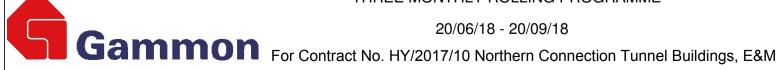
| ID | Activity | Days | Start | Finish 2018 September | | | | | | | | | | | | | |
|----------------|-----------------------------------------------------------|------|------------|-----------------------|----------------|----------|--------------|--------------|-----|----------|----------------|----------------|-----|----|----------|----------|----|
| | | | | | 25 | 1 00 | | | 00 | 20 | | | | 27 | | | |
| Three Month | hly Dragramma 20/06/49 20/00/49 | | | | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| | hly Programme 20/06/18 - 20/09/18 | | | | ÷ | į | | | | | · | . | | | | ļ | |
| Contract Dat | | | | | ÷ | ļ | | | | | | | | | | ļ | |
| Portion Acce | | 0 | 04/07/40 | | ļ | j | ļ | | | | ļ | ļ | | | | | |
| P140 | Access to Portion XI (Day 56) | 0 | 01/07/18 | | | <u> </u> | | | | | ļ | | | | | ļ | |
| P150 | Access to Portion XX (Day 56) | 0 | 01/07/18 | | | ļ | | | | | | | | | | ļ | |
| P160 | Access to Portion IX (Day 56) | 0 | 01/07/18 | | | - | ļ | | | | ļ | | .}} | | | ļ | |
| | session Dates | | 1 | | ; ; | ļ | | | | | | . | | | | ļ | |
| P120 | Possession to Portion VIII (Day 25) | 0 | 31/05/18 A | | ļ. | ļ | | | | | | | | | | ļ | |
| P130 | Possession to Portion XIV (Day 46) | 0 | 21/06/18 | | | <u>.</u> | | | | | İ | | | | | | |
| P145 | Possession to Portion WA6 (Day 91) | 0 | 05/08/18 | | | <u> </u> | | | | |) | | | | | | |
| P185 | Possession to Portion Ve (Day 132) | 0 | 15/09/18 | | | | | | | | | | | | | • | |
| P195 | Possession to Portion XIII (16 Sep 2018) | 0 | 16/09/18* | | | 1 | | | | | | | | | | • | |
| General Pro | curement | | | | | <u>.</u> | | | | | İ | .] | | | | | |
| P1010 | Submit and Approval of Major Material | 26 | 07/05/18 A | 06/06/18 A | | | | | | | | | | | | | |
| P1020 | Conctere Material | 50 | 07/06/18 A | 06/08/18 | : | 1 | | | | | P | | | | | | |
| P1030 | Rebar Material | 50 | 07/06/18 A | 06/08/18 | : | 1 | | | | | - | - | | | | | |
| P1040 | Steelfixer | 50 | 07/06/18 A | 06/08/18 | | | | | | + | - | | | | | | |
| P1050 | Formwork Falsework Erector | 50 | 07/06/18 A | 06/08/18 | | | | | | | - | | | | | | |
| P1060 | ABWF Material | 70 | 07/06/18 A | 29/08/18 | | | | | | | | | | | | | |
| P1070 | ABWF Erector | 70 | 07/06/18 A | 29/08/18 | | _ | | · | | | <u> </u> | <u> </u> | | | | | |
| P1080 | Cladding | 70 | 07/06/18 A | 29/08/18 | : | ! | : | : | ! ! | | ! | | | | | | |
| Method Stat | ements | , | | | | 1 | | | | - | | - | | | - | [| |
| Plant Room | | | | | \ \ | 1 | | | | -1 | † | | | | | ļ | |
| MS1010 | Prepare & Submit MS for Plant Room (Civil) | 24 | 07/05/18 A | 04/06/18 A | † | 1 | | | | | † | | | | | ļ | |
| MS1020 | ICE & ER Approval of MS for Plant Room (Civil) | 12 | 05/06/18 A | 19/06/18 A | | 1 | | | | | | | | | <u> </u> | | |
| MS1150 | Prepare & Submit MS for Plant Room (E&M) | 24 | 20/06/18 | 18/07/18 | | | | | | | | | 1 | | | | |
| MS1160 | ICE & ER Approval of MS for Plant Room (E&M) | 12 | 19/07/18 | 01/08/18 | | † | | | ; | <u>-</u> | | | | | | | |
| Toll Control E | · · · · · · · · · · · · · · · · · · · | | | | } } | + | } | | | | ÷ | † | | | | } | |
| MS1030 | Prepare & Submit MS for Toll Control Building (Civil) | 14 | 07/05/18 A | 23/05/18 A | ļ | | | | | | į | | | | | | |
| MS1040 | ICE & ER Approval of MS for Toll Control Building (Civil) | 12 | | 06/06/18 A | | + | | | | | | | -1 | | | | |
| MS1170 | Prepare & Submit MS for Toll Control Building (E&M) | 14 | | 13/06/18 A | | | | | | | | | | | | · | |
| | | | 27,00,.07 | . 3, 33, . 371 | L | i | 1 | i | : : | | 1 | i | : : | | <u> </u> | <u> </u> | i |

