



**PENJADWALAN PROYEK KONSTRUKSI MENGGUNAKAN CPM  
(*CRITICAL PATH METHOD*)  
(STUDI KASUS : GEDUNG LABORATORIUM TERPADU FAKULTAS  
TEKNIK UNIVERSITAS JEMBER)**

**SKRIPSI**

Oleh

**Ahmad Maulidi  
NIM 161910301004**

**PROGRAM STUDI STRATA I (S1)  
JURUSAN TEKNIK SIPIL  
FAKULTAS TEKNIK  
UNIVERSITAS JEMBER**

**2020**



**PENJADWALAN PROYEK KONSTRUKSI MENGGUNAKAN CPM  
(*CRITICAL PATH METHOD*)  
(STUDI KASUS : GEDUNG LABORATORIUM TERPADU FAKULTAS  
TEKNIK UNIVERSITAS JEMBER)**

**SKRIPSI**

diajukan guna melengkapi tugas akhir dan memenuhi salah satu syarat  
untuk menyelesaikan Program Studi Teknik Sipil (S1)  
dan mencapai gelar Sarjana Teknik

Oleh

**Ahmad Maulidi**  
**NIM 161910301004**

**PROGRAM STUDI STRATA I (S1)  
JURUSAN TEKNIK SIPIL  
FAKULTAS TEKNIK  
UNIVERSITAS JEMBER  
2020**

## PERSEMBAHAN

Tugas Akhir ini saya persembahkan untuk:

1. Allah SwT yang telah memberi saya kesempatan dan kekuatan untuk dapat menyelesaikan tugas akhir ini;
2. Kedua orang tua dan keluarga yang telah memberikan doa, semangat sekaligus dukungan kepada saya baik secara moral maupun materi sehingga saya dapat menyelesaikan tugas akhir ini;
3. Bapak Syamsul Arifin, S.T., M.T. selaku pembimbing utama dan Bapak Ir. Henu Suyoso, M.T. selaku pembimbing anggota dalam penyusunan tugas akhir ini;
4. Almamater Fakultas Teknik Universitas Jember;
5. Yugo, Mukhlis, Janata, Dika, Wildan selaku *partner* yang menemani saya dalam mengerjakan tugas akhir ini;
6. Kontrakan Asoy Permai yang selalu memberikan semangat dan memberi suport dalam mengerjakan tugas akhir ini;
7. Teman-teman Teknik Sipil angkatan 2016 dan semua pihak yang telah memberi memotivasi;
8. Seluruh teman grup *Crew Coffee Engineer* yang telah membantu, menemani dan memeberikan semangat pada pengerjaan penelitian ini;
9. Seluruh teman grup SMANSA 16 yang telah membantu, menemani dan memeberikan semangat pada pengerjaan penelitian ini;
10. Warung Buleck yang telah menyediakan banyak inspirasi dalam penyelesaian penelitian ini.

**MOTTO**

“Allah tidak akan membebani seseorang melainkan sesuai dengan kadar kesanggupannya”

(QS.Yusuf: 87)

“Pengetahuan tidak hanya didasarkan pada kebenaran saja, tetapi juga kesalahan”

(Carl Gustav Jung)

“Tidak ada yang tidak mungkin untuk hari ini, selama kita mau berusaha”

(Ahmad Maulidi)



**PERNYATAAN**

Saya yang bertanda tangan di bawah ini

Nama : Ahmad Maulidi

NIM : 161910301004

Menyatakan dengan sesungguhnya bahwa skripsi yang berjudul “Penjadwalan Proyek Konstruksi Menggunakan CPM (*Critical Path Method*) (Studi Kasus: Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember)” adalah benar-benar hasil karya sendiri, kecuali kutipan yang sudah saya sebutkan sumbernya, belum pernah diajukan pada institusi mana pun, dan bukan karya jiplakan. Saya bertanggung jawab penuh atas kesalahan dan kebenaran isinya sesuai sikap ilmiah yang harus dijunjung tinggi.

Demikian pernyataan ini saya buat dengan sebenarnya, tanpa adanya tekanan dan paksaan dari pihak manapun serta bersedia mendapat sanksi akademik jika ternyata di kemudian hari pernyataan ini tidak benar.

Jember, 18 Juni 2020

Yang Menyatakan,

Ahmad Maulidi

NIM. 161910301004

**SKRIPSI**

**PENJADWALAN PROYEK KONSTRUKSI MENGGUNAKAN CPM  
(*CRITICAL PATH METHOD*)  
(STUDI KASUS: GEDUNG LABORATORIUM TERPADU FAKULTAS  
TEKNIK UNIVERSITAS JEMBER)**

Oleh

Ahmad Maulidi

NIM 161910301004

Pembimbing:

Dosen Pembimbing Utama

: Syamsul Arifin S.T., M.T.

Dosen Pembimbing Anggota

: Ir. Hernu Suyoso., M.T.

PENGESAHAN

Skripsi berjudul “Penjadwalan Proyek Konstruksi Menggunakan CPM (*Critical Path Method*) (Studi Kasus: Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember)” telah diuji disahkan oleh Fakultas Teknik, Jurusan Teknik Sipil, Universitas Jember pada:

Hari, tanggal : Kamis, 18 Juni 2020

Tempat : *Zoom meeting online*

Tim Penguji:

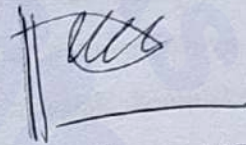
Dosen Pembimbing Utama



Syamsul Arifin, S.T., M.T.

NIP. 196907091998021001

Dosen Pembimbing Anggota



Ir. Hernu Suyoso, M.T.

NIP. 1195511121987021001

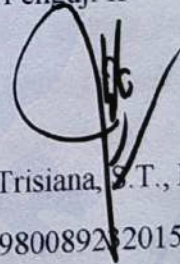
Dosen Penguji I



Sri Sukmawati, S.T., M.T.

NIP. 196506221998032001

Dosen Penguji II



Anita Trisiana, S.T., M.T.

NIP. 198008922015042001

Mengesahkan

Dean Fakultas Teknik,



Dr. Ir. Triwahju Hardianto, S.T., M.T.

NIP. 197008261997021001



## RINGKASAN

**Penjadwalan Proyek Konstruksi Menggunakan CPM (*Critical Path Method*) (Studi Kasus: Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember);** Ahmad Maulidi, 161910301004; 2020: 138 halaman; Jurusan Teknik Sipil Fakultas Teknik Universitas Jember.

Pada era saat ini perkembangan pembangunan konstruksi sangat diperlukannya penerapan pelaksanaan yang berkualitas dengan aspek pada peningkatan kualitas perencanaan dan pengelolaan pekerjaan konstruksi, agar terwujudnya suatu pekerjaan konstruksi yang dapat dilaksanakan dengan baik serta sesuai dengan rencana penjadwalan, dengan begitu akan memberikan keuntungan bagi para pelaksana proyek agar terhindar dari masalah kompleks seperti pembengkakan biaya pelaksanaan proyek sampai terhentinya suatu proyek.

Pembangunan gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember merupakan lokasi penelitian yang terletak di Jalan Kalimantan No, 37 Kabupaten Jember. Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember memiliki fungsi bangunan sebagai laboratorium dan gedung perkuliahan untuk Fakultas Teknik. Tujuan dilakukan penelitian pada gedung tersebut sebagai referensi terhadap perencanaan penjadwalan yang akan dilakukan pada pembangunan lanjutan lantai 3 sampai 6 maupun atap. Penelitian ini menggunakan metode CPM (*Critical Path Method*) merupakan metode yang berorientasi pada waktu yang mengarah pada penentuan jadwal dan estimasi waktu yang bersifat deterministik, serta kegunaan metode tersebut dapat dipakai dalam mengontrol koordinasi kegiatan sehingga proyek dapat diselesaikan dengan tepat waktu..

Data analisis yang digunakan adalah kuisioner civitas akademik Fakultas Teknik Universitas Jember, gambar rencana, *Bill Of Quantity* (BQ), dan AHS UNEJ 2019. Dari data tersebut dapatkannya penyusun WBS (*Work Breakdown Structure*), perhitungan durasi setiap pekerjaan, penyusunan urutan aktivitas antar

pekerjaan, pembuatan jaringan kerja menggunakan *software* manajemen proyek, serta dapat mengidentifikasi lintasan kritis, dan menentukan durasi total proyek. Hasil dari penelitian ini didapatkan bahwa lintasan kritis pada item-item pekerjaan persiapan, pada pekerjaan pasangan, pekerjaan beton, pekerjaan plesteran dan benangan, pekerjaan lantai, pekerjaan langit-langit, pekerjaan tata udara, pekerjaan telepon, pekerjaan *sound system*, alat pemadam kebakaran, pekerjaan sanitair dan sanitasi, instalasi air bersih, instalasi air kotor, instalasi springkler dan hydran atap, pekerjaan listrik dan instalasi penangkal petir. Dari penelitian ini juga telah dilakukan perhitungan total pada durasi normal dengan alat bantu manajemen menggunakan metode CPM (*Critical Path Method*) didapatkannya hasil terselesainya Proyek Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember yaitu selama 127 atau 6 bulan 5 hari, sedangkan rata-rata keinginan civitas akademik Fakultas Teknik Universitas Jember adalah 6 bulan 18 hari. Dengan begitu pada perhitungan penelitian ini sesuai dengan keinginan civitas akademik Fakultas Teknik terhadap pembangunan tersebut.

## SUMMARY

**Construction Project Scheduling Using CPM (Critical Path Method) (Case Study: Integrated Laboratory Building, Faculty of Engineering, University of Jember);** Ahmad Maulidi, 161910301004; 2020: 138 pages; Department of Civil Engineering, Faculty of Engineering, University of Jember.

The development of construction projects in Indonesia has increased significantly so that the aspects of scheduling planning are very necessary to improve the quality and management of construction work in order to realize a construction work that can be carried out well and in accordance with the scheduling plan, so that it will benefit the project implementers and avoid the project from complex issues such as the swelling of project implementation costs to the cessation of a project.

The construction of the Integrated Laboratory Building of the Faculty of Engineering, University of Jember is a research location located on Jalan Kalimantan No, 37, Jember Regency. The Integrated Laboratory Building of the Faculty of Engineering, University of Jember has the function of the building as a laboratory and lecture buildings for the Faculty of Engineering. The purpose of this research is to conduct the building as a reference to the scheduling planning that will be carried out on the continued construction of floors 3 to 6 and the roof. This study uses the CPM (*Critical Path Method*) method which is the basis of a planning and control system of work progress that is based on a network, where the method can show the relationship between one activity and another and can also inform the existence of a critical trajectory in a project schedule, so can be known if there are delays in project work.

The analysis data used are the Jember University Faculty of Engineering academic community questionnaire, plan drawings, *Bill Of Quantity* (BQ), and AHS UNEJ 2019. From these data, the WBS compilers (*Work Breakdown Structure*) are obtained, the calculation of the duration of each job, preparation of

the sequence of activities between jobs , making network work using project management software, identifying critical trajectories, and determining the total duration of the project. The results of this study found that critical trajectories on preparatory work items, on pair work, concrete work, plastering and thread work, floor work, ceiling work, air work, telephone work, sound system work, fire extinguishers, sanitation and sanitation works, clean water installations, dirty water installations, sprinkler and roof hydrant installations, electrical installations and lightning rod installations. This study also calculated total duration of normal duration with management aids using the CPM (*Critical Path Method*) method of obtaining the completion of the Integrated Laboratory Building Project at the Faculty of Engineering, University of Jember, 127 days for 6 months and 5 days. While the average desire of the academic community of the Faculty of Engineering, University of Jember is 6 months 18 days. Thus the calculation of this study is in accordance with the wishes of the Faculty of Engineering's academic community towards the development.



## PRAKATA

Puji syukur kehadirat Allah SWT, atas segala rahmat dan karunia-Nya sehingga penulis mampu menyelesaikan skripsi yang berjudul “Penjadwalan Proyek Konstruksi Menggunakan CPM (*Critical Path Method*) (Studi Kasus: Gedung Laboratorium Terpadu Fakultas Teknik)”. Skripsi ini disusun untuk memenuhi salah satu syarat menyelesaikan pendidikan strata satu (S1) pada Jurusan Teknik Sipil Fakultas Teknik Universitas Jember.

Penyusunan skripsi ini tidak lepas dari bantuan berbagai pihak. Oleh karena itu, penulis menyampaikan terima kasih kepada:

1. Dr. Triwahju Hardianto, S.T., M.T. selaku Dekan Fakultas Teknik Universitas Jember.
2. Dr. Gusfan Halik, S.T., M.T. selaku Ketua Jurusan Teknik Sipil dan Dr. Anik Ratnaningsih, S.T., M.T. selaku Ketua Program Studi S1 Teknik Sipil Universitas Jember.
3. Willy Kriswardhana S.T., M.T., selaku Ketua Komisi Bimbingan dan Winda Tri Wahyuningtyas, S.T., M.T. selaku Sekretaris Komisi Bimbingan Jurusan Teknik Sipil Universitas Jember.
4. Syamsul Arifin, S.T., M.T., selaku Dosen Pembimbing Utama, Ir. Hernu Suyoso, M.T., selaku Dosen Pembimbing Anggota yang telah meluangkan waktu, pikiran dan perhatian dalam penulisan skripsi ini.
5. Nanin Meyfa Utami, S.T., M.T. selaku Dosen Pembimbing Akademik yang telah memberikan saran dan masukan selama menjadi mahasiswa.
6. Kedua orang tua yang telah memberi dukungan serta doanya.
7. Semua pihak yang tidak dapat disebutkan satu per satu.

Penulis menerima kritik dan saran dari semua pihak manapun demi kesempurnaan skripsi ini. Akhirnya penulis berharap, semoga skripsi ini dapat bermanfaat.

Jember, 18 Juni 2020

Penulis

DAFTAR ISI

|                                                           | Halaman |
|-----------------------------------------------------------|---------|
| HALAMAN COVER .....                                       | i       |
| HALAMAN JUDUL .....                                       | ii      |
| HALAMAN PERSEMBAHAN .....                                 | iii     |
| HALAMAN MOTTO .....                                       | iv      |
| HALAMAN PERNYATAAN.....                                   | v       |
| HALAMAN PEMBIMBING .....                                  | vi      |
| HALAMAN PENGESAHAN.....                                   | vii     |
| RINGKASAN .....                                           | viii    |
| SUMMARY.....                                              | x       |
| PRAKATA.....                                              | xii     |
| DAFTAR ISI.....                                           | xiii    |
| DAFTAR TABEL .....                                        | xvi     |
| DAFTAR GAMBAR.....                                        | xix     |
| DAFTAR LAMPIRAN .....                                     | xx      |
| <b>BAB 1. PENDAHULUAN</b>                                 |         |
| <b>1.1 Latar Belakang</b> .....                           | 1       |
| <b>1.2 Rumusan Masalah</b> .....                          | 3       |
| <b>1.3 Tujuan Penelitian</b> .....                        | 3       |
| <b>1.4 Manfaat Penelitian</b> .....                       | 3       |
| <b>1.5 Batasan Masalah</b> .....                          | 4       |
| <b>BAB 2. TINJAUAN PUSTAKA</b>                            |         |
| <b>2.1 Manajemen Proyek</b> .....                         | 5       |
| <b>2.2 Time Schedule</b> .....                            | 5       |
| 2.2.1 Tujuan <i>Time Schedule</i> .....                   | 5       |
| 2.2.2 Fungsi <i>Time Schedule</i> .....                   | 6       |
| <b>2.3 Penjadwalan Proyek</b> .....                       | 6       |
| <b>2.4 WBS (<i>Work Breakdown Structure</i>)</b> .....    | 7       |
| <b>2.5 Analisa Harga Satuan (AHS)</b> .....               | 8       |
| <b>2.6 Analisa Biaya</b> .....                            | 9       |
| <b>2.7 Jaringan Kerja (<i>Network Planning</i>)</b> ..... | 10      |
| 2.7.1 Tahap Penyusunan <i>Network Planning</i> .....      | 10      |
| 2.7.2 Simbol-simbol pada <i>Network Planning</i> .....    | 10      |

|               |             |                                                                                  |    |
|---------------|-------------|----------------------------------------------------------------------------------|----|
|               | <b>2.8</b>  | <b>Produktivitas Tenaga Kerja</b> .....                                          | 12 |
|               | <b>2.9</b>  | <b>Waktu dan Durasi Pekerjaan</b> .....                                          | 12 |
|               | <b>2.10</b> | <b>Critical Path Method (CPM)</b> .....                                          | 12 |
|               | 2.10.1      | Durasi dan Biaya Proyek.....                                                     | 14 |
|               | 2.10.2      | Lintasan Kritis dan Float.....                                                   | 15 |
|               | 2.10.3      | Perhitungan Maju<br>( <i>Forward Pass</i> ) .....                                | 16 |
|               | 2.10.4      | Perhitungan Mundur<br>( <i>Backward Pass</i> ) .....                             | 16 |
|               | 2.10.5      | <i>Total Float</i> (TF) .....                                                    | 17 |
|               | 2.10.6      | <i>Slope</i> dalam Percepatan<br>Waktu Penyelesaian .....                        | 17 |
|               | 2.10.7      | Alternatif Penambahan Jam kerja .....                                            | 18 |
|               | 2.10.8      | Alternatif Penambahan Tenaga kerja.....                                          | 19 |
|               | 2.10.9      | Biaya Tambahan Pekerja<br>( <i>Crash Cost</i> ).....                             | 19 |
|               | <b>2.11</b> | <b>Program Bantu Microsoft Project</b> .....                                     | 20 |
|               | <b>2.12</b> | <b>Perhitungan Statistik Rata-Rata</b> .....                                     | 22 |
|               | <b>2.13</b> | <b>Pengertian dan Cara Pembuatan<br/>Google Form</b> .....                       | 22 |
|               | <b>2.14</b> | <b>Penelitian Terdahulu</b> .....                                                | 23 |
| <b>BAB 3.</b> |             | <b>METODE PENELITIAN</b>                                                         |    |
|               | <b>3.1</b>  | <b>Lokasi Proyek</b> .....                                                       | 27 |
|               | <b>3.2</b>  | <b>Sumber Data</b> .....                                                         | 27 |
|               | <b>3.3</b>  | <b>Analisa Data</b> .....                                                        | 28 |
|               | <b>3.4</b>  | <b>Diagram Alir Penelitian</b> .....                                             | 31 |
|               | <b>3.5</b>  | <b>Matrik Penelitian dan<br/>Jadwal Penelitian</b> .....                         | 33 |
| <b>BAB 4.</b> |             | <b>HASIL DAN PEMBAHASAN</b>                                                      |    |
|               | <b>4.1</b>  | <b>Objek Penelitian</b> .....                                                    | 37 |
|               | <b>4.2</b>  | <b>Hasil Kuisisioner</b> .....                                                   | 40 |
|               | <b>4.3</b>  | <b>Penyusunan (WBS) Work<br/>Breakdown Structure</b> .....                       | 41 |
|               | <b>4.4</b>  | <b>Perhitungan Produktivitas Tenaga Kerja</b> .....                              | 41 |
|               | <b>4.5</b>  | <b>Perhitungan Durasi Setiap Pekerjaan</b> .....                                 | 58 |
|               | <b>4.6</b>  | <b>Penyusunan Jaringan Kerja Menggunakan<br/>Software Manajemen Proyek</b> ..... | 92 |
|               | 4.6.1       | Menginput Informasi tentang Proyek .....                                         | 92 |
|               | 4.6.2       | Penyusunan Kalender Proyek .....                                                 | 92 |
|               | 4.6.3       | Memasukkan Work Breakdown<br>Structure (WBS) dan Durasi Setiap<br>Pekerjaan..... | 93 |

|               |                                                                                   |            |
|---------------|-----------------------------------------------------------------------------------|------------|
| 4.6.4         | Menentukan Hubungan Antar Pekerjaan pada Kolom <i>Predecessor</i> .....           | 94         |
| <b>4.7</b>    | <b>Identifikasi Lintasan Kritis dengan CPM (<i>Critical Path Method</i>).....</b> | <b>94</b>  |
| 4.7.1         | Perhitungan Maju ( <i>Forward Pass</i> ).....                                     | 94         |
| 4.7.2         | Perhitungan Mundur ( <i>Backward Pass</i> ).....                                  | 95         |
| 4.7.3         | Perhitungan <i>Total Float</i> .....                                              | 95         |
| 4.7.4         | Penentuan Lintasan Kritis.....                                                    | 96         |
| <b>4.8</b>    | <b>Penentuan Durasi Proyek .....</b>                                              | <b>98</b>  |
| <b>4.9</b>    | <b>Menghitung Kebutuhan Anggaran Biaya .....</b>                                  | <b>99</b>  |
| <b>BAB. 5</b> | <b>PENUTUP</b>                                                                    |            |
| <b>5.1</b>    | <b>Kesimpulan .....</b>                                                           | <b>121</b> |
| <b>5.2</b>    | <b>Saran.....</b>                                                                 | <b>122</b> |
|               | <b>DAFTAR PUSTAKA .....</b>                                                       | <b>123</b> |
|               | <b>LAMPIRAN.....</b>                                                              | <b>125</b> |

**DAFTAR TABEL**

|                                                                                                                  | Halaman |
|------------------------------------------------------------------------------------------------------------------|---------|
| 2.1 Nilai Koefisien Penurunan Produktivitas.....                                                                 | 18      |
| 2.2 Konsep Penelitian Terdahulu .....                                                                            | 24      |
| 3.1 Matrik Penelitian.....                                                                                       | 34      |
| 3.2 Rencana Jadwal Penelitian.....                                                                               | 36      |
| 4.1 Koefisien pekerjaan pembersihan lapangan dan peralatan 1m <sup>2</sup> .....                                 | 42      |
| 4.2 Koefisien pekerjaan pembuatan 1 m <sup>2</sup> kantor sementara.....                                         | 43      |
| 4.3 Koefisien pekerjaan pembuatan 1 m<br>kolom praktis ukuran 11 x 11 cm.....                                    | 43      |
| 4.4 Koefisien pekerjaan pembuatan 1 m <sup>3</sup><br>kolom ukuran 30 x 30 cm (K2).....                          | 44      |
| 4.5 Koefisien pekerjaan pemasangan 1 m <sup>2</sup><br>lantai keramik ukuran 60 x 60 cm.....                     | 46      |
| 4.6 Koefisien pekerjaan pemasangan 1 m <sup>3</sup><br>dengan pasir urug .....                                   | 47      |
| 4.7 Koefisien pekerjaan <i>exhaust fan</i> jepang.....                                                           | 47      |
| 4.8 Koefisien pekerjaan instalasi lampu exit<br>LED AL 1 MK hugo (komplit).....                                  | 48      |
| 4.9 Koefisien pekerjaan instalasi <i>cable tray</i> 30x10x240 cm<br>Lengkap dengan <i>assesoris</i> .....        | 49      |
| 4.10 Koefisien pekerjaan instalasi detector dan manual break glass<br>NYA cable 2x1,5mm + pipa conduit 20mm..... | 50      |
| 4.11 Koefisien pekerjaan <i>terminal box</i> .....                                                               | 51      |
| 4.12 Koefisien pekerjaan kamera CCTV HD.....                                                                     | 51      |

|      |                                                                                                                          |     |
|------|--------------------------------------------------------------------------------------------------------------------------|-----|
| 4.13 | Koefisien pemasangan pipa air bersih PVC AW Diameter 3/4" .....                                                          | 52  |
| 4.14 | Koefisien pekerjaan BSP Sch.40 c/w<br>fitting2 dan material bantu dia. 1" .....                                          | 53  |
| 4.15 | Rekapan Keseluruhan Produktivitas Tenaga Kerja .....                                                                     | 54  |
| 4.16 | Rekapan Keseluruhan Durasi Pekerjaan dan<br>Jumlah Tenaga Kerja maupun Produktivitasnya .....                            | 64  |
| 4.17 | Kegiatan pekerjaan yang termasuk Lintasan Kritis .....                                                                   | 96  |
| 4.18 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pembersihan Lapangan dan Peralatan.....                  | 99  |
| 4.19 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pembuatan 1m <sup>2</sup> kantor sementara .....         | 100 |
| 4.20 | Rekapitulasi Anggaran Biaya Pekerjaan Persiapan .....                                                                    | 101 |
| 4.21 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pembuatan 1m Kolom Praktis ukuran 11x11cm.....           | 102 |
| 4.22 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pembuatan 1m <sup>3</sup> Kolom ukuran 30x30cm (K2)..... | 103 |
| 4.23 | Rekapitulasi Anggaran Biaya Pekerjaan Struktur Lantai 3 .....                                                            | 104 |
| 4.24 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pemasangan 1m <sup>2</sup> Keramik ukuran 60x60cm.....   | 105 |
| 4.25 | Rekapitulasi Anggaran Biaya Pekerjaan Arsitek Lantai 3 .....                                                             | 106 |
| 4.26 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pengurugan 1m <sup>3</sup> dengan pasir urug.....        | 106 |
| 4.27 | Rekapitulasi Anggaran Biaya Pekerjaan<br>Bangunan Penunjang Lantai 3 .....                                               | 107 |



|      |                                                                                                                                                                        |     |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 4.28 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan <i>exhaust fan</i> jepang .....                                                                        | 107 |
| 4.29 | Rekapitulasi Anggaran Biaya Pekerjaan Tata Udara Lantai 3 .....                                                                                                        | 108 |
| 4.30 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan <i>instalasi detector dan manual break glass NYA cable</i><br><i>2x1,5mm + pipa conduit 20mm</i> ..... | 109 |
| 4.31 | Rekapitulasi Anggaran Biaya Pekerjaan Fire Alarm Lantai 3.....                                                                                                         | 110 |
| 4.32 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan pemasangan kabel Feeder dari rack<br>cabinet ke terminal box, NYMH 3x2.5mm .....                       | 110 |
| 4.33 | Rekapitulasi Anggaran Biaya Pekerjaan Tata Suara Lantai 3 .....                                                                                                        | 111 |
| 4.34 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pemasangan kamera CCTV HD .....                                                                                  | 112 |
| 4.35 | Rekapitulasi Anggaran Biaya Pekerjaan CCTV Lantai 3.....                                                                                                               | 113 |
| 4.36 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan Pemasangan Pipa Air Bersih<br>PVC AW Diameter $\frac{3}{4}$ .....                                      | 113 |
| 4.37 | Rekapitulasi Anggaran Biaya Pekerjaan Plumbing Lantai 3.....                                                                                                           | 114 |
| 4.38 | AHS (Analisa Harga Satuan) Universitas Jember<br>pada Pekerjaan BSP Sch.40 c/w fitting2 dan<br>material bantu dia 1” .....                                             | 115 |
| 4.39 | Rekapitulasi Anggaran Biaya Pekerjaan<br>Pemadam Kebakaran Lantai 3 .....                                                                                              | 115 |
| 4.40 | Rekapitulasi Anggaran Biaya Pembangunan Gedung Laboratorium<br>TerpaduFakultas Teknik Universitas Jember .....                                                         | 116 |



**DAFTAR GAMBAR**

|                                                                                     | Halaman |
|-------------------------------------------------------------------------------------|---------|
| 2.1 Anak Panah .....                                                                | 11      |
| 2.2 Lingkaran .....                                                                 | 11      |
| 2.3 Anak Panah Terputus-putus .....                                                 | 11      |
| 2.4 Diagram Jaringan Kerja .....                                                    | 13      |
| 2.5 Hubungan Waktu biaya normal dan<br>dipersingkat untuk suatu kegiatan .....      | 15      |
| 2.6 Hubungan <i>finish to start</i> (FS).....                                       | 21      |
| 2.7 Hubungan <i>finish to finish</i> (FF) .....                                     | 21      |
| 2.8 Hubungan <i>start to start</i> (SS) .....                                       | 21      |
| 2.9 Hubungan <i>start to finish</i> (SF).....                                       | 21      |
| 3.1 Lokasi Proyek .....                                                             | 27      |
| 3.2 <i>Flowchart</i> Penelitian .....                                               | 36      |
| 4.1 <i>Siteplan</i> Gedung Laboratorium<br>Fakultas Teknik Universitas Jember ..... | 40      |
| 4.2 Tampilan pada <i>Project Information</i> .....                                  | 92      |
| 4.3 Tampilan <i>Change Working Time</i> .....                                       | 93      |
| 4.4 Tampilan kolom <i>Task Name</i> dan <i>Duration</i> .....                       | 93      |
| 4.5 Tampilan kolom Predecessor .....                                                | 94      |
| 4.6 Tampilan <i>Gantt Chart</i> .....                                               | 98      |

**DAFTAR LAMPIRAN**

|                                                                                   | Halaman |
|-----------------------------------------------------------------------------------|---------|
| 4.1 Denah Gedung Laboratorium Terpadu<br>Fakultas Teknik Universitas Jember ..... | 125     |
| 4.2 Hasil dari data Kuisisioner .....                                             | 131     |
| 4.3 Hasil Penyusunan <i>Work Breakdown Structure</i> (WBS) .....                  | 149     |
| 4.4 Perhitungan Produktivitas Tenaga Kerja dan Durasi .....                       | 181     |
| 4.5 Hubungan Antar Pekerjaan .....                                                | 368     |
| 4.6 Perhitungan Maju, Mundur dan <i>Total Slack</i> .....                         | 403     |
| 4.7 Perhitungan Kebutuhan Anggaran Biaya .....                                    | 460     |

## BAB 1. PENDAHULUAN

### 1.1 Latar Belakang

Di saat ini perkembangan pembangunan proyek konstruksi di Indonesia mengalami peningkatan tinggi. Terdapat beberapa aspek yang wajib dilakukan dalam menghadapi perkembangan dan kemajuan di dunia konstruksi saat ini, yaitu dengan adanya peningkatan kualitas perencanaan dan pengelolaan pekerjaan konstruksi. Proses dalam pekerjaan proyek konstruksi yang berkualitas, jika perencanaan yang telah dibuat dapat terlaksana sempurna di lapangan, akan tetapi pada kenyataannya pelaksanaan proyek yang berkualitas sulit untuk diwujudkan dikarenakan terdapat hambatan dalam proses pelaksanaannya. Salah satu contoh hambatan yang sering terjadi di lapangan yaitu adanya keterlambatan dalam waktu penyelesaian proyek, sehingga hambatan ini sangat menimbulkan masalah yang kompleks, dari pembengkakan biaya pelaksanaan proyek sampai terhentinya suatu proyek. (Sulaiman dkk, 2017)

Suatu pelaksanaan proyek yang sesuai dengan perencanaan perlu membuat penjadwalan agar pelaksanaan proyek dapat berjalan dengan lancar. Menurut Telaumbanua dkk, (2017) keberhasilan maupun kegagalan dalam penyelesaian proyek tergantung dari perencanaan, penjadwalan maupun pengendalian proyek yang dikelola secara efektif dan efisien. Perencanaan penjadwalan perlu diterapkan pada pembangunan Gedung Laboratorium Terpadu Fakultas Teknik. Proyek tersebut merupakan salah satu pembangunan yang terdapat di Universitas Jember, berlokasi di Jalan Kalimantan no 37, Kabupaten Jember. Gedung Laboratorium Terpadu Fakultas Teknik dibangun di atas lahan seluas 1490,75 m<sup>2</sup> yang terdiri dari 6 lantai. Pembangunan Gedung Laboratorium Terpadu Fakultas Teknik dilakukan bertahap pada lantai 1 sampai 2, dengan pembangunan lanjutan lantai 3 sampai lantai 6 yang akan diadakan tender terbuka oleh Universitas Jember, dengan begitu penelitian ini bisa membantu sebagai opsi maupun referensi dalam suatu perencanaan penjadwalan proyek konstruksi yang akan dilakukan di tempat tersebut.

Penelitian ini memfokuskan pekerjaan struktur, arsitektur, dan MEP (*Mechanical, Electrical, Plumbing*) pada lantai 3 sampai 6 maupun atap. Penelitian ini merencanakan anggaran biaya dengan menggunakan AHS Universitas Jember 2019, serta *schedule* pekerjaan untuk kebutuhan lantai 3 sampai lantai 6 durasi tersebut dibuat untuk dibandingkan dari hasil rata-rata keinginan civitas akademik Fakultas Teknik Universitas Jember dengan *Google Form* kuisisioner, sehingga pembangunan ini dapat direncanakan dengan anggaran dan waktu yang efisien.

Pada penelitian ini menerapkan metode CPM (*Critical Path Method*) yaitu metode yang berorientasi pada waktu yang mengarah pada penentuan jadwal dan estimasi waktunya bersifat deterministik atau pasti, kegunaan metode ini dapat dipakai dalam mengontrol koordinasi setiap kegiatan sehingga proyek dapat diselesaikan dengan tepat waktu, serta metode ini dapat menunjukkan terhadap keterkaitan antara setiap pekerjaan satu dengan kegiatan lainnya, dan metode ini dapat memperlihatkan lintasan kritis pada suatu penjadwalan proyek sehingga diketahuinya jika terdapat suatu keterlambatan pada pekerjaan proyek, dengan itu pada penelitian ini akan dilakukan suatu perencanaan penjadwalan proyek pada pembangunan gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember dengan menggunakan CPM (*Critical Path Method*).

## 1.2 Rumusan Masalah

Inti permasalahan dari penelitian agar mempunyai suatu kejelasan dalam pengerjaannya, maka rumusan masalah yang dapat diangkat dari latar belakang yaitu:

1. Apa saja pekerjaan yang terdapat pada lintasan kritis di proyek pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember dengan menggunakan aplikasi Manajemen Proyek ?
2. Apakah durasi perencanaan normal yang dibuat melebihi dari durasi civitas Fakultas Teknik Universitas Jember, sehingga adanya *alternative* percepatan dalam durasi pekerjaan proyek dengan penambahan tenaga kerja dan waktu jam kerja ?

## 1.3 Tujuan Penelitian

Tujuan yang akan dicapai dalam penelitian ini antara lain:

1. Menentukan pekerjaan apa saja yang termasuk dalam lintasan kritis pada pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember dengan menggunakan program bantu aplikasi Manajemen Proyek.
2. Mengetahui perbedaan durasi normal yang dibuat dengan durasi keinginan civitas akademik Fakultas Teknik Universitas Jember, jika mengalami keterlambatan dalam durasi perencanaan maka adanya percepatan dengan *alternative* penambahan tenaga kerja dan waktu jam kerja.

## 1.4 Manfaat Penelitian

Manfaat yang dapat diperoleh dari penelitian ini:

1. Bagi Penulis  
Menambah pengetahuan dalam ilmu manajemen proyek yang berkaitan perencanaan penjadwalan dan dapat menjadi bekal pengaplikasian ilmu yang telah didapatkan selama menuntut ilmu di Fakultas Teknik Universitas Jember.
2. Bagi Mahasiswa  
Digunakan sebagai salah satu bahan bacaan atau referensi dalam menggunakan CPM (*Critical Path Method*).

### 3. Bagi Perusahaan

Sebagai opsi penjadwalan yang dapat diterapkan di perusahaan dalam suatu perencanaan penjadwalan selanjutnya.

## 1.5 Batasan Masalah

Pembatasan masalah dalam penelitian ini adalah:

1. Penelitian ini hanya meninjau satu gedung di lokasi pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember pada lantai 3 sampai lantai 6.
2. Perencanaan penjadwalan menggunakan *software* Manajemen Proyek dan diolah menggunakan CPM (*Critical Path Method*).
3. Harga satuan berdasarkan pada AHS (Analisa Harga Satuan) Universitas Jember 2019.
4. Penelitian ini menghitung waktu serta biaya tanpa memperhatikan perhitungan struktur bangunan dan alat berat pendukung operasional.
5. Kebutuhan sumber daya tidak terbatas.
6. Volume pekerjaan pada pelaksanaan proyek pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember didapat dari pihak Konsultan Perencana.
7. Durasi normal adalah durasi yang diperlukan proyek dalam melakukan rangkaian kegiatan sampai selesai tanpa adanya penambahan sumber daya, dan penambahan jam kerja.
8. Durasi dipercepat adalah durasi paling singkat dalam menyelesaikan keseluruhan kegiatan proyek dengan menganalisa *alternative* pada jaringan kerja seperti penambahan tenaga kerja maupun jam kerja.



## BAB 2. TINJAUAN PUSTAKA

### 2.1 Manajemen Proyek

Manajemen proyek menurut Telaumbanua, dkk (2017) ialah suatu perencanaan, pengarahan, pengorganisasian, dan pengawasan terhadap usaha anggota organisasi dan penggunaan sumber daya organisasi lainnya. Ruang lingkup manajemen proyek ini cukup luas dikarenakan mencakup tahap kegiatan awal pelaksanaan sampai akhir pelaksanaan. Menurut Soeharto (1999), terdapat lima fungsi manajemen proyek yaitu:

- a. Merencanakan adalah memilih dan menentukan langkah-langkah kegiatan yang akan dikerjakan dalam mencapai sasaran.
- b. Mengorganisir adalah mengatur dan mengalokasikan segala sesuatu kegiatan serta sumber daya kepada para peserta kelompok agar mencapai sasaran secara efisien.
- c. Memimpin adalah mengarahkan semua sumber daya manusia agar bekerja untuk mencapai tujuan yang ditentukan.
- d. Mengendalikan adalah mengatur, mengkaji, dan mengoreksi agar hasil kegiatan sesuai dengan apa yang telah ditentukan.

### 2.2 Time Schedule

*Time Schedule* merupakan suatu perencanaan waktu pekerjaan proyek dari awal kegiatan hingga akhir kegiatan proyek. Selain itu *Time Schedule* suatu cara mengatur waktu agar terselesainya suatu item pekerjaan pada suatu proyek yang dapat menggambarkan jangka waktu pekerjaan yang harus diselesaikan dan bagian pekerjaan yang berkaitan satu dengan pekerjaan lainnya (Ahadi, 2011).

#### 2.2.1 Tujuan *Time Schedule*

Menurut Ahadi (2011), menyatakan bahwa tujuan atau manfaat dari *Time Schedule* pada suatu proyek yaitu:

1. Menentukan urutan dari setiap pekerjaan untuk mengendalikan waktu pelaksanaan proyek.



2. Mendeteksi terjadinya keterlambatan dari pekerjaan proyek, apabila dalam suatu proyek mengalami keterlambatan dapat dicegah dan dapat segera mengambil kebijakan yang tidak mengganggu kelancaran pekerjaan lain.
3. Alat pengendali waktu pelaksanaan proyek untuk mengetahui setiap progres pekerjaan proyek.
4. Pedoman waktu untuk pengadaan baik berupa sumber daya yang dibutuhkan seperti material, pekerja maupun alat-alat kerja.

## 2.2.2 Fungsi *Time Schedule*

Fungsi dari *Time Schedule* yaitu:

1. Pengontrol waktu pelaksanaan proyek, sehingga dapat memonitoring segala aktifitas.
2. Pedoman bagi *Owner*, Kontraktor dan Konsultan pengawas untuk mengontrol kemajuan pekerjaan pada proyek serta mengevaluasi pekerjaan yang terselesaikan.
3. Memperkirakan jumlah sumber daya manusia, material, dan alat-alat yang harus disediakan pada waktu tertentu.

## 2.3 Penjadwalan Proyek

Penjadwalan proyek merupakan suatu cara menetapkan jangka waktu kegiatan proyek yang harus diselesaikan, bahan baku, tenaga kerja serta waktu yang dibutuhkan di setiap aktivitas (Iwawo, dkk., 2016).

Menurut Kusnanto (2010) terdapat beberapa tujuan penjadwalan proyek yaitu sebagai berikut:

- a. Setiap pekerjaan lebih terorganisir.
- b. Menentukan metode yang sesuai.
- c. Mendapatkan hasil yang optimum, dan
- d. Mempermudah dalam perumusan permasalahan proyek.

Menurut Husen (2010), Manfaat dari penjadwalan proyek sebagai berikut:

- a. Sebagai pedoman terhadap unit kegiatan mengenai batasan waktu memulai dan mengakhiri setiap pekerjaan.

- b. Memberikan sarana bagi manajemen untuk koordinasi secara sistematis dan realistis dalam penentuan alokasi prioritas terhadap sumber daya dan waktu.
- c. Memberikan sarana untuk melakukan penilaian terhadap kemajuan pekerjaan.
- d. Menghindari pemakaian sumber daya yang berlebihan.
- e. Memberikan kepastian waktu pelaksanaan pekerjaan.
- f. Merupakan saran penting dalam pengendalian proyek.

Menurut Telaumbanua dkk (201), terdapat beberapa faktor yang mendasari pembuatan jadwal proyek yaitu:

- a. Produktivitas sumber daya, peralatan proyek dan tenaga kerja, selama operasional berlangsung serta perhitungan yang memenuhi aturan teknis.
- b. Kapasitas daya tampung area proyek terdapat sumber daya yang dipergunakan selama operasional pelaksanaan berlangsung.
- c. Alasan sosial politis lainnya, apabila proyek tersebut milik pemerintah.
- d. Kondisi alam dan lokasi proyek.
- e. Keterjangkauan lokasi proyek ditinjau dari fasilitas perhubungannya.
- f. Kebutuhan dan fungsi dari proyek tersebut.
- g. Ketersediaan dan keterkaitan sumber daya material, peralatan, dan material pelengkap lainnya yang menunjang terwujudnya proyek tersebut.

#### **2.4 WBS (*Work Breakdown Structure*)**

*Work Breakdown Structure* merupakan penguraian pekerjaan menjadi *item* pekerjaan secara detail. Struktur WBS menyerupai piramida yang artinya posisi puncak merupakan keseluruhan pekerjaan. Level di bagian bawah merupakan penggambaran rincian level di atasnya. Level-level terbawah WBS merupakan level terpenting, karena setiap elemen pada level ini menggambarkan bagian terperinci pekerjaan dengan perlengkapan data, atau tugas yang akan dikerjakan. Kontraktor harus memperkirakan anggaran pekerjaan secara detail. Susunan WBS tidak selalu sama untuk setiap proyek (Shofyan, 2018).

Terdapat beberapa hal yang dapat dipakai sebagai pedoman penyusunan WBS menurut Shofyan (2018) antara lain:

- a. Susunan WBS dibuat bertingkat menurut ketelitian spesifikasi pekerjaan.

- b. Susunan WBS dibuat atas dasar penguraian yang distrik dan logis.
- c. Jumlah tingkat hierarki sesuai dengan kebutuhan tingkat pengelolanya.
- d. Jumlah elemen pekerjaan tiap hierarki sesuai dengan kebutuhan pengelolanya.
- e. Tiap elemen WBS diberi nomor, penomoran yang sesuai dengan tingkat hierarkinya.
- f. Elemen pekerjaan dalam WBS merupakan pekerjaan yang terukur.

## **2.5 Analisa Harga Satuan (AHS)**

Menurut Suryono, dkk (2016), analisa harga satuan pekerjaan adalah metode yang digunakan dalam menghitung harga satuan setiap elemen pekerjaan dari kebutuhan bahan bangunan, upah pekerja, dan peralatan yang akan digunakan dalam menyelesaikan per satuan pekerjaan konstruksi. Pelaksanaan perhitungan satuan pekerjaan harus didasarkan pada gambar teknis, RKS, maupun koefisien pekerjaan yang tercantum dalam Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat Republik Indonesia Nomor 28/PRT/M/2016 tentang pedoman Analisa Harga Satuan Pekerjaan Bidang Pekerjaan Umum, pada pedoman tersebut telah diatur harga satuan pekerjaan pada berbagai pekerjaan, yaitu:

- a. Pekerjaan persiapan.
- b. Pekerjaan tanah.
- c. Pekerjaan pondasi.
- d. Pekerjaan beton.
- e. Pekerjaan lantai.
- f. Pekerjaan dinding.
- g. Pekerjaan pengecatan.
- h. Pekerjaan kayu.
- i. Pekerjaan kunci dan kaca.
- j. Pekerjaan plafond.
- k. Pekerjaan sanitasi dan perpipaan.
- l. Pekerjaan besi dan aluminium.
- m. Pekerjaan penutup atap.

## 2.6 Analisa Biaya

Menurut Wahyuni (2017), analisa biaya pada setiap sistem konstruksi dapat dihitung berdasarkan volume setiap item pekerjaan, jumlah pekerja dan peralatan yang digunakan. Analisa biaya dibutuhkan dalam menyusun Rencana Anggaran Biaya (RAB) untuk mengetahui besaran biaya serta anggaran biaya yang dibutuhkan pada masing-masing sistem konstruksi proyek tersebut. Terdapat beberapa tahap dalam perhitungan rencana anggaran yaitu:

a. Analisa Harga Satuan Pekerjaan (AHSP)

Analisa Harga Satuan Pekerjaan (AHSP) merupakan jumlah kebutuhan bahan dan upah tenaga kerja yang diperlukan untuk mengerjakan suatu pekerjaan dalam satu satuan tertentu. Analisa harga satuan berfungsi sebagai pedoman awal perhitungan rencana anggaran biaya, koefisien analisa harga satuan menjadi kunci menghitung dengan tepat perkiraan anggaran biaya. Dalam membuat Analisa Harga Satuan (AHS) suatu pekerjaan dihitung berdasarkan kebutuhan harga upah dan bahan setiap 1m<sup>3</sup> volume pekerjaan. Harga satuan pekerjaan adalah jumlah harga bahan dan upah tenaga kerja atau harga yang harus dibayar untuk menyelesaikan suatu pekerjaan berdasarkan perhitungan analisa.

b. Rencana Anggaran Biaya (RAB)

Menentukan harga keseluruhan dalam suatu proyek dapat dicari dengan mengalikan harga satuan pekerjaan dengan volume total pekerjaan dalam proyek. Secara umum dapat disimpulkan seperti rumus 2.1 :

$$RAB = \sum (\text{Volume} \times \text{Harga Satuan Pekerjaan}) \dots\dots\dots 2.1$$

Menurut Simatupang (2015) adapun biaya-biaya dalam proyek adalah sebagai berikut:

1. Biaya Langsung (*Direct Cost*), adalah biaya-biaya yang langsung berhubungan dengan pelaksanaan pekerjaan konstruksi di lapangan, seperti: biaya bahan/material, pekerja/upah, dan peralatan.
2. Biaya Tak Langsung (*Indirect Cost*), adalah biaya proyek yang harus ada serta harus diperhatikan walaupun tidak ada hubungan secara langsung dengan proyek konstruksi pembangunan, seperti: biaya *Over-head*, biaya tak terduga dan keuntungan/profit.

## 2.7 Jaringan Kejra (*Network Planning*)

Perencanaan jaringan Kejra (*Network Planning*) adalah gambaran kegiatan-kegiatan secara kronologis yang saling berkaitan dan berhubungan. *Network Planning* merupakan alat ukur bagi seorang pemimpin proyek dalam melaksanakan penjadwalan pelaksanaan proyek konstruksi. Semenjak tahun 1950, *Network Planning* telah mulai dikembangkan di Amerika Serikat (Wirantika, 2016). Ada beberapa manfaat *Network Planning* menurut Wirantika (2016):

- a. Membantu menyelesaikan pelaksanaan proyek secara tepat waktu.
- b. Mengorganisir data yang tidak teratur.
- c. Menunjukkan urutan pekerjaan sebuah proyek konstruksi yang paling efisien.

### 2.7.1 Tahapan Penyusunan *Network Planning*

Menurut Husen (2010), ada beberapa tahap penyusunan *Network Planning* yaitu:

1. Mencatatat kegiatan-kegiatan dari paket WBS berdasarkan item pekerjaan.
2. Memperkirakan durasi setiap kegiatan dengan mempertimbangkan jenis pekerjaan, volume pekerjaan, jumlah sumber daya, lingkungan kerja, serta produktivitas pekerja.
3. Menentukan logika ketergantungan antar kegiatan dilakukan dengan tiga kemungkinan hubungan, yaitu kegiatan yang mendahului (*predecessor*), kegiatan yang didahului (*successor*), serta bebas.
4. Menghitung analisis waktu serta alokasi sumber daya.

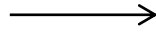
### 2.7.2 Simbol–Simbol Pada *Network Planning*

Menurut Wirantika (2016), *Network Planning* digambarkan dalam bentuk diagram yang berupa simbol-simbol dan lintasan kegiatan yang saling berkaitan selama kegiatan proyek berlangsung. Ada beberapa pengertian dari simbol-simbol tersebut yaitu :

- a. Anak Panah

Anak panah menggambarkan adanya suatu pekerjaan, dan arah anak panah menunjukkan arah kegiatan, sehingga dapat diketahui kegiatan mana yang terlebih dahulu dikerjakan. Contoh anak panah dapat dilihat pada Gambar 2.1



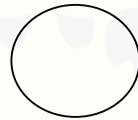


**Gambar 2.1** Anak panah

(Sumber: Wirantika, 2016)

b. Lingkaran

Lingkaran menggambarkan kegiatan di proyek. Kegiatan yang dimaksudkan adalah awal atau akhir dari pekerjaan tersebut. Kemudian lingkaran akan diberi nomor yang bertujuan untuk membedakan kegiatan satu dengan kegiatan lainnya. Penomoran dimulai dari nomor terkecil ke nomor yang besar. Contoh lingkaran dapat dilihat pada Gambar 2.2



**Gambar 2.2** Lingkaran

(Sumber: Wirantika, 2016)

c. Anak Panah Terputus-Putus (*Dummy*)

Menurut Wirantika (2016), peristiwa *dummy* menunjukkan adanya hubungan antara dua kegiatan yang dimaksud dengan kegiatan semu. Dalam hubungan antar kegiatan *dummy* tidak perlu diperhitungkan karena tidak memiliki nama dalam perhitungan waktu, sumber daya, dan ruang sehingga lamanya sama dengan nol, tetapi hubungan antar kegiatan harus ada untuk menyatakan logika ketergantungan kegiatan. Contoh anak panah terputus-putus dapat dilihat pada Gambar 2.3.



**Gambar 2.3** Anak panah terputus-putus

(Sumber: Wirantika, 2016)

## 2.8 Produktivitas Tenaga Kerja

Dalam menghitung produktivitas tenaga kerja per hari dapat dirumuskan seperti rumus 2.2 (Mulyadi, 2016):

$$\text{Produktivitas Tenaga Kerja per hari} = \frac{1}{\text{Koef.Pekerja}} \dots\dots\dots 2.2$$

Untuk kebutuhan jumlah tenaga kerja dapat direncanakan menyesuaikan dengan volume yang ada di lapangan.

## 2.9 Waktu dan Durasi Pekerjaan

Durasi kegiatan memiliki dua perbedaan waktu (*time*) dan kurun waktu (*duration*). Waktu menjelaskan siang atau malam, sedangkan kurun waktu menjelaskan lamanya waktu yang dibutuhkan dalam pelaksanaan suatu kegiatan pekerjaan. Untuk menentukan durasi kegiatan dapat didasari dengan volume pekerjaan dan produktivitas tenaga kerja untuk menyelesaikan suatu pekerjaan (Husen, 2010), rumus dalam memperhitungkan durasi kegiatan seperti pada rumus 2.3 (Mulyadi, 2016):

$$\text{Durasi} = \frac{\text{Volume Pekerjaan}}{\text{Produktivitas} \times \text{Jumlah Tenaga Kerja}} \dots\dots\dots 2.3$$

## 2.10 Critical Path Method (CPM)

Menurut Iwawo dkk. (2016), metode CPM merupakan dasar dari suatu sistem perencanaan maupun pengendalian terhadap kemajuan suatu pekerjaan yang didasari pada jaringan kerja yang dapat dilihat dari segi waktu maupun biaya. Kata lain dari *Critical Path Method* dalam proyek ialah suatu bentuk jaringan aktivitas yang fungsinya untuk menentukan waktu tercepat agar proyek dapat diselesaikan dengan tepat waktu. Dengan CPM, jumlah waktu yang dibutuhkan untuk menyelesaikan berbagai tahap suatu proyek dianggap diketahui dengan pasti, demikian pula dengan antara sumber daya yang akan digunakan maupun waktu yang diperlukan untuk menyelesaikan proyek, kedua perkiraan yang dapat memperkirakan waktu terselesainya maupun biaya yang sifatnya normal (*normal estimate*) serta perkiraan waktu penyelesaian dan biaya yang sifatnya dipercepat

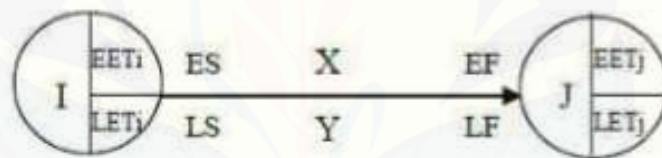


(*crash estimate*). Menurut Setiawati dkk (2016), terdapat beberapa komponen-komponen dalam metode CPM:

- Diagram *Network Planning*.
- Hubungan antar simbol dan urutan kegiatan.
- Jalur kritis.
- Tenggang waktu kegiatan.
- Limit jadwal kegiatan.

Terdapat beberapa karakteristik maupun cara dalam membuat diagram CPM yaitu:

- Setiap kegiatan dapat disimbolkan dalam bentuk lingkaran maupun kotak.
- Hubungan sub pekerjaan disimbolkan dengan garis anak panah.
- Nama kegiatan dan durasi waktu dinyatakan dalam lingkaran kegiatan.
- Adanya keterangan dalam diagram jaringan kerja seperti ES, LS, EF, LF seperti pada gambar 2.4



**.Gambar 2.4** Diagram jaringan kerja

(Sumber: Suparno, 2015)

Keterangan:

- |         |   |                                                 |
|---------|---|-------------------------------------------------|
| I dan J | : | Nomor urutan suatu peristiwa.                   |
| X       | : | Nama suatu kegiatan.                            |
| Y       | : | Durasi suatu kegiatan.                          |
| EET     | : | Saat paling awal suatu kegiatan.                |
| LET     | : | Saat paling akhir suatu kegiatan.               |
| ES      | : | Saat paling cepat dalam memulai suatu kegiatan. |
| EF      | : | Saat paling cepat untuk akhir suatu kegiatan.   |
| LS      | : | Saat paling lambat untuk mulai suatu kegiatan.  |
| LF      | : | Saat paling lambat untuk akhir suatu kegiatan.  |

Menurut Dundu dan Sibi (2015), perencanaan waktu dengan CPM pada umumnya terdiri dari tiga bagian utama, antara lain sebagai berikut:

- a. Tahap perencanaan, yaitu membagi proyek kedalam kegiatan yang berbeda, kemudian menentukan durasi dan membuat diagram panah untuk memberikan gambaran grafis diantar kegiatan-kegiatan dalam proyek.
- b. Tahap penjadwalan, pembuatan jadwal untuk memperhatikan awal dan akhir dari tiap kegiatan yang berhubungan dengan kegiatan lain.
- c. Tahap pengontrolan, meliputi penggunaan bagan waktu dan diagram panah untuk membuat laporan kemajuan periodik.

## 2.10.1 Durasi dan Biaya Proyek

Jalur kritis dalam CPM memiliki rangkaian serta komponen-komponen kegiatan dengan total jumlah waktu terlama dan menunjukkan kurun waktu penyelesaian proyek tercepat. Selain itu metode CPM juga dapat mengidentifikasi waktu kelonggaran (*slack*) paling lambat suatu kegiatan dapat dimulai tanpa menghambat jadwal proyek keseluruhan. Dalam suatu proyek terdapat hubungan antara waktu terhadap biaya. Biaya yang dimaksud berupa biaya langsung (*direct cost*) misalnya biaya tenaga kerja, pembelian material, tanpa memasukkan biaya tak langsung (*indirect cost*) seperti biaya umum maupun biaya administrasi maupun sebagainya. Menurut Simon Patabang (2017), terdapat beberapa istilah yang biasanya digunakan dalam menggambarkan hubungan antara waktu penyelesaian proyek dengan biaya yang dikeluarkan adalah:

### 1. Waktu Normal.

Merupakan waktu yang diperlukan proyek dalam melakukan rangkaian kegiatan sampai selesai tanpa ada pertimbangan terhadap penambahan sumber daya maupun penambahan jam kerja dengan *shift*.

### 2. Biaya Normal.

Merupakan biaya langsung yang dikeluarkan selama penyelesaian kegiatan proyek sesuai dengan waktu normalnya.

### 3. Waktu Dipercepat (*Crash Time*).

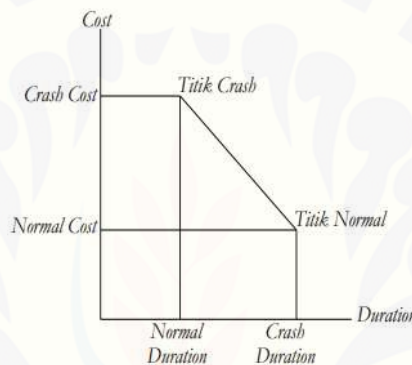
Merupakan waktu paling singkat dalam menyelesaikan seluruh kegiatan

proyek. Biasanya digunakan untuk mengurangi durasi keseluruhan proyek dengan menganalisa alternatif-alternatif yang ada dari jaringan kerja seperti dengan penambahan tenaga kerja maupun jam kerja.

4. Biaya untuk Waktu dipercepat (*Crash Cost*).

Merupakan biaya langsung yang dikeluarkan untuk menyelesaikan kegiatan proyek dengan waktu yang dipercepat.

Hubungan waktu dan biaya pada keadaan normal dapat dilihat pada gambar 2.5:



**Gambar 2.5** Hubungan waktu-biaya normal dan dipersingkat untuk suatu kegiatan  
(Sumber: Fika Giri Aspira Nigrum, et all )

2.10.2 Lintasan Kritis dan *Float*

Menurut Widiyanti dan Lenggogeni (2013) menjelaskan lintasan kritis terletak pada suatu kegiatan apabila mengalami keterlambatan akan menyebabkan keterlambatan pekerjaan secara menyeluruh. Ketentuan umum lintasan kritis menurut Soeharto (1999) yaitu:

- a. Pada pekerjaan pertama,  $ES=LS=0$
- b. Pada pekerjaan terakhir,  $LF=EF$
- c. *Total Float*,  $TF=0$

Perhitungan lintasan kritis terbagi menjadi dua yaitu perhitungan maju (*forward pass*) dan perhitungan mundur (*backward pass*) (Arifudin, 2011). Istilah yang terdapat pada perhitungan maju dan mundur (Widiyanti dan Lenggogeni, 2013) yaitu:

- a) ES (*Early Start*): waktu paling awal kegiatan dapat dimulai setelah kegiatan sebelumnya selesai.
- b) EF (*Early Finish*): waktu paling awal kegiatan dapat diselesaikan jika dimulai sesuai waktu paling awalnya dan dapat diselesaikan sesuai dengan durasinya.
- c) LS (*Late Start*): waktu paling akhir sebuah kegiatan dapat diselesaikan tanpa memperlambat penyelesaian proyek.
- d) LF (*Late Finish*): waktu paling akhir sebuah kegiatan dapat dimulai tanpa memperlambat penyelesaian proyek.

### 2.10.3 Perhitungan Maju (*Forward Pass*)

Menurut Arifudin (2011), perhitungan maju digunakan untuk menghitung saat paling awal terjadinya dan penyelesaian suatu proyek. Dalam mengidentifikasi jalur kritis perhitungan maju terdapat aturan-aturan yang berlaku sebagai berikut (Widiasanti dan Lenggogeni, 2013):

- a. Kegiatan baru dapat dimulai jika kegiatan sebelumnya telah selesai terkecuali kegiatan awal.
- b. Waktu paling awal suatu kegiatan adalah 0.
- c. Waktu selesai paling awal suatu kegiatan sama dengan waktu mulai paling awal dan ditambah kurun waktu kegiatan yang bersangkutan seperti rumus 2.4 (Widiasanti dan Lenggogeni, 2013):

$$EF = ES + D \dots\dots\dots 2.4$$

Keterangan :

- EF = Waktu selesai paling awal suatu kegiatan.
- ES = Waktu mulai paling awal suatu kegiatan.
- D = Durasi kegiatan.

- d. Jika suatu kegiatan memiliki dua kegiatan pendahulunya atau lebih, maka ES merupakan EF terbesar dari kegiatan tersebut.

### 2.10.4 Perhitungan Mundur (*Backward Pass*)

Menurut Arifudin (2011) menyatakan pada perhitungan mundur digunakan untuk menghitung saat yang paling akhir penyelesaian dan terjadinya dari kegiatan suatu proyek. Dalam mengidentifikasi jalur kritis perhitungan mundur

terdapat aturan-aturan yang berlaku sebagai berikut (Widiasanti dan Lenggogeni, 2013):

- a. Hitungan mundur dapat dimulai dari hari terakhir penyelesaian proyek.
- b. Menurut Widiasanti dan Lenggogeni (2013), menyatakan bahwa waktu mulai paling akhir suatu kegiatan sama dengan waktu selesai paling akhir dan dikurangi kurun waktu yang bersangkutan, dapat dilihat pada rumus 2.5 di bawah ini:

$$LS = LF - D \dots\dots\dots 2.5$$

Keterangan:

- LS = Waktu paling akhir kegiatan boleh mulai.
- LF = Waktu paling akhir kegiatan boleh selesai.
- D = Durasi kegiatan.

- c. Jika suatu memiliki dua atau lebih kegiatan, maka LF kegiatan tersebut sama dengan LS kegiatan berikutnya yang terkecil.

#### 2.10.5 Total Float (TF)

Menurut Widiasanti dan Lenggogeni (2013) menjelaskan *total float* suatu kegiatan sama dengan waktu selesai paling akhir dikurangi waktu mulai awal dari suatu kegiatan, dihitung dengan rumus 2.6:

$$TF = LF - EF = LS - ES \dots\dots\dots 2.6$$

Keterangan:

- TF = *Total Float*
- LF = Waktu paling akhir kegiatan boleh selesai.
- EF = Waktu selesai paling awal suatu kegiatan.
- LS = Waktu paling akhir kegiatan boleh mulai.
- ES = Waktu mulai paling awal suatu kegiatan.

#### 2.10.6 Slope dalam Percepatan Waktu Penyelesaian

Mempercepat waktu penyelesaian proyek adalah suatu usaha menyelesaikan proyek lebih awal dari waktu normal. Tujuannya yaitu untuk mempercepat waktu penyelesaian proyek awal dengan perbandingan kenaikan biaya seminimal mungkin. Dengan diadakannya percepatan proyek ini akan terjadi pengurangan



durasi kegiatan yang akan diadakan *crash* program. Dengan menggunakan program *crash schedule* tentu biaya akan jauh lebih besar dari biaya normal *schedule*. Dari *crash schedule* akan dipilih kegiatan-kegiatan kritis dengan waktu dan biaya terkecil untuk mempercepat pelaksanaannya. Menurut Simon Patabang (2017), perhitungan *slope* biaya merupakan metode perhitungan yang dilakukan untuk menentukan kemiringan (waktu dan biaya suatu kegiatan) dapat dilihat pada rumus 2.7:

$$\text{Slope Biaya} = \frac{\text{Biaya Dipercepat} - \text{Biaya Normal}}{\text{Waktu Normal} - \text{Waktu Dipercepat}} \dots\dots\dots 2.7$$

2.10.7 Alternatif Penambahan Jam Kerja

*Crashing* dengan penambahan jam kerja akan mempengaruhi efisiensi proyek. Menurut Fika Giri Aspia Ningrum,dkk, rumus produktivitas untuk *alternative* ini dapat dihitung dengan rumus 2.8 dan 2.9:

$$\text{Produktivitas Harian} = \frac{\text{Volume}}{\text{Durasi Normal}} \dots\dots\dots 2.8$$

$$\text{Produktivitas / jam} = \frac{\text{Produktivitas Harian}}{\text{Jam Kerja Normal}} \dots\dots\dots 2.9$$

Menurut Ida Ayu Mita Yoni, dkk rumus produktivitas sesudah *crash* dapat dilihat dengan rumus 2.10:

$$\text{Produktivitas sesudah Crash} = (8\text{jam} \times \text{Produktivitas tiap jam}) + (a \times b \times \text{produktivitas / jam}) \dots\dots\dots 2.10$$

Keterangan:

a = Jumlah Jam Lembur.

b = Koef. Penurunan produktivitas kerja lembur, dapat dilihat pada tabel 2.1:

**Tabel 2.1** Nilai koefisien penurunan produktivitas

| Jam Lembur | Penurunan Indeks Produktivitas | Prestasi Kerja |
|------------|--------------------------------|----------------|
| 1 jam      | 0,1                            | 90             |

**Tabel 2.1** Nilai koefisien penurunan produktivitas (Lanjutan)

|       |     |    |
|-------|-----|----|
| 2 jam | 0,2 | 80 |
| 3 jam | 0,3 | 70 |

Sumber : Soeharto, 1997

Menurut Mila Nata (2015:20), dari nilai produktivitas harian sesudah *crash* tersebut dapat dicari dalam penyelesaian percepatan proyek (*crash duration*), seperti rumus 2.11:

$$Crash\ Duration = \frac{Volume}{Produktivitas\ sesudah\ Crash} \dots\dots\dots 2.11$$

2.10.8 Alternatif Penambahan Tenaga Kerja

Menurut Ida Ayu Mita Yoni, dkk, dalam penambahan tenaga kerja harus dapat diperhatikan dari lingkup ruang kerja yang tersedia, dikarenakan penambahan tenaga kerja pada suatu aktivitas tidak boleh mengganggu pemakaian tenaga kerja untuk aktivitas lainnya yang sedang berjalan bersamaan. Perhitungan dalam penambahan tenaga kerja dapat dilihat pada rumus 2.12:

Jumlah Tenaga

$$Kerja\ Dipercepat = \frac{(Koef.\ Tenaga\ Kerja\ x\ Volume)}{Durasi\ Dipercepat} \dots\dots\dots 2.12$$

2.10.9 Biaya Tambahan Pekerja (*Crash Cost*)

Menurut Ida Ayu Mita Yoni, dkk, penambahan waktu jam kerja akan menambah besar biaya dalam tenaga kerja dari biaya normal tenaga kerja. Menurut Keputusan Tenaga Kerja dan Transmigrasi Republik Indonesia Nomor KEP. 102/MEN/IV/2004 pasal diperhitungkan bahwa upah penambahan kerja bervariasi. Perhitungan dalam biaya tambahan pekerja dapat dirumuskan sebagai rumus 2.13:

$$Crash\ Cost = Crash\ Duration\ x\ rata-rata\ upah\ tenaga\ kerja\ / \text{hari} \\ x\ Jumlah\ tenaga\ kerja\ setelah\ penambahan \dots\dots\dots 2.13$$

## 2.11 Program Bantu *Microsoft Project*

*Microsoft Project* merupakan salah satu *software* pendukung dalam suatu proyek konstruksi yaitu membantu bagaimana mengembangkan suatu rencana, menetapkan sumber daya, menganalisa beban kerja, mengelola anggaran, serta menetapkan suatu penjadwalan dalam proyek (Warsika, 2016). Tahapan penyusunan rencana sebuah proyek konstruksi menurut Warsika (2016) yaitu memasukkan data-data kegiatan seperti jenis kegiatan (*task name*), durasi kegiatan (*duration*), awal kegiatan (*start*), serta hubungan masing-masing kegiatan dimasukkan ke dalam lembaran kerja (*spread sheet*) pada *Microsoft Project*. Setelah memasukkan data, *Microsoft Project* akan memberikan hasil berupa diagram *Microsoft Project* menyediakan beberapa format dasar sebuah laporan, yaitu:

- a) *Over View*, berisi bentuk laporan umum proyek secara keseluruhan;
- b) *Current Activity*, berisi laporan mengenai kegiatan yang akan dikerjakan maupun yang telah dikerjakan;
- c) *Cost*, berisi laporan biaya proyek;
- d) *Assignment*, berisi laporan pemakaian sumber daya;
- e) *Work Load*, berisi laporan mengenai tanggung jawab oleh sumber daya dan proyek yang bersangkutan;
- f) *Custom*, berisi laporan yang ingin ditambahkan serta ditentukan oleh pembuat laporan;

Setelah menyusun pekerjaan menggunakan *Microsoft Project*, maka akan ditemukan pekerjaan yang termasuk lintasan kritis. Lintasan kritis merupakan pekerjaan yang tidak mempunyai waktu penundaan (*float*). Pekerjaan yang termasuk lintasan kritis inilah yang akan dipercepat karena jika pekerjaan tersebut mengalami penundaan maka akan menyebabkan pekerjaan lainnya tidak dapat berjalan juga dan akan berpengaruh terhadap waktu total pelaksanaan proyek (Marthea, 2017).

Beberapa tipe ketergantungan tugas (*task*) yang digunakan dalam proses pengolahan data menggunakan *Microsoft Project* (Emanuel dkk, 2009):

- a. FS (*Finish to Start*) merupakan suatu kegiatan awal yang harus diselesaikan

sebelum kegiatan selanjutnya boleh dimulai. Hubungan *finish to start* dapat dilihat pada gambar 2.6



**Gambar 2.6** Hubungan *finish to start* (FS)

(Sumber : Emaunuel dkk, 2016)

- b. FF (*Finish to Finish*) merupakan suatu kegiatan awal harus diselesaikan sebelum kegiatan selanjutnya atau dapat diselesaikan bersamaan. Hubungan *finish to finish* dapat dilihat pada gambar 2.7



**Gambar 2.7** Hubungan *finish to finish* (FF)

(Sumber : Emaunuel dkk, 2016)

- c. SS (*Start to Start*) merupakan kegiatan awal dan kegiatan selanjutnya dapat dimulai bersamaan. Hubungan *start to start* dapat dilihat pada gambar 2.8



**Gambar 2.8** Hubungan *start to start* (SS)

(Sumber : Emaunuel dkk, 2016)

- d. SF (*Start to Finish*) merupakan kegiatan awal harus dimulai sebelum kegiatan selanjutnya boleh selesai. Hubungan *start to finish* dapat dilihat pada gambar 2.9



**Gambar 2.9** Hubungan *start to finish* (SF)

(Sumber : Emaunuel dkk, 2016)

## 2.12 Perhitungan Statistik Rata-Rata

Croxton dan Cowden mengatakan statistik merupakan suatu metode atau asas-asas guna “mengerjakan” atau “memanipulasi” data kuantitatif agar angka-angka tersebut agar “berbicara” (Kemdikbud, 2014). *Mean* (rata-rata) merupakan jumlah nilai-nilai dibagi dengan banyaknya individu. Perumusan *Mean* (rata-rata) dapat dilihat pada rumus 2.14:

$$Mean = \frac{\sum_{i=1}^N X_i}{N} \quad (N= 1,2,3,4,\dots,N) \dots\dots\dots 2.14$$

Keterangan:

$X_i$  = Nilai sampel ke- $i$

$N$  = Jumlah sampel

## 2.13 Pengertian dan Cara Pembuatan *Google Form*

Maxi *research* (2018:2) PT. Mulia Karya Inovasi mengatakan bahwasanya *Google Forms* adalah aplikasi untuk membuat *form* berbasis web dan mengumpulkan jawaban secara online. Sebagai *platform*, *Google Form* dapat digunakan untuk berbagai tujuan pengumpulan data. *Google Form* populer digunakan sebagai kuesioner online untuk tugas sekolah ataupun kuliah serta profesional untuk mengerjakan tugas perusahaan. *Google Forms* juga memiliki fitur quiz yang dapat memberi skor pada jawaban pertanyaan kuesioner. Fitur ini merubah kuesioner menjadi alat pendukung proses belajar. Pengajar atau trainer dapat memanfaatkan *Google Form* untuk melakukan quiz terhadap murid ataupun peserta training melalui *device* yang mereka gunakan (smartphone, tablet atau laptop). *Google Form* gratis, tidak ada biaya unuk menggunakan produk tersebut.

Langkah-langkah membuat *Google Form*, seperti yang ditulis oleh Fanandi Prima Ratriyansyah (2018):

### a. Buat Akun *Google*

Memastikan dalam mempunyai akun *Google*, jika belum mempunyai akun *Google* buatlah akun seperti biasanya.



b. Buka Situs *Google Form*

Selanjutnya, bisa menuju link *docs.google.com*. Di situs tersebut, bisa langsung memilih *template* formulir yang diinginkan dengan sesuai kebutuhan. Jika ingin membuat formulir dari *Google Drive*, menekan menu setelah itu *New* yang terletak di sudut kiri atas. Klik *More*, lalu pilih *Google Forms*, dan jika kebutuhan survey untuk *spreadsheet*-mu di *Google Sheet*, dengan membuatnya dengan klik *Insert* lalu pilih *Form*.

c. Membuat Sebuah *Form*

*Google Form* memiliki banyak variasi pilihan pertanyaan yang disesuaikan dengan jenis data yang dibutuhkan. Jenis-jenis pertanyaan yang memberikan responden antara lain: Jawaban Singkat, Paragraf, Pilihan Ganda, hingga Kotak Centang, serta dapat membuat responden mengisi dengan mengunggah file seperti foto, video maupun dokumen. Jika telah selesai menyusun pertanyaan dilanjutkan dengan menekan tombol kirim yang terletak di sudut atas, dan bagikan link *Google Forms* kepada responden.

d. Melihat Tanggapan Responden

Setelah membagikan *Google Form* tentu dapat melihat hasil survey yang telah dilakukan, dapat melihatnya dibagian tanggapan yang berada di sebelah bagian pertanyaan, dan juga dapat melihat versi *spreadsheet*nya dengan melakukan klik pada ikon berwarna merah yang terletak di sebelah pojok kanan atas.

## 2.14 Penelitian Terdahulu dan Penelitian yang Akan dilakukan

Penelitian terdahulu berfungsi sebagai bahan kajian maupun referensi dan perbandingan antar penelitian terdahulu dengan rencana penelitian yang akan dilaksanakan. Hasil penelitian yang akan dikaji tidak lepas dari pembahasan penelitian yang berupa percepatan maupun perencanaan penjadwalan proyek konstruksi menggunakan metode *Critical Path Method*. Penelitian mengenai perencanaan penjadwalan proyek maupun percepatan proyek konstruksi yang telah banyak dilakukan sebelumnya dapat dilihat pada tabel 2.2

**Tabel 2.2** Konsep Penelitian Terdahulu

| No | Perbedaan        | R.M. Iwawo<br>Ezekiel                                                                                          | Pratasik Failen                                                                                                     | Liston Hari Aryono                                                                                                                                                                                                     | Ahmad Maulidi                                                                                                                                                       |
|----|------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Judul Penelitian | Penerapan Metode CPM Pada Proyek Konstruksi (Studi Kasus: Pembangunan Gedung Baru Kompleks Eben Haezar Manado) | Menganalisis Sensitivitas Keterlambatan Durasi Proyek Dengan Metode CPM (Studi Kasus: Perumahan Puri Kelapa Gading) | Evaluasi Pengendalian Biaya dan Waktu Menggunakan CPM Pada Proyek Jembatan Limpas Pengkol Kecamatan Karanggede Kabupaten Boyolali (Studi Kasus Proyek Jembatan Limpas pengkol Kecamatan Karanggede Kabupaten Boyolali) | Penjadwalan Proyek Konstruksi Menggunakan Metode CPM ( <i>Critical Path Method</i> ) (Studi Kasus : Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember) |

|   |            |                                                                                                           |                                                                                                                                                                                                                   |                                                                                                                  |                                                                                                                                                                                                                                                        |
|---|------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | Tujuan     | Penerapan metode CPM dalam penjadwalan kembali proyek pembangunan Gedung Baru Kompleks Eben Haezar Manado | Mengetahui pengaruh percepatan durasi dengan metode CPM pada proyek Perumahan Puri Kelapa Gading dan mengetahui pengaruh percepatan durasi terhadap peningkatan biaya pada pelaksanaan proyek Puri Kelapa Gading. | Penerapan metode CPM dalam mempercepat pelaksanaan proyek dari waktu rencana yang sudah tercantum dalam kontrak. | Menentukan waktu dan biaya dalam keinginan civitas akademik fakultas teknik universitas jember pada proyek pembangunan konstruksi secara efektif dan efisien pada pembangunan lanjutan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember. |
| 3 | Metodologi | CPM ( <i>Critical Path Method</i> )                                                                       | CPM ( <i>Critical Path Method</i> )                                                                                                                                                                               | CPM ( <i>Critical Path Method</i> )                                                                              | <i>Critical Path Method</i> (CPM)                                                                                                                                                                                                                      |
| 4 | Output     | Hasil Akhir yang diperoleh menunjukkan proyek dapat diselesaikan                                          | Dari hasil analisis didapatkan biaya optimum pada penambahan jam                                                                                                                                                  | Dari hasil penelitian optimis biaya pekerjaan proyek pada alternatif pekerjaan I, Alternatif                     | Hasil Akhir yang didapatkan berupa item pekerjaan yang termasuk dalam lintasan kritis. Mengethui perbandingan                                                                                                                                          |

|  |  |                                                                                                                                                                                                                              |                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                |
|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <p>menggunakan metode CPM selama 241 hari dalam menyelesaikan rangkaian pekerjaan persiapan, tanah dan struktur, sedangkan penjadwalan yang direncanakan oleh pihak pelaksana pada pembangunan tersebut selama 259 hari.</p> | <p>kerja pada masing-masing kegiatan dengan biaya penambahan sebesar Rp. 7.540.000,00 dan waktu pemendekan durasi pada lintasan kritis 16 hari.</p> | <p>Pekerjaan II, Alternatif Pekerjaan III, di dapatkan alternatif I menjadi yang paling efisien karena waktu percepatan waktu percepatan, waktu kritis, lintasan kritis dan biaya kritisnya lebih efisien dan ditunjukkan pada biaya normal Rp. 311.615.402,87 dan optimis biaya alternatif pekerjaan I Rp.50.579.077,54 dengan waktu normal 49 hari, dan optimis waktu alternatif pekerjaan I 42 hari.</p> | <p>perencanaan penjadwalan normal dengan keinginan civitas akademik Fakultas Teknik Universitas Jember pada pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember, jika mengalami keterlambatan dalam durasi yang disusun maka adanya <i>alternative</i> penambahan tenaga kerja dan waktu jam kerja.</p> |
|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### BAB 3. METODE PENELITIAN

#### 3.1 Lokasi Proyek

Proyek pembangunan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember berlokasi di Jl. Kalimantan no 37, Krajan Timur, Sumbersari, Kabupaten Jember Jawa Timur dan Proyek ini berlokasi di lingkungan Fakultas Teknik. Lokasi dapat dilihat pada gambar 3.1:



**Gambar 3.1** Lokasi Proyek (sumber: *google earth*)

#### 3.2 Sumber Data

Data yang akan dibutuhkan dalam mendukung keakuratan penelitian ini merupakan data primer dan data sekunder. Data primer merupakan data yang diperoleh dari survey sebagai kebutuhan penelitian, data primer yang dibutuhkan dalam penelitian ini yaitu:

*Google Form* yang dibagikan pada lingkup mahasiswa dan mahasiswi maupun dosen Teknik Sipil, Teknik Mesin, dan Teknik Elektro. Data Sekunder merupakan data yang diperoleh dari proyek, data sekunder yang dibutuhkan dalam penelitian ini yaitu :

1. Analisa Harga Satuan UNEJ 2019
2. Gambar Kerja
3. BQ (*Bill Of Quantity*)



Data-data tersebut dapat membantu dalam pekerjaan penelitian ini dengan menganalisa data proyek yang ada, dan dapat merencanakan dalam penjadwalan proyek konstruksi dengan acuan data primer dalam durasi keinginan terselesainya proyek Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember.

### 3.3 Analisis Data

Penelitian ini secara urut dan sistematis sesuai dasar teori permasalahan, sehingga didapatkan analisis yang akurat untuk mencapai tujuan. Tahapan penelitian ini menggunakan program bantu aplikasi *Software* Manajemen sebagai berikut:

#### 1. Studi Literatur

Kegiatan studi literatur yang sesuai dengan topik penelitian yaitu perencanaan penjadwalan. Studi literatur ini diperoleh dari jurnal-jurnal, skripsi maupun referensi lainnya. Selanjutnya melakukan pencarian sumber-sumber data yang terkait dengan produktivitas tenaga kerja, *alternative* penamabahan tenaga kerja, dan penambahan waktu jam kerja.

#### 2. Pengumpulan Data

Data-data yang dibutuhkan dalam penelitian ini merupakan data primer dan data sekunder, data primer merupakan data yang diperoleh dari survey, data primer yang dibutuhkan dalam penelitian ini yaitu:

*Google Form* yang dibagikan pada lingkup mahasiswa dan mahasiswi maupun dosen Teknik Sipil, Teknik Mesin, dan Teknik Elektro. Data Sekunder merupakan data yang diperoleh dari proyek, data sekunder yang dibutuhkan dalam penelitian ini yaitu:

- a) Analisa Harga Satuan Pekerja UNEJ 2019,
- b) Gambar Kerja,
- c) BQ (*Bill Of Quantity*).

#### 3. Tahapan Analisa Data

Tahapan Analisa Data merupakan urutan perencanaan dari suatu pekerjaan penelitian ini, seperti:

- a) Menyusun WBS (*Work Breakdown Structure*) yaitu menyusun setiap

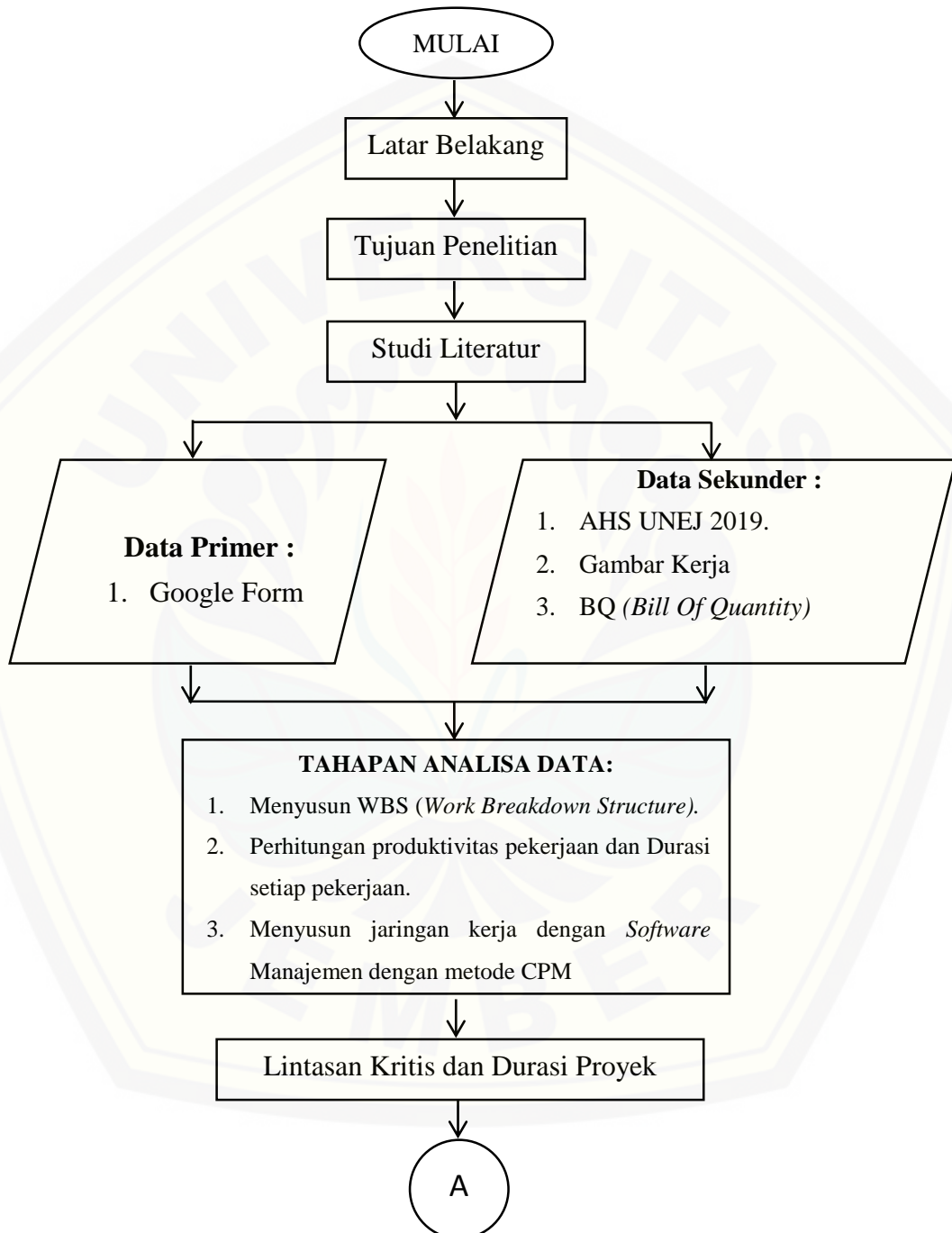
pekerjaan dalam pelaksanaan proyek yang diuraikan menjadi beberapa item pekerjaan agar mempermudah dalam menghitung durasi waktu, maupun kebutuhan pekerja.

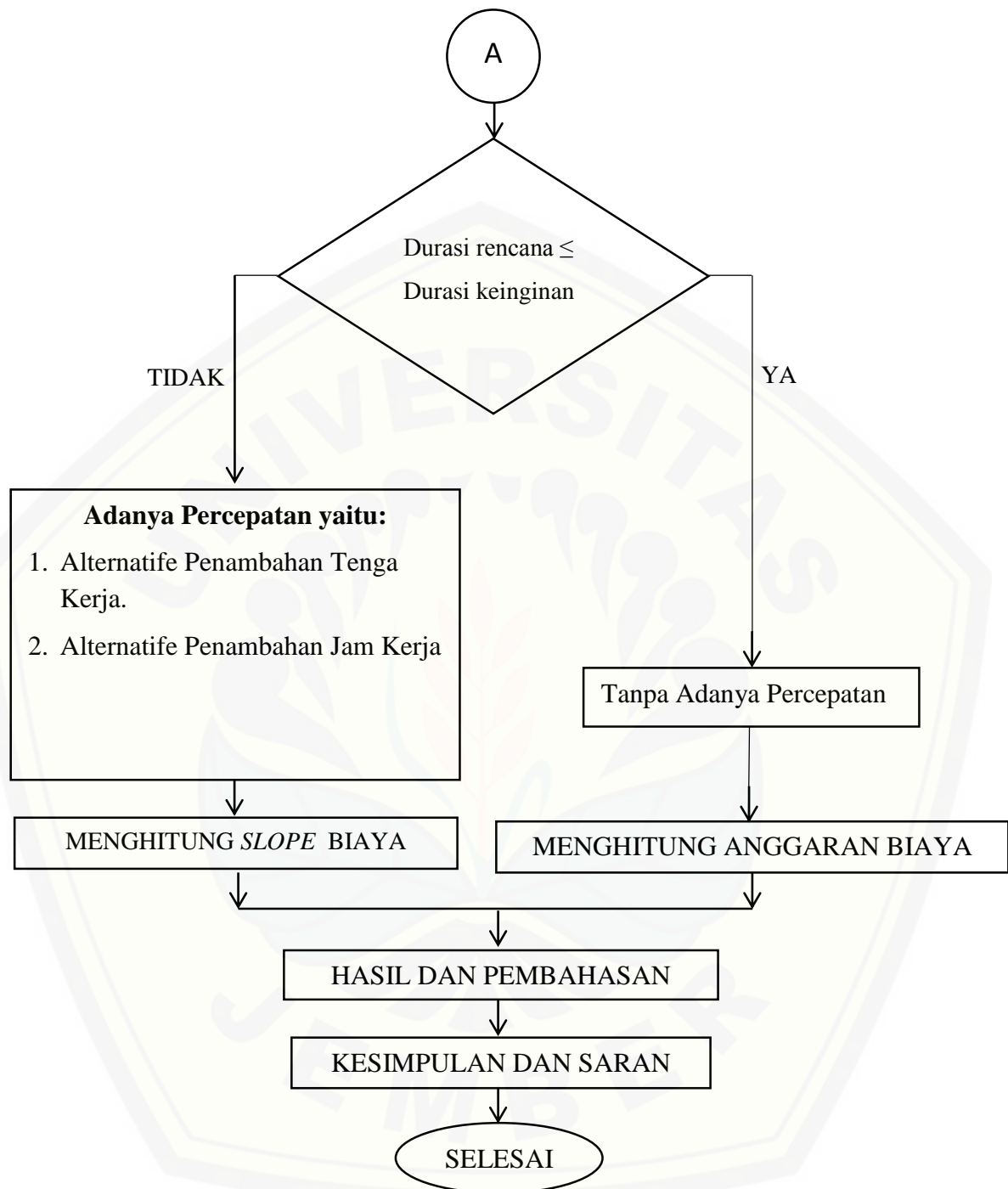
- b) Penentuan durasi setiap pekerjaan merupakan langkah awal dalam mencari produktivitas tenaga kerja yang didapatkan dari koefisien tenaga kerja AHS UNEJ 2019, setelah itu dilakukan dalam perhitungan jumlah tenaga kerja yang nantinya kedua perhitungan tersebut digunakan untuk mencari durasi setiap pekerjaan
- c) Menyusun *Network Planning* merupakan suatu kegiatan dalam menyusun kegiatan pekerjaan yang akan dilakukan di lapangan dengan keterbatasan pekerja maupun dengan waktu normal, penyusunan ini di bantu dengan program bantu *Software* Manajemen dengan Metode CPM.
- d) Identifikasi Lintasan Kritis merupakan pengidentifikasian terhadap pekerjaan yang tidak boleh mengalami penundaan, dikarenakan akan bisa menyebabkan keterlambatan pada pelaksanaan proyek.
- e) Menentukan Durasi Proyek merupakan hasil setelah penyelesaian proses pengerjaan menggunakan *Software* Manajemen dengan memunculkan waktu memulai pekerjaan, waktu selesai pekerjaan, dan durasi penyelesaiannya.
- f) Perbandingan antara durasi rencana dengan durasi keinginan, jika durasi rencana  $\leq$  durasi keinginan maka tidak adanya percepatan penjadwalan suatu proyek, dan sebaliknya.
- g) Waktu Dipercepat merupakan suatu usaha agar mempersingkat dalam penyelesaian seluruh kegiatan proyek dengan menganalisa pada jaringan kerja, seperti penambahan tenaga kerja maupun jam kerja.
- h) Waktu Normal merupakan waktu yang diperlukan proyek dalam melakukan rangkaian kegiatan sampai selesai tanpa ada pertimbangan terhadap penambahan sumber daya maupun penambahan jam kerja.
- i) Menghitung *Slope* biaya merupakan metode perhitungan yang dilakukan untuk kemiringan waktu dan biaya kegiatan dengan menggunakan *Crash Schedule* (Simon Patabang, 2017).

- j) Menghitung Biaya merupakan biaya konstruksi dari setiap pekerjaan, jumlah pekerja dan peralatan yang digunakan, serta mengetahui besar biaya anggaran yang dibutuhkan dalam penyelesaian sistem konstruksi tanpa adanya *Crash Schedule*.
4. Hasil dan Pembahasan merupakan suatu usaha dalam menganalisa dari perbandingan durasi keinginan dengan durasi rencana, dibutuhkananya *alternative* percepatan maupun tidak pada perencanaan penjadwalan tersebut, serta mengetahui pekerjaan yang termasuk pada lintasan kritis pada pekerjaan lantai 3 sampai lantai 6 di Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember.

### 3.4 Diagram Alir Penelitian

Berikut diagram alir penelitian yang dapat dilihat pada Gambar 3.2:





Gambar 3.2 Flowchart penelitian



### 3.5 Matrik Penelitian

Matrik penelitian ini merupakan gambaran keseluruhan suatu pekerjaan, isi penelitian terbuat meliputi judul, latar belakang, tujuan, metodologi dan output. Matrik ini digunakan agar mempermudah dalam melakukan suatu penelitian. Dengan adanya Matrik Penelitian ini semua yang akan dilakukan terstruktur dan bisa mendapatkan hasil penelitian sesuai dengan yang diinginkan. Matrik Penelitian ini dapat dilihat pada tabel 3.1 dan Rencana Penelitian dapat dilihat pada tabel 3.2:



**Tabel 3.1** Matrik Penelitian

| JUDUL                                                                                                                                                         | LATAR BELAKANG                                                                                                                                                                                                                                                                                                                              | RUMUSAN MASALAH                                                                                                                                                                     | VARIABEL                   | DATA          | JENIS DATA          | SUMBER                                                                   | METODE                                                                                                                             | OUTPUT                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------|---------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENJADWLAN PROYEK KONSTRUKSI MENGGUNAKAN CPM ( <i>Critical Path Method</i> )<br>(Studi Kasus: Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember) | Pada pembangunan proyek Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember dilakukan bertahap dari lantai 1 sampai 2, dengan pembangunan lanjutan lantai 3 sampai lantai 6, dengan begitu penelitian ini bisa membantu sebagai opsi maupun referensi dalam suatu penjadwalan konstruksi yang akan dilakukan di tempat tersebut. | 1. Apa saja pekerjaan yang terdapat pada lintasan kritis di proyek pembangunan Gedung Lab Terpadu Fakultas Teknik Universitas Jember dengan menggunakan aplikasi Manajemen Proyek ? | Volume                     | BQ            | Data Sekunder       | Dari pihak Konsultan Perencana                                           | Perencanaan penjadwalan pada penelitian ini menggunakan CPM ( <i>Critical Path Method</i> ) dengan bantu Software Manajemen Proyek | Mengetahui pekerjaan apa saja yang termasuk dalam lintasan kritis pada pembangunan Gedung Lab Terpadu Fakultas Teknik Universitas Jember dengan menggunakan program bantu aplikasi Manajemen Proyek. |
|                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                     | Koefisien Tenaga Kerja     | AHS Unej 2019 |                     | Dokumen RAB pada lantai 1 sampai lantai 2 dari pihak Konsultan Perencana |                                                                                                                                    |                                                                                                                                                                                                      |
|                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                     | Produktivitas Tenaga Kerja |               | Jumlah Tenaga Kerja | Data Primer                                                              |                                                                                                                                    |                                                                                                                                                                                                      |
|                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                     | Tenaga Kerja               | Waktu         | Data Primer         | Hasil dari perhitungan yang didapatkan                                   |                                                                                                                                    |                                                                                                                                                                                                      |
|                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                     | Durasi                     |               |                     |                                                                          |                                                                                                                                    |                                                                                                                                                                                                      |

|  |                                                                                                                                                                                                                                                   |                            |                        |               |                                                                                                    |                                                                                             |                                                                                                                                                                                                                                                                                  |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------|---------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 2. Apakah durasi perencanaan normal yang dibuat melebihi dari durasi civitas Fakultas Teknik Universitas Jember, sehingga adanya <i>alternative</i> percepatan dalam durasi pekerjaan proyek dengan penambahan tenaga kerja dan waktu jam kerja ? | Durasi                     | Waktu                  | Data Primer   | Hasil dari perhitungan yang di dapatkan mahasiswa, mahasiswi serta dosen Teknik Universitas Jember | Statistik rata-rata dari data kelompok.                                                     | Mengetahui perbedaan durasi normal yang dibuat dengan durasi keinginan civitas akademik Fakultas Teknik Universitas Jember, jika mengalami keterlambatan dalam durasi perencanaan maka adanya percepatan dengan <i>alternative</i> penambahan tenaga kerja dan waktu jam kerja . |
|  |                                                                                                                                                                                                                                                   | Volume                     | BQ                     | Data Sekunder | Dari pihak Konsultan Perencana                                                                     | Perencanaan penjadwalan pada penelitian ini menggunakan CPM ( <i>Critical Path Method</i> ) |                                                                                                                                                                                                                                                                                  |
|  |                                                                                                                                                                                                                                                   | Koefisien Tenaga Kerja     | AHS UNEJ 2019          |               | Dokumen RAB pada lantai 1 sampai lantai 2 dari pihak Konsultan Perencana                           |                                                                                             |                                                                                                                                                                                                                                                                                  |
|  |                                                                                                                                                                                                                                                   | Produktivitas Tenaga Kerja |                        |               |                                                                                                    |                                                                                             |                                                                                                                                                                                                                                                                                  |
|  |                                                                                                                                                                                                                                                   | Tenaga Kerja               | Kebutuhan tenaga kerja | Data Primer   | Perencanaan kebutuhan tenaga kerja                                                                 |                                                                                             |                                                                                                                                                                                                                                                                                  |

**Tabel 3.2** Rencana Penelitian

| Bulan                                   | Desember |   |   |   | Januari |   |   |   | Februari |   |   |   | Maret |   |   |   | April |   |   |   | Mei |   |   |   | Juni |   |   |   |
|-----------------------------------------|----------|---|---|---|---------|---|---|---|----------|---|---|---|-------|---|---|---|-------|---|---|---|-----|---|---|---|------|---|---|---|
| Minggu                                  | 1        | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1        | 2 | 3 | 4 | 1     | 2 | 3 | 4 | 1     | 2 | 3 | 4 | 1   | 2 | 3 | 4 | 1    | 2 | 3 | 4 |
| Pengambilan Data dan Pembuatan Proposal | ■        | ■ | ■ | ■ |         |   |   |   |          |   |   |   |       |   |   |   |       |   |   |   |     |   |   |   |      |   |   |   |
| Pengumpulan Proposal                    |          |   |   |   | ■       | ■ | ■ | ■ |          |   |   |   |       |   |   |   |       |   |   |   |     |   |   |   |      |   |   |   |
| Seminar Proposal                        |          |   |   |   |         |   |   |   | ■        | ■ |   |   |       |   |   |   |       |   |   |   |     |   |   |   |      |   |   |   |
| Analisis Data dan Penyusunan laporan    |          |   |   |   |         |   |   |   |          | ■ | ■ | ■ | ■     | ■ | ■ | ■ | ■     | ■ | ■ |   |     |   |   |   |      |   |   |   |
| Seminar Hasil                           |          |   |   |   |         |   |   |   |          |   |   |   |       |   |   |   |       | ■ | ■ |   |     |   |   |   |      |   |   |   |
| Ujian Skripsi                           |          |   |   |   |         |   |   |   |          |   |   |   |       |   |   |   |       |   |   |   |     | ■ | ■ | ■ | ■    | ■ | ■ | ■ |

## BAB 5. PENUTUP

### 5.1 Kesimpulan

Dari hasil penelitian yang telah diuraikan pada Bab 4 dapat disimpulkan bahwa:

1. Pekerjaan yang termasuk dalam lintasan kritis pada pembangunan gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember adalah sebagai berikut: Pekerjaan Pasangan Lantai 6, Pekerjaan Beton Lantai 3, 4, 5 dan 6, Pekerjaan Plesteran dan Benangan Lantai 6, Pekerjaan Lantai pada Lantai 6, Pekerjaan Langit-Langit pada Lantai 6, Pekerjaan Tata Udara Lantai 3, 4, 5 dan 6, Pekerjaan *Sound System* Lantai 6, Pekerjaan Sanitair dan Sanitasi Lantai 6, Instalasi Air Bersih Lantai 6, Instalasi Air Kotor Lantai 6, Pekerjaan Listrik Lantai 6.
2. Setelah dilakukan perhitungan total pada durasi normal dengan alat bantu Program CPM (*Critical Path Method*) didapatkan hasil terselesaikannya Proyek Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember selama 123 hari atau 6 bulan. Sedangkan rata-rata keinginan civitas akademik Fakultas Teknik Universitas Jember adalah 6 bulan 18 hari. Dengan begitu pada perhitungan penelitian ini sesuai dengan keinginan civitas akademik Fakultas Teknik terhadap pembangunan tersebut.



## 5.2 Saran

Berdasarkan kesimpulan yang telah dituliskan diatas, maka saran yang dapat diberikan sebagai berikut:

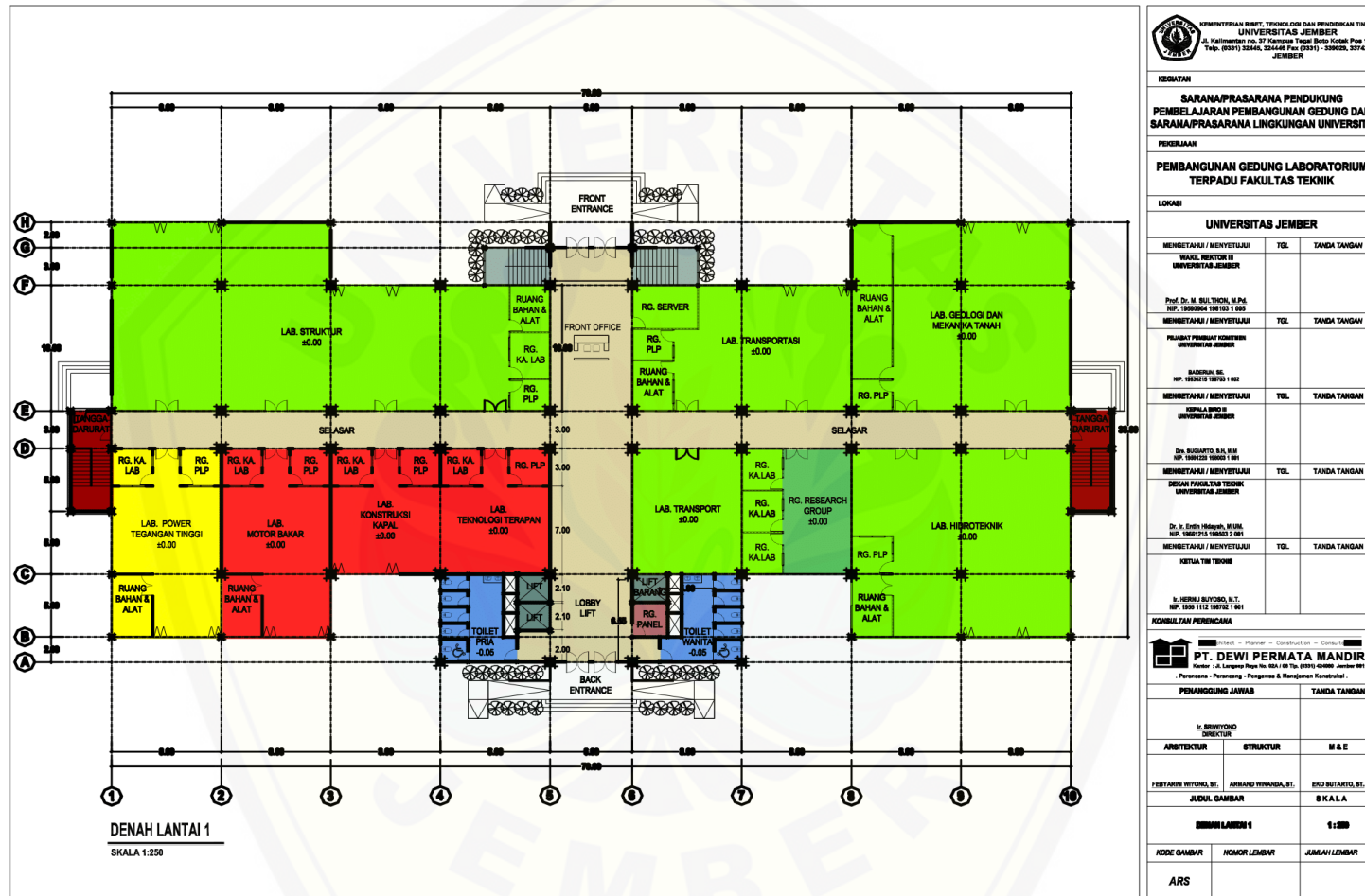
1. Hasil penelitian ini, dapat dijadikannya sebagai opsi pilihan terhadap penjadwalan serta pada penerapan di lapangan dengan pengawasan terhadap pengelolaan yang sangat ketat terkait pelaksanaan pembangunan lanjutan di gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember.
2. Pada penelitian ini, hanya melakukan penjadwalan pada pekerjaan persiapan, struktur, arsitek, bangunan penunjang, dan MEP dengan menggunakan BoQ (*Bill of Quantity*) yang diperoleh dari pihak konsultan. Maka dari itu, pada penelitian selanjutnya dapat dilakukan dengan menghitung sendiri dalam penentuan BoQ (*Bill of Quantity*). Hal itu dikarenakan supaya proyek pada pembangunan lanjutan Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember bisa mendapatkan hal-hal mana yang lebih efisien yang akan terjadi di lapangan.



**DAFTAR PUSTAKA**

- Ahadi, 2011. *Time Schedule Proyek*. <http://www.ilmusipil.com/time-schedule-proyek.html>. (24 April 2011)
- Arifuddin, R. 2011. Optimasi Penjadwalan Proyek dengan Penyeimbangan Biaya Menggunakan Kombinasi CPM dan Algoritma Genetika. *Jurnal Masyarakat Informatika*.2(4): 1-14.
- Aspia, Giri,Fika, dkk. 2017:583 . Penerapan Metode Crashing dalam Percepatan durasi proyek dengan alternatif penambahan jam lembur dan *Shift* kerja (studi kasus: Proyek Pembangunan Hotel Grand Keisha, Yogyakarta). Teknik Sipil. Universitas Sebelas Maret. Yogyakarta
- Dundu, J. S. S. A. K. T., dan M. Sibi 2015. Pengaruh Percepatan Durasi Terhadap Waktu Pada Proyek Konstruksi (Studi Kasus Pembangunan Persekolahan *Eben Haezar* Manado). *Jurnal Sipil Statik*. 3(5): 281-291.
- Emanuel, A. W. R., J. Toba, dan Y.M Djajalaksana. 2009. Panduan Lengkap Mengelola Proyek dengan *Microsoft Project Professional 2007*. Cetakan Pertama. Yogyakarta: Graha Ilmu.
- Ibrahim, M, M, 2019, Penggunaan Media *Google Form* Dalam Evaluasi Pembelajaran Bahasa Arab Maharah Kitabah, Malang, ISSN: 2597-5242
- Iwawo, E. R. M., J. Tjakra, dan P. A. K. Pratas. 2016. Penerapan Metode CPM pada Proyek Konstruksi (Studi Kasus Pembangunan Gedung Baru Kompleks *Eben Haezar* Manado). *Jurnal Sipil Statik*. 4(9): 551-558.
- Kusnanto. 2010. Penjadwalan Proyek Konstruksi dengan Metode PERT (Studi Kasus Proyek Pembangunan Gedung R. Kuliah dan Perpustakaan PGSD Kleco FKIP UNS Tahap 1). *Skripsi*. Surakarta: Teknik Sipil Universitas Sebelas Maret.
- Kementrian Pendidikan dan Kebudayaan Republik Indonesia. 2014. *Pengantar Statistik*. Jakarta: Setjen Pusat Data dan Statistik Pendidikan-Kebudayaan.
- Marthea, R. 2017. Perencanaan Penjadwalan Proyek dengan Metode *Fast Track* (Studi Kasus Proyek Tower Caspian Grand Sungkono Lagoon). *Skripsi*. Jember: S1 Teknik Sipil Universitas Jember.
- Muliyadi. 2016. Penjadwalan Ulang Proyek Konstruksi dengan Preseden Diagram *Method* (Studi Kasus Pembangunan Unit Sarana Belajar TK Pembina Kabupaten Kecamatan Johan Pahlawan Kabupaten Aceh Barat). *Skripsi*. Aceh: S1 Teknik Sipil Universitas Teuku Umar.

