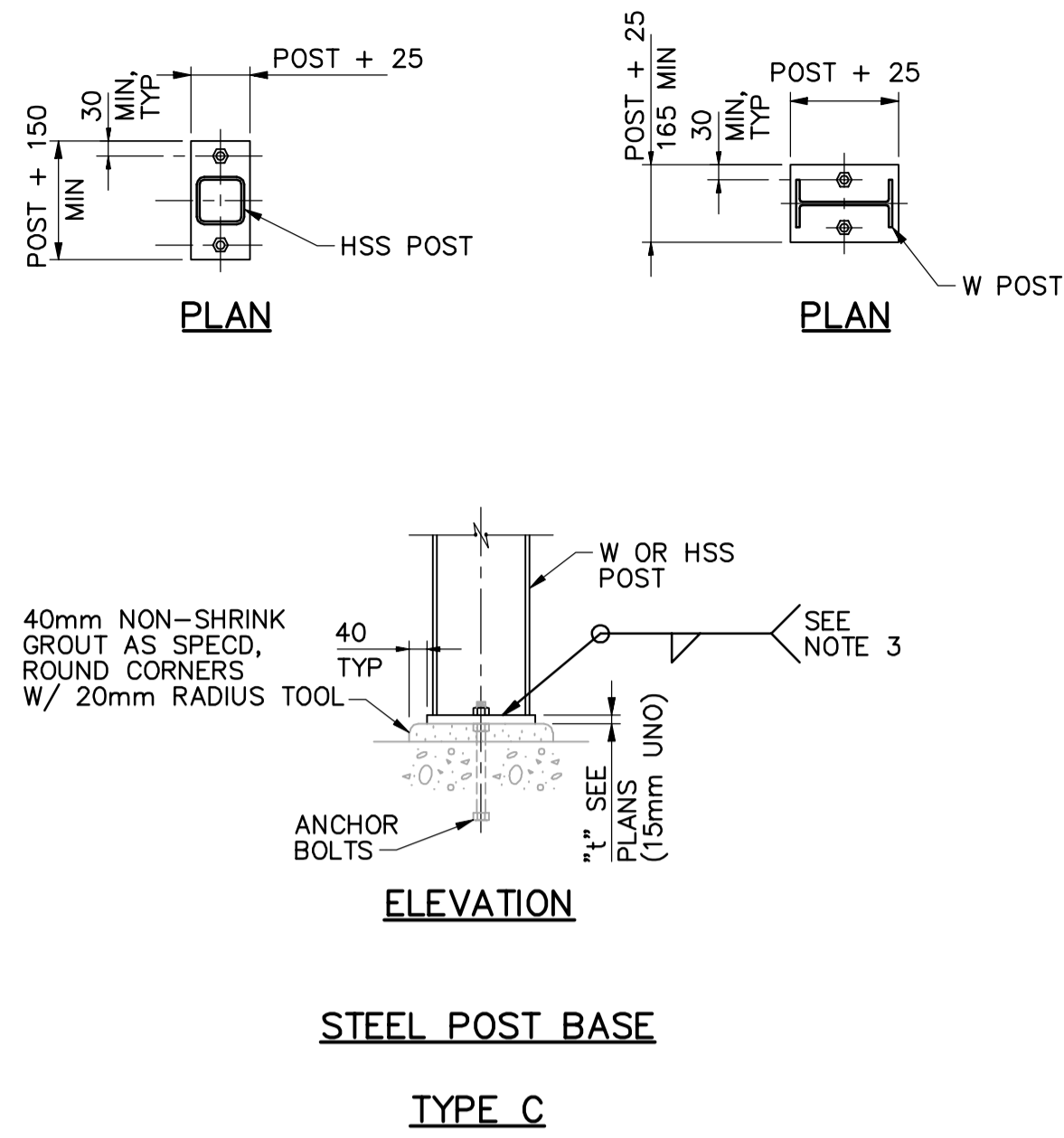


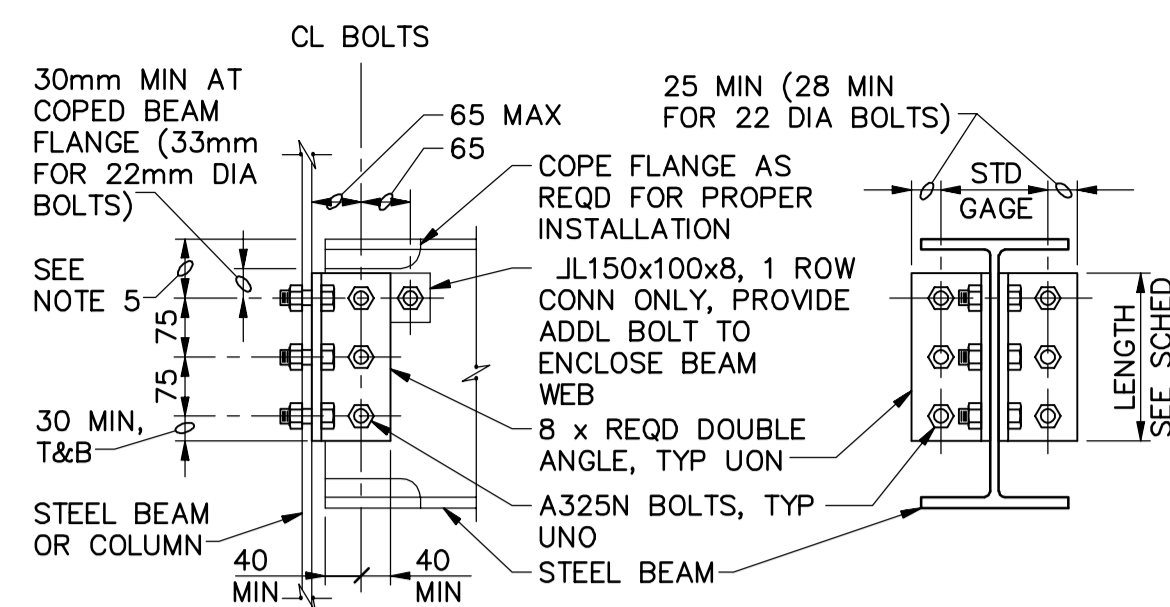
- NOTES:**
- UNLESS OTHERWISE NOTED, ADHESIVE CONC ANCHORS SHALL BE 20mm DIA x REQUIRED WITH LEVELING NUTS AND 300mm MINIMUM EMBED AND BASEPLATES SHALL BE CENTERED ON COLUMN.
 - WELD SIZE SHALL BE DETERMINED BY THE THICKEST MEMBER JOINED; MINIMUM WELD SIZE SHALL BE 5mm FILLET FOR MATERIAL THICKNESSES UP TO AND INCLUDING 15mm, 6mm FILLET FOR THICKNESSES OVER 15mm TO 20mm, AND 8mm FILLET FOR MATERIAL THICKNESSES OVER 20mm. ALL WELDS SHALL BE SINGLE-PASS WELDS.

1 STEEL COLUMN BASE
N.T.S.



- USE OF 2 - BOLT STEEL POST BASEPLATE ANCHORAGE DETAIL SHOWN SHALL BE LIMITED TO STEEL SUPPORT MEMBERS WEIGHING LESS THAN 135kg.

STEEL POST BASE
TYPE C
N.T.S.