| 1 | Date | Revision | Checked | Approved |
|---|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | | | | | | | | | | | | | |
|----------------|------------------------------------------------------------------|------|-------------|------------|----------------|---------------|-------------|--------------|------------|---------------|--------------|--------------|---------|----|-----------|----|----|
| | | | | | 0.5 | 1 00 | _ | | 1 00 1 | | | Augus 13 | t 20 | 07 | Sep 03 | | |
| MS1180 | ICE & ER Approval of MS for Toll Control Building (E&M) | 12 | 14/06/18 A | 23/06/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| Administration | | | 1 1/00/1071 | 20/00/10 | | ļ | | ¦ | | | | | | | | | |
| MS1050 | Prepare & Submit MS for Administration Building (Civil) | 24 | 07/05/18 A | 04/06/18 A | | <u> </u> | ! | ! | | | ļ | | | | | | |
| MS1060 | ICE & ER Approval of MS for Administration Building (Civil) | 12 | | 19/06/18 A | | | <u> </u> | | | | | | | | | | |
| MS1190 | Prepare & Submit MS for Administration Building (E&M) | 24 | 20/06/18 | 18/07/18 | | | | | ii | | | | | | | | |
| MS1200 | ICE & ER Approval of MS for Administration Building (E&M) | 12 | 19/07/18 | 01/08/18 | · | ļ | } | | <u> </u> | <u>-</u> | ļ | ļ | | | | | |
| Maintenance | _ · · · · · · · · · · · · · · · · · · · | | | | | ļ | | | ¦ | | ļ | | | | | | |
| MS1070 | Prepare & Submit MS for Maintenance Depot (Civil) | 24 | 24/05/18 A | 21/06/18 | · ! | | | | † | | | | | | | | |
| MS1080 | ICE & ER Approval of MS for Maintenance Depot (Civil) | 12 | 22/06/18 | 06/07/18 | | - | | | | | | | | | | | |
| MS1210 | Prepare & Submit MS for Maintenance Depot (E&M) | 24 | 07/07/18 | 03/08/18 | | † <u>-</u> | | | | - | | | | | | | |
| MS1220 | ICE & ER Approval of MS for Maintenance Depot (E&M) | 12 | 04/08/18 | 17/08/18 | · † | | | | | | ÷ | | | | | | |
| Costom & Ex | cise Department Building | | | | :: | | | | | | | | | | | | |
| MS1090 | Prepare & Submit MS for C&ED Building (Civil) | 24 | 22/06/18 | 20/07/18 | · • | : | <u> </u> | | | | ļ | 1 | | | | | |
| MS1100 | ICE & ER Approval of MS for C&ED Building (Civil) | 12 | 21/07/18 | 03/08/18 | | | | • | ! ! | _ | | 1 | | | | | |
| MS1230 | Prepare & Submit MS for C&ED Building (E&M) | 24 | 04/08/18 | 31/08/18 | | | | | | - | ! | ! | | | | | |
| MS1240 | ICE & ER Approval of MS for C&ED Building (E&M) | 12 | 01/09/18 | 14/09/18 | | | | | | | ; ; | | | | ······ | | |
| Fire Services | Department Building | | ' | | | | | † ! | | | † | | | | | | |
| MS1110 | Prepare & Submit MS for Fire Services Building (Civil) | 24 | 21/07/18 | 17/08/18 | | | | • | 1 1 | | 1 | | | | | | |
| MS1120 | ICE & ER Approval of MS for Fire Services Building (Civil) | 12 | 18/08/18 | 31/08/18 | | | | | | | | | | | | | |
| MS1250 | Prepare & Submit MS for Fire Services Building (E&M) | 24 | 01/09/18 | 29/09/18 | | | | | | | | | | | | | |
| Satellite Cont | rol Building | | | | | | | | | | | | | | | | |
| MS1130 | Prepare & Submit MS for Satellite Control Building (Civil) | 24 | 18/08/18 | 14/09/18 | | | | : | | | | _ | | | | | |
| MS1140 | ICE & ER Approval of MS for Satellite Control Building (Civil) | 12 | 15/09/18 | 29/09/18 | | | | | | | |] | | | | = | |
| General Subr | mission (First Submission) | | | | | | | | | | | | | | | | |
| GS110 | Prepare & Submit Subcontractor Management Plan | 17 | 07/05/18 A | 23/05/18 A | | <u>.</u> | <u> </u> | : ! | | | | <u> </u> | | | | | |
| GS120 | Prepare & Submit Environmental Management Plan | 32 | 07/05/18 A | 07/06/18 A | | <u>.</u> | | : : ! | <u> </u> | | | <u> </u> | | | | | |
| GS130 | Prepare & Submit Safety Management Plan | 22 | 07/05/18 A | 28/05/18 A | | | ! | : : | | | | | | | | | |
| E&M Design | | | | | | <u> </u> | | <u> </u> | | | | <u> </u> | | | | | |
| | unnel Ventilation System | | | | | <u> </u> | | <u> </u> | | | | | | | | | |
| A010 | Design Proposal of Tunnel Ventilation System | 60 | 18/08/18* | 16/10/18 | | ļ | | : : : | <u>.</u> j | | | _ | | | | | |
| A040 | TVS -Smoke Extraction Fan Static Calculation for Service Gallery | 60 | 13/09/18* | 11/11/18 | | | : ! ! | : ! | | | i 1 1 | | | | | | |