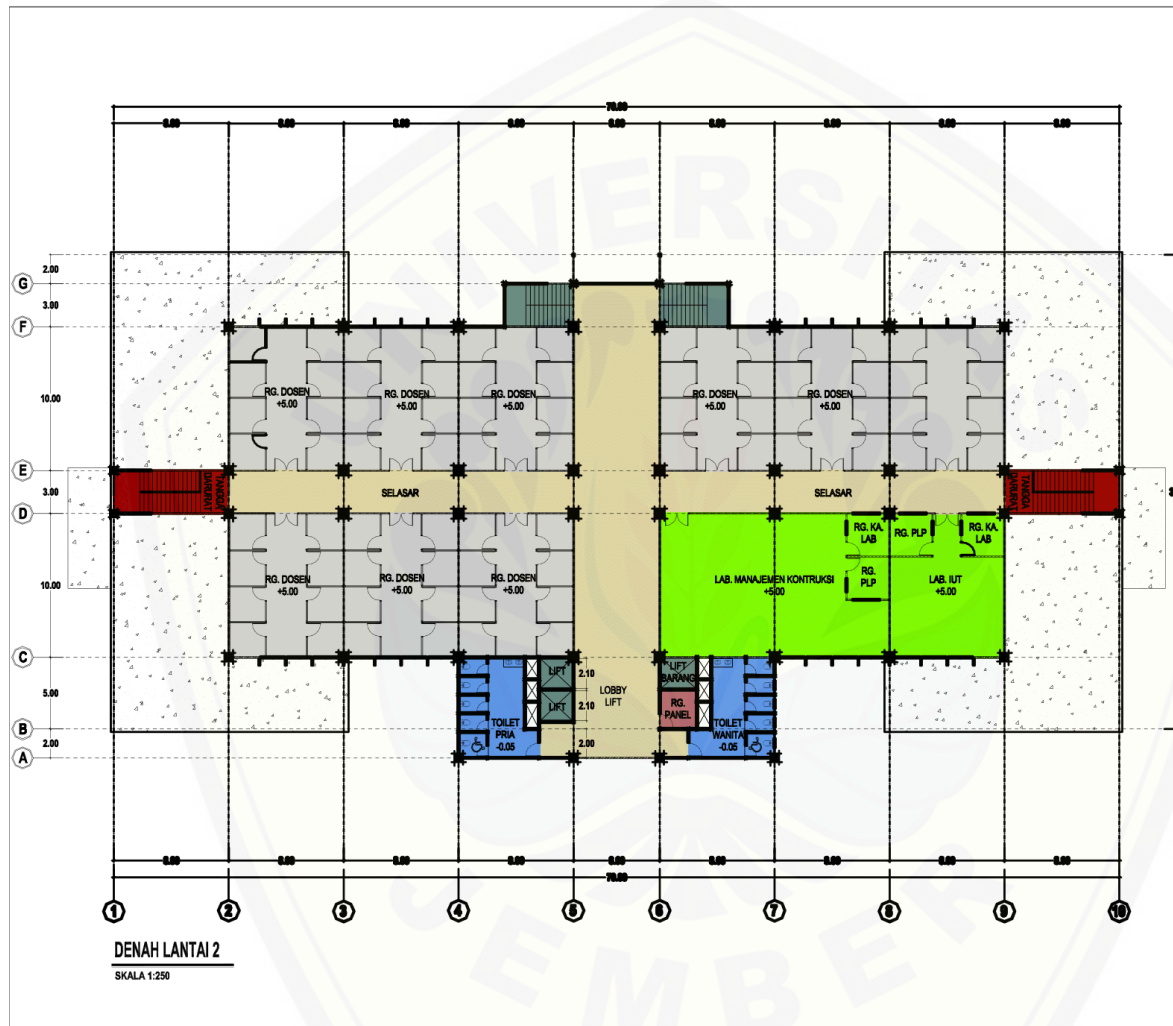
- Patabang, Simon. 2017. *11 Biaya dalam Proyek*.  
<https://www.slideshare.net/simonpatabang/11-biaya-dalam-proyek>. (1 November 2017)
- Shofyan, S. 2018. Penjadwalan Proyek Pembangunan Gedung Fakultas Keguruan dan Ilmu Pendidikan Universitas Jember Menggunakan Metode *Gantt Chart*. *Skripsi*. Jember: Teknik Sipil Universitas Jember.
- Simatupang, J.S. 2015. Pengaruh Percepatan Durasi terhadap Waktu pada Proyek Konstruksi. *Jurnal Sipil Statik*, 3(5):281-280.
- Sulaiman, M., Munirwansyah, dan Azmeri. 2017. Analisis Penyebab Keterlambatan Pelaksanaan Proyek Ditinjau Dari Waktu Pelaksanaan di Provinsi Aceh. *Jurnal Teknik Sipil*. 1(2) :405-418.
- Suryono, D., S. E. Unas, dan E. Andi. 2016. Analisis Risiko Penggunaan Analisa Harga Satuan Pekerja Beton Bertulang Yang Sama Untuk Elemen Bangunan Yang Berbeda. *Jurnal Mahasiswa Jurusan Teknik Sipil*. 1(3):1-14.
- Setiawati, S. 2016. Penerapan Metode CPM dan PERT pada Penjadwalan Proyek Konstruksi (Studi Kasus Rehabilitasi atau Perbaikan dan Peningkatan Infrastruktur Irigasi Daerah Lintas Kabupaten Kota D.I Pekan Dolok. *Skripsi*. Medan: Teknik Sipil Universitas Sumatera Utara.
- Soeharto, I. 1999. *Manajemen Proyek (Dari Konseptual Sampai Operasional)*. 2. Jakarta: Erlangga.
- Telaumbanua, T. A., J. B. Mangare dan M. Sibi. 2017. Perencanaan Waktu Penyelesaian Proyek Toko Modisland Manado dengan Metode CPM. *Jurnal Sipil Statik*. 5(8): 549-557.
- Wahyuni, S.F. 2017. Perbandingan Biaya Dan Waktu Pada Pelaksanaan Pekerjaan Pelat Lantai Konvensional Dan Precast (Studi Kasus Proyek Pembangunan Ruko Puncak Dharmahusada Surabaya). *Skripsi*. Jember Fakultas Teknik Universitas Jember
- Warsika, P. D. 2016. Analisa Biaya dan Waktu dengan Metode *Fast Track* pada Pelaksanaan Proyek Konstruksi (Studi Kasus Proyek Pembangunan Gedung di Kabupaten Bandung). *Skripsi*. Denpasar: Teknik Sipil Universitas Udayana.
- Widiasanti, I. dan Lenggogeni. 2013. *Manajemen Konstruksi*. Cetakan pertama. Bandung: PT. Remaja Rosdakarya.
- Wirantika, H. 2016. Pengendalian Waktu dan Biaya Pembangunan Proyek Jember *Icon* Fase Dua dengan *Critical Path Method* (CPM). *Skripsi*. Jember: S1 Teknik Sipil Universitas Jember.

Lampiran 4.1 Denah Gedung Laboratorium Terpadu Fakultas Teknik Universitas Jember



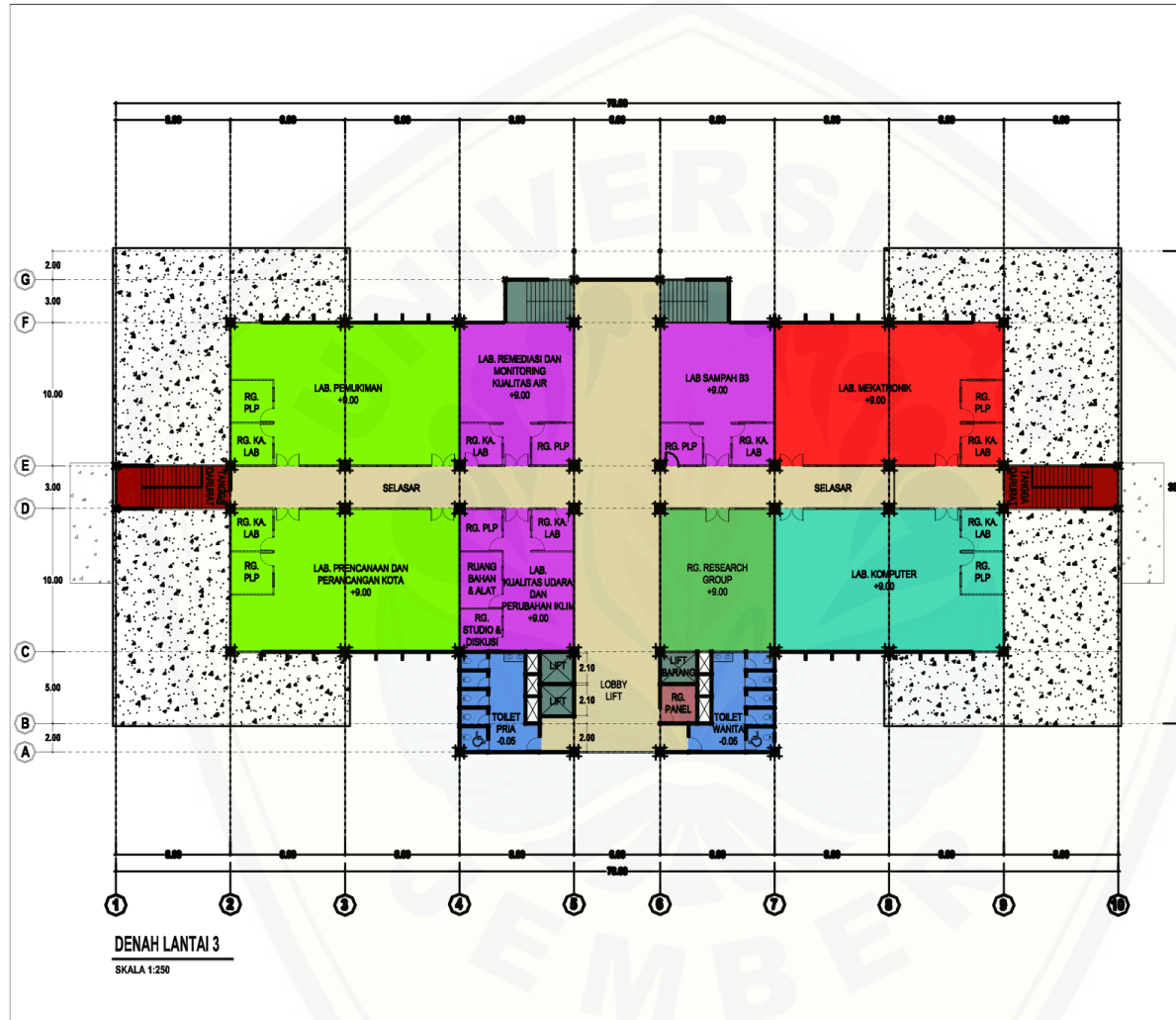
|                                                                                                                                                                                                                                                                                     |                    |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|
|  PEMERINTAH RI/UT, TEKNOLOGI DAN PENDIDIKAN TINGGI<br>UNIVERSITAS JEMBER<br>Jl. Kalimantan no. 37 Kampus Teknologi Kota Jember<br>Telp. (0331) 32444, 32448 Fax (0331) -329926, 327422<br>JEMBER |                    |                  |
| KEGIATAN                                                                                                                                                                                                                                                                            |                    |                  |
| SARANA/PASARANA PENDUKUNG PEMBELAJARAN PEMBANGUNAN GEDUNG DAN SARANA/PASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                 |                    |                  |
| PEKERJAAN                                                                                                                                                                                                                                                                           |                    |                  |
| PEMBANGUNAN GEDUNG LABORATORIUM TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                             |                    |                  |
| LOKASI                                                                                                                                                                                                                                                                              |                    |                  |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                  |                    |                  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                             | TGL. TANDA TANGAN  |                  |
| WAJIB REKTOR II UNIVERSITAS JEMBER                                                                                                                                                                                                                                                  |                    |                  |
| Prof. Dr. M. SULICHON, M.Pd.<br>NIP. 19620904 198703 1 009                                                                                                                                                                                                                          |                    |                  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                             | TGL. TANDA TANGAN  |                  |
| PRIBADI PRIBADI KEMENTERIAN UNIVERSITAS JEMBER                                                                                                                                                                                                                                      |                    |                  |
| BAZURAN, S.S.<br>NIP. 19620115 198101 1 001                                                                                                                                                                                                                                         |                    |                  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                             | TGL. TANDA TANGAN  |                  |
| KOPRALA SING II UNIVERSITAS JEMBER                                                                                                                                                                                                                                                  |                    |                  |
| Dia. SUGAMOTO, S.A. S.S.<br>NIP. 19620315 198203 1 001                                                                                                                                                                                                                              |                    |                  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                             | TGL. TANDA TANGAN  |                  |
| DEKAN FAKULTAS TEKNIK UNIVERSITAS JEMBER                                                                                                                                                                                                                                            |                    |                  |
| Dr. Ir. Ertis Hidayat, M.Eng.<br>NIP. 19620213 196202 2 001                                                                                                                                                                                                                         |                    |                  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                             | TGL. TANDA TANGAN  |                  |
| KETUA TIM TEBOS                                                                                                                                                                                                                                                                     |                    |                  |
| I. HERRU SUYONO, S.T.<br>NIP. 19621112 196212 1 961                                                                                                                                                                                                                                 |                    |                  |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                 |                    |                  |
|  PT. DEWI PERMATA MANDIRI<br>Jalan ...<br>Perencana - Perancang - Pengawas & Manajemen Konstruksi                                                                                               |                    |                  |
| PERANGKUP JAWAB                                                                                                                                                                                                                                                                     | TANDA TANGAN       |                  |
| I. BIRWYONO<br>DIREKTUR                                                                                                                                                                                                                                                             |                    |                  |
| ARSITEKTUR                                                                                                                                                                                                                                                                          | STRUKTUR           | M & E            |
| FERYAN WYONO, ET.                                                                                                                                                                                                                                                                   | ASHAND WYANDA, ET. | ERD SUYARTO, ET. |
| JUDUL GAMBAR                                                                                                                                                                                                                                                                        |                    | SKALA            |
| DESKRIPSI                                                                                                                                                                                                                                                                           |                    | 1:200            |
| KODE GAMBAR                                                                                                                                                                                                                                                                         | NOMOR LEMBAR       | JUMLAH LEMBAR    |
| ARS                                                                                                                                                                                                                                                                                 |                    |                  |



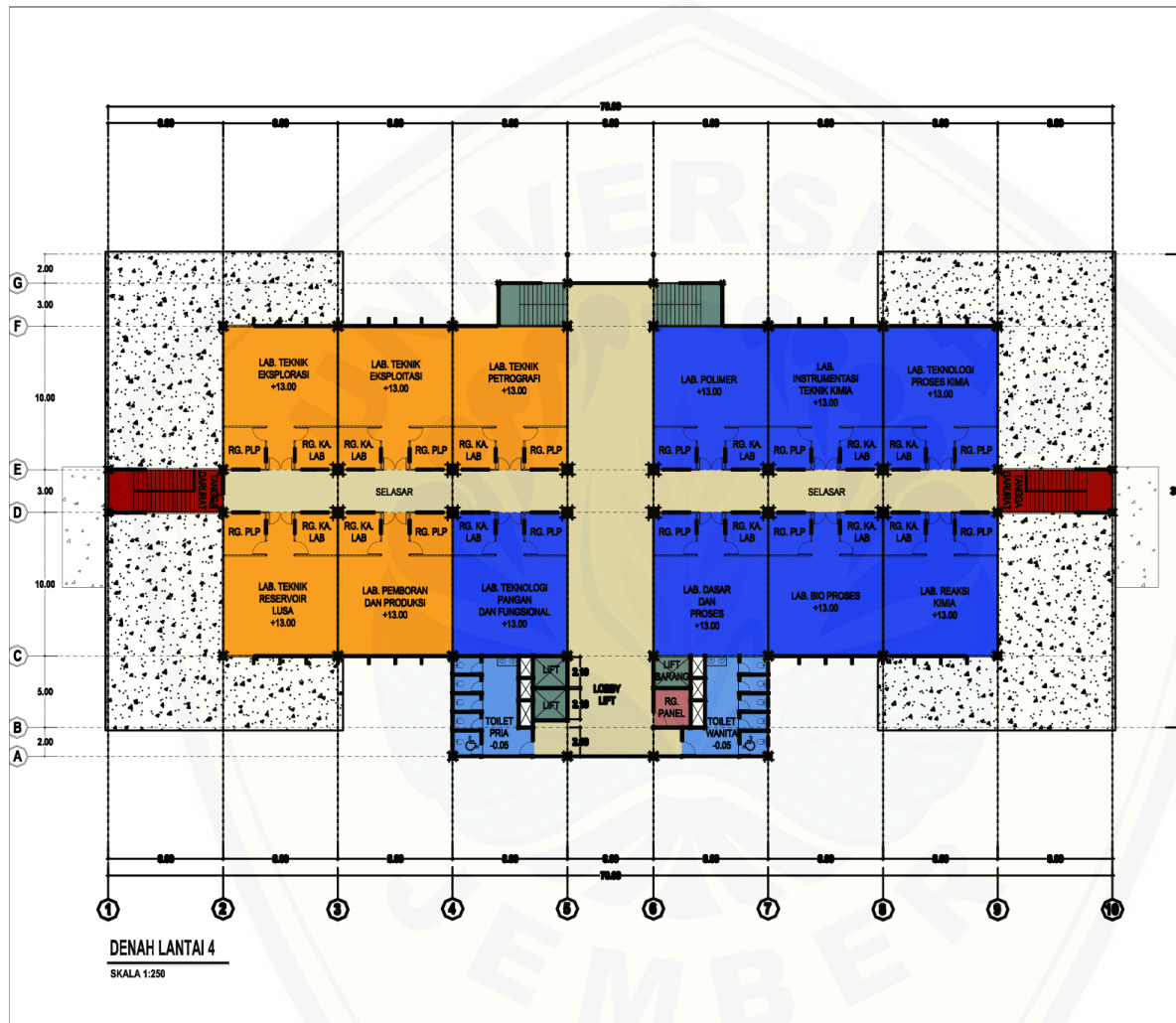




|                                                                                                                                                                                                                                                                                                  |              |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|
|  KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI<br><b>UNIVERSITAS JEMBER</b><br>Jl. Kalimantan No. 37 Kampus Teknologi Kota Pasuruan 60132<br>Telp. (0331) 32446, 32448 Fax (0331) 33925, 32742<br>JEMBER |              |               |
| KONDISI                                                                                                                                                                                                                                                                                          |              |               |
| SARANAPRASARANA PENDUKUNG<br>PEMBELAJARAN PEMBANGUNAN GEDUNG DAN<br>SARANAPRASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                        |              |               |
| PEKERJAAN                                                                                                                                                                                                                                                                                        |              |               |
| PEMBANGUNAN GEDUNG LABORATORIUM<br>TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                                       |              |               |
| LOKASI                                                                                                                                                                                                                                                                                           |              |               |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                               |              |               |
| MENGETARI / MENYETUJUI                                                                                                                                                                                                                                                                           | TGL.         | TANDA TANGAN  |
| WAKIL REKTOR II<br>UNIVERSITAS JEMBER<br><br>Prof. Dr. M. BULTHON, M.Pd<br>NIP. 1960204 198103 1 685                                                                                                                                                                                             |              |               |
| MENGETARI / MENYETUJUI                                                                                                                                                                                                                                                                           | TGL.         | TANDA TANGAN  |
| PRIBADI PRIBADI KEMENTERIAN<br>UNIVERSITAS JEMBER<br><br>BACHRUL, SC<br>NIP. 1962019 198705 1 002                                                                                                                                                                                                |              |               |
| MENGETARI / MENYETUJUI                                                                                                                                                                                                                                                                           | TGL.         | TANDA TANGAN  |
| KEPALA BINA BANGUNAN<br>UNIVERSITAS JEMBER<br><br>DR. SUGIARTO, S.H., M.M<br>NIP. 1961028 196001 1 06                                                                                                                                                                                            |              |               |
| MENGETARI / MENYETUJUI                                                                                                                                                                                                                                                                           | TGL.         | TANDA TANGAN  |
| DEKAN FAKULTAS TEKNIK<br>UNIVERSITAS JEMBER<br><br>Dr. H. Ertha Hidayat, M.Eng<br>NIP. 1961215 196023 2 081                                                                                                                                                                                      |              |               |
| MENGETARI / MENYETUJUI                                                                                                                                                                                                                                                                           | TGL.         | TANDA TANGAN  |
| KETUA TIM TISBOM<br><br>Dr. Heru Sutomo, S.T.<br>NIP. 1961112 196125 1 161                                                                                                                                                                                                                       |              |               |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                              |              |               |
|  PT. DEWI PERMATA MANDIRI<br>Jalan J. Lingkar Raya No. 42/1 (P. Tg. 0331) 60000 Jember 60111<br>. Perencana - Perancang - Pengawas & Manajemen Konstruksi.                                                    |              |               |
| PEMANGGUNG JAWAB                                                                                                                                                                                                                                                                                 | TANDA TANGAN |               |
| Ir. SRIWYONO<br>DIREKTUR                                                                                                                                                                                                                                                                         |              |               |
| ARSITEKTUR<br>FEBRIAN WYONO, ST.    ARHANI WINANDA, ST.    EKO BUTARTO, ST.                                                                                                                                                                                                                      | STRUKTUR     | M & E         |
| JUDUL GAMBAR                                                                                                                                                                                                                                                                                     | 8 K A L A    |               |
| SKALA LAMBEZ<br>ARS                                                                                                                                                                                                                                                                              | 1:200        |               |
| KODE GAMBAR                                                                                                                                                                                                                                                                                      | NOMOR LEMBAR | JUMLAH LEMBAR |
| ARS                                                                                                                                                                                                                                                                                              |              |               |

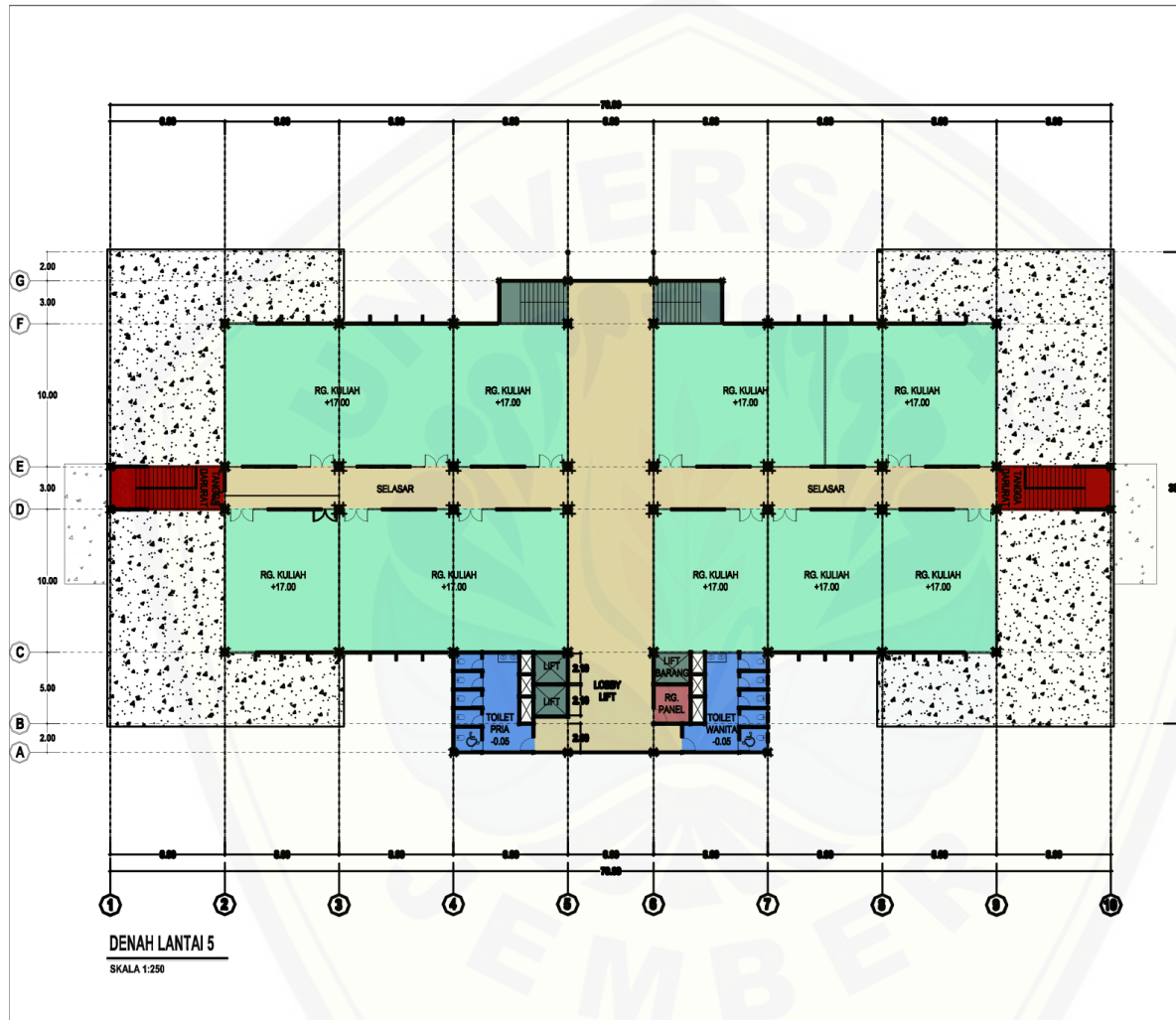






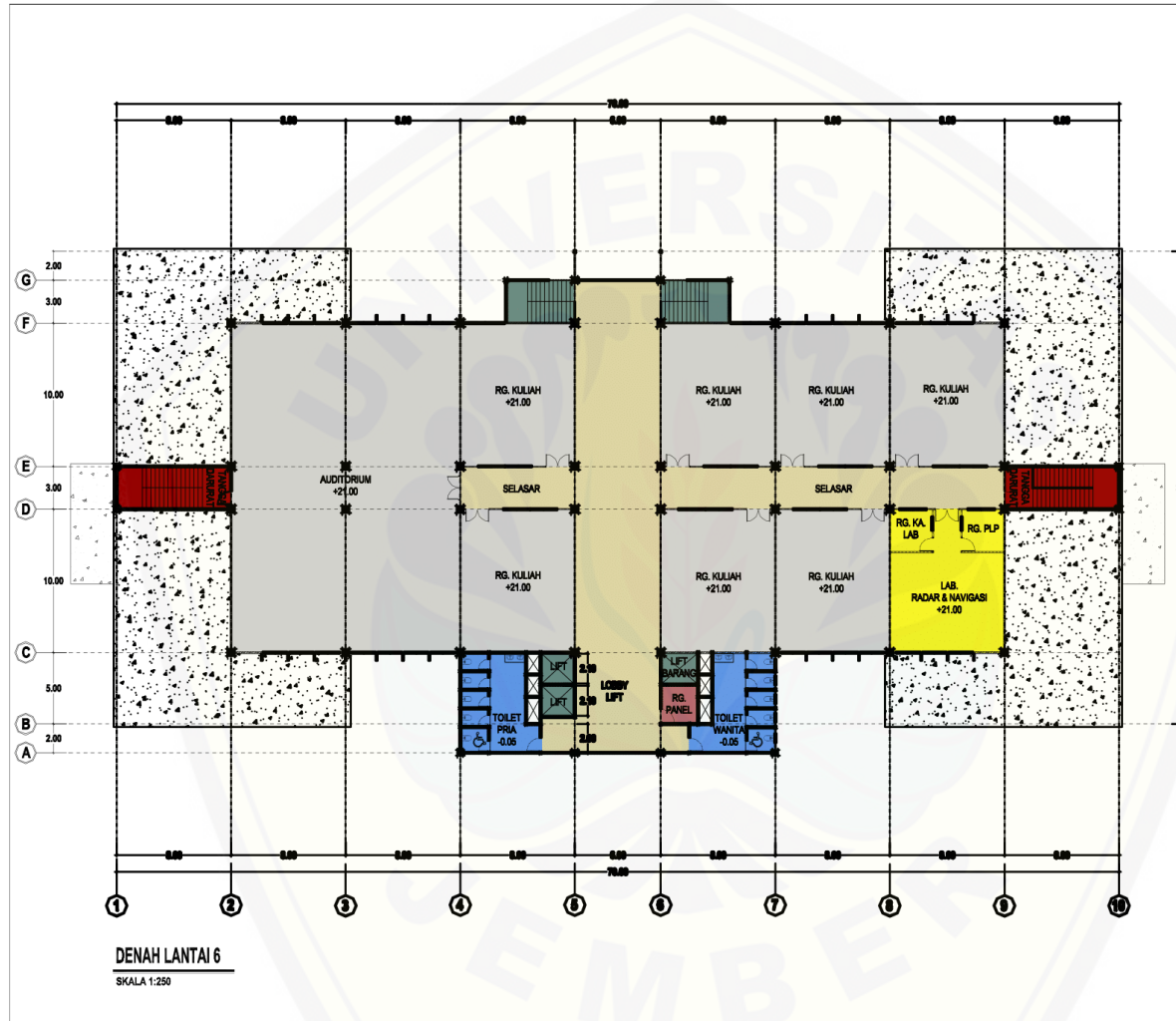
|                                                                                                                                                                                                                                                                                                     |                                                                                                        |                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
|  KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI<br><b>UNIVERSITAS JEMBER</b><br>Jl. Kalimantan No. 37 Kampus Teknologi Kota Pasuruan 130<br>Telp. (0331) 32444, 32448 Fax. (0331) - 339028, 337422<br>JEMBER |                                                                                                        |                                                                             |
| KEDAMATAN                                                                                                                                                                                                                                                                                           |                                                                                                        |                                                                             |
| SARANA/PASARANA PENDUKUNG<br>PEMBELAJARAN PEMBANGUNAN GEDUNG DAN<br>SARANA/PASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                           |                                                                                                        |                                                                             |
| PEKERJAAN                                                                                                                                                                                                                                                                                           |                                                                                                        |                                                                             |
| PEMBANGUNAN GEDUNG LABORATORIUM<br>TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                                          |                                                                                                        |                                                                             |
| LOKASI                                                                                                                                                                                                                                                                                              |                                                                                                        |                                                                             |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                                  |                                                                                                        |                                                                             |
| MENGETAHUI / MENYETUJUI<br>WAKIL REKTOR II<br>UNIVERSITAS JEMBER<br><br>Prof. Dr. H. SUL THOM, M.Pd<br>NIP. 1950004 198103 1 005                                                                                                                                                                    | TGL.                                                                                                   | TANDA TANGAN                                                                |
| MENGETAHUI / MENYETUJUI<br>PRIBADI PIMBAG KONTROL<br>UNIVERSITAS JEMBER<br><br>BUDIANA, S.E.<br>NIP. 1962115 198210 1 002                                                                                                                                                                           | TGL.                                                                                                   | TANDA TANGAN                                                                |
| MENGETAHUI / MENYETUJUI<br>KEPALA BIDANG<br>UNIVERSITAS JEMBER<br><br>Drs. BUDAWATI, S.H., M.M<br>NIP. 1961222 196002 1 001                                                                                                                                                                         | TGL.                                                                                                   | TANDA TANGAN                                                                |
| DEKAN FAKULTAS TEKNIK<br>UNIVERSITAS JEMBER<br><br>Dr. Ir. Erich Hidayat, M.Eng<br>NIP. 1962115 196002 1 001                                                                                                                                                                                        | TGL.                                                                                                   | TANDA TANGAN                                                                |
| MENGETAHUI / MENYETUJUI<br>KETUA TIM TEKNIK<br><br>Ir. HERRU SUTYONO, S.T.<br>NIP. 1956 1112 196702 1 001                                                                                                                                                                                           | TGL.                                                                                                   | TANDA TANGAN                                                                |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                             |
|  <b>PT. DEWI PERMATA MANDIRI</b><br>Kantor : Jl. Lapangan Raya No. 05A / 06 Tlp. (0331) 480000 Jember 60111<br>Perencana - Perancang - Pengawas & Manajemen Konstruksi                                          |                                                                                                        |                                                                             |
| PENANGGUNG JAWAB<br><br>Ir. BIRHYONO<br>DIREKTUR                                                                                                                                                                                                                                                    | TANDA TANGAN                                                                                           |                                                                             |
| ARSITEKTUR<br><br>FEBYARIN WICHO, ST.<br>JUDUL GAMBAR<br><br>BIRNIE LARINGS<br>KODE GAMBAR<br><br>ARS                                                                                                                                                                                               | STRUKTUR<br><br>ASHARDI WIRANDA, ST.<br>S K A L A<br><br>1:200<br><br>NOMOR LEMBAR<br><br>JEMAH LEMBAR | M & E<br><br>EKO SUTARTO, ST.<br>S K A L A<br><br>1:200<br><br>JEMAH LEMBAR |



|                                                                                                                                                                                                                                                                                              |                        |               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
|  KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI<br>UNIVERSITAS JEMBER<br>Jl. Kalimantan no. 37 Kampus Teknologi Boko Kotak Pos 100<br>Telp. (0331) 32446, 32448 Fax (0331) - 339029, 337422<br>JEMBER |                        |               |
| KEBIDATAN                                                                                                                                                                                                                                                                                    |                        |               |
| SARANA/PASARANA PENDUKUNG<br>PEMBELAJARAN PEMBANGUNAN GEDUNG DAN<br>SARANA/PASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                    |                        |               |
| PEREKRAJAN                                                                                                                                                                                                                                                                                   |                        |               |
| PEMBANGUNAN GEDUNG LABORATORIUM<br>TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                                   |                        |               |
| LOKASI                                                                                                                                                                                                                                                                                       |                        |               |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                           |                        |               |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                      | TGL.                   | TANDA TANGAN  |
| WAKIL REKTOR II<br>UNIVERSITAS JEMBER<br><br>Prof. Dr. H. SULTRON, M.Pd.<br>SIP. 1983094 198102 1 005                                                                                                                                                                                        |                        |               |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                      | TGL.                   | TANDA TANGAN  |
| PRABUDI PRABUDI KEMENTERIAN<br>UNIVERSITAS JEMBER<br><br>BADERUN, SE.<br>SIP. 1982015 198103 1 002                                                                                                                                                                                           |                        |               |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                      | TGL.                   | TANDA TANGAN  |
| KEPALA BINA II<br>UNIVERSITAS JEMBER<br><br>DR. SUDARTO, S.H., S.H.<br>SIP. 1967015 196602 2 001                                                                                                                                                                                             |                        |               |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                      | TGL.                   | TANDA TANGAN  |
| DEKAN FAKULTAS TEKNIK<br>UNIVERSITAS JEMBER<br><br>Dr. Ir. Erlet Hidayat, S.H., M.M.<br>SIP. 1967015 196602 2 001                                                                                                                                                                            |                        |               |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                      | TGL.                   | TANDA TANGAN  |
| KETUA TIM TEKNIK<br><br>Ir. HERU SUYONO, S.T.<br>SIP. 1966 1112 196702 1 001                                                                                                                                                                                                                 |                        |               |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                          |                        |               |
|  PT. DEWI PERMATA MANDIRI<br>Gedung : Jl. Lingkar Luar No. 10A, RT. 02/03 Gubuk Jember 68111<br>Perencana - Perancang - Pengawas & Manajemen Konstruktural                                               |                        |               |
| PENANGGUNG JAWAB                                                                                                                                                                                                                                                                             | TANDA TANGAN           |               |
| Ir. BIRYONDIO<br>DIREKTUR                                                                                                                                                                                                                                                                    |                        |               |
| ARSITEKTUR<br>STRUKTUR<br>M & E                                                                                                                                                                                                                                                              |                        |               |
| FERTARIN WITIKO, ST.<br>ARIFAND WINDA, ST.<br>EKO BUTARTO, ST.                                                                                                                                                                                                                               | B K A L A              |               |
| JUDUL GAMBAR                                                                                                                                                                                                                                                                                 | BINA LANTAI 4<br>1:250 |               |
| KODE GAMBAR                                                                                                                                                                                                                                                                                  | NOMOR LEMBAR           | JUMLAH LEMBAR |
| ARS                                                                                                                                                                                                                                                                                          |                        |               |



|                                                                                                                                                                                                                                                                                                |                       |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|
|  KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI<br><b>UNIVERSITAS JEMBER</b><br>Jl. Kalimantan no. 37 Kampus Teknologi Kota Jember 60132<br>Telp. (0331) 32444, 32446 Fax (0331) 32626, 32742<br>JEMBER |                       |              |
| KEGIATAN                                                                                                                                                                                                                                                                                       |                       |              |
| SARANAPRASARANA PENDUKUNG<br>PEMBELAJARAN PEMBANGUNAN GEDUNG DAN<br>SARANAPRASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                      |                       |              |
| PEKERJAAN                                                                                                                                                                                                                                                                                      |                       |              |
| PEMBANGUNAN GEDUNG LABORATORIUM<br>TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                                     |                       |              |
| LOKASI                                                                                                                                                                                                                                                                                         |                       |              |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                             |                       |              |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                        | TGL.                  | TANDA TANGAN |
| WAJIL REKTOR II<br>UNIVERSITAS JEMBER<br><br>Prof. Dr. H. RIA TACH, M.Pd<br>NIP. 1952004 198103 1 005                                                                                                                                                                                          |                       |              |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                        | TGL.                  | TANDA TANGAN |
| PRABUJI PRABUJI KOSMIR<br>UNIVERSITAS JEMBER<br><br>BAKHAR, S.<br>NIP. 1962013 198703 1 002                                                                                                                                                                                                    |                       |              |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                        | TGL.                  | TANDA TANGAN |
| KEPALA BIRU II<br>UNIVERSITAS JEMBER<br><br>Drs. BUDIARTO, S.H., M.H.<br>NIP. 1949123 196903 1 091                                                                                                                                                                                             |                       |              |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                        | TGL.                  | TANDA TANGAN |
| DEKAN FAKULTAS TEKNIK<br>UNIVERSITAS JEMBER<br><br>Dr. H. Endo Hidayat, S.Si, M.Si<br>NIP. 1963013 196502 2 091                                                                                                                                                                                |                       |              |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                        | TGL.                  | TANDA TANGAN |
| KETUA TIM TISBOM<br><br>Ir. HERU SUYONO, M.T.<br>NIP. 1955 1112 198702 1 091                                                                                                                                                                                                                   |                       |              |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                            |                       |              |
|  <b>PT. DEWI PERMATA MANDIRI</b><br>Kantor : J. Linggajaya Raya No. 30A / 10 Tlp. (0331) 426000 Jember 60111<br>* Perencana - Perancang - Pengawas & Manajemen Konstruksi *                                |                       |              |
| PENANGGUNG JAWAB                                                                                                                                                                                                                                                                               | TANDA TANGAN          |              |
| Ir. BIRNYOHIO<br>DIREKTUR                                                                                                                                                                                                                                                                      |                       |              |
| ARSITEKTUR<br>STRUKTUR<br>M & E                                                                                                                                                                                                                                                                |                       |              |
| FEBRYANI WYCHO, ST.<br>ARMAND WIMANDA, ST.<br>ENDI RUTARTO, ST.                                                                                                                                                                                                                                | B K A L A<br>1:250    |              |
| KODE GAMBAR<br>NOMOR LEMBAR<br>JUMLAH LEMBAR                                                                                                                                                                                                                                                   | ARS<br>1:250<br>1:250 |              |



|                                                                                                                                                                                                                                                                                                       |                     |                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------|--|
|  KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI<br><b>UNIVERSITAS JEMBER</b><br>Jl. Kalimantan No. 37 Kampus Teknologi Bodo Wetan Prok 109<br>Telp. (0331) 32448, 324448 Fax (0331) - 330023, 337422<br>JEMBER |                     |                   |  |
| KEGIATAN                                                                                                                                                                                                                                                                                              |                     |                   |  |
| SARANA/PRASARANA PENDUKUNG PEMBELAJARAN PEMBANGUNAN GEDUNG DAN SARANA/PRASARANA LINGKUNGAN UNIVERSITY                                                                                                                                                                                                 |                     |                   |  |
| PEKERJAAN                                                                                                                                                                                                                                                                                             |                     |                   |  |
| PEMBANGUNAN GEDUNG LABORATORIUM TERPADU FAKULTAS TEKNIK                                                                                                                                                                                                                                               |                     |                   |  |
| LOKASI                                                                                                                                                                                                                                                                                                |                     |                   |  |
| UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                                    |                     |                   |  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                               | TGL.                | TANDA TANGAN      |  |
| WAKIL REKTOR II<br>UNIVERSITAS JEMBER                                                                                                                                                                                                                                                                 |                     |                   |  |
| Prof. Dr. M. BALTHAZAR, M.Pd.<br>NIP. 19590504 198103 1 005                                                                                                                                                                                                                                           |                     |                   |  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                               | TGL.                | TANDA TANGAN      |  |
| PRIBADI PEMBILANG KEBERTAHAN<br>UNIVERSITAS JEMBER                                                                                                                                                                                                                                                    |                     |                   |  |
| BAGUSAL, S.S.<br>NIP. 1983010 198705 1 002                                                                                                                                                                                                                                                            |                     |                   |  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                               | TGL.                | TANDA TANGAN      |  |
| KOPALA BINA BANGUNAN<br>UNIVERSITAS JEMBER                                                                                                                                                                                                                                                            |                     |                   |  |
| Dr. BUDHARTO, S.N., M.M.<br>NIP. 1960030 196003 1 001                                                                                                                                                                                                                                                 |                     |                   |  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                               | TGL.                | TANDA TANGAN      |  |
| DIREKTOR FASILITAS TEKNIK<br>UNIVERSITAS JEMBER                                                                                                                                                                                                                                                       |                     |                   |  |
| Dr. Ir. ERIH HENDRIK, M.Eng.<br>NIP. 19610124 198003 2 001                                                                                                                                                                                                                                            |                     |                   |  |
| MENGETAHUI / MENYETUJUI                                                                                                                                                                                                                                                                               | TGL.                | TANDA TANGAN      |  |
| KETUA TIM TEKNIK                                                                                                                                                                                                                                                                                      |                     |                   |  |
| Ir. HERUNG BAYUDO, M.T.<br>NIP. 1964 1122 198705 1 001                                                                                                                                                                                                                                                |                     |                   |  |
| KONSULTAN PERENCANA                                                                                                                                                                                                                                                                                   |                     |                   |  |
|  <b>PT. DEWI PERMATA MANDIRI</b><br>Gedung : J. Lingkar Peka No. 001/16 Th. 1975/0808 Jember 60111<br>Perencana - Perancang - Pengawas & Manajemen Konstruksi                                                     |                     |                   |  |
| PENANGGUNG JAWAB                                                                                                                                                                                                                                                                                      |                     | TANDA TANGAN      |  |
| Ir. BRYANTOND<br>DIREKTOR                                                                                                                                                                                                                                                                             |                     |                   |  |
| ARHITEKTUR                                                                                                                                                                                                                                                                                            | STRUKTUR            | M & E             |  |
| FERYAN WYDHO, ST.                                                                                                                                                                                                                                                                                     | ARWANG WIMANDA, ST. | ERIK BUDARTO, ST. |  |
| JUDUL GAMBAR                                                                                                                                                                                                                                                                                          |                     | 8 K.A.L.A         |  |
| <b>SIKAP LAINNYA</b>                                                                                                                                                                                                                                                                                  |                     | <b>1:200</b>      |  |
| KODE GAMBAR                                                                                                                                                                                                                                                                                           | NOMOR LEMBAR        | JAMAH LEMBAR      |  |
| ARS                                                                                                                                                                                                                                                                                                   |                     |                   |  |



### Lampiran 4.2 Hasil dari data Kuisiner

4/11/2020 Time Off Request - Google Forms

Time Off Request

Questions Responses 183

183 responses

Accepting responses

Summary Question Individual

Name

183 responses

- Muhammad Fawaid
- Bagus Rahmad Hidayat
- Bagus Prakoso
- Milda Ruly Fajariyanti
- Yanuar Rahman Ferdiansyah
- Muhammad Yusuf Priambodo
- Marco Sukma Widanar
- Nur Ahmad Faizal
- Nillam yahaya

[https://docs.google.com/forms/d/1Bk5HAzB8XGAGDKLHkuyZjJ\\_qThxs-GDb65n\\_VhBQM8/edit#responses](https://docs.google.com/forms/d/1Bk5HAzB8XGAGDKLHkuyZjJ_qThxs-GDb65n_VhBQM8/edit#responses)

1/4



4/11/2020

Time Off Request - Google Forms

## NIM atau NIP

183 responses

181910301055

161910301083

161910301122

161903103007

161910301085

161910301013

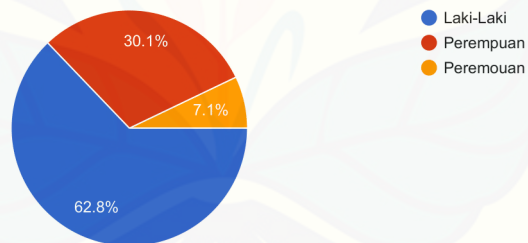
161903103004

161910201063

161910301104

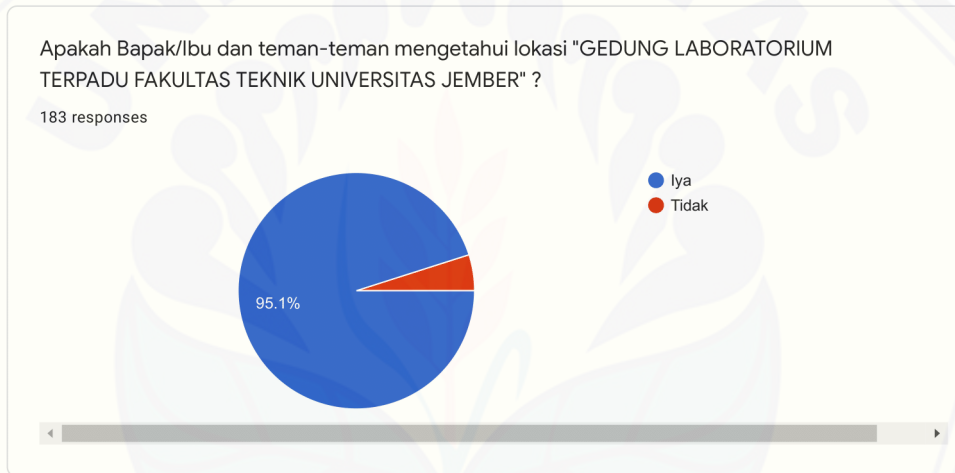
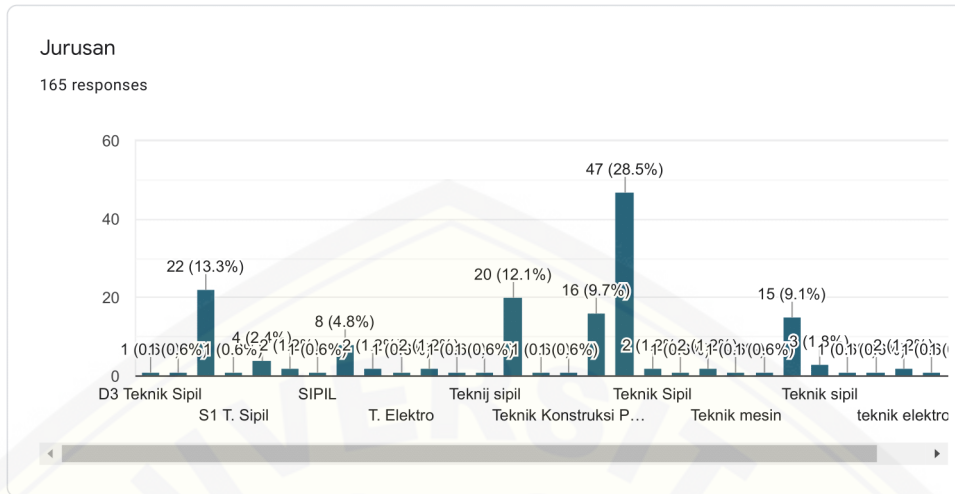
## Jenis Kelamin

183 responses



4/11/2020

Time Off Request - Google Forms

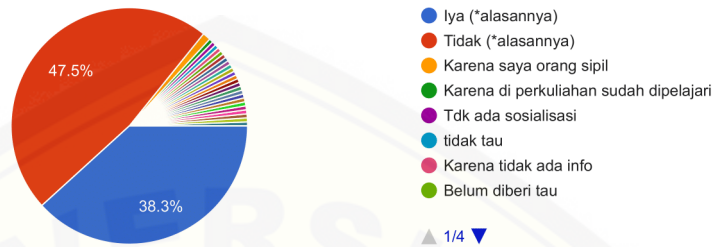


4/11/2020

Time Off Request - Google Forms

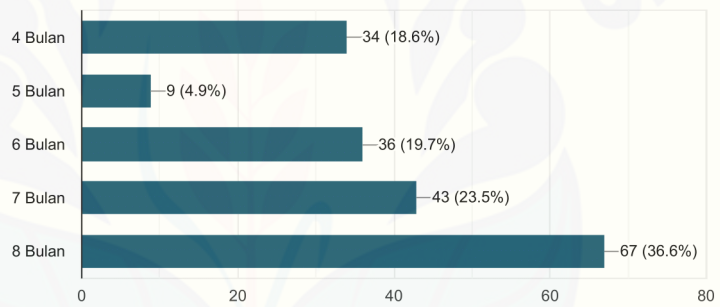
Apakah Bapak/Ibu dan Teman-teman memahami dalam Perencanaan Penjadwalan Proyek Konstruksi ?

183 responses



Berapa Bulan keinginan waktu terselesainya Proyek "GEDUNG LABORATORIUM TERPADU FAKULTAS TEKNIK UNIVERSITAS JEMBER" pada lantai 3 sampai lantai 6 ?

183 responses



| Timestamp           | Name                      | NIM atau NIP | Jenis Kelamin | Jurusan      | Apakah Bapak/Ibu dan teman-teman mengetahui lokasi "GEDUNG LABORATORIUM TERPADU FAKULTAS TEKNIK UNIVERSITAS JEMBER" ? | Apakah Bapak/Ibu dan Teman-teman memahami dalam Perencanaan Penjadwalan Proyek Konstruksi ? | Berapa Bulan keinginan waktu terselesainya Proyek "GEDUNG LABORATORIUM TERPADU FAKULTAS TEKNIK UNIVERSITAS JEMBER" pada lantai 3 sampai lantai 6 ? |
|---------------------|---------------------------|--------------|---------------|--------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/19/2019 19:58:54 | Muhammad Yusuf Priambodo  | 161910201063 | Laki-Laki     | teknik sipil | Tidak                                                                                                                 | Tidak (*alasannya)                                                                          | 6                                                                                                                                                  |
| 12/19/2019 19:59:00 | Bayu Bangun Putra Perkasa | 161910301056 | Laki-Laki     | teknik sipil | Iya                                                                                                                   | Tidak (*alasannya)                                                                          | 4                                                                                                                                                  |
| 12/19/2019 19:59:27 | Samuel                    | 123456789    | Peremouan     | teknik sipil | Tidak                                                                                                                 | Iya (*alasannya)                                                                            | 8                                                                                                                                                  |
| 12/19/2019 19:59:58 | Anita Dewi P              | 161910301068 | Peremouan     | teknik sipil | Iya                                                                                                                   | Tidak (*alasannya)                                                                          | 8                                                                                                                                                  |
| 12/19/2019 20:00:47 | TIARA AYU RAHMAWATY       | 161910301030 | Peremouan     | teknik sipil | Tidak                                                                                                                 | Tidak (*alasannya)                                                                          | 7                                                                                                                                                  |
| 12/19/2019 20:01:36 | Ahmad Kurniawan Wicaksono | 161903103004 | Laki-Laki     | teknik sipil | Iya                                                                                                                   | Tidak (*alasannya)                                                                          | 4                                                                                                                                                  |
| 12/19/2019 20:01:41 | Muhammad Fahmi Ibrahim    | 161910301035 | Laki-Laki     | teknik sipil | Iya                                                                                                                   | Iya (*alasannya)                                                                            | 8                                                                                                                                                  |
| 12/19/2019 20:01:51 | Handini                   | 161910301137 | Peremouan     | teknik sipil | Iya                                                                                                                   | Tidak (*alasannya)                                                                          | 6                                                                                                                                                  |
| 12/19/2019 20:02:05 | Endah Nurhidayah          | 161910301031 | Peremouan     | teknik sipil | Iya                                                                                                                   | Iya (*alasannya)                                                                            | 8                                                                                                                                                  |
| 12/19/2019 20:02:37 | Ahmad Rendi Maulana       | 161910101035 | Laki-Laki     | teknik mesin | Iya                                                                                                                   | Penjadwalan proyek adalah                                                                   | 5                                                                                                                                                  |

|                        |                             |              |           |              |     | kegiatan menetapkan jangka waktu kegiatan proyek yang harus diselesaikan, bahan baku, tenaga kerja serta waktu yang dibutuhkan oleh setiap aktivitas |   |
|------------------------|-----------------------------|--------------|-----------|--------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 12/19/2019<br>20:03:01 | AHYA<br>ATHO'ILLAH<br>PUTRA | 161910301023 | Laki-Laki | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 6 |
| 12/19/2019<br>20:03:22 | Fath                        | 171910301154 | Laki-Laki | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 4 |
| 12/19/2019<br>20:03:48 | Marco Sukma<br>Widanar      | 161910301027 | Laki-Laki | teknik sipil | lya | Tidak begitu<br>paham                                                                                                                                | 8 |
| 12/19/2019<br>20:06:18 | Zulfa Majida<br>A'yuni      | 161910301061 | Peremouan | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 5 |
| 12/19/2019<br>20:06:37 | Aldio D. P.                 | 161910301104 | Laki-Laki | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 7 |
| 12/19/2019<br>20:07:01 | Akhmad Yunior<br>Zamzami    | 161910301021 | Laki-Laki | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 8 |
| 12/19/2019<br>20:07:11 | AFIFAH IZZA<br>FARISA       | 161910301111 | Peremouan | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 4 |
| 12/19/2019<br>20:07:58 | Fahir Aunillah              | 161910301121 | Laki-Laki | teknik sipil | lya | Tidak<br>(*alasannya)                                                                                                                                | 7 |
| 12/19/2019<br>20:23:43 | Risky Andika                | 161910301069 | Laki-Laki | teknik sipil | lya | lya (*alasannya)                                                                                                                                     | 8 |
| 12/19/2019<br>20:24:05 | kamaluddin                  | 181910401032 | Laki-Laki | teknik kimia | lya | Tidak<br>(*alasannya)                                                                                                                                | 4 |



|                                |                          |              |           |                    |       |                                                           |   |
|--------------------------------|--------------------------|--------------|-----------|--------------------|-------|-----------------------------------------------------------|---|
| <b>12/19/2019<br/>20:31:33</b> | dzaki naufal             | 161903103006 | Laki-Laki | teknik sipil       | Tidak | Iya (*alasannya)                                          | 4 |
| <b>12/19/2019<br/>20:35:27</b> | Ahmad<br>habiburrahman   | 181910201106 | Laki-Laki | Teknik<br>elektro  | Iya   | Tidak<br>(*alasannya)                                     | 4 |
| <b>12/19/2019<br/>20:38:23</b> | Rexi                     | 181910201033 | Laki-Laki | Elektro            | Iya   | Tidak<br>(*alasannya)                                     | 4 |
| <b>12/19/2019<br/>20:38:43</b> | Bagus Rahmad<br>Hidayat  | 161910301083 | Laki-Laki | Teknik Sipil       | Iya   | Tidak<br>(*alasannya)                                     | 4 |
| <b>12/19/2019<br/>20:41:39</b> | Arbaatun Luh<br>Noviati  | 181910201016 | Peremouan | Teknik<br>Elektro  | Tidak | Belum<br>berpengalaman<br>dan belum pernah<br>mempelajari | 5 |
| <b>12/19/2019<br/>20:48:31</b> | Taufik                   | 181910201013 | Laki-Laki | Teknik<br>elektro  | Iya   | Tidak<br>(*alasannya)                                     | 6 |
| <b>12/19/2019<br/>20:51:21</b> | Bagus Prakoso            | 161910301122 | Laki-Laki | Teknik Sipil       | Iya   | Karena<br>paham...itu aja<br>mad                          | 8 |
| <b>12/19/2019<br/>21:01:33</b> | Moh. Ziyah<br>Shuyyabi   | 191910201115 | Laki-Laki | Teknik<br>Elektro  | Iya   | Iya (*alasannya)                                          | 4 |
| <b>12/19/2019<br/>21:03:41</b> | Galih setiaji            | 181910201064 | Laki-Laki | T. Elektro         | Iya   | Tidak<br>(*alasannya)                                     | 4 |
| <b>12/19/2019<br/>21:04:07</b> | Mochammad<br>Roziqin     | 161910301047 | Laki-Laki | S1 Teknik<br>Sipil | Iya   | Iya (*alasannya)                                          | 6 |
| <b>12/19/2019<br/>21:09:47</b> | Wildan Abror<br>Alhasimy | 161910301109 | Laki-Laki | Teknik Sipil       | Iya   | Kurang<br>memahami sistem<br>penjadwalan<br>proyek        | 8 |
| <b>12/19/2019<br/>21:13:07</b> | Andi Martin              | 161910301124 | Laki-Laki | Teknik sipil       | Iya   | Tidak<br>(*alasannya)                                     | 8 |
| <b>12/19/2019<br/>21:14:04</b> | FAJRIN NUR<br>ARLISYAH   | 161910301042 | Peremouan | TEKNIK<br>SIPIL    | Iya   | Iya (*alasannya)                                          | 7 |
| <b>12/19/2019<br/>21:17:56</b> | Risqi Sofiana            | 161910301043 | Peremouan | Teknik Sipil       | Iya   | Iya (*alasannya)                                          | 6 |

|                                |                              |              |           |                    |       |                         |   |
|--------------------------------|------------------------------|--------------|-----------|--------------------|-------|-------------------------|---|
| <b>12/19/2019<br/>21:20:58</b> | Zainul Atiqi                 | 161910101037 | Laki-Laki | Teknik<br>Mesin    | Iya   | Tidak<br>(*alasannya)   | 6 |
| <b>12/19/2019<br/>21:21:14</b> | Shofana Elfa<br>Hidayah      | 161910301059 | Peremouan | Sipil              | Iya   | Karena ada natkul<br>mk | 7 |
| <b>12/19/2019<br/>21:38:49</b> | Sareiyang adam<br>jannataa   | 161910301131 | Laki-Laki | Teknik sipil       | Iya   | Tidak<br>(*alasannya)   | 4 |
| <b>12/19/2019<br/>21:45:16</b> | Alfan ridho                  | 181910201005 | Laki-Laki | teknik<br>elektro  | Tidak | Tidak<br>(*alasannya)   | 4 |
| <b>12/19/2019<br/>23:02:34</b> | Nuryantika<br>Rahayu Pertiwi | 161910301048 | Peremouan | S1 T. Sipil        | Iya   | Iya (*alasannya)        | 6 |
| <b>12/19/2019<br/>23:35:02</b> | Trias Firdausi<br>A.N        | 16191030106  | Peremouan | Teknik sipil       | Iya   | Iya (*alasannya)        | 6 |
| <b>12/20/2019<br/>1:57:23</b>  | m baroq arkham               | 181910201120 | Laki-Laki | teknik<br>elektro  | Iya   | Tidak<br>(*alasannya)   | 8 |
| <b>12/20/2019<br/>2:27:46</b>  | Galang K.                    | 181910301010 | Laki-Laki | Teknik sipil       | Iya   | Tidak<br>(*alasannya)   | 4 |
| <b>12/20/2019<br/>5:08:30</b>  | Yoni Aripriyoga              | 161910301108 | Laki-Laki | Teknik Sipil       | Iya   | Iya (*alasannya)        | 5 |
| <b>12/20/2019<br/>5:30:26</b>  | Yogis Pranidhana             | 161910301092 | Perempuan | Teknik Sipil       | Iya   | Iya (*alasannya)        | 5 |
| <b>12/20/2019<br/>6:03:33</b>  | Hasbi Ikhlashul<br>Ariq      | 161910301146 | Laki-Laki | Teknik Sipil       | Iya   | Iya (*alasannya)        | 4 |
| <b>12/20/2019<br/>6:55:22</b>  | Khoiriyah Dwi K              | 161910301093 | Perempuan | Teknik sipil       | Iya   | Iya (*alasannya)        | 8 |
| <b>12/20/2019<br/>7:06:33</b>  | Edo Aditya Natha<br>Yuda     | 161910301028 | Laki-Laki | Teknik Sipil       | Iya   | Tidak<br>(*alasannya)   | 4 |
| <b>12/20/2019<br/>7:46:07</b>  | Adam savero                  | 161910301077 | Laki-Laki | Teknik sipil       | Iya   | Iya (*alasannya)        | 8 |
| <b>12/20/2019<br/>8:21:58</b>  | Muhammad<br>Hamdy            | 151910301065 | Laki-Laki | Teknik Sipil       | Iya   | Iya (*alasannya)        | 8 |
| <b>12/20/2019<br/>8:31:03</b>  | Afri                         | 161910301007 | Laki-Laki | S1 teknik<br>sipil | Iya   | Iya (*alasannya)        | 8 |

|                       |                              |                        |           |                    |     |                                              |   |
|-----------------------|------------------------------|------------------------|-----------|--------------------|-----|----------------------------------------------|---|
| 12/20/2019<br>8:31:37 | Milda Ruly<br>Fajariyanti    | 161910301085           | Perempuan | Teknuk<br>Sipil    | Iya | karena sudah<br>diajarin di<br>perkuliahan   | 8 |
| 12/20/2019<br>8:31:55 | Andini Wihenda<br>Lafatza    | 151910301118           | Perempuan | Teknik Sipil       | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>8:32:07 | Ahmad Ulul<br>Albab          | 151910301064           | Laki-Laki | Teknik Sipil       | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>8:32:41 | Arif<br>Hidayathulloh        | 141910101074           | Laki-Laki | Teknik<br>Mesin    | Iya | Tidak<br>(*alasannya)                        | 8 |
| 12/20/2019<br>8:32:59 | Anggraini<br>Sulistiyowati   | 151910301023           | Perempuan | Teknik Sipil       | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>8:33:05 | Wardatul Jannah              | 161910101043           | Perempuan | Teknik<br>Mesin    | Iya | Tidak<br>(*alasannya)                        | 8 |
| 12/20/2019<br>8:33:43 | Nadya Rezky R                | 181910301167           | Perempuan | S1 Teknik<br>Sipil | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>8:50:01 | Ichwan faisal<br>rizki       | 171910301115           | Laki-Laki | Teknik sipil       | Iya | Iya (*alasannya)                             | 4 |
| 12/20/2019<br>8:50:30 | Nita Ainindia<br>Ayuningtyas | 151910301048           | Perempuan | Teknik Sipil       | Iya | Karena di<br>perkuliahan<br>sudah dipelajari | 8 |
| 12/20/2019<br>8:52:29 | Anita Trisiana               | 198009232015<br>042001 | Perempuan | Teknik Sipil       | Iya | Iya (*alasannya)                             | 6 |
| 12/20/2019<br>8:52:56 | Eri kusworowati              | 151910301002           | Perempuan | Sipil              | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>9:04:28 | winda                        | 760016772              | Perempuan | sipil              | Iya | Iya (*alasannya)                             | 6 |
| 12/20/2019<br>9:13:17 | Aldio                        | 161910301104           | Laki-Laki | Sipil              | Iya | Tidak<br>(*alasannya)                        | 8 |
| 12/20/2019<br>9:30:46 | Rinaldi pratama              | 161910301020           | Laki-Laki | Teknik sipil       | Iya | Iya (*alasannya)                             | 8 |
| 12/20/2019<br>9:32:02 | Andre lausi                  | 161910301084           | Laki-Laki | T sipil            | Iya | Iya (*alasannya)                             | 8 |

|                        |                                     |              |           |                      |       |                                                              |   |
|------------------------|-------------------------------------|--------------|-----------|----------------------|-------|--------------------------------------------------------------|---|
| 12/20/2019<br>9:40:46  | Moh. Wafir                          | 161910101058 | Laki-Laki | Teknik<br>Mesin      | Iya   | Tidak<br>(*alasannya)                                        | 8 |
| 12/20/2019<br>9:48:22  | Muhammad<br>Firmansyah<br>Abriyawan | 161910301086 | Laki-Laki | Teknik Sipil         | Iya   | Iya (*alasannya)                                             | 8 |
| 12/20/2019<br>10:32:26 | Moh ilham hanif                     | 161910301065 | Laki-Laki | Teknik sipil         | Iya   | Iya (*alasannya)                                             | 8 |
| 12/20/2019<br>10:35:36 | Muhammad<br>Priandana<br>Soeharto   | 161910301098 | Laki-Laki | Sipil                | Iya   | Karena saya<br>orang sipil                                   | 8 |
| 12/20/2019<br>10:55:01 | Radhea AR                           | 161910101010 | Laki-Laki | Teknik<br>mesin      | Iya   | Tidak<br>(*alasannya)                                        | 8 |
| 12/20/2019<br>11:15:13 | Bagus Prakoso                       | 161910301122 | Laki-Laki | Teknik Sipil         | Iya   | Iya (*alasannya)                                             | 8 |
| 12/20/2019<br>11:37:51 | cici izza shafira                   | 191910601063 | Perempuan | teknik<br>lingkungan | Tidak | Tidak<br>(*alasannya)                                        | 8 |
| 12/20/2019<br>12:52:05 | Nur Ahmad<br>Faizal                 | 161910301010 | Laki-Laki | Teknik Sipil         | Iya   | Karena saya<br>orang sipil                                   | 8 |
| 12/20/2019<br>15:07:14 | Mohammad Dwi<br>Prayugo             | 161910301009 | Laki-Laki | S1 teknik<br>sipil   | Iya   | Iya (*alasannya)                                             | 8 |
| 12/20/2019<br>15:47:02 | Afifa N                             | 181910301098 | Perempuan | Teknik sipil         | Iya   | Tidak<br>(*alasannya)                                        | 8 |
| 12/20/2019<br>19:12:29 | Dhaniar Muchlis<br>Prayoga          | 161910301139 | Laki-Laki | Teknik Sipil         | Iya   | Saya Pernah<br>menempuh Kuliah<br>MKAH dan<br>Ekonomi Teknik | 8 |
| 12/20/2019<br>20:12:13 | Hafid Ahmad                         | 161903103007 | Laki-Laki | Sipil                | Iya   | Iya (*alasannya)                                             | 8 |
| 12/20/2019<br>23:49:01 | Rizky Ilham<br>Mardhani             | 161910301147 | Laki-Laki | Teknik Sipil         | Iya   | Iya (*alasannya)                                             | 6 |
| 12/21/2019<br>16:10:22 | Noer Intan Syafni                   | 161910301017 | Perempuan | Teknik Sipil         | Iya   | Tidak<br>(*alasannya)                                        | 6 |

|                                |                                  |                    |           |              |       |                                                     |   |
|--------------------------------|----------------------------------|--------------------|-----------|--------------|-------|-----------------------------------------------------|---|
| <b>12/22/2019<br/>8:48:07</b>  | Shafa                            | 181910301044       | Perempuan | Teknik Sipil | Iya   | kurangnya informasi dan rasa keingintahuan          | 7 |
| <b>12/22/2019<br/>8:53:50</b>  | Widelia                          | 181910301106       | Perempuan | Sipil        | Iya   | Karena tidak ada pemberitahuan perihal perencanaan. | 7 |
| <b>12/22/2019<br/>9:05:12</b>  | Muhammad Fawaid                  | 181910301055       | Laki-Laki | Teknik sipil | Iya   | Iya (*alasannya)                                    | 6 |
| <b>12/22/2019<br/>9:05:19</b>  | Muhammad Fawaid                  | 181910301055       | Laki-Laki | Teknik sipil | Iya   | Iya (*alasannya)                                    | 6 |
| <b>12/22/2019<br/>11:04:52</b> | Ghifari                          | 181910301153       | Laki-Laki | Teknik sipil | Iya   | Karena tidak ada info                               | 6 |
| <b>12/22/2019<br/>12:49:17</b> | Alfina Kh                        | 181910301152       | Perempuan | Sipil        | Tidak | Tidak ada pemberitahuan publik                      | 5 |
| <b>12/22/2019<br/>17:50:23</b> | Farikha                          | 181910301029       | Perempuan | Teknik sipil | Iya   | Tidak pernah ada sosialisasinya                     | 8 |
| <b>12/22/2019<br/>20:20:58</b> | Moch. Faishal Fadlillah          | 181910301172       | Laki-Laki | Teknik Sipil | Iya   | Tidak (*alasannya)                                  | 6 |
| <b>1/8/2020<br/>10:34:22</b>   | Luthfi Amri W                    | 760016771          | Laki-Laki | Teknik Sipil | Iya   | Iya (*alasannya)                                    | 4 |
| <b>1/8/2020<br/>13:39:03</b>   | Paksitya Purnama Putra           | 199006062019031022 | Laki-Laki | Teknik Sipil | Iya   | Iya (*alasannya)                                    | 6 |
| <b>1/8/2020<br/>23:59:27</b>   | Sri Sukmawati, S.T., M.T., Ph. D | 197112091998032001 | Perempuan | Teknik Sipil | Iya   | Iya (*alasannya)                                    | 6 |
| <b>1/9/2020<br/>0:09:24</b>    | Dr. Ir. Krisnamurti, M.T         | 196612281999031002 | Laki-Laki | Teknik Sipil | Iya   | Iya (*alasannya)                                    | 6 |
| <b>1/9/2020<br/>0:10:53</b>    | Willy Kriswardhana, S.T., M.T.   | 199005232019031013 | Laki-Laki | Teknik Sipil | Iya   | Iya (*alasannya)                                    | 6 |



|                              |                              |                        |           |                                                          |     |                                               |   |
|------------------------------|------------------------------|------------------------|-----------|----------------------------------------------------------|-----|-----------------------------------------------|---|
| <b>1/9/2020<br/>0:13:32</b>  | AL'ADILAH                    | 161910301106           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:15:10</b>  | Yanuar Rahman<br>Ferdiansyah | 161910301013           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:16:57</b>  | Muhammad<br>Amrulloh         | 171910301001           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:18:30</b>  | Kusumawardhany<br>Suryanto P | 191910301034           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 6 |
| <b>1/9/2020<br/>0:20:34</b>  | Ahmad Edo Dwi<br>Setiawan    | 181910301034           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:22:04</b>  | Alma Dyah<br>Pratitasari     | 161910301040           | Perempuan | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:23:25</b>  | Hafi Anshori<br>Ramadhani    | 161910301041           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>0:25:51</b>  | Bayu Rifqi Itsarus<br>A      | 181903103003           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>10:07:54</b> | Mirtha<br>Firmansyah         | 760017059              | Laki-Laki | Teknik Sipil<br>Prodi<br>Perencanaan wilayah<br>dan kota | Iya | Belum pernah ikut<br>projek<br>penjadwalan    | 6 |
| <b>1/9/2020<br/>11:03:10</b> | Vigit Saputra                | 161910301050           | Laki-Laki | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 8 |
| <b>1/9/2020<br/>11:07:23</b> | Raka Aminul<br>Ramadhani     | 161910301119           | Laki-Laki | S1 Teknik<br>Sipil                                       | Iya | Karena saya<br>kuliah jurusan<br>teknik sipil | 4 |
| <b>1/9/2020<br/>11:10:21</b> | Muhammad<br>Yusuf Priambodo  | 161910201063           | Laki-Laki | Teknik<br>Elektro                                        | Iya | Tidak<br>(*alasannya)                         | 8 |
| <b>1/9/2020<br/>11:21:38</b> | Ririn Endah<br>Badriani      | 197205281998<br>022001 | Perempuan | Teknik Sipil                                             | Iya | Iya (*alasannya)                              | 4 |
| <b>1/9/2020<br/>11:26:55</b> | Tri Vicca<br>Kusumadewi      | 760018075              | Perempuan | Teknik<br>Mesin                                          | Iya | Saya tidak pernah<br>mendalami ilmu           | 4 |

|                              |                        |                    |           |                              |       |                                                          |   |
|------------------------------|------------------------|--------------------|-----------|------------------------------|-------|----------------------------------------------------------|---|
|                              |                        |                    |           |                              |       | perencanaan konstruksi                                   |   |
| <b>1/9/2020<br/>11:38:46</b> | Sartika                | 760017049          | Perempuan | Teknik minyak                | Iya   | Tidak tau sosialisasinya                                 | 4 |
| <b>1/9/2020<br/>12:04:05</b> | Nillam yahaya          | 161910301033       | Perempuan | Teknik sipil                 | Iya   | Tidak (*alasannya)                                       | 4 |
| <b>1/9/2020<br/>12:04:56</b> | HAFID AHMAD A.G.       | 161903103007       | Laki-Laki | SIPIIL                       | Iya   | Iya (*alasannya)                                         | 8 |
| <b>1/9/2020<br/>12:25:47</b> | Muhammad Hasan Habibi  | 161910301044       | Laki-Laki | Teknik sipil                 | Iya   | Iya (*alasannya)                                         | 5 |
| <b>1/9/2020<br/>12:30:35</b> | Purango Ganjar Widityo | 198606072019031012 | Laki-Laki | Teknik Konstruksi Perkapalan | Tidak | Belum diberi tau                                         | 4 |
| <b>1/9/2020<br/>12:30:40</b> | Nur Ahmad Faizal       | 161910301010       | Laki-Laki | Teknik Sipil                 | Iya   | Tidak (*alasannya)                                       | 4 |
| <b>1/9/2020<br/>12:40:38</b> | F.X. Kristianta        | 196501202001121001 | Laki-Laki | T. Mesin                     | Iya   | Tdk ada sosialisasi                                      | 5 |
| <b>1/9/2020<br/>12:56:25</b> | Ivana                  | 161910301110       | Perempuan | T sipil                      | Iya   | Tidak (*alasannya)                                       | 4 |
| <b>1/9/2020<br/>13:04:46</b> | Bellian Arix Arifin    | 151910301091       | Laki-Laki | Teknij sipil                 | Iya   | Kurang mengerti tentang penjadwalan                      | 7 |
| <b>1/9/2020<br/>13:07:36</b> | Bagus Rahmad Hidayat   | 161910301083       | Perempuan | S1 Teknik Sipil              | Iya   | Tidak (*alasannya)                                       | 5 |
| <b>1/9/2020<br/>13:14:39</b> | Hanif Hidayatullah     | 161903103030       | Laki-Laki | Teknik sipil                 | Iya   | Iya (*alasannya)                                         | 6 |
| <b>1/9/2020<br/>13:29:12</b> | A. Royyan Maulana MA   | 151910301130       | Laki-Laki | teknik sipil                 | Iya   | tidak tau                                                | 6 |
| <b>1/9/2020<br/>13:33:45</b> | Sumarji, ST., MT       | 196802021997021001 | Laki-Laki | T. Mesin                     | Iya   | Karena tidak terlibat dalam proyek dan minim sosialisasi | 4 |

|                              |                               |              |           |                 |     |                       |   |
|------------------------------|-------------------------------|--------------|-----------|-----------------|-----|-----------------------|---|
| <b>1/9/2020<br/>13:49:20</b> | Marco Sukma<br>Widanar        | 161910301027 | Laki-Laki | Teknik Sipil    | Iya | Kurang begitu paham   | 8 |
| <b>1/9/2020<br/>13:54:47</b> | Milda Ruly<br>Fajariyanti     | 161910301085 | Perempuan | Teknik Sipil    | Iya | Tidak<br>(*alasannya) | 7 |
| <b>1/9/2020<br/>14:04:11</b> | Ahmad kurniawan<br>wicaksono  | 161903103004 | Laki-Laki | D3 Teknik Sipil | Iya | Iya (*alasannya)      | 4 |
| <b>1/9/2020<br/>14:40:53</b> | Yanuar Rahman<br>Ferdiansyah  | 161910301013 | Laki-Laki | Teknik sipil    | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>1:33:09</b> | Haqni Riwayatul<br>Faizah     | 191910301153 | Perempuan | Teknik Sipil    | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>1:34:47</b> | Alvina praha laili            | 171910301022 | Perempuan | Teknik Sipil    | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>1:56:37</b> | Mudzakir                      | 151910301041 | Laki-Laki | Teknik Sipil    | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>1:57:25</b> | greeman<br>caesarulah         | 151910301124 | Laki-Laki | Teknik Sipil    | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>1:58:28</b> | Indah ludiana<br>putri        | 171910501007 | Perempuan | PWK             | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>1:59:09</b> | Rosida Amalia<br>Nurul Qoyima | 161910201029 | Perempuan | Teknik Elektro  | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>1:59:53</b> | Mariska                       | 161910301016 | Perempuan | Teknik Sipil    | Iya | Iya (*alasannya)      | 6 |
| <b>2/10/2020<br/>2:00:55</b> | Ach Dzikri<br>Mustofa         | 191910201108 | Laki-Laki | Teknik Elektro  | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>2:01:28</b> | Bagas Prima<br>Abdillah       | 191910201010 | Laki-Laki | Teknik Elektro  | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>2:02:00</b> | Achmad<br>Syaifullah Yusuf    | 191910201093 | Laki-Laki | Teknik Elektro  | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>2:03:25</b> | Muhammad<br>Azmil Ramadhan    | 181910201007 | Laki-Laki | Teknik Elektro  | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>2:03:53</b> | DHEA KANA<br>ZHAFIRA          | 181910401056 | Perempuan | Teknik Mesin    | Iya | Tidak<br>(*alasannya) | 7 |

|                               |                                 |              |           |                |     |                    |   |
|-------------------------------|---------------------------------|--------------|-----------|----------------|-----|--------------------|---|
| <b>2/10/2020<br/>2:04:34</b>  | Ahmad Miftahul Royan            | 161910101012 | Laki-Laki | Teknik Mesin   | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>2:05:34</b>  | Ismi Afifah                     | 191910501001 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>2:06:08</b>  | Rahmanivia Permatasari          | 191910501002 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>2:06:45</b>  | Adinda Nurul Aini               | 191910501003 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 6 |
| <b>2/10/2020<br/>2:07:23</b>  | Dea Ardhia Ajeng Pramesti       | 191910501004 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:09:46</b> | Mayla Risya Diyanti             | 191910501005 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 8 |
| <b>2/10/2020<br/>23:10:15</b> | Sulistiana                      | 191910501006 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:10:45</b> | Zhahwanda Anasty Prasadewi      | 191910501007 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:11:17</b> | Dwi Setianingrum                | 191910501008 | Perempuan | PWK            | Iya | Iya (*alasannya)   | 7 |
| <b>2/10/2020<br/>23:12:04</b> | Jihan Dwi Ariyani               | 191910501009 | Perempuan | PWK            | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:12:48</b> | Freska Meliniar Alfian          | 191910201001 | Laki-Laki | Teknik Elektro | Iya | Tidak (*alasannya) | 6 |
| <b>2/10/2020<br/>23:13:17</b> | BUNGA JASMINE ALVRIYANTO        | 191910201079 | Perempuan | Teknik Elektro | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:13:50</b> | Pratama Budi Wicaksono          | 191910201030 | Laki-Laki | Teknik Elektro | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:14:21</b> | Betriqil Jannah                 | 191910101007 | Perempuan | Teknik Mesin   | Iya | Tidak (*alasannya) | 7 |
| <b>2/10/2020<br/>23:15:00</b> | Mochammad Iqbal Fitrah Anugerah | 191910101066 | Laki-Laki | Teknik Mesin   | Iya | Tidak (*alasannya) | 7 |

|                               |                                     |                        |           |                   |     |                       |   |
|-------------------------------|-------------------------------------|------------------------|-----------|-------------------|-----|-----------------------|---|
| <b>2/10/2020<br/>23:16:03</b> | MOCHAMMAD<br>HILDAN<br>TARAFIDY     | 191910101098           | Laki-Laki | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:16:40</b> | Achmad<br>Choiruddin<br>Syahrul A   | 191910201019           | Laki-Laki | Teknik<br>Elektro | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:18:23</b> | MANAR<br>NASUHA                     | 191910501038           | Perempuan | PWK               | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:19:10</b> | Agam patria alam                    | 161910201102           | Laki-Laki | Teknik<br>Elektro | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:19:46</b> | CLARISSA<br>PUTRI                   | 191910101029           | Perempuan | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:20:41</b> | Habibullah                          | 151910201034           | Laki-Laki | Teknik<br>Elektro | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:21:16</b> | R. A. Irwanto                       | 181910101093           | Laki-Laki | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:21:51</b> | Muchammad<br>Rifki Ardiansyah       | 181910301049           | Laki-Laki | Teknik Sipil      | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:22:48</b> | Fahir Hassan                        | 760017043              | Laki-Laki | PWK               | Iya | Tidak<br>(*alasannya) | 4 |
| <b>2/10/2020<br/>23:23:56</b> | Ratih Novi<br>Listyawati            | 760018081              | Perempuan | PWK               | Iya | Iya (*alasannya)      | 6 |
| <b>2/10/2020<br/>23:24:37</b> | Indra N                             | 197010241998<br>032001 | Perempuan | Teknik Sipil      | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>23:25:14</b> | Gamma Aditya<br>Rahardi, S.T.,MT    | 199101282019<br>031018 | Laki-Laki | Teknik<br>Elektro | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>23:25:40</b> | Dr. Widjnarko,<br>S.T., MT          | 197109081999<br>031001 | Laki-Laki | Teknik<br>Elektro | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>23:26:26</b> | Dr. Bambang Sri<br>Kaloko, S.T., MT | 197104022003<br>121001 | Laki-Laki | Teknik<br>Elektro | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>23:28:30</b> | Wahyu Mulyadi,<br>S.T., M.T         | 76016799               | Laki-Laki | Teknik<br>Elektro | Iya | Iya (*alasannya)      | 7 |



|                               |                                              |                        |           |                   |     |                       |   |
|-------------------------------|----------------------------------------------|------------------------|-----------|-------------------|-----|-----------------------|---|
| <b>2/10/2020<br/>23:29:16</b> | Audiananti<br>Meganandi<br>Kartini S.Si.,M.T | 760016800              | Perempuan | Teknik Sipil      | Iya | Iya (*alasannya)      | 7 |
| <b>2/10/2020<br/>23:30:07</b> | Dwi Nurtanto                                 | 197310151998<br>021001 | Laki-Laki | Teknik Sipil      | Iya | Iya (*alasannya)      | 4 |
| <b>2/10/2020<br/>23:30:37</b> | Moch gozali                                  | 198906081998<br>031002 | Laki-Laki | Teknik<br>Elektro | Iya | Iya (*alasannya)      | 8 |
| <b>2/10/2020<br/>23:31:10</b> | Rendra Suprobo<br>Aji                        | 760017109              | Laki-Laki | PWK               | Iya | Tidak<br>(*alasannya) | 4 |
| <b>2/10/2020<br/>23:34:00</b> | Desinta Indri<br>Wahyuni                     | 191910501015           | Perempuan | PWK               | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:34:34</b> | Yulistiana<br>Sholihah Marli                 | 191910501012           | Perempuan | PWK               | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:36:57</b> | Reny Dwi<br>Kurniawati                       | 191910501021           | Perempuan | PWK               | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:38:07</b> | Manik Masminto<br>Radarani                   | 191910501024           | Perempuan | PWK               | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>23:38:44</b> | Kelvian Bekti<br>Dewangga                    | 191910201054           | Laki-Laki | Teknik<br>Elektro | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>23:39:32</b> | Yanuar Henry<br>Christian                    | 191910101041           | Laki-Laki | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:40:26</b> | M. Hilmi Shyhab                              | 191910101109           | Laki-Laki | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 6 |
| <b>2/10/2020<br/>23:41:06</b> | KUMBANG<br>YUDHA<br>WIBAWA                   | 191910501069           | Laki-Laki | PWK               | Iya | Tidak<br>(*alasannya) | 8 |
| <b>2/10/2020<br/>23:42:53</b> | Revaldy<br>Ardiansyah<br>Wardana             | 191910201111           | Laki-Laki | Teknik<br>Elektro | Iya | Tidak<br>(*alasannya) | 7 |
| <b>2/10/2020<br/>23:43:56</b> | NUR HAMID<br>MAJID ANDIKA<br>PRATAMA         | 191910101084           | Laki-Laki | Teknik<br>Mesin   | Iya | Tidak<br>(*alasannya) | 8 |

|                               |                              |              |           |                 |     |                       |      |
|-------------------------------|------------------------------|--------------|-----------|-----------------|-----|-----------------------|------|
| <b>2/10/2020<br/>23:44:29</b> | ADIB AL WAFI                 | 191910101057 | Laki-Laki | Teknik<br>Mesin | Iya | Tidak<br>(*alasannya) | 8    |
| <b>2/10/2020<br/>23:45:10</b> | AZIIZ<br>OKTOBIMA<br>PUTRA   | 191910501071 | Laki-Laki | PWK             | Iya | Tidak<br>(*alasannya) | 8    |
| <b>2/10/2020<br/>23:46:03</b> | Dian Islamiati               | 191910501018 | Perempuan | PWK             | Iya | Tidak<br>(*alasannya) | 7    |
| <b>2/10/2020<br/>23:47:06</b> | Teeusa Cahyani<br>Adiningsih | 191910501014 | Perempuan | PWK             | Iya | Tidak<br>(*alasannya) | 8    |
| Rata-rata                     |                              |              |           |                 |     |                       | 6,56 |



**Lampiran 4.3 Hasil Penyusunan *Work Breakdown Structure* (WBS)**

| No.       | Uraian Pekerjaan                                     |
|-----------|------------------------------------------------------|
| <b>A</b>  | <b>Pekerjaan Persiapan</b>                           |
| 1         | Pembersihan lokasi                                   |
| 2         | Pembuatan kantor Direksi keet                        |
| 3         | Pembuatan pagar keliling                             |
| 4.        | Instalasi Tower Crane                                |
| 5.        | Pemasangan Polynet                                   |
|           |                                                      |
| <b>C</b>  | <b>LANTAI 3</b>                                      |
| <b>I</b>  | <b>Pekerjaan Pasangan</b>                            |
| 1         | Mengurug pasir bawah lantai setebal 5 cm             |
| 2         | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr    |
|           |                                                      |
| <b>II</b> | <b>Pekerjaan Beton</b>                               |
| 1         | Pembuatan Plat Lantai                                |
| 2         | Kolom Praktis uk. 11 x 11 cm                         |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )                         |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )                         |
| 5         | Kolom uk. 50 x 50 cm ( K 4 )                         |
| 6         | Kolom uk. 60 x 60 cm ( K 5 )                         |
| 7         | Kolom uk. 70 x 70 cm ( K 6 )                         |
| 8         | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm |

|            |                                                                                    |
|------------|------------------------------------------------------------------------------------|
| 9          | Plat meja beton tebal 10 cm                                                        |
| 10         | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm                        |
| 11         | Plat Tangga Utama dan Darurat Tebal 15 cm                                          |
| 12         | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm                            |
|            |                                                                                    |
| <b>III</b> | <b>Pekerjaan Plesteran dan Benangan</b>                                            |
| 1          | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                                    |
| 2          | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                                   |
| 3          | Pekerjaan acian interior                                                           |
| 4          | Pekerjaan acian eksterior                                                          |
|            |                                                                                    |
| <b>IV</b>  | <b>Pekerjaan Lantai</b>                                                            |
| 1          | Pasang Keramik Lantai 60 x 60                                                      |
| 2          | Pasang Keramik Lantai 30 x 30                                                      |
| 3          | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      |
| 4          | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             |
| 5          | Pasang Batu Alam                                                                   |
|            |                                                                                    |
| <b>V</b>   | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           |
| <b>A.</b>  | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> |
| 1          | Pas. Kusen Type J2      J2                                                         |
| 2          | Pas. Kusen Type J3      J3                                                         |
| 3          | Pas. Kusen Type J4      J4                                                         |
| 4          | Pas. Kusen Type J8      J8                                                         |

|           |                                                     |     |
|-----------|-----------------------------------------------------|-----|
| 5         | Pas. Kusen Type J9                                  | J9  |
| 6         | Pas. Kusen Type J12                                 | J12 |
| 7         | Pas. Kusen Type P2                                  | P2  |
| 8         | Pas. Kusen Type P3                                  | P3  |
| 9         | Pas. Kusen Type P4                                  | P4  |
| 10        | Pas. Kusen Type P5                                  | P5  |
| 11        | Pasang pintu darurat anti api                       |     |
|           |                                                     |     |
| <b>B.</b> | <b>Pekerjaan Partisi</b>                            |     |
| 1         | Memasang 1m2 unit Partisi Type I                    |     |
| 2         | Memasang 1m2 unit Partisi Type II                   |     |
| 3         | Memasang 1 unit Pintu Type I untuk partisi          |     |
| 4         | Memasang 1 jendela Pintu Type I untuk partisi       |     |
| 5         | Memasang 1 jendela Pintu Type II untuk partisi      |     |
|           |                                                     |     |
| <b>C.</b> | <b>Pekerjaan Railling Tangga</b>                    |     |
| 1         | Pasang Railling Tangga Utama dari Stainless Steel   |     |
| 2         | Pasang Railling Tangga Darurat dari Stainless Steel |     |
|           |                                                     |     |
| <b>D.</b> | <b>Curtin Wall</b>                                  |     |
| 1         | Curtain Wall ( CW2 )                                |     |
|           |                                                     |     |
| <b>VI</b> | <b>Pekerjaan Langit-langit</b>                      |     |
| 1         | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   |     |



|      |                                               |
|------|-----------------------------------------------|
|      |                                               |
| VII  | Pekerjaan Pengecatan                          |
| 1    | Pengecatan dinding interior                   |
| 2    | Pengecatan dinding eksterior                  |
| 3    | Pengecatan plafon                             |
|      |                                               |
| VIII | Pekerjaan Tata Udara                          |
| 1    | Unit AC Cassete 5PK                           |
| 2    | Unit AC Cassete 4PK                           |
| 3    | Unit AC Split Wall Mountain 3/4 PK            |
| 4    | Exhaust Fan ex jepang                         |
|      |                                               |
| IX   | PEKERJAAN TELEPON                             |
| 1    | Pasang Instalasi Telepon                      |
| 2    | Pasang Outlet Telepon                         |
| 3    | Switch Hub 16 port                            |
| 4    | Terminal Box                                  |
|      |                                               |
| X    | Pekerjaan CCTV                                |
| 1    | Kamera CCTV HD                                |
| 2    | Instalasi kabel coaxial RG6 untuk kamera CCTV |
|      |                                               |
| XI   | Pekerjaan Sound System                        |
| 1    | Celling speaker 6 W                           |

|                           |                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------|
| 2                         | Volume control                                                                           |
| 3                         | Instalasi Ceiling speaker                                                                |
| 4                         | Terminal Box                                                                             |
| 5                         | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm                             |
|                           |                                                                                          |
| <b>XII</b>                | <b>Pekerjaan Fire Alarm</b>                                                              |
| <b>INSTALASI LANTAI 3</b> |                                                                                          |
| <b>A.</b>                 | <b>Peralatan Fixture</b>                                                                 |
| 1                         | - Conv. Optical Smoke Detector                                                           |
| 2                         | - Conv. Manual Break glass                                                               |
| 3                         | - Junction Box Fire Alarm                                                                |
| 4                         | - Remote Indicating Lamp                                                                 |
| 5                         | - Alarm Bell                                                                             |
| 6                         | - Terminal Box 30 x 40 x 12                                                              |
|                           |                                                                                          |
| <b>B</b>                  | <b>Pekerjaan Instalasi</b>                                                               |
| 1                         | Instalasi Smoke Detector dan manual break glass<br>NYA Cable 2x1,5mm + Pipa Conduit 20mm |
| 2                         | - Junction Box Fire Alarm<br>NYA cable 2 x 1,5 mm + pipa conduit 20 mm                   |
| 3                         | - Remote Indicating Lamp<br>ITC 2 pairs 0.6 mm+ pipa conduit 20 mm                       |
|                           |                                                                                          |
| <b>XIII</b>               | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                                  |

|             |                                                                                                                                                                  |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1           | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 3 "                                                                                                             |
| 2           | Hydrant Box Indoor, type B c/w<br>-hydrant valve dia. 1 1/2"<br>-fire hose 1 1/2"x30 m<br>-hose rack dia. 1 1/2"<br>-Spray nozzle dia. 1 1/2"<br>-kaca dan kunci |
| 3           | Gate valve dia. 2 1/2" , OS&Y type                                                                                                                               |
| 4           | - Fire Extinguisher 6 kg                                                                                                                                         |
| <b>B</b>    | <b>Instalasi Sprinkler</b>                                                                                                                                       |
| 1           | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 1 "<br>dia. 1 1/4 "<br>dia. 2 "<br>dia. 2 1/2 "<br>dia. 3 "                                                     |
| 2           | Sprinkler head dia. 1/2", 68°C, pendent                                                                                                                          |
| 3           | Branch Control Valve dia. 3"                                                                                                                                     |
| <b>XIII</b> | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                                                                                                                         |
| 1           | Pasang Klosed Duduk                                                                                                                                              |
| 2           | Pasang Wastafel single                                                                                                                                           |

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| 3         | Pasang Jet washer                                                  |
| 4         | Pasang Kran Diameter Air 1/2 "                                     |
| 5         | Pasang Floor Drain                                                 |
| <b>A</b>  | <b>Instalasi Air Bersih</b>                                        |
| 1         | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        |
| <b>B</b>  | <b>Instalasi Air Kotor</b>                                         |
| 1         | Pasang Cleant Out 3"                                               |
| 2         | Pasang Pipa air kotor Ø 3 "                                        |
| 3         | Pasang Pipa air kotor Ø 4 "                                        |
|           |                                                                    |
| <b>XI</b> | <b>Pekerjaan Listrik</b>                                           |
| 1         | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   |
| 2         | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories |
| 3         | Pasang Instalasi Titik Lampu                                       |
| 4         | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               |
| 5         | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    |
| 6         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       |
| 7         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                |
| 8         | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    |
| 9         | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             |
| 10        | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        |
| 11        | Pasang Saklar Tunggal                                              |
| 12        | Pasang Saklar Ganda                                                |
| 13        | Instalasi stop kontak                                              |

|    |                                                                |
|----|----------------------------------------------------------------|
| 14 | Pasang Stop Kontak 1 Phase                                     |
| 15 | Pasang Stop Kontak under floor (lab. komputer dan mekatronika) |
|    |                                                                |

## Lantai 4

| No.       | Uraian Pekerjaan                                  |
|-----------|---------------------------------------------------|
| 1         | 2                                                 |
| <b>D</b>  | <b>LANTAI 4</b>                                   |
| <b>I</b>  | <b>Pekerjaan Pasangan</b>                         |
| 1         | Mengurug pasir bawah lantai setebal 5 cm          |
| 2         | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr |
|           |                                                   |
| <b>II</b> | <b>Pekerjaan Beton</b>                            |
| 1         | Pembuatan Plat Lantai                             |
| 2         | Kolom Praktis uk. 11 x 11 cm                      |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )                      |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )                      |
| 5         | Kolom uk. 50 x 50 cm ( K 4 )                      |
| 6         | Kolom uk. 70 x 70 cm ( K 6 )                      |
| 7         | Balok Lantai uk.11 x 20 cm                        |
| 8         | Balok Type B.1 uk. 30 x 80 cm                     |
| 9         | Balok Type B.2 uk. 40 x 80 cm                     |
| 10        | Balok Type B.3 uk. 30 x 70 cm                     |



|     |                                                             |                |
|-----|-------------------------------------------------------------|----------------|
| 11  | Balok Type B.4                                              | uk. 30 x 50 cm |
| 12  | Balok Type B.5                                              | uk. 30 x 50 cm |
| 13  | Balok Type B.6                                              | uk. 30 x 60 cm |
| 14  | Balok Type B.7                                              | uk. 40 x 80 cm |
| 15  | Balok Type B.8                                              | uk. 30 x 80 cm |
| 16  | Balok Type B.9                                              | uk. 40 x 80 cm |
| 17  | Balok Type B.10                                             | uk. 30 x 60 cm |
| 18  | Balok Type B.11                                             | uk. 30 x 60 cm |
| 19  | Balok Type B.12                                             | uk. 30 x 50 cm |
| 20  | Balok Type B.13                                             | uk. 30 x 60 cm |
| 21  | Balok Type B.14                                             | uk. 20 x 40 cm |
| 22  | Balok Type B.15                                             | uk. 20 x 30 cm |
| 23  | Balok Type B.20                                             | uk. 30 x 60 cm |
| 24  | Balok Type B.27                                             | uk. 30 x 50 cm |
| 25  | Balok Meja Beton                                            |                |
| 26  | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        |                |
| 27  | Balok uk.15 x 30 cm untuk Dinding Box Lift A                |                |
| 28  | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           |                |
| 29  | Plat meja beton tebal 10 cm                                 |                |
| 30  | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm |                |
| 31  | Plat Tangga Utama dan Darurat Tebal 15 cm                   |                |
| 32  | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     |                |
|     |                                                             |                |
| III | Pekerjaan Plesteran dan Benangan                            |                |

|           |                                                                                    |
|-----------|------------------------------------------------------------------------------------|
| 1         | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                                    |
| 2         | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                                   |
| 3         | Pekerjaan acian interior                                                           |
| 4         | Pekerjaan acian eksterior                                                          |
| 5         | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                     |
| 6         | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                                    |
|           |                                                                                    |
| <b>IV</b> | <b>Pekerjaan Lantai</b>                                                            |
| 1         | Pasang Keramik Lantai 60 x 60                                                      |
| 2         | Pasang Keramik Lantai 30 x 30                                                      |
| 3         | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      |
| 4         | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             |
| 5         | Keramik Meja Beton 20 x 20                                                         |
| 6         | Keramik Dinding Meja Beton 20 x 25                                                 |
| 7         | Pasang Batu Alam                                                                   |
|           |                                                                                    |
| <b>V</b>  | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           |
| <b>A.</b> | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> |
| 1         | Pas. Kusen Type J2                                                                 |
| 2         | Pas. Kusen Type J3                                                                 |
| 3         | Pas. Kusen Type J4                                                                 |
| 4         | Pas. Kusen Type J8                                                                 |
| 5         | Pas. Kusen Type J9                                                                 |
| 6         | Pas. Kusen Type P2                                                                 |

|            |                                                     |
|------------|-----------------------------------------------------|
| 7          | Pas. Kusen Type P3                                  |
| 8          | Pas. Kusen Type P4                                  |
| 9          | Pas. Kusen Type P5                                  |
| 10         | Pasang pintu darurat anti api                       |
|            |                                                     |
| <b>B.</b>  | <b>Pekerjaan Partisi</b>                            |
| 1          | Memasang 1m2 unit Partisi Type I                    |
| 2          | Memasang 1 unit Pintu Type I untuk partisi          |
| 3          | Memasang 1 unit Pintu Type II untuk partisi         |
| 4          | Memasang 1 jendela Pintu Type I untuk partisi       |
|            |                                                     |
| <b>C.</b>  | <b>Pekerjaan Railling Tangga</b>                    |
| 1          | Pasang Railling Tangga Utama dari Stainless Steel   |
| 2          | Pasang Railling Tangga Darurat dari Stainless Steel |
|            |                                                     |
| <b>D.</b>  | <b>Curtin Wall</b>                                  |
| 1          | Curtain Wall ( CW2 )                                |
|            |                                                     |
| <b>VI</b>  | <b>Pekerjaan Langit-langit</b>                      |
| 1          | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   |
|            |                                                     |
| <b>VII</b> | <b>Pekerjaan Pengecatan</b>                         |
| 1          | Pengecatan dinding interior                         |
| 2          | Pengecatan dinding eksterior                        |

|      |                                                              |
|------|--------------------------------------------------------------|
| 3    | Pengecatan plafon                                            |
|      |                                                              |
| VIII | Pekerjaan Tata Udara                                         |
| 1    | Unit AC Cassete 5PK                                          |
| 2    | Unit AC Split Wall 3/4 PK                                    |
| 3    | Kipas angin                                                  |
| 4    | Exhaust Fan                                                  |
|      |                                                              |
| IX   | PEKERJAAN TELEPON                                            |
| 1    | Pasang Instalasi Telepon                                     |
| 2    | Pasang Outlet Telepon                                        |
| 3    | Switch Hub 16 port                                           |
| 4    | Terminal Box                                                 |
|      |                                                              |
| X    | Pekerjaan CCTV                                               |
| 1    | Kamera CCTV HD                                               |
| 2    | Instalasi kamera CCTV                                        |
|      |                                                              |
| XI   | Pekerjaan Sound System                                       |
| 1    | Celling speaker 6 W                                          |
| 2    | Volume control                                               |
| 3    | Instalasi Celling speaker                                    |
| 4    | Terminal Box                                                 |
| 5    | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm |

|      |                                                                                    |
|------|------------------------------------------------------------------------------------|
|      |                                                                                    |
| XII  | Pekerjaan Fire Alarm                                                               |
|      | INSTALASI LANTAI 4                                                                 |
| A.   | Peralatan Fixture                                                                  |
| 1    | - Conv. Optical Smoke Detector                                                     |
| 2    | - Conv. Manual Break glass                                                         |
| 3    | - Junction Box Fire Alarm                                                          |
| 4    | - Remote Indicating Lamp                                                           |
| 5    | - Alarm Bell                                                                       |
| 6    | - Terminal Box 30 x 40 x 12                                                        |
|      |                                                                                    |
| B.   | Pekerjaan Instalasi                                                                |
| 1    | Instalasi Detector dan manual break glass<br>NYA Cable 2x1,5mm + Pipa Conduit 20mm |
| 2    | - Junction Box Fire Alarm<br>NYA cable 2 x 1,5 mm + pipa conduit 20 mm             |
| 3    | - Remote Indicating Lamp<br>ITC 2 pairs 0.6 mm+ pipa conduit 20 mm                 |
|      |                                                                                    |
| XIII | Pekerjaan Alat Pemadam Kebakaran                                                   |
| 1    | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 3 "                               |
| 2    | Hydrant Box Indoor, type B c/w<br>-hydrant valve dia. 1 1/2"                       |



|             |                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------|
|             | -fire hose 1 1/2"x30 m                                                                                       |
|             | -hose rack dia. 1 1/2"                                                                                       |
|             | -Spray nozzle dia. 1 1/2"                                                                                    |
|             | -kaca dan kunci                                                                                              |
| 3           | Gate valve dia. 2 1/2" , OS&Y type                                                                           |
| 4           | - Fire Extinguisher 6 kg                                                                                     |
|             |                                                                                                              |
| <b>B</b>    | <b>Instalasi Sprinkler</b>                                                                                   |
| 1           | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 1 "<br>dia. 1 1/4 "<br>dia. 2 "<br>dia. 2 1/2 "<br>dia. 3 " |
| 2           | Sprinkler head dia. 1/2", 68°C, pendent                                                                      |
| 3           | Branch Control Valve dia. 3"                                                                                 |
|             |                                                                                                              |
| <b>XIII</b> | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                                                                     |
| 1           | Pasang Klosed Duduk                                                                                          |
| 2           | Pasang Wastafel single                                                                                       |
| 3           | Pasang Jet washer                                                                                            |
| 4           | Pasang Kran Diameter Air 1/2 "                                                                               |
| 5           | Pasang Floor Drain                                                                                           |
|             |                                                                                                              |

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| <b>A</b>  | <b>Instalasi Air Bersih</b>                                        |
| 1         | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        |
| <b>B</b>  | <b>Instalasi Air Kotor</b>                                         |
| 1         | Pasang Clean Out 3"                                                |
| 2         | Pasang Pipa air kotor Ø 3 "                                        |
| 3         | Pasang Pipa air kotor Ø 4 "                                        |
| <b>XI</b> | <b>Pekerjaan Listrik</b>                                           |
| 1         | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   |
| 2         | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories |
| 3         | Pasang Instalasi Titik Lampu                                       |
| 4         | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               |
| 5         | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    |
| 6         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       |
| 7         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                |
| 8         | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    |
| 9         | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             |
| 10        | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        |
| 11        | Pasang Saklar Tunggal                                              |
| 12        | Pasang Saklar Ganda                                                |
| 13        | Instalasi stop kontak                                              |
| 14        | Instalasi stop kontak 3 phase                                      |
| 15        | Pasang Stop Kontak 1 Phase                                         |

|    |                            |
|----|----------------------------|
| 16 | Pasang Stop Kontak 3 Phase |
|----|----------------------------|

### LANTAI 5

| No.       | Uraian Pekerjaan                                   |
|-----------|----------------------------------------------------|
| 1         | 2                                                  |
| <b>E</b>  | <b>LANTAI 5</b>                                    |
| <b>I</b>  | <b>Pekerjaan Pasangan</b>                          |
| 1         | Mengurug pasir bawah lantai setebal 5 cm           |
| 2         | Pasangan tembok 1/2 bt, spesi 1 Pc : 6 Psr         |
|           |                                                    |
| <b>II</b> | <b>Pekerjaan Beton</b>                             |
| 1         | Pembuatan Plat Lantai                              |
| 2         | Kolom Praktis uk. 11 x 11 cm                       |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )                       |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )                       |
| 5         | Kolom uk. 50 x 50 cm ( K 4 )                       |
| 6         | Balok Lantai uk.11 x 20 cm                         |
| 7         | Balok Type B.1                      uk. 30 x 80 cm |
| 8         | Balok Type B.2                      uk. 40 x 80 cm |
| 9         | Balok Type B.3                      uk. 30 x 70 cm |
| 10        | Balok Type B.4                      uk. 30 x 50 cm |
| 11        | Balok Type B.5                      uk. 30 x 50 cm |

|     |                                                             |                |
|-----|-------------------------------------------------------------|----------------|
| 12  | Balok Type B.6                                              | uk. 30 x 60 cm |
| 13  | Balok Type B.7                                              | uk. 40 x 80 cm |
| 14  | Balok Type B.8                                              | uk. 30 x 80 cm |
| 15  | Balok Type B.9                                              | uk. 40 x 80 cm |
| 16  | Balok Type B.10                                             | uk. 30 x 60 cm |
| 17  | Balok Type B.11                                             | uk. 30 x 60 cm |
| 18  | Balok Type B.12                                             | uk. 30 x 50 cm |
| 19  | Balok Type B.13                                             | uk. 30 x 60 cm |
| 20  | Balok Type B.14                                             | uk. 20 x 40 cm |
| 21  | Balok Type B.15                                             | uk. 20 x 30 cm |
| 22  | Balok Type B.20                                             | uk. 30 x 60 cm |
| 23  | Balok Type B.27                                             | uk. 30 x 50 cm |
| 24  | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        |                |
| 25  | Balok uk.15 x 30 cm untuk Dinding Box Lift A                |                |
| 26  | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           |                |
| 27  | Plat meja beton tebal 10 cm                                 |                |
| 28  | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm |                |
| 29  | Plat Tangga Utama dan Darurat Tebal 15 cm                   |                |
| 30  | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     |                |
|     |                                                             |                |
| III | Pekerjaan Plesteran dan Benangan                            |                |
| 1   | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             |                |
| 2   | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            |                |
| 3   | Pekerjaan acian interior                                    |                |