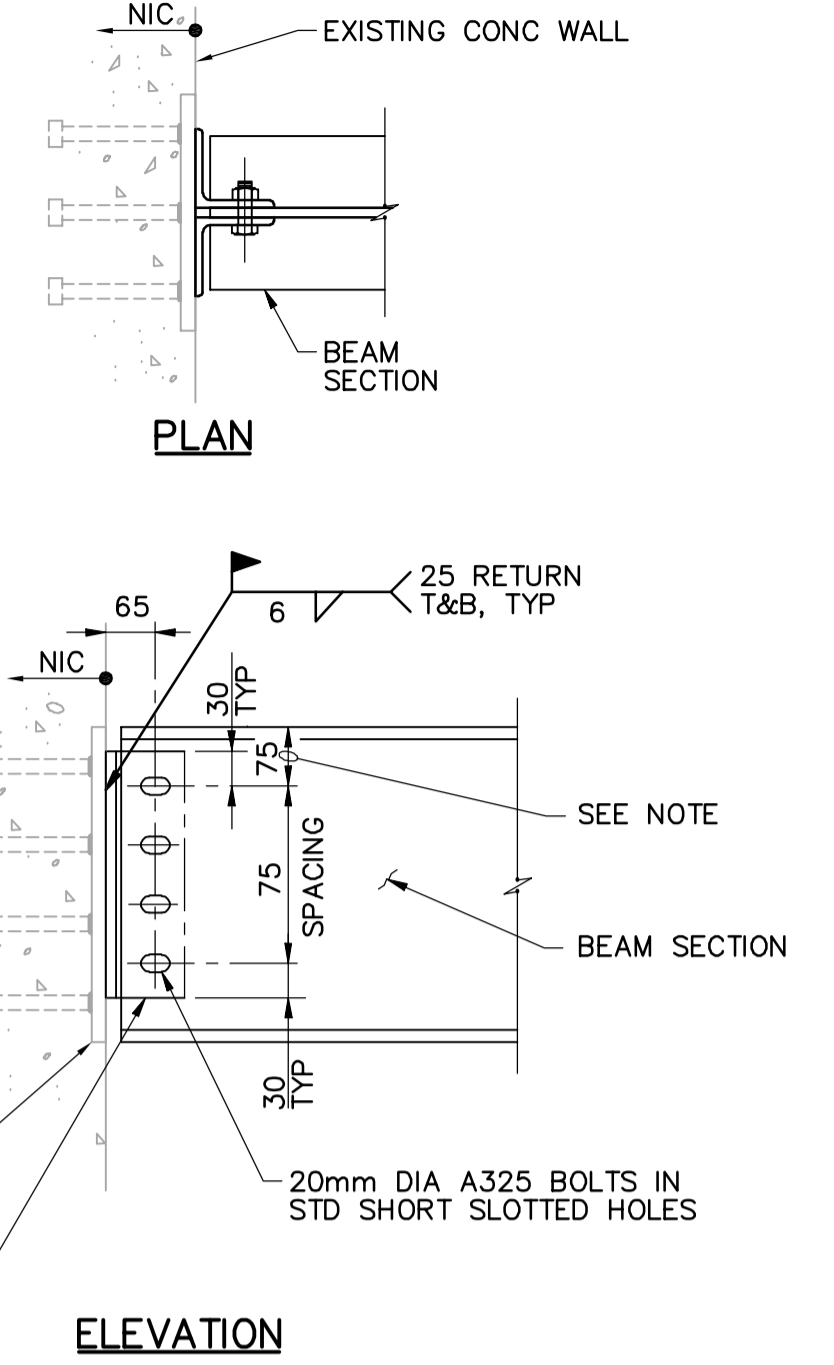


NOMINAL BEAM DEPTH, mm	ROWS OF BOLTS	BOLT DIA, mm	DOUBLE ANGLE, LENGTH, mm	COMMENTS
920	10	22	750	ANGLE THK = 10
840	9	22	675	ANGLE THK = 10
760	8	22	600	ANGLE THK = 10
690	7	20	520	-
610	6	20	445	-
530	5	20	365	-
410-460	4	20	290	-
310-380	3	20	215	-
200-250	2	20	140	-
150	1	20	75	SEE NOTE 3
100	1	20	65	SEE NOTE 3

NOTES:

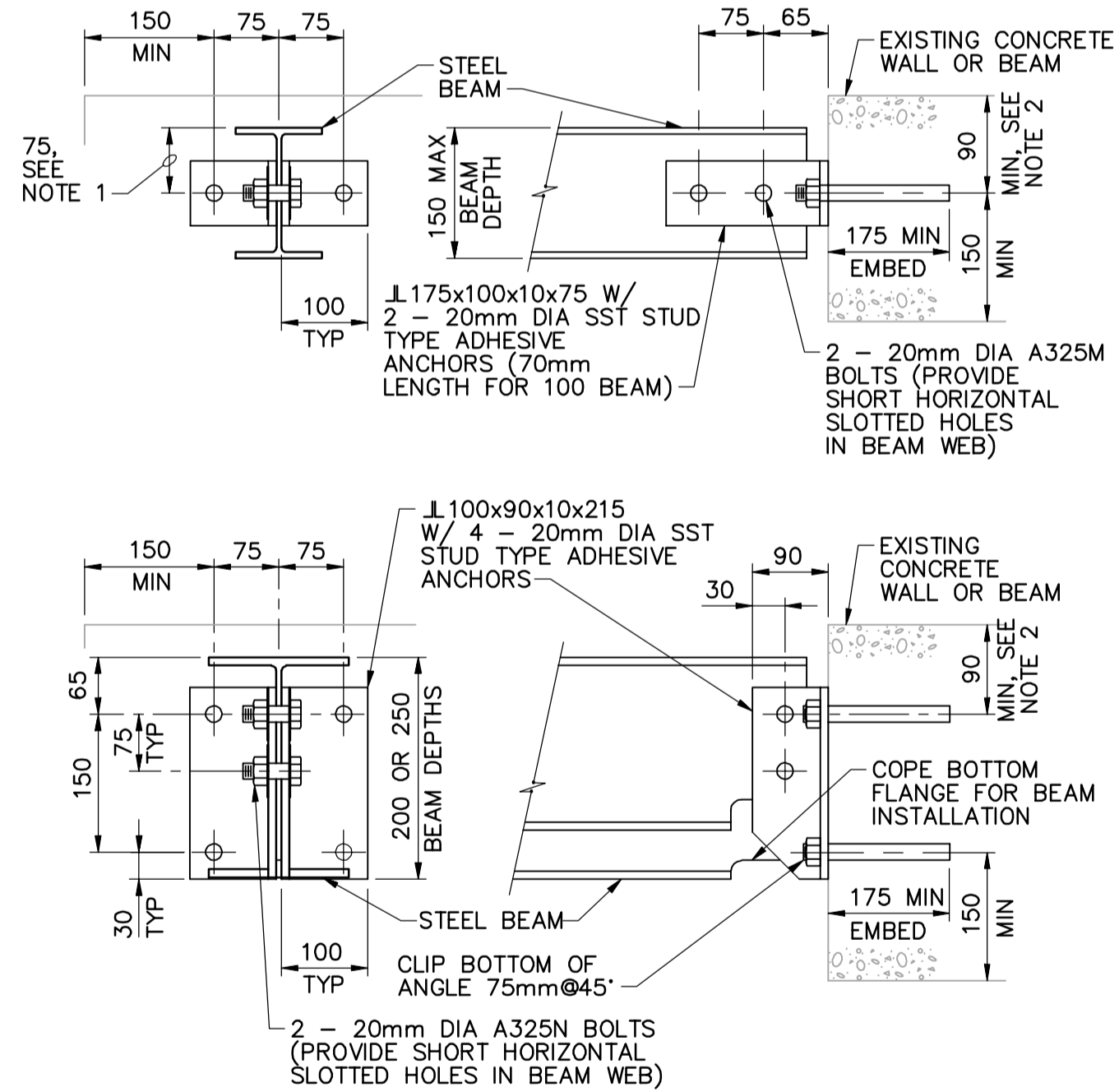
- UNLESS OTHERWISE NOTED, NUMBER OF ROWS IS EQUAL TO NUMBER OF BOLTS TO ENCLOSE BEAM WEB.
- ALL BEAM FRAMING CONNECTIONS SHALL CONFORM TO THIS DETAIL UNLESS SPECIFICALLY NOTED OTHERWISE OR APPROVED IN WRITING BY THE ENGINEER.
- FOR NOMINAL BEAM DEPTHS LESS THAN 200mm, EXTEND LONG LEG OF DOUBLE ANGLE ALONG BEAM WEB AND PROVIDE ADDITIONAL BOLT TO ENCLOSE BEAM WEB AS SHOWN.
- PROVIDE ADDITIONAL 40mm LENGTH TO DOUBLE ANGLE FOR STAGGERED BOLT CONNECTIONS WHEN REQUIRED OR USED.
- DIMENSION SHALL BE 75mm UNLESS OTHERWISE REQUIRED FOR PROPER FABRICATION.