| P2 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| M | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish 2018 July August Septembe | | | | | | | | | | | | | |
|---------------|---------------------------------------------------------------|------|------------|-----------------------------------|----------|-------------|------------------|----------------|----|----|----------------|-------------|---------------------------------------|--------|--------------|--------------|----|
| | | | | | 25 | 1 00 | <u>J</u> 09 | uly 16 | 00 | 20 | | Aug 13 | |) 27 | | epteml 10 | |
| A050 | Jet Fan Static Calculation for Vehicle Underpass | 60 | 13/05/18 A | 11/07/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | l. | 3 20 |) 21 | 03 | 10 | 17 |
| A055 | Jet Fan Static Calculation for Vehicle Underpass - Approval | 28 | 12/07/18 | 08/08/18 | | ł | | ļ | | | <u> </u> | | | | | | |
| A060 | Pressurization Fan Static Calculation for Vehicle Underpass | 60 | 22/08/18* | 20/10/18 | | ł | ! | ļ | | | | | | | | | |
| A080 | TVS -Design Proposal including the Smoke Extraction Strategy | 60 | 13/09/18* | 11/11/18 | | <u> </u> | <u> </u> | | | | | | | | | - | |
| A090 | TVS -Control Logic Review with FSD | 60 | 13/09/18* | 11/11/18 | | | | | | | | | | | | | |
| | unnel Lighting and Road Lighting System | | 10/00/10 | , , | <u> </u> | | } | ļ | | | | | | | | ļ | |
| B010 | Design Proposal of Tunnel Lighting System (TLS) | 60 | 04/08/18* | 02/10/18 | <u> </u> | | | ļ | | | | | | | | | |
| B020 | Tunnel lighting control | 60 | 08/09/18* | 06/11/18 | <u> </u> | | | ¦ | | | | | | | | | |
| B030 | TLS -Lux Calculation | 60 | 08/09/18* | 06/11/18 | | | | ! | | | | | | | | | |
| B040 | TLS -Structure support design calculation for tunnel lighting | 60 | 08/09/18* | 06/11/18 | | | | ļ | | | | | | | | | |
| Section C - B | Building Services of MVAC System | | | | | ļ | } | ļ | | | | | | | | ·} | |
| тсв | | | | | | † | | ļ | | | | | | | | | |
| C012 | TCB -AC Cooling Capacity Calculation | 60 | 31/07/18* | 28/09/18 | | | | ļ | | | | | | | | <u> </u> | |
| C020 | TCB -AHU/PAU Static Pressure Calculation | 60 | 02/07/18* | 30/08/18 | | - | | | | | | | | | | - | |
| C025 | TCB -AHU/PAU Static Pressure Calculation - Approval | 28 | 31/08/18 | 27/09/18 | | | | | | | | | | | | | |
| C040 | TCB -Mechanical Ventilation Capacity Calculation | 60 | 17/06/18 A | 15/08/18 | ; | | <u>}</u> | } | { | | -} | | : | | | ·} | |
| C045 | TCB -Mechanical Ventilation Capacity Calculation - Approval | 28 | 16/08/18 | 12/09/18 | | 1 | } | <u> </u> | | | | | | | | | |
| C050 | TCB -Fan Static Pressure Calculation | 60 | 29/07/18* | 26/09/18 | | 1 | | | | | | | | | | - | |
| ADB | | | | | | 1 | | | | | | | | | | | |
| C070 | ADB -AC Cooling Capacity Calculation | 60 | 24/06/18* | 22/08/18 | ! | ! | ! | ! ! | ! | | · ; | | | | | | |
| C075 | ADB -AC Cooling Capacity Calculation - Approval | 28 | 23/08/18 | 19/09/18 | | 1 | } | † : | | | - | | • | ; | ; | + | |
| C080 | ADB -AHU/PAU Static Pressure Calculation | 60 | 07/09/18* | 05/11/18 | | 1 | | † : | | | | | | | _ | + | |
| C090 | ADB -Pump head calculation | 60 | 27/08/18* | 25/10/18 | | 1 | | | | | | | | | 1 | 1 | |
| C100 | ADB -Mechanical Ventilation Capacity Calculation | 60 | 26/07/18* | 23/09/18 | | 1 | | | | | | | · · · · · · · · · · · · · · · · · · · | | | 1 | |
| C110 | ADB -Fan Static Pressure Calculation | 60 | 06/09/18* | 04/11/18 | |] | : | | | | | | | | | : | 1 |
| NVB | | | | | | | | | | | - | | | | | | |
| C130 | NVB -AC Cooling Capacity Calculation | 60 | 13/09/18* | 11/11/18 | | - | | | | | | | | | | | |
| C140 | NVB -Mechanical Ventilation Capacity Calculation | 60 | 13/09/18* | 11/11/18 | | | | | | | | | | | | | |
| C160 | NVB -Acoustic Performance Calculation | 60 | 17/09/18* | 15/11/18 | | | | | | | | - | | | | | |
| C180 | NVB -Staircase Pressurization System Calculation | 60 | 13/09/18* | 11/11/18 | | | | | | | - | - | | | | | 1 |
| MD | | | | | | | | : | | | | - | | | | | |