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| 4  | Pekerjaan acian eksterior                                                   |
| 5  | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                              |
| 6  | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                             |
|    |                                                                             |
| IV | Pekerjaan Lantai                                                            |
| 1  | Pasang Keramik Lantai 60 x 60                                               |
| 2  | Pasang Keramik Lantai 30 x 30                                               |
| 3  | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                               |
| 4  | Pasang Keramik Dinding 30 x 60 (KM/WC)                                      |
| 5  | Pasang Batu Alam                                                            |
|    |                                                                             |
| V  | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           |
| A. | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen |
| 1  | Pas. Kusen Type J2                                                          |
| 2  | Pas. Kusen Type J3                                                          |
| 3  | Pas. Kusen Type J4                                                          |
| 4  | Pas. Kusen Type J12                                                         |
| 5  | Pas. Kusen Type P2                                                          |
| 6  | Pas. Kusen Type P3                                                          |
| 7  | Pas. Kusen Type P4                                                          |
| 8  | Pas. Kusen Type P5                                                          |
| 9  | Pasang pintu darurat anti api                                               |
|    |                                                                             |
| B. | Pekerjaan Partisi                                                           |



|      |                                                     |
|------|-----------------------------------------------------|
| 1    | Memasang 1m2 unit Partisi Type I                    |
| 2    | Memasang 1 unit Pintu Type II untuk partisi         |
| 3    | Memasang 1 jendela Pintu Type I untuk partisi       |
|      |                                                     |
| C.   | Pekerjaan Railling Tangga                           |
| 1    | Pasang Railling Tangga Utama dari Stainless Steel   |
| 2    | Pasang Railling Tangga Darurat dari Stainless Steel |
|      |                                                     |
| D.   | Curtin Wall                                         |
| 1    | Curtain Wall ( CW2 )                                |
|      |                                                     |
| VII  | Pekerjaan Langit-langit                             |
| 1    | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   |
|      |                                                     |
| VIII | Pekerjaan Pengecatan                                |
| 1    | Pengecatan dinding interior                         |
| 2    | Pengecatan dinding eksterior                        |
| 3    | Pengecatan plafon                                   |
|      |                                                     |
| X    | Pekerjaan Tata Udara                                |
| 1    | Unit AC Cassete 5PK                                 |
| 2    | Unit AC Cassete 4PK                                 |
|      |                                                     |
| XI   | Pekerjaan CCTV                                      |

|             |                                                              |
|-------------|--------------------------------------------------------------|
| 1           | Kamera CCTV HD                                               |
| 2           | Instalasi kamera CCTV                                        |
|             |                                                              |
| <b>XII</b>  | <b>Pekerjaan Sound System</b>                                |
| 1           | Celling speaker 6 W                                          |
| 2           | Volume control                                               |
| 3           | Instalasi Celling speaker                                    |
| 4           | Terminal Box                                                 |
| 5           | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm |
|             |                                                              |
| <b>XIII</b> | <b>Pekerjaan Fire Alarm</b>                                  |
| <b>A</b>    | <b>INSTALASI LANTAI 5</b>                                    |
|             | Peralatan Fixture                                            |
| 1           | - Conv. Optical Smoke Detector                               |
| 2           | - Conv. Manual Break glass                                   |
| 3           | - Junction Box Fire Alarm                                    |
| 4           | - Remote Indicating Lamp                                     |
| 5           | - Alarm Bell                                                 |
| 6           | - Terminal Box 30 x 40 x 12                                  |
|             |                                                              |
| <b>B</b>    | <b>Pekerjaan Instalasi</b>                                   |
| 1           | -Detector dan manual break glass                             |
|             | NYA Cable 2x1,5mm + Pipa Conduit 20mm                        |
| 2           | - Junction Box Fire Alarm                                    |

|            |                                                                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | NYA cable 2 x 1,5 mm + pipa conduit 20 mm                                                                                                                    |
| 3          | - Remote Indicating Lamp                                                                                                                                     |
|            | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm                                                                                                                       |
|            |                                                                                                                                                              |
| <b>XIV</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                                                                                                      |
| 1          | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 3 "                                                                                                         |
| 2          | Hydrant Box Indoor, type B c/w<br>-hydrant valve dia. 11/2"<br>-fire hose 11/2"x30 m<br>-hose rack dia. 11/2"<br>-Spray nozzle dia. 11/2"<br>-kaca dan kunci |
| 3          | Gate valve dia. 21/2" , OS&Y type                                                                                                                            |
| 4          | Fire Extinguisher 6 kg                                                                                                                                       |
|            |                                                                                                                                                              |
| <b>B</b>   | <b>Instalasi Sprinkler</b>                                                                                                                                   |
| 1          | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 1 "<br>dia. 1 1/4 "<br>dia. 2 "<br>dia. 2 1/2 "<br>dia. 3 "                                                 |
| 2          | Sprinkler head dia. 1/2", 68°C, pendent                                                                                                                      |

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| 3         | Branch Control Valve dia. 3"                                       |
|           |                                                                    |
| <b>IX</b> | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                           |
| 1         | Pasang Klosed Duduk                                                |
| 2         | Pasang Wastafel single                                             |
| 3         | Pasang Jet washer                                                  |
| 4         | Pasang Kran Diameter Air 1/2 "                                     |
| 5         | Pasang Floor Drain                                                 |
|           |                                                                    |
| <b>A</b>  | <b>Instalasi Air Bersih</b>                                        |
| 1         | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        |
|           |                                                                    |
| <b>B</b>  | <b>Instalasi Air Kotor</b>                                         |
| 1         | Pasang Clean Out                                                   |
| 2         | Pasang Pipa air kotor Ø 3 "                                        |
| 3         | Pasang Pipa air kotor Ø 4 "                                        |
|           |                                                                    |
| <b>X</b>  | <b>Pekerjaan Listrik</b>                                           |
| 1         | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   |
| 2         | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories |
| 3         | Pasang Instalasi Titik Lampu                                       |
| 4         | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               |
| 5         | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    |
| 6         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       |

|    |                                                     |
|----|-----------------------------------------------------|
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY     |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY              |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt         |
| 11 | Pasang Saklar Tunggal                               |
| 12 | Instalasi stop kontak                               |
| 13 | Pasang Stop Kontak 1 Phase                          |
|    |                                                     |

## LANTAI 6

| No.       | Uraian Pekerjaan                                  |
|-----------|---------------------------------------------------|
| <b>F</b>  | <b>LANTAI 6 DAN ATAP</b>                          |
|           | <b>Pekerjaan Pasangan</b>                         |
| 1         | Mengurug pasir bawah lantai setebal 5 cm          |
| 2         | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr |
|           |                                                   |
| <b>II</b> | <b>Pekerjaan Beton</b>                            |
| 1         | Pembuatan Plat Lantai                             |
| 2         | Kolom Praktis uk. 11 x 11 cm                      |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )                      |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )                      |
| 5         | Kolom uk. 50 x 50 cm ( K 4 )                      |

|                     |                            |                |
|---------------------|----------------------------|----------------|
| 6                   | Balok Lantai uk.11 x 20 cm |                |
| <b>BALOK LANTAI</b> |                            |                |
| 7                   | Balok Type B.1             | uk. 30 x 80 cm |
| 8                   | Balok Type B.2             | uk. 40 x 80 cm |
| 9                   | Balok Type B.3             | uk. 30 x 70 cm |
| 10                  | Balok Type B.4             | uk. 30 x 50 cm |
| 11                  | Balok Type B.5             | uk. 30 x 50 cm |
| 12                  | Balok Type B.6             | uk. 30 x 60 cm |
| 13                  | Balok Type B.7             | uk. 40 x 80 cm |
| 14                  | Balok Type B.8             | uk. 30 x 80 cm |
| 15                  | Balok Type B.9             | uk. 40 x 80 cm |
| 16                  | Balok Type B.10            | uk. 30 x 60 cm |
| 17                  | Balok Type B.11            | uk. 30 x 60 cm |
| 18                  | Balok Type B.12            | uk. 30 x 50 cm |
| 19                  | Balok Type B.13            | uk. 30 x 60 cm |
| 20                  | Balok Type B.14            | uk. 20 x 40 cm |
| 21                  | Balok Type B.15            | uk. 20 x 30 cm |
| 22                  | Balok Type B.20            | uk. 30 x 60 cm |
| 23                  | Balok Type B.27            | uk. 30 x 50 cm |
| <b>BALOK ATAP</b>   |                            |                |
| 25                  | Balok Type B.14            | uk. 20 x 40 cm |
| 26                  | Balok Type B.15            | uk. 20 x 30 cm |
| 27                  | Balok Type B.16            | uk. 30 x 70 cm |
| 28                  | Balok Type B.17            | uk. 30 x 60 cm |



|            |                                                             |                |
|------------|-------------------------------------------------------------|----------------|
| 29         | Balok Type B.18                                             | uk. 30 x 50 cm |
| 30         | Balok Type B.19                                             | uk. 40 x 70 cm |
| 31         | Balok Type B.20                                             | uk. 30 x 60 cm |
| 32         | Balok Type B.21                                             | uk. 30 x 60 cm |
| 33         | Balok Type B.22                                             | uk. 30 x 50 cm |
| 34         | Balok Type B.26                                             | uk. 40 x 70 cm |
| 35         | Balok Type B.29                                             | uk. 30 x 70 cm |
| 36         | Balok Type B.30                                             | uk. 30 x 80 cm |
| 37         | Balok Type B.31                                             | uk. 30 x 60 cm |
| 38         | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        |                |
| 39         | Balok uk.15 x 30 cm untuk Dinding Box Lift A                |                |
| 40         | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           |                |
| 41         | Plat Atap Tebal 10 cm                                       |                |
| 42         | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm |                |
| 43         | Plat Tangga Utama dan Darurat Tebal 15 cm                   |                |
| 44         | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     |                |
| 45         | Waterprofing Plat Atap                                      |                |
|            |                                                             |                |
| <b>III</b> | <b>Pekerjaan Plesteran dan Benangan</b>                     |                |
| 1          | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             |                |
| 2          | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            |                |
| 3          | Pekerjaan acian interior                                    |                |
| 4          | Pekerjaan acian eksterior                                   |                |
| 5          | Pekerjaan benangan interior spesi 1 Pc : 2 Psr              |                |

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| 6  | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                             |
|    |                                                                             |
| IV | Pekerjaan Lantai                                                            |
| 1  | Pasang Keramik Lantai 60 x 60                                               |
| 2  | Pasang Keramik Lantai 30 x 30                                               |
| 3  | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                               |
| 4  | Pasang Keramik Dinding 30 x 60 (KM/WC)                                      |
| 5  | Pasang Batu Alam                                                            |
|    |                                                                             |
| VI | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           |
| A. | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen |
| 1  | Pas. Kusen Type J2                                                          |
| 2  | Pas. Kusen Type J3                                                          |
| 3  | Pas. Kusen Type J4                                                          |
| 4  | Pas. Kusen Type J8                                                          |
| 5  | Pas. Kusen Type J9                                                          |
| 6  | Pas. Kusen Type J12                                                         |
| 7  | Pas. Kusen Type P2                                                          |
| 8  | Pas. Kusen Type P3                                                          |
| 9  | Pas. Kusen Type P4                                                          |
| 10 | Pas. Kusen Type P5                                                          |
| 11 | Pasang pintu darurat anti api                                               |
|    |                                                                             |
| B. | Pekerjaan Partisi                                                           |

|             |                                                     |
|-------------|-----------------------------------------------------|
| 1           | Memasang 1m2 unit Partisi Type I                    |
| 2           | Memasang 1 unit Pintu Type I untuk partisi          |
| 3           | Memasang 1 unit Pintu Type II untuk partisi         |
| 4           | Memasang 1 jendela Type I untuk partisi             |
|             |                                                     |
| <b>C.</b>   | <b>Pekerjaan Railling Tangga</b>                    |
| 1           | Pasang Railling Tangga Utama dari Stainless Steel   |
| 2           | Pasang Railling Tangga Darurat dari Stainless Steel |
|             |                                                     |
| <b>D.</b>   | <b>Curtin Wall</b>                                  |
| 1           | Curtain Wall ( CW1 )                                |
|             |                                                     |
| <b>VII</b>  | <b>Pekerjaan Langit-langit</b>                      |
| 1           | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   |
|             |                                                     |
| <b>VIII</b> | <b>Pekerjaan Pengecatan</b>                         |
| 1           | Pengecatan dinding interior                         |
| 2           | Pengecatan dinding eksterior                        |
| 3           | Pengecatan plafon                                   |
|             |                                                     |
| <b>X</b>    | <b>Pekerjaan Tata Udara</b>                         |
| 1           | Unit AC Cassete 5PK                                 |
| 2           | Unit AC Cassete 4PK                                 |
| 3           | Unit AC Split wall 3/4PK                            |

|      |                                                              |
|------|--------------------------------------------------------------|
|      |                                                              |
| XI   | PEKERJAAN TELEPON                                            |
| 1    | Pasang Instalasi Telepon                                     |
| 2    | Pasang Outlet Telepon                                        |
| 3    | Switch Hub 16 port                                           |
| 4    | Terminal Box                                                 |
|      |                                                              |
| XII  | Pekerjaan CCTV                                               |
| 1    | Kamera CCTV HD                                               |
| 2    | Instalasi kamera CCTV                                        |
|      |                                                              |
| XIII | Pekerjaan Sound System                                       |
| 1    | Celling speaker 6 W                                          |
| 2    | Volume control                                               |
| 3    | Instalasi Celling speaker                                    |
| 4    | Terminal Box                                                 |
| 5    | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm |
|      |                                                              |
| XIV  | Pekerjaan Fire Alarm                                         |
| A    | INSTALASI LANTAI 6                                           |
|      | Peralatan Fixture                                            |
| 1    | - Conv. Optical Smoke Detector                               |
| 2    | - Conv. Manual Break glass                                   |
| 3    | - Junction Box Fire Alarm                                    |

|           |                                                                                                                                                                    |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4         | - Remote Indicating Lamp                                                                                                                                           |
| 5         | - Alarm Bell                                                                                                                                                       |
| 6         | - Terminal Box 30 x 40 x 12                                                                                                                                        |
| <b>B.</b> | <b>Pekerjaan Instalasi</b>                                                                                                                                         |
| 1         | -Detector dan manual break glass<br>NYA Cable 2x1,5mm + Pipa Conduit 20mm                                                                                          |
| 2         | - Junction Box Fire Alarm<br>NYA cable 2 x 1,5 mm + pipa conduit 20 mm                                                                                             |
| 3         | - Remote Indicating Lamp<br>ITC 2 pairs 0.6 mm+ pipa conduit 20 mm                                                                                                 |
|           |                                                                                                                                                                    |
| <b>XV</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                                                                                                            |
| 1         | BSP Sch.40 c/w fitting2 & Material bantu<br>dia. 3 "                                                                                                               |
| 2         | Hydrant Box Indoor, type B c/w -<br>-hydrant valve dia. 1 1/2"<br>-fire hose 1 1/2"x30 m<br>-hose rack dia. 1 1/2"<br>-Spray nozzle dia. 1 1/2"<br>-kaca dan kunci |
| 3         | Gate valve dia. 2 1/2" , OS&Y type                                                                                                                                 |
| 4         | - Fire Extinguisher 6 kg                                                                                                                                           |
| <b>B</b>  | <b>Instalasi Sprinkler</b>                                                                                                                                         |
| 1         | BSP Sch.40 c/w fitting2 & Material bantu                                                                                                                           |

|            |                                                               |
|------------|---------------------------------------------------------------|
|            | dia. 1 "                                                      |
|            | dia. 1 1/4 "                                                  |
|            | dia. 2 "                                                      |
|            | dia. 2 1/2 "                                                  |
|            | dia. 3 "                                                      |
| 2          | Sprinkler head dia. 1/2", 68'C, pendent - Protector c/w plate |
| 3          | Branch Control Valve dia. 3"                                  |
| 4          | Fitting (elbow, reducer, knie dl)                             |
|            |                                                               |
| <b>C</b>   | <b>INSTALASI SPRINGKLER DAN HYDRANT Lt Atap</b>               |
|            | Galv. Pipe Med. c/w fitting <sup>2</sup> & Material bantu     |
| 1          | dia. 1 "                                                      |
| 2          | ARV c/w Gate valve dia. 1"                                    |
| 3          | Presure gauge c/w gate valve dia. 1/2"                        |
| 4          | Ball valve dia. 1" -                                          |
| 5          | Sprinkler head dia. 1/2", 68'C, pendent -                     |
| <b>D</b>   | <b>Fire Extinguisher</b>                                      |
| 1          | Apar ABC Kap. 4 kg                                            |
| 2          | Apar CO2 Kap. 3 kg (SDP area)                                 |
| 3          | Apar CO2 Kap. 23 kg (Panel room)                              |
| <b>XIV</b> | <b>PEKERJAAN SANITAIR DAN SANITASI</b>                        |
| 1          | Pasang Klosed Duduk                                           |
| 2          | Pasang Wastafel single                                        |
| 3          | Pasang Jet washer                                             |



|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| 4         | Pasang Kran Diameter Air 1/2 "                                     |
| 5         | Pasang Floor Drain                                                 |
|           |                                                                    |
| <b>A</b>  | <b>Instalasi Air Bersih</b>                                        |
| 1         | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        |
| 2         | Tangki air bersih kapasitas 1500 ltr                               |
| <b>B</b>  | <b>Instalasi Air Kotor</b>                                         |
| 1         | Pasang Roofdrain                                                   |
| 2         | Pasang Clean Out                                                   |
| 3         | Pasang Pipa air kotor Ø 3 "                                        |
| 4         | Pasang Pipa air kotor Ø 4 "                                        |
| 5         | Pasang instalasi Pipa Air Hujan 4"                                 |
|           |                                                                    |
| <b>XV</b> | <b>Pekerjaan Listrik</b>                                           |
| 1         | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   |
| 2         | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories |
| 3         | Pasang Instalasi Titik Lampu                                       |
| 4         | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               |
| 5         | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    |
| 6         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       |
| 7         | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                |
| 8         | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    |
| 9         | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             |
| 10        | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        |

|     |                                                     |
|-----|-----------------------------------------------------|
| 11  | Pasang Saklar Tunggal                               |
| 12  | Pasang Saklar Ganda                                 |
| 13  | Instalasi stop kontak                               |
| 14  | Pasang Stop Kontak 1 Phase                          |
|     |                                                     |
| XVI | Pekerjaan Instalasi Penangkal Petir                 |
| 1   | Air lighting terminal viking V6 radius 60 m         |
| 2   | Obstruction Lamp                                    |
| 3   | Instalasi Obstruction lamp                          |
| 4   | Pasang Kabel BC 1x70 mm <sup>2</sup> +PVC AW Ø 1.5" |
| 5   | Pasang Dudukan Tiang dan Penangkal Petir            |
| 6   | Pasang Grounding System Rod Ø 1" Panjang 12 mtr     |
| 7   | Pasang Bak Kontrol Grounding                        |
|     |                                                     |

Lampiran 4.4 Perhitungan Produktivitas Tenaga Kerja dan Durasi

| No. | Uraian Pekerjaan              | Volume | Satuan         | Koefisien       | Produktivitas |           |                      |                      |        | Jumlah Tenaga Kerja | Waktu Pelaksanaan |            |
|-----|-------------------------------|--------|----------------|-----------------|---------------|-----------|----------------------|----------------------|--------|---------------------|-------------------|------------|
|     |                               |        |                |                 | (bh/OH)       | (Ls/Hari) | (m <sup>2</sup> /OH) | (m <sup>3</sup> /OH) | (m/OH) |                     | Durasi (Hari)     | Pembulatan |
| a   | b                             | c      | d              | e               | f = 1/e       |           |                      |                      |        | g                   | h = c/(f x g)     | i          |
| 1.  | Pembersihan lokasi            | 1600   | m <sup>2</sup> |                 |               |           | 10                   |                      |        | 20                  | 8                 | 8          |
|     | Pekerja                       |        | Oh             | 0,100           |               |           |                      |                      |        |                     |                   |            |
|     | Mandor                        |        | Oh             | 0,050           |               |           |                      |                      |        |                     |                   |            |
| 2.  | Pembuatan kantor Direksi keet | 24     | m <sup>2</sup> |                 |               |           | 0,5                  |                      |        | 8                   | 6                 | 6          |
|     | Pekerja                       |        | Oh             | 1,000           |               |           |                      |                      |        |                     |                   |            |
|     | Tukang kayu                   |        | Oh             | 2,000           |               |           |                      |                      |        |                     |                   |            |
|     | Kepala tukang                 |        | Oh             | 0,200           |               |           |                      |                      |        |                     |                   |            |
|     | Mandor                        |        | Oh             | 0,050           |               |           |                      |                      |        |                     |                   |            |
| 3.  | Pembuatan pagar keliling      | 160    | m'             |                 |               |           |                      |                      | 5      | 10                  | 3,2               | 4          |
|     | Pekerja                       |        | Oh             | 0,30            |               |           |                      |                      |        |                     |                   |            |
|     | Tukang kayu                   |        | Oh             | 0,20            |               |           |                      |                      |        |                     |                   |            |
|     | Kepala tukang                 |        | Oh             | 0,02            |               |           |                      |                      |        |                     |                   |            |
|     | Mandor                        |        | Oh             | 0,02            |               |           |                      |                      |        |                     |                   |            |
| 4   | Pemansangan TC                | 1      | ls             | Hasil Wawancara |               |           |                      |                      | 6      | 5                   |                   |            |
| 5   | Pembongkaran TC               | 1      | ls             | Hasil Wawancara |               |           |                      |                      | 6      | 4                   |                   |            |
| 6   | Pemasangan Polynet Biru       | 824    | m'             | Hasil Wawancara |               |           |                      |                      | 4      | 1                   |                   |            |

### Lantai 3

| NO | JENIS PEKERJAAN | VOLUME |  | TENAGA KERJA |                | PRODUKTIVITAS        |                      |                      |                                  | JUMLAH TK (/hari) | DURASI |  |
|----|-----------------|--------|--|--------------|----------------|----------------------|----------------------|----------------------|----------------------------------|-------------------|--------|--|
|    |                 |        |  | JENIS        | KOEFISIEN (OH) | (m <sup>1</sup> /OH) | (m <sup>2</sup> /OH) | (m <sup>3</sup> /OH) | (Set/OH)<br>(Unit/OH)<br>(Kg/OH) |                   |        |  |

#### I. Pekerjaan Pasangan

|   |                                                   |          |    |                    |       |  |  |             |  |    |             |   |   |
|---|---------------------------------------------------|----------|----|--------------------|-------|--|--|-------------|--|----|-------------|---|---|
| 1 | Mengurug pasir bawah lantai setebal 5 cm          | 89,45    | m3 | Pekerja            | 0,300 |  |  | 3,333333333 |  | 9  | 2,981564167 | = | 3 |
|   |                                                   |          |    | Mandor             | 0,010 |  |  |             |  |    |             |   |   |
| 2 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 1.348,99 | m2 | Pekerja            | 0,300 |  |  | 3,333333333 |  | 45 | 8,993272    | = | 9 |
|   |                                                   |          |    | Tukang batu/tembok | 0,100 |  |  |             |  |    |             |   |   |
|   |                                                   |          |    | Kepala tukang      | 0,010 |  |  |             |  |    |             |   |   |
|   |                                                   |          |    | Mandor             | 0,015 |  |  |             |  |    |             |   |   |

#### II. Pekerjaan Beton

|   |                              |      |    |                        |       |             |  |  |  |    |       |   |   |
|---|------------------------------|------|----|------------------------|-------|-------------|--|--|--|----|-------|---|---|
| 2 | Kolom Praktis uk. 11 x 11 cm | 340  | m1 | Pekerja                | 0,180 | 5,555555556 |  |  |  | 15 | 4,08  | = | 5 |
|   |                              |      |    | Tukang batu/tembok     | 0,020 |             |  |  |  |    |       |   |   |
|   |                              |      |    | Tukang kayu            | 0,020 |             |  |  |  |    |       |   |   |
|   |                              |      |    | Tukang besi/besi beton | 0,020 |             |  |  |  |    |       |   |   |
|   |                              |      |    | Kepala tukang          | 0,060 |             |  |  |  |    |       |   |   |
|   |                              |      |    | Mandor                 | 0,009 |             |  |  |  |    |       |   |   |
| 3 | Kolom uk. 30 x 30 cm ( K 2 ) | 0,72 | m3 |                        |       |             |  |  |  | 3  | 0,588 | = | 1 |

|   |                              |      |    |                        |       |             |    |        |   |   |
|---|------------------------------|------|----|------------------------|-------|-------------|----|--------|---|---|
| 4 | Mengecor beton K-300         | 3,84 | m3 | Pekerja                | 1,650 | 0,408163265 | 10 | 0,9408 | = | 1 |
|   |                              |      |    | Tukang batu/tembok     | 0,275 |             |    |        |   |   |
|   |                              |      |    | Kepala Tukang          | 0,028 |             |    |        |   |   |
|   |                              |      |    | Mandor                 | 0,083 |             |    |        |   |   |
|   | Pembesian besi beton polos   |      |    | Pekerja                | 0,070 |             |    |        |   |   |
|   |                              |      |    | Tukang besi/besi beton | 0,070 |             |    |        |   |   |
|   |                              |      |    | Kepala Tukang          | 0,007 |             |    |        |   |   |
|   |                              |      |    | Mandor                 | 0,004 |             |    |        |   |   |
|   | Pembesian besi beton ulir    |      |    | Pekerja                | 0,070 |             |    |        |   |   |
|   |                              |      |    | Tukang besi/besi beton | 0,070 |             |    |        |   |   |
|   |                              |      |    | Kepala Tukang          | 0,007 |             |    |        |   |   |
|   |                              |      |    | Mandor                 | 0,004 |             |    |        |   |   |
|   | Bekisting untuk kolom        |      |    | Pekerja                | 0,660 |             |    |        |   |   |
|   |                              |      |    | Tukang kayu            | 0,330 |             |    |        |   |   |
|   |                              |      |    | Kepala Tukang          | 0,033 |             |    |        |   |   |
|   |                              |      |    | Mandor                 | 0,033 |             |    |        |   |   |
|   | Kolom uk. 40 x 40 cm ( K 3 ) |      |    |                        |       |             |    |        |   |   |
|   | Mengecor beton K-300         |      |    | Pekerja                | 1,650 |             |    |        |   |   |
|   |                              |      |    | Tukang batu/tembok     | 0,275 |             |    |        |   |   |

|   |                                  |   |    |                              |                              |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|---|----------------------------------|---|----|------------------------------|------------------------------|---------|-----------------------|-------|-------------|--|--|--|----|--|------|---|---|--|--|--|
|   |                                  |   |    | Kepala<br>Tukang             | 0,028                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Mandor                       | 0,083                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   | Pembesian<br>besi beton<br>polos |   |    | Pekerja                      | 0,070                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Tukang<br>besi/besi<br>beton | 0,070                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Kepala<br>Tukang             | 0,007                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Mandor                       | 0,004                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   | Pembesian<br>besi beton ulir     |   |    | Pekerja                      | 0,070                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              | Tukang<br>besi/besi<br>beton | 0,070   |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Kepala<br>Tukang             | 0,007                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Mandor                       | 0,004                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   | Bekisting<br>untuk kolom         |   |    | Pekerja                      | 0,660                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              | Tukang<br>kayu               | 0,330   |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Kepala<br>Tukang             | 0,033                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    | Mandor                       | 0,033                        |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
| 5 | Kolom uk. 50<br>x 50 cm ( K 4 )  | 4 | m3 |                              |                              |         |                       |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   | Mengecor<br>beton K-300          |   |    |                              |                              | Pekerja | 1,650                 |       |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              |                              |         | Tukang<br>batu/tembok | 0,275 |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              |                              |         | Kepala<br>Tukang      | 0,028 |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              |                              |         | Mandor                | 0,083 |             |  |  |  |    |  |      |   |   |  |  |  |
|   |                                  |   |    |                              |                              |         |                       |       | 0,408163265 |  |  |  | 10 |  | 0,98 | = | 1 |  |  |  |



|   |                              |      |    |                        |       |             |    |       |   |   |
|---|------------------------------|------|----|------------------------|-------|-------------|----|-------|---|---|
| 6 | Pembesian besi beton polos   | 28,8 | m3 | Pekerja                | 0,070 | 0,408163265 | 15 | 4,704 | = | 5 |
|   |                              |      |    | Tukang besi/besi beton | 0,070 |             |    |       |   |   |
|   |                              |      |    | Kepala Tukang          | 0,007 |             |    |       |   |   |
|   |                              |      |    | Mandor                 | 0,004 |             |    |       |   |   |
|   | Pembesian besi beton ulir    |      |    | Pekerja                | 0,070 |             |    |       |   |   |
|   |                              |      |    | Tukang besi/besi beton | 0,070 |             |    |       |   |   |
|   |                              |      |    | Kepala Tukang          | 0,007 |             |    |       |   |   |
|   |                              |      |    | Mandor                 | 0,004 |             |    |       |   |   |
|   | Bekisting untuk kolom        |      |    | Pekerja                | 0,660 |             |    |       |   |   |
|   |                              |      |    | Tukang kayu            | 0,330 |             |    |       |   |   |
|   |                              |      |    | Kepala Tukang          | 0,033 |             |    |       |   |   |
|   |                              |      |    | Mandor                 | 0,033 |             |    |       |   |   |
|   | Kolom uk. 60 x 60 cm ( K 5 ) |      |    |                        |       |             |    |       |   |   |
|   | Mengecor beton K-300         |      |    | Pekerja                | 1,650 |             |    |       |   |   |
|   |                              |      |    | Tukang batu/tembok     | 0,275 |             |    |       |   |   |
|   |                              |      |    | Kepala Tukang          | 0,028 |             |    |       |   |   |
|   |                              |      |    | Mandor                 | 0,083 |             |    |       |   |   |
|   |                              |      |    | Pekerja                | 0,070 |             |    |       |   |   |

|   |                              |       |    |                        |       |  |  |  |  |             |  |    |        |   |   |
|---|------------------------------|-------|----|------------------------|-------|--|--|--|--|-------------|--|----|--------|---|---|
|   | Pembesian besi beton polos   |       |    | Tukang besi/besi beton | 0,070 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Kepala Tukang          | 0,007 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Mandor                 | 0,004 |  |  |  |  |             |  |    |        |   |   |
|   | Pembesian besi beton ulir    |       |    | Pekerja                | 0,070 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Tukang besi/besi beton | 0,070 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Kepala Tukang          | 0,007 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Mandor                 | 0,004 |  |  |  |  |             |  |    |        |   |   |
|   | Bekisting untuk kolom        |       |    | Pekerja                | 0,660 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Tukang kayu            | 0,330 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Kepala Tukang          | 0,033 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Mandor                 | 0,033 |  |  |  |  |             |  |    |        |   |   |
| 7 | Kolom uk. 70 x 70 cm ( K 6 ) | 23,52 | m3 |                        |       |  |  |  |  |             |  |    |        |   |   |
|   | Mengecor beton K-300         |       |    | Pekerja                | 1,650 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Tukang batu/tembok     | 0,275 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Kepala Tukang          | 0,028 |  |  |  |  | 0,408163265 |  |    |        |   |   |
|   |                              |       |    | Mandor                 | 0,083 |  |  |  |  |             |  | 15 | 3,8416 | = | 4 |
|   | Pembesian besi beton polos   |       |    | Pekerja                | 0,070 |  |  |  |  |             |  |    |        |   |   |
|   |                              |       |    | Tukang besi/besi beton | 0,070 |  |  |  |  |             |  |    |        |   |   |

|    |                                                                  |      |    |                              |       |        |       |  |  |             |  |  |    |       |   |
|----|------------------------------------------------------------------|------|----|------------------------------|-------|--------|-------|--|--|-------------|--|--|----|-------|---|
|    |                                                                  |      |    | Kepala<br>Tukang             | 0,007 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Mandor                       | 0,004 |        |       |  |  |             |  |  |    |       |   |
|    | Pembesian<br>besi beton ulir                                     |      |    | Pekerja                      | 0,070 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Tukang<br>besi/besi<br>beton | 0,070 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Kepala<br>Tukang             | 0,007 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Mandor                       | 0,004 |        |       |  |  |             |  |  |    |       |   |
|    | Bekisting<br>untuk kolom                                         |      |    | Pekerja                      | 0,660 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Tukang<br>kayu               | 0,330 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Kepala<br>Tukang             | 0,033 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Mandor                       | 0,033 |        |       |  |  |             |  |  |    |       |   |
| 26 | Balok Tangga<br>Utama dan<br>Tangga<br>Darurat uk. 20<br>x 40 cm | 7,20 | m3 |                              |       |        |       |  |  |             |  |  |    |       |   |
|    | Mengecor<br>beton K-300                                          |      |    | Pekerja                      | 1,650 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Tukang<br>batu/tembok        | 0,275 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Kepala<br>Tukang             | 0,028 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    |                              |       | Mandor | 0,083 |  |  |             |  |  |    |       |   |
|    | Pembesian<br>besi beton<br>polos                                 |      |    | Pekerja                      | 0,070 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    | Tukang<br>besi/besi<br>beton | 0,070 |        |       |  |  |             |  |  |    |       |   |
|    |                                                                  |      |    |                              |       |        |       |  |  | 0,408163265 |  |  | 10 | 1,764 | = |

|    |                                   |      |    |                              |                              |       |  |  |  |             |  |  |   |           |   |
|----|-----------------------------------|------|----|------------------------------|------------------------------|-------|--|--|--|-------------|--|--|---|-----------|---|
|    |                                   |      |    | Kepala<br>Tukang             | 0,007                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Mandor                       | 0,004                        |       |  |  |  |             |  |  |   |           |   |
|    | Pembesian<br>besi beton ulir      |      |    | Pekerja                      | 0,070                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Tukang<br>besi/besi<br>beton | 0,070                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Kepala<br>Tukang             | 0,007                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Mandor                       | 0,004                        |       |  |  |  |             |  |  |   |           |   |
|    | Bekisting<br>untuk balok          |      |    | Pekerja                      | 0,660                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Tukang<br>kayu               | 0,330                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Kepala<br>Tukang             | 0,033                        |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    | Mandor                       | 0,033                        |       |  |  |  |             |  |  |   |           |   |
| 29 | Plat meja<br>beton tebal 10<br>cm | 5,31 | m3 |                              |                              |       |  |  |  |             |  |  |   |           |   |
|    | Mengecor<br>beton K-300           |      |    |                              | Pekerja                      | 1,650 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Tukang<br>batu/tembok        | 0,275 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Kepala<br>Tukang             | 0,028 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Mandor                       | 0,083 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Pekerja                      | 0,070 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Tukang<br>besi/besi<br>beton | 0,070 |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              | Kepala<br>Tukang             | 0,007 |  |  |  |             |  |  |   |           |   |
|    | Pembesian<br>besi beton<br>polos  |      |    |                              |                              |       |  |  |  |             |  |  |   |           |   |
|    |                                   |      |    |                              |                              |       |  |  |  | 0,408163265 |  |  | 8 | 1,6261875 | = |







|    |                                                         |      |    |                        |       |  |  |             |  |  |  |   |                 |
|----|---------------------------------------------------------|------|----|------------------------|-------|--|--|-------------|--|--|--|---|-----------------|
|    | Pembesian besi beton ulir                               |      |    | Pekerja                | 0,070 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Mandor                 | 0,004 |  |  |             |  |  |  |   |                 |
|    | Bekisting untuk plat                                    |      |    | Pekerja                | 0,660 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Tukang kayu            | 0,330 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Kepala Tukang          | 0,033 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Mandor                 | 0,033 |  |  |             |  |  |  |   |                 |
| 32 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 7,05 | m3 |                        |       |  |  |             |  |  |  |   |                 |
|    | Mengecor beton K-300                                    |      |    | Pekerja                | 1,650 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Tukang batu/tembok     | 0,275 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Kepala Tukang          | 0,028 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Mandor                 | 0,083 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Pekerja                | 0,070 |  |  |             |  |  |  |   |                 |
|    | Pembesian besi beton polos                              |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    | Mandor                 | 0,004 |  |  |             |  |  |  |   |                 |
|    |                                                         |      |    |                        |       |  |  | 0,408163265 |  |  |  | 9 | 1,919166667 = 2 |

|  |                           |  |  |                        |       |  |  |  |  |  |  |  |
|--|---------------------------|--|--|------------------------|-------|--|--|--|--|--|--|--|
|  | Pembesian besi beton ulir |  |  | Pekerja                | 0,070 |  |  |  |  |  |  |  |
|  |                           |  |  | Tukang besi/besi beton | 0,070 |  |  |  |  |  |  |  |
|  |                           |  |  | Kepala Tukang          | 0,007 |  |  |  |  |  |  |  |
|  |                           |  |  | Mandor                 | 0,004 |  |  |  |  |  |  |  |
|  | Bekisting untuk plat      |  |  | Pekerja                | 0,660 |  |  |  |  |  |  |  |
|  |                           |  |  | Tukang kayu            | 0,330 |  |  |  |  |  |  |  |
|  |                           |  |  | Kepala Tukang          | 0,033 |  |  |  |  |  |  |  |
|  |                           |  |  | Mandor                 | 0,033 |  |  |  |  |  |  |  |

### III. Pekerjaan Plesteran dan Benangan

|   |                                                  |           |    |                    |       |             |  |  |    |           |   |    |
|---|--------------------------------------------------|-----------|----|--------------------|-------|-------------|--|--|----|-----------|---|----|
| 1 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr  | 2975,3532 | m2 | Pekerja            | 0,300 | 3,333333333 |  |  | 30 | 29,753532 | = | 30 |
|   |                                                  |           |    | Tukang batu/tembok | 0,150 |             |  |  |    |           |   |    |
|   |                                                  |           |    | Kepala tukang      | 0,015 |             |  |  |    |           |   |    |
|   |                                                  |           |    | Mandor             | 0,015 |             |  |  |    |           |   |    |
| 2 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr | 681,11    | m2 | Pekerja            | 0,300 | 3,333333333 |  |  | 30 | 6,811104  | = | 7  |
|   |                                                  |           |    | Tukang batu/tembok | 0,150 |             |  |  |    |           |   |    |
|   |                                                  |           |    | Kepala tukang      | 0,015 |             |  |  |    |           |   |    |
|   |                                                  |           |    | Mandor             | 0,015 |             |  |  |    |           |   |    |
| 3 | Pekerjaan acian interior                         | 2975,3532 | m2 | Pekerja            | 0,200 | 5           |  |  | 30 | 19,835688 | = | 20 |
|   |                                                  |           |    | Tukang batu/tembok | 0,100 |             |  |  |    |           |   |    |

|   |                           |          |    |                    |       |   |  |  |    |          |   |   |  |
|---|---------------------------|----------|----|--------------------|-------|---|--|--|----|----------|---|---|--|
|   |                           |          |    | Kepala tukang      | 0,010 |   |  |  |    |          |   |   |  |
|   |                           |          |    | Mandor             | 0,010 |   |  |  |    |          |   |   |  |
| 4 | Pekerjaan acian eksterior | 681,1104 | m2 | Pekerja            | 0,200 | 5 |  |  | 30 | 4,540736 | = | 5 |  |
|   |                           |          |    | Tukang batu/tembok | 0,100 |   |  |  |    |          |   |   |  |
|   |                           |          |    | Kepala tukang      | 0,010 |   |  |  |    |          |   |   |  |
|   |                           |          |    | Mandor             | 0,010 |   |  |  |    |          |   |   |  |

#### IV. Pekerjaan Lantai

|   |                                               |           |    |                    |       |             |  |  |    |             |   |    |
|---|-----------------------------------------------|-----------|----|--------------------|-------|-------------|--|--|----|-------------|---|----|
| 1 | Pasang Keramik Lantai 60 x 60                 | 1298,7075 | m2 | Pekerja            | 0,900 | 1,111111111 |  |  | 60 | 19,4806125  | = | 20 |
|   |                                               |           |    | Tukang batu/tembok | 0,450 |             |  |  |    |             |   |    |
|   |                                               |           |    | Kepala tukang      | 0,045 |             |  |  |    |             |   |    |
|   |                                               |           |    | Mandor             | 0,045 |             |  |  |    |             |   |    |
| 2 | Pasang Keramik Lantai 30 x 30                 | 134,58    | m2 | Pekerja            | 0,700 | 1,428571429 |  |  | 20 | 4,710125    | = | 5  |
|   |                                               |           |    | Tukang batu/tembok | 0,350 |             |  |  |    |             |   |    |
|   |                                               |           |    | Kepala tukang      | 0,035 |             |  |  |    |             |   |    |
|   |                                               |           |    | Mandor             | 0,035 |             |  |  |    |             |   |    |
| 3 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC | 23,13     | m2 | Pekerja            | 0,700 | 1,428571429 |  |  | 6  | 2,697916667 | = | 3  |
|   |                                               |           |    | Tukang batu/tembok | 0,350 |             |  |  |    |             |   |    |
|   |                                               |           |    | Kepala tukang      | 0,035 |             |  |  |    |             |   |    |
|   |                                               |           |    | Mandor             | 0,035 |             |  |  |    |             |   |    |

|   |                                        |       |    |               |       |             |  |  |    |             |   |   |
|---|----------------------------------------|-------|----|---------------|-------|-------------|--|--|----|-------------|---|---|
| 4 | Pasang Keramik Dinding 30 x 60 (KM/WC) | 76,00 | m2 | Pekerja       | 0,900 | 1,111111111 |  |  | 15 | 4,56        | = | 5 |
|   |                                        |       |    | Tukang        | 0,450 |             |  |  |    |             |   |   |
|   |                                        |       |    | Kepala Tukang | 0,045 |             |  |  |    |             |   |   |
|   |                                        |       |    | Mandor        | 0,045 |             |  |  |    |             |   |   |
| 5 | Pasang Batu Alam                       | 23,33 | m2 | Pekerja       | 0,620 | 1,612903226 |  |  | 7  | 2,066371429 | = | 3 |
|   |                                        |       |    | Tukang        | 0,350 |             |  |  |    |             |   |   |
|   |                                        |       |    | Kepala Tukang | 0,035 |             |  |  |    |             |   |   |
|   |                                        |       |    | Mandor        | 0,030 |             |  |  |    |             |   |   |

## V. Pekerjaan Pintu dan Jendela Aluminium dan Partisi

### A. Pekerjaan Pintu dan Jendela Aluminium, Partisi, Railing tangga dan Sunscreen

|   |                    |       |      |                  |       |             |  |  |   |       |   |   |
|---|--------------------|-------|------|------------------|-------|-------------|--|--|---|-------|---|---|
| 1 | Pas. Kusen Type J2 | 28    | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 2 | 0,602 | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |
|   |                    |       |      | Kepala Tukang    | 0,004 |             |  |  |   |       |   |   |
|   |                    |       |      | Mandor           | 0,002 |             |  |  |   |       |   |   |
| 2 | Pas. Kusen Type J3 | 1,00  | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 1 | 0,043 | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |
|   |                    |       |      | Kepala Tukang    | 0,004 |             |  |  |   |       |   |   |
|   |                    |       |      | Mandor           | 0,002 |             |  |  |   |       |   |   |
| 3 | Pas. Kusen Type J4 | 10,00 | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 1 | 0,43  | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |

|   |                        |       |      |                     |       |  |  |  |             |   |       |   |   |  |
|---|------------------------|-------|------|---------------------|-------|--|--|--|-------------|---|-------|---|---|--|
|   |                        |       |      | Kepala<br>Tukang    | 0,004 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Mandor              | 0,002 |  |  |  |             |   |       |   |   |  |
| 4 | Pas. Kusen<br>Type J8  | 12,00 | Unit | Pekerja             | 0,043 |  |  |  | 23,25581395 | 1 | 0,516 | = | 1 |  |
|   |                        |       |      | Tukang<br>Alumunium | 0,043 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Kepala<br>Tukang    | 0,004 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Mandor              | 0,002 |  |  |  |             |   |       |   |   |  |
| 5 | Pas. Kusen<br>Type J9  | 22,00 | Unit | Pekerja             | 0,043 |  |  |  | 23,25581395 | 1 | 0,946 | = | 1 |  |
|   |                        |       |      | Tukang<br>Alumunium | 0,043 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Kepala<br>Tukang    | 0,004 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Mandor              | 0,002 |  |  |  |             |   |       |   |   |  |
| 6 | Pas. Kusen<br>Type J12 | 4     | Unit | Pekerja             | 0,043 |  |  |  | 23,25581395 | 1 | 0,172 | = | 1 |  |
|   |                        |       |      | Tukang<br>Alumunium | 0,043 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Kepala<br>Tukang    | 0,004 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Mandor              | 0,002 |  |  |  |             |   |       |   |   |  |
| 7 | Pas. Kusen<br>Type P2  | 10    | Unit | Pekerja             | 0,043 |  |  |  | 23,25581395 | 1 | 0,43  | = | 1 |  |
|   |                        |       |      | Tukang<br>Alumunium | 0,043 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Kepala<br>Tukang    | 0,004 |  |  |  |             |   |       |   |   |  |
|   |                        |       |      | Mandor              | 0,002 |  |  |  |             |   |       |   |   |  |
| 8 | Pas. Kusen<br>Type P3  | 21    | Unit | Pekerja             | 0,043 |  |  |  | 23,25581395 | 1 | 0,903 | = | 1 |  |
|   |                        |       |      | Tukang<br>Alumunium | 0,043 |  |  |  |             |   |       |   |   |  |

|    |                               |      |      |                  |       |  |  |             |   |       |   |   |  |  |
|----|-------------------------------|------|------|------------------|-------|--|--|-------------|---|-------|---|---|--|--|
|    |                               |      |      | Kepala Tukang    | 0,004 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | Mandor           | 0,002 |  |  |             |   |       |   |   |  |  |
| 9  | Pas. Kusen Type P4            | 10   | Unit | Pekerja          | 0,043 |  |  | 23,25581395 | 1 | 0,43  | = | 1 |  |  |
|    |                               |      |      | Tukang Alumunium | 0,043 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | Kepala Tukang    | 0,004 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | Mandor           | 0,002 |  |  |             |   |       |   |   |  |  |
| 10 | Pas. Kusen Type P5            | 5    | Unit | Pekerja          | 0,043 |  |  | 23,25581395 | 1 | 0,215 | = | 1 |  |  |
|    |                               |      |      | Tukang Alumunium | 0,043 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | Kepala Tukang    | 0,004 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | Mandor           | 0,002 |  |  |             |   |       |   |   |  |  |
| 11 | Pasang pintu darurat anti api | 2,00 | Unit | pekerja          | 0,085 |  |  | 11,76470588 | 1 | 0,17  | = | 1 |  |  |
|    |                               |      |      | tukang alumunium | 0,085 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | kepala tukang    | 0,009 |  |  |             |   |       |   |   |  |  |
|    |                               |      |      | mandor           | 0,005 |  |  |             |   |       |   |   |  |  |

### B. Pekerjaan Partisi

|   |                                  |        |    |                  |       |  |             |  |   |         |   |   |  |  |
|---|----------------------------------|--------|----|------------------|-------|--|-------------|--|---|---------|---|---|--|--|
| 1 | Memasang 1m2 unit Partisi Type I | 178,35 | m2 | Pekerja          | 0,015 |  | 6,666666667 |  | 8 | 3,34413 | = | 4 |  |  |
|   |                                  |        |    | Tukang Alumunium | 0,150 |  |             |  |   |         |   |   |  |  |
|   |                                  |        |    | Kepala Tukang    | 0,015 |  |             |  |   |         |   |   |  |  |
|   |                                  |        |    | Mandor           | 0,001 |  |             |  |   |         |   |   |  |  |



|   |                                                |       |      |                  |       |             |  |             |   |        |   |   |
|---|------------------------------------------------|-------|------|------------------|-------|-------------|--|-------------|---|--------|---|---|
| 2 | Memasang 1m2 unit Partisi Type II              | 6,65  | m2   | Pekerja          | 0,015 | 6,666666667 |  |             | 1 | 0,9975 | = | 1 |
|   |                                                |       |      | Tukang Alumunium | 0,150 |             |  |             |   |        |   |   |
|   |                                                |       |      | Kepala Tukang    | 0,015 |             |  |             |   |        |   |   |
|   |                                                |       |      | Mandor           | 0,001 |             |  |             |   |        |   |   |
| 3 | Memasang 1 unit Pintu Type I untuk partisi     | 17,00 | unit | Pekerja          | 0,085 |             |  | 11,76470588 | 2 | 0,7225 | = | 1 |
|   |                                                |       |      | Tukang Alumunium | 0,085 |             |  |             |   |        |   |   |
|   |                                                |       |      | Kepala Tukang    | 0,009 |             |  |             |   |        |   |   |
|   |                                                |       |      | Mandor           | 0,005 |             |  |             |   |        |   |   |
| 4 | Memasang 1 jendela Pintu Type I untuk partisi  | 20,00 | unit | Pekerja          | 0,085 |             |  | 11,76470588 | 2 | 0,85   | = | 1 |
|   |                                                |       |      | Tukang Alumunium | 0,085 |             |  |             |   |        |   |   |
|   |                                                |       |      | Kepala Tukang    | 0,009 |             |  |             |   |        |   |   |
|   |                                                |       |      | Mandor           | 0,005 |             |  |             |   |        |   |   |
| 5 | Memasang 1 jendela Pintu Type II untuk partisi | 1,00  | unit | Pekerja          | 0,085 |             |  | 11,76470588 | 1 | 0,085  | = | 1 |
|   |                                                |       |      | Tukang Alumunium | 0,085 |             |  |             |   |        |   |   |
|   |                                                |       |      | Kepala Tukang    | 0,009 |             |  |             |   |        |   |   |
|   |                                                |       |      | Mandor           | 0,005 |             |  |             |   |        |   |   |

### C. Pekerjaan Railling Tangga

|   |                                                   |       |    |                    |       |             |  |  |   |       |   |   |
|---|---------------------------------------------------|-------|----|--------------------|-------|-------------|--|--|---|-------|---|---|
| 1 | Pasang Railling Tangga Utama dari Stainless Steel | 13,76 | M2 | pekerja            | 0,390 | 1,428571429 |  |  | 4 | 2,408 | = | 3 |
|   |                                                   |       |    | tukang besi        | 0,700 |             |  |  |   |       |   |   |
|   |                                                   |       |    | kepala tukang besi | 0,070 |             |  |  |   |       |   |   |

|   |                                                     |       |    |                    |       |             |  |  |  |   |       |   |   |
|---|-----------------------------------------------------|-------|----|--------------------|-------|-------------|--|--|--|---|-------|---|---|
|   |                                                     |       |    | mandor             | 0,007 |             |  |  |  |   |       |   |   |
| 2 | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48 | M2 | pekerja            | 0,390 | 1,428571429 |  |  |  | 3 | 2,912 | = | 3 |
|   |                                                     |       |    | tukang besi        | 0,700 |             |  |  |  |   |       |   |   |
|   |                                                     |       |    | kepala tukang besi | 0,070 |             |  |  |  |   |       |   |   |
|   |                                                     |       |    | mandor             | 0,007 |             |  |  |  |   |       |   |   |

### D. Curtain Wall

|   |                      |   |    |                    |       |             |  |  |  |   |      |   |   |
|---|----------------------|---|----|--------------------|-------|-------------|--|--|--|---|------|---|---|
| 1 | Curtain Wall ( CW2 ) | 1 | M2 | pekerja            | 0,390 | 1,428571429 |  |  |  | 2 | 0,35 | = | 1 |
|   |                      |   |    | tukang besi        | 0,700 |             |  |  |  |   |      |   |   |
|   |                      |   |    | kepala tukang besi | 0,070 |             |  |  |  |   |      |   |   |
|   |                      |   |    | mandor             | 0,007 |             |  |  |  |   |      |   |   |

### VI. Pekerjaan Langit-langit

|   |                                                   |         |    |                    |       |    |  |  |  |    |             |   |   |
|---|---------------------------------------------------|---------|----|--------------------|-------|----|--|--|--|----|-------------|---|---|
| 1 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 1141,44 | m2 | Pekerja            | 0,100 | 10 |  |  |  | 30 | 3,804783333 | = | 4 |
|   |                                                   |         |    | Tukang batu/tembok | 0,050 |    |  |  |  |    |             |   |   |
|   |                                                   |         |    | Kepala tukang      | 0,005 |    |  |  |  |    |             |   |   |
|   |                                                   |         |    | Mandor             | 0,005 |    |  |  |  |    |             |   |   |

### VII. Pekerjaan Pengecatan

|   |                             |           |    |                    |       |             |  |  |  |    |            |   |    |
|---|-----------------------------|-----------|----|--------------------|-------|-------------|--|--|--|----|------------|---|----|
| 1 | Pengecatan dinding interior | 2975,3532 | m2 | Pekerja            | 0,020 | 15,87301587 |  |  |  | 20 | 9,37236258 | = | 10 |
|   |                             |           |    | Tukang cat/pelitur | 0,063 |             |  |  |  |    |            |   |    |
|   |                             |           |    | Kepala tukang      | 0,006 |             |  |  |  |    |            |   |    |
|   |                             |           |    | Mandor             | 0,003 |             |  |  |  |    |            |   |    |

|   |                              |          |    |                    |       |             |  |  |    |           |   |   |
|---|------------------------------|----------|----|--------------------|-------|-------------|--|--|----|-----------|---|---|
| 2 | Pengecatan dinding eksterior | 681,1104 | m2 | Pekerja            | 0,020 | 15,87301587 |  |  | 6  | 7,1516592 | = | 8 |
|   |                              |          |    | Tukang cat/pelitur | 0,063 |             |  |  |    |           |   |   |
|   |                              |          |    | Kepala tukang      | 0,006 |             |  |  |    |           |   |   |
|   |                              |          |    | Mandor             | 0,003 |             |  |  |    |           |   |   |
| 3 | Pengecatan plafon            | 1271     | m2 | Pekerja            | 0,020 | 15,87301587 |  |  | 15 | 5,3382    | = | 6 |
|   |                              |          |    | Tukang Cat         | 0,063 |             |  |  |    |           |   |   |
|   |                              |          |    | Kepala Tukang      | 0,006 |             |  |  |    |           |   |   |
|   |                              |          |    | Mandor             | 0,003 |             |  |  |    |           |   |   |

### VIII. Pekerjaan Tata Udara

|   |                                    |    |      |                |       |  |  |   |   |      |   |   |
|---|------------------------------------|----|------|----------------|-------|--|--|---|---|------|---|---|
| 1 | Unit AC Cassete 5PK                | 2  | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 0,5  | = | 1 |
|   |                                    |    |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |
|   |                                    |    |      | Kepala Tukang  | 0,005 |  |  |   |   |      |   |   |
| 2 | Unit AC Cassete 4PK                | 9  | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 2,25 | = | 3 |
|   |                                    |    |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |
|   |                                    |    |      | Kepala Tukang  | 0,005 |  |  |   |   |      |   |   |
| 3 | Unit AC Split Wall Mountain 3/4 PK | 16 | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 4    | = | 4 |
|   |                                    |    |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |
|   |                                    |    |      | Kepala Tukang  | 0,005 |  |  |   |   |      |   |   |
| 4 | Exhaust Fan ex jepang              | 2  | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 0,5  | = | 1 |
|   |                                    |    |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |

|  |  |  |  |               |       |  |  |  |  |  |  |  |  |
|--|--|--|--|---------------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Kepala Tukang | 0,005 |  |  |  |  |  |  |  |  |
|--|--|--|--|---------------|-------|--|--|--|--|--|--|--|--|

## XI. Pekerjaan Instalasi Telepon

|   |                          |    |       |                         |       |  |  |  |            |   |       |   |   |
|---|--------------------------|----|-------|-------------------------|-------|--|--|--|------------|---|-------|---|---|
| 1 | Pasang Instalasi Telepon | 18 | Titik | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666667 | 2 | 1,35  | = | 2 |
|   |                          |    |       | Tukang listrik          | 0,150 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Kepala tukang listrik   | 0,180 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Mandor                  | 0,150 |  |  |  |            |   |       |   |   |
| 2 | Pasang Outlet Telepon    | 16 | Titik | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666667 | 2 | 1,2   | = | 2 |
|   |                          |    |       | Tukang listrik          | 0,150 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Kepala tukang listrik   | 0,180 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Mandor                  | 0,150 |  |  |  |            |   |       |   |   |
| 3 | Switch Hub 16 port       | 1  | unit  | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666667 | 2 | 0,075 | = | 1 |
|   |                          |    |       | Tukang listrik          | 0,150 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Kepala tukang listrik   | 0,180 |  |  |  |            |   |       |   |   |
|   |                          |    |       | Mandor                  | 0,150 |  |  |  |            |   |       |   |   |
| 4 | Terminal Box             | 1  | unit  | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666667 | 2 | 0,075 | = | 1 |

|  |  |  |  |                       |       |  |  |  |  |  |  |  |  |
|--|--|--|--|-----------------------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Tukang listrik        | 0,150 |  |  |  |  |  |  |  |  |
|  |  |  |  | Kepala tukang listrik | 0,180 |  |  |  |  |  |  |  |  |
|  |  |  |  | Mandor                | 0,150 |  |  |  |  |  |  |  |  |

### X. Pekerjaan CCTV

|   |                                               |   |       |                         |       |  |  |  |             |   |      |   |   |
|---|-----------------------------------------------|---|-------|-------------------------|-------|--|--|--|-------------|---|------|---|---|
| 1 | Kamera CCTV HD                                | 4 | Unit  | Pembantu tukang listrik | 0,015 |  |  |  | 66,66666667 | 2 | 0,03 | = | 1 |
|   |                                               |   |       | Tukang listrik          | 0,015 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Kepala tukang listrik   | 0,001 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Mandor                  | 0,001 |  |  |  |             |   |      |   |   |
| 2 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 4 | Titik | Pekerja                 | 0,050 |  |  |  | 2           | 2 | 1    | = | 1 |
|   |                                               |   |       | Tukang Listrik          | 0,500 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Kepala Tukang           | 0,005 |  |  |  |             |   |      |   |   |

### XI. Pekerjaan Sound System

|   |                           |       |       |                         |       |  |  |  |             |   |             |   |   |
|---|---------------------------|-------|-------|-------------------------|-------|--|--|--|-------------|---|-------------|---|---|
| 1 | Celling speaker 6 W       | 8,00  | Titik | Tukang Listrik          | 0,500 |  |  |  | 2           | 2 | 2           | = | 2 |
| 2 | Volume control            | 1,00  | Titik | Tukang Listrik          | 0,500 |  |  |  | 2           | 1 | 0,5         | = | 1 |
| 3 | Instalasi Celling speaker | 10,00 | Unit  | Tukang Listrik          | 0,500 |  |  |  | 2           | 3 | 1,666666667 | = | 2 |
| 4 | Terminal Box              | 1,00  | Unit  | Pembantu tukang listrik | 0,015 |  |  |  | 66,66666667 | 2 | 0,0075      | = | 1 |
|   |                           |       |       | Tukang listrik          | 0,015 |  |  |  |             |   |             |   |   |

|   |                                                              |      |    |                         |       |    |  |  |   |        |   |   |  |
|---|--------------------------------------------------------------|------|----|-------------------------|-------|----|--|--|---|--------|---|---|--|
|   |                                                              |      |    | Kepala tukang listrik   | 0,001 |    |  |  |   |        |   |   |  |
|   |                                                              |      |    | Mandor                  | 0,001 |    |  |  |   |        |   |   |  |
| 5 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5,00 | m' | Pembantu tukang listrik | 0,025 | 40 |  |  | 2 | 0,0625 | = | 1 |  |
|   |                                                              |      |    | Tukang listrik          | 0,025 |    |  |  |   |        |   |   |  |
|   |                                                              |      |    | Kepala tukang listrik   | 0,017 |    |  |  |   |        |   |   |  |
|   |                                                              |      |    | Mandor                  | 0,014 |    |  |  |   |        |   |   |  |

## XII. Pekerjaan Fire Alarm

### INSTALASI LANTAI 3

| Peralatan Fixture |                                |    |     |                         |       |    |  |  |   |      |   |   |
|-------------------|--------------------------------|----|-----|-------------------------|-------|----|--|--|---|------|---|---|
| 1                 | - Conv. Optical Smoke Detector | 52 | pcs | Pembantu tukang listrik | 0,025 | 40 |  |  | 2 | 0,65 | = | 1 |
|                   |                                |    |     | Tukang listrik          | 0,025 |    |  |  |   |      |   |   |
|                   |                                |    |     | Kepala tukang listrik   | 0,017 |    |  |  |   |      |   |   |
|                   |                                |    |     | Mandor                  | 0,014 |    |  |  |   |      |   |   |
| 1                 | - Conv. Manual Break glass     | 2  | pcs | pekerja                 | 0,050 | 2  |  |  | 2 | 0,5  | = | 1 |
|                   |                                |    |     | tukang listrik          | 0,500 |    |  |  |   |      |   |   |
|                   |                                |    |     | kepala tukang           | 0,005 |    |  |  |   |      |   |   |



|   |                                       |      |      |                         |       |  |  |  |             |   |      |   |   |
|---|---------------------------------------|------|------|-------------------------|-------|--|--|--|-------------|---|------|---|---|
|   | - Junction Box Fire Alarm             | 1,00 | pcs  | pekerja                 | 0,050 |  |  |  | 2           | 2 | 0,25 | = | 1 |
|   |                                       |      |      | tukang listrik          | 0,500 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | kepala tukang           | 0,005 |  |  |  |             |   |      |   |   |
|   | - Remote Indicating Lamp              | 4    | pcs  | Pembantu tukang listrik | 0,025 |  |  |  | 40          | 2 | 0,05 | = | 1 |
|   |                                       |      |      | Tukang listrik          | 0,025 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | Kepala tukang listrik   | 0,017 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | Mandor                  | 0,014 |  |  |  |             |   |      |   |   |
|   | - Alarm Bell                          | 2    | unit | pekerja                 | 0,050 |  |  |  | 2           | 2 | 0,5  | = | 1 |
|   |                                       |      |      | tukang listrik          | 0,500 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | kepala tukang           | 0,005 |  |  |  |             |   |      |   |   |
|   | - Terminal Box 30 x 40 x 12           | 1    | unit | pekerja                 | 0,050 |  |  |  | 2           | 2 | 0,25 | = | 1 |
|   |                                       |      |      | tukang listrik          | 0,500 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | kepala tukang           | 0,005 |  |  |  |             |   |      |   |   |
| 2 | Pekerjaan Instalasi                   |      |      |                         |       |  |  |  |             |   |      |   |   |
|   | -Detector dan manual break glass      | 55   | ttk  | Pembantu tukang listrik | 0,150 |  |  |  | 6,666666667 | 3 | 2,75 | = | 3 |
|   | NYA Cable 2x1,5mm + Pipa Conduit 20mm |      |      | Tukang listrik          | 0,150 |  |  |  |             |   |      |   |   |
|   |                                       |      |      | Kepala tukang listrik   | 0,180 |  |  |  |             |   |      |   |   |

|  |                                           |   |     |                         |       |  |  |             |   |       |   |   |  |  |
|--|-------------------------------------------|---|-----|-------------------------|-------|--|--|-------------|---|-------|---|---|--|--|
|  |                                           |   |     | Mandor                  | 0,150 |  |  |             |   |       |   |   |  |  |
|  | - Junction Box Fire Alarm                 | 1 | ttk | Pembantu tukang listrik | 0,150 |  |  | 6,666666667 | 2 | 0,075 | = | 1 |  |  |
|  | NYA cable 2 x 1,5 mm + pipa conduit 20 mm |   |     | Tukang listrik          | 0,150 |  |  |             |   |       |   |   |  |  |
|  |                                           |   |     | Kepala tukang listrik   | 0,180 |  |  |             |   |       |   |   |  |  |
|  |                                           |   |     | Mandor                  | 0,150 |  |  |             |   |       |   |   |  |  |
|  | - Remote Indicating Lamp                  | 4 | ttk | Pembantu tukang listrik | 0,150 |  |  | 6,666666667 | 2 | 0,3   | = | 1 |  |  |
|  | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    |   |     | Tukang listrik          | 0,150 |  |  |             |   |       |   |   |  |  |
|  |                                           |   |     | Kepala tukang listrik   | 0,180 |  |  |             |   |       |   |   |  |  |
|  |                                           |   |     | Mandor                  | 0,150 |  |  |             |   |       |   |   |  |  |

### XIII. Pekerjaan Alat Pemadam Kebakaran

|   |                                          |      |    |               |       |   |  |  |   |         |   |   |  |  |
|---|------------------------------------------|------|----|---------------|-------|---|--|--|---|---------|---|---|--|--|
|   | BSP Sch.40 c/w fitting2 & Material bantu |      |    |               |       |   |  |  |   |         |   |   |  |  |
| 1 | dia. 3 "                                 | 81,3 | m' | Pekerja       | 0,054 | 4 |  |  | 4 | 5,08125 | = | 6 |  |  |
|   |                                          |      |    | Tukang        | 0,090 |   |  |  |   |         |   |   |  |  |
|   |                                          |      |    | Kepala tukang | 0,009 |   |  |  |   |         |   |   |  |  |
|   |                                          |      |    | Tukang las    | 0,250 |   |  |  |   |         |   |   |  |  |
|   |                                          |      |    | Tukang cat    | 0,160 |   |  |  |   |         |   |   |  |  |
|   |                                          |      |    | Mandor        | 0,005 |   |  |  |   |         |   |   |  |  |

|               |                                    |   |      |               |       |  |  |             |   |       |   |   |
|---------------|------------------------------------|---|------|---------------|-------|--|--|-------------|---|-------|---|---|
| 2             | Hydrant Box Indoor, type B c/w     | 2 | unit | Pekerja       | 0,180 |  |  | 5,555555556 | 2 | 0,18  | = | 1 |
|               | -hydrant valve dia. 1 1/2"         |   |      | Tukang        | 0,180 |  |  |             |   |       |   |   |
|               | -fire hose 1 1/2"x30 m             |   |      | Kepala tukang | 0,040 |  |  |             |   |       |   |   |
|               | -hose rack dia. 1 1/2"             |   |      | Mandor        | 0,040 |  |  |             |   |       |   |   |
|               | -Spray nozzle dia. 1 1/2"          |   |      |               |       |  |  |             |   |       |   |   |
|               | -kaca dan kunci                    |   |      |               |       |  |  |             |   |       |   |   |
| 3             | Gate valve dia. 2 1/2" , OS&Y type | 1 | bh   | Pekerja       | 0,054 |  |  | 4           | 2 | 0,125 | = | 1 |
|               |                                    |   |      | Tukang        | 0,090 |  |  |             |   |       |   |   |
|               |                                    |   |      | Kepala Tukang | 0,009 |  |  |             |   |       |   |   |
|               |                                    |   |      | Tukang las    | 0,250 |  |  |             |   |       |   |   |
|               |                                    |   |      | Tukang cat    | 0,100 |  |  |             |   |       |   |   |
|               |                                    |   |      | Mandor        | 0,005 |  |  |             |   |       |   |   |
|               | - Fire Extinguisher 6 kg           | 2 | unit | pekerja       | 0,150 |  |  | 6,666666667 | 2 | 0,15  | = | 1 |
| tukang batu   | 0,150                              |   |      |               |       |  |  |             |   |       |   |   |
| kepala tukang | 0,180                              |   |      |               |       |  |  |             |   |       |   |   |
| mandor        | 0,150                              |   |      |               |       |  |  |             |   |       |   |   |

### B. Instalasi Sprinkler

|   |                                          |  |  |  |  |  |  |  |  |  |  |  |
|---|------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| 1 | BSP Sch.40 c/w fitting2 & Material bantu |  |  |  |  |  |  |  |  |  |  |  |
|---|------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|

|              |      |    |                 |       |             |  |  |  |   |             |   |   |
|--------------|------|----|-----------------|-------|-------------|--|--|--|---|-------------|---|---|
| dia. 1 "     | 150  | m' | Pembantu tukang | 0,054 | 11,11111111 |  |  |  | 5 | 2,7         | = | 3 |
|              |      |    | Tukang          | 0,090 |             |  |  |  |   |             |   |   |
|              |      |    | Kepala tukang   | 0,009 |             |  |  |  |   |             |   |   |
|              |      |    | Mandor          | 0,027 |             |  |  |  |   |             |   |   |
| dia. 1 1/4 " | 107  | m' | Pembantu tukang | 0,054 | 11,11111111 |  |  |  | 4 | 2,4075      | = | 3 |
|              |      |    | Tukang          | 0,090 |             |  |  |  |   |             |   |   |
|              |      |    | Kepala tukang   | 0,009 |             |  |  |  |   |             |   |   |
|              |      |    | Mandor          | 0,027 |             |  |  |  |   |             |   |   |
| dia. 2 "     | 8,5  | m' | Pembantu tukang | 0,054 | 11,11111111 |  |  |  | 1 | 0,765       | = | 1 |
|              |      |    | Tukang          | 0,090 |             |  |  |  |   |             |   |   |
|              |      |    | Kepala tukang   | 0,009 |             |  |  |  |   |             |   |   |
|              |      |    | Mandor          | 0,027 |             |  |  |  |   |             |   |   |
| dia. 2 1/2 " | 8    | m' | Pekerja         | 0,054 | 4           |  |  |  | 4 | 0,5         | = | 1 |
|              |      |    | Tukang          | 0,090 |             |  |  |  |   |             |   |   |
|              |      |    | Kepala tukang   | 0,009 |             |  |  |  |   |             |   |   |
|              |      |    | Tukang las      | 0,250 |             |  |  |  |   |             |   |   |
|              |      |    | Tukang cat      | 0,100 |             |  |  |  |   |             |   |   |
|              |      |    | Mandor          | 0,005 |             |  |  |  |   |             |   |   |
| dia. 3 "     | 63,5 | m' | Pekerja         | 0,054 | 4           |  |  |  | 3 | 5,291666667 | = | 6 |
|              |      |    | Tukang          | 0,090 |             |  |  |  |   |             |   |   |

|   |                                         |    |      |                |       |  |  |  |   |   |             |   |   |  |
|---|-----------------------------------------|----|------|----------------|-------|--|--|--|---|---|-------------|---|---|--|
|   |                                         |    |      | Kepala tukang  | 0,009 |  |  |  |   |   |             |   |   |  |
|   |                                         |    |      | Tukang las     | 0,250 |  |  |  |   |   |             |   |   |  |
|   |                                         |    |      | Tukang cat     | 0,160 |  |  |  |   |   |             |   |   |  |
|   |                                         |    |      | Mandor         | 0,005 |  |  |  |   |   |             |   |   |  |
| 2 | Sprinkler head dia. 1/2", 68'C, pendent | 71 | bh   | pekerja        | 0,050 |  |  |  | 2 | 6 | 5,916666667 | = | 6 |  |
|   |                                         |    |      | tukang listrik | 0,500 |  |  |  |   |   |             |   |   |  |
|   |                                         |    |      | kepala tukang  | 0,005 |  |  |  |   |   |             |   |   |  |
| 3 | Branch Control Valve dia. 3"            | 1  | unit | pekerja        | 0,050 |  |  |  | 2 | 1 | 0,5         | = | 1 |  |
|   |                                         |    |      | tukang listrik | 0,500 |  |  |  |   |   |             |   |   |  |
|   |                                         |    |      | kepala tukang  | 0,005 |  |  |  |   |   |             |   |   |  |

### XIII. Pekerjaan Sanitair & Sanitasi

|   |                        |    |    |                    |       |  |  |  |             |    |     |   |   |  |
|---|------------------------|----|----|--------------------|-------|--|--|--|-------------|----|-----|---|---|--|
| 1 | Pasang Klosed Duduk    | 10 | Bh | Pekerja            | 3,300 |  |  |  | 0,303030303 | 10 | 3,3 | = | 4 |  |
|   |                        |    |    | Tukang batu/tembok | 1,100 |  |  |  |             |    |     |   |   |  |
|   |                        |    |    | Kepala tukang      | 0,001 |  |  |  |             |    |     |   |   |  |
|   |                        |    |    | Mandor             | 0,160 |  |  |  |             |    |     |   |   |  |
| 2 | Pasang Wastafel single | 6  | Bh | Pekerja            | 1,200 |  |  |  | 0,689655172 | 3  | 2,9 | = | 3 |  |
|   |                        |    |    | Tukang batu/tembok | 1,450 |  |  |  |             |    |     |   |   |  |
|   |                        |    |    | Kepala tukang      | 0,150 |  |  |  |             |    |     |   |   |  |
|   |                        |    |    | Mandor             | 0,100 |  |  |  |             |    |     |   |   |  |

|   |                                |    |    |                    |       |  |  |  |             |   |             |   |   |
|---|--------------------------------|----|----|--------------------|-------|--|--|--|-------------|---|-------------|---|---|
| 3 | Pasang Jet washer              | 10 | Bh | pekerja            | 1,200 |  |  |  | 0,689655172 | 3 | 4,833333333 | = | 5 |
|   |                                |    |    | tukang batu        | 1,450 |  |  |  |             |   |             |   |   |
|   |                                |    |    | kepala tukang      | 0,150 |  |  |  |             |   |             |   |   |
|   |                                |    |    | mandor             | 0,100 |  |  |  |             |   |             |   |   |
| 4 | Pasang Kran Diameter Air 1/2 " | 24 | Bh | Pekerja            | 0,010 |  |  |  | 10          | 3 | 0,8         | = | 1 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |  |             |   |             |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |  |             |   |             |   |   |
|   |                                |    |    | Mandor             | 0,005 |  |  |  |             |   |             |   |   |
| 5 | Pasang Floor Drain             | 10 | Bh | Pekerja            | 0,010 |  |  |  | 10          | 1 | 1           | = | 1 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |  |             |   |             |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |  |             |   |             |   |   |
|   |                                |    |    | Mandor             | 0,005 |  |  |  |             |   |             |   |   |

### A. Instalasi Air Bersih

|   |                                             |        |    |                    |       |             |  |  |  |   |        |   |   |
|---|---------------------------------------------|--------|----|--------------------|-------|-------------|--|--|--|---|--------|---|---|
| 1 | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 108,35 | m' | Pekerja            | 0,036 | 16,66666667 |  |  |  | 2 | 3,2505 | = | 4 |
|   |                                             |        |    | Tukang batu/tembok | 0,060 |             |  |  |  |   |        |   |   |
|   |                                             |        |    | Kepala tukang      | 0,006 |             |  |  |  |   |        |   |   |
|   |                                             |        |    | Mandor             | 0,002 |             |  |  |  |   |        |   |   |

### B. Instalasi Air Kotor

|   |                      |   |      |                 |       |  |  |  |     |   |     |   |   |
|---|----------------------|---|------|-----------------|-------|--|--|--|-----|---|-----|---|---|
| 1 | Pasang Cleant Out 3" | 2 | Unit | Pembantu tukang | 0,400 |  |  |  | 2,5 | 2 | 0,4 | = | 1 |
|   |                      |   |      | Tukang          | 0,200 |  |  |  |     |   |     |   |   |



|   |                             |       |    |                    |       |  |  |  |             |   |         |   |   |  |
|---|-----------------------------|-------|----|--------------------|-------|--|--|--|-------------|---|---------|---|---|--|
|   |                             |       |    | Kepala tukang      | 0,020 |  |  |  |             |   |         |   |   |  |
|   |                             |       |    | Mandor             | 0,020 |  |  |  |             |   |         |   |   |  |
| 2 | Pasang Pipa air kotor Ø 3 " | 16,52 | m' | Pekerja            | 0,081 |  |  |  | 7,407407407 | 2 | 1,1151  | = | 2 |  |
|   |                             |       |    | Tukang batu/tembok | 0,135 |  |  |  |             |   |         |   |   |  |
|   |                             |       |    | Kepala tukang      | 0,014 |  |  |  |             |   |         |   |   |  |
|   |                             |       |    | Mandor             | 0,004 |  |  |  |             |   |         |   |   |  |
| 3 | Pasang Pipa air kotor Ø 4 " | 82,77 | m' | Pekerja            | 0,081 |  |  |  | 7,407407407 | 3 | 3,72465 | = | 4 |  |
|   |                             |       |    | Tukang batu/tembok | 0,135 |  |  |  |             |   |         |   |   |  |
|   |                             |       |    | Kepala tukang      | 0,014 |  |  |  |             |   |         |   |   |  |
|   |                             |       |    | Mandor             | 0,004 |  |  |  |             |   |         |   |   |  |

### XI. Pekerjaan Listrik

|   |                                                                    |       |        |                |       |  |  |  |             |   |          |   |   |
|---|--------------------------------------------------------------------|-------|--------|----------------|-------|--|--|--|-------------|---|----------|---|---|
| 1 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08 | batang | pekerja        | 0,150 |  |  |  | 6,666666667 | 4 | 1,765625 | = | 2 |
|   |                                                                    |       |        | tukang listrik | 0,150 |  |  |  |             |   |          |   |   |
|   |                                                                    |       |        | kepala tukang  | 0,030 |  |  |  |             |   |          |   |   |
|   |                                                                    |       |        | mandor         | 0,030 |  |  |  |             |   |          |   |   |
| 2 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08 | batang | pekerja        | 0,150 |  |  |  | 6,666666667 | 4 | 1,765625 | = | 2 |
|   |                                                                    |       |        | tukang listrik | 0,150 |  |  |  |             |   |          |   |   |
|   |                                                                    |       |        | kepala tukang  | 0,030 |  |  |  |             |   |          |   |   |
|   |                                                                    |       |        | mandor         | 0,030 |  |  |  |             |   |          |   |   |

|   |                                                     |     |       |                |       |  |  |  |             |    |       |   |    |
|---|-----------------------------------------------------|-----|-------|----------------|-------|--|--|--|-------------|----|-------|---|----|
| 3 | Pasang Instalasi Titik Lampu                        | 152 | Titik | Tukang Listrik | 1,000 |  |  |  | 1           | 10 | 15,2  | = | 16 |
| 4 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                | 3   | Titik | pekerja        | 0,150 |  |  |  | 6,666666667 | 2  | 0,225 | = | 1  |
|   |                                                     |     |       | tukang listrik | 0,150 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | kepala tukang  | 0,030 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | mandor         | 0,030 |  |  |  |             |    |       |   |    |
| 5 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w     | 14  | Titik | pekerja        | 0,150 |  |  |  | 6,666666667 | 2  | 1,05  | = | 2  |
|   |                                                     |     |       | tukang listrik | 0,150 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | kepala tukang  | 0,030 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | mandor         | 0,030 |  |  |  |             |    |       |   |    |
| 6 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W        | 2   | Titik | pekerja        | 0,150 |  |  |  | 6,666666667 | 2  | 0,15  | = | 1  |
|   |                                                     |     |       | tukang listrik | 0,150 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | kepala tukang  | 0,030 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | mandor         | 0,030 |  |  |  |             |    |       |   |    |
| 7 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT | 2   | Titik | pekerja        | 0,150 |  |  |  | 6,666666667 | 2  | 0,15  | = | 1  |
|   |                                                     |     |       | tukang listrik | 0,150 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | kepala tukang  | 0,030 |  |  |  |             |    |       |   |    |
|   |                                                     |     |       | mandor         | 0,030 |  |  |  |             |    |       |   |    |
| 8 | LAMPU TK CG T8 2X36, T-LED                          | 1   | Titik | pekerja        | 0,150 |  |  |  | 6,666666667 | 1  | 0,15  | = | 1  |
|   |                                                     |     |       | tukang listrik | 0,150 |  |  |  |             |    |       |   |    |

|    |                                                         |     |       |                               |       |  |  |             |   |          |   |   |  |
|----|---------------------------------------------------------|-----|-------|-------------------------------|-------|--|--|-------------|---|----------|---|---|--|
|    | ESSENTIAL<br>2X16W<br>SAVY                              |     |       | kepala<br>tukang              | 0,030 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | mandor                        | 0,030 |  |  |             |   |          |   |   |  |
| 9  | RMO T 2X36,<br>T-LED<br>ESSENTIAL<br>2X16W<br>SAVY      | 125 | Titik | pekerja                       | 0,150 |  |  | 6,666666667 | 8 | 2,34375  | = | 3 |  |
|    |                                                         |     |       | tukang<br>listrik             | 0,150 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | kepala<br>tukang              | 0,030 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | mandor                        | 0,030 |  |  |             |   |          |   |   |  |
| 10 | RMO T 2X36,<br>T-LED<br>ESSENTIAL<br>2X16W<br>SAVY+Batt | 3   | Titik | pekerja                       | 0,150 |  |  | 6,666666667 | 2 | 0,225    | = | 1 |  |
|    |                                                         |     |       | tukang<br>listrik             | 0,150 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | kepala<br>tukang              | 0,030 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | mandor                        | 0,030 |  |  |             |   |          |   |   |  |
| 11 | Pasang Saklar<br>Tunggal                                | 10  | Titik | Pembantu<br>tukang            | 0,150 |  |  | 6,666666667 | 5 | 0,3      | = | 1 |  |
|    |                                                         |     |       | Tukang<br>Listrik             | 0,150 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | Kepala<br>tukang              | 0,030 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | Mandor                        | 0,030 |  |  |             |   |          |   |   |  |
| 12 | Pasang Saklar<br>Ganda                                  | 15  | Titik | Pembantu<br>tukang            | 0,150 |  |  | 6,666666667 | 4 | 0,5625   | = | 1 |  |
|    |                                                         |     |       | Tukang<br>Listrik             | 0,150 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | Kepala<br>tukang              | 0,030 |  |  |             |   |          |   |   |  |
|    |                                                         |     |       | Mandor                        | 0,030 |  |  |             |   |          |   |   |  |
| 13 | Instalasi stop<br>kontak                                | 149 | Titik | Pembantu<br>tukang<br>listrik | 0,025 |  |  | 40          | 8 | 0,465625 | = | 1 |  |

|    |                                                                |     |       |                         |       |  |  |  |    |    |             |   |   |
|----|----------------------------------------------------------------|-----|-------|-------------------------|-------|--|--|--|----|----|-------------|---|---|
|    |                                                                |     |       | Tukang listrik          | 0,025 |  |  |  |    |    |             |   |   |
|    |                                                                |     |       | Kepala tukang listrik   | 0,017 |  |  |  |    |    |             |   |   |
|    |                                                                |     |       | Mandor                  | 0,014 |  |  |  |    |    |             |   |   |
| 14 | Pasang Stop Kontak 1 Phase                                     | 149 | Titik | Pekerja                 | 0,050 |  |  |  | 2  | 15 | 4,966666667 | = | 5 |
|    |                                                                |     |       | Tukang listrik          | 0,500 |  |  |  |    |    |             |   |   |
|    |                                                                |     |       | Kepala Tukang           | 0,005 |  |  |  |    |    |             |   |   |
| 15 | Pasang Stop Kontak under floor (lab. komputer dan mekatronika) | 84  | Titik | Pembantu tukang listrik | 0,025 |  |  |  | 40 | 8  | 0,2625      | = | 1 |
|    |                                                                |     |       | Tukang listrik          | 0,025 |  |  |  |    |    |             |   |   |
|    |                                                                |     |       | Kepala tukang listrik   | 0,017 |  |  |  |    |    |             |   |   |
|    |                                                                |     |       | Mandor                  | 0,014 |  |  |  |    |    |             |   |   |

## Lantai 4

| NO | JENIS PEKERJAAN | VOLUME | TENAGA KERJA |                | PRODUKTIVITAS        |                      |                      |                                  | JUMLAH TK | DURASI |
|----|-----------------|--------|--------------|----------------|----------------------|----------------------|----------------------|----------------------------------|-----------|--------|
|    |                 |        | JENIS        | KOEFISIEN (OH) | (m <sup>1</sup> /OH) | (m <sup>2</sup> /OH) | (m <sup>3</sup> /OH) | (Set/OH)<br>(Unit/OH)<br>(Kg/OH) | (/hari)   |        |

### I. Pekerjaan Pasangan

|   |                                          |       |                |         |       |  |  |  |             |    |          |   |   |
|---|------------------------------------------|-------|----------------|---------|-------|--|--|--|-------------|----|----------|---|---|
| 1 | Mengurug pasir bawah lantai setebal 5 cm | 97,93 | m <sup>3</sup> | Pekerja | 0,300 |  |  |  | 3,333333333 | 10 | 2,937975 | = | 3 |
|   |                                          |       |                | Mandor  | 0,010 |  |  |  |             |    |          |   |   |

|   |                                                      |             |    |                    |       |                 |  |  |    |               |   |   |
|---|------------------------------------------------------|-------------|----|--------------------|-------|-----------------|--|--|----|---------------|---|---|
| 2 | Pasangan dinding 1/2 batu bata spesi<br>1 Pc : 6 Psr | 1246,7<br>5 | m2 | Pekerja            | 0,300 | 3,33333333<br>3 |  |  | 55 | 6,800458<br>9 | = | 7 |
|   |                                                      |             |    | Tukang batu/tembok | 0,100 |                 |  |  |    |               |   |   |
|   |                                                      |             |    | Kepala tukang      | 0,010 |                 |  |  |    |               |   |   |
|   |                                                      |             |    | Mandor             | 0,015 |                 |  |  |    |               |   |   |

## II. Pekerjaan Beton

|   |                            |        |    |                        |       |                 |  |  |    |        |   |        |
|---|----------------------------|--------|----|------------------------|-------|-----------------|--|--|----|--------|---|--------|
| 1 | Pembuatan Plat Lantai      | 192,48 | m3 |                        |       | 0,40816326<br>5 |  |  | 48 | 9,8245 | = | 1<br>0 |
|   | Mengecor beton K-300       |        |    | Pekerja                | 1,650 |                 |  |  |    |        |   |        |
|   |                            |        |    | Tukang batu/tembok     | 0,275 |                 |  |  |    |        |   |        |
|   |                            |        |    | Kepala Tukang          | 0,028 |                 |  |  |    |        |   |        |
|   |                            |        |    | Mandor                 | 0,083 |                 |  |  |    |        |   |        |
|   | Pembesian besi beton polos |        |    | Pekerja                | 0,070 |                 |  |  |    |        |   |        |
|   |                            |        |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |        |
|   |                            |        |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |        |
|   |                            |        |    | Mandor                 | 0,004 |                 |  |  |    |        |   |        |
|   | Pembesian besi beton ulir  |        |    | Pekerja                | 0,070 |                 |  |  |    |        |   |        |
|   |                            |        |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |        |
|   |                            |        |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |        |
|   |                            |        |    | Mandor                 | 0,004 |                 |  |  |    |        |   |        |
|   |                            |        |    | Pekerja                | 0,660 |                 |  |  |    |        |   |        |

|   |                              |        |    |                        |       |             |                        |       |    |       |   |   |  |  |
|---|------------------------------|--------|----|------------------------|-------|-------------|------------------------|-------|----|-------|---|---|--|--|
|   | Bekisting untuk plat         |        |    | Tukang kayu            | 0,330 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Kepala Tukang          | 0,033 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Mandor                 | 0,033 |             |                        |       |    |       |   |   |  |  |
| 2 | Kolom Praktis uk. 11 x 11 cm | 432,00 | m1 | Pekerja                | 0,180 | 5,555555556 |                        |       | 20 | 3,888 | = | 4 |  |  |
|   |                              |        |    | Tukang batu/tembok     | 0,020 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Tukang kayu            | 0,020 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Tukang besi/besi beton | 0,020 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Kepala tukang          | 0,060 |             |                        |       |    |       |   |   |  |  |
|   |                              |        |    | Mandor                 | 0,009 |             |                        |       |    |       |   |   |  |  |
| 3 | Kolom uk. 30 x 30 cm (K 2)   | 0,72   | m3 |                        |       | 0,408163265 |                        |       | 2  | 0,882 | = | 1 |  |  |
|   | Mengecor beton K-300         |        |    |                        |       |             | Pekerja                | 1,650 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Tukang batu/tembok     | 0,275 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Kepala Tukang          | 0,028 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Mandor                 | 0,083 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Pekerja                | 0,070 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Tukang besi/besi beton | 0,070 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Kepala Tukang          | 0,007 |    |       |   |   |  |  |
|   |                              |        |    |                        |       |             | Mandor                 | 0,004 |    |       |   |   |  |  |
|   | Pembesian besi beton polos   |        |    |                        |       |             |                        |       |    |       |   |   |  |  |



|   |                            |      |    |                        |       |                 |  |   |        |   |   |  |  |
|---|----------------------------|------|----|------------------------|-------|-----------------|--|---|--------|---|---|--|--|
|   | Pembesian besi beton ulir  | 3,84 | m3 | Pekerja                | 0,070 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Tukang besi/besi beton | 0,070 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Kepala Tukang          | 0,007 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Mandor                 | 0,004 |                 |  |   |        |   |   |  |  |
|   | Bekisting untuk kolom      |      |    | Pekerja                | 0,660 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Tukang kayu            | 0,330 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Kepala Tukang          | 0,033 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Mandor                 | 0,033 |                 |  |   |        |   |   |  |  |
| 4 | Kolom uk. 40 x 40 cm (K 3) | 3,84 | m3 |                        |       | 0,40816326<br>5 |  | 5 | 1,8816 | = | 2 |  |  |
|   | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Tukang batu/tembok     | 0,275 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Kepala Tukang          | 0,028 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Mandor                 | 0,083 |                 |  |   |        |   |   |  |  |
|   | Pembesian besi beton polos |      |    | Pekerja                | 0,070 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Tukang besi/besi beton | 0,070 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Kepala Tukang          | 0,007 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Mandor                 | 0,004 |                 |  |   |        |   |   |  |  |
|   | Pembesian besi beton ulir  |      |    | Pekerja                | 0,070 |                 |  |   |        |   |   |  |  |
|   |                            |      |    | Tukang besi/besi beton | 0,070 |                 |  |   |        |   |   |  |  |

|   |                            |                            |       |               |               |                        |         |       |  |  |            |  |  |    |     |   |   |
|---|----------------------------|----------------------------|-------|---------------|---------------|------------------------|---------|-------|--|--|------------|--|--|----|-----|---|---|
|   |                            |                            |       | Kepala Tukang | 0,007         |                        |         |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       | Mandor        | 0,004         |                        |         |       |  |  |            |  |  |    |     |   |   |
|   | Bekisting untuk kolom      |                            |       | Pekerja       | 0,660         |                        |         |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       | Tukang kayu   | 0,330         |                        |         |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               | Kepala Tukang | 0,033                  |         |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               | Mandor        | 0,033                  |         |       |  |  |            |  |  |    |     |   |   |
| 5 |                            | Kolom uk. 50 x 50 cm (K 4) | 28,00 | m3            |               |                        |         |       |  |  |            |  |  |    |     |   |   |
|   |                            | Mengecor beton K-300       |       |               |               |                        | Pekerja | 1,650 |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Tukang batu/tembok     | 0,275   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Kepala Tukang          | 0,028   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Mandor                 | 0,083   |       |  |  |            |  |  |    |     |   |   |
|   | Pembesian besi beton polos |                            |       |               |               | Pekerja                | 0,070   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Tukang besi/besi beton | 0,070   |       |  |  | 0,40816326 |  |  | 14 | 4,9 | = | 5 |
|   |                            |                            |       |               |               | Kepala Tukang          | 0,007   |       |  |  | 5          |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Mandor                 | 0,004   |       |  |  |            |  |  |    |     |   |   |
|   | Pembesian besi beton ulir  |                            |       |               |               | Pekerja                | 0,070   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Tukang besi/besi beton | 0,070   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Kepala Tukang          | 0,007   |       |  |  |            |  |  |    |     |   |   |
|   |                            |                            |       |               |               | Mandor                 | 0,004   |       |  |  |            |  |  |    |     |   |   |

|   |                            |       |    |                        |       |                 |    |       |   |   |  |  |  |  |
|---|----------------------------|-------|----|------------------------|-------|-----------------|----|-------|---|---|--|--|--|--|
|   | Bekisting untuk kolom      |       |    | Pekerja                | 0,660 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Tukang kayu            | 0,330 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Kepala Tukang          | 0,033 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Mandor                 | 0,033 |                 |    |       |   |   |  |  |  |  |
| 6 | Kolom uk. 70 x 70 cm (K 6) | 23,52 | m3 |                        |       | 0,40816326<br>5 | 12 | 4,802 | = | 5 |  |  |  |  |
|   | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Kepala Tukang          | 0,028 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Mandor                 | 0,083 |                 |    |       |   |   |  |  |  |  |
|   | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Mandor                 | 0,004 |                 |    |       |   |   |  |  |  |  |
|   | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Mandor                 | 0,004 |                 |    |       |   |   |  |  |  |  |
|   | Bekisting untuk kolom      |       |    | Pekerja                | 0,660 |                 |    |       |   |   |  |  |  |  |
|   |                            |       |    | Tukang kayu            | 0,330 |                 |    |       |   |   |  |  |  |  |

|        |                            |       |    |                        |       |                 |   |        |   |   |  |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|---|--------|---|---|--|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                 |   |        |   |   |  |  |  |  |
| 7      | Balok Lantai uk.11 x 20 cm | 6,34  | m3 |                        |       | 0,40816326<br>5 | 6 | 2,5872 | = | 3 |  |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |   |        |   |   |  |  |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |   |        |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |   |        |   |   |  |  |  |  |

|        |                            |       |    |                        |       |                 |    |        |   |   |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|----|--------|---|---|
| 8      | Balok Type B.1             | 13,44 | m3 |                        |       | 0,40816326<br>5 | 12 | 2,744  | = | 3 |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |    |        |   |   |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |    |        |   |   |
|        |                            |       |    | Mandor                 | 0,083 |                 |    |        |   |   |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |        |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |        |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |        |   |   |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |        |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |        |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |        |   |   |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |    |        |   |   |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |    |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |        |   |   |
| Mandor |                            | 0,033 |    |                        |       |                 |    |        |   |   |
| 9      | Balok Type B.2             | 48,64 | m3 |                        |       | 0,40816326<br>5 | 20 | 5,9584 | = | 6 |
|        |                            |       |    | Pekerja                | 1,650 |                 |    |        |   |   |







|    |                            |       |    |                        |       |                 |    |          |   |   |
|----|----------------------------|-------|----|------------------------|-------|-----------------|----|----------|---|---|
| 12 | Pembesian besi beton polos | 15,21 | m3 | Pekerja                | 0,070 | 0,40816326<br>5 | 12 | 3,105375 | = | 4 |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |          |   |   |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |    |          |   |   |
|    |                            |       |    | Mandor                 | 0,004 |                 |    |          |   |   |
|    | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |          |   |   |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |          |   |   |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |    |          |   |   |
|    |                            |       |    | Mandor                 | 0,004 |                 |    |          |   |   |
|    | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |    |          |   |   |
|    |                            |       |    | Tukang kayu            | 0,330 |                 |    |          |   |   |
|    |                            |       |    | Kepala Tukang          | 0,033 |                 |    |          |   |   |
|    |                            |       |    | Mandor                 | 0,033 |                 |    |          |   |   |
| 12 | Balok Type B.5             | 15,21 | m3 |                        |       | 0,40816326<br>5 | 12 | 3,105375 | = | 4 |
|    |                            |       |    | Pekerja                | 1,650 |                 |    |          |   |   |
|    | Mengecor beton K-300       |       |    | Tukang batu/tembok     | 0,275 |                 |    |          |   |   |
|    |                            |       |    | Kepala Tukang          | 0,028 |                 |    |          |   |   |
|    |                            |       |    | Mandor                 | 0,083 |                 |    |          |   |   |
|    | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |          |   |   |
|    | Tukang besi/besi beton     | 0,070 |    |                        |       |                 |    |          |   |   |

|    |                                  |       |    |                              |         |                              |       |  |  |  |                 |  |  |    |               |
|----|----------------------------------|-------|----|------------------------------|---------|------------------------------|-------|--|--|--|-----------------|--|--|----|---------------|
|    |                                  |       |    | Kepala<br>Tukang             | 0,007   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Mandor                       | 0,004   |                              |       |  |  |  |                 |  |  |    |               |
|    | Pembesian<br>besi beton ulir     |       |    | Pekerja                      | 0,070   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Tukang<br>besi/besi<br>beton | 0,070   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Kepala<br>Tukang             | 0,007   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Mandor                       | 0,004   |                              |       |  |  |  |                 |  |  |    |               |
|    | Bekisting<br>untuk balok         |       |    | Pekerja                      | 0,660   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Tukang<br>kayu               | 0,330   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Kepala<br>Tukang             | 0,033   |                              |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    | Mandor                       | 0,033   |                              |       |  |  |  |                 |  |  |    |               |
| 13 | Balok Type<br>B.6                | 31,62 | m3 |                              |         |                              |       |  |  |  |                 |  |  |    |               |
|    | Mengecor<br>beton K-300          |       |    |                              | Pekerja | 1,650                        |       |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Tukang<br>batu/tembo<br>k    | 0,275 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Kepala<br>Tukang             | 0,028 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Mandor                       | 0,083 |  |  |  |                 |  |  |    |               |
|    | Pembesian<br>besi beton<br>polos |       |    |                              |         | Pekerja                      | 0,070 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Tukang<br>besi/besi<br>beton | 0,070 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Kepala<br>Tukang             | 0,007 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         | Mandor                       | 0,004 |  |  |  |                 |  |  |    |               |
|    |                                  |       |    |                              |         |                              |       |  |  |  | 0,40816326<br>5 |  |  | 13 | 5,959153<br>8 |

|    |                            |       |    |                        |       |                 |  |  |    |        |   |   |  |
|----|----------------------------|-------|----|------------------------|-------|-----------------|--|--|----|--------|---|---|--|
|    | Pembesian besi beton ulir  | 17,82 | m3 | Pekerja                | 0,070 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |        |   |   |  |
|    | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,033 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Mandor                 | 0,033 |                 |  |  |    |        |   |   |  |
| 14 | Balok Type B.7             | 17,82 | m3 |                        |       | 0,40816326<br>5 |  |  | 10 | 4,3659 | = | 5 |  |
|    | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Tukang batu/tembok     | 0,275 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,028 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Mandor                 | 0,083 |                 |  |  |    |        |   |   |  |
|    | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |        |   |   |  |
|    | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |  |  |    |        |   |   |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |

|    |                            |                      |      |               |               |                        |         |       |  |  |            |  |  |   |       |   |   |
|----|----------------------------|----------------------|------|---------------|---------------|------------------------|---------|-------|--|--|------------|--|--|---|-------|---|---|
|    |                            |                      |      | Kepala Tukang | 0,007         |                        |         |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      | Mandor        | 0,004         |                        |         |       |  |  |            |  |  |   |       |   |   |
|    | Bekisting untuk balok      |                      |      | Pekerja       | 0,660         |                        |         |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      | Tukang kayu   | 0,330         |                        |         |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               | Kepala Tukang | 0,033                  |         |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               | Mandor        | 0,033                  |         |       |  |  |            |  |  |   |       |   |   |
| 15 |                            | Balok Type B.8       | 5,16 | m3            |               |                        |         |       |  |  |            |  |  |   |       |   |   |
|    |                            | Mengecor beton K-300 |      |               |               |                        | Pekerja | 1,650 |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Tukang batu/tembok     | 0,275   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Kepala Tukang          | 0,028   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Mandor                 | 0,083   |       |  |  |            |  |  |   |       |   |   |
|    | Pembesian besi beton polos |                      |      |               |               | Pekerja                | 0,070   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Tukang besi/besi beton | 0,070   |       |  |  | 0,40816326 |  |  | 7 | 1,806 | = | 2 |
|    |                            |                      |      |               |               | Kepala Tukang          | 0,007   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Mandor                 | 0,004   |       |  |  |            |  |  |   |       |   |   |
|    | Pembesian besi beton ulir  |                      |      |               |               | Pekerja                | 0,070   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Tukang besi/besi beton | 0,070   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Kepala Tukang          | 0,007   |       |  |  |            |  |  |   |       |   |   |
|    |                            |                      |      |               |               | Mandor                 | 0,004   |       |  |  |            |  |  |   |       |   |   |

|    |                            |      |    |                        |       |                 |   |       |   |   |  |  |  |  |
|----|----------------------------|------|----|------------------------|-------|-----------------|---|-------|---|---|--|--|--|--|
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Tukang kayu            | 0,330 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,033 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,033 |                 |   |       |   |   |  |  |  |  |
| 16 | Balok Type B.9             | 3,12 | m3 |                        |       | 0,40816326<br>5 | 4 | 1,911 | = | 2 |  |  |  |  |
|    | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Tukang batu/tembok     | 0,275 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,028 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,083 |                 |   |       |   |   |  |  |  |  |
|    | Pembesian besi beton polos |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |
|    | Pembesian besi beton ulir  |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |  |
|    |                            |      |    | Tukang kayu            | 0,330 |                 |   |       |   |   |  |  |  |  |



|        |                            |       |    |                        |       |                 |   |          |   |   |  |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|---|----------|---|---|--|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                 |   |          |   |   |  |  |  |  |
| 17     | Balok Type B.10            | 5,46  | m3 |                        |       | 0,40816326<br>5 | 8 | 1,672125 | = | 2 |  |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |   |          |   |   |  |  |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |          |   |   |  |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |          |   |   |  |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |   |          |   |   |  |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |          |   |   |  |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |   |          |   |   |  |  |  |  |

|        |                            |       |    |                        |       |                 |   |       |   |   |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|---|-------|---|---|
| 18     | Balok Type B.11            | 3,60  | M3 |                        |       | 0,40816326<br>5 | 5 | 1,764 | = | 2 |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |       |   |   |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |       |   |   |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |   |       |   |   |
|        |                            |       |    | Mandor                 | 0,083 |                 |   |       |   |   |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |       |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |       |   |   |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |       |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |       |   |   |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |       |   |   |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |   |       |   |   |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |       |   |   |
| Mandor |                            | 0,033 |    |                        |       |                 |   |       |   |   |
| 19     | Balok Type B.12            | 2,10  | M3 |                        |       | 0,40816326<br>5 | 5 | 1,029 | = | 2 |
|        |                            |       |    | Pekerja                | 1,650 |                 |   |       |   |   |

|    |                            |      |    |                        |       |             |   |        |   |   |                    |       |  |  |  |  |  |
|----|----------------------------|------|----|------------------------|-------|-------------|---|--------|---|---|--------------------|-------|--|--|--|--|--|
| 20 | Mengecor beton K-300       | 4,86 | M3 | Tukang batu/tembok     | 0,275 | 0,408163265 | 6 | 1,9845 | = | 2 |                    |       |  |  |  |  |  |
|    | Pembesian besi beton polos |      |    | Kepala Tukang          | 0,028 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,083 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Pekerja                | 0,070 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    | Pembesian besi beton ulir  |      |    | Tukang besi/besi beton | 0,070 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,070 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |             |   |        |   |   |                    |       |  |  |  |  |  |
|    | Balok Type B.13            |      |    |                        |       |             |   |        |   |   | Tukang kayu        | 0,330 |  |  |  |  |  |
|    | Mengecor beton K-300       |      |    |                        |       |             |   |        |   |   | Pekerja            | 0,660 |  |  |  |  |  |
|    |                            |      |    |                        |       |             |   |        |   |   | Tukang batu/tembok | 0,275 |  |  |  |  |  |

|    |                            |      |    |                        |                        |         |                    |       |  |  |            |  |   |       |   |   |
|----|----------------------------|------|----|------------------------|------------------------|---------|--------------------|-------|--|--|------------|--|---|-------|---|---|
|    |                            |      |    | Kepala Tukang          | 0,028                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Mandor                 | 0,083                  |         |                    |       |  |  |            |  |   |       |   |   |
|    | Pembesian besi beton polos |      |    | Pekerja                | 0,070                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Tukang besi/besi beton | 0,070                  |         |                    |       |  |  |            |  |   |       |   |   |
|    | Pembesian besi beton ulir  |      |    | Kepala Tukang          | 0,007                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        | Mandor                 | 0,004   |                    |       |  |  |            |  |   |       |   |   |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,070                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        | Tukang besi/besi beton | 0,070   |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Kepala Tukang          | 0,007                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Mandor                 | 0,004                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        | Pekerja                | 0,660   |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        | Tukang kayu            | 0,330   |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Kepala Tukang          | 0,033                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    | Mandor                 | 0,033                  |         |                    |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        |                        |         |                    |       |  |  |            |  |   |       |   |   |
| 21 | Balok Type B.14            | 0,56 | M3 |                        |                        |         |                    |       |  |  |            |  |   |       |   |   |
|    | Mengecor beton K-300       |      |    |                        |                        | Pekerja | 1,650              |       |  |  |            |  |   |       |   |   |
|    |                            |      |    |                        |                        |         | Tukang batu/tembok | 0,275 |  |  | 0,40816326 |  | 2 | 0,686 | = | 1 |
|    |                            |      |    |                        |                        |         | Kepala Tukang      | 0,028 |  |  | 5          |  |   |       |   |   |
|    |                            |      |    |                        |                        |         | Mandor             | 0,083 |  |  |            |  |   |       |   |   |

|                            |                            |       |                    |                        |                 |                 |   |       |       |   |   |
|----------------------------|----------------------------|-------|--------------------|------------------------|-----------------|-----------------|---|-------|-------|---|---|
| 22                         | Pembesian besi beton polos | 0,96  | M3                 | Pekerja                | 0,070           | 0,40816326<br>5 |   | 3     | 0,784 | = | 1 |
|                            |                            |       |                    | Tukang besi/besi beton | 0,070           |                 |   |       |       |   |   |
|                            |                            |       |                    | Kepala Tukang          | 0,007           |                 |   |       |       |   |   |
|                            |                            |       |                    | Mandor                 | 0,004           |                 |   |       |       |   |   |
|                            | Pembesian besi beton ulir  |       |                    | Pekerja                | 0,070           |                 |   |       |       |   |   |
|                            |                            |       |                    | Tukang besi/besi beton | 0,070           |                 |   |       |       |   |   |
|                            |                            |       |                    | Kepala Tukang          | 0,007           |                 |   |       |       |   |   |
|                            |                            |       |                    | Mandor                 | 0,004           |                 |   |       |       |   |   |
|                            | Bekisting untuk balok      |       |                    | Pekerja                | 0,660           |                 |   |       |       |   |   |
|                            |                            |       |                    | Tukang kayu            | 0,330           |                 |   |       |       |   |   |
|                            |                            |       |                    | Kepala Tukang          | 0,033           |                 |   |       |       |   |   |
|                            |                            |       |                    | Mandor                 | 0,033           |                 |   |       |       |   |   |
| Balok Type B.15            | 0,96                       | M3    |                    |                        | 0,40816326<br>5 |                 | 3 | 0,784 | =     | 1 |   |
|                            |                            |       | Pekerja            | 1,650                  |                 |                 |   |       |       |   |   |
| Mengecor beton K-300       |                            |       | Tukang batu/tembok | 0,275                  |                 |                 |   |       |       |   |   |
|                            |                            |       | Kepala Tukang      | 0,028                  |                 |                 |   |       |       |   |   |
|                            |                            |       | Mandor             | 0,083                  |                 |                 |   |       |       |   |   |
| Pembesian besi beton polos |                            |       | Pekerja            | 0,070                  |                 |                 |   |       |       |   |   |
|                            | Tukang besi/besi beton     | 0,070 |                    |                        |                 |                 |   |       |       |   |   |

|    |                                  |      |        |                              |         |                              |       |  |  |  |                 |  |   |        |   |   |
|----|----------------------------------|------|--------|------------------------------|---------|------------------------------|-------|--|--|--|-----------------|--|---|--------|---|---|
|    |                                  |      |        | Kepala<br>Tukang             | 0,007   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Mandor                       | 0,004   |                              |       |  |  |  |                 |  |   |        |   |   |
|    | Pembesian<br>besi beton ulir     |      |        | Pekerja                      | 0,070   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Tukang<br>besi/besi<br>beton | 0,070   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Kepala<br>Tukang             | 0,007   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Mandor                       | 0,004   |                              |       |  |  |  |                 |  |   |        |   |   |
|    | Bekisting<br>untuk balok         |      |        | Pekerja                      | 0,660   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Tukang<br>kayu               | 0,330   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Kepala<br>Tukang             | 0,033   |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        | Mandor                       | 0,033   |                              |       |  |  |  |                 |  |   |        |   |   |
| 23 | Balok Type<br>B.20               | 5,76 | M3     |                              |         |                              |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        |                              |         |                              |       |  |  |  |                 |  |   |        |   |   |
|    | Mengecor<br>beton K-300          |      |        |                              | Pekerja | 1,650                        |       |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        |                              |         | Tukang<br>batu/tembo<br>k    | 0,275 |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        |                              |         | Kepala<br>Tukang             | 0,028 |  |  |  |                 |  |   |        |   |   |
|    |                                  |      |        |                              |         | Mandor                       | 0,083 |  |  |  | 0,40816326<br>5 |  |   |        |   |   |
|    |                                  |      |        |                              |         | Pekerja                      | 0,070 |  |  |  |                 |  | 5 |        |   |   |
|    | Pembesian<br>besi beton<br>polos |      |        |                              |         | Tukang<br>besi/besi<br>beton | 0,070 |  |  |  |                 |  |   | 2,8224 | = |   |
|    |                                  |      |        |                              |         | Kepala<br>Tukang             | 0,007 |  |  |  |                 |  |   |        |   | 3 |
|    |                                  |      | Mandor | 0,004                        |         |                              |       |  |  |  |                 |  |   |        |   |   |



|                            |                           |      |         |                        |                 |                 |      |      |   |       |
|----------------------------|---------------------------|------|---------|------------------------|-----------------|-----------------|------|------|---|-------|
| 24                         | Pembesian besi beton ulir | 6,00 | M3      | Pekerja                | 0,070           | 0,40816326<br>5 | 5    | 2,94 | = | 3     |
|                            |                           |      |         | Tukang besi/besi beton | 0,070           |                 |      |      |   |       |
|                            |                           |      |         | Kepala Tukang          | 0,007           |                 |      |      |   |       |
|                            |                           |      |         | Mandor                 | 0,004           |                 |      |      |   |       |
|                            | Bekisting untuk balok     |      |         | Pekerja                | 0,660           |                 |      |      |   |       |
|                            |                           |      |         | Tukang kayu            | 0,330           |                 |      |      |   |       |
|                            |                           |      |         | Kepala Tukang          | 0,033           |                 |      |      |   |       |
|                            |                           |      |         | Mandor                 | 0,033           |                 |      |      |   |       |
| Balok Type B.27            | 6,00                      | M3   |         |                        | 0,40816326<br>5 | 5               | 2,94 | =    | 3 |       |
| Mengecor beton K-300       |                           |      | Pekerja | 1,650                  |                 |                 |      |      |   |       |
|                            |                           |      |         | Tukang batu/tembok     |                 |                 |      |      |   | 0,275 |
|                            |                           |      |         | Kepala Tukang          |                 |                 |      |      |   | 0,028 |
|                            |                           |      |         | Mandor                 |                 |                 |      |      |   | 0,083 |
| Pembesian besi beton polos |                           |      | Pekerja | 0,070                  |                 |                 |      |      |   |       |
|                            |                           |      |         | Tukang besi/besi beton |                 |                 |      |      |   | 0,070 |
|                            |                           |      |         | Kepala Tukang          |                 |                 |      |      |   | 0,007 |
|                            |                           |      |         | Mandor                 |                 |                 |      |      |   | 0,004 |
| Pembesian besi beton ulir  |                           |      | Pekerja | 0,070                  |                 |                 |      |      |   |       |
|                            |                           |      |         | Tukang besi/besi beton |                 |                 |      |      |   | 0,070 |

|    |                            |      |               |                           |                        |                        |       |            |  |  |  |   |          |   |   |
|----|----------------------------|------|---------------|---------------------------|------------------------|------------------------|-------|------------|--|--|--|---|----------|---|---|
|    |                            |      |               | Kepala Tukang             | 0,007                  |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      |               | Mandor                    | 0,004                  |                        |       |            |  |  |  |   |          |   |   |
|    | Bekisting untuk balok      |      |               | Pekerja                   | 0,660                  |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      |               | Tukang kayu               | 0,330                  |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      |               | Kepala Tukang             | 0,033                  |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      |               | Mandor                    | 0,033                  |                        |       |            |  |  |  |   |          |   |   |
| 25 | Balok Meja Beton           | 2,69 | m3            |                           |                        |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           |                        |                        |       |            |  |  |  |   |          |   |   |
|    | Mengecor beton K-300       |      |               |                           | Pekerja                | 1,650                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           | Tukang batu/tembok     | 0,275                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           | Kepala Tukang          | 0,028                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           | Mandor                 | 0,083                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           | Pekerja                | 0,070                  |       |            |  |  |  |   |          |   |   |
|    | Pembesian besi beton polos |      |               |                           | Tukang besi/besi beton | 0,070                  |       | 0,40816326 |  |  |  | 4 | 1,645971 | = | 2 |
|    |                            |      |               |                           | Kepala Tukang          | 0,007                  |       | 5          |  |  |  |   | 3        |   |   |
|    |                            |      |               |                           | Mandor                 | 0,004                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               |                           | Pekerja                | 0,070                  |       |            |  |  |  |   |          |   |   |
|    |                            |      |               | Pembesian besi beton ulir |                        | Tukang besi/besi beton | 0,070 |            |  |  |  |   |          |   |   |
|    |                            |      | Kepala Tukang | 0,007                     |                        |                        |       |            |  |  |  |   |          |   |   |
|    |                            |      | Mandor        | 0,004                     |                        |                        |       |            |  |  |  |   |          |   |   |

|    |                                                      |      |    |                        |       |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|----|------------------------------------------------------|------|----|------------------------|-------|-----------------|----|-------|---|---|--|---------|-------|--|--|--|--|--|--|--|--|
|    | Bekisting untuk balok                                |      |    | Pekerja                | 0,660 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Tukang kayu            | 0,330 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,033 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,033 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
| 26 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm | 7,20 | m3 |                        |       | 0,40816326<br>5 | 10 | 1,764 | = | 2 |  |         |       |  |  |  |  |  |  |  |  |
|    | Mengecor beton K-300                                 |      |    | Pekerja                | 1,650 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Tukang batu/tembok     | 0,275 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,028 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,083 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    | Pembesian besi beton polos                           |      |    | Pekerja                | 0,070 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,004 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    | Pembesian besi beton ulir                            |      |    | Pekerja                | 0,070 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,004 |                 |    |       |   |   |  |         |       |  |  |  |  |  |  |  |  |
|    |                                                      |      |    |                        |       |                 |    |       |   |   |  | Pekerja | 0,660 |  |  |  |  |  |  |  |  |

|    |                                              |      |    |                        |       |                 |   |         |   |   |  |  |  |  |
|----|----------------------------------------------|------|----|------------------------|-------|-----------------|---|---------|---|---|--|--|--|--|
|    | Bekisting untuk balok                        |      |    | Tukang kayu            | 0,330 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Kepala Tukang          | 0,033 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Mandor                 | 0,033 |                 |   |         |   |   |  |  |  |  |
| 27 | Balok uk.15 x 30 cm untuk Dinding Box Lift A | 0,86 | m3 |                        |       | 0,40816326<br>5 | 3 | 0,69825 | = | 1 |  |  |  |  |
|    | Mengecor beton K-300                         |      |    | Pekerja                | 1,650 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Tukang batu/tembok     | 0,275 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Kepala Tukang          | 0,028 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Mandor                 | 0,083 |                 |   |         |   |   |  |  |  |  |
|    | Pembesian besi beton polos                   |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |  |  |
|    | Pembesian besi beton ulir                    |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |  |  |
|    | Bekisting untuk balok                        |      |    | Pekerja                | 0,660 |                 |   |         |   |   |  |  |  |  |
|    |                                              |      |    | Tukang kayu            | 0,330 |                 |   |         |   |   |  |  |  |  |

|    |                                                   |      |    |                        |       |                 |   |        |   |   |  |  |  |  |
|----|---------------------------------------------------|------|----|------------------------|-------|-----------------|---|--------|---|---|--|--|--|--|
|    |                                                   |      |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Mandor                 | 0,033 |                 |   |        |   |   |  |  |  |  |
| 28 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG | 0,54 | m3 |                        |       | 0,40816326<br>5 | 2 | 0,6615 | = | 1 |  |  |  |  |
|    | Mengecor beton K-300                              |      |    | Pekerja                | 1,650 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Tukang batu/tembok     | 0,275 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Kepala Tukang          | 0,028 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Mandor                 | 0,083 |                 |   |        |   |   |  |  |  |  |
|    | Pembesian besi beton polos                        |      |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |  |
|    | Pembesian besi beton ulir                         |      |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |  |
|    | Bekisting untuk balok                             |      |    | Pekerja                | 0,660 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Tukang kayu            | 0,330 |                 |   |        |   |   |  |  |  |  |
|    |                                                   |      |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |  |

|        |                             |       |    |                        |       |                 |   |               |   |   |  |  |  |
|--------|-----------------------------|-------|----|------------------------|-------|-----------------|---|---------------|---|---|--|--|--|
|        |                             |       |    | Mandor                 | 0,033 |                 |   |               |   |   |  |  |  |
| 29     | Plat meja beton tebal 10 cm | 7,08  | m3 |                        |       | 0,40816326<br>5 | 6 | 2,892633<br>3 | = | 3 |  |  |  |
|        | Mengecor beton K-300        |       |    | Pekerja                | 1,650 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Tukang batu/tembok     | 0,275 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Kepala Tukang          | 0,028 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Mandor                 | 0,083 |                 |   |               |   |   |  |  |  |
|        | Pembesian besi beton polos  |       |    | Pekerja                | 0,070 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Tukang besi/besi beton | 0,070 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Kepala Tukang          | 0,007 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Mandor                 | 0,004 |                 |   |               |   |   |  |  |  |
|        | Pembesian besi beton ulir   |       |    | Pekerja                | 0,070 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Tukang besi/besi beton | 0,070 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Kepala Tukang          | 0,007 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Mandor                 | 0,004 |                 |   |               |   |   |  |  |  |
|        | Bekisting untuk plat        |       |    | Pekerja                | 0,660 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Tukang kayu            | 0,330 |                 |   |               |   |   |  |  |  |
|        |                             |       |    | Kepala Tukang          | 0,033 |                 |   |               |   |   |  |  |  |
| Mandor |                             | 0,033 |    |                        |       |                 |   |               |   |   |  |  |  |
| 30     | Anak Tangga Utama dan       | 3,33  | m3 |                        |       | 0,40816326<br>5 | 5 | 1,632251<br>3 | = | 2 |  |  |  |



|    |                                       |      |    |                        |       |  |  |             |  |   |         |   |   |
|----|---------------------------------------|------|----|------------------------|-------|--|--|-------------|--|---|---------|---|---|
|    | Tangga Darurat ( Trap ) uk.20 x 30 cm |      |    |                        |       |  |  |             |  |   |         |   |   |
|    | Mengecor beton K-300                  |      |    | Pekerja                | 1,650 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Tukang batu/tembok     | 0,275 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Kepala Tukang          | 0,028 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Mandor                 | 0,083 |  |  |             |  |   |         |   |   |
|    | Pembesian besi beton polos            |      |    | Pekerja                | 0,070 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Kepala Tukang          | 0,007 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Mandor                 | 0,004 |  |  |             |  |   |         |   |   |
|    | Pembesian besi beton ulir             |      |    | Pekerja                | 0,070 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Kepala Tukang          | 0,007 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Mandor                 | 0,004 |  |  |             |  |   |         |   |   |
|    | Bekisting untuk plat                  |      |    | Pekerja                | 0,660 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Tukang kayu            | 0,330 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Kepala Tukang          | 0,033 |  |  |             |  |   |         |   |   |
|    |                                       |      |    | Mandor                 | 0,033 |  |  |             |  |   |         |   |   |
| 31 | Plat Tangga Utama dan                 | 7,15 | m3 |                        |       |  |  | 0,408163265 |  | 6 | 2,91795 | = | 3 |

|    |                                           |      |    |                              |       |  |  |                 |  |   |         |     |
|----|-------------------------------------------|------|----|------------------------------|-------|--|--|-----------------|--|---|---------|-----|
|    | Darurat Tebal<br>15 cm                    |      |    |                              |       |  |  |                 |  |   |         |     |
|    | Mengecor<br>beton K-300                   |      |    | Pekerja                      | 1,650 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Tukang<br>batu/tembo<br>k    | 0,275 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Kepala<br>Tukang             | 0,028 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Mandor                       | 0,083 |  |  |                 |  |   |         |     |
|    | Pembesian<br>besi beton<br>polos          |      |    | Pekerja                      | 0,070 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Tukang<br>besi/besi<br>beton | 0,070 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Kepala<br>Tukang             | 0,007 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Mandor                       | 0,004 |  |  |                 |  |   |         |     |
|    | Pembesian<br>besi beton ulir              |      |    | Pekerja                      | 0,070 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Tukang<br>besi/besi<br>beton | 0,070 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Kepala<br>Tukang             | 0,007 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Mandor                       | 0,004 |  |  |                 |  |   |         |     |
|    | Bekisting<br>untuk plat                   |      |    | Pekerja                      | 0,660 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Tukang<br>kayu               | 0,330 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Kepala<br>Tukang             | 0,033 |  |  |                 |  |   |         |     |
|    |                                           |      |    | Mandor                       | 0,033 |  |  |                 |  |   |         |     |
| 32 | Plat Bordes<br>Tangga Utama<br>dan Tangga | 7,05 | m3 |                              |       |  |  | 0,40816326<br>5 |  | 6 | 2,87875 | = 3 |



|   |                                                  |         |    |                    |       |             |  |  |    |           |   |    |
|---|--------------------------------------------------|---------|----|--------------------|-------|-------------|--|--|----|-----------|---|----|
| 1 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr  | 2175,04 | m2 | Pekerja            | 0,300 | 3,333333333 |  |  | 30 | 21,750432 | = | 22 |
|   |                                                  |         |    | Tukang batu/tembok | 0,150 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Kepala tukang      | 0,015 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Mandor             | 0,015 |             |  |  |    |           |   |    |
| 2 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr | 548,06  | m2 | Pekerja            | 0,300 | 3,333333333 |  |  | 24 | 6,85073   | = | 7  |
|   |                                                  |         |    | Tukang batu/tembok | 0,150 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Kepala tukang      | 0,015 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Mandor             | 0,015 |             |  |  |    |           |   |    |
| 3 | Pekerjaan acian interior                         | 2175,04 | m2 | Pekerja            | 0,200 | 5           |  |  | 24 | 18,12536  | = | 19 |
|   |                                                  |         |    | Tukang batu/tembok | 0,100 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Kepala tukang      | 0,010 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Mandor             | 0,010 |             |  |  |    |           |   |    |
| 4 | Pekerjaan acian eksterior                        | 548,06  | m2 | Pekerja            | 0,200 | 5           |  |  | 20 | 5,480584  | = | 6  |
|   |                                                  |         |    | Tukang batu/tembok | 0,100 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Kepala tukang      | 0,010 |             |  |  |    |           |   |    |
|   |                                                  |         |    | Mandor             | 0,010 |             |  |  |    |           |   |    |
| 5 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr   | 463,56  | m1 | Pekerja            | 0,133 | 7,501875469 |  |  | 12 | 5,149379  | = | 6  |
|   |                                                  |         |    | Tukang batu/tembok | 0,067 |             |  |  |    |           |   |    |

|   |                                                 |        |    |                    |       |                 |  |  |  |    |               |   |   |  |
|---|-------------------------------------------------|--------|----|--------------------|-------|-----------------|--|--|--|----|---------------|---|---|--|
|   |                                                 |        |    | Kepala tukang      | 0,007 |                 |  |  |  |    |               |   |   |  |
|   |                                                 |        |    | Mandor             | 0,007 |                 |  |  |  |    |               |   |   |  |
| 6 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr | 244,12 | m1 | Pekerja            | 0,133 | 7,50187546<br>9 |  |  |  | 12 | 2,711766<br>3 | = | 3 |  |
|   |                                                 |        |    | Tukang batu/tembok | 0,067 |                 |  |  |  |    |               |   |   |  |
|   |                                                 |        |    | Kepala tukang      | 0,007 |                 |  |  |  |    |               |   |   |  |
|   |                                                 |        |    | Mandor             | 0,007 |                 |  |  |  |    |               |   |   |  |

