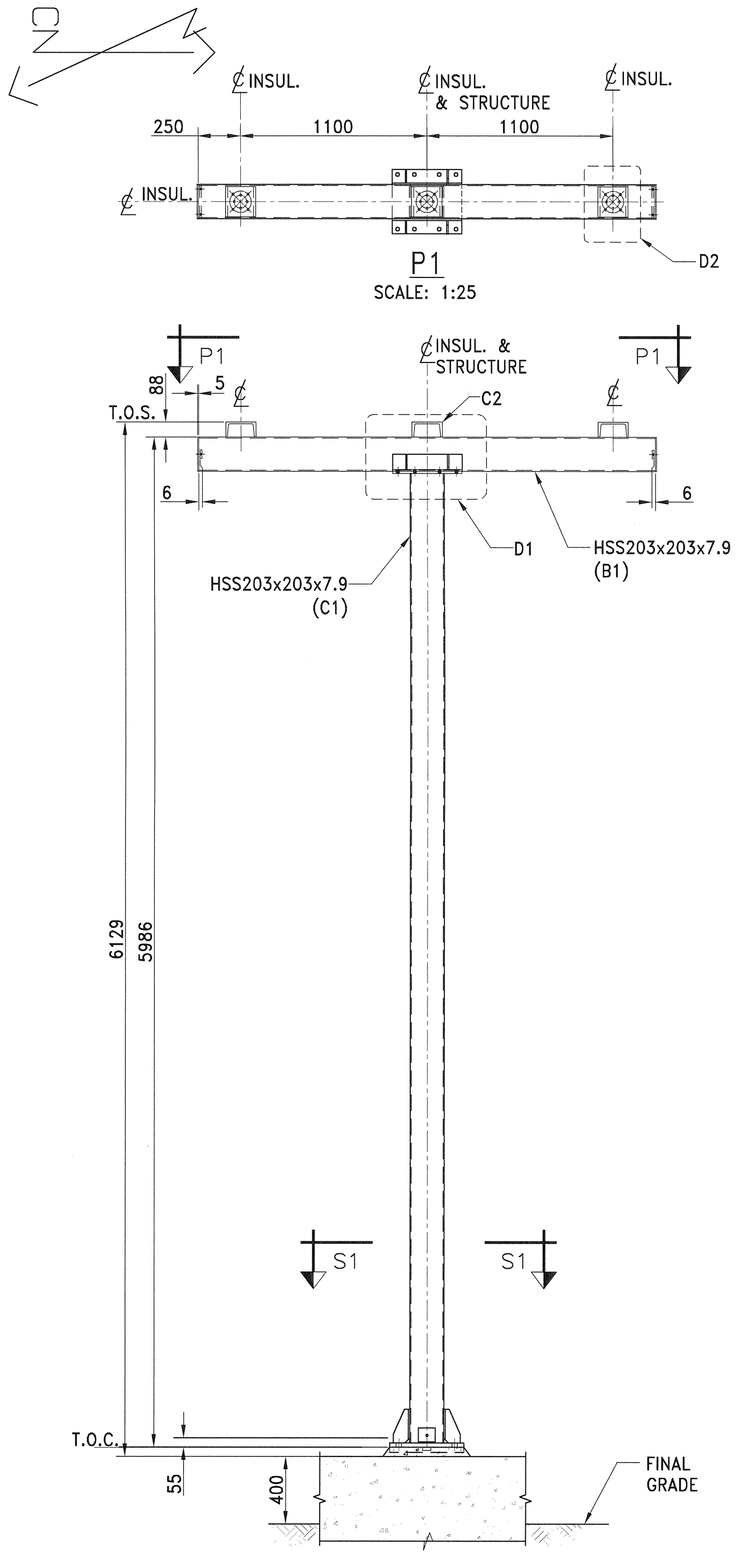
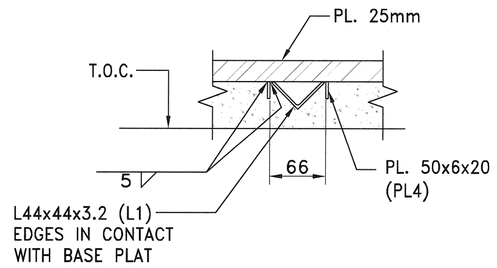