| P3 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| Λ | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | Finish 2018 July August | | | | | | | | | | | | |
|---------------|-------------------------------------------------------------------------|------|------------|----------|--------------------------|--------------|----------------|------------------|----|-----|----------------|---------|----------|-----|------|--------|----|
| | | | | | | | | | 00 | | | | | | | epteml | |
| C400 | MD -AC Cooling Capacity Calculation | 60 | 13/09/18* | 11/11/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 3 20 |) 2 | 7 03 | 10 | 17 |
| C420 | MD -Mechanical Ventilation Capacity Calculation | 60 | 28/08/18* | 26/10/18 | ļ | ļ | ·} | | | | | | | | | | |
| Vehicular Ur | | | | | | | | | | | | | | | 1 | | |
| C450 | Vehicle Underpass -Mechanical Ventilation Capacity Calculation | 60 | 18/08/18* | 16/10/18 | | ļ | | | | | | | | | ļ | | |
| Thermal Ins | | | | | ÷ | <u></u> | | | | | | | | | 1 | | |
| C480 | Ductwork & Pipework Thermal Insulation Thickness Calculation | 60 | 02/07/18* | 30/08/18 | ÷ | | · } | } | | | - † | | <u>-</u> | | 1 | } | |
| C485 | Ductwork & Pipework Thermal Insulation Thickness Calculation - Approval | 28 | 31/08/18 | 27/09/18 | † ! | | | ‡ | | | - | | | | | | |
| Section D - B | uilding Services of Electrical System | | <u>J</u> | | † | <u> </u> | | | | | | | | | 1 | | |
| ТСВ | | | | | | | | | | | | | | | | | |
| D010 | TCB -UPS and Battery Capacity Calculations | 60 | 06/07/18* | 03/09/18 | | _ | | : | | | ! | | | : | 1 | | |
| D015 | TCB -UPS and Battery Capacity Calculations - Approval | 30 | 04/09/18 | 03/10/18 | İ | 1 | - | | | | · | | | | | | |
| D020 | TCB -Electrical Loading Demand Calculation | 60 | 24/07/18* | 21/09/18 | | | | | | | : | 1 | | | | • | |
| D030 | TCB -Lux Level Calculation | 60 | 18/07/18* | 15/09/18 | | | | | | | ! | 1 | 1 | 1 | 1 : | 1 | 1 |
| D035 | TCB -Lux Level Calculation - Approval | 30 | 16/09/18 | 15/10/18 | | | | | | | | | | | | | |
| D040 | TCB -Cable Sizing and Voltage Drop Verification | 60 | 07/08/18* | 05/10/18 | | | | , | | | | | | | 1 | | |
| D050 | TCB -Generator Calculation | 60 | 15/06/18 A | 13/08/18 | | | | | | 1 | | | | | | | |
| D055 | TCB -Generator Calculation - Approval | 30 | 14/08/18 | 12/09/18 | | | | | | 1 | | | | | 1 | | |
| D060 | TCB -Fuel Tank Calculation | 60 | 15/06/18 A | 13/08/18 | , | 1 | 1 | | | 1 | 1 | | | | | | |
| D065 | TCB -Fuel Tank Calculation - Approval | 30 | 14/08/18 | 12/09/18 | | | | | | | | | | : | 1 | | |
| D070 | TCB -Cable Containment Calculation | 60 | 04/09/18* | 02/11/18 | | | | | | 1 | | | | | | | |
| D080 | TCB -Earthing Resistance Calculation | 60 | 07/08/18* | 05/10/18 | | | - | 7 | | | | | | | | - | |
| D090 | TCB -Power Factor Correction & Harmonic Current AnalysisCalculation | 60 | 07/08/18* | 05/10/18 | | | | | | -] | | | | | | | |
| ADB | | | | | | | | | | | | | | | | | |
| D100 | ADB -UPS and Battery Capacity Calculations | 60 | 01/08/18* | 29/09/18 | | | | | | | 1 | 1 | | | | 1 | |
| D110 | ADB -Electrical Loading Demand Calculation | 60 | 28/06/18* | 26/08/18 | | | 1 | 1 | | | 1 | | | | | | |
| D115 | ADB -Electrical Loading Demand Calculation - Approval | 30 | 27/08/18 | 25/09/18 | | | | | | | | | | | | | |
| D120 | ADB -Lux Level Calculation | 60 | 09/09/18* | 07/11/18 | <u> </u> | <u> </u> | | <u> </u> | | | | | | | | | |
| D140 | ADB -Generator Calculation | 60 | 11/06/18 A | 09/08/18 | : | | | | | | | | | | | | |
| D145 | ADB -Generator Calculation - Approval | 30 | 10/08/18 | 08/09/18 | <u> </u> | | | | | | - | | | | |] | |
| D150 | ADB -Fuel Tank Calculation | 60 | 11/06/18 A | 09/08/18 | 1 | 1 | 1 | 1 | | | 1 | | | | | | |
| D155 | ADB -Fuel Tank Calculation - Approval | 30 | 10/08/18 | 08/09/18 | i | | 1 | | | | | i | i | | | 1 | |

| P4 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| M | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish 2018 July August September | | | | | | | | | | | | | | |
|-------------|----------------------------------------------------------------------|------|------------|-----------------------------------|----------------|--------------|--------------|------|------|----|--------------|----------|----|----|----|---------------------------------------|---------------|----|
| | | | | | OF. | 00 | | July | 1 00 | | 1 00 | Auç | | 20 | 27 | | | |
| NVB | | | | | 25 | 02 | 09 | 16 | 23 | 30 | 06 | <u> </u> | 13 | 20 | 27 | 03 | 10 | 17 |
| D190 | NVB -UPS and Battery Capacity Calculations | 60 | 20/06/18* | 18/08/18 | ļ | ļ | | | | | | | | | | | | |
| D195 | NVB -UPS and Battery Capacity Calculations - Approval | 30 | 19/08/18 | 17/09/18 | ļ: | <u> </u> | | | | | | | | | | | | |
| D200 | NVB -Electrical Loading Demand Calculation | 60 | 06/07/18* | 03/09/18 | | | | | | | | | | | | 1 | | |
| D205 | NVB -Electrical Loading Demand Calculation - Approval | 30 | 04/09/18 | 03/10/18 | ļ: | ļ | + | | | | | | | | | ·i | | |
| D210 | NVB -Lux Level Calculation | 60 | 17/07/18* | 14/09/18 | | ļ | ÷ | - | | | | | | | | · | | |
| D215 | NVB -Lux Level Calculation - Approval | 30 | 15/09/18 | 14/10/18 | | ļ | | | | | | | | | | | | |
| D220 | NVB -Cable Sizing and Voltage Drop Verification | 60 | 11/08/18* | 09/10/18 | ļ . | | | | | | | 4 | | | | | | |
| D230 | NVB -Generator Calculation | 60 | 20/06/18* | 18/08/18 | ÷ | 4 | | | | | | | | | | | | |
| D235 | NVB -Generator Calculation - Approval | 30 | 19/08/18 | 17/09/18 | <u> </u> | | | | | | | | | | | | | |
| D240 | NVB -Fuel Tank Calculation | 60 | 20/06/18* | 18/08/18 | ÷ | | - | | | | | | | | | | | |
| D245 | NVB -Fuel Tank Calculation - Approval | 30 | 19/08/18 | 17/09/18 | ļ: | ļ | - | | | | | | | | | | | |
| D250 | NVB -Cable Containment Calculation | 60 | 19/09/18* | 17/11/18 | | | | | | | | | | | | | | |
| D260 | NVB -Earthing Resistance Calculation | 60 | 11/08/18* | 09/10/18 | | | - | | | | | — | | | | | i- | |
| D270 | NVB -Power Factor Correction & Harmonic Current Analysis Calculation | 60 | 11/08/18* | 09/10/18 | | | † | | | | | | | | | | | |
| D280 | NVB -HV Electrical Loading Calculation | 60 | 11/08/18* | 09/10/18 | | | ÷ | | | | | + | | | | · | | |
| MD | | | | | † | † | | | 1 | | | | | | | | | |
| D680 | MD -Electrical Loading Demand Calculation | 60 | 31/07/18* | 28/09/18 | | 1 | 1 | | | | | | | | | | | |
| D690 | MD -Lux Level Calculation | 60 | 20/09/18* | 18/11/18 | | 1 | 1 | - | | | | | | | | | | |
| D710 | MD -Generator Calculation | 60 | 21/08/18* | 19/10/18 | | 1 | 1 | | | | | | 1 | | | | | |
| D720 | MD -Fuel Tank Calculation | 60 | 21/08/18* | 19/10/18 | | | | | | | | | ī | | | · · · · · · · · · · · · · · · · · · · | | |
| Section E - | Building Services of Fire Services System | | | | | | | | | | | | | | | | | |
| Tunnel & | Service Gallery | | | | | | | | | | | | | | | | | |
| E050 | Foam system design calculation for Services Gallery | 60 | 12/06/18 A | 10/08/18 | : | 1 | | ! | | : | | 1 | | 1 | | | | |
| E055 | Foam system design calculation for Services Gallery - Approval | 30 | 11/08/18 | 09/09/18 | [|] | | | | | | | | | | | | |
| ТСВ | | | | | |] | | | | | | | | | | | | |
| E060 | TCB -FS Pump Head Calculation | 60 | 13/09/18* | 11/11/18 | |] | T | | | | | | | | | | | |
| E070 | TCB -Sprinkler Pump Head Calculation | 60 | 13/09/18* | 11/11/18 | | - | | | | | | | | | | | | |
| E080 | TCB -Battery Capacity Calculation | 60 | 02/07/18* | 30/08/18 | | | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| E085 | TCB -Battery Capacity Calculation - Approval | 30 | 31/08/18 | 29/09/18 | | | | | | | | | | | | | | |
| E090 | TCB -FM200 System Design Calculation | 60 | 22/06/18* | 20/08/18 | | 1 | 1 | | 1 | 1 | | 1 | | | | | | |