2 TYPICAL BEAM CONNECTION
N.T.S.



- NOTE:**
65 FOR 200 BEAM DEPTH

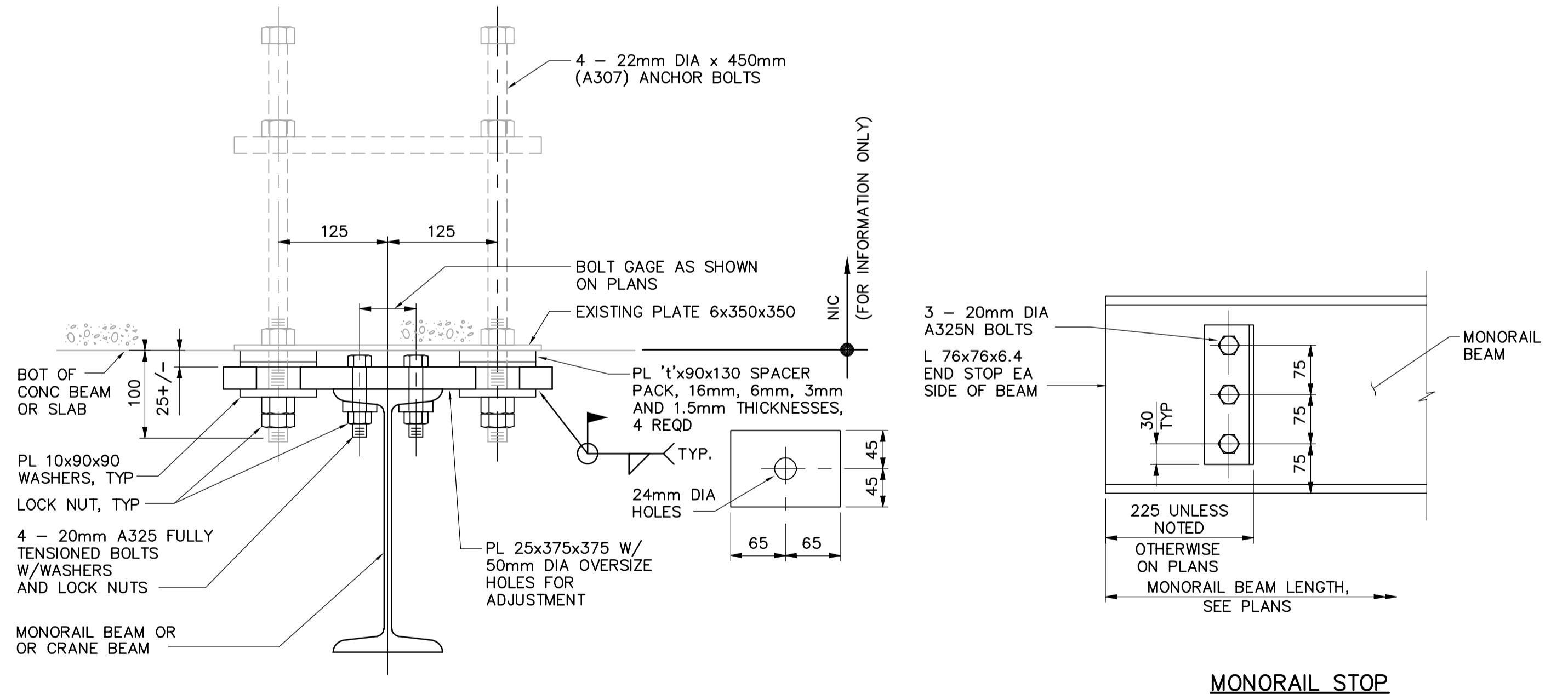
4 EMBEDDED CONNECTION-STEEL BEAMS
N.T.S.



NOTES:

- 75mm DIMENSION TYPICAL EXCEPT 65mm FOR 125mm BEAMS AND 50mm FOR 100mm BEAMS.
- DO NOT CUT EXISTING CONCRETE BEAM TOP REINFORCING DURING DRILL-IN ANCHOR INSTALLATION. FIELD LOCATE BEAM REINFORCING PRIOR TO FABRICATION. ADD LENGTH TO CLIP ANGLES AS REQUIRED TO LOWER ANCHORS TO CLEAR REINFORCING WHILE MAINTAINING SPACING AND EDGE DISTANCE AS SHOWN.
- WHERE BOTH ENDS OF BEAM ARE ATTACHED TO A WALL, PROVIDE LONG HORIZONTALLY SLOTTED HOLES IN BEAM WEB AT ONE END. TIGHTEN NUTS SNUG TIGHT, BACK OFF 1/2 TURN, AND LOCK WITH DOUBLE NUT.

5 BEAM/WALL CONNECTION-STEEL
N.T.S.



NOTES:

- EMBEDDED PLATES PROVIDED IN ALL PERPENDICULAR CONCRETE BEAMS INTERSECTING MONORAIL OR CRANE RAIL.

MONORAIL CONNECTION

6 MONORAIL DETAILS
N.T.S.



B.M. ELEV.	NO.	REVISIONS	DATE	BY
	00	742-2005 ADDENDUM 1	06/04/21	DK
			2006/01/03	

DESIGNED BY	CHECKED BY
DK	AP
DRAWN BY	APPROVED BY
PM	AHL
SCALE:	RELEASED FOR CONSTRUCTION BY:
NTS	R. SOROKOWSKI
	DATE 2006/04/21

ENGINEER'S SEAL
ORIGINAL SIGNED BY D. KRUGER 2006/04/21
CONSULTANT DRAWING NO. WB-S7451

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
MAIN BUILDING
MECHANICAL AND ELECTRICAL

STRUCTURAL
STANDARD DETAILS

CITY FILE NUMBER
SHEET OF
CITY DRAWING NUMBER
1-0601B-A-S7451-001-000