DRAINAGE DETAIL
SCALE: 1:5

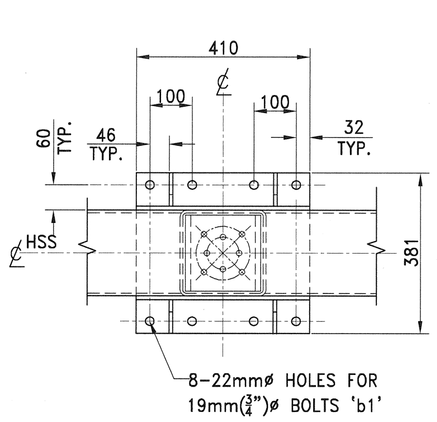
## BILL OF MATERIAL FOR ONE STEEL INSULATOR & BUS SUPPORT

| MARK | QUANT. | DESCRIPTION | MATERIAL | LENGTH (mm) | WEIGHT (kg) | REMARK |
|---|---|---|---|---|---|---|
| B1 | 1 | HSS 203x203x7.9 | G40.20-350W | 2700 | 128.0 | HOT DIP GALV. |
| C1 | 1 | HSS 203x203x7.9 | G40.20-350W | 5746 | 272.4 | HOT DIP GALV. |
| C2 | 3 | MC180x28.4 | G40.21-300W | 180 | 15.3 | HOT DIP GALV. |
| L1 | 1 | L 44x44x3.2 | G40.21-300W | 440 | 0.9 | HOT DIP GALV. |
| L2 | 4 | L 89x89x7.9 | G40.21-300W | 150 | 6.4 | HOT DIP GALV. |
| L3 | 2 | L 89x64x6.4 | G40.21-300W | 100 | 1.5 | HOT DIP GALV. |
| L4 | 2 | L 102x89x9.5 | G40.21-300W | 410 | 11.2 | HOT DIP GALV. |
| PL1 | 1 | PL 440x25 | G40.21-300W | 440 | 38.0 | HOT DIP GALV. |
| PL2 | 4 | PL 68x8 | G40.21-300W | 94 | 1.6 | HOT DIP GALV. |
| PL3 | 1 | PL 381x12 | G40.21-300W | 410 | 14.7 | HOT DIP GALV. |
| PL4 | 2 | PL 50x6 | G40.21-300W | 20 | 0.1 | HOT DIP GALV. |
| PL5 | 2 | PL 203x5 | G40.21-300W | 203 | 3.3 | HOT DIP GALV. |
| PL6 | 2 | PL 50x12 | G40.21-300W | 187 | 1.8 | HOT DIP GALV. |
| TOTAL WEIGHT (INCLUDING 3.5 % FOR GALVANIZATION) | | | | | 512.5 | |

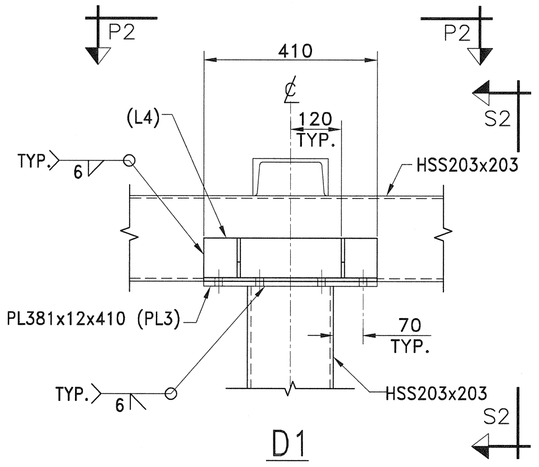
## BILL OF MATERIAL FOR BOLTS

| MARK | QUANT. | DESCRIPTION | MATERIAL | LENGTH (mm) | WEIGHT (kg) | REMARK |
|---|---|---|---|---|---|---|
| b1 | 8 | 19mmø (3/4") BOLTS, WASHERS AND NUTS | A325 | 64mm | – | GALV. |
| b2 | 4 | 12.7mmø (1/2") BOLTS, WASHERS | A325 | 48mm | – | GALV. |