20/06/18 - 20/09/18 Gammon For Contract No. HY/2017/10 Northern Connection Tunnel Buildings, E&M

| 5 | Date | Revision | Checked | Approved |
|---|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | - |
| | | | | · |
| | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | | | | | | | | | | | | | |
|---------------|----------------------------------------------------------------|------|--------------|--------------|-------------|----|----------------|----|--------------|----------|--------------|-------------|--------------|----|----------|------------|----------|
| | | | | | | 00 | | | 00 | 000 | | Augus | | | | eptembe | |
| FOOF | TCD_FM000 Cystem Design Coloulation Approval | 20 | 21/08/18 | 19/09/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| E095 | TCB -FM200 System Design Calculation - Approval | 30 | 21/08/18 | 19/09/18 | | | | | | | | | | | | | |
| ADB | | | | | | | | | | | ļ | | | | | .ļ <u></u> | |
| E100 | ADB -FS Pump Head Calculation | 60 | 13/09/18* | 11/11/18 | | | | | | | | | | | | ļ <u></u> | |
| E110 | ADB -Sprinkler Pump Head Calculation | 60 | 13/09/18* | 11/11/18 | | | | | | | | | | | | | |
| E120 | ADB -Battery Capacity Calculation | 60 | 29/07/18* | 26/09/18 | | | | | | | | | | | | | |
| E130 | ADB -FM200 System Design Calculation | 60 | 22/06/18* | 20/08/18 | .i | | | | i | | i | | <u> </u> | j | | | |
| E135 | ADB -FM200 System Design Calculation - Approval | 30 | 21/08/18 | 19/09/18 | | | | | | .] | | <u>.</u> | | | | | |
| NVB | | | | | | | | | | | | | | | | | |
| E140 | NVB -FS Pump Head Calculation | 60 | 19/08/18* | 17/10/18 | | | | | | 1 | | | | : | 1 | 1 | |
| E150 | NVB -Sprinkler Pump Head Calculation | 60 | 19/08/18* | 17/10/18 | | | | | | 1 | | | | : | : | | |
| E160 | NVB -Battery Capacity Calculation | 60 | 20/06/18* | 18/08/18 | | | | | ; | 1 | 1 | | | | | | |
| E165 | NVB -Battery Capacity Calculation - Approval | 30 | 19/08/18 | 17/09/18 | | | | | | | | | | : | | | - |
| E170 | NVB -FM200 System Design Calculation | 60 | 22/06/18* | 20/08/18 | | | | | | | 1 | | - | : | | | |
| E175 | NVB -FM200 System Design Calculation - Approval | 30 | 21/08/18 | 19/09/18 | | | | | | -1 | | - | | ! | - | | |
| MD | | | | | i | | | | | | | | | | | | |
| E330 | MD -FS Pump Head Calculation | 60 | 21/08/18* | 19/10/18 | ; | | ; : | | } | | † | · | | ; | + | | |
| E340 | MD -Sprinkler Pump Head Calculation | 60 | 21/08/18* | 19/10/18 | | | | | | | · | | | | | | |
| E350 | MD -Battery Capacity Calculation | 60 | 21/08/18* | 19/10/18 | | | | | | -1 | 1 | | | : | | | |
| Vehicular U | Inderpass | | | | | | | | | | | | | | 1 | | |
| E370 | Vehicular Underpass -Foam system design calculation | 60 | 02/07/18* | 30/08/18 | İ | | ; ; | | - | | ; | | - <u></u> | | · | · | |
| E375 | Vehicular Underpass -Foam system design calculation - Approval | 30 | 31/08/18 | 29/09/18 | ÷ | | | | | | † | | | • | | | |
| Section F - E | Building Services of Plumbing & Drainage System | | | | | | | | | | † | † | | | 1 | ·} | |
| Tunnel | | | | | | | | | | | | 1 | | | | | |
| F010 | Oil Interceptor Calculation for tunnel | 60 | 12/07/18* | 09/09/18 | | | | | | | , | | | | | 3 | |
| F015 | Oil Interceptor Calculation for tunnel - Approval | 30 | 10/09/18 | 09/10/18 | | | | | | | | | | | | | |
| тсв | | | | | | | | | | | † | | | | ÷ | | |
| F050 | TCB - Rainwater Analysis and Pipe Work Calculation | 60 | 01/08/18* | 29/09/18 | | | | | | | <u> </u> | 4 | -} | | <u> </u> | | |
| F060 | TCB - Hydraulic Analysis of Waste Water Systems | 60 | 02/06/18 A | 31/07/18 | | | | | | - | | | | | | | |
| F065 | TCB - Hydraulic Analysis of Waste Water Systems - Approval | 30 | 01/08/18 | 30/08/18 | | | | | | | | | | | - | - | |
| F070 | TCB - Hot water system capacity calculation | 60 | 08/08/18* | 06/10/18 | | | | | | | | 4 | <u></u> | | 4 | <u> </u> | |
| ADB | . = | - 55 | 1 20, 30, 13 | 20, . 0, . 0 | | | | | | | | | | | | | |
| ADD | | | | | <u>i li</u> | | i i | | i | | 1 | 1 | 1 | 1 | | | <u> </u> |