#### IV. Pekerjaan Lantai

|   |                                               |             |    |                    |       |                 |  |  |  |    |               |   |        |  |
|---|-----------------------------------------------|-------------|----|--------------------|-------|-----------------|--|--|--|----|---------------|---|--------|--|
| 1 | Pasang Keramik Lantai 60 x 60                 | 1292,8<br>0 | m2 | Pekerja            | 0,900 | 1,11111111<br>1 |  |  |  | 60 | 19,39196<br>3 | = | 2<br>0 |  |
|   |                                               |             |    | Tukang batu/tembok | 0,450 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Kepala tukang      | 0,045 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Mandor             | 0,045 |                 |  |  |  |    |               |   |        |  |
| 2 | Pasang Keramik Lantai 30 x 30                 | 134,58      | m2 | Pekerja            | 0,700 | 1,42857142<br>9 |  |  |  | 12 | 7,850208<br>3 | = | 8      |  |
|   |                                               |             |    | Tukang batu/tembok | 0,350 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Kepala tukang      | 0,035 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Mandor             | 0,035 |                 |  |  |  |    |               |   |        |  |
| 3 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC | 23,13       | m2 | Pekerja            | 0,700 | 1,42857142<br>9 |  |  |  | 8  | 2,023437<br>5 | = | 3      |  |
|   |                                               |             |    | Tukang batu/tembok | 0,350 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Kepala tukang      | 0,035 |                 |  |  |  |    |               |   |        |  |
|   |                                               |             |    | Mandor             | 0,035 |                 |  |  |  |    |               |   |        |  |

|   |                                        |       |    |                    |       |                 |  |  |    |         |   |   |
|---|----------------------------------------|-------|----|--------------------|-------|-----------------|--|--|----|---------|---|---|
| 4 | Pasang Keramik Dinding 30 x 60 (KM/WC) | 76,00 | m2 | Pekerja            | 0,9   | 1,11111111<br>1 |  |  | 16 | 4,275   | = | 5 |
|   |                                        |       |    | Tukang             | 0,45  |                 |  |  |    |         |   |   |
|   |                                        |       |    | Kepala Tukang      | 0,045 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Mandor             | 0,045 |                 |  |  |    |         |   |   |
| 5 | Keramik Meja Beton 20 x 20             | 91,16 | m2 | Pekerja            | 0,700 | 1,42857142<br>9 |  |  | 10 | 6,38127 | = | 7 |
|   |                                        |       |    | Tukang batu/tembok | 0,350 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Kepala tukang      | 0,035 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Mandor             | 0,035 |                 |  |  |    |         |   |   |
| 6 | Keramik Dinding Meja Beton 20 x 25     | 66,47 | m2 | Pekerja            | 0,900 | 1,11111111<br>1 |  |  | 10 | 5,98185 | = | 6 |
|   |                                        |       |    | Tukang             | 0,450 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Kepala Tukang      | 0,045 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Mandor             | 0,045 |                 |  |  |    |         |   |   |
| 7 | Pasang Batu Alam                       | 23,33 | m2 | Pekerja            | 0,62  | 1,61290322<br>6 |  |  | 5  | 2,89292 | = | 3 |
|   |                                        |       |    | Tukang             | 0,35  |                 |  |  |    |         |   |   |
|   |                                        |       |    | Kepala Tukang      | 0,035 |                 |  |  |    |         |   |   |
|   |                                        |       |    | Mandor             | 0,03  |                 |  |  |    |         |   |   |

### V. Pekerjaan Pintu dan Jendela Aluminium dan Partisi

#### A. Pekerjaan Pintu dan Jendela Aluminium, Partisi, Railing tangga dan Sunscreen

|   |                    |       |      |                  |       |                 |  |  |   |       |   |   |
|---|--------------------|-------|------|------------------|-------|-----------------|--|--|---|-------|---|---|
| 1 | Pas. Kusen Type J2 | 28,00 | Unit | Pekerja          | 0,043 | 23,2558139<br>5 |  |  | 2 | 0,602 | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |                 |  |  |   |       |   |   |
|   |                    |       |      | Kepala Tukang    | 0,004 |                 |  |  |   |       |   |   |
|   |                    |       |      | Mandor           | 0,002 |                 |  |  |   |       |   |   |



|   |                       |       |      |                     |       |  |  |                 |   |       |   |   |
|---|-----------------------|-------|------|---------------------|-------|--|--|-----------------|---|-------|---|---|
| 2 | Pas. Kusen<br>Type J3 | 2,00  | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,086 | = | 1 |
|   |                       |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                       |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                       |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 3 | Pas. Kusen<br>Type J4 | 10,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |
|   |                       |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                       |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                       |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 4 | Pas. Kusen<br>Type J8 | 24,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 2 | 0,516 | = | 1 |
|   |                       |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                       |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                       |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 5 | Pas. Kusen<br>Type J9 | 24,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 2 | 0,516 | = | 1 |
|   |                       |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                       |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                       |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 6 | Pas. Kusen<br>Type P2 | 10,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |
|   |                       |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                       |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                       |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |

|    |                                  |       |      |                     |       |  |  |                 |   |       |   |   |
|----|----------------------------------|-------|------|---------------------|-------|--|--|-----------------|---|-------|---|---|
| 7  | Pas. Kusen<br>Type P3            | 28,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 2 | 0,602 | = | 1 |
|    |                                  |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 8  | Pas. Kusen<br>Type P4            | 10,00 | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |
|    |                                  |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 9  | Pas. Kusen<br>Type P5            | 5,00  | Unit | Pekerja             | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,215 | = | 1 |
|    |                                  |       |      | Tukang<br>Alumunium | 0,043 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Kepala<br>Tukang    | 0,004 |  |  |                 |   |       |   |   |
|    |                                  |       |      | Mandor              | 0,002 |  |  |                 |   |       |   |   |
| 10 | Pasang pintu<br>darurat anti api | 2,00  | Unit | pekerja             | 0,085 |  |  | 11,7647058<br>8 | 1 | 0,17  | = | 1 |
|    |                                  |       |      | tukang<br>alumunium | 0,085 |  |  |                 |   |       |   |   |
|    |                                  |       |      | kepala<br>tukang    | 0,009 |  |  |                 |   |       |   |   |
|    |                                  |       |      | mandor              | 0,005 |  |  |                 |   |       |   |   |

### B. Pekerjaan Partisi

|   |                                        |        |    |                     |       |  |                 |  |    |          |   |   |
|---|----------------------------------------|--------|----|---------------------|-------|--|-----------------|--|----|----------|---|---|
| 1 | Memasang<br>1m2 unit<br>Partisi Type I | 383,08 | m2 | Pekerja             | 0,015 |  | 6,66666666<br>7 |  | 10 | 5,746248 | = | 6 |
|   |                                        |        |    | Tukang<br>Alumunium | 0,150 |  |                 |  |    |          |   |   |
|   |                                        |        |    | Kepala<br>Tukang    | 0,015 |  |                 |  |    |          |   |   |
|   |                                        |        |    | Mandor              | 0,001 |  |                 |  |    |          |   |   |

|   |                                               |       |      |                  |       |  |  |                 |   |       |   |   |
|---|-----------------------------------------------|-------|------|------------------|-------|--|--|-----------------|---|-------|---|---|
| 2 | Memasang 1 unit Pintu Type I untuk partisi    | 24,00 | unit | Pekerja          | 0,085 |  |  | 11,7647058<br>8 | 2 | 1,02  | = | 2 |
|   |                                               |       |      | Tukang Alumunium | 0,085 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Kepala Tukang    | 0,009 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Mandor           | 0,005 |  |  |                 |   |       |   |   |
| 3 | Memasang 1 unit Pintu Type II untuk partisi   | 6,00  | unit | Pekerja          | 0,085 |  |  | 11,7647058<br>8 | 2 | 0,255 | = | 1 |
|   |                                               |       |      | Tukang Alumunium | 0,085 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Kepala Tukang    | 0,009 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Mandor           | 0,005 |  |  |                 |   |       |   |   |
| 4 | Memasang 1 jendela Pintu Type I untuk partisi | 48,00 | unit | Pekerja          | 0,085 |  |  | 11,7647058<br>8 | 2 | 2,04  | = | 3 |
|   |                                               |       |      | Tukang Alumunium | 0,085 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Kepala Tukang    | 0,009 |  |  |                 |   |       |   |   |
|   |                                               |       |      | Mandor           | 0,005 |  |  |                 |   |       |   |   |

### C. Pekerjaan Railling Tangga

|   |                                                     |       |    |                    |       |  |                 |  |   |               |   |   |
|---|-----------------------------------------------------|-------|----|--------------------|-------|--|-----------------|--|---|---------------|---|---|
| 1 | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76 | M2 | pekerja            | 0,39  |  | 1,42857142<br>9 |  | 3 | 3,210666<br>7 | = | 4 |
|   |                                                     |       |    | tukang besi        | 0,7   |  |                 |  |   |               |   |   |
|   |                                                     |       |    | kepala tukang besi | 0,07  |  |                 |  |   |               |   |   |
|   |                                                     |       |    | mandor             | 0,007 |  |                 |  |   |               |   |   |
| 2 | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48 | M2 | pekerja            | 0,39  |  | 1,42857142<br>9 |  | 3 | 2,912         | = | 3 |
|   |                                                     |       |    | tukang besi        | 0,7   |  |                 |  |   |               |   |   |
|   |                                                     |       |    | kepala tukang besi | 0,07  |  |                 |  |   |               |   |   |
|   |                                                     |       |    | mandor             | 0,007 |  |                 |  |   |               |   |   |

### D. Curtain Wall

|   |                      |   |    |                    |       |                 |  |  |   |      |   |   |
|---|----------------------|---|----|--------------------|-------|-----------------|--|--|---|------|---|---|
| 1 | Curtain Wall ( CW2 ) | 1 | M2 | pekerja            | 0,390 | 1,42857142<br>9 |  |  | 2 | 0,35 | = | 1 |
|   |                      |   |    | tukang besi        | 0,700 |                 |  |  |   |      |   |   |
|   |                      |   |    | kepala tukang besi | 0,070 |                 |  |  |   |      |   |   |
|   |                      |   |    | mandor             | 0,007 |                 |  |  |   |      |   |   |

### VI. Pekerjaan Langit-langit

|   |                                                   |             |    |                    |       |    |  |  |    |               |   |   |
|---|---------------------------------------------------|-------------|----|--------------------|-------|----|--|--|----|---------------|---|---|
| 1 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 1135,5<br>3 | m2 | Pekerja            | 0,100 | 10 |  |  | 16 | 7,097031<br>3 | = | 8 |
|   |                                                   |             |    | Tukang batu/tembok | 0,050 |    |  |  |    |               |   |   |
|   |                                                   |             |    | Kepala tukang      | 0,005 |    |  |  |    |               |   |   |
|   |                                                   |             |    | Mandor             | 0,005 |    |  |  |    |               |   |   |

### VII. Pekerjaan Pengecatan

|   |                              |             |    |                    |       |                 |  |  |    |               |   |        |
|---|------------------------------|-------------|----|--------------------|-------|-----------------|--|--|----|---------------|---|--------|
| 1 | Pengecatan dinding interior  | 2175,0<br>4 | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 12 | 11,41897<br>7 | = | 1<br>2 |
|   |                              |             |    | Tukang cat/pelitur | 0,063 |                 |  |  |    |               |   |        |
|   |                              |             |    | Kepala tukang      | 0,006 |                 |  |  |    |               |   |        |
|   |                              |             |    | Mandor             | 0,003 |                 |  |  |    |               |   |        |
| 2 | Pengecatan dinding eksterior | 548,06      | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 6  | 5,754613<br>2 | = | 6      |
|   |                              |             |    | Tukang cat/pelitur | 0,063 |                 |  |  |    |               |   |        |
|   |                              |             |    | Kepala tukang      | 0,006 |                 |  |  |    |               |   |        |
|   |                              |             |    | Mandor             | 0,003 |                 |  |  |    |               |   |        |
| 3 | Pengecatan plafon            | 1271,0<br>0 | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 10 | 8,0073        | = | 9      |
|   |                              |             |    | Tukang Cat         | 0,063 |                 |  |  |    |               |   |        |
|   |                              |             |    | Kepala Tukang      | 0,006 |                 |  |  |    |               |   |        |

|  |  |  |  |        |       |  |  |  |  |  |  |  |  |
|--|--|--|--|--------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Mandor | 0,003 |  |  |  |  |  |  |  |  |
|--|--|--|--|--------|-------|--|--|--|--|--|--|--|--|

### VIII. Pekerjaan Tata Udara

|   |                                          |    |      |                |       |  |  |  |   |   |      |   |   |
|---|------------------------------------------|----|------|----------------|-------|--|--|--|---|---|------|---|---|
| 1 | Unit AC<br>Cassete 5PK                   | 11 | Unit | Pekerja        | 0,050 |  |  |  | 2 | 2 | 2,75 | = | 3 |
|   |                                          |    |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                                          |    |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |
| 2 | Unit AC<br>Cassete 4PK                   | 24 | Unit | Pekerja        | 0,050 |  |  |  | 2 | 4 | 3    | = | 3 |
|   |                                          |    |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                                          |    |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |
| 3 | Unit AC Split<br>Wall Mountain<br>3/4 PK | 4  | Unit | Pekerja        | 0,050 |  |  |  | 2 | 2 | 1    | = | 1 |
|   |                                          |    |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                                          |    |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |
| 4 | Exhaust Fan<br>ex jepang                 | 3  | Unit | Pekerja        | 0,050 |  |  |  | 2 | 2 | 0,75 | = | 1 |
|   |                                          |    |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                                          |    |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |

### XI. Pekerjaan Instalasi Telepon

|   |                                |    |       |                         |       |  |  |  |                 |   |      |   |   |
|---|--------------------------------|----|-------|-------------------------|-------|--|--|--|-----------------|---|------|---|---|
| 1 | Pasang<br>Instalasi<br>Telepon | 26 | Titik | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 2 | 1,95 | = | 2 |
|   |                                |    |       | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |
|   |                                |    |       | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |
|   |                                |    |       | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |

|   |                       |    |       |                         |       |  |  |                 |   |      |   |   |
|---|-----------------------|----|-------|-------------------------|-------|--|--|-----------------|---|------|---|---|
| 2 | Pasang Outlet Telepon | 24 | Titik | Pembantu tukang listrik | 0,150 |  |  | 6,66666666<br>7 | 2 | 1,8  | = | 2 |
|   |                       |    |       | Tukang listrik          | 0,150 |  |  |                 |   |      |   |   |
|   |                       |    |       | Kepala tukang listrik   | 0,180 |  |  |                 |   |      |   |   |
|   |                       |    |       | Mandor                  | 0,150 |  |  |                 |   |      |   |   |
| 3 | Switch Hub 16 port    | 1  | unit  | Pembantu tukang listrik | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |
|   |                       |    |       | Tukang listrik          | 0,150 |  |  |                 |   |      |   |   |
|   |                       |    |       | Kepala tukang listrik   | 0,180 |  |  |                 |   |      |   |   |
|   |                       |    |       | Mandor                  | 0,150 |  |  |                 |   |      |   |   |
| 4 | Terminal Box          | 1  | unit  | Pembantu tukang listrik | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |
|   |                       |    |       | Tukang listrik          | 0,150 |  |  |                 |   |      |   |   |
|   |                       |    |       | Kepala tukang listrik   | 0,180 |  |  |                 |   |      |   |   |
|   |                       |    |       | Mandor                  | 0,150 |  |  |                 |   |      |   |   |

### X. Pekerjaan CCTV

|   |                |   |      |                         |       |  |  |                 |   |      |   |   |
|---|----------------|---|------|-------------------------|-------|--|--|-----------------|---|------|---|---|
| 1 | Kamera CCTV HD | 4 | Unit | Pembantu tukang listrik | 0,015 |  |  | 66,6666666<br>7 | 1 | 0,06 | = | 1 |
|   |                |   |      | Tukang listrik          | 0,015 |  |  |                 |   |      |   |   |



|   |                                               |   |       |                       |       |  |  |   |   |   |   |   |  |
|---|-----------------------------------------------|---|-------|-----------------------|-------|--|--|---|---|---|---|---|--|
|   |                                               |   |       | Kepala tukang listrik | 0,001 |  |  |   |   |   |   |   |  |
|   |                                               |   |       | Mandor                | 0,001 |  |  |   |   |   |   |   |  |
| 2 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 4 | Titik | Pekerja               | 0,050 |  |  | 2 | 2 | 1 | = | 1 |  |
|   |                                               |   |       | Tukang Listrik        | 0,500 |  |  |   |   |   |   |   |  |
|   |                                               |   |       | Kepala Tukang         | 0,005 |  |  |   |   |   |   |   |  |

### XI. Pekerjaan Sound System

|   |                                                              |       |       |                         |       |    |  |                 |       |       |   |   |  |
|---|--------------------------------------------------------------|-------|-------|-------------------------|-------|----|--|-----------------|-------|-------|---|---|--|
| 1 | Celling speaker 6 W                                          | 12,00 | Titik | Tukang Listrik          | 0,500 |    |  | 2               | 2     | 3     | = | 3 |  |
| 2 | Volume control                                               | 1,00  | Titik | Tukang Listrik          | 0,500 |    |  | 2               | 1     | 0,5   | = | 1 |  |
| 3 | Instalasi Celling speaker                                    | 14,00 | Unit  | Tukang Listrik          | 0,500 |    |  | 2               | 2     | 3,5   | = | 4 |  |
| 4 | Terminal Box                                                 | 1,00  | Unit  | Pembantu tukang listrik | 0,015 |    |  | 66,6666666<br>7 | 1     | 0,015 | = | 1 |  |
|   |                                                              |       |       | Tukang listrik          | 0,015 |    |  |                 |       |       |   |   |  |
|   |                                                              |       |       | Kepala tukang listrik   | 0,001 |    |  |                 |       |       |   |   |  |
|   |                                                              |       |       | Mandor                  | 0,001 |    |  |                 |       |       |   |   |  |
| 5 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5,00  | m'    | Pembantu tukang listrik | 0,025 | 40 |  | 1               | 0,125 | =     | 1 |   |  |
|   |                                                              |       |       | Tukang listrik          | 0,025 |    |  |                 |       |       |   |   |  |
|   |                                                              |       |       | Kepala tukang listrik   | 0,017 |    |  |                 |       |       |   |   |  |
|   |                                                              |       |       | Mandor                  | 0,014 |    |  |                 |       |       |   |   |  |

## XII. Pekerjaan Fire Alarm

### INSTALASI LANTAI 4

#### Peralatan Fixture

|    |                                |      |      |                         |       |  |  |  |    |   |        |   |   |
|----|--------------------------------|------|------|-------------------------|-------|--|--|--|----|---|--------|---|---|
| 1. | - Conv. Optical Smoke Detector | 41   | pcs  | Pembantu tukang listrik | 0,025 |  |  |  | 40 | 2 | 0,5125 | = | 1 |
|    |                                |      |      | Tukang listrik          | 0,025 |  |  |  |    |   |        |   |   |
|    |                                |      |      | Kepala tukang listrik   | 0,017 |  |  |  |    |   |        |   |   |
|    |                                |      |      | Mandor                  | 0,014 |  |  |  |    |   |        |   |   |
|    | - Conv. Manual Break glass     | 2,00 | pcs  | pekerja                 | 0,050 |  |  |  | 2  | 2 | 0,5    | = | 1 |
|    |                                |      |      | tukang listrik          | 0,500 |  |  |  |    |   |        |   |   |
|    |                                |      |      | kepala tukang           | 0,005 |  |  |  |    |   |        |   |   |
|    | - Junction Box Fire Alarm      | 1,00 | pcs  | pekerja                 | 0,050 |  |  |  | 2  | 1 | 0,5    | = | 1 |
|    |                                |      |      | tukang listrik          | 0,500 |  |  |  |    |   |        |   |   |
|    |                                |      |      | kepala tukang           | 0,005 |  |  |  |    |   |        |   |   |
|    | - Remote Indicating Lamp       | 4,00 | pcs  | Pembantu tukang listrik | 0,025 |  |  |  | 40 | 1 | 0,1    | = | 1 |
|    |                                |      |      | Tukang listrik          | 0,025 |  |  |  |    |   |        |   |   |
|    |                                |      |      | Kepala tukang listrik   | 0,017 |  |  |  |    |   |        |   |   |
|    |                                |      |      | Mandor                  | 0,014 |  |  |  |    |   |        |   |   |
|    | - Alarm Bell                   | 2,00 | unit | pekerja                 | 0,050 |  |  |  | 2  | 1 | 1      | = | 1 |

|  |                             |      |      |                |       |  |  |  |   |   |     |   |   |  |
|--|-----------------------------|------|------|----------------|-------|--|--|--|---|---|-----|---|---|--|
|  |                             |      |      | tukang listrik | 0,500 |  |  |  |   |   |     |   |   |  |
|  |                             |      |      | kepala tukang  | 0,005 |  |  |  |   |   |     |   |   |  |
|  | - Terminal Box 30 x 40 x 12 | 1,00 | unit | pekerja        | 0,050 |  |  |  | 2 | 1 | 0,5 | = | 1 |  |
|  |                             |      |      | tukang listrik | 0,500 |  |  |  |   |   |     |   |   |  |
|  |                             |      |      | kepala tukang  | 0,005 |  |  |  |   |   |     |   |   |  |

### Pekerjaan Instalasi

|   |                                           |      |     |                         |       |  |  |  |                 |   |      |   |   |  |
|---|-------------------------------------------|------|-----|-------------------------|-------|--|--|--|-----------------|---|------|---|---|--|
| 2 | -Detector dan manual break glass          | 44   | ttk | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 3 | 2,2  | = | 3 |  |
|   | NYA Cable 2x1,5mm + Pipa Conduit 20mm     |      |     | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |  |
|   |                                           |      |     | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |  |
|   |                                           |      |     | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |  |
|   | - Junction Box Fire Alarm                 | 1,00 | ttk | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |  |
|   | NYA cable 2 x 1,5 mm + pipa conduit 20 mm |      |     | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |  |
|   |                                           |      |     | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |  |
|   |                                           |      |     | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |  |
|   | - Remote Indicating Lamp                  | 5    | ttk | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,75 | = | 1 |  |
|   |                                           |      |     | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |  |



|                          |                                    |      |               |               |       |  |                 |   |     |      |   |   |
|--------------------------|------------------------------------|------|---------------|---------------|-------|--|-----------------|---|-----|------|---|---|
| 3                        | Gate valve dia. 2 1/2" , OS&Y type | 1    | bh            | Pekerja       | 0,054 |  |                 | 4 | 1   | 0,25 | = | 1 |
|                          |                                    |      |               | Tukang        | 0,090 |  |                 |   |     |      |   |   |
|                          |                                    |      |               | Kepala Tukang | 0,009 |  |                 |   |     |      |   |   |
|                          |                                    |      |               | Tukang las    | 0,250 |  |                 |   |     |      |   |   |
|                          |                                    |      |               | Tukang cat    | 0,100 |  |                 |   |     |      |   |   |
|                          |                                    |      |               | Mandor        | 0,005 |  |                 |   |     |      |   |   |
| - Fire Extinguisher 6 kg | 2                                  | unit | pekerja       | 0,150         |       |  | 6,66666666<br>7 | 1 | 0,3 | =    | 1 |   |
|                          |                                    |      | tukang batu   | 0,150         |       |  |                 |   |     |      |   |   |
|                          |                                    |      | kepala tukang | 0,180         |       |  |                 |   |     |      |   |   |
|                          |                                    |      | mandor        | 0,150         |       |  |                 |   |     |      |   |   |

### B. Instalasi Sprinkler

BSP Sch.40 c/w fitting2 & Material bantu

|   |              |     |    |                 |       |                 |  |  |   |        |   |   |
|---|--------------|-----|----|-----------------|-------|-----------------|--|--|---|--------|---|---|
| 1 | dia. 1 "     | 164 | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  | 5 | 2,952  | = | 3 |
|   |              |     |    | Tukang          | 0,090 |                 |  |  |   |        |   |   |
|   |              |     |    | Kepala tukang   | 0,009 |                 |  |  |   |        |   |   |
|   |              |     |    | Mandor          | 0,027 |                 |  |  |   |        |   |   |
| 1 | dia. 1 1/4 " | 79  | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  | 4 | 1,7775 | = | 2 |
|   |              |     |    | Tukang          | 0,090 |                 |  |  |   |        |   |   |
|   |              |     |    | Kepala tukang   | 0,009 |                 |  |  |   |        |   |   |
|   |              |     |    | Mandor          | 0,027 |                 |  |  |   |        |   |   |
| 1 | dia. 2 "     | 8,5 | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  | 1 | 0,765  | = | 1 |
|   |              |     |    | Tukang          | 0,090 |                 |  |  |   |        |   |   |

|   |                                         |      |      |                |       |   |  |  |  |   |               |      |   |   |
|---|-----------------------------------------|------|------|----------------|-------|---|--|--|--|---|---------------|------|---|---|
|   |                                         |      |      | Kepala tukang  | 0,009 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Mandor         | 0,027 |   |  |  |  |   |               |      |   |   |
|   | dia. 2 1/2 "                            | 8    | m'   | Pekerja        | 0,054 | 4 |  |  |  | 4 | 0,5           | =    | 1 |   |
|   |                                         |      |      | Tukang         | 0,090 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Kepala tukang  | 0,009 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Tukang las     | 0,250 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Tukang cat     | 0,100 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Mandor         | 0,005 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      |                |       |   |  |  |  |   |               |      |   |   |
|   | dia. 3 "                                | 63,5 | m'   | Pekerja        | 0,054 | 4 |  |  |  | 3 | 5,291666<br>7 | =    | 6 |   |
|   |                                         |      |      | Tukang         | 0,090 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Kepala tukang  | 0,009 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Tukang las     | 0,250 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Tukang cat     | 0,160 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | Mandor         | 0,005 |   |  |  |  |   |               |      |   |   |
| 2 | Sprinkler head dia. 1/2", 68'C, pendent | 69   | bh   | pekerja        | 0,050 |   |  |  |  | 2 | 6             | 5,75 | = | 6 |
|   |                                         |      |      | tukang listrik | 0,500 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | kepala tukang  | 0,005 |   |  |  |  |   |               |      |   |   |
| 3 | Branch Control Valve dia. 3"            | 1    | unit | pekerja        | 0,050 |   |  |  |  | 2 | 1             | 0,5  | = | 1 |
|   |                                         |      |      | tukang listrik | 0,500 |   |  |  |  |   |               |      |   |   |
|   |                                         |      |      | kepala tukang  | 0,005 |   |  |  |  |   |               |      |   |   |

### XIII. Pekerjaan Sanitair & Sanitasi



|   |                                |    |    |                    |       |  |  |                 |   |               |   |   |
|---|--------------------------------|----|----|--------------------|-------|--|--|-----------------|---|---------------|---|---|
| 1 | Pasang Klosed Duduk            | 10 | Bh | Pekerja            | 3,300 |  |  | 0,30303030<br>3 | 9 | 3,666666<br>7 | = | 4 |
|   |                                |    |    | Tukang batu/tembok | 1,100 |  |  |                 |   |               |   |   |
|   |                                |    |    | Kepala tukang      | 0,001 |  |  |                 |   |               |   |   |
|   |                                |    |    | Mandor             | 0,160 |  |  |                 |   |               |   |   |
| 2 | Pasang Wastafel single         | 4  | Bh | Pekerja            | 1,200 |  |  | 0,68965517<br>2 | 3 | 1,933333<br>3 | = | 2 |
|   |                                |    |    | Tukang batu/tembok | 1,450 |  |  |                 |   |               |   |   |
|   |                                |    |    | Kepala tukang      | 0,150 |  |  |                 |   |               |   |   |
|   |                                |    |    | Mandor             | 0,100 |  |  |                 |   |               |   |   |
| 3 | Pasang Jet washer              | 10 | Bh | pekerja            | 1,200 |  |  | 0,68965517<br>2 | 3 | 4,833333<br>3 | = | 5 |
|   |                                |    |    | tukang batu        | 1,450 |  |  |                 |   |               |   |   |
|   |                                |    |    | kepala tukang      | 0,150 |  |  |                 |   |               |   |   |
|   |                                |    |    | mandor             | 0,100 |  |  |                 |   |               |   |   |
| 4 | Pasang Kran Diameter Air 1/2 " | 35 | Bh | Pekerja            | 0,010 |  |  | 10              | 3 | 1,166666<br>7 | = | 2 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |                 |   |               |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |                 |   |               |   |   |
|   |                                |    |    | Mandor             | 0,005 |  |  |                 |   |               |   |   |
| 5 | Pasang Floor Drain             | 10 | Bh | Pekerja            | 0,010 |  |  | 10              | 1 | 1             | = | 1 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |                 |   |               |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |                 |   |               |   |   |



|   |                                                                    |        |        |                |       |  |  |  |                 |    |               |   |        |
|---|--------------------------------------------------------------------|--------|--------|----------------|-------|--|--|--|-----------------|----|---------------|---|--------|
| 1 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08  | batang | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 4  | 1,765625      | = | 2      |
|   |                                                                    |        |        | tukang listrik | 0,150 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | kepala tukang  | 0,030 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | mandor         | 0,030 |  |  |  |                 |    |               |   |        |
| 2 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08  | batang | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 4  | 1,765625      | = | 2      |
|   |                                                                    |        |        | tukang listrik | 0,150 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | kepala tukang  | 0,030 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | mandor         | 0,030 |  |  |  |                 |    |               |   |        |
| 3 | Pasang Instalasi Titik Lampu                                       | 151,00 | Titik  | Tukang Listrik | 1,000 |  |  |  | 1               | 12 | 12,58333<br>3 | = | 1<br>3 |
| 4 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 3,00   | Titik  | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1  | 0,45          | = | 1      |
|   |                                                                    |        |        | tukang listrik | 0,150 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | kepala tukang  | 0,030 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | mandor         | 0,030 |  |  |  |                 |    |               |   |        |
| 5 | DOWNLIGH T INBOW / RD 150 E27 + KACA LED BULB 6w                   | 14,00  | Titik  | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 2  | 1,05          | = | 2      |
|   |                                                                    |        |        | tukang listrik | 0,150 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | kepala tukang  | 0,030 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | mandor         | 0,030 |  |  |  |                 |    |               |   |        |
| 6 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 2,00   | Titik  | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1  | 0,3           | = | 1      |
|   |                                                                    |        |        | tukang listrik | 0,150 |  |  |  |                 |    |               |   |        |
|   |                                                                    |        |        | kepala tukang  | 0,030 |  |  |  |                 |    |               |   |        |

|    |                                                     |        |       |                |       |  |  |  |                 |   |        |   |   |
|----|-----------------------------------------------------|--------|-------|----------------|-------|--|--|--|-----------------|---|--------|---|---|
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT | 2,00   | Titik | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,3    | = | 1 |
|    |                                                     |        |       | tukang listrik | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | kepala tukang  | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY     | 1,00   | Titik | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15   | = | 1 |
|    |                                                     |        |       | tukang listrik | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | kepala tukang  | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY              | 137,00 | Titik | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 4 | 5,1375 | = | 6 |
|    |                                                     |        |       | tukang listrik | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | kepala tukang  | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt         | 3,00   | Titik | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,45   | = | 1 |
|    |                                                     |        |       | tukang listrik | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | kepala tukang  | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |
| 11 | Pasang Saklar Tunggal                               | 34,00  | Titik | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 5,1    | = | 6 |
|    |                                                     |        |       | tukang listrik | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | kepala tukang  | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                     |        |       | mandor         | 0,030 |  |  |  |                 |   |        |   |   |

|    |                               |       |       |                         |       |  |  |                 |   |        |   |   |
|----|-------------------------------|-------|-------|-------------------------|-------|--|--|-----------------|---|--------|---|---|
| 12 | Pasang Saklar Ganda           | 18,00 | Titik | pekerja                 | 0,150 |  |  | 6,66666666<br>7 | 2 | 1,35   | = | 2 |
|    |                               |       |       | tukang listrik          | 0,150 |  |  |                 |   |        |   |   |
|    |                               |       |       | kepala tukang           | 0,030 |  |  |                 |   |        |   |   |
|    |                               |       |       | mandor                  | 0,030 |  |  |                 |   |        |   |   |
| 13 | Instalasi stop kontak         | 19,00 | Titik | Pembantu tukang listrik | 0,025 |  |  | 40              | 2 | 0,2375 | = | 1 |
|    |                               |       |       | Tukang listrik          | 0,025 |  |  |                 |   |        |   |   |
|    |                               |       |       | Kepala tukang listrik   | 0,017 |  |  |                 |   |        |   |   |
|    |                               |       |       | Mandor                  | 0,014 |  |  |                 |   |        |   |   |
| 14 | Instalasi stop kontak 3 phase | 49,00 | Titik | Pembantu tukang listrik | 0,025 |  |  | 40              | 2 | 0,6125 | = | 1 |
|    |                               |       |       | Tukang listrik          | 0,025 |  |  |                 |   |        |   |   |
|    |                               |       |       | Kepala tukang listrik   | 0,017 |  |  |                 |   |        |   |   |
|    |                               |       |       | Mandor                  | 0,014 |  |  |                 |   |        |   |   |
| 15 | Pasang Stop Kontak 1 Phase    | 19,00 | Titik | Pekerja                 | 0,050 |  |  | 2               | 8 | 1,1875 | = | 2 |
|    |                               |       |       | Tukang listrik          | 0,500 |  |  |                 |   |        |   |   |
|    |                               |       |       | Kepala Tukang           | 0,005 |  |  |                 |   |        |   |   |
| 16 | Pasang Stop Kontak 3 Phase    | 49,00 | Titik | Pembantu tukang listrik | 0,025 |  |  | 40              | 2 | 0,6125 | = | 1 |
|    |                               |       |       | Tukang listrik          | 0,025 |  |  |                 |   |        |   |   |

|  |  |  |  |                       |       |  |  |  |  |  |  |  |  |
|--|--|--|--|-----------------------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Kepala tukang listrik | 0,017 |  |  |  |  |  |  |  |  |
|  |  |  |  | Mandor                | 0,014 |  |  |  |  |  |  |  |  |

**Lantai 5**

| NO | JENIS PEKERJAAN | VOLUME |  | TENAGA KERJA |                | PRODUKTIVITAS        |                      |                      |                                  | JUMLAH TK | DURASI |  |
|----|-----------------|--------|--|--------------|----------------|----------------------|----------------------|----------------------|----------------------------------|-----------|--------|--|
|    |                 |        |  | JENIS        | KOEFISIEN (OH) | (m <sup>1</sup> /OH) | (m <sup>2</sup> /OH) | (m <sup>3</sup> /OH) | (Set/OH)<br>(Unit/OH)<br>(Kg/OH) | (/hari)   |        |  |

**I. Pekerjaan Pasangan**

|   |                                                   |        |    |                    |       |  |  |                |  |    |              |   |   |
|---|---------------------------------------------------|--------|----|--------------------|-------|--|--|----------------|--|----|--------------|---|---|
| 1 | Mengurug pasir bawah lantai setebal 5 cm          | 94,80  | m3 | Pekerja            | 0,300 |  |  |                |  | 9  | 3,16009<br>2 | = | 4 |
|   |                                                   |        |    | Mandor             | 0,010 |  |  |                |  |    |              |   |   |
| 2 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 862,75 | m2 | Pekerja            | 0,300 |  |  | 3,3333333<br>3 |  | 50 | 5,17650<br>5 | = | 6 |
|   |                                                   |        |    | Tukang batu/tembok | 0,100 |  |  |                |  |    |              |   |   |
|   |                                                   |        |    | Kepala tukang      | 0,010 |  |  |                |  |    |              |   |   |
|   |                                                   |        |    | Mandor             | 0,015 |  |  |                |  |    |              |   |   |

**II. Pekerjaan Beton**

|   |                       |        |    |                    |       |  |  |  |  |    |        |   |        |
|---|-----------------------|--------|----|--------------------|-------|--|--|--|--|----|--------|---|--------|
| 1 | Pembuatan Plat Lantai | 192,48 | m3 |                    |       |  |  |  |  | 48 | 9,8245 | = | 1<br>0 |
|   | Mengecor beton K-300  |        |    | Pekerja            | 1,650 |  |  |  |  |    |        |   |        |
|   |                       |        |    | Tukang batu/tembok | 0,275 |  |  |  |  |    |        |   |        |
|   |                       |        |    | Kepala Tukang      | 0,028 |  |  |  |  |    |        |   |        |
|   |                       |        |    | Mandor             | 0,083 |  |  |  |  |    |        |   |        |

|   |                              |        |    |                        |       |             |  |  |  |  |  |  |  |  |
|---|------------------------------|--------|----|------------------------|-------|-------------|--|--|--|--|--|--|--|--|
|   | Pembesian besi beton polos   | 176,00 | m1 | Pekerja                | 0,070 | 5,555555556 |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang besi/besi beton | 0,070 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Kepala Tukang          | 0,007 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Mandor                 | 0,004 |             |  |  |  |  |  |  |  |  |
|   | Pembesian besi beton ulir    |        |    | Pekerja                | 0,070 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang besi/besi beton | 0,070 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Kepala Tukang          | 0,007 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Mandor                 | 0,004 |             |  |  |  |  |  |  |  |  |
|   | Bekisting untuk plat         |        |    | Pekerja                | 0,660 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang kayu            | 0,330 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Kepala Tukang          | 0,033 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Mandor                 | 0,033 |             |  |  |  |  |  |  |  |  |
| 2 | Kolom Praktis uk. 11 x 11 cm | 176,00 | m1 | Pekerja                | 0,180 | 5,555555556 |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang batu/tembok     | 0,020 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang kayu            | 0,020 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Tukang besi/besi beton | 0,020 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Kepala tukang          | 0,060 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    | Mandor                 | 0,009 |             |  |  |  |  |  |  |  |  |
|   |                              |        |    |                        |       |             |  |  |  |  |  |  |  |  |



|        |                              |       |    |                        |       |                |   |              |   |   |
|--------|------------------------------|-------|----|------------------------|-------|----------------|---|--------------|---|---|
| 3      | Kolom uk. 30 x 30 cm ( K 2 ) | 0,72  | m3 |                        |       | 0,4081632<br>7 | 2 | 0,882        | = | 1 |
|        | Mengecor beton K-300         |       |    | Pekerja                | 1,650 |                |   |              |   |   |
|        |                              |       |    | Tukang batu/tembok     | 0,275 |                |   |              |   |   |
|        |                              |       |    | Kepala Tukang          | 0,028 |                |   |              |   |   |
|        |                              |       |    | Mandor                 | 0,083 |                |   |              |   |   |
|        | Pembesian besi beton polos   |       |    | Pekerja                | 0,070 |                |   |              |   |   |
|        |                              |       |    | Tukang besi/besi beton | 0,070 |                |   |              |   |   |
|        |                              |       |    | Kepala Tukang          | 0,007 |                |   |              |   |   |
|        |                              |       |    | Mandor                 | 0,004 |                |   |              |   |   |
|        | Pembesian besi beton ulir    |       |    | Pekerja                | 0,070 |                |   |              |   |   |
|        |                              |       |    | Tukang besi/besi beton | 0,070 |                |   |              |   |   |
|        |                              |       |    | Kepala Tukang          | 0,007 |                |   |              |   |   |
|        |                              |       |    | Mandor                 | 0,004 |                |   |              |   |   |
|        | Bekisting untuk kolom        |       |    | Pekerja                | 0,660 |                |   |              |   |   |
|        |                              |       |    | Tukang kayu            | 0,330 |                |   |              |   |   |
|        |                              |       |    | Kepala Tukang          | 0,033 |                |   |              |   |   |
| Mandor |                              | 0,033 |    |                        |       |                |   |              |   |   |
| 4      | Kolom uk. 40 x 40 cm ( K 3 ) | 6,4   | m3 |                        |       | 0,4081632<br>7 | 6 | 2,61333<br>3 | = | 3 |







|                            |                           |       |    |                        |                      |                |    |        |   |   |
|----------------------------|---------------------------|-------|----|------------------------|----------------------|----------------|----|--------|---|---|
| 8                          | Pembesian besi beton ulir | 48,64 | m3 | Mandor                 | 0,004                | 0,4081632<br>7 | 20 | 5,9584 | = | 6 |
|                            |                           |       |    | Pekerja                | 0,070                |                |    |        |   |   |
|                            |                           |       |    | Tukang besi/besi beton | 0,070                |                |    |        |   |   |
|                            |                           |       |    | Kepala Tukang          | 0,007                |                |    |        |   |   |
|                            |                           |       |    | Mandor                 | 0,004                |                |    |        |   |   |
|                            | Bekisting untuk balok     |       |    | Pekerja                | 0,660                |                |    |        |   |   |
|                            |                           |       |    | Tukang kayu            | 0,330                |                |    |        |   |   |
|                            |                           |       |    | Kepala Tukang          | 0,033                |                |    |        |   |   |
|                            |                           |       |    | Mandor                 | 0,033                |                |    |        |   |   |
|                            |                           |       |    | Balok Type B.2         | Mengecor beton K-300 |                |    |        |   |   |
| Tukang batu/tembok         | 0,275                     |       |    |                        |                      |                |    |        |   |   |
| Kepala Tukang              | 0,028                     |       |    |                        |                      |                |    |        |   |   |
| Mandor                     | 0,083                     |       |    |                        |                      |                |    |        |   |   |
| Pekerja                    | 0,070                     |       |    |                        |                      |                |    |        |   |   |
| Pembesian besi beton polos | Tukang besi/besi beton    | 0,070 |    |                        |                      |                |    |        |   |   |
|                            | Kepala Tukang             | 0,007 |    |                        |                      |                |    |        |   |   |
|                            | Mandor                    | 0,004 |    |                        |                      |                |    |        |   |   |
|                            | Pekerja                   | 0,070 |    |                        |                      |                |    |        |   |   |
|                            |                           |       |    |                        |                      |                |    |        |   |   |

|   |                            |       |    |                        |       |                |    |       |   |   |
|---|----------------------------|-------|----|------------------------|-------|----------------|----|-------|---|---|
|   | Pembesian besi beton ulir  | 63,60 | m3 | Tukang besi/besi beton | 0,070 | 0,4081632<br>7 | 28 | 5,565 | = | 6 |
|   |                            |       |    | Kepala Tukang          | 0,007 |                |    |       |   |   |
|   |                            |       |    | Mandor                 | 0,004 |                |    |       |   |   |
|   | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |    |       |   |   |
|   |                            |       |    | Tukang kayu            | 0,330 |                |    |       |   |   |
|   |                            |       |    | Kepala Tukang          | 0,033 |                |    |       |   |   |
|   |                            |       |    | Mandor                 | 0,033 |                |    |       |   |   |
| 9 | Balok Type B.3             | 63,60 | m3 |                        |       | 0,4081632<br>7 | 28 | 5,565 | = | 6 |
|   | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |    |       |   |   |
|   |                            |       |    | Tukang batu/tembok     | 0,275 |                |    |       |   |   |
|   |                            |       |    | Kepala Tukang          | 0,028 |                |    |       |   |   |
|   |                            |       |    | Mandor                 | 0,083 |                |    |       |   |   |
|   |                            |       |    | Pekerja                | 0,070 |                |    |       |   |   |
|   | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                |    |       |   |   |
|   |                            |       |    | Kepala Tukang          | 0,007 |                |    |       |   |   |
|   |                            |       |    | Mandor                 | 0,004 |                |    |       |   |   |
|   | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |    |       |   |   |
|   |                            |       |    | Tukang besi/besi beton | 0,070 |                |    |       |   |   |
|   |                            |       |    | Kepala Tukang          | 0,007 |                |    |       |   |   |

|    |                            |       |    |                        |       |                |    |        |   |   |  |  |  |
|----|----------------------------|-------|----|------------------------|-------|----------------|----|--------|---|---|--|--|--|
|    |                            |       |    | Mandor                 | 0,004 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Pekerja                | 0,660 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,033 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,033 |                |    |        |   |   |  |  |  |
| 10 | Balok Type B.4             | 23,76 | m3 |                        |       | 0,4081632<br>7 | 20 | 2,9106 | = | 3 |  |  |  |
|    | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Tukang batu/tembok     | 0,275 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,028 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,083 |                |    |        |   |   |  |  |  |
|    | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,004 |                |    |        |   |   |  |  |  |
|    | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,004 |                |    |        |   |   |  |  |  |
|    | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |    |        |   |   |  |  |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                |    |        |   |   |  |  |  |



|        |                            |       |    |                        |       |                |    |         |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|----------------|----|---------|---|---|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                |    |         |   |   |  |  |  |
| 11     | Balok Type B.5             | 15,21 | m3 |                        |       | 0,4081632<br>7 | 10 | 3,72645 | = | 4 |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Pekerja                | 0,660 |                |    |         |   |   |  |  |  |
|        | Bekisting untuk balok      |       |    | Tukang kayu            | 0,330 |                |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                |    |         |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                |    |         |   |   |  |  |  |

|        |                            |       |    |                        |       |                |    |         |   |   |  |  |
|--------|----------------------------|-------|----|------------------------|-------|----------------|----|---------|---|---|--|--|
| 12     | Balok Type B.6             | 31,62 | m3 |                        |       | 0,4081632<br>7 | 20 | 3,87345 | = | 4 |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |    |         |   |   |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                |    |         |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                |    |         |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                |    |         |   |   |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |    |         |   |   |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                |    |         |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                |    |         |   |   |  |  |
| Mandor |                            | 0,033 |    |                        |       |                |    |         |   |   |  |  |
| 13     | Balok Type B.7             | 17,82 | m3 |                        |       | 0,4081632<br>7 | 12 | 3,63825 | = | 4 |  |  |
|        |                            |       |    | Pekerja                | 1,650 |                |    |         |   |   |  |  |



|    |                            |      |    |                        |       |  |  |  |           |  |   |       |     |
|----|----------------------------|------|----|------------------------|-------|--|--|--|-----------|--|---|-------|-----|
|    | Pembesian besi beton polos |      |    | Mandor                 | 0,083 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Pekerja                | 0,070 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Kepala Tukang          | 0,007 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Mandor                 | 0,004 |  |  |  |           |  |   |       |     |
|    | Pembesian besi beton ulir  |      |    | Pekerja                | 0,070 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Kepala Tukang          | 0,007 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Mandor                 | 0,004 |  |  |  |           |  |   |       |     |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,660 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Tukang kayu            | 0,330 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Kepala Tukang          | 0,033 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Mandor                 | 0,033 |  |  |  |           |  |   |       |     |
| 15 | Balok Type B.9             | 3,12 | m3 |                        |       |  |  |  |           |  |   |       |     |
|    | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |  |  |  | 0,4081632 |  | 4 | 1,911 | = 2 |
|    |                            |      |    | Tukang batu/tembok     | 0,275 |  |  |  | 7         |  |   |       |     |
|    |                            |      |    | Kepala Tukang          | 0,028 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Mandor                 | 0,083 |  |  |  |           |  |   |       |     |
|    |                            |      |    | Pekerja                | 0,070 |  |  |  |           |  |   |       |     |

|                            |                            |       |    |                        |       |                |  |   |        |   |   |
|----------------------------|----------------------------|-------|----|------------------------|-------|----------------|--|---|--------|---|---|
| 16                         | Pembesian besi beton polos | 5,46  | m3 | Tukang besi/besi beton | 0,070 | 0,4081632<br>7 |  | 6 | 2,2295 | = | 3 |
|                            | Pembesian besi beton ulir  |       |    | Kepala Tukang          | 0,007 |                |  |   |        |   |   |
|                            |                            |       |    | Mandor                 | 0,004 |                |  |   |        |   |   |
|                            |                            |       |    | Pekerja                | 0,070 |                |  |   |        |   |   |
|                            | Bekisting untuk balok      |       |    | Tukang besi/besi beton | 0,070 |                |  |   |        |   |   |
|                            |                            |       |    | Kepala Tukang          | 0,007 |                |  |   |        |   |   |
|                            |                            |       |    | Mandor                 | 0,004 |                |  |   |        |   |   |
|                            | Balok Type B.10            |       |    | Pekerja                | 0,660 |                |  |   |        |   |   |
|                            |                            |       |    | Tukang kayu            | 0,330 |                |  |   |        |   |   |
|                            |                            |       |    | Kepala Tukang          | 0,033 |                |  |   |        |   |   |
|                            | Mengecor beton K-300       |       |    | Mandor                 | 0,033 |                |  |   |        |   |   |
|                            |                            |       |    | Pekerja                | 1,650 |                |  |   |        |   |   |
| Tukang batu/tembok         |                            | 0,275 |    |                        |       |                |  |   |        |   |   |
| Pembesian besi beton polos | Kepala Tukang              | 0,028 |    |                        |       |                |  |   |        |   |   |
|                            | Mandor                     | 0,083 |    |                        |       |                |  |   |        |   |   |
|                            | Pekerja                    | 0,070 |    |                        |       |                |  |   |        |   |   |
|                            |                            |       |    | Tukang besi/besi beton | 0,070 |                |  |   |        |   |   |
|                            |                            |       |    | Kepala Tukang          | 0,007 |                |  |   |        |   |   |

|    |  |      |    |                        |       |  |  |           |  |  |   |      |     |
|----|--|------|----|------------------------|-------|--|--|-----------|--|--|---|------|-----|
|    |  |      |    | Mandor                 | 0,004 |  |  |           |  |  |   |      |     |
|    |  |      |    | Pekerja                | 0,070 |  |  |           |  |  |   |      |     |
|    |  |      |    | Tukang besi/besi beton | 0,070 |  |  |           |  |  |   |      |     |
|    |  |      |    | Kepala Tukang          | 0,007 |  |  |           |  |  |   |      |     |
|    |  |      |    | Mandor                 | 0,004 |  |  |           |  |  |   |      |     |
|    |  |      |    | Pekerja                | 0,660 |  |  |           |  |  |   |      |     |
|    |  |      |    | Tukang kayu            | 0,330 |  |  |           |  |  |   |      |     |
|    |  |      |    | Kepala Tukang          | 0,033 |  |  |           |  |  |   |      |     |
|    |  |      |    | Mandor                 | 0,033 |  |  |           |  |  |   |      |     |
|    |  |      |    |                        |       |  |  |           |  |  |   |      |     |
|    |  |      |    | Pekerja                | 1,650 |  |  |           |  |  |   |      |     |
|    |  |      |    | Tukang batu/tembok     | 0,275 |  |  |           |  |  |   |      |     |
|    |  |      |    | Kepala Tukang          | 0,028 |  |  |           |  |  |   |      |     |
|    |  |      |    | Mandor                 | 0,083 |  |  |           |  |  |   |      |     |
| 17 |  | 3,60 | M3 | Pekerja                | 0,070 |  |  | 0,4081632 |  |  | 6 | 1,47 | = 2 |
|    |  |      |    | Tukang besi/besi beton | 0,070 |  |  | 7         |  |  |   |      |     |
|    |  |      |    | Kepala Tukang          | 0,007 |  |  |           |  |  |   |      |     |
|    |  |      |    | Mandor                 | 0,004 |  |  |           |  |  |   |      |     |
|    |  |      |    | Pekerja                | 0,070 |  |  |           |  |  |   |      |     |

|                           |                            |       |    |                        |       |                |   |       |   |   |
|---------------------------|----------------------------|-------|----|------------------------|-------|----------------|---|-------|---|---|
| 18                        | Pembesian besi beton ulir  | 2,10  | M3 | Tukang besi/besi beton | 0,070 | 0,4081632<br>7 | 3 | 1,715 | = | 2 |
|                           | Bekisting untuk balok      |       |    | Kepala Tukang          | 0,007 |                |   |       |   |   |
|                           |                            |       |    | Mandor                 | 0,004 |                |   |       |   |   |
|                           |                            |       |    | Pekerja                | 0,660 |                |   |       |   |   |
|                           |                            |       |    | Tukang kayu            | 0,330 |                |   |       |   |   |
|                           |                            |       |    | Kepala Tukang          | 0,033 |                |   |       |   |   |
|                           |                            |       |    | Mandor                 | 0,033 |                |   |       |   |   |
|                           |                            |       |    | Balok Type B.12        |       |                |   |       |   |   |
|                           | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |   |       |   |   |
|                           |                            |       |    | Tukang batu/tembok     | 0,275 |                |   |       |   |   |
|                           |                            |       |    | Kepala Tukang          | 0,028 |                |   |       |   |   |
|                           |                            |       |    | Mandor                 | 0,083 |                |   |       |   |   |
|                           |                            |       |    | Pekerja                | 0,070 |                |   |       |   |   |
|                           | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                |   |       |   |   |
| Kepala Tukang             |                            | 0,007 |    |                        |       |                |   |       |   |   |
| Mandor                    |                            | 0,004 |    |                        |       |                |   |       |   |   |
| Pembesian besi beton ulir | Pekerja                    | 0,070 |    |                        |       |                |   |       |   |   |
|                           | Tukang besi/besi beton     | 0,070 |    |                        |       |                |   |       |   |   |
|                           | Kepala Tukang              | 0,007 |    |                        |       |                |   |       |   |   |



|             |                            |       |    |                        |       |                |   |        |   |   |  |  |  |
|-------------|----------------------------|-------|----|------------------------|-------|----------------|---|--------|---|---|--|--|--|
|             |                            |       |    | Mandor                 | 0,004 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Pekerja                | 0,660 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Tukang kayu            | 0,330 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Kepala Tukang          | 0,033 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Mandor                 | 0,033 |                |   |        |   |   |  |  |  |
| 19          | Balok Type B.13            | 4,86  | M3 |                        |       | 0,4081632<br>7 | 6 | 1,9845 | = | 2 |  |  |  |
|             | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Tukang batu/tembok     | 0,275 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Kepala Tukang          | 0,028 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Mandor                 | 0,083 |                |   |        |   |   |  |  |  |
|             | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Tukang besi/besi beton | 0,070 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Kepala Tukang          | 0,007 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Mandor                 | 0,004 |                |   |        |   |   |  |  |  |
|             | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Tukang besi/besi beton | 0,070 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Kepala Tukang          | 0,007 |                |   |        |   |   |  |  |  |
|             |                            |       |    | Mandor                 | 0,004 |                |   |        |   |   |  |  |  |
|             | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |   |        |   |   |  |  |  |
| Tukang kayu |                            | 0,330 |    |                        |       |                |   |        |   |   |  |  |  |

|        |                            |       |    |                        |       |                |   |       |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|----------------|---|-------|---|---|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                |   |       |   |   |  |  |  |
| 20     | Balok Type B.14            | 0,56  | M3 |                        |       | 0,4081632<br>7 | 2 | 0,686 | = | 1 |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Pekerja                | 0,070 |                |   |       |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |   |       |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                |   |       |   |   |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                |   |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                |   |       |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                |   |       |   |   |  |  |  |

|        |                            |       |    |                        |       |                |   |        |   |   |
|--------|----------------------------|-------|----|------------------------|-------|----------------|---|--------|---|---|
| 21     | Balok Type B.15            | 0,96  | M3 |                        |       | 0,4081632<br>7 | 3 | 0,784  | = | 1 |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                |   |        |   |   |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                |   |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,028 |                |   |        |   |   |
|        |                            |       |    | Mandor                 | 0,083 |                |   |        |   |   |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                |   |        |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                |   |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |   |        |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                |   |        |   |   |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                |   |        |   |   |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                |   |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,007 |                |   |        |   |   |
|        |                            |       |    | Mandor                 | 0,004 |                |   |        |   |   |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                |   |        |   |   |
|        |                            |       |    | Tukang kayu            | 0,330 |                |   |        |   |   |
|        |                            |       |    | Kepala Tukang          | 0,033 |                |   |        |   |   |
| Mandor |                            | 0,033 |    |                        |       |                |   |        |   |   |
| 22     | Balok Type B.20            | 5,76  | M3 |                        |       | 0,4081632<br>7 | 5 | 2,8224 | = | 3 |
|        |                            |       |    | Pekerja                | 1,650 |                |   |        |   |   |



|    |                                                      |      |    |                        |       |  |           |  |   |      |   |   |
|----|------------------------------------------------------|------|----|------------------------|-------|--|-----------|--|---|------|---|---|
|    | Pembesian besi beton polos                           |      |    | Mandor                 | 0,083 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Pekerja                | 0,070 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Tukang besi/besi beton | 0,070 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Mandor                 | 0,004 |  |           |  |   |      |   |   |
|    | Pembesian besi beton ulir                            |      |    | Pekerja                | 0,070 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Tukang besi/besi beton | 0,070 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Mandor                 | 0,004 |  |           |  |   |      |   |   |
|    | Bekisting untuk balok                                |      |    | Pekerja                | 0,660 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Tukang kayu            | 0,330 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Kepala Tukang          | 0,033 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Mandor                 | 0,033 |  |           |  |   |      |   |   |
| 24 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm | 7,20 | m3 |                        |       |  |           |  |   |      |   |   |
|    | Mengecor beton K-300                                 |      |    | Pekerja                | 1,650 |  | 0,4081632 |  | 6 | 2,94 | = | 3 |
|    |                                                      |      |    | Tukang batu/tembok     | 0,275 |  | 7         |  |   |      |   |   |
|    |                                                      |      |    | Kepala Tukang          | 0,028 |  |           |  |   |      |   |   |
|    |                                                      |      |    | Mandor                 | 0,083 |  |           |  |   |      |   |   |

|    |                                              |      |    |                        |       |  |  |           |  |  |   |         |   |   |
|----|----------------------------------------------|------|----|------------------------|-------|--|--|-----------|--|--|---|---------|---|---|
|    | Pembesian besi beton polos                   |      |    | Pekerja                | 0,070 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Tukang besi/besi beton | 0,070 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Kepala Tukang          | 0,007 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Mandor                 | 0,004 |  |  |           |  |  |   |         |   |   |
|    | Pembesian besi beton ulir                    |      |    | Pekerja                | 0,070 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Tukang besi/besi beton | 0,070 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Kepala Tukang          | 0,007 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Mandor                 | 0,004 |  |  |           |  |  |   |         |   |   |
|    | Bekisting untuk balok                        |      |    | Pekerja                | 0,660 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Tukang kayu            | 0,330 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Kepala Tukang          | 0,033 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Mandor                 | 0,033 |  |  |           |  |  |   |         |   |   |
| 25 | Balok uk.15 x 30 cm untuk Dinding Box Lift A | 0,86 | m3 |                        |       |  |  |           |  |  |   |         |   |   |
|    | Mengecor beton K-300                         |      |    | Pekerja                | 1,650 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Tukang batu/tembok     | 0,275 |  |  | 0,4081632 |  |  | 3 | 0,69825 | = | 1 |
|    |                                              |      |    | Kepala Tukang          | 0,028 |  |  | 7         |  |  |   |         |   |   |
|    |                                              |      |    | Mandor                 | 0,083 |  |  |           |  |  |   |         |   |   |
|    |                                              |      |    | Pekerja                | 0,070 |  |  |           |  |  |   |         |   |   |

|                            |                                                   |                        |       |                        |       |                |   |        |   |   |
|----------------------------|---------------------------------------------------|------------------------|-------|------------------------|-------|----------------|---|--------|---|---|
| 26                         | Pembesian besi beton polos                        | 0,54                   | m3    | Tukang besi/besi beton | 0,070 | 0,4081632<br>7 | 2 | 0,6615 | = | 1 |
|                            | Pembesian besi beton ulir                         |                        |       | Kepala Tukang          | 0,007 |                |   |        |   |   |
|                            |                                                   |                        |       | Mandor                 | 0,004 |                |   |        |   |   |
|                            |                                                   |                        |       | Pekerja                | 0,070 |                |   |        |   |   |
|                            | Bekisting untuk balok                             |                        |       | Tukang besi/besi beton | 0,070 |                |   |        |   |   |
|                            |                                                   |                        |       | Kepala Tukang          | 0,007 |                |   |        |   |   |
|                            |                                                   |                        |       | Mandor                 | 0,004 |                |   |        |   |   |
|                            | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG |                        |       | Pekerja                | 0,660 |                |   |        |   |   |
|                            |                                                   |                        |       | Tukang kayu            | 0,330 |                |   |        |   |   |
|                            |                                                   |                        |       | Kepala Tukang          | 0,033 |                |   |        |   |   |
|                            |                                                   |                        |       | Mandor                 | 0,033 |                |   |        |   |   |
|                            | Mengecor beton K-300                              |                        |       | Pekerja                | 1,650 |                |   |        |   |   |
| Tukang batu/tembok         |                                                   | 0,275                  |       |                        |       |                |   |        |   |   |
| Kepala Tukang              |                                                   | 0,028                  |       |                        |       |                |   |        |   |   |
| Mandor                     |                                                   | 0,083                  |       |                        |       |                |   |        |   |   |
| Pekerja                    |                                                   | 0,070                  |       |                        |       |                |   |        |   |   |
| Pembesian besi beton polos |                                                   | Tukang besi/besi beton | 0,070 |                        |       |                |   |        |   |   |



|    |                             |      |    |                        |       |  |  |  |  |                |  |    |         |   |   |
|----|-----------------------------|------|----|------------------------|-------|--|--|--|--|----------------|--|----|---------|---|---|
|    |                             |      |    | Kepala Tukang          | 0,007 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Mandor                 | 0,004 |  |  |  |  |                |  |    |         |   |   |
|    | Pembesian besi beton ulir   |      |    | Pekerja                | 0,070 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Tukang besi/besi beton | 0,070 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Kepala Tukang          | 0,007 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Mandor                 | 0,004 |  |  |  |  |                |  |    |         |   |   |
|    | Bekisting untuk balok       |      |    | Pekerja                | 0,660 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Tukang kayu            | 0,330 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Kepala Tukang          | 0,033 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Mandor                 | 0,033 |  |  |  |  |                |  |    |         |   |   |
| 27 | Plat meja beton tebal 10 cm | 7,08 | m3 |                        |       |  |  |  |  |                |  |    |         |   |   |
|    | Mengecor beton K-300        |      |    | Pekerja                | 1,650 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Tukang batu/tembok     | 0,275 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Kepala Tukang          | 0,028 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Mandor                 | 0,083 |  |  |  |  |                |  |    |         |   |   |
|    | Pembesian besi beton polos  |      |    | Pekerja                | 0,070 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Tukang besi/besi beton | 0,070 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Kepala Tukang          | 0,007 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    | Mandor                 | 0,004 |  |  |  |  |                |  |    |         |   |   |
|    |                             |      |    |                        |       |  |  |  |  | 0,4081632<br>7 |  | 10 | 1,73558 | = | 2 |

|    |                                                             |      |    |                        |       |  |  |   |           |  |   |         |   |
|----|-------------------------------------------------------------|------|----|------------------------|-------|--|--|---|-----------|--|---|---------|---|
|    | Pembesian besi beton ulir                                   |      |    | Pekerja                | 0,070 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Tukang besi/besi beton | 0,070 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Kepala Tukang          | 0,007 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Mandor                 | 0,004 |  |  |   |           |  |   |         |   |
|    | Bekisting untuk plat                                        |      |    | Pekerja                | 0,660 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Tukang kayu            | 0,330 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Kepala Tukang          | 0,033 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Mandor                 | 0,033 |  |  |   |           |  |   |         |   |
| 28 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 3,33 | m3 |                        |       |  |  |   |           |  |   |         |   |
|    | Mengecor beton K-300                                        |      |    | Pekerja                | 1,650 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Tukang batu/tembok     | 0,275 |  |  |   |           |  |   |         |   |
|    |                                                             |      |    | Kepala Tukang          | 0,028 |  |  |   | 0,4081632 |  |   |         |   |
|    |                                                             |      |    | Mandor                 | 0,083 |  |  | 7 |           |  |   |         |   |
|    |                                                             |      |    | Pekerja                | 0,070 |  |  |   |           |  | 5 |         |   |
|    | Pembesian besi beton polos                                  |      |    | Tukang besi/besi beton | 0,070 |  |  |   |           |  |   | 1,63225 |   |
|    |                                                             |      |    | Kepala Tukang          | 0,007 |  |  |   |           |  |   | 1       | = |
|    |                                                             |      |    | Mandor                 | 0,004 |  |  |   |           |  |   |         | 2 |
|    |                                                             |      |    | Pekerja                | 0,070 |  |  |   |           |  |   |         |   |



|    |                                                         |      |    |                        |       |                |    |         |   |   |  |  |  |
|----|---------------------------------------------------------|------|----|------------------------|-------|----------------|----|---------|---|---|--|--|--|
|    |                                                         |      |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |  |
|    | Bekisting untuk plat                                    |      |    | Pekerja                | 0,660 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Tukang kayu            | 0,330 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,033 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,033 |                |    |         |   |   |  |  |  |
| 30 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 7,05 | m3 |                        |       | 0,4081632<br>7 | 10 | 1,72725 | = | 2 |  |  |  |
|    |                                                         |      |    |                        |       |                |    |         |   |   |  |  |  |
|    | Mengecor beton K-300                                    |      |    | Pekerja                | 1,650 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Tukang batu/tembok     | 0,275 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,028 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,083 |                |    |         |   |   |  |  |  |
|    | Pembesian besi beton polos                              |      |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,004 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Pekerja                | 0,070 |                |    |         |   |   |  |  |  |
|    | Pembesian besi beton ulir                               |      |    | Tukang besi/besi beton | 0,070 |                |    |         |   |   |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |                |    |         |   |   |  |  |  |

|                         |                  |       |  |  |  |  |  |  |  |  |  |  |
|-------------------------|------------------|-------|--|--|--|--|--|--|--|--|--|--|
| Bekisting<br>untuk plat | Mandor           | 0,004 |  |  |  |  |  |  |  |  |  |  |
|                         | Pekerja          | 0,660 |  |  |  |  |  |  |  |  |  |  |
|                         | Tukang<br>kayu   | 0,330 |  |  |  |  |  |  |  |  |  |  |
|                         | Kepala<br>Tukang | 0,033 |  |  |  |  |  |  |  |  |  |  |
|                         | Mandor           | 0,033 |  |  |  |  |  |  |  |  |  |  |

### III. Pekerjaan Plesteran dan Benangan

|   |                                                           |         |    |                           |       |                 |  |  |    |              |   |        |
|---|-----------------------------------------------------------|---------|----|---------------------------|-------|-----------------|--|--|----|--------------|---|--------|
| 1 | Pekerjaan<br>plesteran<br>interior spesi 1<br>Pc : 6 Psr  | 1393,36 | m2 | Pekerja                   | 0,300 | 3,33333333<br>3 |  |  | 20 | 20,9004<br>5 | = | 2<br>1 |
|   |                                                           |         |    | Tukang<br>batu/tembo<br>k | 0,150 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Kepala<br>tukang          | 0,015 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Mandor                    | 0,015 |                 |  |  |    |              |   |        |
| 2 | Pekerjaan<br>plesteran<br>eksterior spesi<br>1 Pc : 6 Psr | 554,86  | m2 | Pekerja                   | 0,300 | 3,33333333<br>3 |  |  | 20 | 8,32287<br>6 | = | 9      |
|   |                                                           |         |    | Tukang<br>batu/tembo<br>k | 0,150 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Kepala<br>tukang          | 0,015 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Mandor                    | 0,015 |                 |  |  |    |              |   |        |
| 3 | Pekerjaan<br>acian interior                               | 1393,36 | m2 | Pekerja                   | 0,200 | 5               |  |  | 16 | 17,4170<br>4 | = | 1<br>8 |
|   |                                                           |         |    | Tukang<br>batu/tembo<br>k | 0,100 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Kepala<br>tukang          | 0,010 |                 |  |  |    |              |   |        |
|   |                                                           |         |    | Mandor                    | 0,010 |                 |  |  |    |              |   |        |
| 4 | Pekerjaan<br>acian eksterior                              | 554,86  | m2 | Pekerja                   | 0,200 | 5               |  |  | 24 | 4,62382      | = | 5      |
|   |                                                           |         |    | Tukang<br>batu/tembo<br>k | 0,100 |                 |  |  |    |              |   |        |

|   |                                                 |         |    |                    |       |                 |  |  |  |    |              |   |   |  |
|---|-------------------------------------------------|---------|----|--------------------|-------|-----------------|--|--|--|----|--------------|---|---|--|
|   |                                                 |         |    | Kepala tukang      | 0,010 |                 |  |  |  |    |              |   |   |  |
|   |                                                 |         |    | Mandor             | 0,010 |                 |  |  |  |    |              |   |   |  |
| 5 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr  | 1131,19 | m1 | Pekerja            | 0,133 | 7,50187546<br>9 |  |  |  | 28 | 5,38528<br>7 | = | 6 |  |
|   |                                                 |         |    | Tukang batu/tembok | 0,067 |                 |  |  |  |    |              |   |   |  |
|   |                                                 |         |    | Kepala tukang      | 0,007 |                 |  |  |  |    |              |   |   |  |
|   |                                                 |         |    | Mandor             | 0,007 |                 |  |  |  |    |              |   |   |  |
| 6 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr | 805,34  | m1 | Pekerja            | 0,133 | 7,50187546<br>9 |  |  |  | 24 | 4,47300<br>3 | = | 5 |  |
|   |                                                 |         |    | Tukang batu/tembok | 0,067 |                 |  |  |  |    |              |   |   |  |
|   |                                                 |         |    | Kepala tukang      | 0,007 |                 |  |  |  |    |              |   |   |  |
|   |                                                 |         |    | Mandor             | 0,007 |                 |  |  |  |    |              |   |   |  |

#### IV. Pekerjaan Lantai

|   |                               |         |    |                    |       |                 |  |  |  |    |              |   |    |  |
|---|-------------------------------|---------|----|--------------------|-------|-----------------|--|--|--|----|--------------|---|----|--|
| 1 | Pasang Keramik Lantai 60 x 60 | 1297,23 | m2 | Pekerja            | 0,900 | 1,11111111<br>1 |  |  |  | 60 | 19,4584<br>5 | = | 20 |  |
|   |                               |         |    | Tukang batu/tembok | 0,450 |                 |  |  |  |    |              |   |    |  |
|   |                               |         |    | Kepala tukang      | 0,045 |                 |  |  |  |    |              |   |    |  |
|   |                               |         |    | Mandor             | 0,045 |                 |  |  |  |    |              |   |    |  |
| 2 | Pasang Keramik Lantai 30 x 30 | 134,575 | m2 | Pekerja            | 0,700 | 1,42857142<br>9 |  |  |  | 12 | 7,85020<br>8 | = | 8  |  |
|   |                               |         |    | Tukang batu/tembok | 0,350 |                 |  |  |  |    |              |   |    |  |
|   |                               |         |    | Kepala tukang      | 0,035 |                 |  |  |  |    |              |   |    |  |

|   |                                               |        |    |                    |       |             |  |  |    |          |   |   |  |
|---|-----------------------------------------------|--------|----|--------------------|-------|-------------|--|--|----|----------|---|---|--|
|   |                                               |        |    | Mandor             | 0,035 |             |  |  |    |          |   |   |  |
| 3 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC | 23,125 | m2 | Pekerja            | 0,700 | 1,428571429 |  |  | 8  | 2,023438 | = | 3 |  |
|   |                                               |        |    | Tukang batu/tembok | 0,350 |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Kepala tukang      | 0,035 |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Mandor             | 0,035 |             |  |  |    |          |   |   |  |
| 4 | Pasang Keramik Dinding 30 x 60 (KM/WC)        | 76,00  | m2 | Pekerja            | 0,9   | 1,111111111 |  |  | 16 | 4,275    | = | 5 |  |
|   |                                               |        |    | Tukang             | 0,45  |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Kepala Tukang      | 0,045 |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Mandor             | 0,045 |             |  |  |    |          |   |   |  |
| 5 | Pasang Batu Alam                              | 23,33  | m2 | Pekerja            | 0,62  | 1,612903226 |  |  | 5  | 2,89292  | = | 3 |  |
|   |                                               |        |    | Tukang             | 0,35  |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Kepala Tukang      | 0,035 |             |  |  |    |          |   |   |  |
|   |                                               |        |    | Mandor             | 0,03  |             |  |  |    |          |   |   |  |

### V. Pekerjaan Pintu dan Jendela Aluminium dan Partisi

#### A. Pekerjaan Pintu dan Jendela Aluminium, Partisi, Railing tangga dan Sunscreen

|   |                    |       |      |                  |       |             |  |  |   |       |   |   |
|---|--------------------|-------|------|------------------|-------|-------------|--|--|---|-------|---|---|
| 1 | Pas. Kusen Type J2 | 28,00 | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 2 | 0,602 | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |
|   |                    |       |      | Kepala Tukang    | 0,004 |             |  |  |   |       |   |   |
|   |                    |       |      | Mandor           | 0,002 |             |  |  |   |       |   |   |
| 2 | Pas. Kusen Type J3 | 2,00  | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 1 | 0,086 | = | 1 |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |



|   |                     |       |      |                  |       |  |  |  |                 |   |       |   |   |  |
|---|---------------------|-------|------|------------------|-------|--|--|--|-----------------|---|-------|---|---|--|
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |
| 3 | Pas. Kusen Type J4  | 10,00 | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |  |
|   |                     |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |
| 4 | Pas. Kusen Type J12 | 12,00 | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,516 | = | 1 |  |
|   |                     |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |
| 5 | Pas. Kusen Type P2  | 13,00 | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,559 | = | 1 |  |
|   |                     |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |
| 6 | Pas. Kusen Type P3  | 3,00  | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,129 | = | 1 |  |
|   |                     |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |
| 7 | Pas. Kusen Type P4  | 10,00 | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |  |
|   |                     |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |  |
|   |                     |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |  |

|   |                               |      |      |                  |       |  |  |                 |   |       |   |   |
|---|-------------------------------|------|------|------------------|-------|--|--|-----------------|---|-------|---|---|
| 8 | Pas. Kusen Type P5            | 5,00 | Unit | Pekerja          | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,215 | = | 1 |
|   |                               |      |      | Tukang Alumunium | 0,043 |  |  |                 |   |       |   |   |
|   |                               |      |      | Kepala Tukang    | 0,004 |  |  |                 |   |       |   |   |
|   |                               |      |      | Mandor           | 0,002 |  |  |                 |   |       |   |   |
| 9 | Pasang pintu darurat anti api | 2,00 | Unit | pekerja          | 0,085 |  |  | 11,7647058<br>8 | 1 | 0,17  | = | 1 |
|   |                               |      |      | tukang alumunium | 0,085 |  |  |                 |   |       |   |   |
|   |                               |      |      | kepala tukang    | 0,009 |  |  |                 |   |       |   |   |
|   |                               |      |      | mandor           | 0,005 |  |  |                 |   |       |   |   |

### B. Pekerjaan Partisi

|   |                                               |        |      |                  |       |  |  |                 |   |        |   |   |
|---|-----------------------------------------------|--------|------|------------------|-------|--|--|-----------------|---|--------|---|---|
| 1 | Memasang 1m2 unit Partisi Type I              | 132,81 | m2   | Pekerja          | 0,015 |  |  | 6,66666666<br>7 | 3 | 6,6405 | = | 7 |
|   |                                               |        |      | Tukang Alumunium | 0,150 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Kepala Tukang    | 0,015 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Mandor           | 0,001 |  |  |                 |   |        |   |   |
| 2 | Memasang 1 unit Pintu Type II untuk partisi   | 7      | unit | Pekerja          | 0,085 |  |  | 11,7647058<br>8 | 2 | 0,2975 | = | 1 |
|   |                                               |        |      | Tukang Alumunium | 0,085 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Kepala Tukang    | 0,009 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Mandor           | 0,005 |  |  |                 |   |        |   |   |
| 3 | Memasang 1 jendela Pintu Type I untuk partisi | 32     | unit | Pekerja          | 0,085 |  |  | 11,7647058<br>8 | 2 | 1,36   | = | 2 |
|   |                                               |        |      | Tukang Alumunium | 0,085 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Kepala Tukang    | 0,009 |  |  |                 |   |        |   |   |
|   |                                               |        |      | Mandor           | 0,005 |  |  |                 |   |        |   |   |

### C. Pekerjaan Railling Tangga

|   |                                                     |       |    |                    |       |             |  |  |   |          |   |   |
|---|-----------------------------------------------------|-------|----|--------------------|-------|-------------|--|--|---|----------|---|---|
| 1 | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76 | M2 | pekerja            | 0,39  | 1,428571429 |  |  | 3 | 3,210667 | = | 4 |
|   |                                                     |       |    | tukang besi        | 0,7   |             |  |  |   |          |   |   |
|   |                                                     |       |    | kepala tukang besi | 0,07  |             |  |  |   |          |   |   |
|   |                                                     |       |    | mandor             | 0,007 |             |  |  |   |          |   |   |
| 2 | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48 | M2 | pekerja            | 0,39  | 1,428571429 |  |  | 3 | 2,912    | = | 3 |
|   |                                                     |       |    | tukang besi        | 0,7   |             |  |  |   |          |   |   |
|   |                                                     |       |    | kepala tukang besi | 0,07  |             |  |  |   |          |   |   |
|   |                                                     |       |    | mandor             | 0,007 |             |  |  |   |          |   |   |

### D. Curtain Wall

|   |                      |   |    |                    |       |             |  |  |   |     |   |   |
|---|----------------------|---|----|--------------------|-------|-------------|--|--|---|-----|---|---|
| 1 | Curtain Wall ( CW2 ) | 1 | M2 | pekerja            | 0,390 | 1,428571429 |  |  | 1 | 0,7 | = | 1 |
|   |                      |   |    | tukang besi        | 0,700 |             |  |  |   |     |   |   |
|   |                      |   |    | kepala tukang besi | 0,070 |             |  |  |   |     |   |   |
|   |                      |   |    | mandor             | 0,007 |             |  |  |   |     |   |   |

### VII. Pekerjaan Langit-langit

|   |                                                   |         |    |                    |       |    |  |  |    |          |   |   |
|---|---------------------------------------------------|---------|----|--------------------|-------|----|--|--|----|----------|---|---|
| 1 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 1139,96 | m2 | Pekerja            | 0,100 | 10 |  |  | 16 | 7,124734 | = | 8 |
|   |                                                   |         |    | Tukang batu/tembok | 0,050 |    |  |  |    |          |   |   |
|   |                                                   |         |    | Kepala tukang      | 0,005 |    |  |  |    |          |   |   |
|   |                                                   |         |    | Mandor             | 0,005 |    |  |  |    |          |   |   |

### VIII. Pekerjaan Pengecatan

|   |                             |           |    |                    |       |             |  |  |   |          |   |    |
|---|-----------------------------|-----------|----|--------------------|-------|-------------|--|--|---|----------|---|----|
| 1 | Pengecatan dinding interior | 1393,3632 | m2 | Pekerja            | 0,020 | 15,87301587 |  |  | 8 | 10,97274 | = | 11 |
|   |                             |           |    | Tukang cat/pelitur | 0,063 |             |  |  |   |          |   |    |
|   |                             |           |    | Kepala tukang      | 0,006 |             |  |  |   |          |   |    |

|   |                              |          |    |                    |       |                 |  |  |    |              |   |   |  |
|---|------------------------------|----------|----|--------------------|-------|-----------------|--|--|----|--------------|---|---|--|
|   |                              |          |    | Mandor             | 0,003 |                 |  |  |    |              |   |   |  |
| 2 | Pengecatan dinding eksterior | 554,8584 | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 6  | 5,82601<br>3 | = | 6 |  |
|   |                              |          |    | Tukang cat/pelitur | 0,063 |                 |  |  |    |              |   |   |  |
|   |                              |          |    | Kepala tukang      | 0,006 |                 |  |  |    |              |   |   |  |
|   |                              |          |    | Mandor             | 0,003 |                 |  |  |    |              |   |   |  |
| 3 | Pengecatan plafon            | 1271     | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 10 | 8,0073       | = | 9 |  |
|   |                              |          |    | Tukang Cat         | 0,063 |                 |  |  |    |              |   |   |  |
|   |                              |          |    | Kepala Tukang      | 0,006 |                 |  |  |    |              |   |   |  |
|   |                              |          |    | Mandor             | 0,003 |                 |  |  |    |              |   |   |  |

### X. Pekerjaan Tata Udara

|   |                     |   |      |                |       |  |  |   |   |      |   |   |
|---|---------------------|---|------|----------------|-------|--|--|---|---|------|---|---|
| 1 | Unit AC Cassete 5PK | 9 | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 2,25 | = | 3 |
|   |                     |   |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |
|   |                     |   |      | Kepala Tukang  | 0,005 |  |  |   |   |      |   |   |
| 2 | Unit AC Cassete 4PK | 4 | Unit | Pekerja        | 0,050 |  |  | 2 | 2 | 1    | = | 1 |
|   |                     |   |      | Tukang Listrik | 0,500 |  |  |   |   |      |   |   |
|   |                     |   |      | Kepala Tukang  | 0,005 |  |  |   |   |      |   |   |

### X. Pekerjaan CCTV

|   |                |   |      |                         |       |  |  |                 |   |      |   |   |
|---|----------------|---|------|-------------------------|-------|--|--|-----------------|---|------|---|---|
| 1 | Kamera CCTV HD | 4 | Unit | Pembantu tukang listrik | 0,015 |  |  | 66,6666666<br>7 | 1 | 0,06 | = | 1 |
|   |                |   |      | Tukang listrik          | 0,015 |  |  |                 |   |      |   |   |
|   |                |   |      | Kepala tukang listrik   | 0,001 |  |  |                 |   |      |   |   |

|   |                                               |   |       |                |       |  |  |  |   |   |   |   |   |
|---|-----------------------------------------------|---|-------|----------------|-------|--|--|--|---|---|---|---|---|
|   |                                               |   |       | Mandor         | 0,001 |  |  |  |   |   |   |   |   |
| 2 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 4 | Titik | Pekerja        | 0,050 |  |  |  | 2 | 2 | 1 | = | 1 |
|   |                                               |   |       | Tukang Listrik | 0,500 |  |  |  |   |   |   |   |   |
|   |                                               |   |       | Kepala Tukang  | 0,005 |  |  |  |   |   |   |   |   |

### XI. Pekerjaan Sound System

|   |                                                              |      |       |                         |       |    |  |  |             |   |       |   |   |
|---|--------------------------------------------------------------|------|-------|-------------------------|-------|----|--|--|-------------|---|-------|---|---|
| 1 | Celling speaker 6 W                                          | 9    | Titik | Tukang Listrik          | 0,500 |    |  |  | 2           | 2 | 2,25  | = | 3 |
| 2 | Volume control                                               | 1,00 | Titik | Tukang Listrik          | 0,500 |    |  |  | 2           | 1 | 0,5   | = | 1 |
| 3 | Instalasi Celling speaker                                    | 11   | Unit  | Tukang Listrik          | 0,500 |    |  |  | 2           | 2 | 2,75  | = | 3 |
| 4 | Terminal Box                                                 | 1,00 | Unit  | Pembantu tukang listrik | 0,015 |    |  |  | 66,66666667 | 1 | 0,015 | = | 1 |
|   |                                                              |      |       | Tukang listrik          | 0,015 |    |  |  |             |   |       |   |   |
|   |                                                              |      |       | Kepala tukang listrik   | 0,001 |    |  |  |             |   |       |   |   |
|   |                                                              |      |       | Mandor                  | 0,001 |    |  |  |             |   |       |   |   |
| 5 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5,00 | m'    | Pembantu tukang listrik | 0,025 | 40 |  |  |             | 1 | 0,125 | = | 1 |
|   |                                                              |      |       | Tukang listrik          | 0,025 |    |  |  |             |   |       |   |   |
|   |                                                              |      |       | Kepala tukang listrik   | 0,017 |    |  |  |             |   |       |   |   |
|   |                                                              |      |       | Mandor                  | 0,014 |    |  |  |             |   |       |   |   |

### XII. Pekerjaan Fire Alarm

## INSTALASI LANTAI 5

| Peralatan Fixture |                                |      |      |                         |       |  |  |  |    |   |        |   |   |
|-------------------|--------------------------------|------|------|-------------------------|-------|--|--|--|----|---|--------|---|---|
| 1                 | - Conv. Optical Smoke Detector | 51   | pcs  | Pembantu tukang listrik | 0,025 |  |  |  | 40 | 2 | 0,6375 | = | 1 |
|                   |                                |      |      | Tukang listrik          | 0,025 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | Kepala tukang listrik   | 0,017 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | Mandor                  | 0,014 |  |  |  |    |   |        |   |   |
|                   | - Conv. Manual Break glass     | 2,00 | pcs  | pekerja                 | 0,050 |  |  |  | 2  | 1 | 1      | = | 1 |
|                   |                                |      |      | tukang listrik          | 0,500 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | kepala tukang           | 0,005 |  |  |  |    |   |        |   |   |
|                   | - Junction Box Fire Alarm      | 1,00 | pcs  | pekerja                 | 0,050 |  |  |  | 2  | 1 | 0,5    | = | 1 |
|                   |                                |      |      | tukang listrik          | 0,500 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | kepala tukang           | 0,005 |  |  |  |    |   |        |   |   |
|                   | - Remote Indicating Lamp       | 4,00 | pcs  | Pembantu tukang listrik | 0,025 |  |  |  | 40 | 1 | 0,1    | = | 1 |
|                   |                                |      |      | Tukang listrik          | 0,025 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | Kepala tukang listrik   | 0,017 |  |  |  |    |   |        |   |   |
|                   |                                |      |      | Mandor                  | 0,014 |  |  |  |    |   |        |   |   |
|                   | - Alarm Bell                   | 2,00 | unit | pekerja                 | 0,050 |  |  |  | 2  | 1 | 1      | = | 1 |
|                   |                                |      |      | tukang listrik          | 0,500 |  |  |  |    |   |        |   |   |

|                       |                                           |      |      |                         |       |  |  |  |                 |   |      |   |   |  |
|-----------------------|-------------------------------------------|------|------|-------------------------|-------|--|--|--|-----------------|---|------|---|---|--|
|                       |                                           |      |      | kepala tukang           | 0,005 |  |  |  |                 |   |      |   |   |  |
|                       | - Terminal Box 30 x 40 x 12               | 1,00 | unit | pekerja                 | 0,050 |  |  |  |                 |   |      |   |   |  |
|                       |                                           |      |      | tukang listrik          | 0,500 |  |  |  | 2               | 1 | 0,5  | = | 1 |  |
|                       |                                           |      |      | kepala tukang           | 0,005 |  |  |  |                 |   |      |   |   |  |
|                       | Pekerjaan Instalasi                       |      |      |                         |       |  |  |  |                 |   |      |   |   |  |
|                       | -Detector dan manual break glass          |      |      | Pembantu tukang listrik | 0,150 |  |  |  |                 |   |      |   |   |  |
|                       | NYA Cable 2x1,5mm + Pipa Conduit 20mm     | 54   | ttk  | Tukang listrik          | 0,150 |  |  |  | 6,66666666<br>7 | 3 | 2,7  | = | 3 |  |
| Kepala tukang listrik |                                           |      |      | 0,180                   |       |  |  |  |                 |   |      |   |   |  |
| Mandor                |                                           |      |      | 0,150                   |       |  |  |  |                 |   |      |   |   |  |
|                       |                                           |      |      |                         |       |  |  |  |                 |   |      |   |   |  |
|                       | - Junction Box Fire Alarm                 |      |      | Pembantu tukang listrik | 0,150 |  |  |  |                 |   |      |   |   |  |
|                       | NYA cable 2 x 1,5 mm + pipa conduit 20 mm | 1,00 | ttk  | Tukang listrik          | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |  |
| Kepala tukang listrik |                                           |      |      | 0,180                   |       |  |  |  |                 |   |      |   |   |  |
| Mandor                |                                           |      |      | 0,150                   |       |  |  |  |                 |   |      |   |   |  |
|                       |                                           |      |      |                         |       |  |  |  |                 |   |      |   |   |  |
|                       | - Remote Indicating Lamp                  |      |      | Pembantu tukang listrik | 0,150 |  |  |  |                 |   |      |   |   |  |
|                       | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    | 5    | ttk  | Tukang listrik          | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,75 | = | 1 |  |
| Kepala tukang listrik |                                           |      |      | 0,180                   |       |  |  |  |                 |   |      |   |   |  |
| Mandor                |                                           |      |      | 0,150                   |       |  |  |  |                 |   |      |   |   |  |
|                       |                                           |      |      |                         |       |  |  |  |                 |   |      |   |   |  |



XIII. Pekerjaan Alat Pemadam Kebakaran

|   |                                                |       |      |                  |       |                 |  |  |   |              |   |   |
|---|------------------------------------------------|-------|------|------------------|-------|-----------------|--|--|---|--------------|---|---|
| 1 | BSP Sch.40<br>c/w fitting2 &<br>Material bantu | 81,83 | m'   | Pekerja          | 0,054 | 4               |  |  | 4 | 5,11437<br>5 | = | 6 |
|   | dia. 3 "                                       |       |      | Tukang           | 0,090 |                 |  |  |   |              |   |   |
|   | Kepala<br>tukang                               |       |      | 0,009            |       |                 |  |  |   |              |   |   |
|   | Tukang las                                     |       |      | 0,250            |       |                 |  |  |   |              |   |   |
|   | Tukang cat                                     |       |      | 0,160            |       |                 |  |  |   |              |   |   |
|   | Mandor                                         |       |      | 0,005            |       |                 |  |  |   |              |   |   |
| 2 | Hydrant Box<br>Indoor, type B<br>c/w           | 2     | unit | Pekerja          | 0,180 | 5,55555555<br>6 |  |  | 1 | 0,36         | = | 1 |
|   | -hydrant<br>valve dia.<br>1 1/2"               |       |      | Tukang           | 0,180 |                 |  |  |   |              |   |   |
|   | -fire hose<br>1 1/2"x30 m                      |       |      | Kepala<br>tukang | 0,040 |                 |  |  |   |              |   |   |
|   | -hose rack<br>dia. 1 1/2"                      |       |      | Mandor           | 0,040 |                 |  |  |   |              |   |   |
|   | -Spray<br>nozzle dia.<br>1 1/2"                |       |      |                  |       |                 |  |  |   |              |   |   |
|   | -kaca dan<br>kunci                             |       |      |                  |       |                 |  |  |   |              |   |   |
| 3 | Gate valve dia.<br>2 1/2" , OS&Y<br>type       | 1     | bh   | Pekerja          | 0,054 | 4               |  |  | 1 | 0,25         | = | 1 |
|   |                                                |       |      | Tukang           | 0,090 |                 |  |  |   |              |   |   |
|   |                                                |       |      | Kepala<br>Tukang | 0,009 |                 |  |  |   |              |   |   |
|   |                                                |       |      | Tukang las       | 0,250 |                 |  |  |   |              |   |   |
|   |                                                |       |      | Tukang cat       | 0,100 |                 |  |  |   |              |   |   |

|   |                          |   |      |               |       |  |  |                  |   |     |   |   |  |
|---|--------------------------|---|------|---------------|-------|--|--|------------------|---|-----|---|---|--|
|   |                          |   |      | Mandor        | 0,005 |  |  |                  |   |     |   |   |  |
| 4 | - Fire Extinguisher 6 kg | 2 | unit | pekerja       | 0,150 |  |  | 6,666666666<br>7 | 1 | 0,3 | = | 1 |  |
|   |                          |   |      | tukang batu   | 0,150 |  |  |                  |   |     |   |   |  |
|   |                          |   |      | kepala tukang | 0,180 |  |  |                  |   |     |   |   |  |
|   |                          |   |      | mandor        | 0,150 |  |  |                  |   |     |   |   |  |

### B. Instalasi Sprinkler

| BSP Sch.40 c/w fitting2 & Material bantu |              |     |    |                 |       |                 |  |  |  |   |        |   |   |
|------------------------------------------|--------------|-----|----|-----------------|-------|-----------------|--|--|--|---|--------|---|---|
| 1                                        | dia. 1 "     | 164 | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  |  | 5 | 2,952  | = | 3 |
|                                          |              |     |    | Tukang          | 0,090 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Kepala tukang   | 0,009 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Mandor          | 0,027 |                 |  |  |  |   |        |   |   |
|                                          | dia. 1 1/4 " | 79  | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  |  | 4 | 1,7775 | = | 2 |
|                                          |              |     |    | Tukang          | 0,090 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Kepala tukang   | 0,009 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Mandor          | 0,027 |                 |  |  |  |   |        |   |   |
|                                          | dia. 2 "     | 8,5 | m' | Pembantu tukang | 0,054 | 11,1111111<br>1 |  |  |  | 1 | 0,765  | = | 1 |
|                                          |              |     |    | Tukang          | 0,090 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Kepala tukang   | 0,009 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Mandor          | 0,027 |                 |  |  |  |   |        |   |   |
|                                          | dia. 2 1/2 " | 8   | m' | Pekerja         | 0,054 | 4               |  |  |  | 4 | 0,5    | = | 1 |
|                                          |              |     |    | Tukang          | 0,090 |                 |  |  |  |   |        |   |   |
|                                          |              |     |    | Kepala tukang   | 0,009 |                 |  |  |  |   |        |   |   |

|   |                                         |      |      |                |       |   |  |  |   |   |              |   |   |
|---|-----------------------------------------|------|------|----------------|-------|---|--|--|---|---|--------------|---|---|
|   |                                         |      |      | Tukang las     | 0,250 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Tukang cat     | 0,100 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Mandor         | 0,005 |   |  |  |   |   |              |   |   |
|   | dia. 3 "                                | 63,5 | m'   | Pekerja        | 0,054 | 4 |  |  |   | 3 | 5,29166<br>7 | = | 6 |
|   |                                         |      |      | Tukang         | 0,090 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Kepala tukang  | 0,009 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Tukang las     | 0,250 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Tukang cat     | 0,160 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | Mandor         | 0,005 |   |  |  |   |   |              |   |   |
| 2 | Sprinkler head dia. 1/2", 68'C, pendent | 69   | bh   | pekerja        | 0,050 |   |  |  | 2 | 6 | 5,75         | = | 6 |
|   |                                         |      |      | tukang listrik | 0,500 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | kepala tukang  | 0,005 |   |  |  |   |   |              |   |   |
| 3 | Branch Control Valve dia. 3"            | 1    | unit | pekerja        | 0,050 |   |  |  | 2 | 1 | 0,5          | = | 1 |
|   |                                         |      |      | tukang listrik | 0,500 |   |  |  |   |   |              |   |   |
|   |                                         |      |      | kepala tukang  | 0,005 |   |  |  |   |   |              |   |   |