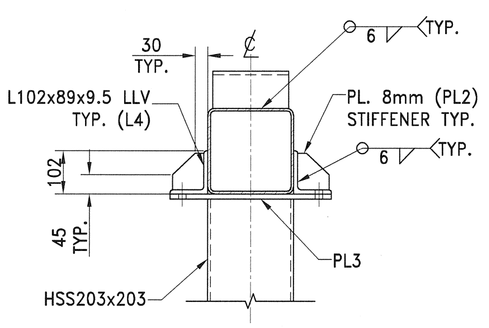
1 INSUL. & BUS SUPPORT REQUIRED. (SBS-1)
BOM FOR REFERENCE ONLY



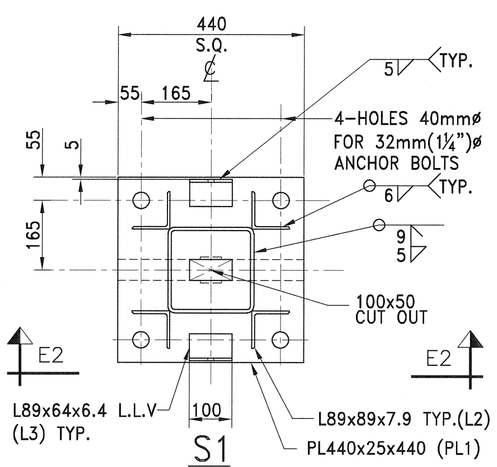

P2
SCALE 1:10



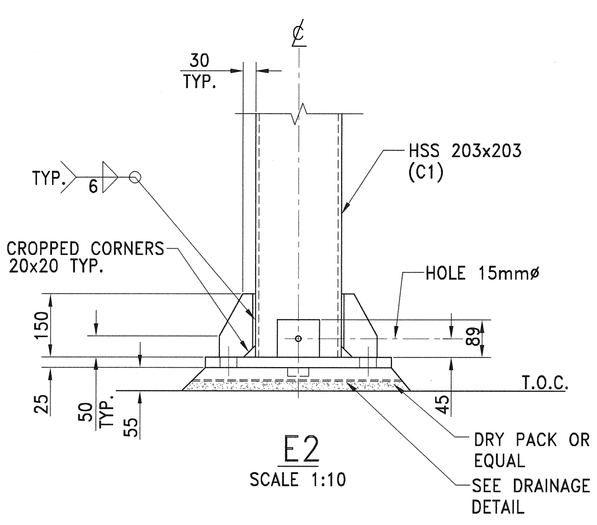

D1
SCALE 1:10



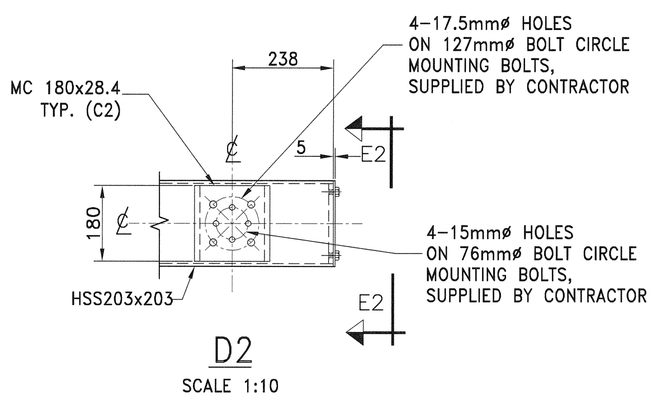

S2
SCALE 1:10



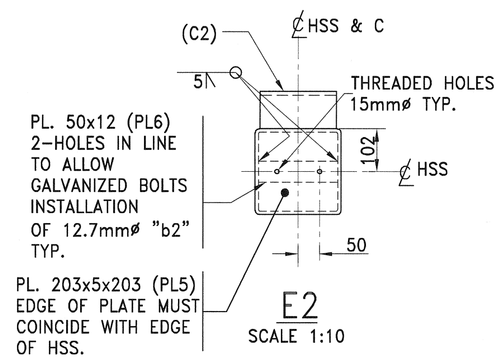

S1
SCALE 1:10




E2
SCALE 1:10




D2
SCALE 1:10




E2
SCALE 1:10

## GENERAL NOTES:

REFER TO DWG. F1731664-200-S005.

## REFERENCE DRAWINGS:

1. 115/13.8kV STATION
   STEEL KEY PLAN & LIST
   STRUCTURE F1731664-200-S001
2. 115kV AREA
   CONTAINM. PIT FOR "T1"
   CONC. & REINF. DETAILS
   FONDATION F1731664-100-F003
3. 115/13.8kV STATION
   BASIC LAYOUT
   ELECTRICAL ARRANG. F1731664-300-EA001
4. 115/13.8kV STATION
   ELEVATIONS
   ELECTRICAL ARRANG. F1731664-300-EA009

## LEGEND:

T.O.C.: TOP OF CONCRETE
T.O.S.: TOP OF STEEL
L.L.V.: LONG LEG VERTICAL
INSUL.: INSULATOR

PROFESSIONALS:

| N° | DATE | TRANSMISSION | BY ENG |
|---|---|---|---|
| 00 | 2018/09/27 | RELEASED FOR CONSTRUCTION | SYW |


THE S.M. GROUP INTERNATIONAL INC.
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STAMP :

LICENSED PROFESSIONAL ENGINEER
S.Y. WANG
100139367
2018/9/27
PROVINCE OF ONTARIO

CLIENT :

PROJECT :

MCMASTER UNIVERSITY-NF91

TITLE :
115/13.8kV STATION
INSUL. & BUS SUPP. 'SBS-1'
STEEL DETAILS
STRUCTURE

| | |
|---|---|
| PREPARED BY : S.Y. WANG | DATE : 2018/09/27 |
| DRAWN BY : G. TUDELA | SCALE : AS SHOWN |
| VERIFIED BY : Z.WANG | DISCIPLINE : STRUCTURE |
| APPROVED BY : S.Y.WANG SYW | CAD FILE NAME : F1731664-200-S003.dwg |

| PROJECT No: | LOT: | DWG. # | REV: | PAGE : |
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| F1731664 | 200 | S003 | 00 | |

A1