| 3 | Date | Revision | Checked | Approved |
|---|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

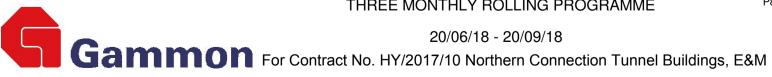
| ID | Activity | Days | Start | Finish | 2018 | | | | | | | | | | | | |
|----------------|-----------------------------------------------------------------|------|------------|------------|------|-------------|----|-----|----|----|------------------|--------------|--------|----|---|---------------|----------|
| | | | | | | 1 00 | | ıly | 00 | 20 | | Augu | | 27 | | eptemb 10 | |
| F110 | ADB - Hydraulic Analysis of Waste Water Systems | 60 | 08/08/18* | 06/10/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | | | | | | |
| F120 | ADB - Hot water system capacity calculation | 60 | 08/08/18* | 06/10/18 | | ļ | | | | | | <u>.</u> | | | | | <u> </u> |
| NVB | | | | | | | | | | | ! ! ! | | | | | | |
| F160 | NVB - Rainwater Analysis and Pipe Work Calculation | 60 | 16/08/18* | 14/10/18 | | | | | | | ; ; ; | † == | | | | | |
| F170 | NVB - Hydraulic Analysis of Waste Water Systems | 60 | 17/06/18 A | 15/08/18 | | | | | | | ‡ | | | | | ÷ | |
| F175 | NVB - Hydraulic Analysis of Waste Water Systems - Approval | 30 | 16/08/18 | 14/09/18 | | ļ | | | | | ; ! | | | | | - | |
| MD | , , , , , , , , , , , , , , , , , , , , | | | | | ļ ! | | | | | i ! | j | | | | | |
| F350 | MD - Hydraulic Analysis of Waste Water Systems | 60 | 10/09/18* | 08/11/18 | | ļ | | | | | . | ļ | | | | | |
| Vehicular Ur | | | | | | ¦ ¦ | | | | | ; ; ; | | | | | ÷ | |
| F400 | Vehicular underpass - Hydraulic Analysis of Waste Water Systems | 60 | 31/08/18* | 29/10/18 | | ¦ | | | | | ; ; ; | | | | | | |
| Section G - El | V System | | | | † | ¦ | | | | | | | · | | | - | † |
| G010 | System Design for Toll Control system | 60 | 02/06/18 A | 31/07/18 | : | <u></u> | ; | | | • | † ! | | | | | | |
| G015 | System Design for Toll Control system - Approval | 30 | 01/08/18* | 30/08/18 | | | | | | | <u> </u> | | | | | | |
| G020 | System Design for CMCS | 60 | 02/09/18* | 31/10/18 | | | | | | 1 | <u> </u> | | | | | | |
| G030 | System Design for Access Control System | 60 | 02/09/18* | 31/10/18 | | | | | | 1 | ! | 1 | | 1 | - | ! | |
| G050 | System Design for IT System | 60 | 01/09/18* | 30/10/18 | · † | { | | | | 1 | † ! ! | 1 | ·; | | | 1 | |
| G060 | System Design for PABX System | 60 | 15/09/18* | 13/11/18 | | | | | | 1 | ‡ ! | | | | | • | - |
| G070 | System Design for PA System | 60 | 15/09/18* | 13/11/18 | | | | | | | 1 | | | | | • | |
| G080 | System Design for BRI System | 60 | 15/09/18* | 13/11/18 | | | | | | 1 | * | | | | | • | |
| G090 | System Design for Audio Recording System | 60 | 15/09/18* | 13/11/18 | | | | | | 1 | * |] | [| | | ; - | |
| G100 | System Design for Communication Network System System | 60 | 15/09/18* | 13/11/18 | | | | | | | † ! ! | | | | | | |
| Section H - B | uilding Services of Lift system | | | | | | | | | 1 | † ! | - | | | | | |
| H010 | System Design for Lift System | 60 | 01/06/18 A | 30/07/18 | | ! | | | |] | | | | | | | |
| H015 | System Design for Lift System - Approval | 30 | 31/07/18 | 29/08/18 | | | | | | | | 1 | 1 | 1 | | | |
| Key Date 1 - | Toll Control Building (TCB) & TCSS Provision | | | | | | | | | | | | | | | | |
| Toll Control B | | | | | | <u>.</u> | | | | | : : : ! | <u> </u> | | | | | .] |
| TCB120 | Site Clearance & Trial Pits | 12 | 07/05/18 A | 19/05/18 A | | | | | | | ¦ ! | | | | | | |
| TCB130 | Excavation (GL3-5) | 12 | 21/05/18 A | 06/06/18 A | | ! ! ! | | | | | ! ! ! | - | | | | | |
| TCB135 | Excavation (Remaining) | 12 | 07/06/18 A | 23/06/18 | | | | | | | | - | | | | | |
| TCB140 | Basement Raft (GL3-5) | 12 | 07/06/18 A | 23/06/18 | | ļ | | | ļ | | ! ! ! | 1 | | | | | |
| TCB145 | Basement Raft (Remaining) | 12 | 25/06/18 | 09/07/18 | | i | | | | | ! ! ! | 1 | : : | | | | |