### XIII. Pekerjaan Sanitair & Sanitasi

|   |                     |    |    |                    |       |  |  |  |                 |   |              |   |   |
|---|---------------------|----|----|--------------------|-------|--|--|--|-----------------|---|--------------|---|---|
| 1 | Pasang Klosed Duduk | 10 | Bh | Pekerja            | 3,300 |  |  |  | 0,30303030<br>3 | 9 | 3,66666<br>7 | = | 4 |
|   |                     |    |    | Tukang batu/tembok | 1,100 |  |  |  |                 |   |              |   |   |
|   |                     |    |    | Kepala tukang      | 0,001 |  |  |  |                 |   |              |   |   |
|   |                     |    |    | Mandor             | 0,160 |  |  |  |                 |   |              |   |   |
| 2 |                     | 4  | Bh | Pekerja            | 1,200 |  |  |  |                 | 3 |              | = | 2 |

|   |                                |    |    |                    |       |  |  |  |                         |   |                      |   |   |
|---|--------------------------------|----|----|--------------------|-------|--|--|--|-------------------------|---|----------------------|---|---|
|   | Pasang Wastafel single         |    |    | Tukang batu/tembok | 1,450 |  |  |  | 0,68965517 <sub>2</sub> |   | 1,93333 <sub>3</sub> |   |   |
|   |                                |    |    | Kepala tukang      | 0,150 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | Mandor             | 0,100 |  |  |  |                         |   |                      |   |   |
| 3 | Pasang Jet washer              | 10 | Bh | pekerja            | 1,200 |  |  |  | 0,68965517 <sub>2</sub> | 3 | 4,83333 <sub>3</sub> | = | 5 |
|   |                                |    |    | tukang batu        | 1,450 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | kepala tukang      | 0,150 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | mandor             | 0,100 |  |  |  |                         |   |                      |   |   |
| 4 | Pasang Kran Diameter Air 1/2 " | 14 | Bh | Pekerja            | 0,010 |  |  |  | 10                      | 3 | 0,46666 <sub>7</sub> | = | 1 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | Mandor             | 0,005 |  |  |  |                         |   |                      |   |   |
| 5 | Pasang Floor Drain             | 10 | Bh | Pekerja            | 0,010 |  |  |  | 10                      | 1 | 1                    | = | 1 |
|   |                                |    |    | Tukang batu/tembok | 0,100 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | Kepala tukang      | 0,010 |  |  |  |                         |   |                      |   |   |
|   |                                |    |    | Mandor             | 0,005 |  |  |  |                         |   |                      |   |   |

### A. Instalasi Air Bersih

|   |                                             |       |    |                    |       |  |  |  |                         |   |        |   |   |
|---|---------------------------------------------|-------|----|--------------------|-------|--|--|--|-------------------------|---|--------|---|---|
| 1 | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 40,14 | m' | Pekerja            | 0,036 |  |  |  |                         |   |        |   |   |
|   |                                             |       |    | Tukang batu/tembok | 0,060 |  |  |  | 16,6666666 <sub>7</sub> | 2 | 1,2042 | = | 2 |
|   |                                             |       |    | Kepala tukang      | 0,006 |  |  |  |                         |   |        |   |   |
|   |                                             |       |    | Mandor             | 0,002 |  |  |  |                         |   |        |   |   |

## B. Instalasi Air Kotor

|   |                             |        |      |                    |       |  |  |  |                 |   |        |   |   |
|---|-----------------------------|--------|------|--------------------|-------|--|--|--|-----------------|---|--------|---|---|
| 1 | Pasang Cleant Out 3"        | 2      | Unit | Pembantu tukang    | 0,400 |  |  |  | 2,5             | 1 | 0,8    | = | 1 |
|   |                             |        |      | Tukang             | 0,200 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Kepala tukang      | 0,020 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Mandor             | 0,020 |  |  |  |                 |   |        |   |   |
| 2 | Pasang Pipa air kotor Ø 3 " | 16,520 | m'   | Pekerja            | 0,081 |  |  |  | 7,40740740<br>7 | 1 | 2,2302 | = | 3 |
|   |                             |        |      | Tukang batu/tembok | 0,135 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Kepala tukang      | 0,014 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Mandor             | 0,004 |  |  |  |                 |   |        |   |   |
| 3 | Pasang Pipa air kotor Ø 4 " | 35,42  | m'   | Pekerja            | 0,081 |  |  |  | 7,40740740<br>7 | 3 | 1,5939 | = | 2 |
|   |                             |        |      | Tukang batu/tembok | 0,135 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Kepala tukang      | 0,014 |  |  |  |                 |   |        |   |   |
|   |                             |        |      | Mandor             | 0,004 |  |  |  |                 |   |        |   |   |

## XI. Pekerjaan Listrik

|   |                                                                  |       |        |                |       |  |  |  |                 |   |              |   |   |
|---|------------------------------------------------------------------|-------|--------|----------------|-------|--|--|--|-----------------|---|--------------|---|---|
| 1 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories | 47,08 | batang | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 4 | 1,76562<br>5 | = | 2 |
|   |                                                                  |       |        | tukang listrik | 0,150 |  |  |  |                 |   |              |   |   |
|   |                                                                  |       |        | kepala tukang  | 0,030 |  |  |  |                 |   |              |   |   |
|   |                                                                  |       |        | mandor         | 0,030 |  |  |  |                 |   |              |   |   |
| 2 | Pas. instalasi Cable ladder 20x10x240 cm                         | 47,08 | batang | pekerja        | 0,150 |  |  |  | 6,66666666<br>7 | 4 | 1,76562<br>5 | = | 2 |
|   |                                                                  |       |        | tukang listrik | 0,150 |  |  |  |                 |   |              |   |   |

|   |                                                     |       |       |                |       |  |  |                 |    |              |   |        |  |
|---|-----------------------------------------------------|-------|-------|----------------|-------|--|--|-----------------|----|--------------|---|--------|--|
|   | lengkap dengan assesories                           |       |       | kepala tukang  | 0,030 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | mandor         | 0,030 |  |  |                 |    |              |   |        |  |
| 3 | Pasang Instalasi Titik Lampu                        | 164   | Titik | Tukang Listrik | 1,000 |  |  | 1               | 15 | 10,9333<br>3 | = | 1<br>1 |  |
| 4 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                | 3,00  | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1  | 0,45         | = | 1      |  |
|   |                                                     |       |       | tukang listrik | 0,150 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | kepala tukang  | 0,030 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | mandor         | 0,030 |  |  |                 |    |              |   |        |  |
| 5 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w     | 14,00 | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 2  | 1,05         | = | 2      |  |
|   |                                                     |       |       | tukang listrik | 0,150 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | kepala tukang  | 0,030 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | mandor         | 0,030 |  |  |                 |    |              |   |        |  |
| 6 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W        | 2,00  | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1  | 0,3          | = | 1      |  |
|   |                                                     |       |       | tukang listrik | 0,150 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | kepala tukang  | 0,030 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | mandor         | 0,030 |  |  |                 |    |              |   |        |  |
| 7 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT | 2,00  | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1  | 0,3          | = | 1      |  |
|   |                                                     |       |       | tukang listrik | 0,150 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | kepala tukang  | 0,030 |  |  |                 |    |              |   |        |  |
|   |                                                     |       |       | mandor         | 0,030 |  |  |                 |    |              |   |        |  |

|    |                                                                |      |       |                            |       |  |  |  |                 |   |        |   |   |
|----|----------------------------------------------------------------|------|-------|----------------------------|-------|--|--|--|-----------------|---|--------|---|---|
| 8  | LAMPU TK<br>CG T8 2X36,<br>T-LED<br>ESSENTIAL<br>2X16W<br>SAVY | 1,00 | Titik | pekerja                    | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15   | = | 1 |
|    |                                                                |      |       | tukang listrik             | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | kepala tukang              | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | mandor                     | 0,030 |  |  |  |                 |   |        |   |   |
| 9  | RMO T 2X36,<br>T-LED<br>ESSENTIAL<br>2X16W<br>SAVY             | 131  | Titik | pekerja                    | 0,150 |  |  |  | 6,66666666<br>7 | 4 | 4,9125 | = | 5 |
|    |                                                                |      |       | tukang listrik             | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | kepala tukang              | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | mandor                     | 0,030 |  |  |  |                 |   |        |   |   |
| 10 | RMO T 2X36,<br>T-LED<br>ESSENTIAL<br>2X16W<br>SAVY+Batt        | 3,00 | Titik | pekerja                    | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,45   | = | 1 |
|    |                                                                |      |       | tukang listrik             | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | kepala tukang              | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | mandor                     | 0,030 |  |  |  |                 |   |        |   |   |
| 11 | Pasang Saklar<br>Tunggal                                       | 24   | Titik | pekerja                    | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 3,6    | = | 4 |
|    |                                                                |      |       | tukang listrik             | 0,150 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | kepala tukang              | 0,030 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | mandor                     | 0,030 |  |  |  |                 |   |        |   |   |
| 12 | Instalasi stop<br>kontak                                       | 23   | Titik | Pembantu<br>tukang listrik | 0,025 |  |  |  | 40              | 2 | 0,2875 | = | 1 |
|    |                                                                |      |       | Tukang listrik             | 0,025 |  |  |  |                 |   |        |   |   |
|    |                                                                |      |       | Kepala tukang listrik      | 0,017 |  |  |  |                 |   |        |   |   |



|    |                            |    |       |                |       |  |  |  |   |   |        |   |   |  |
|----|----------------------------|----|-------|----------------|-------|--|--|--|---|---|--------|---|---|--|
|    |                            |    |       | Mandor         | 0,014 |  |  |  |   |   |        |   |   |  |
| 13 | Pasang Stop Kontak 1 Phase | 23 | Titik | Pekerja        | 0,050 |  |  |  | 2 | 8 | 1,4375 | = | 2 |  |
|    |                            |    |       | Tukang listrik | 0,500 |  |  |  |   |   |        |   |   |  |
|    |                            |    |       | Kepala Tukang  | 0,005 |  |  |  |   |   |        |   |   |  |

## Lantai 6

| NO | JENIS PEKERJAAN | VOLUME | TENAGA KERJA |                | PRODUKTIVITAS        |                      |                      |                                  | JUMLAH TK | DURASI |
|----|-----------------|--------|--------------|----------------|----------------------|----------------------|----------------------|----------------------------------|-----------|--------|
|    |                 |        | JENIS        | KOEFISIEN (OH) | (m <sup>1</sup> /OH) | (m <sup>2</sup> /OH) | (m <sup>3</sup> /OH) | (Set/OH)<br>(Unit/OH)<br>(Kg/OH) | (/hari)   |        |

### I. Pekerjaan Pasangan

|    |                                                   |         |    |                    |       |  |                 |                 |  |    |                 |   |    |
|----|---------------------------------------------------|---------|----|--------------------|-------|--|-----------------|-----------------|--|----|-----------------|---|----|
| 1  | Mengurug pasir bawah lantai setebal 5 cm          | 90,30   | m3 | Pekerja            | 0,300 |  |                 | 3,33333333<br>3 |  | 9  | 3,01014583<br>3 | = | 4  |
|    |                                                   |         |    | Mandor             | 0,010 |  |                 |                 |  |    |                 |   |    |
| 11 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 1010,63 | m2 | Pekerja            | 0,300 |  | 3,33333333<br>3 |                 |  | 30 | 10,106258       | = | 11 |
|    |                                                   |         |    | Tukang batu/tembok | 0,100 |  |                 |                 |  |    |                 |   |    |
|    |                                                   |         |    | Kepala tukang      | 0,010 |  |                 |                 |  |    |                 |   |    |
|    |                                                   |         |    | Mandor             | 0,015 |  |                 |                 |  |    |                 |   |    |

### II. Pekerjaan Beton

|   |                       |        |    |         |       |  |  |                 |  |    |        |   |    |
|---|-----------------------|--------|----|---------|-------|--|--|-----------------|--|----|--------|---|----|
| 1 | Pembuatan Plat Lantai | 192,48 | m3 |         |       |  |  | 0,40816326<br>5 |  | 48 | 9,8245 | = | 10 |
|   |                       |        |    | Pekerja | 1,650 |  |  |                 |  |    |        |   |    |



|   |                            |      |    |                        |       |                 |   |       |   |   |  |  |  |  |  |  |
|---|----------------------------|------|----|------------------------|-------|-----------------|---|-------|---|---|--|--|--|--|--|--|
|   |                            |      |    | Tukang besi/besi beton | 0,020 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Kepala tukang          | 0,060 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Mandor                 | 0,009 |                 |   |       |   |   |  |  |  |  |  |  |
| 3 | Kolom uk. 30 x 30 cm (K 2) | 0,72 | m3 |                        |       | 0,40816326<br>5 | 2 | 0,882 | = | 1 |  |  |  |  |  |  |
|   | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Tukang batu/tembok     | 0,275 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Kepala Tukang          | 0,028 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Mandor                 | 0,083 |                 |   |       |   |   |  |  |  |  |  |  |
|   | Pembesian besi beton polos |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |  |  |
|   | Pembesian besi beton ulir  |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |  |  |
|   |                            |      |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |  |  |  |

|   |                            |     |    |                        |       |                 |   |                 |   |   |  |  |  |  |  |  |  |
|---|----------------------------|-----|----|------------------------|-------|-----------------|---|-----------------|---|---|--|--|--|--|--|--|--|
|   | Bekisting untuk kolom      |     |    | Tukang kayu            | 0,330 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Kepala Tukang          | 0,033 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Mandor                 | 0,033 |                 |   |                 |   |   |  |  |  |  |  |  |  |
| 4 | Kolom uk. 40 x 40 cm (K 3) | 6,4 | m3 |                        |       | 0,40816326<br>5 | 6 | 2,61333333<br>3 | = | 3 |  |  |  |  |  |  |  |
|   | Mengecor beton K-300       |     |    | Pekerja                | 1,650 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Tukang batu/tembok     | 0,275 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Kepala Tukang          | 0,028 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Mandor                 | 0,083 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   | Pembesian besi beton polos |     |    | Pekerja                | 0,070 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Tukang besi/besi beton | 0,070 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Kepala Tukang          | 0,007 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Mandor                 | 0,004 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   | Pembesian besi beton ulir  |     |    | Pekerja                | 0,070 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Tukang besi/besi beton | 0,070 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Kepala Tukang          | 0,007 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Mandor                 | 0,004 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   | Bekisting untuk kolom      |     |    | Pekerja                | 0,660 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Tukang kayu            | 0,330 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    | Kepala Tukang          | 0,033 |                 |   |                 |   |   |  |  |  |  |  |  |  |
|   |                            |     |    |                        |       |                 |   |                 |   |   |  |  |  |  |  |  |  |

|        |                            |       |    |                        |       |                 |    |                 |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|----|-----------------|---|---|--|--|--|
|        | Kolom uk. 50 x 50 cm (K 4) |       |    | Mandor                 | 0,033 |                 |    |                 |   |   |  |  |  |
| 5      | Mengecor beton K-300       | 32    | m3 | Pekerja                | 1,650 | 0,40816326<br>5 | 15 | 5,22666666<br>7 | = | 6 |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Pekerja                | 0,070 |                 |    |                 |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |                 |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |                 |   |   |  |  |  |
|        | Bekisting untuk kolom      |       |    | Pekerja                | 0,660 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |    |                 |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |                 |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |    |                 |   |   |  |  |  |
|        |                            |       |    |                        |       |                 |    |                 |   |   |  |  |  |
| 6      | Balok Lantai uk.11 x 20 cm | 4,246 | m3 |                        |       | 0,40816326<br>5 | 6  | 1,73378333<br>3 | = | 2 |  |  |  |
|        |                            |       |    | Pekerja                | 1,650 |                 |    |                 |   |   |  |  |  |



|   |                            |       |    |                        |       |  |  |             |  |  |    |        |     |
|---|----------------------------|-------|----|------------------------|-------|--|--|-------------|--|--|----|--------|-----|
|   |                            |       |    | Kepala Tukang          | 0,028 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Mandor                 | 0,083 |  |  |             |  |  |    |        |     |
|   | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Kepala Tukang          | 0,007 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Mandor                 | 0,004 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Pekerja                | 0,070 |  |  |             |  |  |    |        |     |
|   | Pembesian besi beton ulir  |       |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Kepala Tukang          | 0,007 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Mandor                 | 0,004 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Pekerja                | 0,660 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Tukang kayu            | 0,330 |  |  |             |  |  |    |        |     |
|   | Bekisting untuk balok      |       |    | Kepala Tukang          | 0,033 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Mandor                 | 0,033 |  |  |             |  |  |    |        |     |
| 8 | Balok Type B.2             | 48,64 | m3 |                        |       |  |  |             |  |  |    |        |     |
|   | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Tukang batu/tembok     | 0,275 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Kepala Tukang          | 0,028 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Mandor                 | 0,083 |  |  |             |  |  |    |        |     |
|   |                            |       |    | Pekerja                | 0,070 |  |  |             |  |  |    |        |     |
|   |                            |       |    |                        |       |  |  | 0,408163265 |  |  | 20 | 5,9584 | = 6 |



|               |                            |       |    |                        |       |                 |  |  |    |        |   |   |  |
|---------------|----------------------------|-------|----|------------------------|-------|-----------------|--|--|----|--------|---|---|--|
|               | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |        |   |   |  |
|               | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |        |   |   |  |
|               | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Tukang kayu            | 0,330 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Kepala Tukang          | 0,033 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Mandor                 | 0,033 |                 |  |  |    |        |   |   |  |
| 9             | Balok Type B.3             | 63,6  | m3 |                        |       | 0,40816326<br>5 |  |  | 25 | 6,2328 | = | 7 |  |
|               |                            |       |    | Pekerja                | 1,650 |                 |  |  |    |        |   |   |  |
|               | Mengecor beton K-300       |       |    | Tukang batu/tembok     | 0,275 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Kepala Tukang          | 0,028 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Mandor                 | 0,083 |                 |  |  |    |        |   |   |  |
|               |                            |       |    | Pekerja                | 0,070 |                 |  |  |    |        |   |   |  |
|               | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |        |   |   |  |
| Kepala Tukang |                            | 0,007 |    |                        |       |                 |  |  |    |        |   |   |  |

|    |                            |       |    |                        |       |  |  |   |            |  |    |       |     |
|----|----------------------------|-------|----|------------------------|-------|--|--|---|------------|--|----|-------|-----|
|    |                            |       |    | Mandor                 | 0,004 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Pekerja                | 0,070 |  |  |   |            |  |    |       |     |
|    | Pembesian besi beton ulir  |       |    | Tukang besi/besi beton | 0,070 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Kepala Tukang          | 0,007 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Mandor                 | 0,004 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Pekerja                | 0,660 |  |  |   |            |  |    |       |     |
|    | Bekisting untuk balok      |       |    | Tukang kayu            | 0,330 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Kepala Tukang          | 0,033 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Mandor                 | 0,033 |  |  |   |            |  |    |       |     |
| 10 | Balok Type B.4             | 23,76 | m3 |                        |       |  |  |   |            |  |    |       |     |
|    |                            |       |    | Pekerja                | 1,650 |  |  |   |            |  |    |       |     |
|    | Mengecor beton K-300       |       |    | Tukang batu/tembok     | 0,275 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Kepala Tukang          | 0,028 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Mandor                 | 0,083 |  |  |   | 0,40816326 |  |    |       |     |
|    |                            |       |    | Pekerja                | 0,070 |  |  | 5 |            |  | 12 | 4,851 | = 5 |
|    | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Kepala Tukang          | 0,007 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Mandor                 | 0,004 |  |  |   |            |  |    |       |     |
|    |                            |       |    | Pekerja                | 0,070 |  |  |   |            |  |    |       |     |

|                           |                            |                        |       |                        |                        |             |    |          |   |   |       |
|---------------------------|----------------------------|------------------------|-------|------------------------|------------------------|-------------|----|----------|---|---|-------|
| 11                        | Pembesian besi beton ulir  | 15,21                  | m3    | Tukang besi/besi beton | 0,070                  | 0,408163265 | 12 | 3,105375 | = | 4 |       |
|                           | Bekisting untuk balok      |                        |       | Kepala Tukang          | 0,007                  |             |    |          |   |   |       |
|                           |                            |                        |       | Mandor                 | 0,004                  |             |    |          |   |   |       |
|                           |                            |                        |       | Pekerja                | 0,660                  |             |    |          |   |   |       |
|                           |                            |                        |       | Tukang kayu            | 0,330                  |             |    |          |   |   |       |
|                           |                            |                        |       | Kepala Tukang          | 0,033                  |             |    |          |   |   |       |
|                           |                            |                        |       | Mandor                 | 0,033                  |             |    |          |   |   |       |
|                           | Balok Type B.5             |                        |       | Mengecor beton K-300   | Pekerja                |             |    |          |   |   | 1,650 |
|                           | Pembesian besi beton polos |                        |       |                        | Tukang batu/tembok     |             |    |          |   |   | 0,275 |
|                           |                            |                        |       |                        | Kepala Tukang          |             |    |          |   |   | 0,028 |
|                           |                            |                        |       |                        | Mandor                 |             |    |          |   |   | 0,083 |
|                           |                            |                        |       |                        | Pekerja                |             |    |          |   |   | 0,070 |
|                           |                            |                        |       |                        | Tukang besi/besi beton |             |    |          |   |   | 0,070 |
|                           |                            |                        |       |                        | Kepala Tukang          |             |    |          |   |   | 0,007 |
| Mandor                    |                            | 0,004                  |       |                        |                        |             |    |          |   |   |       |
| Pekerja                   |                            | 0,070                  |       |                        |                        |             |    |          |   |   |       |
| Pembesian besi beton ulir |                            | Tukang besi/besi beton | 0,070 |                        |                        |             |    |          |   |   |       |
|                           | Kepala Tukang              | 0,007                  |       |                        |                        |             |    |          |   |   |       |

|    |                            |       |    |                        |       |                 |    |         |   |   |  |  |  |
|----|----------------------------|-------|----|------------------------|-------|-----------------|----|---------|---|---|--|--|--|
|    |                            |       |    | Mandor                 | 0,004 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Pekerja                | 0,660 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,033 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,033 |                 |    |         |   |   |  |  |  |
| 12 | Balok Type B.6             | 31,62 | m3 |                        |       | 0,40816326<br>5 | 20 | 3,87345 | = | 4 |  |  |  |
|    | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,028 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,083 |                 |    |         |   |   |  |  |  |
|    | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |    |         |   |   |  |  |  |
|    | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |    |         |   |   |  |  |  |
|    | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |    |         |   |   |  |  |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                 |    |         |   |   |  |  |  |

|        |                            |       |    |                        |       |                 |    |         |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|----|---------|---|---|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                 |    |         |   |   |  |  |  |
| 13     | Balok Type B.7             | 17,82 | m3 |                        |       | 0,40816326<br>5 | 12 | 3,63825 | = | 4 |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |    |         |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |         |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |         |   |   |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |    |         |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |         |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |    |         |   |   |  |  |  |

|               |                            |       |    |                        |       |                 |   |         |   |   |  |  |
|---------------|----------------------------|-------|----|------------------------|-------|-----------------|---|---------|---|---|--|--|
| 14            | Balok Type B.8             | 5,16  | m3 |                        |       | 0,40816326<br>5 | 8 | 1,58025 | = | 2 |  |  |
|               | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |         |   |   |  |  |
|               |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |         |   |   |  |  |
|               |                            |       |    | Kepala Tukang          | 0,028 |                 |   |         |   |   |  |  |
|               |                            |       |    | Mandor                 | 0,083 |                 |   |         |   |   |  |  |
|               | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |
|               |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |
|               |                            |       |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |
|               |                            |       |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |
|               | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |
|               |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |
|               |                            |       |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |
|               |                            |       |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |
|               | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |         |   |   |  |  |
| Tukang kayu   |                            | 0,330 |    |                        |       |                 |   |         |   |   |  |  |
| Kepala Tukang |                            | 0,033 |    |                        |       |                 |   |         |   |   |  |  |
| Mandor        |                            | 0,033 |    |                        |       |                 |   |         |   |   |  |  |
| 15            | Balok Type B.9             | 3,12  | m3 |                        |       | 0,40816326<br>5 | 4 | 1,911   | = | 2 |  |  |
|               |                            |       |    | Pekerja                | 1,650 |                 |   |         |   |   |  |  |





|    |                            |     |    |                        |                    |                 |  |   |       |   |   |       |
|----|----------------------------|-----|----|------------------------|--------------------|-----------------|--|---|-------|---|---|-------|
|    | Pembesian besi beton polos |     |    | Mandor                 | 0,083              |                 |  |   |       |   |   |       |
|    |                            |     |    | Pekerja                | 0,070              |                 |  |   |       |   |   |       |
|    |                            |     |    | Tukang besi/besi beton | 0,070              |                 |  |   |       |   |   |       |
|    |                            |     |    | Kepala Tukang          | 0,007              |                 |  |   |       |   |   |       |
|    |                            |     |    | Mandor                 | 0,004              |                 |  |   |       |   |   |       |
|    | Pembesian besi beton ulir  |     |    | Pekerja                | 0,070              |                 |  |   |       |   |   |       |
|    |                            |     |    | Tukang besi/besi beton | 0,070              |                 |  |   |       |   |   |       |
|    |                            |     |    | Kepala Tukang          | 0,007              |                 |  |   |       |   |   |       |
|    |                            |     |    | Mandor                 | 0,004              |                 |  |   |       |   |   |       |
|    | Bekisting untuk balok      |     |    | Pekerja                | 0,660              |                 |  |   |       |   |   |       |
|    |                            |     |    | Tukang kayu            | 0,330              |                 |  |   |       |   |   |       |
|    |                            |     |    | Kepala Tukang          | 0,033              |                 |  |   |       |   |   |       |
|    |                            |     |    | Mandor                 | 0,033              |                 |  |   |       |   |   |       |
| 17 | Balok Type B.11            | 3,6 | M3 |                        |                    | 0,40816326<br>5 |  | 5 | 1,764 | = | 2 |       |
|    |                            |     |    | Pekerja                | 1,650              |                 |  |   |       |   |   |       |
|    | Mengecor beton K-300       |     |    |                        | Tukang batu/tembok |                 |  |   |       |   |   | 0,275 |
|    |                            |     |    |                        | Kepala Tukang      |                 |  |   |       |   |   | 0,028 |
|    |                            |     |    |                        | Mandor             |                 |  |   |       |   |   | 0,083 |
|    |                            |     |    |                        | Pekerja            |                 |  |   |       |   |   | 0,070 |



|    |                           |      |    |                            |                        |                 |  |   |        |   |   |       |  |  |
|----|---------------------------|------|----|----------------------------|------------------------|-----------------|--|---|--------|---|---|-------|--|--|
|    |                           |      |    | Mandor                     | 0,004                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Pekerja                    | 0,070                  |                 |  |   |        |   |   |       |  |  |
|    | Pembesian besi beton ulir |      |    | Tukang besi/besi beton     | 0,070                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Kepala Tukang              | 0,007                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Mandor                     | 0,004                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Pekerja                    | 0,660                  |                 |  |   |        |   |   |       |  |  |
|    | Bekisting untuk balok     |      |    | Tukang kayu                | 0,330                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Kepala Tukang              | 0,033                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Mandor                     | 0,033                  |                 |  |   |        |   |   |       |  |  |
| 19 | Balok Type B.13           | 4,86 | M3 |                            |                        | 0,40816326<br>5 |  | 6 | 1,9845 | = | 2 |       |  |  |
|    |                           |      |    | Pekerja                    | 1,650                  |                 |  |   |        |   |   |       |  |  |
|    | Mengecor beton K-300      |      |    | Tukang batu/tembok         | 0,275                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Kepala Tukang              | 0,028                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Mandor                     | 0,083                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Pekerja                    | 0,070                  |                 |  |   |        |   |   |       |  |  |
|    |                           |      |    | Pembesian besi beton polos | Tukang besi/besi beton |                 |  |   |        |   |   | 0,070 |  |  |
|    |                           |      |    |                            | Kepala Tukang          |                 |  |   |        |   |   | 0,007 |  |  |
|    |                           |      |    |                            | Mandor                 |                 |  |   |        |   |   | 0,004 |  |  |
|    |                           |      |    |                            | Pekerja                |                 |  |   |        |   |   | 0,070 |  |  |

|                           |                            |       |    |                        |       |             |   |       |   |   |                        |       |             |   |       |   |   |
|---------------------------|----------------------------|-------|----|------------------------|-------|-------------|---|-------|---|---|------------------------|-------|-------------|---|-------|---|---|
| 20                        | Pembesian besi beton ulir  | 0,56  | M3 | Tukang besi/besi beton | 0,070 | 0,408163265 | 2 | 0,686 | = | 1 |                        |       |             |   |       |   |   |
|                           | Bekisting untuk balok      |       |    | Kepala Tukang          | 0,007 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           |                            |       |    | Mandor                 | 0,004 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           |                            |       |    | Pekerja                | 0,660 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           |                            |       |    | Tukang kayu            | 0,330 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           |                            |       |    | Kepala Tukang          | 0,033 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           |                            |       |    | Mandor                 | 0,033 |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           | Balok Type B.14            |       |    | 0,56                   | M3    |             |   |       |   |   | Pekerja                | 1,650 | 0,408163265 | 2 | 0,686 | = | 1 |
|                           | Mengecor beton K-300       |       |    |                        |       |             |   |       |   |   | Tukang batu/tembok     | 0,275 |             |   |       |   |   |
|                           |                            |       |    |                        |       |             |   |       |   |   | Kepala Tukang          | 0,028 |             |   |       |   |   |
|                           |                            |       |    |                        |       |             |   |       |   |   | Mandor                 | 0,083 |             |   |       |   |   |
|                           |                            |       |    |                        |       |             |   |       |   |   | Pekerja                | 0,070 |             |   |       |   |   |
|                           |                            |       |    |                        |       |             |   |       |   |   | Tukang besi/besi beton | 0,070 |             |   |       |   |   |
|                           | Pembesian besi beton polos |       |    |                        |       |             |   |       |   |   | Kepala Tukang          | 0,007 |             |   |       |   |   |
| Mandor                    |                            | 0,004 |    |                        |       |             |   |       |   |   |                        |       |             |   |       |   |   |
| Pekerja                   |                            | 0,070 |    |                        |       |             |   |       |   |   |                        |       |             |   |       |   |   |
| Pembesian besi beton ulir | Tukang besi/besi beton     | 0,070 |    |                        |       |             |   |       |   |   |                        |       |             |   |       |   |   |
|                           | Kepala Tukang              | 0,007 |    |                        |       |             |   |       |   |   |                        |       |             |   |       |   |   |

|                       |                            |       |    |                        |       |                 |   |       |   |   |  |  |  |  |  |
|-----------------------|----------------------------|-------|----|------------------------|-------|-----------------|---|-------|---|---|--|--|--|--|--|
|                       |                            |       |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Tukang kayu            | 0,330 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Kepala Tukang          | 0,033 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Mandor                 | 0,033 |                 |   |       |   |   |  |  |  |  |  |
| 21                    | Balok Type B.15            | 0,96  | M3 |                        |       | 0,40816326<br>5 | 3 | 0,784 | = | 1 |  |  |  |  |  |
|                       |                            |       |    |                        |       |                 |   |       |   |   |  |  |  |  |  |
|                       | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Kepala Tukang          | 0,028 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Mandor                 | 0,083 |                 |   |       |   |   |  |  |  |  |  |
|                       | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |  |
|                       | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |  |  |
|                       |                            |       |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |  |  |
| Bekisting untuk balok | Pekerja                    | 0,660 |    |                        |       |                 |   |       |   |   |  |  |  |  |  |
|                       | Tukang kayu                | 0,330 |    |                        |       |                 |   |       |   |   |  |  |  |  |  |

|        |                            |       |    |                        |       |                 |   |        |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|---|--------|---|---|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                 |   |        |   |   |  |  |  |
| 22     | Balok Type B.20            | 5,76  | M3 |                        |       | 0,40816326<br>5 | 5 | 2,8224 | = | 3 |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |   |        |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |   |        |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |   |        |   |   |  |  |  |

|        |                            |       |    |                        |       |  |                 |  |   |       |   |   |  |  |
|--------|----------------------------|-------|----|------------------------|-------|--|-----------------|--|---|-------|---|---|--|--|
| 23     | Balok Type B.27            | 6     | M3 |                        |       |  |                 |  |   |       |   |   |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,083 |  |                 |  |   |       |   |   |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |  |                 |  |   |       |   |   |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |  |                 |  |   |       |   |   |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |  |                 |  |   |       |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |  |                 |  |   |       |   |   |  |  |
| Mandor |                            | 0,033 |    |                        |       |  |                 |  |   |       |   |   |  |  |
|        | BALOK ATAP                 |       |    |                        |       |  |                 |  |   |       |   |   |  |  |
| 24     | Balok Type B.14            | 2,24  | M3 |                        |       |  | 0,40816326<br>5 |  | 4 | 1,372 | = | 2 |  |  |



|    |                            |      |    |                        |       |  |  |  |             |  |   |           |
|----|----------------------------|------|----|------------------------|-------|--|--|--|-------------|--|---|-----------|
|    | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |  |  |  |             |  |   |           |
|    |                            |      |    | Tukang batu/tembok     | 0,275 |  |  |  |             |  |   |           |
|    |                            |      |    | Kepala Tukang          | 0,028 |  |  |  |             |  |   |           |
|    |                            |      |    | Mandor                 | 0,083 |  |  |  |             |  |   |           |
|    | Pembesian besi beton polos |      |    | Pekerja                | 0,070 |  |  |  |             |  |   |           |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |  |  |  |             |  |   |           |
|    |                            |      |    | Kepala Tukang          | 0,007 |  |  |  |             |  |   |           |
|    |                            |      |    | Mandor                 | 0,004 |  |  |  |             |  |   |           |
|    | Pembesian besi beton ulir  |      |    | Pekerja                | 0,070 |  |  |  |             |  |   |           |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |  |  |  |             |  |   |           |
|    |                            |      |    | Kepala Tukang          | 0,007 |  |  |  |             |  |   |           |
|    |                            |      |    | Mandor                 | 0,004 |  |  |  |             |  |   |           |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,660 |  |  |  |             |  |   |           |
|    |                            |      |    | Tukang kayu            | 0,330 |  |  |  |             |  |   |           |
|    |                            |      |    | Kepala Tukang          | 0,033 |  |  |  |             |  |   |           |
|    |                            |      |    | Mandor                 | 0,033 |  |  |  |             |  |   |           |
| 25 | Balok Type B.15            | 0,36 | M3 |                        |       |  |  |  |             |  |   |           |
|    | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |  |  |  |             |  |   |           |
|    |                            |      |    | Tukang batu/tembok     | 0,275 |  |  |  |             |  |   |           |
|    |                            |      |    |                        |       |  |  |  | 0,408163265 |  | 1 | 0,882 = 1 |

|    |                            |      |    |                        |                        |                 |    |       |   |   |                    |       |  |  |  |  |
|----|----------------------------|------|----|------------------------|------------------------|-----------------|----|-------|---|---|--------------------|-------|--|--|--|--|
|    |                            |      |    | Kepala Tukang          | 0,028                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    | Mandor                 | 0,083                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    | Pembesian besi beton polos |      |    | Pekerja                | 0,070                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    | Pembesian besi beton ulir  |      |    | Kepala Tukang          | 0,007                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    |                        | Mandor                 | 0,004           |    |       |   |   |                    |       |  |  |  |  |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,070                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    |                        | Tukang besi/besi beton | 0,070           |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    |                        | Mandor                 | 0,004           |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    | Pekerja                | 0,660                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    |                        | Tukang kayu            | 0,330           |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,033                  |                 |    |       |   |   |                    |       |  |  |  |  |
|    |                            |      |    |                        | Mandor                 | 0,033           |    |       |   |   |                    |       |  |  |  |  |
| 26 | Balok Type B.16            | 40,8 | M3 |                        |                        | 0,40816326<br>5 | 20 | 4,998 | = | 5 |                    |       |  |  |  |  |
|    | Mengecor beton K-300       |      |    |                        |                        |                 |    |       |   |   | Pekerja            | 1,650 |  |  |  |  |
|    |                            |      |    |                        |                        |                 |    |       |   |   | Tukang batu/tembok | 0,275 |  |  |  |  |
|    |                            |      |    |                        |                        |                 |    |       |   |   | Kepala Tukang      | 0,028 |  |  |  |  |
|    |                            |      |    |                        |                        |                 |    |       |   |   | Mandor             | 0,083 |  |  |  |  |
|    |                            |      |    |                        |                        |                 |    |       |   |   | Pekerja            | 0,070 |  |  |  |  |

|                            |                            |       |    |                        |       |             |    |         |   |   |
|----------------------------|----------------------------|-------|----|------------------------|-------|-------------|----|---------|---|---|
| 27                         | Pembesian besi beton polos | 59,85 | M3 | Tukang besi/besi beton | 0,070 | 0,408163265 | 30 | 4,88775 | = | 5 |
|                            | Pembesian besi beton ulir  |       |    | Kepala Tukang          | 0,007 |             |    |         |   |   |
|                            |                            |       |    | Mandor                 | 0,004 |             |    |         |   |   |
|                            |                            |       |    | Pekerja                | 0,070 |             |    |         |   |   |
|                            | Bekisting untuk balok      |       |    | Tukang besi/besi beton | 0,070 |             |    |         |   |   |
|                            |                            |       |    | Kepala Tukang          | 0,007 |             |    |         |   |   |
|                            |                            |       |    | Mandor                 | 0,004 |             |    |         |   |   |
|                            |                            |       |    | Pekerja                | 0,660 |             |    |         |   |   |
|                            |                            |       |    | Tukang kayu            | 0,330 |             |    |         |   |   |
|                            | Balok Type B.17            |       |    | Kepala Tukang          | 0,033 |             |    |         |   |   |
|                            |                            |       |    | Mandor                 | 0,033 |             |    |         |   |   |
|                            |                            |       |    | Pekerja                | 1,650 |             |    |         |   |   |
| Mengecor beton K-300       | Tukang batu/tembok         | 0,275 |    |                        |       |             |    |         |   |   |
|                            | Kepala Tukang              | 0,028 |    |                        |       |             |    |         |   |   |
|                            | Mandor                     | 0,083 |    |                        |       |             |    |         |   |   |
|                            | Pekerja                    | 0,070 |    |                        |       |             |    |         |   |   |
| Pembesian besi beton polos | Tukang besi/besi beton     | 0,070 |    |                        |       |             |    |         |   |   |
|                            | Kepala Tukang              | 0,007 |    |                        |       |             |    |         |   |   |

|                              |                              |      |    |                                                                                           |       |                 |   |           |   |   |
|------------------------------|------------------------------|------|----|-------------------------------------------------------------------------------------------|-------|-----------------|---|-----------|---|---|
| 28                           | Pembesian<br>besi beton ulir | 9,45 | M3 | Mandor                                                                                    | 0,004 | 0,40816326<br>5 | 8 | 2,8940625 | = | 3 |
|                              |                              |      |    | Pekerja                                                                                   | 0,070 |                 |   |           |   |   |
|                              |                              |      |    | Tukang<br>besi/besi<br>beton                                                              | 0,070 |                 |   |           |   |   |
|                              |                              |      |    | Kepala<br>Tukang                                                                          | 0,007 |                 |   |           |   |   |
|                              |                              |      |    | Mandor                                                                                    | 0,004 |                 |   |           |   |   |
|                              | Bekisting<br>untuk balok     |      |    | Pekerja                                                                                   | 0,660 |                 |   |           |   |   |
|                              |                              |      |    | Tukang<br>kayu                                                                            | 0,330 |                 |   |           |   |   |
|                              |                              |      |    | Kepala<br>Tukang                                                                          | 0,033 |                 |   |           |   |   |
|                              |                              |      |    | Mandor                                                                                    | 0,033 |                 |   |           |   |   |
|                              |                              |      |    | Balok Type<br>B.18<br><br>Mengecor<br>beton K-300<br><br>Pembesian<br>besi beton<br>polos | 9,45  |                 |   |           |   |   |
| Pekerja                      | 1,650                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Tukang<br>batu/tembo<br>k    | 0,275                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Kepala<br>Tukang             | 0,028                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Mandor                       | 0,083                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Pekerja                      | 0,070                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Tukang<br>besi/besi<br>beton | 0,070                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Kepala<br>Tukang             | 0,007                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Mandor                       | 0,004                        |      |    |                                                                                           |       |                 |   |           |   |   |
| Pekerja                      | 0,070                        |      |    |                                                                                           |       |                 |   |           |   |   |

|    |                            |       |    |                        |       |                 |  |  |    |                 |   |   |  |
|----|----------------------------|-------|----|------------------------|-------|-----------------|--|--|----|-----------------|---|---|--|
|    | Pembesian besi beton ulir  |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |                 |   |   |  |
|    | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Tukang kayu            | 0,330 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,033 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Mandor                 | 0,033 |                 |  |  |    |                 |   |   |  |
| 29 | Balok Type B.19            | 53,76 | M3 |                        |       | 0,40816326<br>5 |  |  | 22 | 5,98690909<br>1 | = | 6 |  |
|    |                            |       |    | Pekerja                | 1,650 |                 |  |  |    |                 |   |   |  |
|    | Mengecor beton K-300       |       |    | Tukang batu/tembok     | 0,275 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,028 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Mandor                 | 0,083 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Pekerja                | 0,070 |                 |  |  |    |                 |   |   |  |
|    | Pembesian besi beton polos |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Mandor                 | 0,004 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Pekerja                | 0,070 |                 |  |  |    |                 |   |   |  |
|    | Pembesian besi beton ulir  |       |    | Tukang besi/besi beton | 0,070 |                 |  |  |    |                 |   |   |  |
|    |                            |       |    | Kepala Tukang          | 0,007 |                 |  |  |    |                 |   |   |  |

|    |                            |      |    |                        |       |                 |   |       |   |   |  |  |  |
|----|----------------------------|------|----|------------------------|-------|-----------------|---|-------|---|---|--|--|--|
|    |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Tukang kayu            | 0,330 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,033 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Mandor                 | 0,033 |                 |   |       |   |   |  |  |  |
| 30 | Balok Type B.20            | 4,32 | M3 |                        |       | 0,40816326<br>5 | 6 | 1,764 | = | 2 |  |  |  |
|    |                            |      |    |                        |       |                 |   |       |   |   |  |  |  |
|    | Mengecor beton K-300       |      |    | Pekerja                | 1,650 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Tukang batu/tembok     | 0,275 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,028 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Mandor                 | 0,083 |                 |   |       |   |   |  |  |  |
|    | Pembesian besi beton polos |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |
|    | Pembesian besi beton ulir  |      |    | Pekerja                | 0,070 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Kepala Tukang          | 0,007 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Mandor                 | 0,004 |                 |   |       |   |   |  |  |  |
|    | Bekisting untuk balok      |      |    | Pekerja                | 0,660 |                 |   |       |   |   |  |  |  |
|    |                            |      |    | Tukang kayu            | 0,330 |                 |   |       |   |   |  |  |  |

|        |                            |       |    |                        |       |                 |    |       |   |   |  |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|----|-------|---|---|--|--|--|
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,033 |                 |    |       |   |   |  |  |  |
| 31     | Balok Type B.21            | 21,24 | M3 |                        |       | 0,40816326<br>5 | 14 | 3,717 | = | 4 |  |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |    |       |   |   |  |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |       |   |   |  |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |    |       |   |   |  |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |    |       |   |   |  |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |    |       |   |   |  |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |    |       |   |   |  |  |  |



|        |                            |       |    |                        |       |                 |   |                 |   |   |  |  |
|--------|----------------------------|-------|----|------------------------|-------|-----------------|---|-----------------|---|---|--|--|
| 32     | Balok Type B.22            | 1,8   | M3 |                        |       | 0,40816326<br>5 | 3 | 1,47            | = | 2 |  |  |
|        | Mengecor beton K-300       |       |    | Pekerja                | 1,650 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Tukang batu/tembok     | 0,275 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,028 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,083 |                 |   |                 |   |   |  |  |
|        | Pembesian besi beton polos |       |    | Pekerja                | 0,070 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |                 |   |   |  |  |
|        | Pembesian besi beton ulir  |       |    | Pekerja                | 0,070 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Tukang besi/besi beton | 0,070 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,007 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Mandor                 | 0,004 |                 |   |                 |   |   |  |  |
|        | Bekisting untuk balok      |       |    | Pekerja                | 0,660 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Tukang kayu            | 0,330 |                 |   |                 |   |   |  |  |
|        |                            |       |    | Kepala Tukang          | 0,033 |                 |   |                 |   |   |  |  |
| Mandor |                            | 0,033 |    |                        |       |                 |   |                 |   |   |  |  |
| 33     | Balok Type B.26            | 4,48  | M3 |                        |       | 0,40816326<br>5 | 6 | 1,82933333<br>3 | = | 2 |  |  |
|        |                            |       |    | Pekerja                | 1,650 |                 |   |                 |   |   |  |  |



|    |                            |     |    |                        |                    |                 |  |   |      |   |   |       |  |  |
|----|----------------------------|-----|----|------------------------|--------------------|-----------------|--|---|------|---|---|-------|--|--|
|    | Pembesian besi beton polos |     |    | Mandor                 | 0,083              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Pekerja                | 0,070              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Tukang besi/besi beton | 0,070              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Kepala Tukang          | 0,007              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Mandor                 | 0,004              |                 |  |   |      |   |   |       |  |  |
|    | Pembesian besi beton ulir  |     |    | Pekerja                | 0,070              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Tukang besi/besi beton | 0,070              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Kepala Tukang          | 0,007              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Mandor                 | 0,004              |                 |  |   |      |   |   |       |  |  |
|    | Bekisting untuk balok      |     |    | Pekerja                | 0,660              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Tukang kayu            | 0,330              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Kepala Tukang          | 0,033              |                 |  |   |      |   |   |       |  |  |
|    |                            |     |    | Mandor                 | 0,033              |                 |  |   |      |   |   |       |  |  |
| 35 | Balok Type B.30            | 1,8 | M3 |                        |                    | 0,40816326<br>5 |  | 3 | 1,47 | = | 2 |       |  |  |
|    |                            |     |    | Pekerja                | 1,650              |                 |  |   |      |   |   |       |  |  |
|    | Mengecor beton K-300       |     |    |                        | Tukang batu/tembok |                 |  |   |      |   |   | 0,275 |  |  |
|    |                            |     |    |                        | Kepala Tukang      |                 |  |   |      |   |   | 0,028 |  |  |
|    |                            |     |    |                        | Mandor             |                 |  |   |      |   |   | 0,083 |  |  |
|    |                            |     |    |                        | Pekerja            |                 |  |   |      |   |   | 0,070 |  |  |

|                            |                            |                        |       |                        |       |             |   |       |   |   |
|----------------------------|----------------------------|------------------------|-------|------------------------|-------|-------------|---|-------|---|---|
| 36                         | Pembesian besi beton polos | 6,66                   | M3    | Tukang besi/besi beton | 0,070 | 0,408163265 | 9 | 1,813 | = | 2 |
|                            | Pembesian besi beton ulir  |                        |       | Kepala Tukang          | 0,007 |             |   |       |   |   |
|                            |                            |                        |       | Mandor                 | 0,004 |             |   |       |   |   |
|                            |                            |                        |       | Pekerja                | 0,070 |             |   |       |   |   |
|                            | Bekisting untuk balok      |                        |       | Tukang besi/besi beton | 0,070 |             |   |       |   |   |
|                            |                            |                        |       | Kepala Tukang          | 0,007 |             |   |       |   |   |
|                            |                            |                        |       | Mandor                 | 0,004 |             |   |       |   |   |
|                            |                            |                        |       | Pekerja                | 0,660 |             |   |       |   |   |
|                            | Balok Type B.31            |                        |       | Tukang kayu            | 0,330 |             |   |       |   |   |
|                            |                            |                        |       | Kepala Tukang          | 0,033 |             |   |       |   |   |
|                            |                            |                        |       | Mandor                 | 0,033 |             |   |       |   |   |
|                            | Mengecor beton K-300       |                        |       | Pekerja                | 1,650 |             |   |       |   |   |
| Tukang batu/tembok         |                            | 0,275                  |       |                        |       |             |   |       |   |   |
| Kepala Tukang              |                            | 0,028                  |       |                        |       |             |   |       |   |   |
| Mandor                     |                            | 0,083                  |       |                        |       |             |   |       |   |   |
| Pekerja                    |                            | 0,070                  |       |                        |       |             |   |       |   |   |
| Pembesian besi beton polos |                            | Tukang besi/besi beton | 0,070 |                        |       |             |   |       |   |   |
|                            |                            | Kepala Tukang          | 0,007 |                        |       |             |   |       |   |   |

|    |                                                      |      |               |                        |       |                 |   |      |   |   |                    |       |  |  |  |  |  |
|----|------------------------------------------------------|------|---------------|------------------------|-------|-----------------|---|------|---|---|--------------------|-------|--|--|--|--|--|
| 37 | Pembesian besi beton ulir                            | 7,20 | m3            | Mandor                 | 0,004 | 0,40816326<br>5 | 6 | 2,94 | = | 3 |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Pekerja                | 0,070 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Tukang besi/besi beton | 0,070 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Kepala Tukang          | 0,007 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Mandor                 | 0,004 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Pekerja                | 0,660 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    | Bekisting untuk balok                                |      |               | Tukang kayu            | 0,330 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Kepala Tukang          | 0,033 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Mandor                 | 0,033 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm |      |               |                        |       |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    | Mengecor beton K-300                                 |      |               |                        |       |                 |   |      |   |   | Pekerja            | 1,650 |  |  |  |  |  |
|    |                                                      |      |               |                        |       |                 |   |      |   |   | Tukang batu/tembok | 0,275 |  |  |  |  |  |
|    |                                                      |      | Kepala Tukang | 0,028                  |       |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      | Mandor        | 0,083                  |       |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      | Pekerja       | 0,070                  |       |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    | Pembesian besi beton polos                           |      |               | Tukang besi/besi beton | 0,070 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Kepala Tukang          | 0,007 |                 |   |      |   |   |                    |       |  |  |  |  |  |
|    |                                                      |      |               | Mandor                 | 0,004 |                 |   |      |   |   |                    |       |  |  |  |  |  |

|    |                                              |      |    |                        |       |  |  |             |  |  |  |   |             |
|----|----------------------------------------------|------|----|------------------------|-------|--|--|-------------|--|--|--|---|-------------|
|    | Pembesian besi beton ulir                    |      |    | Pekerja                | 0,070 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Kepala Tukang          | 0,007 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Mandor                 | 0,004 |  |  |             |  |  |  |   |             |
|    | Bekisting untuk balok                        |      |    | Pekerja                | 0,660 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Tukang kayu            | 0,330 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Kepala Tukang          | 0,033 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Mandor                 | 0,033 |  |  |             |  |  |  |   |             |
| 38 | Balok uk.15 x 30 cm untuk Dinding Box Lift A | 0,86 | m3 |                        |       |  |  |             |  |  |  |   |             |
|    | Mengecor beton K-300                         |      |    | Pekerja                | 1,650 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Tukang batu/tembok     | 0,275 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Kepala Tukang          | 0,028 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Mandor                 | 0,083 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Pekerja                | 0,070 |  |  |             |  |  |  |   |             |
|    | Pembesian besi beton polos                   |      |    | Tukang besi/besi beton | 0,070 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Kepala Tukang          | 0,007 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Mandor                 | 0,004 |  |  |             |  |  |  |   |             |
|    |                                              |      |    | Pekerja                | 0,070 |  |  |             |  |  |  |   |             |
|    |                                              |      |    |                        |       |  |  | 0,408163265 |  |  |  | 3 | 0,69825 = 1 |

|    |                                                      |      |    |                        |       |                 |   |        |   |   |  |  |  |
|----|------------------------------------------------------|------|----|------------------------|-------|-----------------|---|--------|---|---|--|--|--|
|    | Pembesian besi beton ulir                            |      |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |
|    | Bekisting untuk balok                                |      |    | Pekerja                | 0,660 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Tukang kayu            | 0,330 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,033 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,033 |                 |   |        |   |   |  |  |  |
| 39 | Balok uk.15 x 30 cm untuk Dinding Box Lift<br>BARANG | 0,54 | m3 |                        |       | 0,40816326<br>5 | 2 | 0,6615 | = | 1 |  |  |  |
|    |                                                      |      |    | Pekerja                | 1,650 |                 |   |        |   |   |  |  |  |
|    | Mengecor beton K-300                                 |      |    | Tukang batu/tembok     | 0,275 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,028 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,083 |                 |   |        |   |   |  |  |  |
|    | Pembesian besi beton polos                           |      |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Tukang besi/besi beton | 0,070 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Kepala Tukang          | 0,007 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Mandor                 | 0,004 |                 |   |        |   |   |  |  |  |
|    |                                                      |      |    | Pekerja                | 0,070 |                 |   |        |   |   |  |  |  |



|                           |                             |        |    |                        |       |                 |    |                 |   |   |
|---------------------------|-----------------------------|--------|----|------------------------|-------|-----------------|----|-----------------|---|---|
| 40                        | Pembesian besi beton ulir   | 153,74 | m3 | Tukang besi/besi beton | 0,070 | 0,40816326<br>5 | 63 | 5,97862222<br>2 | = | 6 |
|                           |                             |        |    | Kepala Tukang          | 0,007 |                 |    |                 |   |   |
|                           |                             |        |    | Mandor                 | 0,004 |                 |    |                 |   |   |
|                           | Bekisting untuk balok       |        |    | Pekerja                | 0,660 |                 |    |                 |   |   |
|                           |                             |        |    | Tukang kayu            | 0,330 |                 |    |                 |   |   |
|                           |                             |        |    | Kepala Tukang          | 0,033 |                 |    |                 |   |   |
|                           |                             |        |    | Mandor                 | 0,033 |                 |    |                 |   |   |
|                           | Plat meja beton tebal 10 cm |        |    |                        |       |                 |    |                 |   |   |
|                           | Mengecor beton K-300        |        |    | Pekerja                | 1,650 |                 |    |                 |   |   |
|                           |                             |        |    | Tukang batu/tembok     | 0,275 |                 |    |                 |   |   |
|                           |                             |        |    | Kepala Tukang          | 0,028 |                 |    |                 |   |   |
|                           |                             |        |    | Mandor                 | 0,083 |                 |    |                 |   |   |
|                           | Pembesian besi beton polos  |        |    | Pekerja                | 0,070 |                 |    |                 |   |   |
|                           |                             |        |    | Tukang besi/besi beton | 0,070 |                 |    |                 |   |   |
|                           | Kepala Tukang               | 0,007  |    |                        |       |                 |    |                 |   |   |
|                           | Mandor                      | 0,004  |    |                        |       |                 |    |                 |   |   |
| Pembesian besi beton ulir | Pekerja                     | 0,070  |    |                        |       |                 |    |                 |   |   |
|                           | Tukang besi/besi beton      | 0,070  |    |                        |       |                 |    |                 |   |   |

|    |                                                             |      |    |                        |       |  |  |            |  |   |            |   |   |
|----|-------------------------------------------------------------|------|----|------------------------|-------|--|--|------------|--|---|------------|---|---|
|    |                                                             |      |    | Kepala Tukang          | 0,007 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Mandor                 | 0,004 |  |  |            |  |   |            |   |   |
|    | Bekisting untuk plat                                        |      |    | Pekerja                | 0,660 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Tukang kayu            | 0,330 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Kepala Tukang          | 0,033 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Mandor                 | 0,033 |  |  |            |  |   |            |   |   |
| 41 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 3,33 | m3 |                        |       |  |  | 0,40816326 |  | 5 | 1,63225125 | = | 2 |
|    | Mengecor beton K-300                                        |      |    | Pekerja                | 1,650 |  |  | 5          |  |   |            |   |   |
|    |                                                             |      |    | Tukang batu/tembok     | 0,275 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Kepala Tukang          | 0,028 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Mandor                 | 0,083 |  |  |            |  |   |            |   |   |
|    | Pembesian besi beton polos                                  |      |    | Pekerja                | 0,070 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Tukang besi/besi beton | 0,070 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Kepala Tukang          | 0,007 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Mandor                 | 0,004 |  |  |            |  |   |            |   |   |
|    | Pembesian besi beton ulir                                   |      |    | Pekerja                | 0,070 |  |  |            |  |   |            |   |   |
|    |                                                             |      |    | Tukang besi/besi beton | 0,070 |  |  |            |  |   |            |   |   |

|    |                                           |      |    |                        |       |                 |   |         |   |   |  |  |  |
|----|-------------------------------------------|------|----|------------------------|-------|-----------------|---|---------|---|---|--|--|--|
|    |                                           |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |  |
|    | Bekisting untuk plat                      |      |    | Pekerja                | 0,660 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Tukang kayu            | 0,330 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Kepala Tukang          | 0,033 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Mandor                 | 0,033 |                 |   |         |   |   |  |  |  |
| 42 | Plat Tangga Utama dan Darurat Tebal 15 cm | 7,15 | m3 |                        |       | 0,40816326<br>5 | 6 | 2,91795 | = | 3 |  |  |  |
|    |                                           |      |    | Pekerja                | 1,650 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Tukang batu/tembok     | 0,275 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Kepala Tukang          | 0,028 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Mandor                 | 0,083 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |  |  |
|    |                                           |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |  |  |
|    | Mengecor beton K-300                      |      |    |                        |       |                 |   |         |   |   |  |  |  |
|    | Pembesian besi beton polos                |      |    |                        |       |                 |   |         |   |   |  |  |  |
|    | Pembesian besi beton ulir                 |      |    |                        |       |                 |   |         |   |   |  |  |  |

|    |                                                         |      |    |                        |       |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|----|---------------------------------------------------------|------|----|------------------------|-------|-----------------|---|---------|---|---|--|---------|-------|--|--|--|--|--|--|
|    | Bekisting untuk plat                                    |      |    | Pekerja                | 0,660 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Tukang kayu            | 0,330 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,033 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,033 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
| 43 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 7,05 | m3 |                        |       | 0,40816326<br>5 | 6 | 2,87875 | = | 3 |  |         |       |  |  |  |  |  |  |
|    | Mengecor beton K-300                                    |      |    | Pekerja                | 1,650 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Tukang batu/tembok     | 0,275 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,028 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,083 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    | Pembesian besi beton polos                              |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    | Pembesian besi beton ulir                               |      |    | Pekerja                | 0,070 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Tukang besi/besi beton | 0,070 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Kepala Tukang          | 0,007 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    | Mandor                 | 0,004 |                 |   |         |   |   |  |         |       |  |  |  |  |  |  |
|    |                                                         |      |    |                        |       |                 |   |         |   |   |  | Pekerja | 0,660 |  |  |  |  |  |  |

|                                              |                                                  |           |    |                    |       |  |            |  |  |    |            |   |    |
|----------------------------------------------|--------------------------------------------------|-----------|----|--------------------|-------|--|------------|--|--|----|------------|---|----|
|                                              | Bekisting untuk plat                             |           |    | Tukang kayu        | 0,330 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Kepala Tukang      | 0,033 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Mandor             | 0,033 |  |            |  |  |    |            |   |    |
| 44                                           | Waterprofing plat atap                           | 1477,44   | m2 | Pekerja            | 0,025 |  | 10         |  |  | 20 | 7,3872     | = | 8  |
|                                              |                                                  |           |    | Tukang Cat         | 0,100 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Kepala Tukang      | 0,010 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Mandor             | 0,003 |  |            |  |  |    |            |   |    |
| <b>III. Pekerjaan Plesteran dan Benangan</b> |                                                  |           |    |                    |       |  |            |  |  |    |            |   |    |
| 1                                            | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr  | 1529,0782 | m2 | Pekerja            | 0,300 |  | 3,33333333 |  |  | 24 | 19,1134775 | = | 20 |
|                                              |                                                  |           |    | Tukang batu/tembok | 0,150 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Kepala tukang      | 0,015 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Mandor             | 0,015 |  |            |  |  |    |            |   |    |
| 2                                            | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr | 702,7334  | m2 | Pekerja            | 0,300 |  | 3,33333333 |  |  | 30 | 7,027334   | = | 8  |
|                                              |                                                  |           |    | Tukang batu/tembok | 0,150 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Kepala tukang      | 0,015 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Mandor             | 0,015 |  |            |  |  |    |            |   |    |
| 3                                            | Pekerjaan acian interior                         | 1529,0782 | m2 | Pekerja            | 0,200 |  | 5          |  |  | 20 | 15,290782  | = | 16 |
|                                              |                                                  |           |    | Tukang batu/tembok | 0,100 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Kepala tukang      | 0,010 |  |            |  |  |    |            |   |    |
|                                              |                                                  |           |    | Mandor             | 0,010 |  |            |  |  |    |            |   |    |

|                             |                                                 |                |    |                    |       |                 |  |  |    |                 |   |    |
|-----------------------------|-------------------------------------------------|----------------|----|--------------------|-------|-----------------|--|--|----|-----------------|---|----|
| 4                           | Pekerjaan acian eksterior                       | 702,7334       | m2 | Pekerja            | 0,200 | 5               |  |  | 30 | 4,68488933<br>3 | = | 5  |
|                             |                                                 |                |    | Tukang batu/tembok | 0,100 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Kepala tukang      | 0,010 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Mandor             | 0,010 |                 |  |  |    |                 |   |    |
| 5                           | Pekerjaan benangan interior spesi 1 Pc : 2 Psr  | 463,56         | m1 | Pekerja            | 0,133 | 7,50187546<br>9 |  |  | 12 | 5,149379        | = | 6  |
|                             |                                                 |                |    | Tukang batu/tembok | 0,067 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Kepala tukang      | 0,007 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Mandor             | 0,007 |                 |  |  |    |                 |   |    |
| 6                           | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr | 244,12         | m1 | Pekerja            | 0,133 | 7,50187546<br>9 |  |  | 12 | 2,71176633<br>3 | = | 3  |
|                             |                                                 |                |    | Tukang batu/tembok | 0,067 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Kepala tukang      | 0,007 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Mandor             | 0,007 |                 |  |  |    |                 |   |    |
| <b>IV. Pekerjaan Lantai</b> |                                                 |                |    |                    |       |                 |  |  |    |                 |   |    |
| 1                           | Pasang Keramik Lantai 60 x 60                   | 1300,7212<br>5 | m2 | Pekerja            | 0,900 | 1,11111111<br>1 |  |  | 60 | 19,5108187<br>5 | = | 20 |
|                             |                                                 |                |    | Tukang batu/tembok | 0,450 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Kepala tukang      | 0,045 |                 |  |  |    |                 |   |    |
|                             |                                                 |                |    | Mandor             | 0,045 |                 |  |  |    |                 |   |    |
| 2                           | Pasang Keramik Lantai 30 x 30                   | 32,745         | m2 | Pekerja            | 0,700 | 1,42857142<br>9 |  |  | 10 | 2,29215         | = | 3  |
|                             |                                                 |                |    | Tukang batu/tembok | 0,350 |                 |  |  |    |                 |   |    |

|   |                                               |        |    |                    |       |             |  |  |    |             |   |   |  |
|---|-----------------------------------------------|--------|----|--------------------|-------|-------------|--|--|----|-------------|---|---|--|
|   |                                               |        |    | Kepala tukang      | 0,035 |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Mandor             | 0,035 |             |  |  |    |             |   |   |  |
| 3 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC | 23,125 | m2 | Pekerja            | 0,700 | 1,428571429 |  |  | 8  | 2,0234375   | = | 3 |  |
|   |                                               |        |    | Tukang batu/tembok | 0,350 |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Kepala tukang      | 0,035 |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Mandor             | 0,035 |             |  |  |    |             |   |   |  |
| 4 | Pasang Keramik Dinding 30 x 60 (KM/WC)        | 76,00  | m2 | Pekerja            | 0,9   | 1,111111111 |  |  | 16 | 4,275       | = | 5 |  |
|   |                                               |        |    | Tukang             | 0,45  |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Kepala Tukang      | 0,045 |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Mandor             | 0,045 |             |  |  |    |             |   |   |  |
| 5 | Pasang Batu Alam                              | 23,33  | m2 | Pekerja            | 0,62  | 1,612903226 |  |  | 7  | 2,066371429 | = | 3 |  |
|   |                                               |        |    | Tukang             | 0,35  |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Kepala Tukang      | 0,035 |             |  |  |    |             |   |   |  |
|   |                                               |        |    | Mandor             | 0,03  |             |  |  |    |             |   |   |  |

## V. Pekerjaan Pintu dan Jendela Aluminium dan Partisi

### A.. Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen

|   |                    |       |      |                  |       |             |  |  |   |       |   |   |  |
|---|--------------------|-------|------|------------------|-------|-------------|--|--|---|-------|---|---|--|
| 1 | Pas. Kusen Type J2 | 28,00 | Unit | Pekerja          | 0,043 | 23,25581395 |  |  | 2 | 0,602 | = | 1 |  |
|   |                    |       |      | Tukang Alumunium | 0,043 |             |  |  |   |       |   |   |  |
|   |                    |       |      | Kepala Tukang    | 0,004 |             |  |  |   |       |   |   |  |
|   |                    |       |      | Mandor           | 0,002 |             |  |  |   |       |   |   |  |



|   |                        |       |      |                         |       |  |  |                 |   |       |   |   |
|---|------------------------|-------|------|-------------------------|-------|--|--|-----------------|---|-------|---|---|
| 2 | Pas. Kusen<br>Type J3  | 2,00  | Unit | Pekerja                 | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,086 | = | 1 |
|   |                        |       |      | Tukang<br>Aluminiu<br>m | 0,043 |  |  |                 |   |       |   |   |
|   |                        |       |      | Kepala<br>Tukang        | 0,004 |  |  |                 |   |       |   |   |
|   |                        |       |      | Mandor                  | 0,002 |  |  |                 |   |       |   |   |
| 3 | Pas. Kusen<br>Type J4  | 10,00 | Unit | Pekerja                 | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |
|   |                        |       |      | Tukang<br>Aluminiu<br>m | 0,043 |  |  |                 |   |       |   |   |
|   |                        |       |      | Kepala<br>Tukang        | 0,004 |  |  |                 |   |       |   |   |
|   |                        |       |      | Mandor                  | 0,002 |  |  |                 |   |       |   |   |
| 4 | Pas. Kusen<br>Type J8  | 2     | Unit | Pekerja                 | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,086 | = | 1 |
|   |                        |       |      | Tukang<br>Aluminiu<br>m | 0,043 |  |  |                 |   |       |   |   |
|   |                        |       |      | Kepala<br>Tukang        | 0,004 |  |  |                 |   |       |   |   |
|   |                        |       |      | Mandor                  | 0,002 |  |  |                 |   |       |   |   |
| 5 | Pas. Kusen<br>Type J9  | 1     | Unit | Pekerja                 | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,043 | = | 1 |
|   |                        |       |      | Tukang<br>Aluminiu<br>m | 0,043 |  |  |                 |   |       |   |   |
|   |                        |       |      | Kepala<br>Tukang        | 0,004 |  |  |                 |   |       |   |   |
|   |                        |       |      | Mandor                  | 0,002 |  |  |                 |   |       |   |   |
| 6 | Pas. Kusen<br>Type J12 | 8     | Unit | Pekerja                 | 0,043 |  |  | 23,2558139<br>5 | 1 | 0,344 | = | 1 |
|   |                        |       |      | Tukang<br>Aluminiu<br>m | 0,043 |  |  |                 |   |       |   |   |

|    |                    |       |      |                  |       |  |  |  |                 |   |       |   |   |
|----|--------------------|-------|------|------------------|-------|--|--|--|-----------------|---|-------|---|---|
|    |                    |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |
| 7  | Pas. Kusen Type P2 | 9     | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,387 | = | 1 |
|    |                    |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |
| 8  | Pas. Kusen Type P3 | 5     | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,215 | = | 1 |
|    |                    |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |
| 9  | Pas. Kusen Type P4 | 10,00 | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,43  | = | 1 |
|    |                    |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |
| 10 | Pas. Kusen Type P5 | 5,00  | Unit | Pekerja          | 0,043 |  |  |  | 23,2558139<br>5 | 1 | 0,215 | = | 1 |
|    |                    |       |      | Tukang Alumunium | 0,043 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Kepala Tukang    | 0,004 |  |  |  |                 |   |       |   |   |
|    |                    |       |      | Mandor           | 0,002 |  |  |  |                 |   |       |   |   |

|    |                               |      |      |                  |       |  |  |                         |   |      |   |   |
|----|-------------------------------|------|------|------------------|-------|--|--|-------------------------|---|------|---|---|
| 11 | Pasang pintu darurat anti api | 2,00 | Unit | pekerja          | 0,085 |  |  | 11,7647058 <sub>8</sub> | 1 | 0,17 | = | 1 |
|    |                               |      |      | tukang alumunium | 0,085 |  |  |                         |   |      |   |   |
|    |                               |      |      | kepala tukang    | 0,009 |  |  |                         |   |      |   |   |
|    |                               |      |      | mandor           | 0,005 |  |  |                         |   |      |   |   |

### B. Pekerjaan Partisi

|   |                                               |          |      |                  |       |                         |  |                         |   |                         |   |   |
|---|-----------------------------------------------|----------|------|------------------|-------|-------------------------|--|-------------------------|---|-------------------------|---|---|
| 1 | Memasang 1m2 unit Partisi Type I              | 100,7456 | m2   | Pekerja          | 0,015 | 66,6666666 <sub>7</sub> |  |                         | 7 | 0,21588342 <sub>9</sub> | = | 1 |
|   |                                               |          |      | Tukang Alumunium | 0,150 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Kepala Tukang    | 0,015 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Mandor           | 0,001 |                         |  |                         |   |                         |   |   |
| 2 | Memasang 1 unit Pintu Type I untuk partisi    | 2        | unit | Pekerja          | 0,085 |                         |  | 11,7647058 <sub>8</sub> | 1 | 0,17                    | = | 1 |
|   |                                               |          |      | Tukang Alumunium | 0,085 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Kepala Tukang    | 0,009 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Mandor           | 0,005 |                         |  |                         |   |                         |   |   |
| 3 | Memasang 1 unit Pintu Type II untuk partisi   | 5        | unit | Pekerja          | 0,085 |                         |  | 11,7647058 <sub>8</sub> | 2 | 0,2125                  | = | 1 |
|   |                                               |          |      | Tukang Alumunium | 0,085 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Kepala Tukang    | 0,009 |                         |  |                         |   |                         |   |   |
|   |                                               |          |      | Mandor           | 0,005 |                         |  |                         |   |                         |   |   |
| 4 | Memasang 1 jendela Pintu Type I untuk partisi | 18       | unit | Pekerja          | 0,085 |                         |  | 11,7647058 <sub>8</sub> | 2 | 0,765                   | = | 1 |
|   |                                               |          |      | Tukang Alumunium | 0,085 |                         |  |                         |   |                         |   |   |

|  |  |  |  |                  |       |  |  |  |  |  |  |  |  |
|--|--|--|--|------------------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Kepala<br>Tukang | 0,009 |  |  |  |  |  |  |  |  |
|  |  |  |  | Mandor           | 0,005 |  |  |  |  |  |  |  |  |

### C. Pekerjaan Railling Tangga

|   |                                                                 |       |    |                       |       |                 |  |  |  |   |                 |   |   |
|---|-----------------------------------------------------------------|-------|----|-----------------------|-------|-----------------|--|--|--|---|-----------------|---|---|
| 1 | Pasang<br>Railling<br>Tangga<br>Utama dari<br>Stainless Steel   | 13,76 | M2 | pekerja               | 0,39  | 1,42857142<br>9 |  |  |  | 3 | 3,21066666<br>7 | = | 4 |
|   |                                                                 |       |    | tukang besi           | 0,7   |                 |  |  |  |   |                 |   |   |
|   |                                                                 |       |    | kepala<br>tukang besi | 0,07  |                 |  |  |  |   |                 |   |   |
|   |                                                                 |       |    | mandor                | 0,007 |                 |  |  |  |   |                 |   |   |
| 2 | Pasang<br>Railling<br>Tangga<br>Darurat dari<br>Stainless Steel | 12,48 | M2 | pekerja               | 0,39  | 1,42857142<br>9 |  |  |  | 3 | 2,912           | = | 3 |
|   |                                                                 |       |    | tukang besi           | 0,7   |                 |  |  |  |   |                 |   |   |
|   |                                                                 |       |    | kepala<br>tukang besi | 0,07  |                 |  |  |  |   |                 |   |   |
|   |                                                                 |       |    | mandor                | 0,007 |                 |  |  |  |   |                 |   |   |

### D. Curtain Wall

|   |                      |   |    |                       |       |                 |  |  |  |   |     |   |   |
|---|----------------------|---|----|-----------------------|-------|-----------------|--|--|--|---|-----|---|---|
| 1 | Curtain Wall ( CW2 ) | 1 | M2 | pekerja               | 0,390 | 1,42857142<br>9 |  |  |  | 1 | 0,7 | = | 1 |
|   |                      |   |    | tukang besi           | 0,700 |                 |  |  |  |   |     |   |   |
|   |                      |   |    | kepala<br>tukang besi | 0,070 |                 |  |  |  |   |     |   |   |
|   |                      |   |    | mandor                | 0,007 |                 |  |  |  |   |     |   |   |

### VII Pekerjaan Langit-langit

|   |                                                               |         |    |                           |       |    |  |  |  |    |           |   |   |
|---|---------------------------------------------------------------|---------|----|---------------------------|-------|----|--|--|--|----|-----------|---|---|
| 1 | Pasang<br>Plafond<br>Acoustic<br>Rangka Cross<br>Tee Main Tee | 1188,41 | m2 | Pekerja                   | 0,100 | 10 |  |  |  | 20 | 5,9420375 | = | 6 |
|   |                                                               |         |    | Tukang<br>batu/tembo<br>k | 0,050 |    |  |  |  |    |           |   |   |
|   |                                                               |         |    | Kepala<br>tukang          | 0,005 |    |  |  |  |    |           |   |   |
|   |                                                               |         |    | Mandor                    | 0,005 |    |  |  |  |    |           |   |   |

### VIII. Pekerjaan Pengecatan

|   |                              |           |    |                    |       |                 |  |  |    |            |   |   |
|---|------------------------------|-----------|----|--------------------|-------|-----------------|--|--|----|------------|---|---|
| 1 | Pengecatan dinding interior  | 1529,0782 | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 12 | 8,02766055 | = | 9 |
|   |                              |           |    | Tukang cat/pelitur | 0,063 |                 |  |  |    |            |   |   |
|   |                              |           |    | Kepala tukang      | 0,006 |                 |  |  |    |            |   |   |
|   |                              |           |    | Mandor             | 0,003 |                 |  |  |    |            |   |   |
| 2 | Pengecatan dinding eksterior | 702,7334  | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 6  | 7,3787007  | = | 8 |
|   |                              |           |    | Tukang cat/pelitur | 0,063 |                 |  |  |    |            |   |   |
|   |                              |           |    | Kepala tukang      | 0,006 |                 |  |  |    |            |   |   |
|   |                              |           |    | Mandor             | 0,003 |                 |  |  |    |            |   |   |
| 3 | Pengecatan plafon            | 1271      | m2 | Pekerja            | 0,020 | 15,8730158<br>7 |  |  | 15 | 5,3382     | = | 6 |
|   |                              |           |    | Tukang Cat         | 0,063 |                 |  |  |    |            |   |   |
|   |                              |           |    | Kepala Tukang      | 0,006 |                 |  |  |    |            |   |   |
|   |                              |           |    | Mandor             | 0,003 |                 |  |  |    |            |   |   |

### X. Pekerjaan Tata Udara

|   |                          |   |      |                |       |  |  |  |   |   |      |   |   |
|---|--------------------------|---|------|----------------|-------|--|--|--|---|---|------|---|---|
| 1 | Unit AC Cassete 5PK      | 7 | Unit | Pekerja        | 0,050 |  |  |  | 2 | 2 | 1,75 | = | 2 |
|   |                          |   |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                          |   |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |
| 2 | Unit AC Cassete 4PK      | 9 | Unit | Pekerja        | 0,050 |  |  |  | 2 | 2 | 2,25 | = | 3 |
|   |                          |   |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |
|   |                          |   |      | Kepala Tukang  | 0,005 |  |  |  |   |   |      |   |   |
| 3 | Unit AC Split wall 3/4PK | 2 | Unit | Pekerja        | 0,050 |  |  |  | 2 | 1 | 1    | = | 1 |
|   |                          |   |      | Tukang Listrik | 0,500 |  |  |  |   |   |      |   |   |

|                                        |                          |      |       |                         |       |  |  |  |                 |   |      |   |   |
|----------------------------------------|--------------------------|------|-------|-------------------------|-------|--|--|--|-----------------|---|------|---|---|
|                                        |                          |      |       | Kepala Tukang           | 0,005 |  |  |  |                 |   |      |   |   |
| <b>XI. Pekerjaan Instalasi Telepon</b> |                          |      |       |                         |       |  |  |  |                 |   |      |   |   |
| 1                                      | Pasang Instalasi Telepon | 4    | Titik | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 2 | 0,3  | = | 1 |
|                                        |                          |      |       | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |
| 2                                      | Pasang Outlet Telepon    | 2    | Titik | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 2 | 0,15 | = | 1 |
|                                        |                          |      |       | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |
| 3                                      | Switch Hub 16 port       | 1,00 | unit  | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |
|                                        |                          |      |       | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |
|                                        |                          |      |       | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |
| 4                                      | Terminal Box             | 1,00 | unit  | Pembantu tukang listrik | 0,150 |  |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |
|                                        |                          |      |       | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |

|  |  |  |  |                       |       |  |  |  |  |  |  |  |  |
|--|--|--|--|-----------------------|-------|--|--|--|--|--|--|--|--|
|  |  |  |  | Kepala tukang listrik | 0,180 |  |  |  |  |  |  |  |  |
|  |  |  |  | Mandor                | 0,150 |  |  |  |  |  |  |  |  |

### X. Pekerjaan CCTV

|   |                                               |   |       |                         |       |  |  |  |             |   |      |   |   |
|---|-----------------------------------------------|---|-------|-------------------------|-------|--|--|--|-------------|---|------|---|---|
| 1 | Kamera CCTV HD                                | 4 | Unit  | Pembantu tukang listrik | 0,015 |  |  |  | 66,66666667 | 1 | 0,06 | = | 1 |
|   |                                               |   |       | Tukang listrik          | 0,015 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Kepala tukang listrik   | 0,001 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Mandor                  | 0,001 |  |  |  |             |   |      |   |   |
| 2 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 4 | Titik | Pekerja                 | 0,050 |  |  |  | 2           | 2 | 1    | = | 1 |
|   |                                               |   |       | Tukang Listrik          | 0,500 |  |  |  |             |   |      |   |   |
|   |                                               |   |       | Kepala Tukang           | 0,005 |  |  |  |             |   |      |   |   |

### XI. Pekerjaan Sound System

|   |                           |      |       |                         |       |  |  |  |             |   |       |   |   |
|---|---------------------------|------|-------|-------------------------|-------|--|--|--|-------------|---|-------|---|---|
| 1 | Celling speaker 6 W       | 9    | Titik | Tukang Listrik          | 0,500 |  |  |  | 2           | 2 | 2,25  | = | 3 |
| 2 | Volume control            | 1,00 | Titik | Tukang Listrik          | 0,500 |  |  |  | 2           | 1 | 0,5   | = | 1 |
| 3 | Instalasi Celling speaker | 11   | Unit  | Tukang Listrik          | 0,500 |  |  |  | 2           | 2 | 2,75  | = | 3 |
| 4 | Terminal Box              | 1,00 | Unit  | Pembantu tukang listrik | 0,015 |  |  |  | 66,66666667 | 1 | 0,015 | = | 1 |
|   |                           |      |       | Tukang listrik          | 0,015 |  |  |  |             |   |       |   |   |
|   |                           |      |       | Kepala tukang listrik   | 0,001 |  |  |  |             |   |       |   |   |



|   |                                                              |      |    |                         |       |    |  |  |   |       |   |   |  |
|---|--------------------------------------------------------------|------|----|-------------------------|-------|----|--|--|---|-------|---|---|--|
|   |                                                              |      |    | Mandor                  | 0,001 |    |  |  |   |       |   |   |  |
| 5 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5,00 | m' | Pembantu tukang listrik | 0,025 | 40 |  |  | 1 | 0,125 | = | 1 |  |
|   |                                                              |      |    | Tukang listrik          | 0,025 |    |  |  |   |       |   |   |  |
|   |                                                              |      |    | Kepala tukang listrik   | 0,017 |    |  |  |   |       |   |   |  |
|   |                                                              |      |    | Mandor                  | 0,014 |    |  |  |   |       |   |   |  |

## XII. Pekerjaan Fire Alarm

### INSTALASI LANTAI 6

| Peralatan Fixture |                                |      |     |                         |       |    |  |  |   |       |   |   |  |
|-------------------|--------------------------------|------|-----|-------------------------|-------|----|--|--|---|-------|---|---|--|
| 1                 | - Conv. Optical Smoke Detector | 42   | pcs | Pembantu tukang listrik | 0,025 | 40 |  |  | 2 | 0,525 | = | 1 |  |
|                   |                                |      |     | Tukang listrik          | 0,025 |    |  |  |   |       |   |   |  |
|                   |                                |      |     | Kepala tukang listrik   | 0,017 |    |  |  |   |       |   |   |  |
|                   |                                |      |     | Mandor                  | 0,014 |    |  |  |   |       |   |   |  |
|                   | - Conv. Manual Break glass     | 2,00 | pcs | pekerja                 | 0,050 | 2  |  |  | 1 | 1     | = | 1 |  |
|                   |                                |      |     | tukang listrik          | 0,500 |    |  |  |   |       |   |   |  |
|                   |                                |      |     | kepala tukang           | 0,005 |    |  |  |   |       |   |   |  |
|                   | - Junction Box Fire Alarm      | 1,00 | pcs | pekerja                 | 0,050 | 2  |  |  | 1 | 0,5   | = | 1 |  |
|                   |                                |      |     | tukang listrik          | 0,500 |    |  |  |   |       |   |   |  |
|                   |                                |      |     | kepala tukang           | 0,005 |    |  |  |   |       |   |   |  |

|                                       |                             |                                  |      |                         |                         |                 |                 |      |      |   |   |
|---------------------------------------|-----------------------------|----------------------------------|------|-------------------------|-------------------------|-----------------|-----------------|------|------|---|---|
| 2                                     | - Remote Indicating Lamp    | 4,00                             | pcs  | Pembantu tukang listrik | 0,025                   | 40              | 1               | 0,1  | =    | 1 |   |
|                                       |                             |                                  |      | Tukang listrik          | 0,025                   |                 |                 |      |      |   |   |
|                                       |                             |                                  |      | Kepala tukang listrik   | 0,017                   |                 |                 |      |      |   |   |
|                                       |                             |                                  |      | Mandor                  | 0,014                   |                 |                 |      |      |   |   |
|                                       | - Alarm Bell                | 2,00                             | unit | pekerja                 | 0,050                   | 2               | 1               | 1    | =    | 1 |   |
|                                       |                             |                                  |      | tukang listrik          | 0,500                   |                 |                 |      |      |   |   |
|                                       |                             |                                  |      | kepala tukang           | 0,005                   |                 |                 |      |      |   |   |
|                                       | - Terminal Box 30 x 40 x 12 | 1,00                             | unit | pekerja                 | 0,050                   | 2               | 1               | 0,5  | =    | 1 |   |
|                                       |                             |                                  |      | tukang listrik          | 0,500                   |                 |                 |      |      |   |   |
|                                       |                             |                                  |      | kepala tukang           | 0,005                   |                 |                 |      |      |   |   |
|                                       | Pekerjaan Instalasi         |                                  |      |                         |                         |                 |                 |      |      |   |   |
|                                       |                             | -Detector dan manual break glass | 45   | ttk                     | Pembantu tukang listrik | 0,150           | 6,66666666<br>7 | 3    | 2,25 | = | 3 |
| NYA Cable 2x1,5mm + Pipa Conduit 20mm |                             | Tukang listrik                   |      |                         | 0,150                   |                 |                 |      |      |   |   |
|                                       |                             | Kepala tukang listrik            |      |                         | 0,180                   |                 |                 |      |      |   |   |
|                                       |                             | Mandor                           |      |                         | 0,150                   |                 |                 |      |      |   |   |
| - Junction Box Fire Alarm             |                             | 1,00                             | ttk  | Pembantu tukang listrik | 0,150                   | 6,66666666<br>7 | 1               | 0,15 | =    | 1 |   |
| NYA cable 2 x 1,5 mm +                | Tukang listrik              |                                  |      | 0,150                   |                         |                 |                 |      |      |   |   |

|  |                                        |       |     |                         |       |  |  |  |                 |   |      |   |   |
|--|----------------------------------------|-------|-----|-------------------------|-------|--|--|--|-----------------|---|------|---|---|
|  | pipa conduit 20 mm                     | 5     | ttk | Kepala tukang listrik   | 0,180 |  |  |  | 6,66666666<br>7 | 1 | 0,75 | = | 1 |
|  |                                        |       |     | Mandor                  | 0,150 |  |  |  |                 |   |      |   |   |
|  | - Remote Indicating Lamp               |       |     | Pembantu tukang listrik | 0,150 |  |  |  |                 |   |      |   |   |
|  | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm |       |     | Tukang listrik          | 0,150 |  |  |  |                 |   |      |   |   |
|  |                                        |       |     | Kepala tukang listrik   | 0,180 |  |  |  |                 |   |      |   |   |
|  | Mandor                                 | 0,150 |     |                         |       |  |  |  |                 |   |      |   |   |

### XIII. Pekerjaan Alat Pemadam Kebakaran

|   |                                          |      |      |               |       |   |  |  |                 |   |         |   |   |
|---|------------------------------------------|------|------|---------------|-------|---|--|--|-----------------|---|---------|---|---|
| 1 | BSP Sch.40 c/w fitting2 & Material bantu | 81,3 | m'   |               |       | 4 |  |  |                 | 4 | 5,08125 | = | 6 |
|   | dia. 3 "                                 |      |      | Pekerja       | 0,054 |   |  |  |                 |   |         |   |   |
|   |                                          |      |      | Tukang        | 0,090 |   |  |  |                 |   |         |   |   |
|   |                                          |      |      | Kepala tukang | 0,009 |   |  |  |                 |   |         |   |   |
|   |                                          |      |      | Tukang las    | 0,250 |   |  |  |                 |   |         |   |   |
|   |                                          |      |      | Tukang cat    | 0,160 |   |  |  |                 |   |         |   |   |
|   |                                          |      |      | Mandor        | 0,005 |   |  |  |                 |   |         |   |   |
| 2 | Hydrant Box Indoor, type B c/w           | 2    | unit | Pekerja       | 0,180 |   |  |  | 5,55555555<br>6 | 1 | 0,36    | = | 1 |
|   | -hydrant valve dia. 1 1/2"               |      |      | Tukang        | 0,180 |   |  |  |                 |   |         |   |   |
|   | -fire hose 1 1/2"x30 m                   |      |      | Kepala tukang | 0,040 |   |  |  |                 |   |         |   |   |

|                          |                                   |      |               |               |       |  |                 |   |     |      |   |   |  |  |
|--------------------------|-----------------------------------|------|---------------|---------------|-------|--|-----------------|---|-----|------|---|---|--|--|
|                          | -hose rack dia. 11/2"             |      |               | Mandor        | 0,040 |  |                 |   |     |      |   |   |  |  |
|                          | -Spray nozzle dia. 11/2"          |      |               |               |       |  |                 |   |     |      |   |   |  |  |
|                          | -kaca dan kunci                   |      |               |               |       |  |                 |   |     |      |   |   |  |  |
| 3                        | Gate valve dia. 21/2" , OS&Y type | 1    | bh            | Pekerja       | 0,054 |  |                 | 4 | 1   | 0,25 | = | 1 |  |  |
|                          |                                   |      |               | Tukang        | 0,090 |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      |               | Kepala Tukang | 0,009 |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      |               | Tukang las    | 0,250 |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      |               | Tukang cat    | 0,100 |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      |               | Mandor        | 0,005 |  |                 |   |     |      |   |   |  |  |
| - Fire Extinguisher 6 kg | 2                                 | unit | pekerja       | 0,150         |       |  | 6,66666666<br>7 | 1 | 0,3 | =    | 1 |   |  |  |
|                          |                                   |      | tukang batu   | 0,150         |       |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      | kepala tukang | 0,180         |       |  |                 |   |     |      |   |   |  |  |
|                          |                                   |      | mandor        | 0,150         |       |  |                 |   |     |      |   |   |  |  |

### B. Instalasi Sprinkler

| BSP Sch.40 c/w fitting2 & Material bantu |          |     |                 |                 |                 |                 |  |   |        |       |   |   |  |  |
|------------------------------------------|----------|-----|-----------------|-----------------|-----------------|-----------------|--|---|--------|-------|---|---|--|--|
| 1                                        | dia. 1 " | 164 | m'              | Pembantu tukang | 0,054           | 11,1111111<br>1 |  |   | 5      | 2,952 | = | 3 |  |  |
|                                          |          |     |                 | Tukang          | 0,090           |                 |  |   |        |       |   |   |  |  |
|                                          |          |     |                 | Kepala tukang   | 0,009           |                 |  |   |        |       |   |   |  |  |
|                                          |          |     |                 | Mandor          | 0,027           |                 |  |   |        |       |   |   |  |  |
| dia. 1 1/4 "                             | 79       | m'  | Pembantu tukang | 0,054           | 11,1111111<br>1 |                 |  | 4 | 1,7775 | =     | 2 |   |  |  |
|                                          |          |     | Tukang          | 0,090           |                 |                 |  |   |        |       |   |   |  |  |
|                                          |          |     | Kepala tukang   | 0,009           |                 |                 |  |   |        |       |   |   |  |  |

|   |                                         |      |      |                 |       |                  |  |  |   |   |         |   |   |  |
|---|-----------------------------------------|------|------|-----------------|-------|------------------|--|--|---|---|---------|---|---|--|
|   |                                         |      |      | Mandor          | 0,027 |                  |  |  |   |   |         |   |   |  |
|   | dia. 2 "                                | 8,5  | m'   | Pembantu tukang | 0,054 | 11,11111111<br>1 |  |  |   | 1 | 0,765   | = | 1 |  |
|   |                                         |      |      | Tukang          | 0,090 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Kepala tukang   | 0,009 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Mandor          | 0,027 |                  |  |  |   |   |         |   |   |  |
|   | dia. 2 1/2 "                            | 8    | m'   | Pekerja         | 0,054 | 4                |  |  |   | 4 | 0,5     | = | 1 |  |
|   |                                         |      |      | Tukang          | 0,090 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Kepala tukang   | 0,009 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Tukang las      | 0,250 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Tukang cat      | 0,100 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Mandor          | 0,005 |                  |  |  |   |   |         |   |   |  |
|   | dia. 3 "                                | 63,5 | m'   | Pekerja         | 0,054 | 2                |  |  |   | 8 | 3,96875 | = | 4 |  |
|   |                                         |      |      | Tukang          | 0,090 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Kepala tukang   | 0,009 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Tukang las      | 0,250 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Tukang cat      | 0,160 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | Mandor          | 0,005 |                  |  |  |   |   |         |   |   |  |
| 2 | Sprinkler head dia. 1/2", 68'C, pendent | 69   | bh   | pekerja         | 0,050 |                  |  |  | 2 | 8 | 4,3125  | = | 5 |  |
|   |                                         |      |      | tukang listrik  | 0,500 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | kepala tukang   | 0,005 |                  |  |  |   |   |         |   |   |  |
| 3 | Branch Control Valve dia. 3"            | 1    | unit | pekerja         | 0,050 |                  |  |  | 2 | 1 | 0,5     | = | 1 |  |
|   |                                         |      |      | tukang listrik  | 0,500 |                  |  |  |   |   |         |   |   |  |
|   |                                         |      |      | kepala tukang   | 0,005 |                  |  |  |   |   |         |   |   |  |

|   |                                            |   |    |                   |       |  |  |   |   |     |   |   |
|---|--------------------------------------------|---|----|-------------------|-------|--|--|---|---|-----|---|---|
| 6 | Fitting<br>(elbow,<br>reducer, knie<br>dl) | 1 | ls | pekerja           | 0,05  |  |  | 2 | 1 | 0,5 | = | 1 |
|   |                                            |   |    | tukang<br>listrik | 0,5   |  |  |   |   |     |   |   |
|   |                                            |   |    | kepala<br>tukang  | 0,005 |  |  |   |   |     |   |   |

### C. INSTALASI SPRINGKLER DAN HYDRANT Lt Atap

Galv. Pipe Med. c/w fitting2 & Material bantu

|   |                                              |   |      |                    |       |                 |  |   |   |      |   |   |
|---|----------------------------------------------|---|------|--------------------|-------|-----------------|--|---|---|------|---|---|
| 1 | dia. 1 "                                     | 4 | m'   | Pembantu<br>tukang | 0,054 | 11,1111111<br>1 |  |   | 1 | 0,36 | = | 1 |
|   |                                              |   |      | Tukang             | 0,090 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Kepala<br>tukang   | 0,009 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Mandor             | 0,027 |                 |  |   |   |      |   |   |
| 2 | ARV c/w<br>Gate valve<br>dia. 1"             | 2 | unit | Pembantu<br>tukang | 0,054 | 11,1111111<br>1 |  |   | 1 | 0,18 | = | 1 |
|   |                                              |   |      | Tukang             | 0,090 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Kepala<br>tukang   | 0,009 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Mandor             | 0,027 |                 |  |   |   |      |   |   |
| 3 | Presure gauge<br>c/w gate valve<br>dia. 1/2" | 2 | unit | pekerja            | 0,05  |                 |  | 2 | 1 | 1    | = | 1 |
|   |                                              |   |      | tukang<br>listrik  | 0,5   |                 |  |   |   |      |   |   |
|   |                                              |   |      | kepala<br>tukang   | 0,005 |                 |  |   |   |      |   |   |
| 4 | Ball valve<br>dia. 1" -                      | 1 | bh   | Pembantu<br>tukang | 0,054 | 11,1111111<br>1 |  |   | 1 | 0,09 | = | 1 |
|   |                                              |   |      | Tukang             | 0,090 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Kepala<br>tukang   | 0,009 |                 |  |   |   |      |   |   |
|   |                                              |   |      | Mandor             | 0,027 |                 |  |   |   |      |   |   |
| 5 | Sprinkler<br>head dia. 1/2",                 | 1 | bh   | pekerja            | 0,050 |                 |  | 2 | 1 | 0,5  | = | 1 |
|   |                                              |   |      | tukang<br>listrik  | 0,500 |                 |  |   |   |      |   |   |

|  |                    |  |  |                  |       |  |  |  |  |  |  |  |  |
|--|--------------------|--|--|------------------|-------|--|--|--|--|--|--|--|--|
|  | 68'C, pendent<br>- |  |  | kepala<br>tukang | 0,005 |  |  |  |  |  |  |  |  |
|--|--------------------|--|--|------------------|-------|--|--|--|--|--|--|--|--|

### D. Fire Extinguisher

|   |                                        |   |    |         |       |  |  |  |    |   |      |   |   |
|---|----------------------------------------|---|----|---------|-------|--|--|--|----|---|------|---|---|
| 1 | Apar ABC<br>Kap. 4 kg                  | 1 | bh | Pekerja | 0,050 |  |  |  | 20 | 1 | 0,05 | = | 1 |
| 2 | Apar CO2<br>Kap. 3 kg<br>(SDP area)    | 8 | bh | Pekerja | 0,050 |  |  |  | 20 | 1 | 0,4  | = | 1 |
| 3 | Apar CO2<br>Kap. 23 kg<br>(Panel room) | 1 | bh | Pekerja | 0,050 |  |  |  | 20 | 1 | 0,05 | = | 1 |

### XIII. Pekerjaan Sanitair & Sanitasi

|   |                              |    |    |                           |       |  |  |  |                 |    |                 |   |   |
|---|------------------------------|----|----|---------------------------|-------|--|--|--|-----------------|----|-----------------|---|---|
| 1 | Pasang<br>Klosed Duduk       | 10 | Bh | Pekerja                   | 3,300 |  |  |  | 0,30303030<br>3 | 12 | 2,75            | = | 3 |
|   |                              |    |    | Tukang<br>batu/tembo<br>k | 1,100 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | Kepala<br>tukang          | 0,001 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | Mandor                    | 0,160 |  |  |  |                 |    |                 |   |   |
| 2 | Pasang<br>Wastafel<br>single | 4  | Bh | Pekerja                   | 1,200 |  |  |  | 0,68965517<br>2 | 3  | 1,93333333<br>3 | = | 2 |
|   |                              |    |    | Tukang<br>batu/tembo<br>k | 1,450 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | Kepala<br>tukang          | 0,150 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | Mandor                    | 0,100 |  |  |  |                 |    |                 |   |   |
| 3 | Pasang Jet<br>washer         | 10 | Bh | pekerja                   | 1,200 |  |  |  | 0,68965517<br>2 | 5  | 2,9             | = | 3 |
|   |                              |    |    | tukang batu               | 1,450 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | kepala<br>tukang          | 0,150 |  |  |  |                 |    |                 |   |   |
|   |                              |    |    | mandor                    | 0,100 |  |  |  |                 |    |                 |   |   |



|   |                                      |    |    |                           |       |  |  |  |    |   |                 |   |   |
|---|--------------------------------------|----|----|---------------------------|-------|--|--|--|----|---|-----------------|---|---|
| 4 | Pasang Kran<br>Diameter Air<br>1/2 " | 14 | Bh | Pekerja                   | 0,010 |  |  |  | 10 | 3 | 0,46666666<br>7 | = | 1 |
|   |                                      |    |    | Tukang<br>batu/tembo<br>k | 0,100 |  |  |  |    |   |                 |   |   |
|   |                                      |    |    | Kepala<br>tukang          | 0,010 |  |  |  |    |   |                 |   |   |
|   |                                      |    |    | Mandor                    | 0,005 |  |  |  |    |   |                 |   |   |
| 5 | Pasang Floor<br>Drain                | 10 | Bh | Pekerja                   | 0,010 |  |  |  | 10 | 1 | 1               | = | 1 |
|   |                                      |    |    | Tukang<br>batu/tembo<br>k | 0,100 |  |  |  |    |   |                 |   |   |
|   |                                      |    |    | Kepala<br>tukang          | 0,010 |  |  |  |    |   |                 |   |   |
|   |                                      |    |    | Mandor                    | 0,005 |  |  |  |    |   |                 |   |   |

### A. Instalasi Air Bersih

|   |                                                      |       |      |                           |       |                 |  |  |       |   |                 |   |   |
|---|------------------------------------------------------|-------|------|---------------------------|-------|-----------------|--|--|-------|---|-----------------|---|---|
| 1 | Pasang Pipa<br>Air Bersih<br>PVC AW<br>Diameter 3/4" | 36,14 | M1   | Pekerja                   | 0,036 | 16,6666666<br>7 |  |  |       | 2 | 1,0842          | = | 2 |
|   |                                                      |       |      | Tukang<br>batu/tembo<br>k | 0,060 |                 |  |  |       |   |                 |   |   |
|   |                                                      |       |      | Kepala<br>tukang          | 0,006 |                 |  |  |       |   |                 |   |   |
|   |                                                      |       |      | Mandor                    | 0,002 |                 |  |  |       |   |                 |   |   |
| 2 | Tangki air<br>bersih<br>kapasitas<br>1500 ltr        | 4     | unit | Pekerja                   | 1,5   |                 |  |  | 0,625 | 3 | 2,13333333<br>3 | = | 3 |
|   |                                                      |       |      | Tukang                    | 1,6   |                 |  |  |       |   |                 |   |   |
|   |                                                      |       |      | Kepala<br>tukang          | 0,5   |                 |  |  |       |   |                 |   |   |
|   |                                                      |       |      | Mandor                    | 0,56  |                 |  |  |       |   |                 |   |   |

### B. Instalasi Air Kotor

|   |                     |    |      |                           |      |  |  |  |    |   |     |   |   |
|---|---------------------|----|------|---------------------------|------|--|--|--|----|---|-----|---|---|
| 1 | Pasang<br>Roofdrain | 28 | Unit | Pekerja                   | 0,01 |  |  |  | 10 | 1 | 2,8 | = | 3 |
|   |                     |    |      | Tukang<br>batu/tembo<br>k | 0,1  |  |  |  |    |   |     |   |   |

|   |                                    |        |      |                    |        |            |  |  |     |    |         |   |   |  |
|---|------------------------------------|--------|------|--------------------|--------|------------|--|--|-----|----|---------|---|---|--|
|   |                                    |        |      | Kepala tukang      | 0,01   |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Mandor             | 0,005  |            |  |  |     |    |         |   |   |  |
| 2 | Pasang Cleant Out 3"               | 2      | Unit | Pembantu tukang    | 0,400  |            |  |  | 2,5 | 1  | 0,8     | = | 1 |  |
|   |                                    |        |      | Tukang             | 0,200  |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Kepala tukang      | 0,020  |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Mandor             | 0,020  |            |  |  |     |    |         |   |   |  |
| 3 | Pasang Pipa air kotor Ø 3 "        | 16,520 | m'   | Pekerja            | 0,081  | 7,40740740 |  |  |     | 1  | 2,2302  | = | 3 |  |
|   |                                    |        |      | Tukang batu/tembok | 0,135  | 7          |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Kepala tukang      | 0,0135 |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Mandor             | 0,0041 |            |  |  |     |    |         |   |   |  |
| 4 | Pasang Pipa air kotor Ø 4 "        | 35,42  | m'   | Pekerja            | 0,081  | 7,40740740 |  |  |     | 3  | 1,5939  | = | 2 |  |
|   |                                    |        |      | Tukang batu/tembok | 0,135  | 7          |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Kepala tukang      | 0,0135 |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Mandor             | 0,0041 |            |  |  |     |    |         |   |   |  |
| 5 | Pasang instalasi Pipa Air Hujan 4" | 361,39 | M1   | Pekerja            | 0,081  | 7,40740740 |  |  |     | 15 | 3,25251 | = | 4 |  |
|   |                                    |        |      | Tukang batu/tembok | 0,135  | 7          |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Kepala tukang      | 0,0135 |            |  |  |     |    |         |   |   |  |
|   |                                    |        |      | Mandor             | 0,0041 |            |  |  |     |    |         |   |   |  |

## XI. Pekerjaan Listrik

|   |                                                                    |       |         |                |       |  |  |                 |    |                 |   |        |
|---|--------------------------------------------------------------------|-------|---------|----------------|-------|--|--|-----------------|----|-----------------|---|--------|
| 1 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08 | batan g | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 4  | 1,765625        | = | 2      |
|   |                                                                    |       |         | tukang listrik | 0,150 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | kepala tukang  | 0,030 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | mandor         | 0,030 |  |  |                 |    |                 |   |        |
| 2 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08 | batan g | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 4  | 1,765625        | = | 2      |
|   |                                                                    |       |         | tukang listrik | 0,150 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | kepala tukang  | 0,030 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | mandor         | 0,030 |  |  |                 |    |                 |   |        |
| 3 | Pasang Instalasi Titik Lampu                                       | 155   | Titik   | Tukang Listrik | 1,000 |  |  | 1               | 13 | 11,9230769<br>2 | = | 1<br>2 |
| 4 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 3,00  | Titik   | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1  | 0,45            | = | 1      |
|   |                                                                    |       |         | tukang listrik | 0,150 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | kepala tukang  | 0,030 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | mandor         | 0,030 |  |  |                 |    |                 |   |        |
| 5 | DOWNLIGH T INBOW / RD 150 E27 + KACA LED BULB 6w                   | 14,00 | Titik   | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 2  | 1,05            | = | 2      |
|   |                                                                    |       |         | tukang listrik | 0,150 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | kepala tukang  | 0,030 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | mandor         | 0,030 |  |  |                 |    |                 |   |        |
| 6 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 2,00  | Titik   | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1  | 0,3             | = | 1      |
|   |                                                                    |       |         | tukang listrik | 0,150 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | kepala tukang  | 0,030 |  |  |                 |    |                 |   |        |
|   |                                                                    |       |         | mandor         | 0,030 |  |  |                 |    |                 |   |        |

|    |                                                     |      |       |                |       |  |  |                 |   |        |   |   |
|----|-----------------------------------------------------|------|-------|----------------|-------|--|--|-----------------|---|--------|---|---|
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT | 2,00 | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,3    | = | 1 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | kepala tukang  | 0,030 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | mandor         | 0,030 |  |  |                 |   |        |   |   |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY     | 1,00 | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,15   | = | 1 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | kepala tukang  | 0,030 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | mandor         | 0,030 |  |  |                 |   |        |   |   |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY              | 131  | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 4 | 4,9125 | = | 5 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | kepala tukang  | 0,030 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | mandor         | 0,030 |  |  |                 |   |        |   |   |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt         | 3,00 | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,45   | = | 1 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | kepala tukang  | 0,030 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | mandor         | 0,030 |  |  |                 |   |        |   |   |
| 11 | Pasang Saklar Tunggal                               | 13   | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1 | 1,95   | = | 2 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | kepala tukang  | 0,030 |  |  |                 |   |        |   |   |
|    |                                                     |      |       | mandor         | 0,030 |  |  |                 |   |        |   |   |
| 12 | Pasang Saklar Ganda                                 | 16   | Titik | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 2 | 1,2    | = | 2 |
|    |                                                     |      |       | tukang listrik | 0,150 |  |  |                 |   |        |   |   |

|    |                            |    |       |                         |       |  |  |    |   |        |   |   |  |
|----|----------------------------|----|-------|-------------------------|-------|--|--|----|---|--------|---|---|--|
|    |                            |    |       | kepala tukang           | 0,030 |  |  |    |   |        |   |   |  |
|    |                            |    |       | mandor                  | 0,030 |  |  |    |   |        |   |   |  |
| 13 | Instalasi stop kontak      | 25 | Titik | Pembantu tukang listrik | 0,025 |  |  | 40 | 2 | 0,3125 | = | 1 |  |
|    |                            |    |       | Tukang listrik          | 0,025 |  |  |    |   |        |   |   |  |
|    |                            |    |       | Kepala tukang listrik   | 0,017 |  |  |    |   |        |   |   |  |
|    |                            |    |       | Mandor                  | 0,014 |  |  |    |   |        |   |   |  |
| 14 | Pasang Stop Kontak 1 Phase | 25 | Titik | Pekerja                 | 0,050 |  |  | 2  | 8 | 1,5625 | = | 2 |  |
|    |                            |    |       | Tukang listrik          | 0,500 |  |  |    |   |        |   |   |  |
|    |                            |    |       | Kepala Tukang           | 0,005 |  |  |    |   |        |   |   |  |