20/06/18 - 20/09/18

Gammon For Contract No. HY/2017/10 Northern Connection Tunnel Buildings, E&M

| P7 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| M | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | 2018 | | | | | | | | | | | | |
|----------------|----------------------------------------------------------------------|------|----------|------------|--------------------------------|--------------|----|----------------|------------|----------|--------------|--------------|----|----|-----------|--------------|----|
| | | | | | 0.5 | 1 00 | | uly | 00 | | | Augus | | 07 | Sep 03 | tember 10 | |
| TCB150 | Ground Floor Slab - Formwork | 12 | 10/07/18 | 23/07/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| TCB152 | Ground Floor Slab - Rebar | 12 | 19/07/18 | 01/08/18 | ļ; | ļ | | | | <u>-</u> | ļ | ļ | | | | | |
| TCB154 | Ground Floor Slab - Concrete | 2 | 02/08/18 | 03/08/18 | | | | | | | | | | | | | |
| TCB160 | Level 1 Slab - Remove G/F Slab Formwork | 2 | 04/08/18 | 06/08/18 | | | | | | | - | | | | | | |
| TCB161 | Level 1 Columns & Scaffolding | 10 | 07/08/18 | 17/08/18 | | | | | | | - | - | | | | | |
| TCB162 | Level 1 Slab | 12 | 18/08/18 | 31/08/18 | † | | | | | | ÷ | - | | | | | |
| TCB171 | Level 2 Slab - Remove 1/F Slab Formwork | 2 | 01/09/18 | 03/09/18 | | | | | { <u>}</u> | | ļ | | | | 1 | | |
| TCB172 | Level 2 Columns & Scaffolding | 10 | 04/09/18 | 14/09/18 | | | | | | | | | | | | | |
| TCB173 | Level 2 Slab | 12 | 15/09/18 | 29/09/18 | | | | | | 1 | | | | | | = | |
| TCSS Provision | on . | | | | [|] | | | | 1 | | | | | | | |
| TCB200 | Blockwork Walls and Plaster (G/F) | 12 | 15/09/18 | 29/09/18 | | | | | | | | | | | | | |
| Key Date 4 - | E&M Works in Vehicular Underpass Area & TCSS Provision | | | | | | | | | | | | | | | | |
| E&M Works | | | | | <u> </u> | | | | | | | | | | | | |
| VU110 | Access Portion XI | 0 | | 01/07/18 | • | <u> </u> | | | | | | | | | | | |
| _ | Administration Building, Maintenance Depot, Kiosk N2, TCSS Provision | | | | ļ. | | | | | | | ļ | | | | | |
| | on Building (ADB) | | | | | ļ | | | | | | | | | | | |
| Piling Works | | | | | ļ. | ļ | | | | | | | | | | | |
| ADB110 | Possess Portion XIV | 0 | | 20/06/18 A | <u> </u> | | | | | | | | | | | | |
| ADB120 | Predrilling (No 1-6) | 7 | 21/06/18 | 28/06/18 | | ļ | | | | | | ļ | | | | | |
| ADB121 | Predrilling (No 7-12) | 7 | 29/06/18 | 07/07/18 | ļ. | ļ | | <u> </u> | ļļ | | | ļ | | | | | |
| ADB122 | Predrilling (No 13-18) | 7 | 09/07/18 | 16/07/18 | ļ. . . | ļ | | - | | | ¦ | ļ | | | | | |
| ADB140 | Socket H-Piling (No. 1-5) - 1Rig | 12 | 17/07/18 | 30/07/18 | ļ. - | ļ | | | | <u> </u> | | <u>!</u> | | | | | |
| ADB141 | Socket H-Piling (No. 6-10) - 1Rig | 12 | 31/07/18 | 13/08/18 | l . | | | | | | <u> </u> | | | | | | |
| ADB142 | Socket H-Piling (No. 11-15) - 1Rig | 12 | 14/08/18 | 27/08/18 | ļ. | ļ | | | | | | | | | | | |
| ADB143 | Socket H-Piling (No. 16-20) - 1Rig | 12 | 28/08/18 | 10/09/18 | ļ | | | | | | ļ | ļ | | | | <u>-</u> | |
| ADB144 | Socket H-Piling (No. 21-25) - 1Rig | 12 | 11/09/18 | 24/09/18 | | ļ | | | | | ¦ | ļ | | | | | |
| Maintenance | | | | | ļ | ļ | | | ļļ | | ļ | ļ | | | | | |
| Piling Works | | | | 10/00/10 | | ļ | | | ļ <u>.</u> | | | | | | | | |
| MD110 | Possess Portion XIII | 0 | 17/00/10 | 16/09/18 | ļ . | ļ | | | | | | | | | | | |
| MD120 | Predrilling (1-10) | 10 | 17/09/18 | 28/09/18 | ļ: | ļ | | | <u></u> | | | ļ | | | | | |
| Kiosk N2 | | | | | İ | İ | | 1 | | | İ | <u> </u> | | | | | |