**XI. Pekerjaan Instalasi Penangkal Petir**

|   |                                             |      |      |                |       |  |  |                 |   |      |   |   |  |
|---|---------------------------------------------|------|------|----------------|-------|--|--|-----------------|---|------|---|---|--|
| 1 | Air lighting terminal viking V6 radius 60 m | 1,00 | unit | Tukang listrik | 0,500 |  |  | 2               | 1 | 0,5  | = | 1 |  |
| 2 | Obstruction Lamp                            | 1,00 | Bh   | pekerja        | 0,150 |  |  | 6,66666666<br>7 | 1 | 0,15 | = | 1 |  |
|   |                                             |      |      | tukang listrik | 0,150 |  |  |                 |   |      |   |   |  |
|   |                                             |      |      | kepala tukang  | 0,030 |  |  |                 |   |      |   |   |  |
|   |                                             |      |      | mandor         | 0,030 |  |  |                 |   |      |   |   |  |
| 3 | Instalasi Obstruction lamp                  | 1,00 | ls   | Tukang listrik | 0,500 |  |  | 2               | 1 | 0,5  | = | 1 |  |

|   |                                                     |       |    |                         |       |  |  |                 |   |      |   |   |
|---|-----------------------------------------------------|-------|----|-------------------------|-------|--|--|-----------------|---|------|---|---|
| 4 | Pasang Kabel BC 1x70 mm <sup>2</sup> +PVC AW Ø 1.5" | 32,00 | m' | Pembantu tukang listrik | 0,033 |  |  | 30,7692307<br>7 | 1 | 1,04 | = | 2 |
|   |                                                     |       |    | Tukang listrik          | 0,033 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Kepala tukang listrik   | 0,017 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Mandor                  | 0,014 |  |  |                 |   |      |   |   |
| 5 | Pasang Dudukan Tiang dan Penangkal Petir            | 1,00  | ls | Pekerja                 | 0,050 |  |  | 2               | 1 | 0,5  | = | 1 |
|   |                                                     |       |    | Tukang listrik          | 0,500 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Kepala Tukang           | 0,005 |  |  |                 |   |      |   |   |
| 6 | Pasang Grounding System Rod Ø 1" Panjang 12 mtr     | 3,00  | Bh | Pekerja                 | 0,200 |  |  | 5               | 1 | 0,6  | = | 1 |
|   |                                                     |       |    | Tukang batu/tembok      | 0,020 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Kepala tukang           | 0,020 |  |  |                 |   |      |   |   |
| 7 | Pasang Bak Kontrol Grounding                        | 1,00  | Bh | Pekerja                 | 3,200 |  |  | 0,3125          | 4 | 0,8  | = | 1 |
|   |                                                     |       |    | Tukang batu/tembok      | 1,150 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Kepala tukang           | 0,011 |  |  |                 |   |      |   |   |
|   |                                                     |       |    | Mandor                  | 0,016 |  |  |                 |   |      |   |   |

## Lampiran 4.5 Hubungan Antar Pekerjaan

| No | Task Name                                         | Duration | Start_Date      | Finish_Date      | Predecessors |
|----|---------------------------------------------------|----------|-----------------|------------------|--------------|
| 1  | Pekerjaan Persiapan                               | 75 days  | 02/01/2020 8:00 | 26/03/2020 17:00 |              |
| 2  | Pembersihan Lokasi                                | 8 days   | 02/01/2020 8:00 | 10/01/2020 17:00 |              |
| 3  | Pembuatan Kantor direksi keet                     | 6 days   | 07/01/2020 8:00 | 13/01/2020 17:00 | 2            |
| 4  | Pembuatan pagar keliling                          | 4 days   | 10/01/2020 8:00 | 14/01/2020 17:00 | 3FF+1d       |
| 5  | Pemasangan TC                                     | 5 days   | 15/01/2020 8:00 | 20/01/2020 17:00 | 4            |
| 6  | Pembongkaran TC                                   | 4 days   | 21/03/2020 8:00 | 26/03/2020 17:00 | 482FF        |
| 7  | Pemasangan Polynet Biru                           | 1 day    | 20/01/2020 8:00 | 20/01/2020 17:00 | 5FF-1d       |
| 8  | LANTAI 3                                          | 99 days  | 21/01/2020 8:00 | 19/05/2020 17:00 |              |
| 9  | Pekerjaan Pasangan                                | 9 days   | 13/02/2020 8:00 | 22/02/2020 17:00 |              |
| 10 | Mengurug pasir bawah lantai setebal 5 cm          | 3 days   | 20/02/2020 8:00 | 22/02/2020 17:00 | 27SS+2d      |
| 11 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 9 days   | 13/02/2020 8:00 | 22/02/2020 17:00 | 299SS        |
| 12 | Pekerjaan Beton                                   | 28 days  | 21/01/2020 8:00 | 22/02/2020 17:00 |              |
| 13 | Kolom Praktis uk. 11 x 11 cm                      | 5 days   | 18/02/2020 8:00 | 22/02/2020 17:00 | 11FF         |
| 14 | Kolom uk. 30 x 30 cm ( K 2 )                      | 1 day    | 21/01/2020 8:00 | 21/01/2020 17:00 | 5            |
| 15 | Kolom uk. 40 x 40 cm ( K 3 )                      | 1 day    | 21/01/2020 8:00 | 21/01/2020 17:00 | 14SS         |
| 16 | Kolom uk. 50 x 50 cm ( K 4 )                      | 1 day    | 21/01/2020 8:00 | 21/01/2020 17:00 | 14SS         |



|    |                                                             |         |                 |                  |         |
|----|-------------------------------------------------------------|---------|-----------------|------------------|---------|
| 17 | Kolom uk. 60 x 60 cm ( K 5 )                                | 5 days  | 21/01/2020 8:00 | 27/01/2020 17:00 | 14SS    |
| 18 | Kolom uk. 70 x 70 cm ( K 6 )                                | 4 days  | 21/01/2020 8:00 | 24/01/2020 17:00 | 14SS    |
| 19 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 2 days  | 30/01/2020 8:00 | 31/01/2020 17:00 | 17FS+2d |
| 20 | Plat meja beton tebal 10 cm                                 | 2 days  | 30/01/2020 8:00 | 31/01/2020 17:00 | 17FS+2d |
| 21 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 1 day   | 30/01/2020 8:00 | 30/01/2020 17:00 | 17FS+2d |
| 22 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 2 days  | 30/01/2020 8:00 | 31/01/2020 17:00 | 17FS+2d |
| 23 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 2 days  | 30/01/2020 8:00 | 31/01/2020 17:00 | 17FS+2d |
| 24 | Pekerjaan Plesteran dan Benangan                            | 30 days | 15/02/2020 8:00 | 20/03/2020 17:00 |         |
| 25 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 30 days | 15/02/2020 8:00 | 20/03/2020 17:00 | 11FS-7d |
| 26 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 7 days  | 15/02/2020 8:00 | 22/02/2020 17:00 | 11FS-7d |
| 27 | Pekerjaan acian interior                                    | 20 days | 18/02/2020 8:00 | 11/03/2020 17:00 | 25SS+2d |
| 28 | Pekerjaan acian eksterior                                   | 5 days  | 24/02/2020 8:00 | 28/02/2020 17:00 | 26      |
| 29 | Pekerjaan Lantai                                            | 23 days | 20/02/2020 8:00 | 17/03/2020 17:00 |         |
| 30 | Pasang Keramik Lantai 60 x 60                               | 20 days | 20/02/2020 8:00 | 13/03/2020 17:00 | 10SS    |
| 31 | Pasang Keramik Lantai 30 x 30                               | 5 days  | 20/02/2020 8:00 | 25/02/2020 17:00 | 30SS    |
| 32 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC               | 3 days  | 03/03/2020 8:00 | 05/03/2020 17:00 | 33      |
| 33 | Pasang Keramik Dinding 30 x 60 (KM/WC)                      | 5 days  | 26/02/2020 8:00 | 02/03/2020 17:00 | 31      |
| 34 | Pasang Batu Alam                                            | 3 days  | 14/03/2020 8:00 | 17/03/2020 17:00 | 63FF    |

|    |                                                                             |        |                 |                  |      |
|----|-----------------------------------------------------------------------------|--------|-----------------|------------------|------|
| 35 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 6 days | 14/03/2020 8:00 | 20/03/2020 17:00 |      |
| 36 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 |      |
| 37 | Pas. Kusen Type J2                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 49   |
| 38 | Pas. Kusen Type J3                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 39 | Pas. Kusen Type J4                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 40 | Pas. Kusen Type J8                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 41 | Pas. Kusen Type J9                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 42 | Pas. Kusen Type J12                                                         | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 43 | Pas. Kusen Type P2                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 44 | Pas. Kusen Type P3                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 45 | Pas. Kusen Type P4                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 46 | Pas. Kusen Type P5                                                          | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 47 | Pasang pintu darurat anti api                                               | 1 day  | 19/03/2020 8:00 | 19/03/2020 17:00 | 37SS |
| 48 | Pekerjaan Partisi                                                           | 6 days | 14/03/2020 8:00 | 20/03/2020 17:00 |      |
| 49 | Memasang 1m2 unit Partisi Type I                                            | 4 days | 14/03/2020 8:00 | 18/03/2020 17:00 | 30   |
| 50 | Memasang 1m2 unit Partisi Type II                                           | 1 day  | 18/03/2020 8:00 | 18/03/2020 17:00 | 49FF |
| 51 | Memasang 1 unit Pintu Type I untuk partisi                                  | 1 day  | 20/03/2020 8:00 | 20/03/2020 17:00 | 37   |
| 52 | Memasang 1 jendela Pintu Type I untuk partisi                               | 1 day  | 20/03/2020 8:00 | 20/03/2020 17:00 | 51SS |

|    |                                                     |         |                 |                  |         |
|----|-----------------------------------------------------|---------|-----------------|------------------|---------|
| 53 | Memasang 1 jendela Pintu Type II untuk partisi      | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 51SS    |
| 54 | Pekerjaan Railling Tangga                           | 3 days  | 16/03/2020 8:00 | 18/03/2020 17:00 |         |
| 55 | Pasang Railling Tangga Utama dari Stainless Steel   | 3 days  | 16/03/2020 8:00 | 18/03/2020 17:00 | 49FF    |
| 56 | Pasang Railling Tangga Darurat dari Stainless Steel | 3 days  | 16/03/2020 8:00 | 18/03/2020 17:00 | 55FF    |
| 57 | Curtain Wall                                        | 1 day   | 18/03/2020 8:00 | 18/03/2020 17:00 |         |
| 58 | Curtain Wall ( CW2 )                                | 1 day   | 18/03/2020 8:00 | 18/03/2020 17:00 | 49FF    |
| 59 | Pekerjaan Langit-langit                             | 4 days  | 06/03/2020 8:00 | 10/03/2020 17:00 |         |
| 60 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 4 days  | 06/03/2020 8:00 | 10/03/2020 17:00 | 30FS-7d |
| 61 | Pekerjaan Pengecatan                                | 11 days | 05/03/2020 8:00 | 17/03/2020 17:00 |         |
| 62 | Pengecatan dinding interior                         | 10 days | 06/03/2020 8:00 | 17/03/2020 17:00 | 60SS    |
| 63 | Pengecatan dinding eksterior                        | 8 days  | 09/03/2020 8:00 | 17/03/2020 17:00 | 62FF    |
| 64 | Pengecatan plafon                                   | 6 days  | 05/03/2020 8:00 | 11/03/2020 17:00 | 60FS-5d |
| 65 | Pekerjaan Tata Udara                                | 4 days  | 14/05/2020 8:00 | 18/05/2020 17:00 |         |
| 66 | Unit AC Cassete 5PK                                 | 1 day   | 14/05/2020 8:00 | 14/05/2020 17:00 | 68SS    |
| 67 | Unit AC Cassete 4PK                                 | 3 days  | 15/05/2020 8:00 | 18/05/2020 17:00 | 68FF    |
| 68 | Unit AC Split Wall Mountain 3/4 PK                  | 4 days  | 14/05/2020 8:00 | 18/05/2020 17:00 | 601SS   |
| 69 | Exhaust Fan ex jepang                               | 1 day   | 14/05/2020 8:00 | 14/05/2020 17:00 | 68SS    |
| 70 | Pekerjaan Instalasi Telepon                         | 47 days | 19/03/2020 8:00 | 15/05/2020 17:00 |         |

|    |                                                              |         |                 |                  |         |
|----|--------------------------------------------------------------|---------|-----------------|------------------|---------|
| 71 | Pasang Instalasi Telepon                                     | 2 days  | 19/03/2020 8:00 | 20/03/2020 17:00 | 25FF    |
| 72 | Pasang Outlet Telepon                                        | 2 days  | 14/05/2020 8:00 | 15/05/2020 17:00 | 68SS    |
| 73 | Switch Hub 16 port                                           | 1 day   | 15/05/2020 8:00 | 15/05/2020 17:00 | 72FF    |
| 74 | Terminal Box                                                 | 1 day   | 15/05/2020 8:00 | 15/05/2020 17:00 | 72FF    |
| 75 | Pekerjaan CCTV                                               | 45 days | 20/03/2020 8:00 | 14/05/2020 17:00 |         |
| 76 | Kamera CCTV HD                                               | 1 day   | 14/05/2020 8:00 | 14/05/2020 17:00 | 68SS    |
| 77 | Instalasi kabel coaxial RG6 untuk kamera CCTV                | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF    |
| 78 | Pekerjaan Sound System                                       | 47 days | 19/03/2020 8:00 | 15/05/2020 17:00 |         |
| 79 | Celling speaker 6 W                                          | 2 days  | 14/05/2020 8:00 | 15/05/2020 17:00 | 68SS    |
| 80 | Volume control                                               | 1 day   | 15/05/2020 8:00 | 15/05/2020 17:00 | 79FF    |
| 81 | Instalasi Celling speaker                                    | 2 days  | 19/03/2020 8:00 | 20/03/2020 17:00 | 25FF    |
| 82 | Terminal Box                                                 | 1 day   | 15/05/2020 8:00 | 15/05/2020 17:00 | 79FF    |
| 83 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF    |
| 84 | Pekerjaan Fire Alarm                                         | 7 days  | 13/03/2020 8:00 | 20/03/2020 17:00 |         |
| 85 | INSTALASI LANTAI 3                                           | 7 days  | 13/03/2020 8:00 | 20/03/2020 17:00 |         |
| 86 | Peralatan Fixture                                            | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 |         |
| 87 | - Conv. Optical Smoke Detector                               | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 64FS+1d |
| 88 | - Conv. Manual Break glass                                   | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 87SS    |

|     |                                                                        |         |                 |                  |       |
|-----|------------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 89  | - Junction Box Fire Alarm                                              | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 87SS  |
| 90  | - Remote Indicating Lamp                                               | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 87SS  |
| 91  | - Alarm Bell                                                           | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 87SS  |
| 92  | - Terminal Box 30 x 40 x 12                                            | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 87SS  |
| 93  | <b>Pekerjaan Instalasi</b>                                             | 3 days  | 18/03/2020 8:00 | 20/03/2020 17:00 |       |
| 94  | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days  | 18/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 95  | - Junction Box Fire Alarm NYA cable 2 x 1,5 mm + pipa conduit 20 mm    | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 96  | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 97  | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                | 50 days | 14/03/2020 8:00 | 14/05/2020 17:00 |       |
| 98  | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 6 days  | 14/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 99  | Hydrant Box Indoor, type B c/w                                         | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 100 | Gate valve dia. 21/2" , OS&Y type                                      | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 101 | - Fire Extinguisher 6 kg                                               | 1 day   | 14/05/2020 8:00 | 14/05/2020 17:00 | 68SS  |
| 102 | <b>Instalasi Sprinkler</b>                                             | 7 days  | 13/03/2020 8:00 | 20/03/2020 17:00 |       |
| 103 | <b>BSP Sch.40 c/w fitting2 &amp; Material bantu</b>                    | 7 days  | 13/03/2020 8:00 | 20/03/2020 17:00 |       |
| 104 | dia. 1 "                                                               | 3 days  | 18/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 105 | dia. 1 1/4 "                                                           | 3 days  | 18/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 106 | dia. 2 "                                                               | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 108FF |



|     |                                                                  |         |                 |                  |       |
|-----|------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 107 | dia. 2 1/2 "                                                     | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 108 | dia. 3 "                                                         | 7 days  | 13/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 109 | Sprinkler head dia. 1/2", 68'C, pendent                          | 6 days  | 14/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 110 | Branch Control Valve dia. 3"                                     | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 108FF |
| 111 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                         | 52 days | 17/03/2020 8:00 | 19/05/2020 17:00 |       |
| 112 | Pasang Klosed Duduk                                              | 4 days  | 14/05/2020 8:00 | 18/05/2020 17:00 | 66SS  |
| 113 | Pasang Wastafel single                                           | 3 days  | 14/05/2020 8:00 | 16/05/2020 17:00 | 114SS |
| 114 | Pasang Jet washer                                                | 5 days  | 14/05/2020 8:00 | 19/05/2020 17:00 | 68SS  |
| 115 | Pasang Kran Diameter Air 1/2 "                                   | 1 day   | 19/05/2020 8:00 | 19/05/2020 17:00 | 114FF |
| 116 | Pasang Floor Drain                                               | 1 day   | 14/05/2020 8:00 | 14/05/2020 17:00 | 114SS |
| 117 | <b>Instalasi Air Bersih</b>                                      | 4 days  | 17/03/2020 8:00 | 20/03/2020 17:00 |       |
| 118 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                      | 4 days  | 17/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 119 | <b>Instalasi Air Kotor</b>                                       | 4 days  | 17/03/2020 8:00 | 20/03/2020 17:00 |       |
| 120 | Pasang Cleant Out 3"                                             | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 121 | Pasang Pipa air kotor Ø 3 "                                      | 2 days  | 19/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 122 | Pasang Pipa air kotor Ø 4 "                                      | 4 days  | 17/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 123 | <b>Pekerjaan Listrik</b>                                         | 18 days | 19/03/2020 8:00 | 09/04/2020 17:00 |       |
| 124 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories | 2 days  | 19/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |

|     |                                                                    |         |                 |                  |       |
|-----|--------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 125 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days  | 19/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 126 | Pasang Instalasi Titik Lampu                                       | 16 days | 21/03/2020 8:00 | 09/04/2020 17:00 | 25    |
| 127 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day   | 19/03/2020 8:00 | 19/03/2020 17:00 | 125SS |
| 128 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 132   |
| 129 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day   | 19/03/2020 8:00 | 19/03/2020 17:00 | 127SS |
| 130 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 129   |
| 131 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 137FF |
| 132 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 3 days  | 04/04/2020 8:00 | 07/04/2020 17:00 | 137SS |
| 133 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day   | 07/04/2020 8:00 | 07/04/2020 17:00 | 132FF |
| 134 | Pasang Saklar Tunggal                                              | 1 day   | 07/04/2020 8:00 | 07/04/2020 17:00 | 132FF |
| 135 | Pasang Saklar Ganda                                                | 1 day   | 08/04/2020 8:00 | 08/04/2020 17:00 | 128SS |
| 136 | Instalasi stop kontak                                              | 1 day   | 20/03/2020 8:00 | 20/03/2020 17:00 | 25FF  |
| 137 | Pasang Stop Kontak 1 Phase                                         | 5 days  | 04/04/2020 8:00 | 09/04/2020 17:00 | 126FF |
| 138 | Pasang Stop Kontak under floor (lab. komputer dan mekatronika)     | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 137FF |
| 139 | LANTAI 4                                                           | 98 days | 28/01/2020 8:00 | 26/05/2020 17:00 |       |
| 140 | Pekerjaan Pasangan                                                 | 23 days | 29/02/2020 8:00 | 27/03/2020 17:00 |       |
| 141 | Mengurug pasir bawah lantai setebal 5 cm                           | 3 days  | 24/03/2020 8:00 | 27/03/2020 17:00 | 181FF |
| 142 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr                  | 7 days  | 29/02/2020 8:00 | 07/03/2020 17:00 | 438SS |



|     |                              |         |                 |                  |          |
|-----|------------------------------|---------|-----------------|------------------|----------|
| 143 | Pekerjaan Beton              | 35 days | 28/01/2020 8:00 | 07/03/2020 17:00 |          |
| 144 | Pembuatan Plat Lantai        | 10 days | 28/01/2020 8:00 | 07/02/2020 17:00 | 17       |
| 145 | Kolom Praktis uk. 11 x 11 cm | 4 days  | 04/03/2020 8:00 | 07/03/2020 17:00 | 142FF    |
| 146 | Kolom uk. 30 x 30 cm ( K 2 ) | 1 day   | 12/02/2020 8:00 | 12/02/2020 17:00 | 149FF    |
| 147 | Kolom uk. 40 x 40 cm ( K 3 ) | 2 days  | 11/02/2020 8:00 | 12/02/2020 17:00 | 149FF    |
| 148 | Kolom uk. 50 x 50 cm ( K 4 ) | 5 days  | 07/02/2020 8:00 | 12/02/2020 17:00 | 149FF    |
| 149 | Kolom uk. 70 x 70 cm ( K 6 ) | 5 days  | 07/02/2020 8:00 | 12/02/2020 17:00 | 144FS-1d |
| 150 | Balok Lantai uk.11 x 20 cm   | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 151 | Balok Type B.1               | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 152 | Balok Type B.2               | 6 days  | 01/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 153 | Balok Type B.3               | 7 days  | 31/01/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 154 | Balok Type B.4               | 6 days  | 01/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 155 | Balok Type B.5               | 4 days  | 04/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 156 | Balok Type B.6               | 6 days  | 01/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 157 | Balok Type B.7               | 5 days  | 03/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 158 | Balok Type B.8               | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 159 | Balok Type B.9               | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 160 | Balok Type B.10              | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |

|     |                                                             |         |                 |                  |          |
|-----|-------------------------------------------------------------|---------|-----------------|------------------|----------|
| 161 | Balok Type B.11                                             | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 162 | Balok Type B.12                                             | 1 day   | 07/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 163 | Balok Type B.13                                             | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 164 | Balok Type B.14                                             | 1 day   | 07/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 165 | Balok Type B.15                                             | 1 day   | 07/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 166 | Balok Type B.20                                             | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 167 | Balok Type B.27                                             | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 168 | Balok Meja Beton                                            | 2 days  | 03/03/2020 8:00 | 04/03/2020 17:00 | 145SF+1d |
| 169 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 170 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 1 day   | 07/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 171 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 1 day   | 07/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 172 | Plat meja beton tebal 10 cm                                 | 3 days  | 03/03/2020 8:00 | 05/03/2020 17:00 | 168SS    |
| 173 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 2 days  | 06/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 174 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 175 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 3 days  | 05/02/2020 8:00 | 07/02/2020 17:00 | 144FF    |
| 176 | Pekerjaan Plesteran dan Benangan                            | 23 days | 29/02/2020 8:00 | 27/03/2020 17:00 |          |
| 177 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 22 days | 29/02/2020 8:00 | 26/03/2020 17:00 | 142FS-7d |
| 178 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 7 days  | 29/02/2020 8:00 | 07/03/2020 17:00 | 142FS-7d |

|     |                                                                             |         |                 |                  |          |
|-----|-----------------------------------------------------------------------------|---------|-----------------|------------------|----------|
| 179 | Pekerjaan acian interior                                                    | 19 days | 04/03/2020 8:00 | 26/03/2020 17:00 | 177SS+3d |
| 180 | Pekerjaan acian eksterior                                                   | 6 days  | 09/03/2020 8:00 | 14/03/2020 17:00 | 178      |
| 181 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                              | 6 days  | 20/03/2020 8:00 | 27/03/2020 17:00 | 179FF+1d |
| 182 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                             | 3 days  | 14/03/2020 8:00 | 17/03/2020 17:00 | 180FF+2d |
| 183 | Pekerjaan Lantai                                                            | 25 days | 24/03/2020 8:00 | 22/04/2020 17:00 |          |
| 184 | Pasang Keramik Lantai 60 x 60                                               | 20 days | 24/03/2020 8:00 | 16/04/2020 17:00 | 141SS    |
| 185 | Pasang Keramik Lantai 30 x 30                                               | 8 days  | 24/03/2020 8:00 | 02/04/2020 17:00 | 184SS    |
| 186 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                               | 3 days  | 31/03/2020 8:00 | 02/04/2020 17:00 | 187      |
| 187 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                      | 5 days  | 24/03/2020 8:00 | 30/03/2020 17:00 | 184SS    |
| 188 | Keramik Meja Beton 20 x 20                                                  | 7 days  | 09/04/2020 8:00 | 16/04/2020 17:00 | 189FS-1d |
| 189 | Keramik Dinding Meja Beton 20 x 25                                          | 6 days  | 03/04/2020 8:00 | 09/04/2020 17:00 | 186      |
| 190 | Pasang Batu Alam                                                            | 3 days  | 20/04/2020 8:00 | 22/04/2020 17:00 | 217FF    |
| 191 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 10 days | 17/04/2020 8:00 | 28/04/2020 17:00 |          |
| 192 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 |          |
| 193 | Pas. Kusen Type J2                                                          | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 194 | Pas. Kusen Type J3                                                          | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 195 | Pas. Kusen Type J4                                                          | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 196 | Pas. Kusen Type J8                                                          | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 204      |

|     |                                                     |         |                 |                  |          |
|-----|-----------------------------------------------------|---------|-----------------|------------------|----------|
| 197 | Pas. Kusen Type J9                                  | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 198 | Pas. Kusen Type P2                                  | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 199 | Pas. Kusen Type P3                                  | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 200 | Pas. Kusen Type P4                                  | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 201 | Pas. Kusen Type P5                                  | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 202 | Pasang pintu darurat anti api                       | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 196FF    |
| 203 | <b>Pekerjaan Partisi</b>                            | 10 days | 17/04/2020 8:00 | 28/04/2020 17:00 |          |
| 204 | Memasang 1m2 unit Partisi Type I                    | 6 days  | 17/04/2020 8:00 | 23/04/2020 17:00 | 184      |
| 205 | Memasang 1 unit Pintu Type I untuk partisi          | 2 days  | 25/04/2020 8:00 | 27/04/2020 17:00 | 196      |
| 206 | Memasang 1 unit Pintu Type II untuk partisi         | 1 day   | 25/04/2020 8:00 | 25/04/2020 17:00 | 205SS    |
| 207 | Memasang 1 jendela Pintu Type I untuk partisi       | 3 days  | 25/04/2020 8:00 | 28/04/2020 17:00 | 205SS    |
| 208 | <b>Pekerjaan Railling Tangga</b>                    | 4 days  | 20/04/2020 8:00 | 23/04/2020 17:00 |          |
| 209 | Pasang Railling Tangga Utama dari Stainless Steel   | 4 days  | 20/04/2020 8:00 | 23/04/2020 17:00 | 204FF    |
| 210 | Pasang Railling Tangga Darurat dari Stainless Steel | 3 days  | 20/04/2020 8:00 | 22/04/2020 17:00 | 209SS    |
| 211 | <b>Curtain Wall</b>                                 | 1 day   | 23/04/2020 8:00 | 23/04/2020 17:00 |          |
| 212 | Curtain Wall ( CW2 )                                | 1 day   | 23/04/2020 8:00 | 23/04/2020 17:00 | 204FF    |
| 213 | <b>Pekerjaan Langit-langit</b>                      | 8 days  | 09/04/2020 8:00 | 17/04/2020 17:00 |          |
| 214 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 8 days  | 09/04/2020 8:00 | 17/04/2020 17:00 | 184FS-7d |

|     |                                               |         |                 |                  |          |
|-----|-----------------------------------------------|---------|-----------------|------------------|----------|
| 215 | Pekerjaan Pengecatan                          | 12 days | 09/04/2020 8:00 | 22/04/2020 17:00 |          |
| 216 | Pengecatan dinding interior                   | 12 days | 09/04/2020 8:00 | 22/04/2020 17:00 | 214SS    |
| 217 | Pengecatan dinding eksterior                  | 6 days  | 16/04/2020 8:00 | 22/04/2020 17:00 | 216FF    |
| 218 | Pengecatan plafon                             | 9 days  | 13/04/2020 8:00 | 22/04/2020 17:00 | 214FS-5d |
| 219 | Pekerjaan Tata Udara                          | 3 days  | 19/05/2020 8:00 | 22/05/2020 17:00 |          |
| 220 | Unit AC Cassete 5PK                           | 3 days  | 19/05/2020 8:00 | 22/05/2020 17:00 | 221FF    |
| 221 | Unit AC Cassete 4PK                           | 3 days  | 19/05/2020 8:00 | 22/05/2020 17:00 | 68       |
| 222 | Unit AC Split Wall Mountain 3/4 PK            | 1 day   | 19/05/2020 8:00 | 19/05/2020 17:00 | 221SS    |
| 223 | Exhaust Fan ex jepang                         | 1 day   | 22/05/2020 8:00 | 22/05/2020 17:00 | 221FF    |
| 224 | Pekerjaan Instalasi Telepon                   | 33 days | 02/04/2020 8:00 | 12/05/2020 17:00 |          |
| 225 | Pasang Instalasi Telepon                      | 2 days  | 02/04/2020 8:00 | 03/04/2020 17:00 | 177FF+7d |
| 226 | Pasang Outlet Telepon                         | 2 days  | 11/05/2020 8:00 | 12/05/2020 17:00 | 221SS-7d |
| 227 | Switch Hub 16 port                            | 1 day   | 12/05/2020 8:00 | 12/05/2020 17:00 | 226FF    |
| 228 | Terminal Box                                  | 1 day   | 12/05/2020 8:00 | 12/05/2020 17:00 | 226FF    |
| 229 | Pekerjaan CCTV                                | 31 days | 03/04/2020 8:00 | 11/05/2020 17:00 |          |
| 230 | Kamera CCTV HD                                | 1 day   | 11/05/2020 8:00 | 11/05/2020 17:00 | 221SS-7d |
| 231 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 1 day   | 03/04/2020 8:00 | 03/04/2020 17:00 | 177FF+7d |
| 232 | Pekerjaan Sound System                        | 36 days | 31/03/2020 8:00 | 13/05/2020 17:00 |          |



|     |                                                                        |         |                 |                  |          |
|-----|------------------------------------------------------------------------|---------|-----------------|------------------|----------|
| 233 | Celling speaker 6 W                                                    | 3 days  | 11/05/2020 8:00 | 13/05/2020 17:00 | 221SS-7d |
| 234 | Volume control                                                         | 1 day   | 13/05/2020 8:00 | 13/05/2020 17:00 | 233FF    |
| 235 | Instalasi Celling speaker                                              | 4 days  | 31/03/2020 8:00 | 03/04/2020 17:00 | 177FF+7d |
| 236 | Terminal Box                                                           | 1 day   | 13/05/2020 8:00 | 13/05/2020 17:00 | 233FF    |
| 237 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 1 day   | 03/04/2020 8:00 | 03/04/2020 17:00 | 177FF+7d |
| 238 | Pekerjaan Fire Alarm                                                   | 28 days | 23/03/2020 8:00 | 24/04/2020 17:00 |          |
| 239 | INSTALASI LANTAI 4                                                     | 28 days | 23/03/2020 8:00 | 24/04/2020 17:00 |          |
| 240 | Peralatan Fixture                                                      | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 |          |
| 241 | - Conv. Optical Smoke Detector                                         | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 218FS+1d |
| 242 | - Conv. Manual Break glass                                             | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 241SS    |
| 243 | - Junction Box Fire Alarm                                              | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 241SS    |
| 244 | - Remote Indicating Lamp                                               | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 241SS    |
| 245 | - Alarm Bell                                                           | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 241SS    |
| 246 | - Terminal Box 30 x 40 x 12                                            | 1 day   | 24/04/2020 8:00 | 24/04/2020 17:00 | 241SS    |
| 247 | Pekerjaan Instalasi                                                    | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 |          |
| 248 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 249 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 250 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |

|     |                                                   |         |                 |                  |          |
|-----|---------------------------------------------------|---------|-----------------|------------------|----------|
| 251 | Pekerjaan Alat Pemadam Kebakaran                  | 43 days | 19/03/2020 8:00 | 11/05/2020 17:00 |          |
| 252 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 " | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 253 | Hydrant Box Indoor, type B c/w                    | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 252FF    |
| 254 | Gate valve dia. 21/2" , OS&Y type                 | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 252FF    |
| 255 | - Fire Extinguisher 6 kg                          | 1 day   | 11/05/2020 8:00 | 11/05/2020 17:00 | 221SS-7d |
| 256 | Instalasi Sprinkler                               | 7 days  | 18/03/2020 8:00 | 26/03/2020 17:00 |          |
| 257 | BSP Sch.40 c/w fitting2 & Material bantu          | 7 days  | 18/03/2020 8:00 | 26/03/2020 17:00 |          |
| 258 | dia. 1 "                                          | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 259 | dia. 1 1/4 "                                      | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 260 | dia. 2 "                                          | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 261 | dia. 2 1/2 "                                      | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 262 | dia. 3 "                                          | 7 days  | 18/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 263 | Sprinkler head dia. 1/2", 68'C, pendent           | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 264 | Branch Control Valve dia. 3"                      | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 265 | Pekerjaan Sanitair & Sanitasi                     | 54 days | 19/03/2020 8:00 | 26/05/2020 17:00 |          |
| 266 | Pasang Klosed Duduk                               | 4 days  | 19/05/2020 8:00 | 23/05/2020 17:00 | 219SS    |
| 267 | Pasang Wastafel single                            | 2 days  | 19/05/2020 8:00 | 20/05/2020 17:00 | 268SS    |
| 268 | Pasang Jet washer                                 | 5 days  | 19/05/2020 8:00 | 26/05/2020 17:00 | 221SS    |



|     |                                                                    |         |                 |                  |       |
|-----|--------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 269 | Pasang Kran Diameter Air 1/2 "                                     | 2 days  | 23/05/2020 8:00 | 26/05/2020 17:00 | 268FF |
| 270 | Pasang Floor Drain                                                 | 1 day   | 19/05/2020 8:00 | 19/05/2020 17:00 | 268SS |
| 271 | Instalasi Air Bersih                                               | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 |       |
| 272 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 273 | Instalasi Air Kotor                                                | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 |       |
| 274 | Pasang Clean Out 3"                                                | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 275 | Pasang Pipa air kotor Ø 3 "                                        | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 276 | Pasang Pipa air kotor Ø 4 "                                        | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 277 | Pekerjaan Listrik                                                  | 15 days | 24/03/2020 8:00 | 10/04/2020 17:00 |       |
| 278 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 279 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 177FF |
| 280 | Pasang Instalasi Titik Lampu                                       | 13 days | 27/03/2020 8:00 | 10/04/2020 17:00 | 177   |
| 281 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day   | 04/04/2020 8:00 | 04/04/2020 17:00 | 288SS |
| 282 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days  | 06/04/2020 8:00 | 07/04/2020 17:00 | 281   |
| 283 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day   | 08/04/2020 8:00 | 08/04/2020 17:00 | 282   |
| 284 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 283   |
| 285 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day   | 10/04/2020 8:00 | 10/04/2020 17:00 | 284   |
| 286 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 6 days  | 04/04/2020 8:00 | 10/04/2020 17:00 | 288FF |

|     |                                                   |         |                 |                  |          |
|-----|---------------------------------------------------|---------|-----------------|------------------|----------|
| 287 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt       | 1 day   | 10/04/2020 8:00 | 10/04/2020 17:00 | 288FF    |
| 288 | Pasang Saklar Tunggal                             | 6 days  | 04/04/2020 8:00 | 10/04/2020 17:00 | 280FF    |
| 289 | Pasang Saklar Ganda                               | 2 days  | 04/04/2020 8:00 | 06/04/2020 17:00 | 288SS    |
| 290 | Instalasi stop kontak                             | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 291 | Instalasi stop kontak 3 phase                     | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 177FF    |
| 292 | Pasang Stop Kontak 1 Phase                        | 2 days  | 07/04/2020 8:00 | 08/04/2020 17:00 | 289      |
| 293 | Pasang Stop Kontak 3 Phase                        | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 292      |
| 294 | <b>LANTAI 5</b>                                   | 87 days | 13/02/2020 8:00 | 29/05/2020 17:00 |          |
| 295 | <b>Pekerjaan Pasangan</b>                         | 19 days | 17/03/2020 8:00 | 08/04/2020 17:00 |          |
| 296 | Mengurug pasir bawah lantai setebal 5 cm          | 4 days  | 04/04/2020 8:00 | 08/04/2020 17:00 | 332FF    |
| 297 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 6 days  | 17/03/2020 8:00 | 23/03/2020 17:00 | 483SS    |
| 298 | <b>Pekerjaan Beton</b>                            | 34 days | 13/02/2020 8:00 | 23/03/2020 17:00 |          |
| 299 | Pembuatan Plat Lantai                             | 10 days | 13/02/2020 8:00 | 24/02/2020 17:00 | 148      |
| 300 | Kolom Praktis uk. 11 x 11 cm                      | 3 days  | 20/03/2020 8:00 | 23/03/2020 17:00 | 297FF    |
| 301 | Kolom uk. 30 x 30 cm ( K 2 )                      | 1 day   | 28/02/2020 8:00 | 28/02/2020 17:00 | 303FF    |
| 302 | Kolom uk. 40 x 40 cm ( K 3 )                      | 3 days  | 26/02/2020 8:00 | 28/02/2020 17:00 | 303FF    |
| 303 | Kolom uk. 50 x 50 cm ( K 4 )                      | 5 days  | 24/02/2020 8:00 | 28/02/2020 17:00 | 299FS-1d |
| 304 | Balok Lantai uk.11 x 20 cm                        | 2 days  | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |

|     |                                                      |        |                 |                  |       |
|-----|------------------------------------------------------|--------|-----------------|------------------|-------|
| 305 | Balok Type B.1                                       | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 306 | Balok Type B.2                                       | 6 days | 18/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 307 | Balok Type B.3                                       | 6 days | 18/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 308 | Balok Type B.4                                       | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 309 | Balok Type B.5                                       | 4 days | 20/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 310 | Balok Type B.6                                       | 4 days | 20/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 311 | Balok Type B.7                                       | 4 days | 20/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 312 | Balok Type B.8                                       | 2 days | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 313 | Balok Type B.9                                       | 2 days | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 314 | Balok Type B.10                                      | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 315 | Balok Type B.11                                      | 2 days | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 316 | Balok Type B.12                                      | 2 days | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 317 | Balok Type B.13                                      | 2 days | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 318 | Balok Type B.14                                      | 1 day  | 24/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 319 | Balok Type B.15                                      | 1 day  | 24/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 320 | Balok Type B.20                                      | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 321 | Balok Type B.27                                      | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |
| 322 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm | 3 days | 21/02/2020 8:00 | 24/02/2020 17:00 | 299FF |

|     |                                                             |         |                 |                  |          |
|-----|-------------------------------------------------------------|---------|-----------------|------------------|----------|
| 323 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 1 day   | 24/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |
| 324 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 1 day   | 24/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |
| 325 | Plat meja beton tebal 10 cm                                 | 2 days  | 20/03/2020 8:00 | 21/03/2020 17:00 | 300SS    |
| 326 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 2 days  | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |
| 327 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 2 days  | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |
| 328 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 2 days  | 22/02/2020 8:00 | 24/02/2020 17:00 | 299FF    |
| 329 | <b>Pekerjaan Plesteran dan Benangan</b>                     | 21 days | 16/03/2020 8:00 | 09/04/2020 17:00 |          |
| 330 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 21 days | 16/03/2020 8:00 | 09/04/2020 17:00 | 297FS-7d |
| 331 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 9 days  | 16/03/2020 8:00 | 26/03/2020 17:00 | 297FS-7d |
| 332 | Pekerjaan acian interior                                    | 18 days | 18/03/2020 8:00 | 08/04/2020 17:00 | 330SS+2d |
| 333 | Pekerjaan acian eksterior                                   | 5 days  | 21/03/2020 8:00 | 27/03/2020 17:00 | 331FF+1d |
| 334 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr              | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 | 332SS+1d |
| 335 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr             | 5 days  | 24/03/2020 8:00 | 30/03/2020 17:00 | 333SS+2d |
| 336 | <b>Pekerjaan Lantai</b>                                     | 24 days | 04/04/2020 8:00 | 02/05/2020 17:00 |          |
| 337 | Pasang Keramik Lantai 60 x 60                               | 20 days | 04/04/2020 8:00 | 27/04/2020 17:00 | 296SS    |
| 338 | Pasang Keramik Lantai 30 x 30                               | 8 days  | 07/04/2020 8:00 | 15/04/2020 17:00 | 337SS+2d |
| 339 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC               | 3 days  | 22/04/2020 8:00 | 24/04/2020 17:00 | 340      |
| 340 | Pasang Keramik Dinding 30 x 60 (KM/WC)                      | 5 days  | 16/04/2020 8:00 | 21/04/2020 17:00 | 338      |

|     |                                                                             |         |                 |                  |       |
|-----|-----------------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 341 | Pasang Batu Alam                                                            | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 366FF |
| 342 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 10 days | 28/04/2020 8:00 | 11/05/2020 17:00 |       |
| 343 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 |       |
| 344 | Pas. Kusen Type J2                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 354   |
| 345 | Pas. Kusen Type J3                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 346 | Pas. Kusen Type J4                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 347 | Pas. Kusen Type J12                                                         | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 348 | Pas. Kusen Type P2                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 349 | Pas. Kusen Type P3                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 350 | Pas. Kusen Type P4                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 351 | Pas. Kusen Type P5                                                          | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 352 | Pasang pintu darurat anti api                                               | 1 day   | 08/05/2020 8:00 | 08/05/2020 17:00 | 344SS |
| 353 | Pekerjaan Partisi                                                           | 10 days | 28/04/2020 8:00 | 11/05/2020 17:00 |       |
| 354 | Memasang 1m2 unit Partisi Type I                                            | 7 days  | 28/04/2020 8:00 | 06/05/2020 17:00 | 337   |
| 355 | Memasang 1 unit Pintu Type II untuk partisi                                 | 1 day   | 09/05/2020 8:00 | 09/05/2020 17:00 | 356SS |
| 356 | Memasang 1 jendela Pintu Type I untuk partisi                               | 2 days  | 09/05/2020 8:00 | 11/05/2020 17:00 | 344   |
| 357 | Pekerjaan Railling Tangga                                                   | 7 days  | 28/04/2020 8:00 | 06/05/2020 17:00 |       |
| 358 | Pasang Railling Tangga Utama dari Stainless Steel                           | 4 days  | 02/05/2020 8:00 | 06/05/2020 17:00 | 354FF |



|     |                                                     |         |                 |                  |          |
|-----|-----------------------------------------------------|---------|-----------------|------------------|----------|
| 359 | Pasang Railling Tangga Darurat dari Stainless Steel | 3 days  | 28/04/2020 8:00 | 30/04/2020 17:00 | 354SS    |
| 360 | Curtain Wall                                        | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 |          |
| 361 | Curtain Wall ( CW2 )                                | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 354FF    |
| 362 | Pekerjaan Langit-langit                             | 8 days  | 20/04/2020 8:00 | 28/04/2020 17:00 |          |
| 363 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 8 days  | 20/04/2020 8:00 | 28/04/2020 17:00 | 337FS-7d |
| 364 | Pengerjaan Pengecatan                               | 12 days | 20/04/2020 8:00 | 04/05/2020 17:00 |          |
| 365 | Pengecatan dinding interior                         | 11 days | 20/04/2020 8:00 | 02/05/2020 17:00 | 363SS    |
| 366 | Pengecatan dinding eksterior                        | 6 days  | 25/04/2020 8:00 | 02/05/2020 17:00 | 365FF    |
| 367 | Pengecatan plafon                                   | 9 days  | 23/04/2020 8:00 | 04/05/2020 17:00 | 363FS-5d |
| 368 | Pekerjaan Tata Udara                                | 3 days  | 23/05/2020 8:00 | 27/05/2020 17:00 |          |
| 369 | Unit AC Cassete 5PK                                 | 3 days  | 23/05/2020 8:00 | 27/05/2020 17:00 | 221      |
| 370 | Unit AC Cassete 4PK                                 | 1 day   | 23/05/2020 8:00 | 23/05/2020 17:00 | 369SS    |
| 371 | Pekerjaan CCTV                                      | 36 days | 09/04/2020 8:00 | 23/05/2020 17:00 |          |
| 372 | Kamera CCTV HD                                      | 1 day   | 23/05/2020 8:00 | 23/05/2020 17:00 | 369SS    |
| 373 | Instalasi kabel coaxial RG6 untuk kamera CCTV       | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 374 | Pekerjaan Sound System                              | 40 days | 07/04/2020 8:00 | 27/05/2020 17:00 |          |
| 375 | Celling speaker 6 W                                 | 3 days  | 23/05/2020 8:00 | 27/05/2020 17:00 | 369SS    |
| 376 | Volume control                                      | 1 day   | 27/05/2020 8:00 | 27/05/2020 17:00 | 375FF    |

|     |                                                                        |         |                 |                  |          |
|-----|------------------------------------------------------------------------|---------|-----------------|------------------|----------|
| 377 | Instalasi Ceiling speaker                                              | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 378 | Terminal Box                                                           | 1 day   | 27/05/2020 8:00 | 27/05/2020 17:00 | 375FF    |
| 379 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 380 | Pekerjaan Fire Alarm                                                   | 25 days | 07/04/2020 8:00 | 06/05/2020 17:00 |          |
| 381 | INSTALASI LANTAI 5                                                     | 25 days | 07/04/2020 8:00 | 06/05/2020 17:00 |          |
| 382 | Peralatan Fixture                                                      | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 |          |
| 383 | - Conv. Optical Smoke Detector                                         | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 367FS+1d |
| 384 | - Conv. Manual Break glass                                             | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 383SS    |
| 385 | - Junction Box Fire Alarm                                              | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 383SS    |
| 386 | - Remote Indicating Lamp                                               | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 383SS    |
| 387 | - Alarm Bell                                                           | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 383SS    |
| 388 | - Terminal Box 30 x 40 x 12                                            | 1 day   | 06/05/2020 8:00 | 06/05/2020 17:00 | 383SS    |
| 389 | <b>Pekerjaan Instalasi</b>                                             | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 |          |
| 390 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 391 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 392 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 393 | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                | 41 days | 03/04/2020 8:00 | 23/05/2020 17:00 |          |
| 394 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 6 days  | 03/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |



|     |                                          |         |                 |                  |       |
|-----|------------------------------------------|---------|-----------------|------------------|-------|
| 395 | Hydrant Box Indoor, type B c/w           | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 394FF |
| 396 | Gate valve dia. 21/2" , OS&Y type        | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 394FF |
| 397 | - Fire Extinguisher 6 kg                 | 1 day   | 23/05/2020 8:00 | 23/05/2020 17:00 | 369SS |
| 398 | Instalasi Sprinkler                      | 7 days  | 02/04/2020 8:00 | 09/04/2020 17:00 |       |
| 399 | BSP Sch.40 c/w fitting2 & Material bantu | 7 days  | 02/04/2020 8:00 | 09/04/2020 17:00 |       |
| 400 | dia. 1 "                                 | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 401 | dia. 1 1/4 "                             | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 402 | dia. 2 "                                 | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 403 | dia. 2 1/2 "                             | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 404 | dia. 3 "                                 | 7 days  | 02/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 405 | Sprinkler head dia. 1/2", 68'C, pendent  | 6 days  | 03/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 406 | Branch Control Valve dia. 3"             | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 407 | Pekerjaan Sanitair & Sanitasi            | 42 days | 07/04/2020 8:00 | 29/05/2020 17:00 |       |
| 408 | Pasang Klosed Duduk                      | 4 days  | 23/04/2020 8:00 | 27/04/2020 17:00 | 367SS |
| 409 | Pasang Wastafel single                   | 2 days  | 23/05/2020 8:00 | 26/05/2020 17:00 | 410SS |
| 410 | Pasang Jet washer                        | 5 days  | 23/05/2020 8:00 | 29/05/2020 17:00 | 369SS |
| 411 | Pasang Kran Diameter Air 1/2 "           | 1 day   | 27/05/2020 8:00 | 27/05/2020 17:00 | 409   |
| 412 | Pasang Floor Drain                       | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 410FF |

|     |                                                                    |         |                 |                  |       |
|-----|--------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 413 | Instalasi Air Bersih                                               | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 |       |
| 414 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 415 | Instalasi Air Kotor                                                | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 |       |
| 416 | Pasang Cleant Out 3"                                               | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 417 | Pasang Pipa air kotor Ø 3 "                                        | 3 days  | 07/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 418 | Pasang Pipa air kotor Ø 4 "                                        | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 419 | Pekerjaan Listrik                                                  | 13 days | 08/04/2020 8:00 | 22/04/2020 17:00 |       |
| 420 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 421 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days  | 08/04/2020 8:00 | 09/04/2020 17:00 | 330FF |
| 422 | Pasang Instalasi Titik Lampu                                       | 11 days | 10/04/2020 8:00 | 22/04/2020 17:00 | 330   |
| 423 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day   | 17/04/2020 8:00 | 17/04/2020 17:00 | 428SS |
| 424 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days  | 18/04/2020 8:00 | 20/04/2020 17:00 | 423   |
| 425 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day   | 21/04/2020 8:00 | 21/04/2020 17:00 | 424   |
| 426 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 420FF |
| 427 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day   | 22/04/2020 8:00 | 22/04/2020 17:00 | 425   |
| 428 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 5 days  | 17/04/2020 8:00 | 22/04/2020 17:00 | 422FF |
| 429 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day   | 22/04/2020 8:00 | 22/04/2020 17:00 | 430   |
| 430 | Pasang Saklar Tunggal                                              | 4 days  | 17/04/2020 8:00 | 21/04/2020 17:00 | 428SS |

|     |                                                   |         |                 |                  |          |
|-----|---------------------------------------------------|---------|-----------------|------------------|----------|
| 431 | Instalasi stop kontak                             | 1 day   | 09/04/2020 8:00 | 09/04/2020 17:00 | 330FF    |
| 432 | Pasang Stop Kontak 1 Phase                        | 2 days  | 21/04/2020 8:00 | 22/04/2020 17:00 | 428FF    |
| 433 | <b>LANTAI 6 DAN ATAP</b>                          | 74 days | 29/02/2020 8:00 | 30/05/2020 17:00 |          |
| 434 | <b>Pekerjaan Pasangan</b>                         | 23 days | 04/04/2020 8:00 | 30/04/2020 17:00 |          |
| 435 | Mengurug pasir bawah lantai setebal 5 cm          | 4 days  | 27/04/2020 8:00 | 30/04/2020 17:00 | 489FF    |
| 436 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 11 days | 04/04/2020 8:00 | 16/04/2020 17:00 | 483FS+7d |
| 437 | <b>Pekerjaan Beton</b>                            | 40 days | 29/02/2020 8:00 | 16/04/2020 17:00 |          |
| 438 | Pembuatan Plat Lantai                             | 10 days | 29/02/2020 8:00 | 11/03/2020 17:00 | 303      |
| 439 | Kolom Praktis uk. 11 x 11 cm                      | 4 days  | 13/04/2020 8:00 | 16/04/2020 17:00 | 436FF    |
| 440 | Kolom uk. 30 x 30 cm ( K 2 )                      | 1 day   | 16/03/2020 8:00 | 16/03/2020 17:00 | 442FF    |
| 441 | Kolom uk. 40 x 40 cm ( K 3 )                      | 3 days  | 13/03/2020 8:00 | 16/03/2020 17:00 | 442FF    |
| 442 | Kolom uk. 50 x 50 cm ( K 4 )                      | 6 days  | 10/03/2020 8:00 | 16/03/2020 17:00 | 438FS-2d |
| 443 | Balok Lantai uk.11 x 20 cm                        | 2 days  | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF    |
| 444 | <b>BALOK LANTAI</b>                               | 37 days | 04/03/2020 8:00 | 16/04/2020 17:00 |          |
| 445 | Balok Type B.1                                    | 4 days  | 07/03/2020 8:00 | 11/03/2020 17:00 | 438FF    |
| 446 | Balok Type B.2                                    | 6 days  | 05/03/2020 8:00 | 11/03/2020 17:00 | 438FF    |
| 447 | Balok Type B.3                                    | 7 days  | 04/03/2020 8:00 | 11/03/2020 17:00 | 438FF    |
| 448 | Balok Type B.4                                    | 5 days  | 06/03/2020 8:00 | 11/03/2020 17:00 | 438FF    |

|     |                                                             |        |                 |                  |       |
|-----|-------------------------------------------------------------|--------|-----------------|------------------|-------|
| 449 | Balok Type B.5                                              | 4 days | 07/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 450 | Balok Type B.6                                              | 4 days | 07/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 451 | Balok Type B.7                                              | 4 days | 07/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 452 | Balok Type B.8                                              | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 453 | Balok Type B.9                                              | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 454 | Balok Type B.10                                             | 3 days | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 455 | Balok Type B.11                                             | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 456 | Balok Type B.12                                             | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 457 | Balok Type B.13                                             | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 458 | Balok Type B.14                                             | 1 day  | 11/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 459 | Balok Type B.15                                             | 1 day  | 11/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 460 | Balok Type B.20                                             | 3 days | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 461 | Balok Type B.27                                             | 3 days | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 462 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 3 days | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 463 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 1 day  | 11/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 464 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 1 day  | 11/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 465 | Plat meja beton tebal 10 cm                                 | 6 days | 10/04/2020 8:00 | 16/04/2020 17:00 | 436FF |
| 466 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 2 days | 10/03/2020 8:00 | 11/03/2020 17:00 | 438FF |

|     |                                                         |         |                 |                  |       |
|-----|---------------------------------------------------------|---------|-----------------|------------------|-------|
| 467 | Plat Tangga Utama dan Darurat Tebal 15 cm               | 3 days  | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 468 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 3 days  | 09/03/2020 8:00 | 11/03/2020 17:00 | 438FF |
| 469 | <b>BALOK ATAP</b>                                       | 8 days  | 17/03/2020 8:00 | 26/03/2020 17:00 |       |
| 470 | Balok Type B.14                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 471 | Balok Type B.15                                         | 1 day   | 26/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 472 | Balok Type B.16                                         | 5 days  | 20/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 473 | Balok Type B.17                                         | 5 days  | 20/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 474 | Balok Type B.18                                         | 3 days  | 23/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 475 | Balok Type B.19                                         | 6 days  | 19/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 476 | Balok Type B.20                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 477 | Balok Type B.21                                         | 4 days  | 21/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 478 | Balok Type B.22                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 479 | Balok Type B.26                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 480 | Balok Type B.29                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 481 | Balok Type B.30                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 482 | Balok Type B.31                                         | 2 days  | 24/03/2020 8:00 | 26/03/2020 17:00 | 483FF |
| 483 | Waterprofing plat atap                                  | 8 days  | 17/03/2020 8:00 | 26/03/2020 17:00 | 442   |
| 484 | <b>Pekerjaan Plesteran dan Benangan</b>                 | 20 days | 09/04/2020 8:00 | 02/05/2020 17:00 |       |



|     |                                                                                    |         |                 |                  |          |
|-----|------------------------------------------------------------------------------------|---------|-----------------|------------------|----------|
| 485 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                                    | 20 days | 09/04/2020 8:00 | 02/05/2020 17:00 | 436FS-7d |
| 486 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                                   | 8 days  | 09/04/2020 8:00 | 17/04/2020 17:00 | 436FS-7d |
| 487 | Pekerjaan acian interior                                                           | 16 days | 11/04/2020 8:00 | 29/04/2020 17:00 | 485SS+2d |
| 488 | Pekerjaan acian eksterior                                                          | 5 days  | 13/04/2020 8:00 | 17/04/2020 17:00 | 486SS+3d |
| 489 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                     | 6 days  | 24/04/2020 8:00 | 30/04/2020 17:00 | 487FF+1d |
| 490 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                                    | 4 days  | 18/04/2020 8:00 | 22/04/2020 17:00 | 488      |
| 491 | <b>Pekerjaan Lantai</b>                                                            | 22 days | 27/04/2020 8:00 | 26/05/2020 17:00 |          |
| 492 | Pasang Keramik Lantai 60 x 60                                                      | 20 days | 27/04/2020 8:00 | 22/05/2020 17:00 | 435SS    |
| 493 | Pasang Keramik Lantai 30 x 30                                                      | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 492SS+2d |
| 494 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      | 3 days  | 11/05/2020 8:00 | 13/05/2020 17:00 | 495      |
| 495 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             | 5 days  | 04/05/2020 8:00 | 09/05/2020 17:00 | 493      |
| 496 | Pasang Batu Alam                                                                   | 3 days  | 22/05/2020 8:00 | 26/05/2020 17:00 | 524FF    |
| 497 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 5 days  | 23/05/2020 8:00 | 29/05/2020 17:00 |          |
| 498 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 |          |
| 499 | Pas. Kusen Type J2                                                                 | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 511      |
| 500 | Pas. Kusen Type J3                                                                 | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS    |
| 501 | Pas. Kusen Type J4                                                                 | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS    |
| 502 | Pas. Kusen Type J8                                                                 | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS    |

|     |                                                     |        |                 |                  |       |
|-----|-----------------------------------------------------|--------|-----------------|------------------|-------|
| 503 | Pas. Kusen Type J9                                  | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 504 | Pas. Kusen Type J12                                 | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 505 | Pas. Kusen Type P2                                  | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 506 | Pas. Kusen Type P3                                  | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 507 | Pas. Kusen Type P4                                  | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 508 | Pas. Kusen Type P5                                  | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 509 | Pasang pintu darurat anti api                       | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 499SS |
| 510 | Pekerjaan Partisi                                   | 5 days | 23/05/2020 8:00 | 29/05/2020 17:00 |       |
| 511 | Memasang 1m2 unit Partisi Type I                    | 3 days | 23/05/2020 8:00 | 27/05/2020 17:00 | 492   |
| 512 | Memasang 1 unit Pintu Type I untuk partisi          | 1 day  | 29/05/2020 8:00 | 29/05/2020 17:00 | 499   |
| 513 | Memasang 1 unit Pintu Type II untuk partisi         | 1 day  | 29/05/2020 8:00 | 29/05/2020 17:00 | 512SS |
| 514 | Memasang 1 jendela Pintu Type I untuk partisi       | 1 day  | 29/05/2020 8:00 | 29/05/2020 17:00 | 512SS |
| 515 | Pekerjaan Railling Tangga                           | 4 days | 22/05/2020 8:00 | 27/05/2020 17:00 |       |
| 516 | Pasang Railling Tangga Utama dari Stainless Steel   | 4 days | 22/05/2020 8:00 | 27/05/2020 17:00 | 511FF |
| 517 | Pasang Railling Tangga Darurat dari Stainless Steel | 3 days | 23/05/2020 8:00 | 27/05/2020 17:00 | 516FF |
| 518 | Curtain Wall                                        | 1 day  | 27/05/2020 8:00 | 27/05/2020 17:00 |       |
| 519 | Curtain Wall ( CW2 )                                | 1 day  | 27/05/2020 8:00 | 27/05/2020 17:00 | 511FF |
| 520 | Pekerjaan Langit-langit                             | 6 days | 14/05/2020 8:00 | 20/05/2020 17:00 |       |



|     |                                                   |         |                 |                  |          |
|-----|---------------------------------------------------|---------|-----------------|------------------|----------|
| 521 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 6 days  | 14/05/2020 8:00 | 20/05/2020 17:00 | 492FS-7d |
| 522 | <b>Pekerjaan Pengecatan</b>                       | 9 days  | 14/05/2020 8:00 | 26/05/2020 17:00 |          |
| 523 | Pengecatan dinding interior                       | 9 days  | 14/05/2020 8:00 | 26/05/2020 17:00 | 521SS    |
| 524 | Pengecatan dinding eksterior                      | 8 days  | 15/05/2020 8:00 | 26/05/2020 17:00 | 523FF    |
| 525 | Pengecatan plafon                                 | 6 days  | 15/05/2020 8:00 | 22/05/2020 17:00 | 521FS-5d |
| 526 | <b>Pekerjaan Tata Udara</b>                       | 3 days  | 27/05/2020 8:00 | 29/05/2020 17:00 |          |
| 527 | Unit AC Cassete 5PK                               | 2 days  | 28/05/2020 8:00 | 29/05/2020 17:00 | 369      |
| 528 | Unit AC Cassete 4PK                               | 3 days  | 27/05/2020 8:00 | 29/05/2020 17:00 | 527FF    |
| 529 | Unit AC Split wall 3/4PK                          | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 527FF    |
| 530 | <b>Pekerjaan Instalasi Telepon</b>                | 20 days | 02/05/2020 8:00 | 28/05/2020 17:00 |          |
| 531 | Pasang Instalasi Telepon                          | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 532 | Pasang Outlet Telepon                             | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS    |
| 533 | Switch Hub 16 port                                | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 532SS    |
| 534 | Terminal Box                                      | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 532SS    |
| 535 | <b>Pekerjaan CCTV</b>                             | 20 days | 02/05/2020 8:00 | 28/05/2020 17:00 |          |
| 536 | Kamera CCTV HD                                    | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS    |
| 537 | Instalasi kabel coaxial RG6 untuk kamera CCTV     | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 538 | <b>Pekerjaan Sound System</b>                     | 24 days | 29/04/2020 8:00 | 30/05/2020 17:00 |          |

|     |                                                                        |         |                 |                  |          |
|-----|------------------------------------------------------------------------|---------|-----------------|------------------|----------|
| 539 | Celling speaker 6 W                                                    | 3 days  | 28/05/2020 8:00 | 30/05/2020 17:00 | 527SS    |
| 540 | Volume control                                                         | 1 day   | 30/05/2020 8:00 | 30/05/2020 17:00 | 539FF    |
| 541 | Instalasi Celling speaker                                              | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 542 | Terminal Box                                                           | 1 day   | 30/05/2020 8:00 | 30/05/2020 17:00 | 539FF    |
| 543 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 544 | Pekerjaan Fire Alarm                                                   | 42 days | 13/03/2020 8:00 | 02/05/2020 17:00 |          |
| 545 | INSTALASI LANTAI 6                                                     | 42 days | 13/03/2020 8:00 | 02/05/2020 17:00 |          |
| 546 | Peralatan Fixture                                                      | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 |          |
| 547 | - Conv. Optical Smoke Detector                                         | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 467FS+1d |
| 548 | - Conv. Manual Break glass                                             | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 547SS    |
| 549 | - Junction Box Fire Alarm                                              | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 547SS    |
| 550 | - Remote Indicating Lamp                                               | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 547SS    |
| 551 | - Alarm Bell                                                           | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 547SS    |
| 552 | - Terminal Box 30 x 40 x 12                                            | 1 day   | 13/03/2020 8:00 | 13/03/2020 17:00 | 547SS    |
| 553 | Pekerjaan Instalasi                                                    | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 |          |
| 554 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 555 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 556 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |

|     |                                                   |         |                 |                  |       |
|-----|---------------------------------------------------|---------|-----------------|------------------|-------|
| 557 | Pekerjaan Alat Pemadam Kebakaran                  | 25 days | 25/04/2020 8:00 | 28/05/2020 17:00 |       |
| 558 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 " | 6 days  | 25/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 559 | Hydrant Box Indoor, type B c/w                    | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 558FF |
| 560 | Gate valve dia. 21/2" , OS&Y type                 | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 558FF |
| 561 | - Fire Extinguisher 6 kg                          | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS |
| 562 | Instalasi Sprinkler                               | 5 days  | 27/04/2020 8:00 | 02/05/2020 17:00 |       |
| 563 | BSP Sch.40 c/w fitting2 & Material bantu          | 5 days  | 27/04/2020 8:00 | 02/05/2020 17:00 |       |
| 564 | dia. 1 "                                          | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 565 | dia. 1 1/4 "                                      | 2 days  | 30/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 566 | dia. 2 "                                          | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 567 | dia. 2 1/2 "                                      | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 568 | dia. 3 "                                          | 4 days  | 28/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 569 | Sprinkler head dia. 1/2", 68'C, pendent           | 5 days  | 27/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 570 | Branch Control Valve dia. 3"                      | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 571 | Fitting (elbow, reducer, knie dl)                 | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 572 | INSTALASI SPRINGKLER DAN HYDRANT Lt Atap          | 20 days | 02/05/2020 8:00 | 28/05/2020 17:00 |       |
| 573 | Galv. Pipe Med. c/w fitting2 & Material bantu     | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 |       |
| 574 | dia. 1 "                                          | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |

|     |                                             |         |                 |                  |          |
|-----|---------------------------------------------|---------|-----------------|------------------|----------|
| 575 | ARV c/w Gate valve dia. 1"                  | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 576 | Pressure gauge c/w gate valve dia. 1/2"     | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 577 | Ball valve dia. 1" -                        | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 578 | Sprinkler head dia. 1/2", 68°C, pendent -   | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 579 | Fire Extinguisher                           | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 |          |
| 580 | Apar ABC Kap. 4 kg                          | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS    |
| 581 | Apar CO2 Kap. 3 kg (SDP area)               | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS    |
| 582 | Apar CO2 Kap. 23 kg (Panel room)            | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 527SS    |
| 583 | Pekerjaan Sanitair & Sanitasi               | 25 days | 28/04/2020 8:00 | 30/05/2020 17:00 |          |
| 584 | Pasang Klosed Duduk                         | 3 days  | 15/05/2020 8:00 | 18/05/2020 17:00 | 525SS    |
| 585 | Pasang Wastafel single                      | 2 days  | 29/05/2020 8:00 | 30/05/2020 17:00 | 586FF    |
| 586 | Pasang Jet washer                           | 3 days  | 28/05/2020 8:00 | 30/05/2020 17:00 | 527SS    |
| 587 | Pasang Kran Diameter Air 1/2 "              | 1 day   | 28/05/2020 8:00 | 28/05/2020 17:00 | 586SS    |
| 588 | Pasang Floor Drain                          | 1 day   | 30/05/2020 8:00 | 30/05/2020 17:00 | 586FF    |
| 589 | Instalasi Air Bersih                        | 23 days | 30/04/2020 8:00 | 30/05/2020 17:00 |          |
| 590 | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 2 days  | 30/04/2020 8:00 | 02/05/2020 17:00 | 485FF    |
| 591 | Tangki air bersih kapasitas 1500 ltr        | 3 days  | 28/05/2020 8:00 | 30/05/2020 17:00 | 601FS-2d |
| 592 | Instalasi Air Kotor                         | 25 days | 28/04/2020 8:00 | 30/05/2020 17:00 |          |

|     |                                                                    |         |                 |                  |       |
|-----|--------------------------------------------------------------------|---------|-----------------|------------------|-------|
| 593 | Pasang Roofdrain                                                   | 3 days  | 28/05/2020 8:00 | 30/05/2020 17:00 | 591SS |
| 594 | Pasang Cleant Out 3"                                               | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 595 | Pasang Pipa air kotor Ø 3 "                                        | 3 days  | 29/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 596 | Pasang Pipa air kotor Ø 4 "                                        | 2 days  | 30/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 597 | Pasang instalasi Pipa Air Hujan 4"                                 | 4 days  | 28/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 598 | Pekerjaan Listrik                                                  | 22 days | 30/04/2020 8:00 | 29/05/2020 17:00 |       |
| 599 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days  | 30/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 600 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days  | 30/04/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 601 | Pasang Instalasi Titik Lampu                                       | 12 days | 14/05/2020 8:00 | 29/05/2020 17:00 | 521SS |
| 602 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 607FF |
| 603 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days  | 23/05/2020 8:00 | 26/05/2020 17:00 | 607SS |
| 604 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 607FF |
| 605 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day   | 02/05/2020 8:00 | 02/05/2020 17:00 | 599FF |
| 606 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 607FF |
| 607 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 5 days  | 23/05/2020 8:00 | 29/05/2020 17:00 | 601FF |
| 608 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day   | 29/05/2020 8:00 | 29/05/2020 17:00 | 607FF |
| 609 | Pasang Saklar Tunggal                                              | 2 days  | 23/05/2020 8:00 | 26/05/2020 17:00 | 607SS |
| 610 | Pasang Saklar Ganda                                                | 2 days  | 23/05/2020 8:00 | 26/05/2020 17:00 | 607SS |

|     |                                                     |        |                 |                  |       |
|-----|-----------------------------------------------------|--------|-----------------|------------------|-------|
| 611 | Instalasi stop kontak                               | 1 day  | 02/05/2020 8:00 | 02/05/2020 17:00 | 485FF |
| 612 | Pasang Stop Kontak 1 Phase                          | 2 days | 23/05/2020 8:00 | 26/05/2020 17:00 | 607SS |
| 613 | Pekerjaan Instalasi Penangkal Petir                 | 2 days | 28/05/2020 8:00 | 29/05/2020 17:00 |       |
| 614 | Air lighting terminal viking V6 radius 60 m         | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 615FF |
| 615 | Obstruction Lamp                                    | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 617SS |
| 616 | Instalasi Obstruction lamp                          | 1 day  | 29/05/2020 8:00 | 29/05/2020 17:00 | 618FF |
| 617 | Pasang Kabel BC 1x70 mm <sup>2</sup> +PVC AW Ø 1.5" | 2 days | 28/05/2020 8:00 | 29/05/2020 17:00 | 619SS |
| 618 | Pasang Dudukan Tiang dan Penangkal Petir            | 1 day  | 29/05/2020 8:00 | 29/05/2020 17:00 | 617FF |
| 619 | Pasang Grounding System Rod Ø 1" Panjang 12 mtr     | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 620SS |
| 620 | Pasang Bak Kontrol Grounding                        | 1 day  | 28/05/2020 8:00 | 28/05/2020 17:00 | 591SS |



## Lampiran 4.6 Pehitungan Maju, Mundur dan *Total Slack*

| No | Task Name                                         | Early_Start | Early_Finish | Late_Start | Late_Finish | Total_Slack |
|----|---------------------------------------------------|-------------|--------------|------------|-------------|-------------|
| 1  | Pekerjaan Persiapan                               | 02/01/2020  | 26/03/2020   | 03/01/2020 | 27/03/2020  | 1d          |
| 2  | Pembersihan Lokasi                                | 02/01/2020  | 10/01/2020   | 03/01/2020 | 11/01/2020  | 0d          |
| 3  | Pembuatan Kantor direksi keet                     | 07/01/2020  | 13/01/2020   | 08/01/2020 | 14/01/2020  | 0d          |
| 4  | Pembuatan pagar keliling                          | 10/01/2020  | 14/01/2020   | 11/01/2020 | 15/01/2020  | 0d          |
| 5  | Pemasangan TC                                     | 15/01/2020  | 20/01/2020   | 16/01/2020 | 21/01/2020  | 0d          |
| 6  | Pembongkaran TC                                   | 21/03/2020  | 26/03/2020   | 23/03/2020 | 27/03/2020  | 1d          |
| 7  | Pemasangan Polynet Biru                           | 20/01/2020  | 20/01/2020   | 21/01/2020 | 21/01/2020  | 1d          |
| 8  | LANTAI 3                                          | 21/01/2020  | 19/05/2020   | 31/01/2020 | 30/05/2020  | 0d          |
| 9  | Pekerjaan Pasangan                                | 13/02/2020  | 22/02/2020   | 14/02/2020 | 24/02/2020  | 1d          |
| 10 | Mengurug pasir bawah lantai setebal 5 cm          | 20/02/2020  | 22/02/2020   | 21/02/2020 | 24/02/2020  | 1d          |
| 11 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 13/02/2020  | 22/02/2020   | 14/02/2020 | 24/02/2020  | 1d          |
| 12 | Pekerjaan Beton                                   | 21/01/2020  | 22/02/2020   | 21/01/2020 | 22/02/2020  | 1d          |
| 13 | Kolom Praktis uk. 11 x 11 cm                      | 18/02/2020  | 22/02/2020   | 19/02/2020 | 24/02/2020  | 1d          |
| 14 | Kolom uk. 30 x 30 cm ( K 2 )                      | 21/01/2020  | 21/01/2020   | 21/01/2020 | 21/01/2020  | 0d          |
| 15 | Kolom uk. 40 x 40 cm ( K 3 )                      | 21/01/2020  | 21/01/2020   | 22/01/2020 | 22/01/2020  | 5d          |
| 16 | Kolom uk. 50 x 50 cm ( K 4 )                      | 21/01/2020  | 21/01/2020   | 22/01/2020 | 22/01/2020  | 5d          |



|    |                                                             |            |            |            |            |     |
|----|-------------------------------------------------------------|------------|------------|------------|------------|-----|
| 17 | Kolom uk. 60 x 60 cm ( K 5 )                                | 21/01/2020 | 27/01/2020 | 21/01/2020 | 27/01/2020 | 0d  |
| 18 | Kolom uk. 70 x 70 cm ( K 6 )                                | 21/01/2020 | 24/01/2020 | 21/01/2020 | 24/01/2020 | 2d  |
| 19 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 30/01/2020 | 31/01/2020 | 31/01/2020 | 01/02/2020 | 1d  |
| 20 | Plat meja beton tebal 10 cm                                 | 30/01/2020 | 31/01/2020 | 31/01/2020 | 01/02/2020 | 1d  |
| 21 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 30/01/2020 | 30/01/2020 | 01/02/2020 | 01/02/2020 | 2d  |
| 22 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 30/01/2020 | 31/01/2020 | 31/01/2020 | 01/02/2020 | 1d  |
| 23 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 30/01/2020 | 31/01/2020 | 31/01/2020 | 01/02/2020 | 1d  |
| 24 | <b>Pekerjaan Plesteran dan Benangan</b>                     | 15/02/2020 | 20/03/2020 | 17/02/2020 | 21/03/2020 | 1d  |
| 25 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 15/02/2020 | 20/03/2020 | 17/02/2020 | 21/03/2020 | 1d  |
| 26 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 15/02/2020 | 22/02/2020 | 09/03/2020 | 16/03/2020 | 19d |
| 27 | Pekerjaan acian interior                                    | 18/02/2020 | 11/03/2020 | 19/02/2020 | 12/03/2020 | 1d  |
| 28 | Pekerjaan acian eksterior                                   | 24/02/2020 | 28/02/2020 | 17/03/2020 | 21/03/2020 | 19d |
| 29 | <b>Pekerjaan Lantai</b>                                     | 20/02/2020 | 17/03/2020 | 21/02/2020 | 18/03/2020 | 1d  |
| 30 | Pasang Keramik Lantai 60 x 60                               | 20/02/2020 | 13/03/2020 | 21/02/2020 | 14/03/2020 | 1d  |
| 31 | Pasang Keramik Lantai 30 x 30                               | 20/02/2020 | 25/02/2020 | 04/03/2020 | 09/03/2020 | 11d |
| 32 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC               | 03/03/2020 | 05/03/2020 | 16/03/2020 | 18/03/2020 | 11d |
| 33 | Pasang Keramik Dinding 30 x 60 (KM/WC)                      | 26/02/2020 | 02/03/2020 | 10/03/2020 | 14/03/2020 | 11d |
| 34 | Pasang Batu Alam                                            | 14/03/2020 | 17/03/2020 | 16/03/2020 | 18/03/2020 | 1d  |

|    |                                                                             |            |            |            |            |    |
|----|-----------------------------------------------------------------------------|------------|------------|------------|------------|----|
| 35 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 14/03/2020 | 20/03/2020 | 23/05/2020 | 30/05/2020 | 1d |
| 36 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 37 | Pas. Kusen Type J2                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 38 | Pas. Kusen Type J3                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 39 | Pas. Kusen Type J4                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 40 | Pas. Kusen Type J8                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 41 | Pas. Kusen Type J9                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 42 | Pas. Kusen Type J12                                                         | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 43 | Pas. Kusen Type P2                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 44 | Pas. Kusen Type P3                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 45 | Pas. Kusen Type P4                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 46 | Pas. Kusen Type P5                                                          | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 47 | Pasang pintu darurat anti api                                               | 19/03/2020 | 19/03/2020 | 20/03/2020 | 20/03/2020 | 1d |
| 48 | Pekerjaan Partisi                                                           | 14/03/2020 | 20/03/2020 | 16/03/2020 | 21/03/2020 | 1d |
| 49 | Memasang 1m2 unit Partisi Type I                                            | 14/03/2020 | 18/03/2020 | 16/03/2020 | 19/03/2020 | 1d |
| 50 | Memasang 1m2 unit Partisi Type II                                           | 18/03/2020 | 18/03/2020 | 21/03/2020 | 21/03/2020 | 3d |
| 51 | Memasang 1 unit Pintu Type I untuk partisi                                  | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d |
| 52 | Memasang 1 jendela Pintu Type I untuk partisi                               | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d |

|    |                                                     |            |            |            |            |    |
|----|-----------------------------------------------------|------------|------------|------------|------------|----|
| 53 | Memasang 1 jendela Pintu Type II untuk partisi      | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d |
| 54 | Pekerjaan Railling Tangga                           | 16/03/2020 | 18/03/2020 | 17/03/2020 | 19/03/2020 | 1d |
| 55 | Pasang Railling Tangga Utama dari Stainless Steel   | 16/03/2020 | 18/03/2020 | 17/03/2020 | 19/03/2020 | 1d |
| 56 | Pasang Railling Tangga Darurat dari Stainless Steel | 16/03/2020 | 18/03/2020 | 17/03/2020 | 19/03/2020 | 1d |
| 57 | Curtain Wall                                        | 18/03/2020 | 18/03/2020 | 19/03/2020 | 19/03/2020 | 1d |
| 58 | Curtain Wall ( CW2 )                                | 18/03/2020 | 18/03/2020 | 19/03/2020 | 19/03/2020 | 1d |
| 59 | Pekerjaan Langit-langit                             | 06/03/2020 | 10/03/2020 | 07/03/2020 | 11/03/2020 | 2d |
| 60 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 06/03/2020 | 10/03/2020 | 07/03/2020 | 11/03/2020 | 1d |
| 61 | Pekerjaan Pengecatan                                | 05/03/2020 | 17/03/2020 | 06/03/2020 | 18/03/2020 | 1d |
| 62 | Pengecatan dinding interior                         | 06/03/2020 | 17/03/2020 | 07/03/2020 | 18/03/2020 | 1d |
| 63 | Pengecatan dinding eksterior                        | 09/03/2020 | 17/03/2020 | 10/03/2020 | 18/03/2020 | 1d |
| 64 | Pengecatan plafon                                   | 05/03/2020 | 11/03/2020 | 06/03/2020 | 12/03/2020 | 6d |
| 65 | Pekerjaan Tata Udara                                | 14/05/2020 | 18/05/2020 | 15/05/2020 | 19/05/2020 | 0d |
| 66 | Unit AC Cassete 5PK                                 | 14/05/2020 | 14/05/2020 | 16/05/2020 | 16/05/2020 | 1d |
| 67 | Unit AC Cassete 4PK                                 | 15/05/2020 | 18/05/2020 | 16/05/2020 | 19/05/2020 | 0d |
| 68 | Unit AC Split Wall Mountain 3/4 PK                  | 14/05/2020 | 18/05/2020 | 14/05/2020 | 18/05/2020 | 0d |
| 69 | Exhaust Fan ex jepang                               | 14/05/2020 | 14/05/2020 | 19/05/2020 | 19/05/2020 | 3d |
| 70 | Pekerjaan Instalasi Telepon                         | 19/03/2020 | 15/05/2020 | 20/03/2020 | 16/05/2020 | 0d |

|    |                                                              |            |            |            |            |     |
|----|--------------------------------------------------------------|------------|------------|------------|------------|-----|
| 71 | Pasang Instalasi Telepon                                     | 19/03/2020 | 20/03/2020 | 15/05/2020 | 16/05/2020 | 45d |
| 72 | Pasang Outlet Telepon                                        | 14/05/2020 | 15/05/2020 | 15/05/2020 | 16/05/2020 | 0d  |
| 73 | Switch Hub 16 port                                           | 15/05/2020 | 15/05/2020 | 16/05/2020 | 16/05/2020 | 0d  |
| 74 | Terminal Box                                                 | 15/05/2020 | 15/05/2020 | 16/05/2020 | 16/05/2020 | 0d  |
| 75 | <b>Pekerjaan CCTV</b>                                        | 20/03/2020 | 14/05/2020 | 21/03/2020 | 15/05/2020 | 1d  |
| 76 | Kamera CCTV HD                                               | 14/05/2020 | 14/05/2020 | 15/05/2020 | 15/05/2020 | 1d  |
| 77 | Instalasi kabel coaxial RG6 untuk kamera CCTV                | 20/03/2020 | 20/03/2020 | 15/05/2020 | 15/05/2020 | 45d |
| 78 | <b>Pekerjaan Sound System</b>                                | 19/03/2020 | 15/05/2020 | 20/03/2020 | 16/05/2020 | 0d  |
| 79 | Celling speaker 6 W                                          | 14/05/2020 | 15/05/2020 | 15/05/2020 | 16/05/2020 | 0d  |
| 80 | Volume control                                               | 15/05/2020 | 15/05/2020 | 16/05/2020 | 16/05/2020 | 0d  |
| 81 | Instalasi Celling speaker                                    | 19/03/2020 | 20/03/2020 | 15/05/2020 | 16/05/2020 | 45d |
| 82 | Terminal Box                                                 | 15/05/2020 | 15/05/2020 | 16/05/2020 | 16/05/2020 | 0d  |
| 83 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 20/03/2020 | 20/03/2020 | 16/05/2020 | 16/05/2020 | 45d |
| 84 | <b>Pekerjaan Fire Alarm</b>                                  | 13/03/2020 | 20/03/2020 | 14/03/2020 | 21/03/2020 | 1d  |
| 85 | <b>INSTALASI LANTAI 3</b>                                    | 13/03/2020 | 20/03/2020 | 14/03/2020 | 21/03/2020 | 1d  |
| 86 | <b>Peralatan Fixture</b>                                     | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 87 | - Conv. Optical Smoke Detector                               | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 88 | - Conv. Manual Break glass                                   | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |

|     |                                                                        |            |            |            |            |     |
|-----|------------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 89  | - Junction Box Fire Alarm                                              | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 90  | - Remote Indicating Lamp                                               | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 91  | - Alarm Bell                                                           | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 92  | - Terminal Box 30 x 40 x 12                                            | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 7d  |
| 93  | <b>Pekerjaan Instalasi</b>                                             | 18/03/2020 | 20/03/2020 | 19/03/2020 | 21/03/2020 | 1d  |
| 94  | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 18/03/2020 | 20/03/2020 | 19/03/2020 | 21/03/2020 | 1d  |
| 95  | - Junction Box Fire Alarm NYA cable 2 x 1,5 mm + pipa conduit 20 mm    | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |
| 96  | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |
| 97  | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                | 14/03/2020 | 14/05/2020 | 16/03/2020 | 15/05/2020 | 0d  |
| 98  | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 14/03/2020 | 20/03/2020 | 09/05/2020 | 15/05/2020 | 44d |
| 99  | Hydrant Box Indoor, type B c/w                                         | 20/03/2020 | 20/03/2020 | 15/05/2020 | 15/05/2020 | 44d |
| 100 | Gate valve dia. 21/2" , OS&Y type                                      | 20/03/2020 | 20/03/2020 | 15/05/2020 | 15/05/2020 | 44d |
| 101 | - Fire Extinguisher 6 kg                                               | 14/05/2020 | 14/05/2020 | 15/05/2020 | 15/05/2020 | 0d  |
| 102 | <b>Instalasi Sprinkler</b>                                             | 13/03/2020 | 20/03/2020 | 14/03/2020 | 21/03/2020 | 1d  |
| 103 | <b>BSP Sch.40 c/w fitting2 &amp; Material bantu</b>                    | 13/03/2020 | 20/03/2020 | 14/03/2020 | 21/03/2020 | 1d  |
| 104 | dia. 1 "                                                               | 18/03/2020 | 20/03/2020 | 19/03/2020 | 21/03/2020 | 1d  |
| 105 | dia. 1 1/4 "                                                           | 18/03/2020 | 20/03/2020 | 19/03/2020 | 21/03/2020 | 1d  |
| 106 | dia. 2 "                                                               | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |



|     |                                                                  |            |            |            |            |     |
|-----|------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 107 | dia. 2 1/2 "                                                     | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |
| 108 | dia. 3 "                                                         | 13/03/2020 | 20/03/2020 | 14/03/2020 | 21/03/2020 | 1d  |
| 109 | Sprinkler head dia. 1/2", 68'C, pendent                          | 14/03/2020 | 20/03/2020 | 16/03/2020 | 21/03/2020 | 1d  |
| 110 | Branch Control Valve dia. 3"                                     | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |
| 111 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                         | 17/03/2020 | 19/05/2020 | 18/03/2020 | 20/05/2020 | 0d  |
| 112 | Pasang Klosed Duduk                                              | 14/05/2020 | 18/05/2020 | 16/05/2020 | 20/05/2020 | 1d  |
| 113 | Pasang Wastafel single                                           | 14/05/2020 | 16/05/2020 | 18/05/2020 | 20/05/2020 | 2d  |
| 114 | Pasang Jet washer                                                | 14/05/2020 | 19/05/2020 | 15/05/2020 | 20/05/2020 | 0d  |
| 115 | Pasang Kran Diameter Air 1/2 "                                   | 19/05/2020 | 19/05/2020 | 20/05/2020 | 20/05/2020 | 0d  |
| 116 | Pasang Floor Drain                                               | 14/05/2020 | 14/05/2020 | 20/05/2020 | 20/05/2020 | 4d  |
| 117 | <b>Instalasi Air Bersih</b>                                      | 17/03/2020 | 20/03/2020 | 18/03/2020 | 21/03/2020 | 1d  |
| 118 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                      | 17/03/2020 | 20/03/2020 | 18/03/2020 | 21/03/2020 | 1d  |
| 119 | <b>Instalasi Air Kotor</b>                                       | 17/03/2020 | 20/03/2020 | 18/03/2020 | 21/03/2020 | 1d  |
| 120 | Pasang Cleant Out 3"                                             | 20/03/2020 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 1d  |
| 121 | Pasang Pipa air kotor Ø 3 "                                      | 19/03/2020 | 20/03/2020 | 20/03/2020 | 21/03/2020 | 1d  |
| 122 | Pasang Pipa air kotor Ø 4 "                                      | 17/03/2020 | 20/03/2020 | 18/03/2020 | 21/03/2020 | 1d  |
| 123 | <b>Pekerjaan Listrik</b>                                         | 19/03/2020 | 09/04/2020 | 20/03/2020 | 10/04/2020 | 1d  |
| 124 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories | 19/03/2020 | 20/03/2020 | 09/04/2020 | 10/04/2020 | 17d |

|     |                                                                    |            |            |            |            |     |
|-----|--------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 125 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 19/03/2020 | 20/03/2020 | 09/04/2020 | 10/04/2020 | 17d |
| 126 | Pasang Instalasi Titik Lampu                                       | 21/03/2020 | 09/04/2020 | 23/03/2020 | 10/04/2020 | 1d  |
| 127 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 19/03/2020 | 19/03/2020 | 09/04/2020 | 09/04/2020 | 17d |
| 128 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 08/04/2020 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 1d  |
| 129 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 19/03/2020 | 19/03/2020 | 09/04/2020 | 09/04/2020 | 17d |
| 130 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 20/03/2020 | 20/03/2020 | 10/04/2020 | 10/04/2020 | 17d |
| 131 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 132 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 04/04/2020 | 07/04/2020 | 06/04/2020 | 08/04/2020 | 1d  |
| 133 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 07/04/2020 | 07/04/2020 | 10/04/2020 | 10/04/2020 | 3d  |
| 134 | Pasang Saklar Tunggal                                              | 07/04/2020 | 07/04/2020 | 10/04/2020 | 10/04/2020 | 3d  |
| 135 | Pasang Saklar Ganda                                                | 08/04/2020 | 08/04/2020 | 10/04/2020 | 10/04/2020 | 2d  |
| 136 | Instalasi stop kontak                                              | 20/03/2020 | 20/03/2020 | 10/04/2020 | 10/04/2020 | 17d |
| 137 | Pasang Stop Kontak 1 Phase                                         | 04/04/2020 | 09/04/2020 | 06/04/2020 | 10/04/2020 | 1d  |
| 138 | Pasang Stop Kontak under floor (lab. komputer dan mekatronika)     | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 139 | LANTAI 4                                                           | 28/01/2020 | 26/05/2020 | 29/01/2020 | 27/05/2020 | 0d  |
| 140 | Pekerjaan Pasangan                                                 | 29/02/2020 | 27/03/2020 | 02/03/2020 | 28/03/2020 | 0d  |
| 141 | Mengurug pasir bawah lantai setebal 5 cm                           | 24/03/2020 | 27/03/2020 | 26/03/2020 | 28/03/2020 | 0d  |
| 142 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr                  | 29/02/2020 | 07/03/2020 | 02/03/2020 | 09/03/2020 | 0d  |



|     |                              |            |            |            |            |    |
|-----|------------------------------|------------|------------|------------|------------|----|
| 143 | Pekerjaan Beton              | 28/01/2020 | 07/03/2020 | 28/01/2020 | 07/03/2020 | 0d |
| 144 | Pembuatan Plat Lantai        | 28/01/2020 | 07/02/2020 | 28/01/2020 | 07/02/2020 | 0d |
| 145 | Kolom Praktis uk. 11 x 11 cm | 04/03/2020 | 07/03/2020 | 05/03/2020 | 09/03/2020 | 0d |
| 146 | Kolom uk. 30 x 30 cm ( K 2 ) | 12/02/2020 | 12/02/2020 | 13/02/2020 | 13/02/2020 | 0d |
| 147 | Kolom uk. 40 x 40 cm ( K 3 ) | 11/02/2020 | 12/02/2020 | 12/02/2020 | 13/02/2020 | 0d |
| 148 | Kolom uk. 50 x 50 cm ( K 4 ) | 07/02/2020 | 12/02/2020 | 07/02/2020 | 12/02/2020 | 0d |
| 149 | Kolom uk. 70 x 70 cm ( K 6 ) | 07/02/2020 | 12/02/2020 | 07/02/2020 | 12/02/2020 | 0d |
| 150 | Balok Lantai uk.11 x 20 cm   | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 151 | Balok Type B.1               | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 152 | Balok Type B.2               | 01/02/2020 | 07/02/2020 | 03/02/2020 | 08/02/2020 | 4d |
| 153 | Balok Type B.3               | 31/01/2020 | 07/02/2020 | 01/02/2020 | 08/02/2020 | 4d |
| 154 | Balok Type B.4               | 01/02/2020 | 07/02/2020 | 03/02/2020 | 08/02/2020 | 4d |
| 155 | Balok Type B.5               | 04/02/2020 | 07/02/2020 | 05/02/2020 | 08/02/2020 | 4d |
| 156 | Balok Type B.6               | 01/02/2020 | 07/02/2020 | 03/02/2020 | 08/02/2020 | 4d |
| 157 | Balok Type B.7               | 03/02/2020 | 07/02/2020 | 04/02/2020 | 08/02/2020 | 4d |
| 158 | Balok Type B.8               | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 159 | Balok Type B.9               | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 160 | Balok Type B.10              | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |

|     |                                                             |            |            |            |            |    |
|-----|-------------------------------------------------------------|------------|------------|------------|------------|----|
| 161 | Balok Type B.11                                             | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 162 | Balok Type B.12                                             | 07/02/2020 | 07/02/2020 | 08/02/2020 | 08/02/2020 | 4d |
| 163 | Balok Type B.13                                             | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 164 | Balok Type B.14                                             | 07/02/2020 | 07/02/2020 | 08/02/2020 | 08/02/2020 | 4d |
| 165 | Balok Type B.15                                             | 07/02/2020 | 07/02/2020 | 08/02/2020 | 08/02/2020 | 4d |
| 166 | Balok Type B.20                                             | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 167 | Balok Type B.27                                             | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 168 | Balok Meja Beton                                            | 03/03/2020 | 04/03/2020 | 04/03/2020 | 05/03/2020 | 2d |
| 169 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 170 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 07/02/2020 | 07/02/2020 | 08/02/2020 | 08/02/2020 | 4d |
| 171 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 07/02/2020 | 07/02/2020 | 08/02/2020 | 08/02/2020 | 4d |
| 172 | Plat meja beton tebal 10 cm                                 | 03/03/2020 | 05/03/2020 | 04/03/2020 | 06/03/2020 | 2d |
| 173 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 06/02/2020 | 07/02/2020 | 07/02/2020 | 08/02/2020 | 4d |
| 174 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 175 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 05/02/2020 | 07/02/2020 | 06/02/2020 | 08/02/2020 | 4d |
| 176 | <b>Pekerjaan Plesteran dan Benangan</b>                     | 29/02/2020 | 27/03/2020 | 02/03/2020 | 28/03/2020 | 0d |
| 177 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 29/02/2020 | 26/03/2020 | 02/03/2020 | 27/03/2020 | 0d |
| 178 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 29/02/2020 | 07/03/2020 | 11/03/2020 | 18/03/2020 | 8d |

|     |                                                                                    |            |            |            |            |     |
|-----|------------------------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 179 | Pekerjaan acian interior                                                           | 04/03/2020 | 26/03/2020 | 05/03/2020 | 27/03/2020 | 0d  |
| 180 | Pekerjaan acian eksterior                                                          | 09/03/2020 | 14/03/2020 | 19/03/2020 | 26/03/2020 | 8d  |
| 181 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                     | 20/03/2020 | 27/03/2020 | 21/03/2020 | 28/03/2020 | 0d  |
| 182 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                                    | 14/03/2020 | 17/03/2020 | 26/03/2020 | 28/03/2020 | 8d  |
| 183 | <b>Pekerjaan Lantai</b>                                                            | 24/03/2020 | 22/04/2020 | 28/04/2020 | 30/05/2020 | 0d  |
| 184 | Pasang Keramik Lantai 60 x 60                                                      | 24/03/2020 | 16/04/2020 | 26/03/2020 | 17/04/2020 | 0d  |
| 185 | Pasang Keramik Lantai 30 x 30                                                      | 24/03/2020 | 02/04/2020 | 15/04/2020 | 23/04/2020 | 17d |
| 186 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      | 31/03/2020 | 02/04/2020 | 07/04/2020 | 09/04/2020 | 5d  |
| 187 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             | 24/03/2020 | 30/03/2020 | 01/04/2020 | 06/04/2020 | 5d  |
| 188 | Keramik Meja Beton 20 x 20                                                         | 09/04/2020 | 16/04/2020 | 16/04/2020 | 23/04/2020 | 5d  |
| 189 | Keramik Dinding Meja Beton 20 x 25                                                 | 03/04/2020 | 09/04/2020 | 10/04/2020 | 16/04/2020 | 5d  |
| 190 | Pasang Batu Alam                                                                   | 20/04/2020 | 22/04/2020 | 21/04/2020 | 23/04/2020 | 0d  |
| 191 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 17/04/2020 | 28/04/2020 | 18/04/2020 | 29/04/2020 | 1d  |
| 192 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 193 | Pas. Kusen Type J2                                                                 | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 194 | Pas. Kusen Type J3                                                                 | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 195 | Pas. Kusen Type J4                                                                 | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 196 | Pas. Kusen Type J8                                                                 | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |

|     |                                                     |            |            |            |            |    |
|-----|-----------------------------------------------------|------------|------------|------------|------------|----|
| 197 | Pas. Kusen Type J9                                  | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 198 | Pas. Kusen Type P2                                  | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 199 | Pas. Kusen Type P3                                  | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 200 | Pas. Kusen Type P4                                  | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 201 | Pas. Kusen Type P5                                  | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 202 | Pasang pintu darurat anti api                       | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d |
| 203 | <b>Pekerjaan Partisi</b>                            | 17/04/2020 | 28/04/2020 | 18/04/2020 | 29/04/2020 | 1d |
| 204 | Memasang 1m2 unit Partisi Type I                    | 17/04/2020 | 23/04/2020 | 18/04/2020 | 24/04/2020 | 1d |
| 205 | Memasang 1 unit Pintu Type I untuk partisi          | 25/04/2020 | 27/04/2020 | 27/04/2020 | 28/04/2020 | 1d |
| 206 | Memasang 1 unit Pintu Type II untuk partisi         | 25/04/2020 | 25/04/2020 | 29/04/2020 | 29/04/2020 | 3d |
| 207 | Memasang 1 jendela Pintu Type I untuk partisi       | 25/04/2020 | 28/04/2020 | 27/04/2020 | 29/04/2020 | 1d |
| 208 | <b>Pekerjaan Railling Tangga</b>                    | 20/04/2020 | 23/04/2020 | 21/04/2020 | 24/04/2020 | 1d |
| 209 | Pasang Railling Tangga Utama dari Stainless Steel   | 20/04/2020 | 23/04/2020 | 21/04/2020 | 24/04/2020 | 1d |
| 210 | Pasang Railling Tangga Darurat dari Stainless Steel | 20/04/2020 | 22/04/2020 | 22/04/2020 | 24/04/2020 | 2d |
| 211 | <b>Curtain Wall</b>                                 | 23/04/2020 | 23/04/2020 | 24/04/2020 | 24/04/2020 | 1d |
| 212 | Curtain Wall ( CW2 )                                | 23/04/2020 | 23/04/2020 | 24/04/2020 | 24/04/2020 | 1d |
| 213 | <b>Pekerjaan Langit-langit</b>                      | 09/04/2020 | 17/04/2020 | 10/04/2020 | 18/04/2020 | 0d |
| 214 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 09/04/2020 | 17/04/2020 | 10/04/2020 | 18/04/2020 | 0d |

|     |                                               |            |            |            |            |     |
|-----|-----------------------------------------------|------------|------------|------------|------------|-----|
| 215 | Pekerjaan Pengecatan                          | 09/04/2020 | 22/04/2020 | 10/04/2020 | 23/04/2020 | 1d  |
| 216 | Pengecatan dinding interior                   | 09/04/2020 | 22/04/2020 | 10/04/2020 | 23/04/2020 | 0d  |
| 217 | Pengecatan dinding eksterior                  | 16/04/2020 | 22/04/2020 | 17/04/2020 | 23/04/2020 | 0d  |
| 218 | Pengecatan plafon                             | 13/04/2020 | 22/04/2020 | 14/04/2020 | 23/04/2020 | 1d  |
| 219 | Pekerjaan Tata Udara                          | 19/05/2020 | 22/05/2020 | 20/05/2020 | 23/05/2020 | 0d  |
| 220 | Unit AC Cassete 5PK                           | 19/05/2020 | 22/05/2020 | 20/05/2020 | 23/05/2020 | 0d  |
| 221 | Unit AC Cassete 4PK                           | 19/05/2020 | 22/05/2020 | 19/05/2020 | 22/05/2020 | 0d  |
| 222 | Unit AC Split Wall Mountain 3/4 PK            | 19/05/2020 | 19/05/2020 | 23/05/2020 | 23/05/2020 | 2d  |
| 223 | Exhaust Fan ex jepang                         | 22/05/2020 | 22/05/2020 | 23/05/2020 | 23/05/2020 | 0d  |
| 224 | Pekerjaan Instalasi Telepon                   | 02/04/2020 | 12/05/2020 | 03/04/2020 | 13/05/2020 | 1d  |
| 225 | Pasang Instalasi Telepon                      | 02/04/2020 | 03/04/2020 | 12/05/2020 | 13/05/2020 | 32d |
| 226 | Pasang Outlet Telepon                         | 11/05/2020 | 12/05/2020 | 12/05/2020 | 13/05/2020 | 1d  |
| 227 | Switch Hub 16 port                            | 12/05/2020 | 12/05/2020 | 13/05/2020 | 13/05/2020 | 1d  |
| 228 | Terminal Box                                  | 12/05/2020 | 12/05/2020 | 13/05/2020 | 13/05/2020 | 1d  |
| 229 | Pekerjaan CCTV                                | 03/04/2020 | 11/05/2020 | 04/04/2020 | 12/05/2020 | 1d  |
| 230 | Kamera CCTV HD                                | 11/05/2020 | 11/05/2020 | 12/05/2020 | 12/05/2020 | 1d  |
| 231 | Instalasi kabel coaxial RG6 untuk kamera CCTV | 03/04/2020 | 03/04/2020 | 12/05/2020 | 12/05/2020 | 31d |
| 232 | Pekerjaan Sound System                        | 31/03/2020 | 13/05/2020 | 01/04/2020 | 14/05/2020 | 1d  |



|     |                                                                        |            |            |            |            |     |
|-----|------------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 233 | Celling speaker 6 W                                                    | 11/05/2020 | 13/05/2020 | 12/05/2020 | 14/05/2020 | 1d  |
| 234 | Volume control                                                         | 13/05/2020 | 13/05/2020 | 14/05/2020 | 14/05/2020 | 1d  |
| 235 | Instalasi Celling speaker                                              | 31/03/2020 | 03/04/2020 | 11/05/2020 | 14/05/2020 | 33d |
| 236 | Terminal Box                                                           | 13/05/2020 | 13/05/2020 | 14/05/2020 | 14/05/2020 | 1d  |
| 237 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 03/04/2020 | 03/04/2020 | 14/05/2020 | 14/05/2020 | 33d |
| 238 | Pekerjaan Fire Alarm                                                   | 23/03/2020 | 24/04/2020 | 24/03/2020 | 25/04/2020 | 1d  |
| 239 | INSTALASI LANTAI 4                                                     | 23/03/2020 | 24/04/2020 | 24/03/2020 | 25/04/2020 | 1d  |
| 240 | Peralatan Fixture                                                      | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 241 | - Conv. Optical Smoke Detector                                         | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 242 | - Conv. Manual Break glass                                             | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 243 | - Junction Box Fire Alarm                                              | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 244 | - Remote Indicating Lamp                                               | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 245 | - Alarm Bell                                                           | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 246 | - Terminal Box 30 x 40 x 12                                            | 24/04/2020 | 24/04/2020 | 25/04/2020 | 25/04/2020 | 1d  |
| 247 | Pekerjaan Instalasi                                                    | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 1d  |
| 248 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 1d  |
| 249 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |
| 250 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |

|     |                                                   |            |            |            |            |     |
|-----|---------------------------------------------------|------------|------------|------------|------------|-----|
| 251 | Pekerjaan Alat Pemadam Kebakaran                  | 19/03/2020 | 11/05/2020 | 20/03/2020 | 12/05/2020 | 0d  |
| 252 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 " | 19/03/2020 | 26/03/2020 | 05/05/2020 | 12/05/2020 | 37d |
| 253 | Hydrant Box Indoor, type B c/w                    | 26/03/2020 | 26/03/2020 | 12/05/2020 | 12/05/2020 | 37d |
| 254 | Gate valve dia. 21/2" , OS&Y type                 | 26/03/2020 | 26/03/2020 | 12/05/2020 | 12/05/2020 | 37d |
| 255 | - Fire Extinguisher 6 kg                          | 11/05/2020 | 11/05/2020 | 12/05/2020 | 12/05/2020 | 0d  |
| 256 | Instalasi Sprinkler                               | 18/03/2020 | 26/03/2020 | 19/03/2020 | 27/03/2020 | 1d  |
| 257 | BSP Sch.40 c/w fitting2 & Material bantu          | 18/03/2020 | 26/03/2020 | 19/03/2020 | 27/03/2020 | 1d  |
| 258 | dia. 1 "                                          | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 1d  |
| 259 | dia. 1 1/4 "                                      | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 1d  |
| 260 | dia. 2 "                                          | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |
| 261 | dia. 2 1/2 "                                      | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |
| 262 | dia. 3 "                                          | 18/03/2020 | 26/03/2020 | 19/03/2020 | 27/03/2020 | 1d  |
| 263 | Sprinkler head dia. 1/2", 68'C, pendent           | 19/03/2020 | 26/03/2020 | 20/03/2020 | 27/03/2020 | 1d  |
| 264 | Branch Control Valve dia. 3"                      | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |
| 265 | Pekerjaan Sanitair & Sanitasi                     | 19/03/2020 | 26/05/2020 | 20/03/2020 | 27/05/2020 | 0d  |
| 266 | Pasang Klosed Duduk                               | 19/05/2020 | 23/05/2020 | 22/05/2020 | 27/05/2020 | 1d  |
| 267 | Pasang Wastafel single                            | 19/05/2020 | 20/05/2020 | 26/05/2020 | 27/05/2020 | 3d  |
| 268 | Pasang Jet washer                                 | 19/05/2020 | 26/05/2020 | 20/05/2020 | 27/05/2020 | 0d  |



|     |                                                                    |            |            |            |            |     |
|-----|--------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 269 | Pasang Kran Diameter Air 1/2 "                                     | 23/05/2020 | 26/05/2020 | 26/05/2020 | 27/05/2020 | 0d  |
| 270 | Pasang Floor Drain                                                 | 19/05/2020 | 19/05/2020 | 27/05/2020 | 27/05/2020 | 4d  |
| 271 | <b>Instalasi Air Bersih</b>                                        | 19/03/2020 | 26/03/2020 | 20/03/2020 | 27/03/2020 | 1d  |
| 272 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 19/03/2020 | 26/03/2020 | 20/03/2020 | 27/03/2020 | 1d  |
| 273 | <b>Instalasi Air Kotor</b>                                         | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 1d  |
| 274 | Pasang Cleant Out 3"                                               | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 1d  |
| 275 | Pasang Pipa air kotor Ø 3 "                                        | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 1d  |
| 276 | Pasang Pipa air kotor Ø 4 "                                        | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 1d  |
| 277 | <b>Pekerjaan Listrik</b>                                           | 24/03/2020 | 10/04/2020 | 26/03/2020 | 11/04/2020 | 1d  |
| 278 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 24/03/2020 | 26/03/2020 | 10/04/2020 | 11/04/2020 | 14d |
| 279 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 24/03/2020 | 26/03/2020 | 10/04/2020 | 11/04/2020 | 14d |
| 280 | Pasang Instalasi Titik Lampu                                       | 27/03/2020 | 10/04/2020 | 28/03/2020 | 11/04/2020 | 1d  |
| 281 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 04/04/2020 | 04/04/2020 | 06/04/2020 | 06/04/2020 | 1d  |
| 282 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 06/04/2020 | 07/04/2020 | 07/04/2020 | 08/04/2020 | 1d  |
| 283 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 08/04/2020 | 08/04/2020 | 09/04/2020 | 09/04/2020 | 1d  |
| 284 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 285 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 10/04/2020 | 10/04/2020 | 11/04/2020 | 11/04/2020 | 1d  |
| 286 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 04/04/2020 | 10/04/2020 | 06/04/2020 | 11/04/2020 | 1d  |

|     |                                                   |            |            |            |            |     |
|-----|---------------------------------------------------|------------|------------|------------|------------|-----|
| 287 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt       | 10/04/2020 | 10/04/2020 | 11/04/2020 | 11/04/2020 | 1d  |
| 288 | Pasang Saklar Tunggal                             | 04/04/2020 | 10/04/2020 | 06/04/2020 | 11/04/2020 | 1d  |
| 289 | Pasang Saklar Ganda                               | 04/04/2020 | 06/04/2020 | 07/04/2020 | 08/04/2020 | 2d  |
| 290 | Instalasi stop kontak                             | 26/03/2020 | 26/03/2020 | 11/04/2020 | 11/04/2020 | 14d |
| 291 | Instalasi stop kontak 3 phase                     | 26/03/2020 | 26/03/2020 | 11/04/2020 | 11/04/2020 | 14d |
| 292 | Pasang Stop Kontak 1 Phase                        | 07/04/2020 | 08/04/2020 | 09/04/2020 | 10/04/2020 | 2d  |
| 293 | Pasang Stop Kontak 3 Phase                        | 09/04/2020 | 09/04/2020 | 11/04/2020 | 11/04/2020 | 2d  |
| 294 | <b>LANTAI 5</b>                                   | 13/02/2020 | 29/05/2020 | 14/02/2020 | 30/05/2020 | 0d  |
| 295 | <b>Pekerjaan Pasangan</b>                         | 17/03/2020 | 08/04/2020 | 18/03/2020 | 09/04/2020 | 0d  |
| 296 | Mengurug pasir bawah lantai setebal 5 cm          | 04/04/2020 | 08/04/2020 | 06/04/2020 | 09/04/2020 | 0d  |
| 297 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 17/03/2020 | 23/03/2020 | 18/03/2020 | 24/03/2020 | 0d  |
| 298 | <b>Pekerjaan Beton</b>                            | 13/02/2020 | 23/03/2020 | 14/02/2020 | 24/03/2020 | 0d  |
| 299 | Pembuatan Plat Lantai                             | 13/02/2020 | 24/02/2020 | 13/02/2020 | 24/02/2020 | 0d  |
| 300 | Kolom Praktis uk. 11 x 11 cm                      | 20/03/2020 | 23/03/2020 | 21/03/2020 | 24/03/2020 | 0d  |
| 301 | Kolom uk. 30 x 30 cm ( K 2 )                      | 28/02/2020 | 28/02/2020 | 29/02/2020 | 29/02/2020 | 0d  |
| 302 | Kolom uk. 40 x 40 cm ( K 3 )                      | 26/02/2020 | 28/02/2020 | 27/02/2020 | 29/02/2020 | 0d  |
| 303 | Kolom uk. 50 x 50 cm ( K 4 )                      | 24/02/2020 | 28/02/2020 | 24/02/2020 | 28/02/2020 | 0d  |
| 304 | Balok Lantai uk.11 x 20 cm                        | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d  |