| P8 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| M | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | 2018 | | | | | | | | | | | | |
|---------------|----------------------------------------------------------------------------------------------|------|------------|----------------|----------------|------------|-----------------|------------------|----------|----------|------------------|-------------|-------------|----|----------|--------|----|
| | | | | | I OF | 1 00 | | uly | 00 | 20 | | Augus | t | 07 | | ptembe | |
| N2-110 | Possess Portion Ve | 0 | | 15/09/18 | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| N2-120 | Site clearance & trial pits | 6 | 15/09/18 | 21/09/18 | ļ: | ļ ļ | | ¦ | | | ! ! | ļ | | | | | |
| Key Date 5 - | Key Date 5 - E&M Works for TCB, Toll Area, Kiosk N1, Underpass, Plant Rm, and Approach Roads | | | · | | | | | | ! | | | | - | | | |
| E&M Works f | | | | | | | | | | | ; ; ; | | | | | | |
| | First Floor Completed at TCB with Scaffolding Removed | 0 | | 14/09/18 | · † | ¦ | ! | | | | ; ; ; | | | | - | • | |
| ETCB119 | Remaining Blockwork Walls and Plaster (G/F) | 12 | 15/09/18 | 29/09/18 | † | { } | } } | ; ; | {} | | † ! | | } | | ÷ | | |
| ETCB120 | Blockwork Walls and Plaster (1/F) | 12 | 02/10/18 | 15/10/18 | <u> </u> | | | | | | ‡ | | | | - | | |
| Power On a | nd Statutory Inspections (except FSD) | | | | | ! | | | | | i | | | | | | |
| ETCB180 | Liaison with CLP | 12 | 15/09/18 | 29/09/18 | | i | | | | | <u></u> | | | | - | - | |
| Toll Area | | | | | | ! | | | | | ; ! | | | | | | |
| South Boun | d | | | | † | { | ; | ; | {} | | ; | | ; : | | ÷ | | |
| ETA110 | Access Portion IX | 0 | | 01/07/18 | | | | | () | | ‡ | | | | - | | |
| North Boun | d | | | | | | L | | | | 1 | | L | | | | |
| ETA180 | Access Portion XI | 0 | | 01/07/18 | • | <u> </u> | | | | | * | | + | | | | |
| Kiosk N1 | | | | | | | | , | | | , | | , | | - | | |
| EN110 | Access Portion IX | 0 | | 01/07/18 | • | | | | | | T | | , | | | | |
| EN130 | Site Clearance and Trial Pits | 6 | 07/08/18 | 13/08/18 | | | | | | | | • | | | | | |
| EN131 | Trim Formation | 2 | 14/08/18 | 15/08/18 | | | | | | | ! ! | | | | - | | |
| EN132 | Cast Concrete Base | 6 | 16/08/18 | 22/08/18 | | | | | | | | | | | - | | |
| Plant Room | | | | | | | | | | | , , , |] | | | - | | |
| Building Stru | ıcture | | | | | | | | | | | | | | | | |
| PR110 | Possess Portion XII | 0 | | 07/05/18 A | | | | | | | | | | | | | |
| PR120 | Footing - Formwork | 11 | 13/06/18 A | 23/06/18 | | | ! ! ! | | | | ! ! | | | | | | |
| PR121 | Footing - Rebar | 6 | 25/06/18 | 30/06/18 | | | | | | | i ! ! | | | | | | |
| PR122 | Footing - Concrete | 1 | 03/07/18 | 03/07/18 | | 0 | | : ! ! | | | ; ! ! | <u>.</u> | : ! ! | | <u> </u> | | |
| PR130 | Remove Formwork | 1 | 04/07/18 | 04/07/18 | <u> </u> | 0 | | | <u> </u> | | : : : ! | <u> </u> | | | | | |
| PR131 | Ground Floor Structure - Formwork | 12 | 05/07/18 | 18/07/18 | | | | | | | ! ! ! ! | <u> </u> | | | | | |
| PR132 | Ground Floor Structure - Rebar | 12 | 19/07/18 | 01/08/18 | | ¦ ¦ | | | | - | : | | | | <u> </u> | | |
| PR133 | Ground Floor Structure - Concrete | 1 | 02/08/18 | 02/08/18 | | | ! ! ! | ! ! ! | | | ! ! ! | | | | - | | |
| PR141 | Remove Formwork | 1 | 03/08/18 | 03/08/18 | ļ;ļ. | <u> </u> | <u> </u> | : ; ; | ; ;; | 0 | ; ; ; | ļ | | | ļ | ļ | |
| PR142 | Roof - Formwork | 12 | 04/08/18 | 17/08/18 | - | : | ! ! ! | ! ! | | | i | i | | | 1 | | |

20/06/18 - 20/09/18

Gammon For Contract No. HY/2017/10 Northern Connection Tunnel Buildings, E&M

| P9 | Date | Revision | Checked | Approved |
|----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| Л | | | | |
| | | | | |

| ID | Activity | Days | Start | Finish | 2018 | | | | | | | | | | | | |
|------------|------------------------------------------|------|----------|----------|------|------|----|----|----|--------|----|----|------|--------|----|----|----|
| | | ' | | | | July | | | - | August | t | | Sept | tember | | | |
| | | | | | 25 | 02 | 09 | 16 | 23 | 30 | 06 | 13 | 20 | 27 | 03 | 10 | 17 |
| PR143 | Roof - Rebar | 12 | 18/08/18 | 31/08/18 | | | | | | | | | | | | | |
| PR144 | Roof - Concrete | 1 | 01/09/18 | 01/09/18 | | | | | | | | | | 0 | | | |
| PR150 | Dwarf Wall on Rooof Level | 12 | 03/09/18 | 15/09/18 | | | | | | | | | | | | | |
| E&M Work | | | | | | | | | | | | | | | | | |
| EPR110 | Place Mass Concrete Fill & Plinth on G/F | 12 | 03/09/18 | 15/09/18 | |] | | | | | | | | | | | |
| EPR120 | Blockwork Wall | 12 | 17/09/18 | 02/10/18 | |] | | | | | | | | | [| | |
| Approach R | pads | | | | | | | | | | | | | | | | |
| Under Port | ons IX, XI, XX | | | | 1 | | | | | 1 | | | | | | | |
| AR110 | Access Portions IX, XI, and XX | 0 | | 01/07/18 | | | | | | | 1 | | | | | | |

20/06/18 - 20/09/18

Gammon For Contract No. HY/2017/10 Northern Connection Tunnel Buildings, E&I

| P10 | Date | Revision | Checked | Approved |
|-----|----------|----------|---------|----------|
| | 20/06/18 | | | |
| | | | | |
| | | | | |
| ķМ | | | | |
| | | | | |