|     |                                                      |            |            |            |            |    |
|-----|------------------------------------------------------|------------|------------|------------|------------|----|
| 305 | Balok Type B.1                                       | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |
| 306 | Balok Type B.2                                       | 18/02/2020 | 24/02/2020 | 19/02/2020 | 25/02/2020 | 4d |
| 307 | Balok Type B.3                                       | 18/02/2020 | 24/02/2020 | 19/02/2020 | 25/02/2020 | 4d |
| 308 | Balok Type B.4                                       | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |
| 309 | Balok Type B.5                                       | 20/02/2020 | 24/02/2020 | 21/02/2020 | 25/02/2020 | 4d |
| 310 | Balok Type B.6                                       | 20/02/2020 | 24/02/2020 | 21/02/2020 | 25/02/2020 | 4d |
| 311 | Balok Type B.7                                       | 20/02/2020 | 24/02/2020 | 21/02/2020 | 25/02/2020 | 4d |
| 312 | Balok Type B.8                                       | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d |
| 313 | Balok Type B.9                                       | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d |
| 314 | Balok Type B.10                                      | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |
| 315 | Balok Type B.11                                      | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d |
| 316 | Balok Type B.12                                      | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d |
| 317 | Balok Type B.13                                      | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d |
| 318 | Balok Type B.14                                      | 24/02/2020 | 24/02/2020 | 25/02/2020 | 25/02/2020 | 4d |
| 319 | Balok Type B.15                                      | 24/02/2020 | 24/02/2020 | 25/02/2020 | 25/02/2020 | 4d |
| 320 | Balok Type B.20                                      | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |
| 321 | Balok Type B.27                                      | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |
| 322 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm | 21/02/2020 | 24/02/2020 | 22/02/2020 | 25/02/2020 | 4d |

|     |                                                             |            |            |            |            |     |
|-----|-------------------------------------------------------------|------------|------------|------------|------------|-----|
| 323 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 24/02/2020 | 24/02/2020 | 25/02/2020 | 25/02/2020 | 4d  |
| 324 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 24/02/2020 | 24/02/2020 | 25/02/2020 | 25/02/2020 | 4d  |
| 325 | Plat meja beton tebal 10 cm                                 | 20/03/2020 | 21/03/2020 | 21/03/2020 | 23/03/2020 | 0d  |
| 326 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d  |
| 327 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d  |
| 328 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 22/02/2020 | 24/02/2020 | 24/02/2020 | 25/02/2020 | 4d  |
| 329 | Pekerjaan Plesteran dan Benangan                            | 16/03/2020 | 09/04/2020 | 17/03/2020 | 10/04/2020 | 0d  |
| 330 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 16/03/2020 | 09/04/2020 | 17/03/2020 | 10/04/2020 | 0d  |
| 331 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 16/03/2020 | 26/03/2020 | 28/03/2020 | 07/04/2020 | 9d  |
| 332 | Pekerjaan acian interior                                    | 18/03/2020 | 08/04/2020 | 19/03/2020 | 09/04/2020 | 0d  |
| 333 | Pekerjaan acian eksterior                                   | 21/03/2020 | 27/03/2020 | 03/04/2020 | 08/04/2020 | 9d  |
| 334 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr              | 19/03/2020 | 26/03/2020 | 04/04/2020 | 10/04/2020 | 12d |
| 335 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr             | 24/03/2020 | 30/03/2020 | 06/04/2020 | 10/04/2020 | 9d  |
| 336 | Pekerjaan Lantai                                            | 04/04/2020 | 02/05/2020 | 06/04/2020 | 04/05/2020 | 0d  |
| 337 | Pasang Keramik Lantai 60 x 60                               | 04/04/2020 | 27/04/2020 | 06/04/2020 | 28/04/2020 | 0d  |
| 338 | Pasang Keramik Lantai 30 x 30                               | 07/04/2020 | 15/04/2020 | 15/04/2020 | 23/04/2020 | 6d  |
| 339 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC               | 22/04/2020 | 24/04/2020 | 30/04/2020 | 04/05/2020 | 6d  |
| 340 | Pasang Keramik Dinding 30 x 60 (KM/WC)                      | 16/04/2020 | 21/04/2020 | 24/04/2020 | 29/04/2020 | 6d  |

|     |                                                                             |            |            |            |            |    |
|-----|-----------------------------------------------------------------------------|------------|------------|------------|------------|----|
| 341 | Pasang Batu Alam                                                            | 29/04/2020 | 02/05/2020 | 30/04/2020 | 04/05/2020 | 0d |
| 342 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 28/04/2020 | 11/05/2020 | 29/04/2020 | 12/05/2020 | 1d |
| 343 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 344 | Pas. Kusen Type J2                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 345 | Pas. Kusen Type J3                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 346 | Pas. Kusen Type J4                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 347 | Pas. Kusen Type J12                                                         | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 348 | Pas. Kusen Type P2                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 349 | Pas. Kusen Type P3                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 350 | Pas. Kusen Type P4                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 351 | Pas. Kusen Type P5                                                          | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 352 | Pasang pintu darurat anti api                                               | 08/05/2020 | 08/05/2020 | 09/05/2020 | 09/05/2020 | 1d |
| 353 | Pekerjaan Partisi                                                           | 28/04/2020 | 11/05/2020 | 29/04/2020 | 12/05/2020 | 1d |
| 354 | Memasang 1m2 unit Partisi Type I                                            | 28/04/2020 | 06/05/2020 | 29/04/2020 | 08/05/2020 | 1d |
| 355 | Memasang 1 unit Pintu Type II untuk partisi                                 | 09/05/2020 | 09/05/2020 | 12/05/2020 | 12/05/2020 | 2d |
| 356 | Memasang 1 jendela Pintu Type I untuk partisi                               | 09/05/2020 | 11/05/2020 | 11/05/2020 | 12/05/2020 | 1d |
| 357 | Pekerjaan Railling Tangga                                                   | 28/04/2020 | 06/05/2020 | 29/04/2020 | 08/05/2020 | 1d |
| 358 | Pasang Railling Tangga Utama dari Stainless Steel                           | 02/05/2020 | 06/05/2020 | 04/05/2020 | 08/05/2020 | 1d |



|     |                                                    |            |            |            |            |     |
|-----|----------------------------------------------------|------------|------------|------------|------------|-----|
| 359 | Pasang Railing Tangga Darurat dari Stainless Steel | 28/04/2020 | 30/04/2020 | 05/05/2020 | 08/05/2020 | 5d  |
| 360 | Curtain Wall                                       | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 361 | Curtain Wall ( CW2 )                               | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 362 | Pekerjaan Langit-langit                            | 20/04/2020 | 28/04/2020 | 21/04/2020 | 29/04/2020 | 0d  |
| 363 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee  | 20/04/2020 | 28/04/2020 | 21/04/2020 | 29/04/2020 | 0d  |
| 364 | Pengerjaan Pengecatan                              | 20/04/2020 | 04/05/2020 | 21/04/2020 | 05/05/2020 | 1d  |
| 365 | Pengerjaan pengecatan dinding interior             | 20/04/2020 | 02/05/2020 | 21/04/2020 | 04/05/2020 | 0d  |
| 366 | Pengerjaan pengecatan dinding eksterior            | 25/04/2020 | 02/05/2020 | 27/04/2020 | 04/05/2020 | 0d  |
| 367 | Pengerjaan plafon                                  | 23/04/2020 | 04/05/2020 | 24/04/2020 | 05/05/2020 | 1d  |
| 368 | Pengerjaan Tata Udara                              | 23/05/2020 | 27/05/2020 | 23/05/2020 | 27/05/2020 | 0d  |
| 369 | Unit AC Cassete 5PK                                | 23/05/2020 | 27/05/2020 | 23/05/2020 | 27/05/2020 | 0d  |
| 370 | Unit AC Cassete 4PK                                | 23/05/2020 | 23/05/2020 | 28/05/2020 | 28/05/2020 | 2d  |
| 371 | Pengerjaan CCTV                                    | 09/04/2020 | 23/05/2020 | 11/04/2020 | 27/05/2020 | 1d  |
| 372 | Kamera CCTV HD                                     | 23/05/2020 | 23/05/2020 | 27/05/2020 | 27/05/2020 | 1d  |
| 373 | Instalasi kabel coaxial RG6 untuk kamera CCTV      | 09/04/2020 | 09/04/2020 | 27/05/2020 | 27/05/2020 | 36d |
| 374 | Pengerjaan Sound System                            | 07/04/2020 | 27/05/2020 | 08/04/2020 | 28/05/2020 | 1d  |
| 375 | Celling speaker 6 W                                | 23/05/2020 | 27/05/2020 | 26/05/2020 | 28/05/2020 | 1d  |
| 376 | Volume control                                     | 27/05/2020 | 27/05/2020 | 28/05/2020 | 28/05/2020 | 1d  |

|     |                                                                        |            |            |            |            |     |
|-----|------------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 377 | Instalasi Ceiling speaker                                              | 07/04/2020 | 09/04/2020 | 26/05/2020 | 28/05/2020 | 38d |
| 378 | Terminal Box                                                           | 27/05/2020 | 27/05/2020 | 28/05/2020 | 28/05/2020 | 1d  |
| 379 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 09/04/2020 | 09/04/2020 | 28/05/2020 | 28/05/2020 | 38d |
| 380 | Pekerjaan Fire Alarm                                                   | 07/04/2020 | 06/05/2020 | 09/04/2020 | 09/05/2020 | 1d  |
| 381 | INSTALASI LANTAI 5                                                     | 07/04/2020 | 06/05/2020 | 09/04/2020 | 09/05/2020 | 1d  |
| 382 | Peralatan Fixture                                                      | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d? |
| 383 | - Conv. Optical Smoke Detector                                         | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 384 | - Conv. Manual Break glass                                             | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 385 | - Junction Box Fire Alarm                                              | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 386 | - Remote Indicating Lamp                                               | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 387 | - Alarm Bell                                                           | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 388 | - Terminal Box 30 x 40 x 12                                            | 06/05/2020 | 06/05/2020 | 09/05/2020 | 09/05/2020 | 1d  |
| 389 | Pekerjaan Instalasi                                                    | 07/04/2020 | 09/04/2020 | 08/04/2020 | 10/04/2020 | 1d  |
| 390 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 07/04/2020 | 09/04/2020 | 08/04/2020 | 10/04/2020 | 1d  |
| 391 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 392 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 393 | Pekerjaan Alat Pemadam Kebakaran                                       | 03/04/2020 | 23/05/2020 | 06/04/2020 | 27/05/2020 | 0d  |
| 394 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 03/04/2020 | 09/04/2020 | 19/05/2020 | 27/05/2020 | 35d |



|     |                                          |            |            |            |            |     |
|-----|------------------------------------------|------------|------------|------------|------------|-----|
| 395 | Hydrant Box Indoor, type B c/w           | 09/04/2020 | 09/04/2020 | 27/05/2020 | 27/05/2020 | 35d |
| 396 | Gate valve dia. 21/2" , OS&Y type        | 09/04/2020 | 09/04/2020 | 27/05/2020 | 27/05/2020 | 35d |
| 397 | - Fire Extinguisher 6 kg                 | 23/05/2020 | 23/05/2020 | 27/05/2020 | 27/05/2020 | 0d  |
| 398 | Instalasi Sprinkler                      | 02/04/2020 | 09/04/2020 | 03/04/2020 | 10/04/2020 | 1d  |
| 399 | BSP Sch.40 c/w fitting2 & Material bantu | 02/04/2020 | 09/04/2020 | 03/04/2020 | 10/04/2020 | 1d  |
| 400 | dia. 1 "                                 | 07/04/2020 | 09/04/2020 | 08/04/2020 | 10/04/2020 | 1d  |
| 401 | dia. 1 1/4 "                             | 08/04/2020 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 1d  |
| 402 | dia. 2 "                                 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 403 | dia. 2 1/2 "                             | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 404 | dia. 3 "                                 | 02/04/2020 | 09/04/2020 | 03/04/2020 | 10/04/2020 | 1d  |
| 405 | Sprinkler head dia. 1/2", 68'C, pendent  | 03/04/2020 | 09/04/2020 | 04/04/2020 | 10/04/2020 | 1d  |
| 406 | Branch Control Valve dia. 3"             | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 407 | Pekerjaan Sanitair & Sanitasi            | 07/04/2020 | 29/05/2020 | 08/04/2020 | 30/05/2020 | 0d  |
| 408 | Pasang Klosed Duduk                      | 23/04/2020 | 27/04/2020 | 27/05/2020 | 30/05/2020 | 24d |
| 409 | Pasang Wastafel single                   | 23/05/2020 | 26/05/2020 | 28/05/2020 | 29/05/2020 | 2d  |
| 410 | Pasang Jet washer                        | 23/05/2020 | 29/05/2020 | 26/05/2020 | 30/05/2020 | 0d  |
| 411 | Pasang Kran Diameter Air 1/2 "           | 27/05/2020 | 27/05/2020 | 30/05/2020 | 30/05/2020 | 2d  |
| 412 | Pasang Floor Drain                       | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |

|     |                                                                    |            |            |            |            |     |
|-----|--------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 413 | <b>Instalasi Air Bersih</b>                                        | 08/04/2020 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 1d  |
| 414 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 08/04/2020 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 1d  |
| 415 | <b>Instalasi Air Kotor</b>                                         | 07/04/2020 | 09/04/2020 | 08/04/2020 | 10/04/2020 | 1d  |
| 416 | Pasang Cleant Out 3"                                               | 09/04/2020 | 09/04/2020 | 10/04/2020 | 10/04/2020 | 1d  |
| 417 | Pasang Pipa air kotor Ø 3 "                                        | 07/04/2020 | 09/04/2020 | 08/04/2020 | 10/04/2020 | 1d  |
| 418 | Pasang Pipa air kotor Ø 4 "                                        | 08/04/2020 | 09/04/2020 | 09/04/2020 | 10/04/2020 | 1d  |
| 419 | <b>Pekerjaan Listrik</b>                                           | 08/04/2020 | 22/04/2020 | 09/04/2020 | 23/04/2020 | 1d  |
| 420 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 08/04/2020 | 09/04/2020 | 22/04/2020 | 23/04/2020 | 12d |
| 421 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 08/04/2020 | 09/04/2020 | 22/04/2020 | 23/04/2020 | 12d |
| 422 | Pasang Instalasi Titik Lampu                                       | 10/04/2020 | 22/04/2020 | 11/04/2020 | 23/04/2020 | 1d  |
| 423 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 17/04/2020 | 17/04/2020 | 18/04/2020 | 18/04/2020 | 1d  |
| 424 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 18/04/2020 | 20/04/2020 | 20/04/2020 | 21/04/2020 | 1d  |
| 425 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 21/04/2020 | 21/04/2020 | 22/04/2020 | 22/04/2020 | 1d  |
| 426 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 09/04/2020 | 09/04/2020 | 23/04/2020 | 23/04/2020 | 12d |
| 427 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 22/04/2020 | 22/04/2020 | 23/04/2020 | 23/04/2020 | 1d  |
| 428 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 17/04/2020 | 22/04/2020 | 18/04/2020 | 23/04/2020 | 1d  |
| 429 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 22/04/2020 | 22/04/2020 | 23/04/2020 | 23/04/2020 | 1d  |
| 430 | Pasang Saklar Tunggal                                              | 17/04/2020 | 21/04/2020 | 18/04/2020 | 22/04/2020 | 1d  |

|     |                                                   |            |            |            |            |     |
|-----|---------------------------------------------------|------------|------------|------------|------------|-----|
| 431 | Instalasi stop kontak                             | 09/04/2020 | 09/04/2020 | 23/04/2020 | 23/04/2020 | 12d |
| 432 | Pasang Stop Kontak 1 Phase                        | 21/04/2020 | 22/04/2020 | 22/04/2020 | 23/04/2020 | 1d  |
| 433 | <b>LANTAI 6 DAN ATAP</b>                          | 29/02/2020 | 30/05/2020 | 29/02/2020 | 30/05/2020 | 0d  |
| 434 | <b>Pekerjaan Pasangan</b>                         | 04/04/2020 | 30/04/2020 | 04/04/2020 | 30/04/2020 | 0d  |
| 435 | Mengurug pasir bawah lantai setebal 5 cm          | 27/04/2020 | 30/04/2020 | 27/04/2020 | 30/04/2020 | 0d  |
| 436 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 04/04/2020 | 16/04/2020 | 04/04/2020 | 16/04/2020 | 0d  |
| 437 | <b>Pekerjaan Beton</b>                            | 29/02/2020 | 16/04/2020 | 02/03/2020 | 17/04/2020 | 0d  |
| 438 | Pembuatan Plat Lantai                             | 29/02/2020 | 11/03/2020 | 29/02/2020 | 11/03/2020 | 0d  |
| 439 | Kolom Praktis uk. 11 x 11 cm                      | 13/04/2020 | 16/04/2020 | 14/04/2020 | 17/04/2020 | 0d  |
| 440 | Kolom uk. 30 x 30 cm ( K 2 )                      | 16/03/2020 | 16/03/2020 | 17/03/2020 | 17/03/2020 | 1d  |
| 441 | Kolom uk. 40 x 40 cm ( K 3 )                      | 13/03/2020 | 16/03/2020 | 14/03/2020 | 17/03/2020 | 1d  |
| 442 | Kolom uk. 50 x 50 cm ( K 4 )                      | 10/03/2020 | 16/03/2020 | 10/03/2020 | 16/03/2020 | 0d  |
| 443 | Balok Lantai uk.11 x 20 cm                        | 10/03/2020 | 11/03/2020 | 16/03/2020 | 17/03/2020 | 64d |
| 444 | <b>BALOK LANTAI</b>                               | 04/03/2020 | 16/04/2020 | 05/03/2020 | 17/04/2020 | 0d  |
| 445 | Balok Type B.1                                    | 07/03/2020 | 11/03/2020 | 09/03/2020 | 12/03/2020 | 1d  |
| 446 | Balok Type B.2                                    | 05/03/2020 | 11/03/2020 | 06/03/2020 | 12/03/2020 | 1d  |
| 447 | Balok Type B.3                                    | 04/03/2020 | 11/03/2020 | 05/03/2020 | 12/03/2020 | 1d  |
| 448 | Balok Type B.4                                    | 06/03/2020 | 11/03/2020 | 07/03/2020 | 12/03/2020 | 1d  |

|     |                                                             |            |            |            |            |     |
|-----|-------------------------------------------------------------|------------|------------|------------|------------|-----|
| 449 | Balok Type B.5                                              | 07/03/2020 | 11/03/2020 | 09/03/2020 | 12/03/2020 | 1d  |
| 450 | Balok Type B.6                                              | 07/03/2020 | 11/03/2020 | 09/03/2020 | 12/03/2020 | 1d  |
| 451 | Balok Type B.7                                              | 07/03/2020 | 11/03/2020 | 09/03/2020 | 12/03/2020 | 1d  |
| 452 | Balok Type B.8                                              | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 1d  |
| 453 | Balok Type B.9                                              | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 1d  |
| 454 | Balok Type B.10                                             | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 1d  |
| 455 | Balok Type B.11                                             | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 1d  |
| 456 | Balok Type B.12                                             | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 1d  |
| 457 | Balok Type B.13                                             | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 1d  |
| 458 | Balok Type B.14                                             | 11/03/2020 | 11/03/2020 | 12/03/2020 | 12/03/2020 | 1d  |
| 459 | Balok Type B.15                                             | 11/03/2020 | 11/03/2020 | 12/03/2020 | 12/03/2020 | 1d  |
| 460 | Balok Type B.20                                             | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 1d  |
| 461 | Balok Type B.27                                             | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 1d  |
| 462 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 1d  |
| 463 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 11/03/2020 | 11/03/2020 | 12/03/2020 | 12/03/2020 | 1d  |
| 464 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 11/03/2020 | 11/03/2020 | 12/03/2020 | 12/03/2020 | 1d  |
| 465 | Plat meja beton tebal 10 cm                                 | 10/04/2020 | 16/04/2020 | 11/04/2020 | 17/04/2020 | 0d  |
| 466 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 10/03/2020 | 11/03/2020 | 11/03/2020 | 12/03/2020 | 64d |

|     |                                                         |            |            |            |            |     |
|-----|---------------------------------------------------------|------------|------------|------------|------------|-----|
| 467 | Plat Tangga Utama dan Darurat Tebal 15 cm               | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 62d |
| 468 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 09/03/2020 | 11/03/2020 | 10/03/2020 | 12/03/2020 | 64d |
| 469 | <b>BALOK ATAP</b>                                       | 17/03/2020 | 26/03/2020 | 18/03/2020 | 27/03/2020 | 0d  |
| 470 | Balok Type B.14                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 471 | Balok Type B.15                                         | 26/03/2020 | 26/03/2020 | 27/03/2020 | 27/03/2020 | 0d  |
| 472 | Balok Type B.16                                         | 20/03/2020 | 26/03/2020 | 21/03/2020 | 27/03/2020 | 0d  |
| 473 | Balok Type B.17                                         | 20/03/2020 | 26/03/2020 | 21/03/2020 | 27/03/2020 | 0d  |
| 474 | Balok Type B.18                                         | 23/03/2020 | 26/03/2020 | 24/03/2020 | 27/03/2020 | 0d  |
| 475 | Balok Type B.19                                         | 19/03/2020 | 26/03/2020 | 20/03/2020 | 27/03/2020 | 0d  |
| 476 | Balok Type B.20                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 477 | Balok Type B.21                                         | 21/03/2020 | 26/03/2020 | 23/03/2020 | 27/03/2020 | 0d  |
| 478 | Balok Type B.22                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 479 | Balok Type B.26                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 480 | Balok Type B.29                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 481 | Balok Type B.30                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 482 | Balok Type B.31                                         | 24/03/2020 | 26/03/2020 | 26/03/2020 | 27/03/2020 | 0d  |
| 483 | Waterprofing plat atap                                  | 17/03/2020 | 26/03/2020 | 17/03/2020 | 26/03/2020 | 0d  |
| 484 | <b>Pekerjaan Plesteran dan Benangan</b>                 | 09/04/2020 | 02/05/2020 | 09/04/2020 | 02/05/2020 | 0d  |



|     |                                                                             |            |            |            |            |    |
|-----|-----------------------------------------------------------------------------|------------|------------|------------|------------|----|
| 485 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                             | 09/04/2020 | 02/05/2020 | 09/04/2020 | 02/05/2020 | 0d |
| 486 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                            | 09/04/2020 | 17/04/2020 | 18/04/2020 | 27/04/2020 | 8d |
| 487 | Pekerjaan acian interior                                                    | 11/04/2020 | 29/04/2020 | 11/04/2020 | 29/04/2020 | 0d |
| 488 | Pekerjaan acian eksterior                                                   | 13/04/2020 | 17/04/2020 | 22/04/2020 | 27/04/2020 | 8d |
| 489 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                              | 24/04/2020 | 30/04/2020 | 24/04/2020 | 30/04/2020 | 0d |
| 490 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                             | 18/04/2020 | 22/04/2020 | 28/04/2020 | 02/05/2020 | 8d |
| 491 | Pekerjaan Lantai                                                            | 27/04/2020 | 26/05/2020 | 28/04/2020 | 27/05/2020 | 0d |
| 492 | Pasang Keramik Lantai 60 x 60                                               | 27/04/2020 | 22/05/2020 | 27/04/2020 | 22/05/2020 | 0d |
| 493 | Pasang Keramik Lantai 30 x 30                                               | 29/04/2020 | 02/05/2020 | 13/05/2020 | 15/05/2020 | 9d |
| 494 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                               | 11/05/2020 | 13/05/2020 | 23/05/2020 | 27/05/2020 | 9d |
| 495 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                      | 04/05/2020 | 09/05/2020 | 16/05/2020 | 22/05/2020 | 9d |
| 496 | Pasang Batu Alam                                                            | 22/05/2020 | 26/05/2020 | 23/05/2020 | 27/05/2020 | 0d |
| 497 | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           | 23/05/2020 | 29/05/2020 | 26/05/2020 | 30/05/2020 | 1d |
| 498 | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 499 | Pas. Kusen Type J2                                                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 500 | Pas. Kusen Type J3                                                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 501 | Pas. Kusen Type J4                                                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 502 | Pas. Kusen Type J8                                                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |

|     |                                                     |            |            |            |            |    |
|-----|-----------------------------------------------------|------------|------------|------------|------------|----|
| 503 | Pas. Kusen Type J9                                  | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 504 | Pas. Kusen Type J12                                 | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 505 | Pas. Kusen Type P2                                  | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 506 | Pas. Kusen Type P3                                  | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 507 | Pas. Kusen Type P4                                  | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 508 | Pas. Kusen Type P5                                  | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 509 | Pasang pintu darurat anti api                       | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d |
| 510 | Pekerjaan Partisi                                   | 23/05/2020 | 29/05/2020 | 26/05/2020 | 30/05/2020 | 1d |
| 511 | Memasang 1m2 unit Partisi Type I                    | 23/05/2020 | 27/05/2020 | 26/05/2020 | 28/05/2020 | 1d |
| 512 | Memasang 1 unit Pintu Type I untuk partisi          | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d |
| 513 | Memasang 1 unit Pintu Type II untuk partisi         | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d |
| 514 | Memasang 1 jendela Pintu Type I untuk partisi       | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d |
| 515 | Pekerjaan Railling Tangga                           | 22/05/2020 | 27/05/2020 | 23/05/2020 | 28/05/2020 | 1d |
| 516 | Pasang Railling Tangga Utama dari Stainless Steel   | 22/05/2020 | 27/05/2020 | 23/05/2020 | 28/05/2020 | 1d |
| 517 | Pasang Railling Tangga Darurat dari Stainless Steel | 23/05/2020 | 27/05/2020 | 26/05/2020 | 28/05/2020 | 1d |
| 518 | Curtain Wall                                        | 27/05/2020 | 27/05/2020 | 28/05/2020 | 28/05/2020 | 1d |
| 519 | Curtain Wall ( CW2 )                                | 27/05/2020 | 27/05/2020 | 28/05/2020 | 28/05/2020 | 1d |
| 520 | Pekerjaan Langit-langit                             | 14/05/2020 | 20/05/2020 | 14/05/2020 | 20/05/2020 | 0d |



|     |                                                   |            |            |            |            |     |
|-----|---------------------------------------------------|------------|------------|------------|------------|-----|
| 521 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 14/05/2020 | 20/05/2020 | 14/05/2020 | 20/05/2020 | 0d  |
| 522 | Pekerjaan Pengecatan                              | 14/05/2020 | 26/05/2020 | 15/05/2020 | 27/05/2020 | 0d  |
| 523 | Pengecatan dinding interior                       | 14/05/2020 | 26/05/2020 | 15/05/2020 | 27/05/2020 | 0d  |
| 524 | Pengecatan dinding eksterior                      | 15/05/2020 | 26/05/2020 | 16/05/2020 | 27/05/2020 | 0d  |
| 525 | Pengecatan plafon                                 | 15/05/2020 | 22/05/2020 | 19/05/2020 | 27/05/2020 | 2d  |
| 526 | Pekerjaan Tata Udara                              | 27/05/2020 | 29/05/2020 | 28/05/2020 | 30/05/2020 | 1d  |
| 527 | Unit AC Cassete 5PK                               | 28/05/2020 | 29/05/2020 | 28/05/2020 | 29/05/2020 | 0d  |
| 528 | Unit AC Cassete 4PK                               | 27/05/2020 | 29/05/2020 | 28/05/2020 | 30/05/2020 | 1d  |
| 529 | Unit AC Split wall 3/4PK                          | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 530 | Pekerjaan Instalasi Telepon                       | 02/05/2020 | 28/05/2020 | 04/05/2020 | 29/05/2020 | 1d  |
| 531 | Pasang Instalasi Telepon                          | 02/05/2020 | 02/05/2020 | 29/05/2020 | 29/05/2020 | 20d |
| 532 | Pasang Outlet Telepon                             | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d  |
| 533 | Switch Hub 16 port                                | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d  |
| 534 | Terminal Box                                      | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d  |
| 535 | Pekerjaan CCTV                                    | 02/05/2020 | 28/05/2020 | 04/05/2020 | 29/05/2020 | 1d  |
| 536 | Kamera CCTV HD                                    | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 1d  |
| 537 | Instalasi kabel coaxial RG6 untuk kamera CCTV     | 02/05/2020 | 02/05/2020 | 29/05/2020 | 29/05/2020 | 20d |
| 538 | Pekerjaan Sound System                            | 29/04/2020 | 30/05/2020 | 29/04/2020 | 30/05/2020 | 0d  |

|     |                                                                        |            |            |            |            |     |
|-----|------------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 539 | Celling speaker 6 W                                                    | 28/05/2020 | 30/05/2020 | 28/05/2020 | 30/05/2020 | 0d  |
| 540 | Volume control                                                         | 30/05/2020 | 30/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |
| 541 | Instalasi Celling speaker                                              | 29/04/2020 | 02/05/2020 | 28/05/2020 | 30/05/2020 | 21d |
| 542 | Terminal Box                                                           | 30/05/2020 | 30/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |
| 543 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 02/05/2020 | 02/05/2020 | 30/05/2020 | 30/05/2020 | 21d |
| 544 | Pekerjaan Fire Alarm                                                   | 13/03/2020 | 02/05/2020 | 08/04/2020 | 30/05/2020 | 1d  |
| 545 | INSTALASI LANTAI 6                                                     | 13/03/2020 | 02/05/2020 | 08/04/2020 | 30/05/2020 | 1d  |
| 546 | Peralatan Fixture                                                      | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 547 | - Conv. Optical Smoke Detector                                         | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 548 | - Conv. Manual Break glass                                             | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 549 | - Junction Box Fire Alarm                                              | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 550 | - Remote Indicating Lamp                                               | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 551 | - Alarm Bell                                                           | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 552 | - Terminal Box 30 x 40 x 12                                            | 13/03/2020 | 13/03/2020 | 14/03/2020 | 14/03/2020 | 1d  |
| 553 | Pekerjaan Instalasi                                                    | 29/04/2020 | 02/05/2020 | 02/05/2020 | 05/05/2020 | 1d  |
| 554 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 29/04/2020 | 02/05/2020 | 02/05/2020 | 05/05/2020 | 1d  |
| 555 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |
| 556 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |

|     |                                                   |            |            |            |            |     |
|-----|---------------------------------------------------|------------|------------|------------|------------|-----|
| 557 | Pekerjaan Alat Pemadam Kebakaran                  | 25/04/2020 | 28/05/2020 | 27/04/2020 | 29/05/2020 | 0d  |
| 558 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 " | 25/04/2020 | 02/05/2020 | 22/05/2020 | 29/05/2020 | 19d |
| 559 | Hydrant Box Indoor, type B c/w                    | 02/05/2020 | 02/05/2020 | 29/05/2020 | 29/05/2020 | 19d |
| 560 | Gate valve dia. 21/2" , OS&Y type                 | 02/05/2020 | 02/05/2020 | 29/05/2020 | 29/05/2020 | 19d |
| 561 | - Fire Extinguisher 6 kg                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 562 | Instalasi Sprinkler                               | 27/04/2020 | 02/05/2020 | 29/04/2020 | 05/05/2020 | 1d  |
| 563 | BSP Sch.40 c/w fitting2 & Material bantu          | 27/04/2020 | 02/05/2020 | 29/04/2020 | 05/05/2020 | 1d  |
| 564 | dia. 1 "                                          | 29/04/2020 | 02/05/2020 | 02/05/2020 | 05/05/2020 | 1d  |
| 565 | dia. 1 1/4 "                                      | 30/04/2020 | 02/05/2020 | 04/05/2020 | 05/05/2020 | 1d  |
| 566 | dia. 2 "                                          | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |
| 567 | dia. 2 1/2 "                                      | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |
| 568 | dia. 3 "                                          | 28/04/2020 | 02/05/2020 | 30/04/2020 | 05/05/2020 | 1d  |
| 569 | Sprinkler head dia. 1/2", 68'C, pendent           | 27/04/2020 | 02/05/2020 | 29/04/2020 | 05/05/2020 | 1d  |
| 570 | Branch Control Valve dia. 3"                      | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |
| 571 | Fitting (elbow, reducer, knie dl)                 | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 1d  |
| 572 | INSTALASI SPRINGKLER DAN HYDRANT Lt Atap          | 02/05/2020 | 28/05/2020 | 04/05/2020 | 29/05/2020 | 0d  |
| 573 | Galv. Pipe Med. c/w fitting2 & Material bantu     | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |
| 574 | dia. 1 "                                          | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |

|     |                                             |            |            |            |            |     |
|-----|---------------------------------------------|------------|------------|------------|------------|-----|
| 575 | ARV c/w Gate valve dia. 1"                  | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |
| 576 | Pressure gauge c/w gate valve dia. 1/2"     | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |
| 577 | Ball valve dia. 1" -                        | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |
| 578 | Sprinkler head dia. 1/2", 68'C, pendent -   | 02/05/2020 | 02/05/2020 | 05/05/2020 | 05/05/2020 | 0d  |
| 579 | <b>Fire Extinguisher</b>                    | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 580 | Apar ABC Kap. 4 kg                          | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 581 | Apar CO2 Kap. 3 kg (SDP area)               | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 582 | Apar CO2 Kap. 23 kg (Panel room)            | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 583 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>    | 28/04/2020 | 30/05/2020 | 28/04/2020 | 30/05/2020 | 0d  |
| 584 | Pasang Klosed Duduk                         | 15/05/2020 | 18/05/2020 | 28/05/2020 | 30/05/2020 | 9d  |
| 585 | Pasang Wastafel single                      | 29/05/2020 | 30/05/2020 | 29/05/2020 | 30/05/2020 | 0d  |
| 586 | Pasang Jet washer                           | 28/05/2020 | 30/05/2020 | 28/05/2020 | 30/05/2020 | 0d  |
| 587 | Pasang Kran Diameter Air 1/2 "              | 28/05/2020 | 28/05/2020 | 30/05/2020 | 30/05/2020 | 2d  |
| 588 | Pasang Floor Drain                          | 30/05/2020 | 30/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |
| 589 | <b>Instalasi Air Bersih</b>                 | 30/04/2020 | 30/05/2020 | 30/04/2020 | 30/05/2020 | 0d  |
| 590 | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 30/04/2020 | 02/05/2020 | 29/05/2020 | 30/05/2020 | 21d |
| 591 | Tangki air bersih kapasitas 1500 ltr        | 28/05/2020 | 30/05/2020 | 28/05/2020 | 30/05/2020 | 0d  |
| 592 | <b>Instalasi Air Kotor</b>                  | 28/04/2020 | 30/05/2020 | 28/04/2020 | 30/05/2020 | 0d  |

|     |                                                                    |            |            |            |            |     |
|-----|--------------------------------------------------------------------|------------|------------|------------|------------|-----|
| 593 | Pasang Roofdrain                                                   | 28/05/2020 | 30/05/2020 | 28/05/2020 | 30/05/2020 | 0d  |
| 594 | Pasang Cleant Out 3"                                               | 02/05/2020 | 02/05/2020 | 30/05/2020 | 30/05/2020 | 21d |
| 595 | Pasang Pipa air kotor Ø 3 "                                        | 29/04/2020 | 02/05/2020 | 28/05/2020 | 30/05/2020 | 21d |
| 596 | Pasang Pipa air kotor Ø 4 "                                        | 30/04/2020 | 02/05/2020 | 29/05/2020 | 30/05/2020 | 21d |
| 597 | Pasang instalasi Pipa Air Hujan 4"                                 | 28/04/2020 | 02/05/2020 | 27/05/2020 | 30/05/2020 | 21d |
| 598 | Pekerjaan Listrik                                                  | 30/04/2020 | 29/05/2020 | 02/05/2020 | 30/05/2020 | 1d  |
| 599 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 30/04/2020 | 02/05/2020 | 29/05/2020 | 30/05/2020 | 21d |
| 600 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 30/04/2020 | 02/05/2020 | 29/05/2020 | 30/05/2020 | 21d |
| 601 | Pasang Instalasi Titik Lampu                                       | 14/05/2020 | 29/05/2020 | 14/05/2020 | 29/05/2020 | 0d  |
| 602 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 603 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 23/05/2020 | 26/05/2020 | 29/05/2020 | 30/05/2020 | 4d  |
| 604 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 605 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 02/05/2020 | 02/05/2020 | 30/05/2020 | 30/05/2020 | 21d |
| 606 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 607 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 23/05/2020 | 29/05/2020 | 26/05/2020 | 30/05/2020 | 1d  |
| 608 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 609 | Pasang Saklar Tunggal                                              | 23/05/2020 | 26/05/2020 | 29/05/2020 | 30/05/2020 | 4d  |
| 610 | Pasang Saklar Ganda                                                | 23/05/2020 | 26/05/2020 | 29/05/2020 | 30/05/2020 | 4d  |



|     |                                                     |            |            |            |            |     |
|-----|-----------------------------------------------------|------------|------------|------------|------------|-----|
| 611 | Instalasi stop kontak                               | 02/05/2020 | 02/05/2020 | 30/05/2020 | 30/05/2020 | 21d |
| 612 | Pasang Stop Kontak 1 Phase                          | 23/05/2020 | 26/05/2020 | 29/05/2020 | 30/05/2020 | 4d  |
| 613 | <b>Pekerjaan Instalasi Penangkal Petir</b>          | 28/05/2020 | 29/05/2020 | 29/05/2020 | 30/05/2020 | 0d  |
| 614 | Air lighting terminal viking V6 radius 60 m         | 28/05/2020 | 28/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 615 | Obstruction Lamp                                    | 28/05/2020 | 28/05/2020 | 30/05/2020 | 30/05/2020 | 1d  |
| 616 | Instalasi Obstruction lamp                          | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |
| 617 | Pasang Kabel BC 1x70 mm <sup>2</sup> +PVC AW Ø 1.5" | 28/05/2020 | 29/05/2020 | 29/05/2020 | 30/05/2020 | 0d  |
| 618 | Pasang Dudukan Tiang dan Penangkal Petir            | 29/05/2020 | 29/05/2020 | 30/05/2020 | 30/05/2020 | 0d  |
| 619 | Pasang Grounding System Rod Ø 1" Panjang 12 mtr     | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |
| 620 | Pasang Bak Kontrol Grounding                        | 28/05/2020 | 28/05/2020 | 29/05/2020 | 29/05/2020 | 0d  |

| ID | Task Name                                                   | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |  |  |  |  |
|----|-------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|--|--|--|--|
|    |                                                             |          |              |              |              | D            | J | F | M | A | M |  |  |  |  |  |
| 1  | <b>Pekerjaan Persiapan</b>                                  | 71 days  | Thu 02/01/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |  |  |  |  |
| 2  | Pembersihan Lokasi                                          | 8 days   | Thu 02/01/20 | Fri 10/01/20 |              |              |   |   |   |   |   |  |  |  |  |  |
| 3  | Pembuatan Kantor direksi keet                               | 6 days   | Tue 07/01/20 | Mon 13/01/20 | 2FF+2 days   |              |   |   |   |   |   |  |  |  |  |  |
| 4  | Pembuatan pagar keliling                                    | 4 days   | Fri 10/01/20 | Tue 14/01/20 | 3FF+1 day    |              |   |   |   |   |   |  |  |  |  |  |
| 5  | Pemasangan TC                                               | 5 days   | Wed 15/01/20 | Mon 20/01/20 | 4            |              |   |   |   |   |   |  |  |  |  |  |
| 6  | Pembongkaran TC                                             | 4 days   | Sat 21/03/20 | Thu 26/03/20 | 482FF        |              |   |   |   |   |   |  |  |  |  |  |
| 7  | Pemasangan Polynet Biru                                     | 1 day    | Mon 20/01/20 | Mon 20/01/20 | 5FF          |              |   |   |   |   |   |  |  |  |  |  |
| 8  | <b>LANTAI 3</b>                                             | 99 days  | Tue 21/01/20 | Tue 19/05/20 |              |              |   |   |   |   |   |  |  |  |  |  |
| 9  | <b>Pekerjaan Pasangan</b>                                   | 9 days   | Thu 13/02/20 | Sat 22/02/20 |              |              |   |   |   |   |   |  |  |  |  |  |
| 10 | Mengurug pasir bawah lantai setebal 5 cm                    | 3 days   | Thu 20/02/20 | Sat 22/02/20 | 27SS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 11 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr           | 9 days   | Thu 13/02/20 | Sat 22/02/20 | 299SS        |              |   |   |   |   |   |  |  |  |  |  |
| 12 | <b>Pekerjaan Beton</b>                                      | 28 days  | Tue 21/01/20 | Sat 22/02/20 | 7SS          |              |   |   |   |   |   |  |  |  |  |  |
| 13 | Kolom Praktis uk. 11 x 11 cm                                | 5 days   | Tue 18/02/20 | Sat 22/02/20 | 11FF         |              |   |   |   |   |   |  |  |  |  |  |
| 14 | Kolom uk. 30 x 30 cm ( K 2 )                                | 1 day    | Tue 21/01/20 | Tue 21/01/20 | 12SS         |              |   |   |   |   |   |  |  |  |  |  |
| 15 | Kolom uk. 40 x 40 cm ( K 3 )                                | 1 day    | Tue 21/01/20 | Tue 21/01/20 | 14SS         |              |   |   |   |   |   |  |  |  |  |  |
| 16 | Kolom uk. 50 x 50 cm ( K 4 )                                | 1 day    | Tue 21/01/20 | Tue 21/01/20 | 14SS         |              |   |   |   |   |   |  |  |  |  |  |
| 17 | Kolom uk. 60 x 60 cm ( K 5 )                                | 5 days   | Tue 21/01/20 | Mon 27/01/20 | 14SS         |              |   |   |   |   |   |  |  |  |  |  |
| 18 | Kolom uk. 70 x 70 cm ( K 6 )                                | 4 days   | Tue 21/01/20 | Fri 24/01/20 | 14SS         |              |   |   |   |   |   |  |  |  |  |  |
| 19 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 2 days   | Thu 30/01/20 | Fri 31/01/20 | 17FS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 20 | Plat meja beton tebal 10 cm                                 | 2 days   | Thu 30/01/20 | Fri 31/01/20 | 17FS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 21 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 1 day    | Thu 30/01/20 | Thu 30/01/20 | 17FS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 22 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 2 days   | Thu 30/01/20 | Fri 31/01/20 | 17FS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 23 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 2 days   | Thu 30/01/20 | Fri 31/01/20 | 17FS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 24 | <b>Pekerjaan Plesteran dan Benangan</b>                     | 30 days  | Sat 15/02/20 | Fri 20/03/20 |              |              |   |   |   |   |   |  |  |  |  |  |
| 25 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 30 days  | Sat 15/02/20 | Fri 20/03/20 | 11FS-7 days  |              |   |   |   |   |   |  |  |  |  |  |
| 26 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 7 days   | Sat 15/02/20 | Sat 22/02/20 | 11FS-7 days  |              |   |   |   |   |   |  |  |  |  |  |
| 27 | Pekerjaan acian interior                                    | 20 days  | Tue 18/02/20 | Wed 11/03/20 | 25SS+2 days  |              |   |   |   |   |   |  |  |  |  |  |
| 28 | Pekerjaan acian eksterior                                   | 5 days   | Mon 24/02/20 | Fri 28/02/20 | 26           |              |   |   |   |   |   |  |  |  |  |  |
| 29 | <b>Pekerjaan Lantai</b>                                     | 23 days  | Thu 20/02/20 | Tue 17/03/20 |              |              |   |   |   |   |   |  |  |  |  |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

Page 1



| ID | Task Name                                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|----|------------------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|    |                                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 30 | Pasang Keramik Lantai 60 x 60                                                      | 20 days  | Thu 20/02/20 | Fri 13/03/20 | 10SS         |              |   |   |   |   |   |  |
| 31 | Pasang Keramik Lantai 30 x 30                                                      | 5 days   | Thu 20/02/20 | Tue 25/02/20 | 30SS         |              |   |   |   |   |   |  |
| 32 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      | 3 days   | Tue 03/03/20 | Thu 05/03/20 | 33           |              |   |   |   |   |   |  |
| 33 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             | 5 days   | Wed 26/02/20 | Mon 02/03/20 | 31           |              |   |   |   |   |   |  |
| 34 | Pasang Batu Alam                                                                   | 3 days   | Sat 14/03/20 | Tue 17/03/20 | 63FF         |              |   |   |   |   |   |  |
| 35 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 6 days   | Sat 14/03/20 | Fri 20/03/20 |              |              |   |   |   |   |   |  |
| 36 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 1 day    | Thu 19/03/20 | Thu 19/03/20 |              |              |   |   |   |   |   |  |
| 37 | Pas. Kusen Type J2                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 49           |              |   |   |   |   |   |  |
| 38 | Pas. Kusen Type J3                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 39 | Pas. Kusen Type J4                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 40 | Pas. Kusen Type J8                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 41 | Pas. Kusen Type J9                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 42 | Pas. Kusen Type J12                                                                | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 43 | Pas. Kusen Type P2                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 44 | Pas. Kusen Type P3                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 45 | Pas. Kusen Type P4                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 46 | Pas. Kusen Type P5                                                                 | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 47 | Pasang pintu darurat anti api                                                      | 1 day    | Thu 19/03/20 | Thu 19/03/20 | 37SS         |              |   |   |   |   |   |  |
| 48 | <b>Pekerjaan Partisi</b>                                                           | 6 days   | Sat 14/03/20 | Fri 20/03/20 |              |              |   |   |   |   |   |  |
| 49 | Memasang 1m2 unit Partisi Type I                                                   | 4 days   | Sat 14/03/20 | Wed 18/03/20 | 30           |              |   |   |   |   |   |  |
| 50 | Memasang 1m2 unit Partisi Type II                                                  | 1 day    | Wed 18/03/20 | Wed 18/03/20 | 49FF         |              |   |   |   |   |   |  |
| 51 | Memasang 1 unit Pintu Type I untuk partisi                                         | 1 day    | Fri 20/03/20 | Fri 20/03/20 | 37           |              |   |   |   |   |   |  |
| 52 | Memasang 1 jendela Pintu Type I untuk partisi                                      | 1 day    | Fri 20/03/20 | Fri 20/03/20 | 51SS         |              |   |   |   |   |   |  |
| 53 | Memasang 1 jendela Pintu Type II untuk partisi                                     | 1 day    | Fri 20/03/20 | Fri 20/03/20 | 51SS         |              |   |   |   |   |   |  |
| 54 | <b>Pekerjaan Railling Tangga</b>                                                   | 3 days   | Mon 16/03/20 | Wed 18/03/20 |              |              |   |   |   |   |   |  |
| 55 | Pasang Railling Tangga Utama dari Stainless Steel                                  | 3 days   | Mon 16/03/20 | Wed 18/03/20 | 49FF         |              |   |   |   |   |   |  |
| 56 | Pasang Railling Tangga Darurat dari Stainless Steel                                | 3 days   | Mon 16/03/20 | Wed 18/03/20 | 55FF         |              |   |   |   |   |   |  |
| 57 | <b>Curtain Wall</b>                                                                | 1 day    | Wed 18/03/20 | Wed 18/03/20 |              |              |   |   |   |   |   |  |
| 58 | Curtain Wall ( CW2 )                                                               | 1 day    | Wed 18/03/20 | Wed 18/03/20 | 49FF         |              |   |   |   |   |   |  |

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--|-------|---------------|--|----------------|-----------|--|-----------------|---------|--|------------------|----------------|--|--------------------|-------------------------|--|------------------|---------------------|--|-------------|--------------------|--|---------------|--|--|-----------------------|--|--|----------------|--|--|------------|--|--|-------------|--|--|----------------|--|--|--------------------|--|--|----------|--|--|----------|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Task</td> <td style="width: 33%;"></td> <td style="width: 34%;">Split</td> </tr> <tr> <td>Critical Task</td> <td></td> <td>External Tasks</td> </tr> <tr> <td>Milestone</td> <td></td> <td>Project Summary</td> </tr> <tr> <td>Summary</td> <td></td> <td>Group By Summary</td> </tr> <tr> <td>Rolled Up Task</td> <td></td> <td>Inactive Milestone</td> </tr> <tr> <td>Rolled Up Critical Task</td> <td></td> <td>Inactive Summary</td> </tr> <tr> <td>Rolled Up Milestone</td> <td></td> <td>Manual Task</td> </tr> <tr> <td>Rolled Up Progress</td> <td></td> <td>Duration-only</td> </tr> <tr> <td></td> <td></td> <td>Manual Summary Rollup</td> </tr> <tr> <td></td> <td></td> <td>Manual Summary</td> </tr> <tr> <td></td> <td></td> <td>Start-only</td> </tr> <tr> <td></td> <td></td> <td>Finish-only</td> </tr> <tr> <td></td> <td></td> <td>External Tasks</td> </tr> <tr> <td></td> <td></td> <td>External Milestone</td> </tr> <tr> <td></td> <td></td> <td>Progress</td> </tr> <tr> <td></td> <td></td> <td>Deadline</td> </tr> </table> | Task                  |  | Split | Critical Task |  | External Tasks | Milestone |  | Project Summary | Summary |  | Group By Summary | Rolled Up Task |  | Inactive Milestone | Rolled Up Critical Task |  | Inactive Summary | Rolled Up Milestone |  | Manual Task | Rolled Up Progress |  | Duration-only |  |  | Manual Summary Rollup |  |  | Manual Summary |  |  | Start-only |  |  | Finish-only |  |  | External Tasks |  |  | External Milestone |  |  | Progress |  |  | Deadline |
| Task                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Split                 |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Critical Task                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | External Tasks        |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Milestone                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Project Summary       |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Summary                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Group By Summary      |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Rolled Up Task                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Inactive Milestone    |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Rolled Up Critical Task                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Inactive Summary      |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Rolled Up Milestone                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Manual Task           |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
| Rolled Up Progress                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Duration-only         |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Manual Summary Rollup |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Manual Summary        |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Start-only            |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Finish-only           |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | External Tasks        |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | External Milestone    |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Progress              |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Deadline              |  |       |               |  |                |           |  |                 |         |  |                  |                |  |                    |                         |  |                  |                     |  |             |                    |  |               |  |  |                       |  |  |                |  |  |            |  |  |             |  |  |                |  |  |                    |  |  |          |  |  |          |











| ID  | Task Name                                                   | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|-------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                             |          |              |              |              | D            | J | F | M | A | M |  |
| 146 | Kolom uk. 30 x 30 cm ( K 2 )                                | 1 day    | Wed 12/02/20 | Wed 12/02/20 | 149FF        |              |   |   |   |   |   |  |
| 147 | Kolom uk. 40 x 40 cm ( K 3 )                                | 2 days   | Tue 11/02/20 | Wed 12/02/20 | 149FF        |              |   |   |   |   |   |  |
| 148 | Kolom uk. 50 x 50 cm ( K 4 )                                | 5 days   | Fri 07/02/20 | Wed 12/02/20 | 149FF        |              |   |   |   |   |   |  |
| 149 | Kolom uk. 70 x 70 cm ( K 6 )                                | 5 days   | Fri 07/02/20 | Wed 12/02/20 | 144FS-1 day  |              |   |   |   |   |   |  |
| 150 | Balok Lantai uk.11 x 20 cm                                  | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 151 | Balok Type B.1                                              | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 152 | Balok Type B.2                                              | 6 days   | Sat 01/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 153 | Balok Type B.3                                              | 7 days   | Fri 31/01/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 154 | Balok Type B.4                                              | 6 days   | Sat 01/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 155 | Balok Type B.5                                              | 4 days   | Tue 04/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 156 | Balok Type B.6                                              | 6 days   | Sat 01/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 157 | Balok Type B.7                                              | 5 days   | Mon 03/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 158 | Balok Type B.8                                              | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 159 | Balok Type B.9                                              | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 160 | Balok Type B.10                                             | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 161 | Balok Type B.11                                             | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 162 | Balok Type B.12                                             | 1 day    | Fri 07/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 163 | Balok Type B.13                                             | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 164 | Balok Type B.14                                             | 1 day    | Fri 07/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 165 | Balok Type B.15                                             | 1 day    | Fri 07/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 166 | Balok Type B.20                                             | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 167 | Balok Type B.27                                             | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 168 | Balok Meja Beton                                            | 2 days   | Tue 03/03/20 | Wed 04/03/20 | 145SF+1 day  |              |   |   |   |   |   |  |
| 169 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 170 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 1 day    | Fri 07/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 171 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 1 day    | Fri 07/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 172 | Plat meja beton tebal 10 cm                                 | 3 days   | Tue 03/03/20 | Thu 05/03/20 | 168SS        |              |   |   |   |   |   |  |
| 173 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 2 days   | Thu 06/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 174 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |
| 175 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 3 days   | Wed 05/02/20 | Fri 07/02/20 | 144FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

Page 6

| ID  | Task Name                                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|------------------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 176 | <b>Pekerjaan Plesteran dan Benangan</b>                                            | 23 days  | Sat 29/02/20 | Fri 27/03/20 |              |              |   |   |   |   |   |  |
| 177 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                                    | 22 days  | Sat 29/02/20 | Thu 26/03/20 | 142FS-7 days |              |   |   |   |   |   |  |
| 178 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                                   | 7 days   | Sat 29/02/20 | Sat 07/03/20 | 142FS-7 days |              |   |   |   |   |   |  |
| 179 | Pekerjaan acian interior                                                           | 19 days  | Wed 04/03/20 | Thu 26/03/20 | 177SS+3 days |              |   |   |   |   |   |  |
| 180 | Pekerjaan acian eksterior                                                          | 6 days   | Mon 09/03/20 | Sat 14/03/20 | 178          |              |   |   |   |   |   |  |
| 181 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                     | 6 days   | Fri 20/03/20 | Fri 27/03/20 | 179FF+1 day  |              |   |   |   |   |   |  |
| 182 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                                    | 3 days   | Sat 14/03/20 | Tue 17/03/20 | 180FF+2 days |              |   |   |   |   |   |  |
| 183 | <b>Pekerjaan Lantai</b>                                                            | 25 days  | Tue 24/03/20 | Wed 22/04/20 |              |              |   |   |   |   |   |  |
| 184 | Pasang Keramik Lantai 60 x 60                                                      | 20 days  | Tue 24/03/20 | Thu 16/04/20 | 141SS        |              |   |   |   |   |   |  |
| 185 | Pasang Keramik Lantai 30 x 30                                                      | 8 days   | Tue 24/03/20 | Thu 02/04/20 | 184SS        |              |   |   |   |   |   |  |
| 186 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      | 3 days   | Tue 31/03/20 | Thu 02/04/20 | 187          |              |   |   |   |   |   |  |
| 187 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             | 5 days   | Tue 24/03/20 | Mon 30/03/20 | 184SS        |              |   |   |   |   |   |  |
| 188 | Keramik Meja Beton 20 x 20                                                         | 7 days   | Thu 09/04/20 | Thu 16/04/20 | 189FS-1 day  |              |   |   |   |   |   |  |
| 189 | Keramik Dinding Meja Beton 20 x 25                                                 | 6 days   | Fri 03/04/20 | Thu 09/04/20 | 186          |              |   |   |   |   |   |  |
| 190 | Pasang Batu Alam                                                                   | 3 days   | Mon 20/04/20 | Wed 22/04/20 | 217FF        |              |   |   |   |   |   |  |
| 191 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 10 days  | Fri 17/04/20 | Tue 28/04/20 |              |              |   |   |   |   |   |  |
| 192 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 1 day    | Fri 24/04/20 | Fri 24/04/20 |              |              |   |   |   |   |   |  |
| 193 | Pas. Kusen Type J2                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 194 | Pas. Kusen Type J3                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 195 | Pas. Kusen Type J4                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 196 | Pas. Kusen Type J8                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 204          |              |   |   |   |   |   |  |
| 197 | Pas. Kusen Type J9                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 198 | Pas. Kusen Type P2                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 199 | Pas. Kusen Type P3                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 200 | Pas. Kusen Type P4                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 201 | Pas. Kusen Type P5                                                                 | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 202 | Pasang pintu darurat anti api                                                      | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 196FF        |              |   |   |   |   |   |  |
| 203 | <b>Pekerjaan Partisi</b>                                                           | 10 days  | Fri 17/04/20 | Tue 28/04/20 |              |              |   |   |   |   |   |  |
| 204 | Memasang 1m2 unit Partisi Type I                                                   | 6 days   | Fri 17/04/20 | Thu 23/04/20 | 184          |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                           | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|-----------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                     |          |              |              |              | D            | J | F | M | A | M |  |
| 205 | Memasang 1 unit Pintu Type I untuk partisi          | 2 days   | Sat 25/04/20 | Mon 27/04/20 | 196          |              |   |   |   |   |   |  |
| 206 | Memasang 1 unit Pintu Type II untuk partisi         | 1 day    | Sat 25/04/20 | Sat 25/04/20 | 205SS        |              |   |   |   |   |   |  |
| 207 | Memasang 1 jendela Pintu Type I untuk partisi       | 3 days   | Sat 25/04/20 | Tue 28/04/20 | 205SS        |              |   |   |   |   |   |  |
| 208 | <b>Pekerjaan Railling Tangga</b>                    | 4 days   | Mon 20/04/20 | Thu 23/04/20 |              |              |   |   |   |   |   |  |
| 209 | Pasang Railling Tangga Utama dari Stainless Steel   | 4 days   | Mon 20/04/20 | Thu 23/04/20 | 204FF        |              |   |   |   |   |   |  |
| 210 | Pasang Railling Tangga Darurat dari Stainless Steel | 3 days   | Mon 20/04/20 | Wed 22/04/20 | 209SS        |              |   |   |   |   |   |  |
| 211 | <b>Curtain Wall</b>                                 | 1 day    | Thu 23/04/20 | Thu 23/04/20 |              |              |   |   |   |   |   |  |
| 212 | Curtain Wall ( CW2 )                                | 1 day    | Thu 23/04/20 | Thu 23/04/20 | 204FF        |              |   |   |   |   |   |  |
| 213 | <b>Pekerjaan Langit-langit</b>                      | 8 days   | Thu 09/04/20 | Fri 17/04/20 |              |              |   |   |   |   |   |  |
| 214 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 8 days   | Thu 09/04/20 | Fri 17/04/20 | 184FS-7 days |              |   |   |   |   |   |  |
| 215 | <b>Pekerjaan Pengecatan</b>                         | 12 days  | Thu 09/04/20 | Wed 22/04/20 |              |              |   |   |   |   |   |  |
| 216 | Pengecatan dinding interior                         | 12 days  | Thu 09/04/20 | Wed 22/04/20 | 214SS        |              |   |   |   |   |   |  |
| 217 | Pengecatan dinding eksterior                        | 6 days   | Thu 16/04/20 | Wed 22/04/20 | 216FF        |              |   |   |   |   |   |  |
| 218 | Pengecatan plafon                                   | 9 days   | Mon 13/04/20 | Wed 22/04/20 | 214FS-5 days |              |   |   |   |   |   |  |
| 219 | <b>Pekerjaan Tata Udara</b>                         | 3 days   | Tue 19/05/20 | Fri 22/05/20 |              |              |   |   |   |   |   |  |
| 220 | Unit AC Cassete 5PK                                 | 3 days   | Tue 19/05/20 | Fri 22/05/20 | 221FF        |              |   |   |   |   |   |  |
| 221 | Unit AC Cassete 4PK                                 | 3 days   | Tue 19/05/20 | Fri 22/05/20 | 68           |              |   |   |   |   |   |  |
| 222 | Unit AC Split Wall Mountain 3/4 PK                  | 1 day    | Tue 19/05/20 | Tue 19/05/20 | 221SS        |              |   |   |   |   |   |  |
| 223 | Exhaust Fan ex jepang                               | 1 day    | Fri 22/05/20 | Fri 22/05/20 | 221FF        |              |   |   |   |   |   |  |
| 224 | <b>Pekerjaan Instalasi Telepon</b>                  | 33 days  | Thu 02/04/20 | Tue 12/05/20 |              |              |   |   |   |   |   |  |
| 225 | Pasang Instalasi Telepon                            | 2 days   | Thu 02/04/20 | Fri 03/04/20 | 177FF+7 days |              |   |   |   |   |   |  |
| 226 | Pasang Outlet Telepon                               | 2 days   | Mon 11/05/20 | Tue 12/05/20 | 221SS-7 days |              |   |   |   |   |   |  |
| 227 | Switch Hub 16 port                                  | 1 day    | Tue 12/05/20 | Tue 12/05/20 | 226FF        |              |   |   |   |   |   |  |
| 228 | Terminal Box                                        | 1 day    | Tue 12/05/20 | Tue 12/05/20 | 226FF        |              |   |   |   |   |   |  |
| 229 | <b>Pekerjaan CCTV</b>                               | 31 days  | Fri 03/04/20 | Mon 11/05/20 |              |              |   |   |   |   |   |  |
| 230 | Kamera CCTV HD                                      | 1 day    | Mon 11/05/20 | Mon 11/05/20 | 221SS-7 days |              |   |   |   |   |   |  |
| 231 | Instalasi kabel coaxial RG6 untuk kamera CCTV       | 1 day    | Fri 03/04/20 | Fri 03/04/20 | 177FF+7 days |              |   |   |   |   |   |  |
| 232 | <b>Pekerjaan Sound System</b>                       | 36 days  | Tue 31/03/20 | Wed 13/05/20 |              |              |   |   |   |   |   |  |
| 233 | Ceiling speaker 6 W                                 | 3 days   | Mon 11/05/20 | Wed 13/05/20 | 221SS-7 days |              |   |   |   |   |   |  |

Project: Tanpa deadline  
Date: Sat 20/06/20

|                         |  |                    |  |                       |  |
|-------------------------|--|--------------------|--|-----------------------|--|
| Task                    |  | Split              |  | Manual Summary Rollup |  |
| Critical Task           |  | External Tasks     |  | Manual Summary        |  |
| Milestone               |  | Project Summary    |  | Start-only            |  |
| Summary                 |  | Group By Summary   |  | Finish-only           |  |
| Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
| Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
| Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
| Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                                              | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                        |          |              |              |              | D            | J | F | M | A | M |  |
| 234 | Volume control                                                         | 1 day    | Wed 13/05/20 | Wed 13/05/20 | 233FF        |              |   |   |   |   |   |  |
| 235 | Instalasi Ceiling speaker                                              | 4 days   | Tue 31/03/20 | Fri 03/04/20 | 177FF+7 days |              |   |   |   |   |   |  |
| 236 | Terminal Box                                                           | 1 day    | Wed 13/05/20 | Wed 13/05/20 | 233FF        |              |   |   |   |   |   |  |
| 237 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 1 day    | Fri 03/04/20 | Fri 03/04/20 | 177FF+7 days |              |   |   |   |   |   |  |
| 238 | <b>Pekerjaan Fire Alarm</b>                                            | 28 days  | Mon 23/03/20 | Fri 24/04/20 |              |              |   |   |   |   |   |  |
| 239 | <b>INSTALASI LANTAI 4</b>                                              | 28 days  | Mon 23/03/20 | Fri 24/04/20 |              |              |   |   |   |   |   |  |
| 240 | <b>Peralatan Fixture</b>                                               | 1 day    | Fri 24/04/20 | Fri 24/04/20 |              |              |   |   |   |   |   |  |
| 241 | - Conv. Optical Smoke Detector                                         | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 218FS+1 day  |              |   |   |   |   |   |  |
| 242 | - Conv. Manual Break glass                                             | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 241SS        |              |   |   |   |   |   |  |
| 243 | - Junction Box Fire Alarm                                              | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 241SS        |              |   |   |   |   |   |  |
| 244 | - Remote Indicating Lamp                                               | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 241SS        |              |   |   |   |   |   |  |
| 245 | - Alarm Bell                                                           | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 241SS        |              |   |   |   |   |   |  |
| 246 | - Terminal Box 30 x 40 x 12                                            | 1 day    | Fri 24/04/20 | Fri 24/04/20 | 241SS        |              |   |   |   |   |   |  |
| 247 | <b>Pekerjaan Instalasi</b>                                             | 3 days   | Mon 23/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 248 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days   | Mon 23/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 249 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 250 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 251 | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                | 43 days  | Thu 19/03/20 | Mon 11/05/20 |              |              |   |   |   |   |   |  |
| 252 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 6 days   | Thu 19/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 253 | Hydrant Box Indoor, type B c/w                                         | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 252FF        |              |   |   |   |   |   |  |
| 254 | Gate valve dia. 2 1/2" , OS&Y type                                     | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 252FF        |              |   |   |   |   |   |  |
| 255 | - Fire Extinguisher 6 kg                                               | 1 day    | Mon 11/05/20 | Mon 11/05/20 | 221SS-7 days |              |   |   |   |   |   |  |
| 256 | <b>Instalasi Sprinkler</b>                                             | 7 days   | Wed 18/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 257 | <b>BSP Sch.40 c/w fitting2 &amp; Material bantu</b>                    | 7 days   | Wed 18/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 258 | dia. 1 "                                                               | 3 days   | Mon 23/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 259 | dia. 1 1/4 "                                                           | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 260 | dia. 2 "                                                               | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 261 | dia. 2 1/2 "                                                           | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 262 | dia. 3 "                                                               | 7 days   | Wed 18/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|--------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 263 | Sprinkler head dia. 1/2", 68°C, pendent                            | 6 days   | Thu 19/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 264 | Branch Control Valve dia. 3"                                       | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 265 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                           | 54 days  | Thu 19/03/20 | Tue 26/05/20 |              |              |   |   |   |   |   |  |
| 266 | Pasang Klosed Duduk                                                | 4 days   | Tue 19/05/20 | Sat 23/05/20 | 219SS        |              |   |   |   |   |   |  |
| 267 | Pasang Wastafel single                                             | 2 days   | Tue 19/05/20 | Wed 20/05/20 | 268SS        |              |   |   |   |   |   |  |
| 268 | Pasang Jet washer                                                  | 5 days   | Tue 19/05/20 | Tue 26/05/20 | 221SS        |              |   |   |   |   |   |  |
| 269 | Pasang Kran Diameter Air 1/2 "                                     | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 268FF        |              |   |   |   |   |   |  |
| 270 | Pasang Floor Drain                                                 | 1 day    | Tue 19/05/20 | Tue 19/05/20 | 268SS        |              |   |   |   |   |   |  |
| 271 | <b>Instalasi Air Bersih</b>                                        | 6 days   | Thu 19/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 272 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 6 days   | Thu 19/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 273 | <b>Instalasi Air Kotor</b>                                         | 3 days   | Mon 23/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 274 | Pasang Cleant Out 3"                                               | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 275 | Pasang Pipa air kotor Ø 3 "                                        | 3 days   | Mon 23/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 276 | Pasang Pipa air kotor Ø 4 "                                        | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 277 | <b>Pekerjaan Listrik</b>                                           | 15 days  | Tue 24/03/20 | Fri 10/04/20 |              |              |   |   |   |   |   |  |
| 278 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 279 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 280 | Pasang Instalasi Titik Lampu                                       | 13 days  | Fri 27/03/20 | Fri 10/04/20 | 177          |              |   |   |   |   |   |  |
| 281 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day    | Sat 04/04/20 | Sat 04/04/20 | 288SS        |              |   |   |   |   |   |  |
| 282 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days   | Mon 06/04/20 | Tue 07/04/20 | 281          |              |   |   |   |   |   |  |
| 283 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day    | Wed 08/04/20 | Wed 08/04/20 | 282          |              |   |   |   |   |   |  |
| 284 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 283          |              |   |   |   |   |   |  |
| 285 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day    | Fri 10/04/20 | Fri 10/04/20 | 284          |              |   |   |   |   |   |  |
| 286 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 6 days   | Sat 04/04/20 | Fri 10/04/20 | 288FF        |              |   |   |   |   |   |  |
| 287 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day    | Fri 10/04/20 | Fri 10/04/20 | 288FF        |              |   |   |   |   |   |  |
| 288 | Pasang Saklar Tunggal                                              | 6 days   | Sat 04/04/20 | Fri 10/04/20 | 280FF        |              |   |   |   |   |   |  |
| 289 | Pasang Saklar Ganda                                                | 2 days   | Sat 04/04/20 | Mon 06/04/20 | 288SS        |              |   |   |   |   |   |  |
| 290 | Instalasi stop kontak                                              | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |
| 291 | Instalasi stop kontak 3 phase                                      | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 177FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                         | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|---------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                   |          |              |              |              | D            | J | F | M | A | M |  |
| 292 | Pasang Stop Kontak 1 Phase                        | 2 days   | Tue 07/04/20 | Wed 08/04/20 | 289          |              |   |   |   |   |   |  |
| 293 | Pasang Stop Kontak 3 Phase                        | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 292          |              |   |   |   |   |   |  |
| 294 | <b>LANTAI 5</b>                                   | 87 days  | Thu 13/02/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 295 | <b>Pekerjaan Pasangan</b>                         | 19 days  | Tue 17/03/20 | Wed 08/04/20 |              |              |   |   |   |   |   |  |
| 296 | Mengurug pasir bawah lantai setebal 5 cm          | 4 days   | Sat 04/04/20 | Wed 08/04/20 | 332FF        |              |   |   |   |   |   |  |
| 297 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 6 days   | Tue 17/03/20 | Mon 23/03/20 | 483SS        |              |   |   |   |   |   |  |
| 298 | <b>Pekerjaan Beton</b>                            | 34 days  | Thu 13/02/20 | Mon 23/03/20 |              |              |   |   |   |   |   |  |
| 299 | Pembuatan Plat Lantai                             | 10 days  | Thu 13/02/20 | Mon 24/02/20 | 148          |              |   |   |   |   |   |  |
| 300 | Kolom Praktis uk. 11 x 11 cm                      | 3 days   | Fri 20/03/20 | Mon 23/03/20 | 297FF        |              |   |   |   |   |   |  |
| 301 | Kolom uk. 30 x 30 cm ( K 2 )                      | 1 day    | Fri 28/02/20 | Fri 28/02/20 | 303FF        |              |   |   |   |   |   |  |
| 302 | Kolom uk. 40 x 40 cm ( K 3 )                      | 3 days   | Wed 26/02/20 | Fri 28/02/20 | 303FF        |              |   |   |   |   |   |  |
| 303 | Kolom uk. 50 x 50 cm ( K 4 )                      | 5 days   | Mon 24/02/20 | Fri 28/02/20 | 299FS-1 day  |              |   |   |   |   |   |  |
| 304 | Balok Lantai uk.11 x 20 cm                        | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 305 | Balok Type B.1                                    | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 306 | Balok Type B.2                                    | 6 days   | Tue 18/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 307 | Balok Type B.3                                    | 6 days   | Tue 18/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 308 | Balok Type B.4                                    | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 309 | Balok Type B.5                                    | 4 days   | Thu 20/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 310 | Balok Type B.6                                    | 4 days   | Thu 20/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 311 | Balok Type B.7                                    | 4 days   | Thu 20/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 312 | Balok Type B.8                                    | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 313 | Balok Type B.9                                    | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 314 | Balok Type B.10                                   | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 315 | Balok Type B.11                                   | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 316 | Balok Type B.12                                   | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 317 | Balok Type B.13                                   | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 318 | Balok Type B.14                                   | 1 day    | Mon 24/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 319 | Balok Type B.15                                   | 1 day    | Mon 24/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 320 | Balok Type B.20                                   | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 321 | Balok Type B.27                                   | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|------------------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 322 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm                               | 3 days   | Fri 21/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 323 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                                       | 1 day    | Mon 24/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 324 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG                                  | 1 day    | Mon 24/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 325 | Plat meja beton tebal 10 cm                                                        | 2 days   | Fri 20/03/20 | Sat 21/03/20 | 300SS        |              |   |   |   |   |   |  |
| 326 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm                        | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 327 | Plat Tangga Utama dan Darurat Tebal 15 cm                                          | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 328 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm                            | 2 days   | Sat 22/02/20 | Mon 24/02/20 | 299FF        |              |   |   |   |   |   |  |
| 329 | <b>Pekerjaan Plesteran dan Benangan</b>                                            | 21 days  | Mon 16/03/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |
| 330 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr                                    | 21 days  | Mon 16/03/20 | Thu 09/04/20 | 297FS-7 days |              |   |   |   |   |   |  |
| 331 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr                                   | 9 days   | Mon 16/03/20 | Thu 26/03/20 | 297FS-7 days |              |   |   |   |   |   |  |
| 332 | Pekerjaan acian interior                                                           | 18 days  | Wed 18/03/20 | Wed 08/04/20 | 330SS+2 days |              |   |   |   |   |   |  |
| 333 | Pekerjaan acian eksterior                                                          | 5 days   | Sat 21/03/20 | Fri 27/03/20 | 331FF+1 day  |              |   |   |   |   |   |  |
| 334 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                     | 6 days   | Thu 19/03/20 | Thu 26/03/20 | 332SS+1 day  |              |   |   |   |   |   |  |
| 335 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                                    | 5 days   | Tue 24/03/20 | Mon 30/03/20 | 333SS+2 days |              |   |   |   |   |   |  |
| 336 | <b>Pekerjaan Lantai</b>                                                            | 24 days  | Sat 04/04/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 337 | Pasang Keramik Lantai 60 x 60                                                      | 20 days  | Sat 04/04/20 | Mon 27/04/20 | 296SS        |              |   |   |   |   |   |  |
| 338 | Pasang Keramik Lantai 30 x 30                                                      | 8 days   | Tue 07/04/20 | Wed 15/04/20 | 337SS+2 days |              |   |   |   |   |   |  |
| 339 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                      | 3 days   | Wed 22/04/20 | Fri 24/04/20 | 340          |              |   |   |   |   |   |  |
| 340 | Pasang Keramik Dinding 30 x 60 (KM/WC)                                             | 5 days   | Thu 16/04/20 | Tue 21/04/20 | 338          |              |   |   |   |   |   |  |
| 341 | Pasang Batu Alam                                                                   | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 366FF        |              |   |   |   |   |   |  |
| 342 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 10 days  | Tue 28/04/20 | Mon 11/05/20 |              |              |   |   |   |   |   |  |
| 343 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 1 day    | Fri 08/05/20 | Fri 08/05/20 |              |              |   |   |   |   |   |  |
| 344 | Pas. Kusen Type J2                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 354          |              |   |   |   |   |   |  |
| 345 | Pas. Kusen Type J3                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 346 | Pas. Kusen Type J4                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 347 | Pas. Kusen Type J12                                                                | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 348 | Pas. Kusen Type P2                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 349 | Pas. Kusen Type P3                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 350 | Pas. Kusen Type P4                                                                 | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                                    | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|--------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                              |          |              |              |              | D            | J | F | M | A | M |  |
| 351 | Pas. Kusen Type P5                                           | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 352 | Pasang pintu darurat anti api                                | 1 day    | Fri 08/05/20 | Fri 08/05/20 | 344SS        |              |   |   |   |   |   |  |
| 353 | <b>Pekerjaan Partisi</b>                                     | 10 days  | Tue 28/04/20 | Mon 11/05/20 |              |              |   |   |   |   |   |  |
| 354 | Memasang 1m2 unit Partisi Type I                             | 7 days   | Tue 28/04/20 | Wed 06/05/20 | 337          |              |   |   |   |   |   |  |
| 355 | Memasang 1 unit Pintu Type II untuk partisi                  | 1 day    | Sat 09/05/20 | Sat 09/05/20 | 356SS        |              |   |   |   |   |   |  |
| 356 | Memasang 1 jendela Pintu Type I untuk partisi                | 2 days   | Sat 09/05/20 | Mon 11/05/20 | 344          |              |   |   |   |   |   |  |
| 357 | <b>Pekerjaan Railling Tangga</b>                             | 7 days   | Tue 28/04/20 | Wed 06/05/20 |              |              |   |   |   |   |   |  |
| 358 | Pasang Railling Tangga Utama dari Stainless Steel            | 4 days   | Sat 02/05/20 | Wed 06/05/20 | 354FF        |              |   |   |   |   |   |  |
| 359 | Pasang Railling Tangga Darurat dari Stainless Steel          | 3 days   | Tue 28/04/20 | Thu 30/04/20 | 354SS        |              |   |   |   |   |   |  |
| 360 | <b>Curtain Wall</b>                                          | 1 day    | Wed 06/05/20 | Wed 06/05/20 |              |              |   |   |   |   |   |  |
| 361 | Curtain Wall ( CW2 )                                         | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 354FF        |              |   |   |   |   |   |  |
| 362 | <b>Pekerjaan Langit-langit</b>                               | 8 days   | Mon 20/04/20 | Tue 28/04/20 |              |              |   |   |   |   |   |  |
| 363 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee            | 8 days   | Mon 20/04/20 | Tue 28/04/20 | 337FS-7 days |              |   |   |   |   |   |  |
| 364 | <b>Pekerjaan Pengecatan</b>                                  | 12 days  | Mon 20/04/20 | Mon 04/05/20 |              |              |   |   |   |   |   |  |
| 365 | Pengecatan dinding interior                                  | 11 days  | Mon 20/04/20 | Sat 02/05/20 | 363SS        |              |   |   |   |   |   |  |
| 366 | Pengecatan dinding eksterior                                 | 6 days   | Sat 25/04/20 | Sat 02/05/20 | 365FF        |              |   |   |   |   |   |  |
| 367 | Pengecatan plafon                                            | 9 days   | Thu 23/04/20 | Mon 04/05/20 | 363FS-5 days |              |   |   |   |   |   |  |
| 368 | <b>Pekerjaan Tata Udara</b>                                  | 3 days   | Sat 23/05/20 | Wed 27/05/20 |              |              |   |   |   |   |   |  |
| 369 | Unit AC Cassete 5PK                                          | 3 days   | Sat 23/05/20 | Wed 27/05/20 | 221          |              |   |   |   |   |   |  |
| 370 | Unit AC Cassete 4PK                                          | 1 day    | Sat 23/05/20 | Sat 23/05/20 | 369SS        |              |   |   |   |   |   |  |
| 371 | <b>Pekerjaan CCTV</b>                                        | 36 days  | Thu 09/04/20 | Sat 23/05/20 |              |              |   |   |   |   |   |  |
| 372 | Kamera CCTV HD                                               | 1 day    | Sat 23/05/20 | Sat 23/05/20 | 369SS        |              |   |   |   |   |   |  |
| 373 | Instalasi kabel coaxial RG6 untuk kamera CCTV                | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 374 | <b>Pekerjaan Sound System</b>                                | 40 days  | Tue 07/04/20 | Wed 27/05/20 |              |              |   |   |   |   |   |  |
| 375 | Celling speaker 6 W                                          | 3 days   | Sat 23/05/20 | Wed 27/05/20 | 369SS        |              |   |   |   |   |   |  |
| 376 | Volume control                                               | 1 day    | Wed 27/05/20 | Wed 27/05/20 | 375FF        |              |   |   |   |   |   |  |
| 377 | Instalasi Celling speaker                                    | 3 days   | Tue 07/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 378 | Terminal Box                                                 | 1 day    | Wed 27/05/20 | Wed 27/05/20 | 375FF        |              |   |   |   |   |   |  |
| 379 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                              | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |  |
|-----|------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|--|
|     |                                                                        |          |              |              |              | D            | J | F | M | A | M |  |  |
| 380 | <b>Pekerjaan Fire Alarm</b>                                            | 25 days  | Tue 07/04/20 | Wed 06/05/20 |              |              |   |   |   |   |   |  |  |
| 381 | <b>INSTALASI LANTAI 5</b>                                              | 25 days  | Tue 07/04/20 | Wed 06/05/20 |              |              |   |   |   |   |   |  |  |
| 382 | <b>Peralatan Fixture</b>                                               | 1 day    | Wed 06/05/20 | Wed 06/05/20 |              |              |   |   |   |   |   |  |  |
| 383 | - Conv. Optical Smoke Detector                                         | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 367FS+1 day  |              |   |   |   |   |   |  |  |
| 384 | - Conv. Manual Break glass                                             | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 383SS        |              |   |   |   |   |   |  |  |
| 385 | - Junction Box Fire Alarm                                              | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 383SS        |              |   |   |   |   |   |  |  |
| 386 | - Remote Indicating Lamp                                               | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 383SS        |              |   |   |   |   |   |  |  |
| 387 | - Alarm Bell                                                           | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 383SS        |              |   |   |   |   |   |  |  |
| 388 | - Terminal Box 30 x 40 x 12                                            | 1 day    | Wed 06/05/20 | Wed 06/05/20 | 383SS        |              |   |   |   |   |   |  |  |
| 389 | <b>Pekerjaan Instalasi</b>                                             | 3 days   | Tue 07/04/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |  |
| 390 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days   | Tue 07/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 391 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm        | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 392 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm        | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 393 | <b>Pekerjaan Alat Pemadam Kebakaran</b>                                | 41 days  | Fri 03/04/20 | Sat 23/05/20 |              |              |   |   |   |   |   |  |  |
| 394 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "                      | 6 days   | Fri 03/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 395 | Hydrant Box Indoor, type B c/w                                         | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 394FF        |              |   |   |   |   |   |  |  |
| 396 | Gate valve dia. 2 1/2" , OS&Y type                                     | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 394FF        |              |   |   |   |   |   |  |  |
| 397 | - Fire Extinguisher 6 kg                                               | 1 day    | Sat 23/05/20 | Sat 23/05/20 | 369SS        |              |   |   |   |   |   |  |  |
| 398 | <b>Instalasi Sprinkler</b>                                             | 7 days   | Thu 02/04/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |  |
| 399 | <b>BSP Sch.40 c/w fitting2 &amp; Material bantu</b>                    | 7 days   | Thu 02/04/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |  |
| 400 | dia. 1 "                                                               | 3 days   | Tue 07/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 401 | dia. 1 1/4 "                                                           | 2 days   | Wed 08/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 402 | dia. 2 "                                                               | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 403 | dia. 2 1/2 "                                                           | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 404 | dia. 3 "                                                               | 7 days   | Thu 02/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 405 | Sprinkler head dia. 1/2", 68'C, pendent                                | 6 days   | Fri 03/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 406 | Branch Control Valve dia. 3"                                           | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |  |
| 407 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                               | 42 days  | Tue 07/04/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |  |
| 408 | Pasang Klosed Duduk                                                    | 4 days   | Thu 23/04/20 | Mon 27/04/20 | 367SS        |              |   |   |   |   |   |  |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

Page 14



| ID  | Task Name                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|--------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 409 | Pasang Wastafel single                                             | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 410SS        |              |   |   |   |   |   |  |
| 410 | Pasang Jet washer                                                  | 5 days   | Sat 23/05/20 | Fri 29/05/20 | 369SS        |              |   |   |   |   |   |  |
| 411 | Pasang Kran Diameter Air 1/2 "                                     | 1 day    | Wed 27/05/20 | Wed 27/05/20 | 409          |              |   |   |   |   |   |  |
| 412 | Pasang Floor Drain                                                 | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 410FF        |              |   |   |   |   |   |  |
| 413 | <b>Instalasi Air Bersih</b>                                        | 2 days   | Wed 08/04/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |
| 414 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 2 days   | Wed 08/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 415 | <b>Instalasi Air Kotor</b>                                         | 3 days   | Tue 07/04/20 | Thu 09/04/20 |              |              |   |   |   |   |   |  |
| 416 | Pasang Clean Out 3"                                                | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 417 | Pasang Pipa air kotor Ø 3 "                                        | 3 days   | Tue 07/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 418 | Pasang Pipa air kotor Ø 4 "                                        | 2 days   | Wed 08/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 419 | <b>Pekerjaan Listrik</b>                                           | 13 days  | Wed 08/04/20 | Wed 22/04/20 |              |              |   |   |   |   |   |  |
| 420 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days   | Wed 08/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 421 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days   | Wed 08/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 422 | Pasang Instalasi Titik Lampu                                       | 11 days  | Fri 10/04/20 | Wed 22/04/20 | 330          |              |   |   |   |   |   |  |
| 423 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day    | Fri 17/04/20 | Fri 17/04/20 | 428SS        |              |   |   |   |   |   |  |
| 424 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days   | Sat 18/04/20 | Mon 20/04/20 | 423          |              |   |   |   |   |   |  |
| 425 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day    | Tue 21/04/20 | Tue 21/04/20 | 424          |              |   |   |   |   |   |  |
| 426 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 420FF        |              |   |   |   |   |   |  |
| 427 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day    | Wed 22/04/20 | Wed 22/04/20 | 425          |              |   |   |   |   |   |  |
| 428 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 5 days   | Fri 17/04/20 | Wed 22/04/20 | 422FF        |              |   |   |   |   |   |  |
| 429 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day    | Wed 22/04/20 | Wed 22/04/20 | 430          |              |   |   |   |   |   |  |
| 430 | Pasang Saklar Tunggal                                              | 4 days   | Fri 17/04/20 | Tue 21/04/20 | 428SS        |              |   |   |   |   |   |  |
| 431 | Instalasi stop kontak                                              | 1 day    | Thu 09/04/20 | Thu 09/04/20 | 330FF        |              |   |   |   |   |   |  |
| 432 | Pasang Stop Kontak 1 Phase                                         | 2 days   | Tue 21/04/20 | Wed 22/04/20 | 428FF        |              |   |   |   |   |   |  |
| 433 | <b>LANTAI 6 DAN ATAP</b>                                           | 74 days  | Sat 29/02/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |
| 434 | <b>Pekerjaan Pasangan</b>                                          | 23 days  | Sat 04/04/20 | Thu 30/04/20 |              |              |   |   |   |   |   |  |
| 435 | Mengurug pasir bawah lantai setebal 5 cm                           | 4 days   | Mon 27/04/20 | Thu 30/04/20 | 489FF        |              |   |   |   |   |   |  |
| 436 | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr                  | 11 days  | Sat 04/04/20 | Thu 16/04/20 | 483FS+7 days |              |   |   |   |   |   |  |
| 437 | <b>Pekerjaan Beton</b>                                             | 40 days  | Sat 29/02/20 | Thu 16/04/20 |              |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                   | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|-------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                             |          |              |              |              | D            | J | F | M | A | M |  |
| 438 | Pembuatan Plat Lantai                                       | 10 days  | Sat 29/02/20 | Wed 11/03/20 | 303          |              |   |   |   |   |   |  |
| 439 | Kolom Praktis uk. 11 x 11 cm                                | 4 days   | Mon 13/04/20 | Thu 16/04/20 | 436FF        |              |   |   |   |   |   |  |
| 440 | Kolom uk. 30 x 30 cm ( K 2 )                                | 1 day    | Mon 16/03/20 | Mon 16/03/20 | 442FF        |              |   |   |   |   |   |  |
| 441 | Kolom uk. 40 x 40 cm ( K 3 )                                | 3 days   | Fri 13/03/20 | Mon 16/03/20 | 442FF        |              |   |   |   |   |   |  |
| 442 | Kolom uk. 50 x 50 cm ( K 4 )                                | 6 days   | Tue 10/03/20 | Mon 16/03/20 | 438FS-2 days |              |   |   |   |   |   |  |
| 443 | Balok Lantai uk.11 x 20 cm                                  | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 444 | <b>BALOK LANTAI</b>                                         | 37 days  | Wed 04/03/20 | Thu 16/04/20 |              |              |   |   |   |   |   |  |
| 445 | Balok Type B.1                                              | 4 days   | Sat 07/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 446 | Balok Type B.2                                              | 6 days   | Thu 05/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 447 | Balok Type B.3                                              | 7 days   | Wed 04/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 448 | Balok Type B.4                                              | 5 days   | Fri 06/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 449 | Balok Type B.5                                              | 4 days   | Sat 07/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 450 | Balok Type B.6                                              | 4 days   | Sat 07/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 451 | Balok Type B.7                                              | 4 days   | Sat 07/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 452 | Balok Type B.8                                              | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 453 | Balok Type B.9                                              | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 454 | Balok Type B.10                                             | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 455 | Balok Type B.11                                             | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 456 | Balok Type B.12                                             | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 457 | Balok Type B.13                                             | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 458 | Balok Type B.14                                             | 1 day    | Wed 11/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 459 | Balok Type B.15                                             | 1 day    | Wed 11/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 460 | Balok Type B.20                                             | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 461 | Balok Type B.27                                             | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 462 | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 463 | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 1 day    | Wed 11/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 464 | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 1 day    | Wed 11/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 465 | Plat meja beton tebal 10 cm                                 | 6 days   | Fri 10/04/20 | Thu 16/04/20 | 436FF        |              |   |   |   |   |   |  |
| 466 | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 2 days   | Tue 10/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 467 | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                               | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|---------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                         |          |              |              |              | D            | J | F | M | A | M |  |
| 468 | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm | 3 days   | Mon 09/03/20 | Wed 11/03/20 | 438FF        |              |   |   |   |   |   |  |
| 469 | <b>BALOK ATAP</b>                                       | 8 days   | Tue 17/03/20 | Thu 26/03/20 |              |              |   |   |   |   |   |  |
| 470 | Balok Type B.14                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 471 | Balok Type B.15                                         | 1 day    | Thu 26/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 472 | Balok Type B.16                                         | 5 days   | Fri 20/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 473 | Balok Type B.17                                         | 5 days   | Fri 20/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 474 | Balok Type B.18                                         | 3 days   | Mon 23/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 475 | Balok Type B.19                                         | 6 days   | Thu 19/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 476 | Balok Type B.20                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 477 | Balok Type B.21                                         | 4 days   | Sat 21/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 478 | Balok Type B.22                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 479 | Balok Type B.26                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 480 | Balok Type B.29                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 481 | Balok Type B.30                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 482 | Balok Type B.31                                         | 2 days   | Tue 24/03/20 | Thu 26/03/20 | 483FF        |              |   |   |   |   |   |  |
| 483 | Waterprofing plat atap                                  | 8 days   | Tue 17/03/20 | Thu 26/03/20 | 442          |              |   |   |   |   |   |  |
| 484 | <b>Pekerjaan Plesteran dan Benangan</b>                 | 20 days  | Thu 09/04/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 485 | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr         | 20 days  | Thu 09/04/20 | Sat 02/05/20 | 436FS-7 days |              |   |   |   |   |   |  |
| 486 | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr        | 8 days   | Thu 09/04/20 | Fri 17/04/20 | 436FS-7 days |              |   |   |   |   |   |  |
| 487 | Pekerjaan acian interior                                | 16 days  | Sat 11/04/20 | Wed 29/04/20 | 485SS+2 days |              |   |   |   |   |   |  |
| 488 | Pekerjaan acian eksterior                               | 5 days   | Mon 13/04/20 | Fri 17/04/20 | 486SS+3 days |              |   |   |   |   |   |  |
| 489 | Pekerjaan benangan interior spesi 1 Pc : 2 Psr          | 6 days   | Fri 24/04/20 | Thu 30/04/20 | 487FF+1 day  |              |   |   |   |   |   |  |
| 490 | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr         | 4 days   | Sat 18/04/20 | Wed 22/04/20 | 488          |              |   |   |   |   |   |  |
| 491 | <b>Pekerjaan Lantai</b>                                 | 22 days  | Mon 27/04/20 | Tue 26/05/20 |              |              |   |   |   |   |   |  |
| 492 | Pasang Keramik Lantai 60 x 60                           | 20 days  | Mon 27/04/20 | Fri 22/05/20 | 435SS        |              |   |   |   |   |   |  |
| 493 | Pasang Keramik Lantai 30 x 30                           | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 492SS+2 days |              |   |   |   |   |   |  |
| 494 | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC           | 3 days   | Mon 11/05/20 | Wed 13/05/20 | 495          |              |   |   |   |   |   |  |
| 495 | Pasang Keramik Dinding 30 x 60 (KM/WC)                  | 5 days   | Mon 04/05/20 | Sat 09/05/20 | 493          |              |   |   |   |   |   |  |
| 496 | Pasang Batu Alam                                        | 3 days   | Fri 22/05/20 | Tue 26/05/20 | 524FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|------------------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 497 | <b>Pekerjaan Pintu dan Jendela Aluminium dan Partisi</b>                           | 5 days   | Sat 23/05/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 498 | <b>Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen</b> | 1 day    | Thu 28/05/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 499 | Pas. Kusen Type J2                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 511          |              |   |   |   |   |   |  |
| 500 | Pas. Kusen Type J3                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 501 | Pas. Kusen Type J4                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 502 | Pas. Kusen Type J8                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 503 | Pas. Kusen Type J9                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 504 | Pas. Kusen Type J12                                                                | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 505 | Pas. Kusen Type P2                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 506 | Pas. Kusen Type P3                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 507 | Pas. Kusen Type P4                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 508 | Pas. Kusen Type P5                                                                 | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 509 | Pasang pintu darurat anti api                                                      | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 499SS        |              |   |   |   |   |   |  |
| 510 | <b>Pekerjaan Partisi</b>                                                           | 5 days   | Sat 23/05/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 511 | Memasang 1m2 unit Partisi Type I                                                   | 3 days   | Sat 23/05/20 | Wed 27/05/20 | 492          |              |   |   |   |   |   |  |
| 512 | Memasang 1 unit Pintu Type I untuk partisi                                         | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 499          |              |   |   |   |   |   |  |
| 513 | Memasang 1 unit Pintu Type II untuk partisi                                        | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 512SS        |              |   |   |   |   |   |  |
| 514 | Memasang 1 jendela Pintu Type I untuk partisi                                      | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 512SS        |              |   |   |   |   |   |  |
| 515 | <b>Pekerjaan Railling Tangga</b>                                                   | 4 days   | Fri 22/05/20 | Wed 27/05/20 |              |              |   |   |   |   |   |  |
| 516 | Pasang Railling Tangga Utama dari Stainless Steel                                  | 4 days   | Fri 22/05/20 | Wed 27/05/20 | 511FF        |              |   |   |   |   |   |  |
| 517 | Pasang Railling Tangga Darurat dari Stainless Steel                                | 3 days   | Sat 23/05/20 | Wed 27/05/20 | 516FF        |              |   |   |   |   |   |  |
| 518 | <b>Curtain Wall</b>                                                                | 1 day    | Wed 27/05/20 | Wed 27/05/20 |              |              |   |   |   |   |   |  |
| 519 | Curtain Wall ( CW2 )                                                               | 1 day    | Wed 27/05/20 | Wed 27/05/20 | 511FF        |              |   |   |   |   |   |  |
| 520 | <b>Pekerjaan Langit-langit</b>                                                     | 6 days   | Thu 14/05/20 | Wed 20/05/20 |              |              |   |   |   |   |   |  |
| 521 | Pasang Plafond Acoustic Rangka Cross Tee Main Tee                                  | 6 days   | Thu 14/05/20 | Wed 20/05/20 | 492FS-7 days |              |   |   |   |   |   |  |
| 522 | <b>Pekerjaan Pengecatan</b>                                                        | 9 days   | Thu 14/05/20 | Tue 26/05/20 |              |              |   |   |   |   |   |  |
| 523 | Pengecatan dinding interior                                                        | 9 days   | Thu 14/05/20 | Tue 26/05/20 | 521SS        |              |   |   |   |   |   |  |
| 524 | Pengecatan dinding eksterior                                                       | 8 days   | Fri 15/05/20 | Tue 26/05/20 | 523FF        |              |   |   |   |   |   |  |
| 525 | Pengecatan plafon                                                                  | 6 days   | Fri 15/05/20 | Fri 22/05/20 | 521FS-5 days |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                                              | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|------------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                        |          |              |              |              | D            | J | F | M | A | M |  |
| 526 | <b>Pekerjaan Tata Udara</b>                                            | 3 days   | Wed 27/05/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 527 | Unit AC Cassete 5PK                                                    | 2 days   | Thu 28/05/20 | Fri 29/05/20 | 369          |              |   |   |   |   |   |  |
| 528 | Unit AC Cassete 4PK                                                    | 3 days   | Wed 27/05/20 | Fri 29/05/20 | 527FF        |              |   |   |   |   |   |  |
| 529 | Unit AC Split wall 3/4PK                                               | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 527FF        |              |   |   |   |   |   |  |
| 530 | <b>Pekerjaan Instalasi Telepon</b>                                     | 20 days  | Sat 02/05/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 531 | Pasang Instalasi Telepon                                               | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 532 | Pasang Outlet Telepon                                                  | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 533 | Switch Hub 16 port                                                     | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 532SS        |              |   |   |   |   |   |  |
| 534 | Terminal Box                                                           | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 532SS        |              |   |   |   |   |   |  |
| 535 | <b>Pekerjaan CCTV</b>                                                  | 20 days  | Sat 02/05/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 536 | Kamera CCTV HD                                                         | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 537 | Instalasi kabel coaxial RG6 untuk kamera CCTV                          | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 538 | <b>Pekerjaan Sound System</b>                                          | 24 days  | Wed 29/04/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |
| 539 | Celling speaker 6 W                                                    | 3 days   | Thu 28/05/20 | Sat 30/05/20 | 527SS        |              |   |   |   |   |   |  |
| 540 | Volume control                                                         | 1 day    | Sat 30/05/20 | Sat 30/05/20 | 539FF        |              |   |   |   |   |   |  |
| 541 | Instalasi Celling speaker                                              | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 542 | Terminal Box                                                           | 1 day    | Sat 30/05/20 | Sat 30/05/20 | 539FF        |              |   |   |   |   |   |  |
| 543 | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm           | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 544 | <b>Pekerjaan Fire Alarm</b>                                            | 42 days  | Fri 13/03/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 545 | <b>INSTALASI LANTAI 6</b>                                              | 42 days  | Fri 13/03/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 546 | <b>Peralatan Fixture</b>                                               | 1 day    | Fri 13/03/20 | Fri 13/03/20 |              |              |   |   |   |   |   |  |
| 547 | - Conv. Optical Smoke Detector                                         | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 467FS+1 day  |              |   |   |   |   |   |  |
| 548 | - Conv. Manual Break glass                                             | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 547SS        |              |   |   |   |   |   |  |
| 549 | - Junction Box Fire Alarm                                              | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 547SS        |              |   |   |   |   |   |  |
| 550 | - Remote Indicating Lamp                                               | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 547SS        |              |   |   |   |   |   |  |
| 551 | - Alarm Bell                                                           | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 547SS        |              |   |   |   |   |   |  |
| 552 | - Terminal Box 30 x 40 x 12                                            | 1 day    | Fri 13/03/20 | Fri 13/03/20 | 547SS        |              |   |   |   |   |   |  |
| 553 | <b>Pekerjaan Instalasi</b>                                             | 3 days   | Wed 29/04/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 554 | -Detector dan manual break glass NYA Cable 2x1,5mm + Pipa Conduit 20mm | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                                       | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|-----------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                 |          |              |              |              | D            | J | F | M | A | M |  |
| 555 | - Junction Box Fire Alarm NYA Cable 2x1,5mm + Pipa Conduit 20mm | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 556 | - Remote Indicating Lamp ITC 2 pairs 0.6 mm+ pipa conduit 20 mm | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 557 | <b>Pekerjaan Alat Pemadam Kebakaran</b>                         | 25 days  | Sat 25/04/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 558 | BSP Sch.40 c/w fitting2 & Material bantu dia. 3 "               | 6 days   | Sat 25/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 559 | Hydrant Box Indoor, type B c/w                                  | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 558FF        |              |   |   |   |   |   |  |
| 560 | Gate valve dia. 2 1/2" , OS&Y type                              | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 558FF        |              |   |   |   |   |   |  |
| 561 | - Fire Extinguisher 6 kg                                        | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 562 | <b>Instalasi Sprinkler</b>                                      | 5 days   | Mon 27/04/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 563 | <b>BSP Sch.40 c/w fitting2 &amp; Material bantu</b>             | 5 days   | Mon 27/04/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 564 | dia. 1 "                                                        | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 565 | dia. 1 1/4 "                                                    | 2 days   | Thu 30/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 566 | dia. 2 "                                                        | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 567 | dia. 2 1/2 "                                                    | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 568 | dia. 3 "                                                        | 4 days   | Tue 28/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 569 | Sprinkler head dia. 1/2" , 68'C, pendent                        | 5 days   | Mon 27/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 570 | Branch Control Valve dia. 3"                                    | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 571 | Fitting (elbow, reducer, knie dl)                               | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 572 | <b>INSTALASI SPRINKLER DAN HYDRANT Lt Atap</b>                  | 20 days  | Sat 02/05/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 573 | <b>Galv. Pipe Med. c/w fitting2 &amp; Material bantu</b>        | 1 day    | Sat 02/05/20 | Sat 02/05/20 |              |              |   |   |   |   |   |  |
| 574 | dia. 1 "                                                        | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 575 | ARV c/w Gate valve dia. 1"                                      | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 576 | Pressure gauge c/w gate valve dia. 1/2"                         | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 577 | Ball valve dia. 1" -                                            | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 578 | Sprinkler head dia. 1/2" , 68'C, pendent -                      | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 579 | <b>Fire Extinguisher</b>                                        | 1 day    | Thu 28/05/20 | Thu 28/05/20 |              |              |   |   |   |   |   |  |
| 580 | Apar ABC Kap. 4 kg                                              | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 581 | Apar CO2 Kap. 3 kg (SDP area)                                   | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 582 | Apar CO2 Kap. 23 kg (Panel room)                                | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 527SS        |              |   |   |   |   |   |  |
| 583 | <b>Pekerjaan Sanitair &amp; Sanitasi</b>                        | 25 days  | Tue 28/04/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |



| ID  | Task Name                                                          | Duration | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|--------------------------------------------------------------------|----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                                    |          |              |              |              | D            | J | F | M | A | M |  |
| 584 | Pasang Klosed Duduk                                                | 3 days   | Fri 15/05/20 | Mon 18/05/20 | 525SS        |              |   |   |   |   |   |  |
| 585 | Pasang Wastafel single                                             | 2 days   | Fri 29/05/20 | Sat 30/05/20 | 586FF        |              |   |   |   |   |   |  |
| 586 | Pasang Jet washer                                                  | 3 days   | Thu 28/05/20 | Sat 30/05/20 | 527SS        |              |   |   |   |   |   |  |
| 587 | Pasang Kran Diameter Air 1/2 "                                     | 1 day    | Thu 28/05/20 | Thu 28/05/20 | 586SS        |              |   |   |   |   |   |  |
| 588 | Pasang Floor Drain                                                 | 1 day    | Sat 30/05/20 | Sat 30/05/20 | 586FF        |              |   |   |   |   |   |  |
| 589 | <b>Instalasi Air Bersih</b>                                        | 23 days  | Thu 30/04/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |
| 590 | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 2 days   | Thu 30/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 591 | Tangki air bersih kapasitas 1500 ltr                               | 3 days   | Thu 28/05/20 | Sat 30/05/20 | 601FS-2 days |              |   |   |   |   |   |  |
| 592 | <b>Instalasi Air Kotor</b>                                         | 25 days  | Tue 28/04/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |
| 593 | Pasang Roofdrain                                                   | 3 days   | Thu 28/05/20 | Sat 30/05/20 | 591SS        |              |   |   |   |   |   |  |
| 594 | Pasang Cleant Out 3"                                               | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 595 | Pasang Pipa air kotor Ø 3 "                                        | 3 days   | Wed 29/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 596 | Pasang Pipa air kotor Ø 4 "                                        | 2 days   | Thu 30/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 597 | Pasang instalasi Pipa Air Hujan 4"                                 | 4 days   | Tue 28/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 598 | <b>Pekerjaan Listrik</b>                                           | 22 days  | Thu 30/04/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 599 | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 2 days   | Thu 30/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 600 | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 2 days   | Thu 30/04/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 601 | Pasang Instalasi Titik Lampu                                       | 12 days  | Thu 14/05/20 | Fri 29/05/20 | 521SS        |              |   |   |   |   |   |  |
| 602 | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 607FF        |              |   |   |   |   |   |  |
| 603 | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 607SS        |              |   |   |   |   |   |  |
| 604 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 607FF        |              |   |   |   |   |   |  |
| 605 | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 599FF        |              |   |   |   |   |   |  |
| 606 | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 607FF        |              |   |   |   |   |   |  |
| 607 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 5 days   | Sat 23/05/20 | Fri 29/05/20 | 601FF        |              |   |   |   |   |   |  |
| 608 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 1 day    | Fri 29/05/20 | Fri 29/05/20 | 607FF        |              |   |   |   |   |   |  |
| 609 | Pasang Saklar Tunggal                                              | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 607SS        |              |   |   |   |   |   |  |
| 610 | Pasang Saklar Ganda                                                | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 607SS        |              |   |   |   |   |   |  |
| 611 | Instalasi stop kontak                                              | 1 day    | Sat 02/05/20 | Sat 02/05/20 | 485FF        |              |   |   |   |   |   |  |
| 612 | Pasang Stop Kontak 1 Phase                                         | 2 days   | Sat 23/05/20 | Tue 26/05/20 | 607SS        |              |   |   |   |   |   |  |

|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

| ID  | Task Name                                       | Duration  | Start        | Finish       | Predecessors | Half 1, 2020 |   |   |   |   |   |  |
|-----|-------------------------------------------------|-----------|--------------|--------------|--------------|--------------|---|---|---|---|---|--|
|     |                                                 |           |              |              |              | D            | J | F | M | A | M |  |
| 613 | <b>Pekerjaan Instalasi Penangkal Petir</b>      | 2 days    | Thu 28/05/20 | Fri 29/05/20 |              |              |   |   |   |   |   |  |
| 614 | Air lighting terminal viking V6 radius 60 m     | 1 day     | Thu 28/05/20 | Thu 28/05/20 | 615FF        |              |   |   |   |   |   |  |
| 615 | Obstruction Lamp                                | 1 day     | Thu 28/05/20 | Thu 28/05/20 | 617SS        |              |   |   |   |   |   |  |
| 616 | Instalasi Obstruction lamp                      | 1 day     | Fri 29/05/20 | Fri 29/05/20 | 618FF        |              |   |   |   |   |   |  |
| 617 | Pasang Kabel BC 1x70 mm2 +PVC AW Ø 1.5"         | 2 days    | Thu 28/05/20 | Fri 29/05/20 | 619SS        |              |   |   |   |   |   |  |
| 618 | Pasang Dudukan Tiang dan Penangkal Petir        | 1 day     | Fri 29/05/20 | Fri 29/05/20 | 617FF        |              |   |   |   |   |   |  |
| 619 | Pasang Grounding System Rod Ø 1" Panjang 12 mtr | 1 day     | Thu 28/05/20 | Thu 28/05/20 | 620SS        |              |   |   |   |   |   |  |
| 620 | Pasang Bak Kontrol Grounding                    | 1 day     | Thu 28/05/20 | Thu 28/05/20 | 591SS        |              |   |   |   |   |   |  |
| 621 | durasi proyek                                   | 123 days? | Thu 02/01/20 | Sat 30/05/20 |              |              |   |   |   |   |   |  |



|                                               |                         |  |                    |  |                       |  |
|-----------------------------------------------|-------------------------|--|--------------------|--|-----------------------|--|
| Project: Tanpa deadline<br>Date: Sat 20/06/20 | Task                    |  | Split              |  | Manual Summary Rollup |  |
|                                               | Critical Task           |  | External Tasks     |  | Manual Summary        |  |
|                                               | Milestone               |  | Project Summary    |  | Start-only            |  |
|                                               | Summary                 |  | Group By Summary   |  | Finish-only           |  |
|                                               | Rolled Up Task          |  | Inactive Milestone |  | External Tasks        |  |
|                                               | Rolled Up Critical Task |  | Inactive Summary   |  | External Milestone    |  |
|                                               | Rolled Up Milestone     |  | Manual Task        |  | Progress              |  |
|                                               | Rolled Up Progress      |  | Duration-only      |  | Deadline              |  |

**Lampiran 4.7 Perhitungan Kebutuhan Anggaran Biaya**

Lantai 3

| No.       | Uraian Pekerjaan                                  | Volume   |                | Harga Satuan |              | Jumlah Harga |                  | Bobot Pekerjaan |
|-----------|---------------------------------------------------|----------|----------------|--------------|--------------|--------------|------------------|-----------------|
| <b>A</b>  | <b>Pekerjaan Persiapan</b>                        |          |                |              |              |              |                  |                 |
| 1         | Pembersihan lokasi                                | 1600     | m <sup>2</sup> | Rp           | 12.300,00    | Rp           | 19.680.000,00    | 0,0713%         |
| 2         | Pembuatan kantor Direksi keet                     | 24       | m <sup>2</sup> | Rp           | 845.500,00   | Rp           | 20.292.000,00    | 0,0735%         |
| 3         | Pembuatan pagar keliling                          | 160      | m'             | Rp           | 193.400,00   | Rp           | 30.944.000,00    | 0,1121%         |
| 4.        | Instalasi Tower Crane                             | 1        | Ls             | Rp           | 6019354839   | Rp           | 6.019.354.839,00 | 21,8064 %       |
| 5.        | Pemasangan Polynet Biru                           | 824      | m'             | Rp           | 6500         | Rp           | 5.356.000,00     | 0,0194%         |
|           |                                                   |          |                |              |              |              |                  |                 |
| <b>I</b>  | <b>Pekerjaan Pasangan</b>                         |          |                |              |              |              |                  |                 |
| 1         | Mengurug pasir bawah lantai setebal 5 cm          | 89,45    | m <sup>3</sup> | Rp           | 136.400,00   | Rp           | 12.200.980,00    | 0,0442%         |
| 2         | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 1.348,99 | m <sup>2</sup> | Rp           | 184.400,00   | Rp           | 248.753.756,00   | 0,9012%         |
|           |                                                   |          |                |              |              |              |                  |                 |
| <b>II</b> | <b>Pekerjaan Beton</b>                            |          |                |              |              |              |                  |                 |
| 2         | Kolom Praktis uk. 11 x 11 cm                      | 340      | M1             | Rp           | 86.700,00    | Rp           | 29.478.000,00    | 0,1068%         |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )                      | 0,72     | m <sup>3</sup> | Rp           | 6.989.900,00 | Rp           | 5.032.728,00     | 0,0182%         |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )                      | 3,84     | m <sup>3</sup> | Rp           | 5.298.400,00 | Rp           | 20.345.856,00    | 0,0737%         |

|            |                                                             |              |    |    |              |    |                |         |
|------------|-------------------------------------------------------------|--------------|----|----|--------------|----|----------------|---------|
| 5          | Kolom uk. 50 x 50 cm ( K 4 )                                | 4            | m3 | Rp | 7.154.200,00 | Rp | 28.616.800,00  | 0,1037% |
| 6          | Kolom uk. 60 x 60 cm ( K 5 )                                | 28,8         | m3 | Rp | 5.962.800,00 | Rp | 171.728.640,00 | 0,6221% |
| 7          | Kolom uk. 70 x 70 cm ( K 6 )                                | 23,52        | m3 | Rp | 5.254.000,00 | Rp | 123.574.080,00 | 0,4477% |
| 27         | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 7,2          | m3 | Rp | 6.335.400,00 | Rp | 45.614.880,00  | 0,1652% |
| 30         | Plat meja beton tebal 10 cm                                 | 5,31         | m3 | Rp | 5.498.600,00 | Rp | 29.197.566,00  | 0,1058% |
| 32         | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 3,33         | m3 | Rp | 5.498.600,00 | Rp | 18.310.338,00  | 0,0663% |
| 33         | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 7,15         | m3 | Rp | 5.498.600,00 | Rp | 39.314.990,00  | 0,1424% |
| 34         | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 7,05         | m3 | Rp | 5.498.600,00 | Rp | 38.765.130,00  | 0,1404% |
|            |                                                             |              |    |    |              |    |                |         |
| <b>III</b> | <b>Pekerjaan Plesteran dan Benangan</b>                     |              |    |    |              |    |                |         |
| 1          | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 2.975,3<br>5 | m2 | Rp | 46.400,00    | Rp | 138.056.240,00 | 0,5001% |
| 2          | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 681,11       | m2 | Rp | 46.400,00    | Rp | 31.603.504,00  | 0,1145% |
| 3          | Pekerjaan acian interior                                    | 2.975,3<br>5 | m2 | Rp | 29.000,00    | Rp | 86.285.150,00  | 0,3126% |
| 4          | Pekerjaan acian eksterior                                   | 681,11<br>04 | m2 | Rp | 29.000,00    | Rp | 19.752.201,60  | 0,0716% |
|            |                                                             |              |    |    |              |    |                |         |
| <b>IV</b>  | <b>Pekerjaan Lantai</b>                                     |              |    |    |              |    |                |         |
| 1          | Pasang Keramik Lantai 60 x 60                               | 1.298,7<br>1 | m2 | Rp | 296.300,00   | Rp | 384.807.773,00 | 1,3941% |
| 2          | Pasang Keramik Lantai 30 x 30                               | 134,58       | m2 | Rp | 203.300,00   | Rp | 27.360.114,00  | 0,0991% |



|    |                                                                             |       |      |    |              |    |               |         |
|----|-----------------------------------------------------------------------------|-------|------|----|--------------|----|---------------|---------|
| 3  | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                               | 23,13 | m2   | Rp | 203.300,00   | Rp | 4.702.329,00  | 0,0170% |
| 4  | Pasang Keramik Dinding 30 x 60 (KM/WC)                                      | 76    | m2   | Rp | 267.000,00   | Rp | 20.292.000,00 | 0,0735% |
| 5  | Pasang Batu Alam                                                            | 23,33 | m2   | Rp | 102.200,00   | Rp | 2.384.326,00  | 0,0086% |
|    |                                                                             |       |      |    |              |    |               |         |
| V  | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                           |       |      |    |              |    |               |         |
| A. | Pekerjaan Pintu dan Jendela Aluminium,Partisi,Railling tangga dan Sunscreen |       |      |    |              |    |               |         |
| 1  | Pas. Kusen Type J2 J2                                                       | 28    | Unit | Rp | 1.851.600,00 | Rp | 51.844.800,00 | 0,1878% |
| 2  | Pas. Kusen Type J3 J3                                                       | 1     | Unit | Rp | 2.025.000,00 | Rp | 2.025.000,00  | 0,0073% |
| 3  | Pas. Kusen Type J4 J4                                                       | 10    | Unit | Rp | 304.100,00   | Rp | 3.041.000,00  | 0,0110% |
| 4  | Pas. Kusen Type J8 J8                                                       | 12    | Unit | Rp | 1.728.100,00 | Rp | 20.737.200,00 | 0,0751% |
| 5  | Pas. Kusen Type J9 J9                                                       | 22    | Unit | Rp | 993.300,00   | Rp | 21.852.600,00 | 0,0792% |
| 6  | Pas. Kusen Type J12 J12                                                     | 4     | Unit | Rp | 3.197.500,00 | Rp | 12.790.000,00 | 0,0463% |
| 7  | Pas. Kusen Type P2 P2                                                       | 10    | Unit | Rp | 1.046.400,00 | Rp | 10.464.000,00 | 0,0379% |
| 8  | Pas. Kusen Type P3 P3                                                       | 21    | Unit | Rp | 1.704.000,00 | Rp | 35.784.000,00 | 0,1296% |
| 9  | Pas. Kusen Type P4 P4                                                       | 10    | Unit | Rp | 1.570.500,00 | Rp | 15.705.000,00 | 0,0569% |
| 10 | Pas. Kusen Type P5 P5                                                       | 5     | Unit | Rp | 5.199.300,00 | Rp | 25.996.500,00 | 0,0942% |

|            |                                                     |          |      |    |              |    |                |         |
|------------|-----------------------------------------------------|----------|------|----|--------------|----|----------------|---------|
| 11         | Pasang pintu darurat anti api                       | 2        | Unit | Rp | 4000000      | Rp | 8.000.000,00   | 0,0290% |
|            |                                                     |          |      |    |              |    |                |         |
| <b>B.</b>  | <b>Pekerjaan Partisi</b>                            |          |      |    |              |    |                |         |
| 1          | Memasang 1m2 unit Partisi Type I                    | 178,35   | m2   | Rp | 985.700,00   | Rp | 175.799.595,00 | 0,6369% |
| 2          | Memasang 1m2 unit Partisi Type II                   | 6,65     | m2   | Rp | 1986500      | Rp | 13.210.225,00  | 0,0479% |
| 3          | Memasang 1 unit Pintu Type I untuk partisi          | 17       | Unit | Rp | 2.118.800,00 | Rp | 36.019.600,00  | 0,1305% |
| 4          | Memasang 1 jendela Pintu Type I untuk partisi       | 20       | Unit | Rp | 1.267.000,00 | Rp | 25.340.000,00  | 0,0918% |
| 5          | Memasang 1 jendela Pintu Type II untuk partisi      | 1        | Unit | Rp | 1.634.000,00 | Rp | 1.634.000,00   | 0,0059% |
|            |                                                     |          |      |    |              |    |                |         |
| <b>C.</b>  | <b>Pekerjaan Railling Tangga</b>                    |          |      |    |              |    |                |         |
| 1          | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76    | m2   | Rp | 1.610.800,00 | Rp | 22.164.608,00  | 0,0803% |
| 2          | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48    | m2   | Rp | 1.610.800,00 | Rp | 20.102.784,00  | 0,0728% |
|            |                                                     |          |      |    |              |    |                |         |
| <b>D.</b>  | <b>Curtin Wall</b>                                  |          |      |    |              |    |                |         |
| 2          | Curtain Wall ( CW2 )                                | 1        | m2   | Rp | 9.771.200,00 | Rp | 9.771.200,00   | 0,0354% |
|            |                                                     |          |      |    |              |    |                |         |
| <b>VI</b>  | <b>Pekerjaan Langit-langit</b>                      |          |      |    |              |    |                |         |
| 1          | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 1.141,44 | m2   | Rp | 239.300,00   | Rp | 273.146.592,00 | 0,9895% |
|            |                                                     |          |      |    |              |    |                |         |
| <b>VII</b> | <b>Pekerjaan Pengecatan</b>                         |          |      |    |              |    |                |         |
| 1          | Pengecatan dinding interior                         | 2.975,35 | m2   | Rp | 23.300,00    | Rp | 69.325.655,00  | 0,2511% |



|                  |                                               |          |       |    |              |    |               |         |
|------------------|-----------------------------------------------|----------|-------|----|--------------|----|---------------|---------|
| 2                | Pengecatan dinding eksterior                  | 681,11   | m2    | Rp | 52.200,00    | Rp | 35.553.942,00 | 0,1288% |
| 3                | Pengecatan plafon                             | 1.271,00 | m2    | Rp | 23.300,00    | Rp | 29.614.300,00 | 0,1073% |
|                  |                                               |          |       |    |              |    |               |         |
| <b>VII<br/>I</b> | <b>Pekerjaan Tata Udara</b>                   |          |       |    |              |    |               |         |
| 1                | Unit AC Cassete 5PK                           | 2        | Unit  | Rp | 3717129      | Rp | 7.434.258,00  | 0,0269% |
| 2                | Unit AC Cassete 4PK                           | 9        | Unit  | Rp | 3261729      | Rp | 29.355.561,00 | 0,1063% |
| 3                | Unit AC Split Wall Mountain 3/4 PK            | 16       | Unit  | Rp | 380283       | Rp | 6.084.528,00  | 0,0220% |
| 4                | Exhaust Fan ex jepang                         | 2        | Unit  | Rp | 131937       | Rp | 263.874,00    | 0,0010% |
|                  |                                               |          |       |    |              |    |               |         |
| <b>IX</b>        | <b>PEKERJAAN TELEPON</b>                      |          |       |    |              |    |               |         |
| 1                | Pasang Instalasi Telepon                      | 18       | titik | Rp | 119.550,00   | Rp | 2.151.900,00  | 0,0078% |
| 2                | Pasang Outlet Telepon                         | 16       | titik | Rp | 47500        | Rp | 760.000,00    | 0,0028% |
| 3                | Switch Hub 16 port                            | 1        | Unit  | Rp | 205000       | Rp | 205.000,00    | 0,0007% |
| 4                | Terminal Box                                  | 1        | Unit  | Rp | 325000       | Rp | 325.000,00    | 0,0012% |
|                  |                                               |          |       |    |              |    |               |         |
| <b>X</b>         | <b>Pekerjaan CCTV</b>                         |          |       |    |              |    |               |         |
| 1                | Kamera CCTV HD                                | 4        | Unit  | Rp | 1.037.970,00 | Rp | 4.151.880,00  | 0,0150% |
| 2                | Instalasi kabel coaxial RG6 untuk kamera CCTV | 4        | titik | Rp | 155891,25    | Rp | 623.565,00    | 0,0023% |
|                  |                                               |          |       |    |              |    |               |         |

|            |                                                              |    |       |    |            |    |               |         |
|------------|--------------------------------------------------------------|----|-------|----|------------|----|---------------|---------|
| <b>XI</b>  | <b>Pekerjaan Sound System</b>                                |    |       |    |            |    |               |         |
| 1          | Celling speaker 6 W                                          | 8  | titik | Rp | 185000     | Rp | 1.480.000,00  | 0,0054% |
| 2          | Volume control                                               | 1  | titik | Rp | 145000     | Rp | 145.000,00    | 0,0005% |
| 3          | Instalasi Celling speaker                                    | 10 | Unit  | Rp | 275000     | Rp | 2.750.000,00  | 0,0100% |
| 4          | Terminal Box                                                 | 1  | Unit  | Rp | 325000     | Rp | 325.000,00    | 0,0012% |
| 5          | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5  | m'    | Rp | 18.431,00  | Rp | 92.155,00     | 0,0003% |
|            |                                                              |    |       |    |            |    |               |         |
| <b>XII</b> | <b>Pekerjaan Fire Alarm</b>                                  |    |       |    |            |    |               |         |
| <b>A.</b>  | <b>Peralatan Fixture</b>                                     |    |       |    |            |    |               |         |
| 1          | - Conv. Optical Smoke Detector                               | 52 | pcs   | Rp | 470.381,00 | Rp | 24.459.812,00 | 0,0886% |
| 2          | - Conv. Manual Break glass                                   | 2  | pcs   | Rp | 126000     | Rp | 252.000,00    | 0,0009% |
| 3          | - Junction Box Fire Alarm                                    | 1  | pcs   | Rp | 450000     | Rp | 450.000,00    | 0,0016% |
| 4          | - Remote Indicating Lamp                                     | 4  | pcs   | Rp | 102.036,00 | Rp | 408.144,00    | 0,0015% |
| 5          | - Alarm Bell                                                 | 2  | Unit  | Rp | 205000     | Rp | 410.000,00    | 0,0015% |
| 6          | - Terminal Box 30 x 40 x 12                                  | 1  | Unit  | Rp | 757000     | Rp | 757.000,00    | 0,0027% |
|            |                                                              |    |       |    |            |    |               |         |
| <b>B</b>   | <b>Pekerjaan Instalasi</b>                                   |    |       |    |            |    |               |         |
| 1          | Instalasi Smoke Detector dan manual break glass              | 55 | titik | Rp | 470.381,00 | Rp | 25.870.955,00 | 0,0937% |
|            | NYA Cable 2x1,5mm + Pipa Conduit 20mm                        |    |       |    |            |    |               |         |

|              |                                           |      |       |    |              |    |               |         |
|--------------|-------------------------------------------|------|-------|----|--------------|----|---------------|---------|
| 2            | - Junction Box Fire Alarm                 | 1    | titik | Rp | 470.381,00   | Rp | 470.381,00    | 0,0017% |
|              | NYA cable 2 x 1,5 mm + pipa conduit 20 mm |      |       |    |              |    |               |         |
| 3            | - Remote Indicating Lamp                  | 4    | titik | Rp | 75000        | Rp | 300.000,00    | 0,0011% |
|              | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    |      |       |    |              |    |               |         |
|              |                                           |      |       |    |              |    |               |         |
| <b>XII I</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>   |      |       |    |              |    |               |         |
| 1            | BSP Sch.40 c/w fitting2 & Material bantu  |      |       |    |              |    |               |         |
|              | dia. 3 "                                  | 81,3 | m'    | Rp | 346.300,00   | Rp | 28.154.190,00 | 0,1020% |
| 2            | Hydrant Box Indoor, type B c/w            | 2    | Unit  | Rp | 7.963.200,00 | Rp | 15.926.400,00 | 0,0577% |
|              | -hydrant valve dia. 11/2"                 |      |       |    |              |    |               |         |
|              | -fire hose 11/2"x30 m                     |      |       |    |              |    |               |         |
|              | -hose rack dia. 11/2"                     |      |       |    |              |    |               |         |
|              | -Spray nozzle dia. 11/2"                  |      |       |    |              |    |               |         |
|              | -kaca dan kunci                           |      |       |    |              |    |               |         |
| 3            | Gate valve dia. 21/2" , OS&Y type         | 1    | bh    | Rp | 3410000      | Rp | 3.410.000,00  | 0,0124% |
| 4            | - Fire Extinguisher 6 kg                  | 2    | Unit  | Rp | 461000       | Rp | 922.000,00    | 0,0033% |
| <b>B</b>     | <b>Instalasi Sprinkler</b>                |      |       |    |              |    |               |         |
|              |                                           |      |       |    |              |    |               |         |
| 1            | BSP Sch.40 c/w fitting2 & Material bantu  |      |       |    |              |    |               |         |
|              | dia. 1 "                                  | 150  | m'    | Rp | 81.000,00    | Rp | 12.150.000,00 | 0,0440% |
|              | dia. 1 1/4 "                              | 107  | m'    | Rp | 105.600,00   | Rp | 11.299.200,00 | 0,0409% |

|            |                                             |        |      |    |              |    |               |         |
|------------|---------------------------------------------|--------|------|----|--------------|----|---------------|---------|
|            | dia. 2 "                                    | 8,5    | m'   | Rp | 159.800,00   | Rp | 1.358.300,00  | 0,0049% |
|            | dia. 2 1/2 "                                | 8      | m'   | Rp | 270.700,00   | Rp | 2.165.600,00  | 0,0078% |
|            | dia. 3 "                                    | 63,5   | m'   | Rp | 346.300,00   | Rp | 21.990.050,00 | 0,0797% |
| 2          | Sprinkler head dia. 1/2", 68'C, pendent     | 71     | bh   | Rp | 52500        | Rp | 3.727.500,00  | 0,0135% |
| 3          | Branch Control Valve dia. 3"                | 1      | unit | Rp | 6540000      | Rp | 6.540.000,00  | 0,0237% |
|            |                                             |        |      |    |              |    |               |         |
| <b>XII</b> | <b>Pekerjaan Sanitair &amp; Sanitasi</b>    |        |      |    |              |    |               |         |
| <b>I</b>   |                                             |        |      |    |              |    |               |         |
| 1          | Pasang Klosed Duduk                         | 10     | bh   | Rp | 2.193.500,00 | Rp | 21.935.000,00 | 0,0795% |
| 2          | Pasang Wastafel single                      | 6      | bh   | Rp | 863.600,00   | Rp | 5.181.600,00  | 0,0188% |
| 3          | Pasang Jet washer                           | 10     | bh   | Rp | 195000       | Rp | 1.950.000,00  | 0,0071% |
| 4          | Pasang Kran Diameter Air 1/2 "              | 24     | bh   | Rp | 62.600,00    | Rp | 1.502.400,00  | 0,0054% |
| 5          | Pasang Floor Drain                          | 10     | bh   | Rp | 94.100,00    | Rp | 941.000,00    | 0,0034% |
|            |                                             |        |      |    |              |    |               |         |
| <b>A</b>   | <b>Instalasi Air Bersih</b>                 |        |      |    |              |    |               |         |
| 1          | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 108,35 | m'   | Rp | 26.000,00    | Rp | 2.817.100,00  | 0,0102% |
|            |                                             |        |      |    |              |    |               |         |
| <b>B</b>   | <b>Instalasi Air Kotor</b>                  |        |      |    |              |    |               |         |
| 1          | Pasang Cleant Out 3"                        | 2      | Unit | Rp | 108.100,00   | Rp | 216.200,00    | 0,0008% |
| 2          | Pasang Pipa air kotor Ø 3 "                 | 16,52  | m'   | Rp | 126.000,00   | Rp | 2.081.520,00  | 0,0075% |

|    |                                                                    |       |        |    |            |    |               |         |
|----|--------------------------------------------------------------------|-------|--------|----|------------|----|---------------|---------|
| 3  | Pasang Pipa air kotor Ø 4 "                                        | 82,77 | m'     | Rp | 167.900,00 | Rp | 13.897.083,00 | 0,0503% |
|    |                                                                    |       |        |    |            |    |               |         |
| XI | Pekerjaan Listrik                                                  |       |        |    |            |    |               |         |
| 1  | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08 | batang | Rp | 421800     | Rp | 19.858.344,00 | 0,0719% |
| 2  | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08 | batang | Rp | 361000     | Rp | 16.995.880,00 | 0,0616% |
| 3  | Pasang Instalasi Titik Lampu                                       | 152   | Titik  | Rp | 215.200,00 | Rp | 32.710.400,00 | 0,1185% |
| 4  | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 3     | Titik  | Rp | 1095000    | Rp | 3.285.000,00  | 0,0119% |
| 5  | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 14    | Titik  | Rp | 185600     | Rp | 2.598.400,00  | 0,0094% |
| 6  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 2     | Titik  | Rp | 484000     | Rp | 968.000,00    | 0,0035% |
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 2     | Titik  | Rp | 1765000    | Rp | 3.530.000,00  | 0,0128% |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1     | Titik  | Rp | 534500     | Rp | 534.500,00    | 0,0019% |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 125   | Titik  | Rp | 698600     | Rp | 87.325.000,00 | 0,3164% |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 3     | Titik  | Rp | 1917500    | Rp | 5.752.500,00  | 0,0208% |
| 11 | Pasang Saklar Tunggal                                              | 10    | Titik  | Rp | 103.000,00 | Rp | 1.030.000,00  | 0,0037% |
| 12 | Pasang Saklar Ganda                                                | 15    | Titik  | Rp | 85.300,00  | Rp | 1.279.500,00  | 0,0046% |
| 13 | Instalasi stop kontak                                              | 149   | Titik  | Rp | 18.431,00  | Rp | 2.746.219,00  | 0,0099% |
| 14 | Pasang Stop Kontak 1 Phase                                         | 149   | Titik  | Rp | 107.000,00 | Rp | 15.943.000,00 | 0,0578% |

|    |                                                                |    |       |    |            |    |                  |           |
|----|----------------------------------------------------------------|----|-------|----|------------|----|------------------|-----------|
| 15 | Pasang Stop Kontak under floor (lab. komputer dan mekatronika) | 84 | Titik | Rp | 491.081,00 | Rp | 41.250.804,00    | 0,1494%   |
|    |                                                                |    |       |    |            |    |                  |           |
|    |                                                                |    |       |    |            |    | 9.045.225.524,60 | 32,7683 % |

## Lantai 4

| No.                         | Uraian Pekerjaan                                  | Volume   |    | Harga Satuan |              | Jumlah Harga |                  | Bobot Pekerjaan |
|-----------------------------|---------------------------------------------------|----------|----|--------------|--------------|--------------|------------------|-----------------|
| <b>I Pekerjaan Pasangan</b> |                                                   |          |    |              |              |              |                  |                 |
| 1                           | Mengurug pasir bawah lantai setebal 5 cm          | 97,93    | m3 | Rp           | 136.400,00   | Rp           | 13.357.652,00    | 0,0484%         |
| 2                           | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 1.246,75 | m2 | Rp           | 184.400,00   | Rp           | 229.900.700,00   | 0,8329%         |
|                             |                                                   |          |    |              |              |              |                  |                 |
| <b>II Pekerjaan Beton</b>   |                                                   |          |    |              |              |              |                  |                 |
| 1                           | Pembuatan Plat Lantai                             | 192,48   | m3 | Rp           | 7.173.900,00 | Rp           | 1.380.832.272,00 | 5,0024%         |
| 2                           | Kolom Praktis uk. 11 x 11 cm                      | 432      | m1 | Rp           | 86.700,00    | Rp           | 37.454.400,00    | 0,1357%         |
| 3                           | Kolom uk. 30 x 30 cm ( K 2 )                      | 0,72     | m3 | Rp           | 6.989.900,00 | Rp           | 5.032.728,00     | 0,0182%         |
| 4                           | Kolom uk. 40 x 40 cm ( K 3 )                      | 3,84     | m3 | Rp           | 5.298.400,00 | Rp           | 20.345.856,00    | 0,0737%         |
| 5                           | Kolom uk. 50 x 50 cm ( K 4 )                      | 28       | m3 | Rp           | 7.154.200,00 | Rp           | 200.317.600,00   | 0,7257%         |
| 6                           | Kolom uk. 70 x 70 cm ( K 6 )                      | 23,52    | m3 | Rp           | 5.254.000,00 | Rp           | 123.574.080,00   | 0,4477%         |
| 7                           | Balok Lantai uk.11 x 20 cm                        | 6,34     | m3 | Rp           | 6.526.300,00 | Rp           | 41.376.742,00    | 0,1499%         |
| 8                           | Balok Type B.1 uk. 30 x 80 cm                     | 13,44    | m3 | Rp           | 5.429.300,00 | Rp           | 72.969.792,00    | 0,2643%         |



|    |                 |                |       |    |    |              |    |                |         |
|----|-----------------|----------------|-------|----|----|--------------|----|----------------|---------|
| 9  | Balok Type B.2  | uk. 40 x 80 cm | 48,64 | m3 | Rp | 5.865.900,00 | Rp | 285.317.376,00 | 1,0336% |
| 10 | Balok Type B.3  | uk. 30 x 70 cm | 63,6  | m3 | Rp | 4.972.500,00 | Rp | 316.251.000,00 | 1,1457% |
| 11 | Balok Type B.4  | uk. 30 x 50 cm | 23,76 | m3 | Rp | 6.254.600,00 | Rp | 148.609.296,00 | 0,5384% |
| 12 | Balok Type B.5  | uk. 30 x 50 cm | 15,21 | m3 | Rp | 5.527.300,00 | Rp | 84.070.233,00  | 0,3046% |
| 13 | Balok Type B.6  | uk. 30 x 60 cm | 31,62 | m3 | Rp | 5.358.400,00 | Rp | 169.432.608,00 | 0,6138% |
| 14 | Balok Type B.7  | uk. 40 x 80 cm | 17,82 | m3 | Rp | 6.183.200,00 | Rp | 110.184.624,00 | 0,3992% |
| 15 | Balok Type B.8  | uk. 30 x 80 cm | 5,16  | m3 | Rp | 5.429.300,00 | Rp | 28.015.188,00  | 0,1015% |
| 16 | Balok Type B.9  | uk. 40 x 80 cm | 3,12  | m3 | Rp | 5.503.200,00 | Rp | 17.169.984,00  | 0,0622% |
| 17 | Balok Type B.10 | uk. 30 x 60 cm | 5,46  | m3 | Rp | 5.086.800,00 | Rp | 27.773.928,00  | 0,1006% |
| 18 | Balok Type B.11 | uk. 30 x 60 cm | 3,6   | m3 | Rp | 5.221.100,00 | Rp | 18.795.960,00  | 0,0681% |
| 19 | Balok Type B.12 | uk. 30 x 50 cm | 2,1   | m3 | Rp | 5.907.400,00 | Rp | 12.405.540,00  | 0,0449% |
| 20 | Balok Type B.13 | uk. 30 x 60 cm | 4,86  | m3 | Rp | 4.964.300,00 | Rp | 24.126.498,00  | 0,0874% |
| 21 | Balok Type B.14 | uk. 20 x 40 cm | 0,56  | m3 | Rp | 6.127.300,00 | Rp | 3.431.288,00   | 0,0124% |
| 22 | Balok Type B.15 | uk. 20 x 30 cm | 0,96  | m3 | Rp | 5.753.500,00 | Rp | 5.523.360,00   | 0,0200% |
| 23 | Balok Type B.20 | uk. 30 x 60 cm | 5,76  | m3 | Rp | 5.871.300,00 | Rp | 33.818.688,00  | 0,1225% |
| 24 | Balok Type B.27 | uk. 30 x 50 cm | 6     | m3 | Rp | 4.548.200,00 | Rp | 27.289.200,00  | 0,0989% |

|     |                                                             |          |    |    |              |    |                |         |
|-----|-------------------------------------------------------------|----------|----|----|--------------|----|----------------|---------|
| 25  | Balok Meja Beton                                            | 2,69     | m3 | Rp | 7.892.400,00 | Rp | 21.230.556,00  | 0,0769% |
| 26  | Balok Tangga Utama dan Tangga Darurat uk. 20 x 40 cm        | 7,2      | m3 | Rp | 6.335.400,00 | Rp | 45.614.880,00  | 0,1652% |
| 27  | Balok uk.15 x 30 cm untuk Dinding Box Lift A                | 0,86     | m3 | Rp | 7.172.500,00 | Rp | 6.168.350,00   | 0,0223% |
| 28  | Balok uk.15 x 30 cm untuk Dinding Box Lift BARANG           | 0,54     | m3 | Rp | 7.172.500,00 | Rp | 3.873.150,00   | 0,0140% |
| 29  | Plat meja beton tebal 10 cm                                 | 7,08     | m3 | Rp | 5.498.600,00 | Rp | 38.930.088,00  | 0,1410% |
| 30  | Anak Tangga Utama dan Tangga Darurat ( Trap ) uk.20 x 30 cm | 3,33     | m3 | Rp | 5.498.600,00 | Rp | 18.310.338,00  | 0,0663% |
| 31  | Plat Tangga Utama dan Darurat Tebal 15 cm                   | 7,15     | m3 | Rp | 5.498.600,00 | Rp | 39.314.990,00  | 0,1424% |
| 32  | Plat Bordes Tangga Utama dan Tangga Darurat Tebal 25 cm     | 7,05     | m3 | Rp | 5.498.600,00 | Rp | 38.765.130,00  | 0,1404% |
|     |                                                             |          |    |    |              |    |                |         |
| III | <b>Pekerjaan Plesteran dan Benangan</b>                     |          |    |    |              |    |                |         |
| 1   | Pekerjaan plesteran interior spesi 1 Pc : 6 Psr             | 2.175,04 | m2 | Rp | 46.400,00    | Rp | 100.921.856,00 | 0,3656% |
| 2   | Pekerjaan plesteran eksterior spesi 1 Pc : 6 Psr            | 548,06   | m2 | Rp | 46.400,00    | Rp | 25.429.984,00  | 0,0921% |
| 3   | Pekerjaan acian interior                                    | 2.175,04 | m2 | Rp | 29.000,00    | Rp | 63.076.160,00  | 0,2285% |
| 4   | Pekerjaan acian eksterior                                   | 548,06   | m2 | Rp | 29.000,00    | Rp | 15.893.740,00  | 0,0576% |
| 5   | Pekerjaan benangan interior spesi 1 Pc : 2 Psr              | 463,56   | m1 | Rp | 16.900,00    | Rp | 7.834.164,00   | 0,0284% |
| 6   | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr             | 244,12   | m1 | Rp | 16.900,00    | Rp | 4.125.628,00   | 0,0149% |
|     |                                                             |          |    |    |              |    |                |         |

| IV Pekerjaan Lantai |                                                                               |          |      |    |              |    |                |         |
|---------------------|-------------------------------------------------------------------------------|----------|------|----|--------------|----|----------------|---------|
| 1                   | Pasang Keramik Lantai 60 x 60                                                 | 1.292,80 | m2   | Rp | 296.300,00   | Rp | 383.056.640,00 | 1,3877% |
| 2                   | Pasang Keramik Lantai 30 x 30                                                 | 134,58   | m2   | Rp | 203.300,00   | Rp | 27.360.114,00  | 0,0991% |
| 3                   | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                 | 23,13    | m2   | Rp | 203.300,00   | Rp | 4.702.329,00   | 0,0170% |
| 4                   | Pasang Keramik Dinding 30 x 60 (KM/WC)                                        | 76       | m2   | Rp | 267.000,00   | Rp | 20.292.000,00  | 0,0735% |
| 5                   | Keramik Meja Beton 20 x 20                                                    | 91,16    | m2   | Rp | 189.300,00   | Rp | 17.256.588,00  | 0,0625% |
| 6                   | Keramik Dinding Meja Beton 20 x 25                                            | 66,47    | m2   | Rp | 223.900,00   | Rp | 14.882.633,00  | 0,0539% |
| 7                   | Pasang Batu Alam                                                              | 23,33    | m2   | Rp | 102.200,00   | Rp | 2.384.326,00   | 0,0086% |
|                     |                                                                               |          |      |    |              |    |                |         |
| V                   | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                             |          |      |    |              |    |                |         |
| A.                  | Pekerjaan Pintu dan Jendela Aluminium, Partisi, Railling tangga dan Sunscreen |          |      |    |              |    |                |         |
| 1                   | Pas. Kusen Type J2                                                            | 28       | Unit | Rp | 1.851.600,00 | Rp | 51.844.800,00  | 0,1878% |
| 2                   | Pas. Kusen Type J3                                                            | 2        | Unit | Rp | 2.025.000,00 | Rp | 4.050.000,00   | 0,0147% |
| 3                   | Pas. Kusen Type J4                                                            | 10       | Unit | Rp | 304.100,00   | Rp | 3.041.000,00   | 0,0110% |
| 4                   | Pas. Kusen Type J8                                                            | 24       | Unit | Rp | 1.728.100,00 | Rp | 41.474.400,00  | 0,1503% |
| 5                   | Pas. Kusen Type J9                                                            | 24       | Unit | Rp | 993.300,00   | Rp | 23.839.200,00  | 0,0864% |
| 6                   | Pas. Kusen Type P2                                                            | 10       | Unit | Rp | 1.046.400,00 | Rp | 10.464.000,00  | 0,0379% |

|                                     |                                                     |          |      |    |              |    |                |         |
|-------------------------------------|-----------------------------------------------------|----------|------|----|--------------|----|----------------|---------|
| 7                                   | Pas. Kusen Type P3                                  | 28       | Unit | Rp | 1.704.000,00 | Rp | 47.712.000,00  | 0,1728% |
| 8                                   | Pas. Kusen Type P4                                  | 10       | Unit | Rp | 1.570.500,00 | Rp | 15.705.000,00  | 0,0569% |
| 9                                   | Pas. Kusen Type P5                                  | 5        | Unit | Rp | 5.199.300,00 | Rp | 25.996.500,00  | 0,0942% |
| 10                                  | Pasang pintu darurat anti api                       | 2        | Unit | Rp | 4000000      | Rp | 8.000.000,00   | 0,0290% |
|                                     |                                                     |          |      |    |              |    |                |         |
| <b>B. Pekerjaan Partisi</b>         |                                                     |          |      |    |              |    |                |         |
| 1                                   | Memasang 1m2 unit Partisi Type I                    | 383,08   | m2   | Rp | 985.700,00   | Rp | 377.601.956,00 | 1,3679% |
| 2                                   | Memasang 1 unit Pintu Type I untuk partisi          | 24       | Unit | Rp | 2.118.800,00 | Rp | 50.851.200,00  | 0,1842% |
| 3                                   | Memasang 1 unit Pintu Type II untuk partisi         | 6        | Unit | Rp | 2.984.200,00 | Rp | 17.905.200,00  | 0,0649% |
| 4                                   | Memasang 1 jendela Pintu Type I untuk partisi       | 48       | Unit | Rp | 1.267.000,00 | Rp | 60.816.000,00  | 0,2203% |
|                                     |                                                     |          |      |    |              |    |                |         |
| <b>C. Pekerjaan Railling Tangga</b> |                                                     |          |      |    |              |    |                |         |
| 1                                   | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76    | m2   | Rp | 1.610.800,00 | Rp | 22.164.608,00  | 0,0803% |
| 2                                   | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48    | m2   | Rp | 1.610.800,00 | Rp | 20.102.784,00  | 0,0728% |
|                                     |                                                     |          |      |    |              |    |                |         |
| <b>D. Curtin Wall</b>               |                                                     |          |      |    |              |    |                |         |
| 1                                   | Curtain Wall ( CW2 )                                | 1        | m2   | Rp | 9.771.200,00 | Rp | 9.771.200,00   | 0,0354% |
|                                     |                                                     |          |      |    |              |    |                |         |
| <b>VI Pekerjaan Langit-langit</b>   |                                                     |          |      |    |              |    |                |         |
| 1                                   | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 1.135,53 | m2   | Rp | 239.300,00   | Rp | 271.732.329,00 | 0,9844% |

|                  |                              |              |       |    |            |    |               |         |
|------------------|------------------------------|--------------|-------|----|------------|----|---------------|---------|
|                  |                              |              |       |    |            |    |               |         |
| <b>VII</b>       | <b>Pekerjaan Pengecatan</b>  |              |       |    |            |    |               |         |
| 1                | Pengecatan dinding interior  | 2.175,0<br>4 | m2    | Rp | 23.300,00  | Rp | 50.678.432,00 | 0,1836% |
| 2                | Pengecatan dinding eksterior | 548,06       | m2    | Rp | 52.200,00  | Rp | 28.608.732,00 | 0,1036% |
| 3                | Pengecatan plafon            | 1.271,0<br>0 | m2    | Rp | 23.300,00  | Rp | 29.614.300,00 | 0,1073% |
|                  |                              |              |       |    |            |    |               |         |
| <b>VII<br/>I</b> | <b>Pekerjaan Tata Udara</b>  |              |       |    |            |    |               |         |
| 1                | Unit AC Cassete 5PK          | 11           | Unit  | Rp | 3717129    | Rp | 40.888.419,00 | 0,1481% |
| 2                | Unit AC Split Wall 3/4 PK    | 24           | Unit  | Rp | 380283     | Rp | 9.126.792,00  | 0,0331% |
| 3                | Kipas angin                  | 4            | Unit  | Rp | 770.300,00 | Rp | 3.081.200,00  | 0,0112% |
| 4                | Exhaust Fan                  | 3            | Unit  | Rp | 131937     | Rp | 395.811,00    | 0,0014% |
|                  |                              |              |       |    |            |    |               |         |
| <b>IX</b>        | <b>PEKERJAAN TELEPON</b>     |              |       |    |            |    |               |         |
| 1                | Pasang Instalasi Telepon     | 26           | Titik | Rp | 119.550,00 | Rp | 3.108.300,00  | 0,0113% |
| 2                | Pasang Outlet Telepon        | 24           | Titik | Rp | 47500      | Rp | 1.140.000,00  | 0,0041% |
| 3                | Switch Hub 16 port           | 1            | Unit  | Rp | 205000     | Rp | 205.000,00    | 0,0007% |
| 4                | Terminal Box                 | 1            | Unit  | Rp | 325000     | Rp | 325.000,00    | 0,0012% |
|                  |                              |              |       |    |            |    |               |         |
| <b>X</b>         | <b>Pekerjaan CCTV</b>        |              |       |    |            |    |               |         |

|     |                                                              |    |       |    |              |    |               |         |
|-----|--------------------------------------------------------------|----|-------|----|--------------|----|---------------|---------|
| 1   | Kamera CCTV HD                                               | 4  | Unit  | Rp | 1.037.970,00 | Rp | 4.151.880,00  | 0,0150% |
| 2   | Instalasi kamera CCTV                                        | 4  | Titik | Rp | 155891,25    | Rp | 623.565,00    | 0,0023% |
|     |                                                              |    |       |    |              |    |               |         |
| XI  | <b>Pekerjaan Sound System</b>                                |    |       |    |              |    |               |         |
| 1   | Celling speaker 6 W                                          | 12 | Titik | Rp | 185000       | Rp | 2.220.000,00  | 0,0080% |
| 2   | Volume control                                               | 1  | Titik | Rp | 145000       | Rp | 145.000,00    | 0,0005% |
| 3   | Instalasi Celling speaker                                    | 14 | Unit  | Rp | 275000       | Rp | 3.850.000,00  | 0,0139% |
| 4   | Terminal Box                                                 | 1  | Unit  | Rp | 325000       | Rp | 325.000,00    | 0,0012% |
| 5   | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5  | ml    | Rp | 18.431,00    | Rp | 92.155,00     | 0,0003% |
|     |                                                              |    |       |    |              |    |               |         |
| XII | <b>Pekerjaan Fire Alarm</b>                                  |    |       |    |              |    |               |         |
|     | <b>INSTALASI LANTAI 4</b>                                    |    |       |    |              |    |               |         |
| A.  | Peralatan Fixture                                            |    |       |    |              |    |               |         |
| 1   | - Conv. Optical Smoke Detector                               | 41 | pcs   | Rp | 470.381,00   | Rp | 19.285.621,00 | 0,0699% |
| 2   | - Conv. Manual Break glass                                   | 2  | pcs   | Rp | 126000       | Rp | 252.000,00    | 0,0009% |
| 3   | - Junction Box Fire Alarm                                    | 1  | pcs   | Rp | 450000       | Rp | 450.000,00    | 0,0016% |
| 4   | - Remote Indicating Lamp                                     | 4  | pcs   | Rp | 102.036,00   | Rp | 408.144,00    | 0,0015% |
| 5   | - Alarm Bell                                                 | 2  | Unit  | Rp | 205000       | Rp | 410.000,00    | 0,0015% |
| 6   | - Terminal Box 30 x 40 x 12                                  | 1  | Unit  | Rp | 757000       | Rp | 757.000,00    | 0,0027% |



| <b>B.</b>    | <b>Pekerjaan Instalasi</b>                |       |       |    |              |    |               |         |
|--------------|-------------------------------------------|-------|-------|----|--------------|----|---------------|---------|
| 1            | Instalasi Detector dan manual break glass | 44    | Titik | Rp | 470.381,00   | Rp | 20.696.764,00 | 0,0750% |
|              | NYA Cable 2x1,5mm + Pipa Conduit 20mm     |       |       |    |              |    |               |         |
| 2            | - Junction Box Fire Alarm                 | 1     | Titik | Rp | 470.381,00   | Rp | 470.381,00    | 0,0017% |
|              | NYA cable 2 x 1,5 mm + pipa conduit 20 mm |       |       |    |              |    |               |         |
| 3            | - Remote Indicating Lamp                  | 5     | Titik | Rp | 75000        | Rp | 375.000,00    | 0,0014% |
|              | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    |       |       |    |              |    |               |         |
|              |                                           |       |       |    |              |    |               |         |
| <b>XII I</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>   |       |       |    |              |    |               |         |
| 1            | BSP Sch.40 c/w fitting2 & Material bantu  |       |       |    |              |    |               |         |
|              | dia. 3 "                                  | 81,83 | ml    | Rp | 346.300,00   | Rp | 28.337.729,00 | 0,1027% |
| 2            | Hydrant Box Indoor, tipe B c/w            | 2     | Unit  | Rp | 7.963.200,00 | Rp | 15.926.400,00 | 0,0577% |
|              | -hydrant valve dia. 11/2"                 |       |       |    |              |    |               |         |
|              | -fire hose 11/2"x30 m                     |       |       |    |              |    |               |         |
|              | -hose rack dia. 11/2"                     |       |       |    |              |    |               |         |
|              | -Spray nozzle dia. 11/2"                  |       |       |    |              |    |               |         |
|              | -kaca dan kunci                           |       |       |    |              |    |               |         |
| 3            | Gate valve dia. 21/2" , OS&Y type         | 1     | bh    | Rp | 3410000      | Rp | 3.410.000,00  | 0,0124% |
| 4            | - Fire Extinguisher 6 kg                  | 2     | Unit  | Rp | 461000       | Rp | 922.000,00    | 0,0033% |
|              |                                           |       |       |    |              |    |               |         |
| <b>B</b>     | <b>Instalasi Sprinkler</b>                |       |       |    |              |    |               |         |

|                  |                                             |        |      |    |              |    |               |         |
|------------------|---------------------------------------------|--------|------|----|--------------|----|---------------|---------|
| 1                | BSP Sch.40 c/w fitting2 & Material bantu    |        |      |    |              |    |               |         |
|                  | dia. 1 "                                    | 164    | m'   | Rp | 81.000,00    | Rp | 13.284.000,00 | 0,0481% |
|                  | dia. 1 1/4 "                                | 79     | m'   | Rp | 105.600,00   | Rp | 8.342.400,00  | 0,0302% |
|                  | dia. 2 "                                    | 8,5    | m'   | Rp | 159.800,00   | Rp | 1.358.300,00  | 0,0049% |
|                  | dia. 2 1/2 "                                | 8      | m'   | Rp | 270.700,00   | Rp | 2.165.600,00  | 0,0078% |
|                  | dia. 3 "                                    | 63,5   | m'   | Rp | 346.300,00   | Rp | 21.990.050,00 | 0,0797% |
| 2                | Sprinkler head dia. 1/2", 68'C, pendent     | 69     | bh   | Rp | 52500        | Rp | 3.622.500,00  | 0,0131% |
| 3                | Branch Control Valve dia. 3"                | 1      | Unit | Rp | 6540000      | Rp | 6.540.000,00  | 0,0237% |
|                  |                                             |        |      |    |              |    |               |         |
| <b>XII<br/>I</b> | <b>Pekerjaan Sanitair &amp; Sanitasi</b>    |        |      |    |              |    |               |         |
| 1                | Pasang Klosed Duduk                         | 10     | bh   | Rp | 2.193.500,00 | Rp | 21.935.000,00 | 0,0795% |
| 2                | Pasang Wastafel single                      | 4      | bh   | Rp | 863.600,00   | Rp | 3.454.400,00  | 0,0125% |
| 3                | Pasang Jet washer                           | 10     | bh   | Rp | 195000       | Rp | 1.950.000,00  | 0,0071% |
| 4                | Pasang Kran Diameter Air 1/2 "              | 35     | bh   | Rp | 62.600,00    | Rp | 2.191.000,00  | 0,0079% |
| 5                | Pasang Floor Drain                          | 10     | bh   | Rp | 94.100,00    | Rp | 941.000,00    | 0,0034% |
|                  |                                             |        |      |    |              |    |               |         |
| <b>A</b>         | <b>Instalasi Air Bersih</b>                 |        |      |    |              |    |               |         |
| 1                | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 190,49 | m'   | Rp | 26.000,00    | Rp | 4.952.740,00  | 0,0179% |
|                  |                                             |        |      |    |              |    |               |         |

| B  | Instalasi Air Kotor                                                |       |        |    |            |    |               |         |
|----|--------------------------------------------------------------------|-------|--------|----|------------|----|---------------|---------|
| 1  | Pasang Cleant Out 3"                                               | 2     | Unit   | Rp | 108.100,00 | Rp | 216.200,00    | 0,0008% |
| 2  | Pasang Pipa air kotor Ø 3 "                                        | 16,52 | m'     | Rp | 126.000,00 | Rp | 2.081.520,00  | 0,0075% |
| 3  | Pasang Pipa air kotor Ø 4 "                                        | 35,42 | m'     | Rp | 167.900,00 | Rp | 5.947.018,00  | 0,0215% |
|    |                                                                    |       |        |    |            |    |               |         |
| XI | Pekerjaan Listrik                                                  |       |        |    |            |    |               |         |
| 1  | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08 | batang | Rp | 421800     | Rp | 19.858.344,00 | 0,0719% |
| 2  | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08 | batang | Rp | 361000     | Rp | 16.995.880,00 | 0,0616% |
| 3  | Pasang Instalasi Titik Lampu                                       | 151   | Titik  | Rp | 215.200,00 | Rp | 32.495.200,00 | 0,1177% |
| 4  | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 3     | Titik  | Rp | 1095000    | Rp | 3.285.000,00  | 0,0119% |
| 5  | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 14    | Titik  | Rp | 185600     | Rp | 2.598.400,00  | 0,0094% |
| 6  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 2     | Titik  | Rp | 484000     | Rp | 968.000,00    | 0,0035% |
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 2     | Titik  | Rp | 1765000    | Rp | 3.530.000,00  | 0,0128% |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1     | Titik  | Rp | 534500     | Rp | 534.500,00    | 0,0019% |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 137   | Titik  | Rp | 698600     | Rp | 95.708.200,00 | 0,3467% |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 3     | Titik  | Rp | 1917500    | Rp | 5.752.500,00  | 0,0208% |
| 11 | Pasang Saklar Tunggal                                              | 34    | Titik  | Rp | 51.500,00  | Rp | 1.751.000,00  | 0,0063% |
| 12 | Pasang Saklar Ganda                                                | 18    | Titik  | Rp | 85.300,00  | Rp | 1.535.400,00  | 0,0056% |

|    |                               |    |       |    |            |    |                 |         |
|----|-------------------------------|----|-------|----|------------|----|-----------------|---------|
| 13 | Instalasi stop kontak         | 19 | Titik | Rp | 18.431,00  | Rp | 350.189,00      | 0,0013% |
| 14 | Instalasi stop kontak 3 phase | 49 | Titik | Rp | 48.561,00  | Rp | 2.379.489,00    | 0,0086% |
| 15 | Pasang Stop Kontak 1 Phase    | 19 | Titik | Rp | 107.000,00 | Rp | 2.033.000,00    | 0,0074% |
| 16 | Pasang Stop Kontak 3 Phase    | 49 | Titik | Rp | 455.661,00 | Rp | 22.327.389,00   | 0,0809% |
|    |                               |    |       |    |            |    |                 |         |
|    |                               |    |       |    |            |    | 5.983.227.258,0 | 21,6756 |
|    |                               |    |       |    |            |    | 0               | %       |

## Lantai 5

| No.       | Uraian Pekerjaan                           | Volume |    | Harga Satuan |              | Jumlah Harga |                  | Bobot Pekerjaan |
|-----------|--------------------------------------------|--------|----|--------------|--------------|--------------|------------------|-----------------|
| <b>I</b>  | <b>Pekerjaan Pasangan</b>                  |        |    |              |              |              |                  |                 |
| 1         | Mengurug pasir bawah lantai setebal 5 cm   | 94,8   | m3 | Rp           | 136.400,00   | Rp           | 12.930.720,00    | 0,0468%         |
| 2         | Pasangan tembok 1/2 bt, spesi 1 Pc : 6 Psr | 862,75 | m2 | Rp           | 184.400,00   | Rp           | 159.091.100,00   | 0,5763%         |
|           |                                            |        |    |              |              |              |                  |                 |
| <b>II</b> | <b>Pekerjaan Beton</b>                     |        |    |              |              |              |                  |                 |
| 1         | Pembuatan Plat Lantai                      | 192,48 | m3 | Rp           | 7.173.900,00 | Rp           | 1.380.832.272,00 | 5,0024%         |
| 2         | Kolom Praktis uk. 11 x 11 cm               | 176    | m1 | Rp           | 86.700,00    | Rp           | 15.259.200,00    | 0,0553%         |
| 3         | Kolom uk. 30 x 30 cm ( K 2 )               | 0,72   | m3 | Rp           | 6.989.900,00 | Rp           | 5.032.728,00     | 0,0182%         |
| 4         | Kolom uk. 40 x 40 cm ( K 3 )               | 6,4    | m3 | Rp           | 5.298.400,00 | Rp           | 33.909.760,00    | 0,1228%         |

|    |                                   |       |    |    |              |    |                |         |
|----|-----------------------------------|-------|----|----|--------------|----|----------------|---------|
| 5  | Kolom uk. 50 x 50 cm ( K 4 )      | 20    | m3 | Rp | 7.154.200,00 | Rp | 143.084.000,00 | 0,5184% |
| 6  | Balok Latai uk.11 x 20 cm         | 4,4   | m3 | Rp | 6.526.300,00 | Rp | 28.715.720,00  | 0,1040% |
| 7  | Balok Type B.1<br>cm uk. 30 x 80  | 13,44 | m3 | Rp | 5.429.300,00 | Rp | 72.969.792,00  | 0,2643% |
| 8  | Balok Type B.2<br>cm uk. 40 x 80  | 48,64 | m3 | Rp | 5.865.900,00 | Rp | 285.317.376,00 | 1,0336% |
| 9  | Balok Type B.3<br>cm uk. 30 x 70  | 63,6  | m3 | Rp | 4.972.500,00 | Rp | 316.251.000,00 | 1,1457% |
| 10 | Balok Type B.4<br>cm uk. 30 x 50  | 23,76 | m3 | Rp | 6.254.600,00 | Rp | 148.609.296,00 | 0,5384% |
| 11 | Balok Type B.5<br>cm uk. 30 x 50  | 15,21 | m3 | Rp | 5.527.300,00 | Rp | 84.070.233,00  | 0,3046% |
| 12 | Balok Type B.6<br>cm uk. 30 x 60  | 31,62 | m3 | Rp | 5.358.400,00 | Rp | 169.432.608,00 | 0,6138% |
| 13 | Balok Type B.7<br>cm uk. 40 x 80  | 17,82 | m3 | Rp | 6.183.200,00 | Rp | 110.184.624,00 | 0,3992% |
| 14 | Balok Type B.8<br>cm uk. 30 x 80  | 5,16  | m3 | Rp | 5.429.300,00 | Rp | 28.015.188,00  | 0,1015% |
| 15 | Balok Type B.9<br>cm uk. 40 x 80  | 3,12  | m3 | Rp | 5.503.200,00 | Rp | 17.169.984,00  | 0,0622% |
| 16 | Balok Type B.10<br>cm uk. 30 x 60 | 5,46  | m3 | Rp | 5.086.800,00 | Rp | 27.773.928,00  | 0,1006% |
| 17 | Balok Type B.11<br>cm uk. 30 x 60 | 3,6   | M3 | Rp | 5.221.100,00 | Rp | 18.795.960,00  | 0,0681% |
| 18 | Balok Type B.12<br>cm uk. 30 x 50 | 2,1   | M3 | Rp | 5.907.400,00 | Rp | 12.405.540,00  | 0,0449% |
| 19 | Balok Type B.13<br>cm uk. 30 x 60 | 4,86  | M3 | Rp | 4.964.300,00 | Rp | 24.126.498,00  | 0,0874% |
| 20 | Balok Type B.14<br>cm uk. 20 x 40 | 0,56  | M3 | Rp | 6.127.300,00 | Rp | 3.431.288,00   | 0,0124% |

|            |                                                              |              |    |    |              |    |               |         |
|------------|--------------------------------------------------------------|--------------|----|----|--------------|----|---------------|---------|
| 21         | Balok Type B.15<br>cm uk. 20 x 30                            | 0,96         | M3 | Rp | 5.753.500,00 | Rp | 5.523.360,00  | 0,0200% |
| 22         | Balok Type B.20<br>cm uk. 30 x 60                            | 5,76         | M3 | Rp | 5.871.300,00 | Rp | 33.818.688,00 | 0,1225% |
| 23         | Balok Type B.27<br>cm uk. 30 x 50                            | 6            | M3 | Rp | 4.548.200,00 | Rp | 27.289.200,00 | 0,0989% |
| 24         | Balok Tangga Utama dan Tangga Darurat<br>uk. 20 x 40 cm      | 7,2          | m3 | Rp | 6.335.400,00 | Rp | 45.614.880,00 | 0,1652% |
| 25         | Balok uk.15 x 30 cm untuk Dinding Box<br>Lift A              | 0,86         | m3 | Rp | 7.172.500,00 | Rp | 6.168.350,00  | 0,0223% |
| 26         | Balok uk.15 x 30 cm untuk Dinding Box<br>Lift BARANG         | 0,54         | m3 | Rp | 7.172.500,00 | Rp | 3.873.150,00  | 0,0140% |
| 27         | Plat Meja beton tebal 10 cm                                  | 7,08         | m3 | Rp | 5.498.600,00 | Rp | 38.930.088,00 | 0,1410% |
| 28         | Anak Tangga Utama dan Tangga Darurat (Trap)<br>uk.20 x 30 cm | 3,33         | m3 | Rp | 5.498.600,00 | Rp | 18.310.338,00 | 0,0663% |
| 29         | Plat Tangga Utama dan Darurat Tebal 15<br>cm                 | 7,15         | m3 | Rp | 5.498.600,00 | Rp | 39.314.990,00 | 0,1424% |
| 30         | Plat Bordes Tangga Utama dan Tangga<br>Darurat Tebal 25 cm   | 7,05         | m3 | Rp | 5.498.600,00 | Rp | 38.765.130,00 | 0,1404% |
|            |                                                              |              |    |    |              |    |               |         |
| <b>III</b> | <b>Pekerjaan Plesteran dan Benangan</b>                      |              |    |    |              |    |               |         |
| 1          | Pekerjaan plesteran interior spesi 1 Pc : 6<br>Psr           | 1.393,<br>36 | m2 | Rp | 46.400,00    | Rp | 64.651.904,00 | 0,2342% |
| 2          | Pekerjaan plesteran eksterior spesi 1 Pc : 6<br>Psr          | 554,86       | m2 | Rp | 46.400,00    | Rp | 25.745.504,00 | 0,0933% |
| 3          | Pekerjaan acian interior                                     | 1.393,<br>36 | m2 | Rp | 29.000,00    | Rp | 40.407.440,00 | 0,1464% |
| 4          | Pekerjaan acian eksterior                                    | 554,86       | m2 | Rp | 29.000,00    | Rp | 16.090.940,00 | 0,0583% |
| 5          | Pekerjaan benangan interior spesi 1 Pc : 2<br>Psr            | 1.131,<br>19 | m1 | Rp | 16.900,00    | Rp | 19.117.111,00 | 0,0693% |



|    |                                                                                   |              |      |    |              |    |                |         |
|----|-----------------------------------------------------------------------------------|--------------|------|----|--------------|----|----------------|---------|
| 6  | Pekerjaan benangan eksterior spesi 1 Pc :<br>2 Psr                                | 805,34       | m1   | Rp | 16.900,00    | Rp | 13.610.246,00  | 0,0493% |
|    |                                                                                   |              |      |    |              |    |                |         |
| IV | Pekerjaan Lantai                                                                  |              |      |    |              |    |                |         |
| 1  | Pasang Keramik Lantai 60 x 60                                                     | 1.297,<br>23 | m2   | Rp | 296.300,00   | Rp | 384.369.249,00 | 1,3925% |
| 2  | Pasang Keramik Lantai 30 x 30                                                     | 134,58       | m2   | Rp | 203.300,00   | Rp | 27.360.114,00  | 0,0991% |
| 3  | Pasang Keramik Hard Rock 30 x 30<br>Lantai KM/WC                                  | 23,13        | m2   | Rp | 203.300,00   | Rp | 4.702.329,00   | 0,0170% |
| 4  | Pasang Keramik Dinding 30 x 60<br>(KM/WC)                                         | 76           | m2   | Rp | 267.000,00   | Rp | 20.292.000,00  | 0,0735% |
| 5  | Pasang Batu Alam                                                                  | 23,33        | m2   | Rp | 102.200,00   | Rp | 2.384.326,00   | 0,0086% |
|    |                                                                                   |              |      |    |              |    |                |         |
| V  | Pekerjaan Pintu dan Jendela Aluminium<br>dan Partisi                              |              |      |    |              |    |                |         |
| A. | Pekerjaan Pintu dan Jendela<br>Aluminium,Partisi,Railling tangga dan<br>Sunscreen |              |      |    |              |    |                |         |
| 1  | Pas. Kusen Type J2                                                                | 28           | Unit | Rp | 1.851.600,00 | Rp | 51.844.800,00  | 0,1878% |
| 2  | Pas. Kusen Type J3                                                                | 2            | Unit | Rp | 2.025.000,00 | Rp | 4.050.000,00   | 0,0147% |
| 3  | Pas. Kusen Type J4                                                                | 10           | Unit | Rp | 304.100,00   | Rp | 3.041.000,00   | 0,0110% |
| 4  | Pas. Kusen Type J12                                                               | 12           | Unit | Rp | 3.197.500,00 | Rp | 38.370.000,00  | 0,1390% |
| 5  | Pas. Kusen Type P2                                                                | 13           | Unit | Rp | 1.046.400,00 | Rp | 13.603.200,00  | 0,0493% |
| 6  | Pas. Kusen Type P3                                                                | 3            | Unit | Rp | 1.704.000,00 | Rp | 5.112.000,00   | 0,0185% |

|             |                                                     |          |      |    |              |    |                |         |
|-------------|-----------------------------------------------------|----------|------|----|--------------|----|----------------|---------|
| 7           | Pas. Kusen Type P4                                  | 10       | Unit | Rp | 1.570.500,00 | Rp | 15.705.000,00  | 0,0569% |
| 8           | Pas. Kusen Type P5                                  | 5        | Unit | Rp | 5.199.300,00 | Rp | 25.996.500,00  | 0,0942% |
| 9           | Pasang pintu darurat anti api                       | 2        | Unit | Rp | 4000000      | Rp | 8.000.000,00   | 0,0290% |
|             |                                                     |          |      |    |              |    |                |         |
| <b>B</b>    | <b>Pekerjaan Partisi</b>                            |          |      |    |              |    |                |         |
| 1           | Memasang 1m2 unit Partisi Type I                    | 132,81   | m2   | Rp | 985.700,00   | Rp | 130.910.817,00 | 0,4743% |
| 2           | Memasang 1 unit Pintu Type II untuk partisi         | 7        | unit | Rp | 2.984.200,00 | Rp | 20.889.400,00  | 0,0757% |
| 3           | Memasang 1 jendela Pintu Type I untuk partisi       | 32       | unit | Rp | 1.267.000,00 | Rp | 40.544.000,00  | 0,1469% |
|             |                                                     |          |      |    |              |    |                |         |
| <b>C.</b>   | <b>Pekerjaan Railling Tangga</b>                    |          |      |    |              |    |                |         |
| 1           | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76    | m2   | Rp | 1.610.800,00 | Rp | 22.164.608,00  | 0,0803% |
| 2           | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48    | m2   | Rp | 1.610.800,00 | Rp | 20.102.784,00  | 0,0728% |
|             |                                                     |          |      |    |              |    |                |         |
| <b>D.</b>   | <b>Curtin Wall</b>                                  |          |      |    |              |    |                |         |
| 1           | Curtain Wall ( CW2 )                                | 1        | m2   | Rp | 9.771.200,00 | Rp | 9.771.200,00   | 0,0354% |
|             |                                                     |          |      |    |              |    |                |         |
| <b>VII</b>  | <b>Pekerjaan Langit-langit</b>                      |          |      |    |              |    |                |         |
| 1           | Pasang Plafond Acoustic Rangka Cross Tee Main Tee   | 1.139,96 | m2   | Rp | 239.300,00   | Rp | 272.792.428,00 | 0,9883% |
|             |                                                     |          |      |    |              |    |                |         |
| <b>VIII</b> | <b>Pekerjaan Pengecatan</b>                         |          |      |    |              |    |                |         |

|     |                                                              |          |       |    |              |    |               |         |
|-----|--------------------------------------------------------------|----------|-------|----|--------------|----|---------------|---------|
| 1   | Pengecatan dinding interior                                  | 1.393,36 | m2    | Rp | 23.300,00    | Rp | 32.465.288,00 | 0,1176% |
| 2   | Pengecatan dinding eksterior                                 | 554,86   | m2    | Rp | 52.200,00    | Rp | 28.963.692,00 | 0,1049% |
| 3   | Pengecatan plafon                                            | 1.271,00 | m2    | Rp | 23.300,00    | Rp | 29.614.300,00 | 0,1073% |
|     |                                                              |          |       |    |              |    |               |         |
| X   | <b>Pekerjaan Tata Udara</b>                                  |          |       |    |              |    |               |         |
| 1   | Unit AC Cassete 5PK                                          | 9        | Unit  | Rp | 3717129      | Rp | 33.454.161,00 | 0,1212% |
| 2   | Unit AC Cassete 4PK                                          | 4        | Unit  | Rp | 3261729      | Rp | 13.046.916,00 | 0,0473% |
|     |                                                              |          |       |    |              |    |               |         |
| XI  | <b>Pekerjaan CCTV</b>                                        |          |       |    |              |    |               |         |
| 1   | Kamera CCTV HD                                               | 4        | Unit  | Rp | 1.037.970,00 | Rp | 4.151.880,00  | 0,0150% |
| 2   | Instalasi kamera CCTV                                        | 4        | Titik | Rp | 155891,25    | Rp | 623.565,00    | 0,0023% |
|     |                                                              |          |       |    |              |    |               |         |
| XII | <b>Pekerjaan Sound System</b>                                |          |       |    |              |    |               |         |
| 1   | Celling speaker 6 W                                          | 9        | Titik | Rp | 185000       | Rp | 1.665.000,00  | 0,0060% |
| 2   | Volume control                                               | 1        | Titik | Rp | 145000       | Rp | 145.000,00    | 0,0005% |
| 3   | Instalasi Celling speaker                                    | 11       | Unit  | Rp | 275000       | Rp | 3.025.000,00  | 0,0110% |
| 4   | Terminal Box                                                 | 1        | Unit  | Rp | 325000       | Rp | 325.000,00    | 0,0012% |
| 5   | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5        | m'    | Rp | 18.431,00    | Rp | 92.155,00     | 0,0003% |
| 6   | Material bantu dan testing commissioning                     | 1        | ls    | Rp | 1.500.000,00 | Rp | 1.500.000,00  | 0,0054% |

| <b>XIII</b>     | <b>Pekerjaan Fire Alarm</b>               |    |       |    |            |    |               |         |
|-----------------|-------------------------------------------|----|-------|----|------------|----|---------------|---------|
| <b>A</b>        | <b>INSTALASI LANTAI 5</b>                 |    |       |    |            |    |               |         |
|                 | Peralatan Fixture                         |    |       |    |            |    |               |         |
| 1               | - Conv. Optical Smoke Detector            | 51 | pcs   | Rp | 470.381,00 | Rp | 23.989.431,00 | 0,0869% |
| 2               | - Conv. Manual Break glass                | 2  | pcs   | Rp | 126000     | Rp | 252.000,00    | 0,0009% |
| 3               | - Junction Box Fire Alarm                 | 1  | pcs   | Rp | 450000     | Rp | 450.000,00    | 0,0016% |
| 4               | - Remote Indicating Lamp                  | 4  | pcs   | Rp | 102.036,00 | Rp | 408.144,00    | 0,0015% |
| 5               | - Alarm Bell                              | 2  | Unit  | Rp | 205000     | Rp | 410.000,00    | 0,0015% |
| 6               | - Terminal Box 30 x 40 x 12               | 1  | Unit  | Rp | 757000     | Rp | 757.000,00    | 0,0027% |
|                 |                                           |    |       |    |            |    |               |         |
| <b>B</b>        | <b>Pekerjaan Instalasi</b>                |    |       |    |            |    |               |         |
| 1               | -Detector dan manual break glass          | 54 | Titik | Rp | 470.381,00 | Rp | 25.400.574,00 | 0,0920% |
|                 | NYA Cable 2x1,5mm + Pipa Conduit 20mm     |    |       |    |            |    |               |         |
| 2               | - Junction Box Fire Alarm                 | 1  | Titik | Rp | 470.381,00 | Rp | 470.381,00    | 0,0017% |
|                 | NYA cable 2 x 1,5 mm + pipa conduit 20 mm |    |       |    |            |    |               |         |
| 3               | - Remote Indicating Lamp                  | 5  | Titik | Rp | 75000      | Rp | 375.000,00    | 0,0014% |
|                 | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    |    |       |    |            |    |               |         |
|                 |                                           |    |       |    |            |    |               |         |
| <b>XI<br/>V</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>   |    |       |    |            |    |               |         |

|          |                                          |       |      |    |              |    |               |         |
|----------|------------------------------------------|-------|------|----|--------------|----|---------------|---------|
| 1        | BSP Sch.40 c/w fitting2 & Material bantu |       |      |    |              |    |               |         |
|          | dia. 3 "                                 | 81,83 | m'   | Rp | 346.300,00   | Rp | 28.337.729,00 | 0,1027% |
| 2        | Hydrant Box Indoor, type B c/w           | 2     | unit | Rp | 7.963.200,00 | Rp | 15.926.400,00 | 0,0577% |
|          | -hydrant valve dia. 11/2"                |       |      |    |              |    |               |         |
|          | -fire hose 11/2"x30 m                    |       |      |    |              |    |               |         |
|          | -hose rack dia. 11/2"                    |       |      |    |              |    |               |         |
|          | -Spray nozzle dia. 11/2"                 |       |      |    |              |    |               |         |
|          | -kaca dan kunci                          |       |      |    |              |    |               |         |
| 3        | Gate valve dia. 21/2" , OS&Y type        | 1     | bh   | Rp | 3410000      | Rp | 3.410.000,00  | 0,0124% |
| 4        | Fire Extinguisher 6 kg                   | 2     | Unit | Rp | 461000       | Rp | 922.000,00    | 0,0033% |
|          |                                          |       |      |    |              |    |               |         |
| <b>B</b> | <b>Instalasi Sprinkler</b>               |       |      |    |              |    |               |         |
| 1        | BSP Sch.40 c/w fitting2 & Material bantu |       |      |    |              |    |               |         |
|          | dia. 1 "                                 | 164   | m'   | Rp | 81.000,00    | Rp | 13.284.000,00 | 0,0481% |
|          | dia. 1 1/4 "                             | 79    | m'   | Rp | 105.600,00   | Rp | 8.342.400,00  | 0,0302% |
|          | dia. 2 "                                 | 8,5   | m'   | Rp | 159.800,00   | Rp | 1.358.300,00  | 0,0049% |
|          | dia. 2 1/2 "                             | 8     | m'   | Rp | 270.700,00   | Rp | 2.165.600,00  | 0,0078% |
|          | dia. 3 "                                 | 63,5  | m'   | Rp | 346.300,00   | Rp | 21.990.050,00 | 0,0797% |
| 2        | Sprinkler head dia. 1/2", 68°C, pendent  | 69    | bh   | Rp | 52500        | Rp | 3.622.500,00  | 0,0131% |
| 3        | Branch Control Valve dia. 3"             | 1     | Unit | Rp | 6540000      | Rp | 6.540.000,00  | 0,0237% |
|          |                                          |       |      |    |              |    |               |         |

| IX Pekerjaan Sanitair & Sanitasi |                                                                    |       |         |    |              |    |               |         |
|----------------------------------|--------------------------------------------------------------------|-------|---------|----|--------------|----|---------------|---------|
| 1                                | Pasang Klosed Duduk                                                | 10    | Bh      | Rp | 2.193.500,00 | Rp | 21.935.000,00 | 0,0795% |
| 2                                | Pasang Wastafel single                                             | 4     | Bh      | Rp | 863.600,00   | Rp | 3.454.400,00  | 0,0125% |
| 3                                | Pasang Jet washer                                                  | 10    | Bh      | Rp | 195000       | Rp | 1.950.000,00  | 0,0071% |
| 4                                | Pasang Kran Diameter Air 1/2 "                                     | 14    | Bh      | Rp | 62.600,00    | Rp | 876.400,00    | 0,0032% |
| 5                                | Pasang Floor Drain                                                 | 10    | Bh      | Rp | 94.100,00    | Rp | 941.000,00    | 0,0034% |
|                                  |                                                                    |       |         |    |              |    |               |         |
| A Instalasi Air Bersih           |                                                                    |       |         |    |              |    |               |         |
| 1                                | Pasang Pipa Air Bersih PVC AW Diameter 3/4"                        | 40,14 | m'      | Rp | 26.000,00    | Rp | 1.043.640,00  | 0,0038% |
|                                  |                                                                    |       |         |    |              |    |               |         |
| B Instalasi Air Kotor            |                                                                    |       |         |    |              |    |               |         |
| 1                                | Pasang Clean Out                                                   | 2     | Unit    | Rp | 108.100,00   | Rp | 216.200,00    | 0,0008% |
| 2                                | Pasang Pipa air kotor Ø 3 "                                        | 16,52 | m'      | Rp | 126.000,00   | Rp | 2.081.520,00  | 0,0075% |
| 3                                | Pasang Pipa air kotor Ø 4 "                                        | 35,42 | m'      | Rp | 167.900,00   | Rp | 5.947.018,00  | 0,0215% |
|                                  |                                                                    |       |         |    |              |    |               |         |
| X Pekerjaan Listrik              |                                                                    |       |         |    |              |    |               |         |
| 1                                | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08 | bata ng | Rp | 421800       | Rp | 19.858.344,00 | 0,0719% |
| 2                                | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08 | bata ng | Rp | 361000       | Rp | 16.995.880,00 | 0,0616% |
| 3                                | Pasang Instalasi Titik Lampu                                       | 164   | Titik   | Rp | 215.200,00   | Rp | 35.292.800,00 | 0,1279% |



|    |                                                     |     |       |    |            |    |                  |           |
|----|-----------------------------------------------------|-----|-------|----|------------|----|------------------|-----------|
| 4  | LAMPU EXIT LED AL IMK HUGO (Komplit)                | 3   | Titik | Rp | 1095000    | Rp | 3.285.000,00     | 0,0119%   |
| 5  | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w     | 14  | Titik | Rp | 185600     | Rp | 2.598.400,00     | 0,0094%   |
| 6  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W        | 2   | Titik | Rp | 484000     | Rp | 968.000,00       | 0,0035%   |
| 7  | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT | 2   | Titik | Rp | 1765000    | Rp | 3.530.000,00     | 0,0128%   |
| 8  | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY     | 1   | Titik | Rp | 534500     | Rp | 534.500,00       | 0,0019%   |
| 9  | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY              | 131 | Titik | Rp | 698600     | Rp | 91.516.600,00    | 0,3315%   |
| 10 | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt         | 3   | Titik | Rp | 1917500    | Rp | 5.752.500,00     | 0,0208%   |
| 11 | Pasang Saklar Tunggal                               | 24  | Titik | Rp | 51.500,00  | Rp | 1.236.000,00     | 0,0045%   |
| 12 | Instalasi stop kontak                               | 23  | Titik | Rp | 18.431,00  | Rp | 423.913,00       | 0,0015%   |
| 13 | Pasang Stop Kontak 1 Phase                          | 23  | Titik | Rp | 107.000,00 | Rp | 2.461.000,00     | 0,0089%   |
|    |                                                     |     |       |    |            |    |                  |           |
|    |                                                     |     |       |    |            |    | 5.187.027.470,00 | 18,7911 % |

## Lantai 6

| No                 | Uraian Pekerjaan                                  | Volume   |    |    |            |    |                |         |
|--------------------|---------------------------------------------------|----------|----|----|------------|----|----------------|---------|
| Pekerjaan Pasangan |                                                   |          |    |    |            |    |                |         |
| 1                  | Mengurug pasir bawah lantai setebal 5 cm          | 90,3     | m3 | Rp | 136.400,00 | Rp | 12.316.920,00  | 0,0446% |
| 2                  | Pasangan dinding 1/2 batu bata spesi 1 Pc : 6 Psr | 1.010,63 | m3 | Rp | 184.400,00 | Rp | 186.360.172,00 | 0,6751% |

| II           | Pekerjaan Beton               |            |    |    |              |    |                  |         |
|--------------|-------------------------------|------------|----|----|--------------|----|------------------|---------|
| 1            | Pembuatan Plat Lantai         | 192,4<br>8 | m3 | Rp | 7.173.900,00 | Rp | 1.380.832.272,00 | 5,0024% |
| 2            | Kolom Praktis uk. 11 x 11 cm  | 200        | m1 | Rp | 86.700,00    | Rp | 17.340.000,00    | 0,0628% |
| 3            | Kolom uk. 30 x 30 cm ( K 2 )  | 0,72       | m3 | Rp | 6.989.900,00 | Rp | 5.032.728,00     | 0,0182% |
| 4            | Kolom uk. 40 x 40 cm ( K 3 )  | 6,4        | m3 | Rp | 5.298.400,00 | Rp | 33.909.760,00    | 0,1228% |
| 5            | Kolom uk. 50 x 50 cm ( K 4 )  | 32         | m3 | Rp | 7.154.200,00 | Rp | 228.934.400,00   | 0,8294% |
| 6            | Balok Lantai uk.11 x 20 cm    | 4,25       | m3 | Rp | 6.526.300,00 | Rp | 27.736.775,00    | 0,1005% |
| BALOK LANTAI |                               |            |    |    |              |    |                  |         |
| 7            | Balok Type B.1 uk. 30 x 80 cm | 13,44      | m3 | Rp | 5.429.300,00 | Rp | 72.969.792,00    | 0,2643% |
| 8            | Balok Type B.2 uk. 40 x 80 cm | 48,64      | m3 | Rp | 5.865.900,00 | Rp | 285.317.376,00   | 1,0336% |
| 9            | Balok Type B.3 uk. 30 x 70 cm | 63,6       | m3 | Rp | 4.972.500,00 | Rp | 316.251.000,00   | 1,1457% |
| 10           | Balok Type B.4 uk. 30 x 50 cm | 23,76      | m3 | Rp | 6.254.600,00 | Rp | 148.609.296,00   | 0,5384% |
| 11           | Balok Type B.5 uk. 30 x 50 cm | 15,21      | m3 | Rp | 5.527.300,00 | Rp | 84.070.233,00    | 0,3046% |
| 12           | Balok Type B.6 uk. 30 x 60 cm | 31,62      | m3 | Rp | 5.358.400,00 | Rp | 169.432.608,00   | 0,6138% |
| 13           | Balok Type B.7 uk. 40 x 80 cm | 17,82      | m3 | Rp | 6.183.200,00 | Rp | 110.184.624,00   | 0,3992% |
| 14           | Balok Type B.8 uk. 30 x 80 cm | 5,16       | m3 | Rp | 5.429.300,00 | Rp | 28.015.188,00    | 0,1015% |
| 15           | Balok Type B.9 uk. 40 x 80 cm | 3,12       | m3 | Rp | 5.503.200,00 | Rp | 17.169.984,00    | 0,0622% |

|                   |                 |                |       |    |    |              |    |                |         |
|-------------------|-----------------|----------------|-------|----|----|--------------|----|----------------|---------|
| 16                | Balok Type B.10 | uk. 30 x 60 cm | 5,46  | m3 | Rp | 5.086.800,00 | Rp | 27.773.928,00  | 0,1006% |
| 17                | Balok Type B.11 | uk. 30 x 60 cm | 3,6   | m3 | Rp | 5.221.100,00 | Rp | 18.795.960,00  | 0,0681% |
| 18                | Balok Type B.12 | uk. 30 x 50 cm | 2,1   | m3 | Rp | 5.907.400,00 | Rp | 12.405.540,00  | 0,0449% |
| 19                | Balok Type B.13 | uk. 30 x 60 cm | 4,86  | m3 | Rp | 4.964.300,00 | Rp | 24.126.498,00  | 0,0874% |
| 20                | Balok Type B.14 | uk. 20 x 40 cm | 0,56  | m3 | Rp | 6.127.300,00 | Rp | 3.431.288,00   | 0,0124% |
| 21                | Balok Type B.15 | uk. 20 x 30 cm | 0,96  | m3 | Rp | 5.753.500,00 | Rp | 5.523.360,00   | 0,0200% |
| 22                | Balok Type B.20 | uk. 30 x 60 cm | 5,76  | m3 | Rp | 5.871.300,00 | Rp | 33.818.688,00  | 0,1225% |
| 23                | Balok Type B.27 | uk. 30 x 50 cm | 6     | m3 | Rp | 4.548.200,00 | Rp | 27.289.200,00  | 0,0989% |
| <b>BALOK ATAP</b> |                 |                |       |    |    |              |    |                |         |
| 25                | Balok Type B.14 | uk. 20 x 40 cm | 2,24  | m3 | Rp | 6.127.300,00 | Rp | 13.725.152,00  | 0,0497% |
| 26                | Balok Type B.15 | uk. 20 x 30 cm | 0,36  | m3 | Rp | 5.753.500,00 | Rp | 2.071.260,00   | 0,0075% |
| 27                | Balok Type B.16 | uk. 30 x 70 cm | 40,8  | m3 | Rp | 5.681.500,00 | Rp | 231.805.200,00 | 0,8398% |
| 28                | Balok Type B.17 | uk. 30 x 60 cm | 59,85 | m3 | Rp | 6.059.400,00 | Rp | 362.655.090,00 | 1,3138% |
| 29                | Balok Type B.18 | uk. 30 x 50 cm | 9,45  | m3 | Rp | 4.990.600,00 | Rp | 47.161.170,00  | 0,1709% |
| 30                | Balok Type B.19 | uk. 40 x 70 cm | 53,76 | m3 | Rp | 6.074.300,00 | Rp | 326.554.368,00 | 1,1830% |
| 31                | Balok Type B.20 | uk. 30 x 60 cm | 4,32  | m3 | Rp | 5.871.300,00 | Rp | 25.364.016,00  | 0,0919% |
| 32                | Balok Type B.21 | uk. 30 x 60 cm | 21,24 | m3 | Rp | 4.144.600,00 | Rp | 88.031.304,00  | 0,3189% |

|            |                                                                |                |              |    |    |              |    |                |         |
|------------|----------------------------------------------------------------|----------------|--------------|----|----|--------------|----|----------------|---------|
| 33         | Balok Type B.22                                                | uk. 30 x 50 cm | 1,8          | m3 | Rp | 4.753.300,00 | Rp | 8.555.940,00   | 0,0310% |
| 34         | Balok Type B.26                                                | uk. 40 x 70 cm | 4,48         | m3 | Rp | 5.190.300,00 | Rp | 23.252.544,00  | 0,0842% |
| 35         | Balok Type B.29                                                | uk. 30 x 70 cm | 2,94         | m3 | Rp | 4.604.300,00 | Rp | 13.536.642,00  | 0,0490% |
| 36         | Balok Type B.30                                                | uk. 30 x 80 cm | 1,8          | m3 | Rp | 4.356.000,00 | Rp | 7.840.800,00   | 0,0284% |
| 37         | Balok Type B.31                                                | uk. 30 x 60 cm | 6,66         | m3 | Rp | 4.538.200,00 | Rp | 30.224.412,00  | 0,1095% |
| 38         | Balok Tangga Utama dan Tangga Darurat<br>uk. 20 x 40 cm        |                | 7,2          | m3 | Rp | 6.335.400,00 | Rp | 45.614.880,00  | 0,1652% |
| 39         | Balok uk.15 x 30 cm untuk Dinding Box<br>Lift A                |                | 0,86         | m3 | Rp | 7.172.500,00 | Rp | 6.168.350,00   | 0,0223% |
| 40         | Balok uk.15 x 30 cm untuk Dinding Box<br>Lift BARANG           |                | 0,54         | m3 | Rp | 7.172.500,00 | Rp | 3.873.150,00   | 0,0140% |
| 41         | Plat Atap Tebal 10 cm                                          |                | 153,7<br>4   | m3 | Rp | 5.498.600,00 | Rp | 845.354.764,00 | 3,0625% |
| 42         | Anak Tangga Utama dan Tangga Darurat ( Trap )<br>uk.20 x 30 cm |                | 3,33         | m3 | Rp | 5.498.600,00 | Rp | 18.310.338,00  | 0,0663% |
| 43         | Plat Tangga Utama dan Darurat Tebal 15<br>cm                   |                | 7,15         | m3 | Rp | 5.498.600,00 | Rp | 39.314.990,00  | 0,1424% |
| 44         | Plat Bordes Tangga Utama dan Tangga<br>Darurat Tebal 25 cm     |                | 7,05         | m3 | Rp | 5.498.600,00 | Rp | 38.765.130,00  | 0,1404% |
| 45         | Waterprofing Plat Atap                                         |                | 1477,<br>44  | m2 | Rp | 30.600,00    | Rp | 45.209.664,00  | 0,1638% |
|            |                                                                |                |              |    |    |              |    |                |         |
| <b>III</b> | <b>Pekerjaan Plesteran dan Benangan</b>                        |                |              |    |    |              |    |                |         |
| 1          | Pekerjaan plesteran interior spesi 1 Pc : 6<br>Psr             |                | 1.529<br>,08 | m2 | Rp | 46.400,00    | Rp | 70.949.312,00  | 0,2570% |
| 2          | Pekerjaan plesteran eksterior spesi 1 Pc : 6<br>Psr            |                | 702,7<br>3   | m2 | Rp | 46.400,00    | Rp | 32.606.672,00  | 0,1181% |

|    |                                                                               |          |      |    |              |    |                |         |
|----|-------------------------------------------------------------------------------|----------|------|----|--------------|----|----------------|---------|
| 3  | Pekerjaan acian interior                                                      | 1.529,08 | m2   | Rp | 29.000,00    | Rp | 44.343.320,00  | 0,1606% |
| 4  | Pekerjaan acian eksterior                                                     | 702,73   | m2   | Rp | 29.000,00    | Rp | 20.379.170,00  | 0,0738% |
| 5  | Pekerjaan benangan interior spesi 1 Pc : 2 Psr                                | 463,56   | m1   | Rp | 16.900,00    | Rp | 7.834.164,00   | 0,0284% |
| 6  | Pekerjaan benangan eksterior spesi 1 Pc : 2 Psr                               | 244,12   | m1   | Rp | 16.900,00    | Rp | 4.125.628,00   | 0,0149% |
|    |                                                                               |          |      |    |              |    |                |         |
| IV | Pekerjaan Lantai                                                              |          |      |    |              |    |                |         |
| 1  | Pasang Keramik Lantai 60 x 60                                                 | 1.300,72 | m2   | Rp | 296.300,00   | Rp | 385.403.336,00 | 1,3962% |
| 2  | Pasang Keramik Lantai 30 x 30                                                 | 32,75    | m2   | Rp | 203.300,00   | Rp | 6.658.075,00   | 0,0241% |
| 3  | Pasang Keramik Hard Rock 30 x 30 Lantai KM/WC                                 | 23,13    | m2   | Rp | 203.300,00   | Rp | 4.702.329,00   | 0,0170% |
| 4  | Pasang Keramik Dinding 30 x 60 (KM/WC)                                        | 76       | m2   | Rp | 267.000,00   | Rp | 20.292.000,00  | 0,0735% |
| 5  | Pasang Batu Alam                                                              | 23,33    | m2   | Rp | 102.200,00   | Rp | 2.384.326,00   | 0,0086% |
|    |                                                                               |          |      |    |              |    |                |         |
| VI | Pekerjaan Pintu dan Jendela Aluminium dan Partisi                             |          |      |    |              |    |                |         |
| A. | Pekerjaan Pintu dan Jendela Aluminium, Partisi, Railling tangga dan Sunscreen |          |      |    |              |    |                |         |
| 1  | Pas. Kusen Type J2                                                            | 28       | Unit | Rp | 1.851.600,00 | Rp | 51.844.800,00  | 0,1878% |
| 2  | Pas. Kusen Type J3                                                            | 2        | Unit | Rp | 2.025.000,00 | Rp | 4.050.000,00   | 0,0147% |
| 3  | Pas. Kusen Type J4                                                            | 10       | Unit | Rp | 304.100,00   | Rp | 3.041.000,00   | 0,0110% |

|                                     |                                                     |            |      |    |              |    |               |         |
|-------------------------------------|-----------------------------------------------------|------------|------|----|--------------|----|---------------|---------|
| 4                                   | Pas. Kusen Type J8                                  | 2          | Unit | Rp | 1.728.100,00 | Rp | 3.456.200,00  | 0,0125% |
| 5                                   | Pas. Kusen Type J9                                  | 1          | Unit | Rp | 993.300,00   | Rp | 993.300,00    | 0,0036% |
| 6                                   | Pas. Kusen Type J12                                 | 8          | Unit | Rp | 3.197.500,00 | Rp | 25.580.000,00 | 0,0927% |
| 7                                   | Pas. Kusen Type P2                                  | 9          | Unit | Rp | 1.046.400,00 | Rp | 9.417.600,00  | 0,0341% |
| 8                                   | Pas. Kusen Type P3                                  | 5          | Unit | Rp | 1.704.000,00 | Rp | 8.520.000,00  | 0,0309% |
| 9                                   | Pas. Kusen Type P4                                  | 10         | Unit | Rp | 1.570.500,00 | Rp | 15.705.000,00 | 0,0569% |
| 10                                  | Pas. Kusen Type P5                                  | 5          | Unit | Rp | 5.199.300,00 | Rp | 25.996.500,00 | 0,0942% |
| 11                                  | Pasang pintu darurat anti api                       | 2          | Unit | Rp | 4000000      | Rp | 8.000.000,00  | 0,0290% |
|                                     |                                                     |            |      |    |              |    |               |         |
| <b>B. Pekerjaan Partisi</b>         |                                                     |            |      |    |              |    |               |         |
| 1                                   | Memasang 1m2 unit Partisi Type I                    | 100,7<br>5 | m2   | Rp | 985.700,00   | Rp | 99.309.275,00 | 0,3598% |
| 2                                   | Memasang 1 unit Pintu Type I untuk partisi          | 2          | unit | Rp | 2.118.800,00 | Rp | 4.237.600,00  | 0,0154% |
| 3                                   | Memasang 1 unit Pintu Type II untuk partisi         | 5          | unit | Rp | 2.984.200,00 | Rp | 14.921.000,00 | 0,0541% |
| 4                                   | Memasang 1 jendela Type I untuk partisi             | 18         | unit | Rp | 1.267.000,00 | Rp | 22.806.000,00 | 0,0826% |
|                                     |                                                     |            |      |    |              |    |               |         |
| <b>C. Pekerjaan Railling Tangga</b> |                                                     |            |      |    |              |    |               |         |
| 1                                   | Pasang Railling Tangga Utama dari Stainless Steel   | 13,76      | m2   | Rp | 1.610.800,00 | Rp | 22.164.608,00 | 0,0803% |
| 2                                   | Pasang Railling Tangga Darurat dari Stainless Steel | 12,48      | m2   | Rp | 1.610.800,00 | Rp | 20.102.784,00 | 0,0728% |
|                                     |                                                     |            |      |    |              |    |               |         |



|                                    |                                                   |          |       |    |              |    |                |         |
|------------------------------------|---------------------------------------------------|----------|-------|----|--------------|----|----------------|---------|
| <b>D. Curtin Wall</b>              |                                                   |          |       |    |              |    |                |         |
| 1                                  | Curtain Wall ( CW2 )                              | 1        | m2    | Rp | 9.771.200,00 | Rp | 9.771.200,00   | 0,0354% |
| <b>VII Pekerjaan Langit-langit</b> |                                                   |          |       |    |              |    |                |         |
| 1                                  | Pasang Plafond Acoustic Rangka Cross Tee Main Tee | 1.188,41 | m2    | Rp | 239.300,00   | Rp | 284.386.513,00 | 1,0303% |
| <b>VII I Pekerjaan Pengecatan</b>  |                                                   |          |       |    |              |    |                |         |
| 1                                  | Pengecatan dinding interior                       | 1.529,08 | m2    | Rp | 23.300,00    | Rp | 35.627.564,00  | 0,1291% |
| 2                                  | Pengecatan dinding eksterior                      | 702,73   | m2    | Rp | 52.200,00    | Rp | 36.682.506,00  | 0,1329% |
| 3                                  | Pengecatan plafon                                 | 1.271,00 | m2    | Rp | 23.300,00    | Rp | 29.614.300,00  | 0,1073% |
| <b>X Pekerjaan Tata Udara</b>      |                                                   |          |       |    |              |    |                |         |
| 1                                  | Unit AC Cassete 5PK                               | 7        | Unit  | Rp | 3717129      | Rp | 26.019.903,00  | 0,0943% |
| 2                                  | Unit AC Cassete 4PK                               | 9        | Unit  | Rp | 3261729      | Rp | 29.355.561,00  | 0,1063% |
| 3                                  | Unit AC Split wall 3/4PK                          | 2        | Unit  | Rp | 380283       | Rp | 760.566,00     | 0,0028% |
| <b>XI PEKERJAAN TELEPON</b>        |                                                   |          |       |    |              |    |                |         |
| 1                                  | Pasang Instalasi Telepon                          | 4        | Unit  | Rp | 119.550,00   | Rp | 478.200,00     | 0,0017% |
| 2                                  | Pasang Outlet Telepon                             | 2        | Titik | Rp | 47500        | Rp | 95.000,00      | 0,0003% |
| 3                                  | Switch Hub 16 port                                | 1        | unit  | Rp | 205000       | Rp | 205.000,00     | 0,0007% |

|                              |                                                              |    |       |    |              |    |               |         |
|------------------------------|--------------------------------------------------------------|----|-------|----|--------------|----|---------------|---------|
| 4                            | Terminal Box                                                 | 1  | unit  | Rp | 325000       | Rp | 325.000,00    | 0,0012% |
|                              |                                                              |    |       |    |              |    |               |         |
| XII Pekerjaan CCTV           |                                                              |    |       |    |              |    |               |         |
| 1                            | Kamera CCTV HD                                               | 4  | Unit  | Rp | 1.037.970,00 | Rp | 4.151.880,00  | 0,0150% |
| 2                            | Instalasi kamera CCTV                                        | 4  | titik | Rp | 155891,25    | Rp | 623.565,00    | 0,0023% |
|                              |                                                              |    |       |    |              |    |               |         |
| XII I Pekerjaan Sound System |                                                              |    |       |    |              |    |               |         |
| 1                            | Celling speaker 6 W                                          | 9  | Titik | Rp | 185000       | Rp | 1.665.000,00  | 0,0060% |
| 2                            | Volume control                                               | 1  | Titik | Rp | 145000       | Rp | 145.000,00    | 0,0005% |
| 3                            | Instalasi Celling speaker                                    | 11 | Unit  | Rp | 275000       | Rp | 3.025.000,00  | 0,0110% |
| 4                            | Terminal Box                                                 | 1  | Unit  | Rp | 325000       | Rp | 325.000,00    | 0,0012% |
| 5                            | Kabel Feeder dari rack cabinet ke terminal box, NYMH 3x2.5mm | 5  | m'    | Rp | 18.431,00    | Rp | 92.155,00     | 0,0003% |
|                              |                                                              |    |       |    |              |    |               |         |
| XI V Pekerjaan Fire Alarm    |                                                              |    |       |    |              |    |               |         |
| Peralatan Fixture            |                                                              |    |       |    |              |    |               |         |
| 1                            | - Conv. Optical Smoke Detector                               | 42 | pcs   | Rp | 470.381,00   | Rp | 19.756.002,00 | 0,0716% |
| 2                            | - Conv. Manual Break glass                                   | 2  | pcs   | Rp | 126000       | Rp | 252.000,00    | 0,0009% |
| 3                            | - Junction Box Fire Alarm                                    | 1  | pcs   | Rp | 450000       | Rp | 450.000,00    | 0,0016% |
| 4                            | - Remote Indicating Lamp                                     | 4  | pcs   | Rp | 102.036,00   | Rp | 408.144,00    | 0,0015% |

|                |                                           |      |       |    |              |    |               |         |
|----------------|-------------------------------------------|------|-------|----|--------------|----|---------------|---------|
| 5              | - Alarm Bell                              | 2    | unit  | Rp | 205000       | Rp | 410.000,00    | 0,0015% |
| 6              | - Terminal Box 30 x 40 x 12               | 1    | unit  | Rp | 757000       | Rp | 757.000,00    | 0,0027% |
| <b>B.</b>      | <b>Pekerjaan Instalasi</b>                |      |       |    |              |    |               |         |
| 1              | -Detector dan manual break glass          |      |       |    |              |    |               |         |
|                | NYA Cable 2x1,5mm + Pipa Conduit 20mm     | 45   | Titik | Rp | 470.381,00   | Rp | 21.167.145,00 | 0,0767% |
| 2              | - Junction Box Fire Alarm                 |      |       |    |              |    |               |         |
|                | NYA cable 2 x 1,5 mm + pipa conduit 20 mm | 1    | Titik | Rp | 470.381,00   | Rp | 470.381,00    | 0,0017% |
| 3              | - Remote Indicating Lamp                  |      |       |    |              |    |               |         |
|                | ITC 2 pairs 0.6 mm+ pipa conduit 20 mm    | 5    | Titik | Rp | 75000        | Rp | 375.000,00    | 0,0014% |
|                |                                           |      |       |    |              |    |               |         |
| <b>X<br/>V</b> | <b>Pekerjaan Alat Pemadam Kebakaran</b>   |      |       |    |              |    |               |         |
| 1              | BSP Sch.40 c/w fitting2 & Material bantu  |      |       |    |              |    |               |         |
|                | dia. 3 "                                  | 81,3 | m'    | Rp | 346.300,00   | Rp | 28.154.190,00 | 0,1020% |
| 2              | Hydrant Box Indoor, type B c/w -          | 2    | unit  | Rp | 7.963.200,00 | Rp | 15.926.400,00 | 0,0577% |
|                | -hydrant valve dia. 1 1/2"                |      |       |    |              |    |               |         |
|                | -fire hose 1 1/2"x30 m                    |      |       |    |              |    |               |         |
|                | -hose rack dia. 1 1/2"                    |      |       |    |              |    |               |         |
|                | -Spray nozzle dia. 1 1/2"                 |      |       |    |              |    |               |         |
|                | -kaca dan kunci                           |      |       |    |              |    |               |         |
| 3              | Gate valve dia. 2 1/2" , OS&Y type        | 1    | bh    | Rp | 3410000      | Rp | 3.410.000,00  | 0,0124% |
| 4              | - Fire Extinguisher 6 kg                  | 2    | unit  | Rp | 461000       | Rp | 922.000,00    | 0,0033% |
|                |                                           |      |       |    |              |    |               |         |

| B Instalasi Sprinkler                     |                                                               |      |      |    |            |    |               |         |
|-------------------------------------------|---------------------------------------------------------------|------|------|----|------------|----|---------------|---------|
| 1                                         | BSP Sch.40 c/w fitting <sup>2</sup> & Material bantu          |      |      |    |            |    |               |         |
|                                           | dia. 1 "                                                      | 164  | m'   | Rp | 81.000,00  | Rp | 13.284.000,00 | 0,0481% |
|                                           | dia. 1 1/4 "                                                  | 79   | m'   | Rp | 105.600,00 | Rp | 8.342.400,00  | 0,0302% |
|                                           | dia. 2 "                                                      | 8,5  | m'   | Rp | 159.800,00 | Rp | 1.358.300,00  | 0,0049% |
|                                           | dia. 2 1/2 "                                                  | 8    | m'   | Rp | 270.700,00 | Rp | 2.165.600,00  | 0,0078% |
|                                           | dia. 3 "                                                      | 63,5 | m'   | Rp | 346.300,00 | Rp | 21.990.050,00 | 0,0797% |
| 2                                         | Sprinkler head dia. 1/2", 68'C, pendent - Protector c/w plate | 69   | bh   | Rp | 52500      | Rp | 3.622.500,00  | 0,0131% |
| 3                                         | Branch Control Valve dia. 3"                                  | 1    | unit | Rp | 6540000    | Rp | 6.540.000,00  | 0,0237% |
| 4                                         | Fitting (elbow, reducer, knie dl)                             | 1    | ls   | Rp | 3000000    | Rp | 3.000.000,00  | 0,0109% |
|                                           |                                                               |      |      |    |            |    |               |         |
| C INSTALASI SPRINKLER DAN HYDRANT Lt Atap |                                                               |      |      |    |            |    |               |         |
|                                           | Galv. Pipe Med. c/w fitting <sup>2</sup> & Material bantu     |      |      |    |            |    |               |         |
| 1                                         | dia. 1 "                                                      | 4    | m'   | Rp | 81.000,00  | Rp | 324.000,00    | 0,0012% |
| 2                                         | ARV c/w Gate valve dia. 1"                                    | 2    | unit | Rp | 2750000    | Rp | 5.500.000,00  | 0,0199% |
| 3                                         | Pressure gauge c/w gate valve dia. 1/2"                       | 2    | unit | Rp | 165000     | Rp | 330.000,00    | 0,0012% |
| 4                                         | Ball valve dia. 1" -                                          | 1    | bh   | Rp | 285000     | Rp | 285.000,00    | 0,0010% |
| 5                                         | Sprinkler head dia. 1/2", 68'C, pendent -                     | 1    | bh   | Rp | 52500      | Rp | 52.500,00     | 0,0002% |

| <b>D</b>        | <b>Fire Extinguisher</b>                    |       |      |    |              |    |               |         |
|-----------------|---------------------------------------------|-------|------|----|--------------|----|---------------|---------|
| 1               | Apar ABC Kap. 4 kg                          | 1     | bh   | Rp | 310.000,00   | Rp | 310.000,00    | 0,0011% |
| 2               | Apar CO2 Kap. 3 kg (SDP area)               | 8     | bh   | Rp | 630.000,00   | Rp | 5.040.000,00  | 0,0183% |
| 3               | Apar CO2 Kap. 23 kg (Panel room)            | 1     | bh   | Rp | 4.150.000,00 | Rp | 4.150.000,00  | 0,0150% |
|                 |                                             |       |      |    |              |    |               |         |
| <b>XI<br/>V</b> | <b>PEKERJAAN SANITAIR DAN<br/>SANITASI</b>  |       |      |    |              |    |               |         |
| 1               | Pasang Klosed Duduk                         | 10    | Bh   | Rp | 2.193.500,00 | Rp | 21.935.000,00 | 0,0795% |
| 2               | Pasang Wastafel single                      | 4     | Bh   | Rp | 863.600,00   | Rp | 3.454.400,00  | 0,0125% |
| 3               | Pasang Jet washer                           | 10    | Bh   | Rp | 195000       | Rp | 1.950.000,00  | 0,0071% |
| 4               | Pasang Kran Diameter Air 1/2 "              | 14    | Bh   | Rp | 62.600,00    | Rp | 876.400,00    | 0,0032% |
| 5               | Pasang Floor Drain                          | 10    | Bh   | Rp | 94.100,00    | Rp | 941.000,00    | 0,0034% |
|                 |                                             |       |      |    |              |    |               |         |
| <b>A</b>        | <b>Instalasi Air Bersih</b>                 |       |      |    |              |    |               |         |
| 1               | Pasang Pipa Air Bersih PVC AW Diameter 3/4" | 36,14 | ml   | Rp | 26.000,00    | Rp | 939.640,00    | 0,0034% |
| 2               | Tangki air bersih kapasitas 1500 ltr        | 4     | unit | Rp | 371.400,00   | Rp | 1.485.600,00  | 0,0054% |
|                 |                                             |       |      |    |              |    |               |         |
| <b>B</b>        | <b>Instalasi Air Kotor</b>                  |       |      |    |              |    |               |         |
| 1               | Pasang Roofdrain                            | 28    | Unit | Rp | 94.100,00    | Rp | 2.634.800,00  | 0,0095% |

|        |                                                                    |            |            |    |            |    |               |         |
|--------|--------------------------------------------------------------------|------------|------------|----|------------|----|---------------|---------|
| 2      | Pasang Clean Out                                                   | 2          | Unit       | Rp | 108.100,00 | Rp | 216.200,00    | 0,0008% |
| 3      | Pasang Pipa air kotor Ø 3 "                                        | 16,52      | M1         | Rp | 108.100,00 | Rp | 1.785.812,00  | 0,0065% |
| 4      | Pasang Pipa air kotor Ø 4 "                                        | 35,42      | M1         | Rp | 126.000,00 | Rp | 4.462.920,00  | 0,0162% |
| 5      | Pasang instalasi Pipa Air Hujan 4"                                 | 361,3<br>9 | M1         | Rp | 167.900,00 | Rp | 60.677.381,00 | 0,2198% |
|        |                                                                    |            |            |    |            |    |               |         |
| X<br>V | Pekerjaan Listrik                                                  |            |            |    |            |    |               |         |
| 1      | Pas. instalasi Cable Tray 30x10x240 cm lengkap dengan assesories   | 47,08      | batan<br>g | Rp | 421800     | Rp | 19.858.344,00 | 0,0719% |
| 2      | Pas. instalasi Cable ladder 20x10x240 cm lengkap dengan assesories | 47,08      | batan<br>g | Rp | 361000     | Rp | 16.995.880,00 | 0,0616% |
| 3      | Pasang Instalasi Titik Lampu                                       | 155        | Titik      | Rp | 215.200,00 | Rp | 33.356.000,00 | 0,1208% |
| 4      | LAMPU EXIT LED AL 1MK HUGO (Komplit)                               | 3          | Titik      | Rp | 1095000    | Rp | 3.285.000,00  | 0,0119% |
| 5      | DOWNLIGHT INBOW / RD 150 E27 + KACA LED BULB 6w                    | 14         | Titik      | Rp | 185600     | Rp | 2.598.400,00  | 0,0094% |
| 6      | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W                       | 2          | Titik      | Rp | 484000     | Rp | 968.000,00    | 0,0035% |
| 7      | LAMPU GMS TP ACR 1X36, T-LED ESSENTIAL 1X36W + BATT                | 2          | Titik      | Rp | 1765000    | Rp | 3.530.000,00  | 0,0128% |
| 8      | LAMPU TK CG T8 2X36, T-LED ESSENTIAL 2X16W SAVY                    | 1          | Titik      | Rp | 534500     | Rp | 534.500,00    | 0,0019% |
| 9      | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY                             | 131        | Titik      | Rp | 698600     | Rp | 91.516.600,00 | 0,3315% |
| 10     | RMO T 2X36, T-LED ESSENTIAL 2X16W SAVY+Batt                        | 3          | Titik      | Rp | 1917500    | Rp | 5.752.500,00  | 0,0208% |
| 11     | Pasang Saklar Tunggal                                              | 13         | Titik      | Rp | 51.500,00  | Rp | 669.500,00    | 0,0024% |



|              |                                                     |    |       |    |               |    |                   |           |
|--------------|-----------------------------------------------------|----|-------|----|---------------|----|-------------------|-----------|
| 12           | Pasang Saklar Ganda                                 | 16 | Titik | Rp | 85.300,00     | Rp | 1.364.800,00      | 0,0049%   |
| 13           | Instalasi stop kontak                               | 25 | Titik | Rp | 18.431,00     | Rp | 460.775,00        | 0,0017%   |
| 14           | Pasang Stop Kontak 1 Phase                          | 25 | Titik | Rp | 107.000,00    | Rp | 2.675.000,00      | 0,0097%   |
|              |                                                     |    |       |    |               |    |                   |           |
| X<br>VI      | Pekerjaan Instalasi Penangkal Petir                 |    |       |    |               |    |                   |           |
| 1            | Air lighting terminal viking V6 radius 60 m         | 1  | unit  | Rp | 20.500.000,00 | Rp | 20.500.000,00     | 0,0743%   |
| 2            | Obstruction Lamp                                    | 1  | Bh    | Rp | 800.000,00    | Rp | 800.000,00        | 0,0029%   |
| 3            | Instalasi Obstruction lamp                          | 1  | ls    | Rp | 80.000,00     | Rp | 80.000,00         | 0,0003%   |
| 4            | Pasang Kabel BC 1x70 mm <sup>2</sup> +PVC AW Ø 1.5" | 32 | m'    | Rp | 108.606,00    | Rp | 3.475.392,00      | 0,0126%   |
| 5            | Pasang Dudukan Tiang dan Penangkal Petir            | 1  | ls    | Rp | 2.000.000,00  | Rp | 2.000.000,00      | 0,0072%   |
| 6            | Pasang Grounding System Rod Ø 1" Panjang 12 mtr     | 3  | Bh    | Rp | 880.000,00    | Rp | 2.640.000,00      | 0,0096%   |
| 7            | Pasang Bak Kontrol Grounding                        | 1  | Bh    | Rp | 712.215,41    | Rp | 712.215,41        | 0,0026%   |
|              |                                                     |    |       |    |               |    |                   |           |
|              |                                                     |    |       |    |               |    | 7.388.094.337,41  | 26,7650%  |
| Total Proyek |                                                     |    |       |    |               |    | 27.603.574.590,01 | 100,0000% |