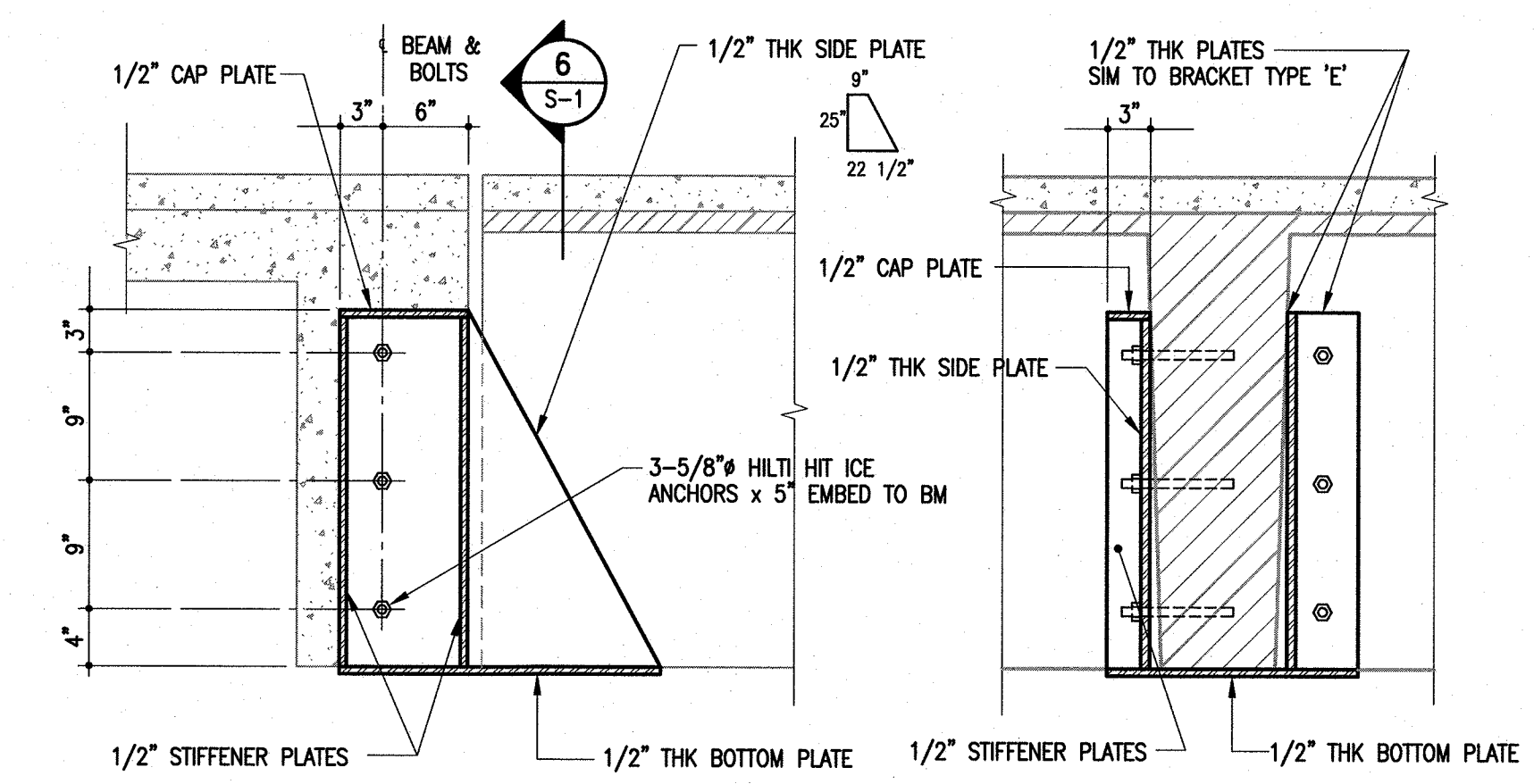


- GENERAL NOTES**
- DO NOT SCALE DRAWINGS.
  - ALL DIMENSIONS ARE TO BE VERIFIED ON-SITE PRIOR TO FABRICATION & CONSTRUCTION. THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.
  - ALL SHORING LOCATIONS TO BE SITE CONFIRMED PRIOR TO ERECTION.
  - MECHANICAL/ELECTRICAL SERVICES NOT SHOWN. RELOCATE EXISTING ELECTRICAL CONDUIT AS REQUIRED TO INSTALL SHORING. COORDINATE WITH THE CONTRACT ADMINISTRATOR.
  - EXISTING FLOOR LINE LOAD = 50 PSF

- STRUCTURAL STEEL**
- STRUCTURAL STEEL TO CONFORM TO CSA-G40.21, "STRUCTURAL QUALITY STEELS" AND CSA-G40.20 "GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL".
  - ALL ROLLED OR STEEL STRUCTURAL SECTIONS SHALL BE G40.21-S50W. ALL HOLLOW STRUCTURAL SECTIONS TO BE G40.21-S50W CLASS C. ALL ANGLES AND PLATES SHALL BE G40.21-44W.
  - FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CAN/CSA S16.1-09, "STEEL STRUCTURES FOR BUILDINGS".
  - ALL HSS COLUMNS TO BE HSS 5x5x0.313 TYPICAL.
  - ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF CSA W59, "WELDED STEEL CONSTRUCTION". FABRICATORS SHALL BE PROPERLY CERTIFIED IN ACCORDANCE WITH CSA W47.1, "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
  - ALL BOLTED CONNECTIONS TO USE A325 HIGH STRENGTH BOLTS. MINIMUM CONNECTION SHALL CONSIST OF 2 BOLTS.
  - STEEL RECEIVING FINISH PAINTING TO HAVE ONE COAT OF CISC/CPMA 2-75 QUICK DRYING SHOP PRIMER. STEEL TO BE CLEANED IN CONFORMANCE WITH SSPC-SP7. PAINT SHORING TO MATCH EXISTING USING TWO COATS OF WATER BASED ENAMEL (REF TO SPECIFICATIONS).
  - ANCHOR BOLTS FOR ADHESIVE ANCHORS TO BE GRADE ASTM A193, GRADE B7.
  - FABRICATOR TO NOTIFY ENGINEER OF ANY PROPOSED MEMBER SUBSTITUTIONS AND CHANGED CONNECTION DETAILS.
  - STRUCTURAL STEEL SUPPLIER IS TO SUBMIT ENGINEERING DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA COVERING THE DESIGN OF CONNECTIONS, TO THE PROJECT DESIGN ENGINEER FOR REVIEW PRIOR TO FABRICATION. CONNECTION DESIGN TO INCLUDE FOR ALL ADJUSTABLE CONNECTIONS REQUIRED TO SUITE FABRICATION AND ERECTION PROCEDURES AND TOLERANCES.

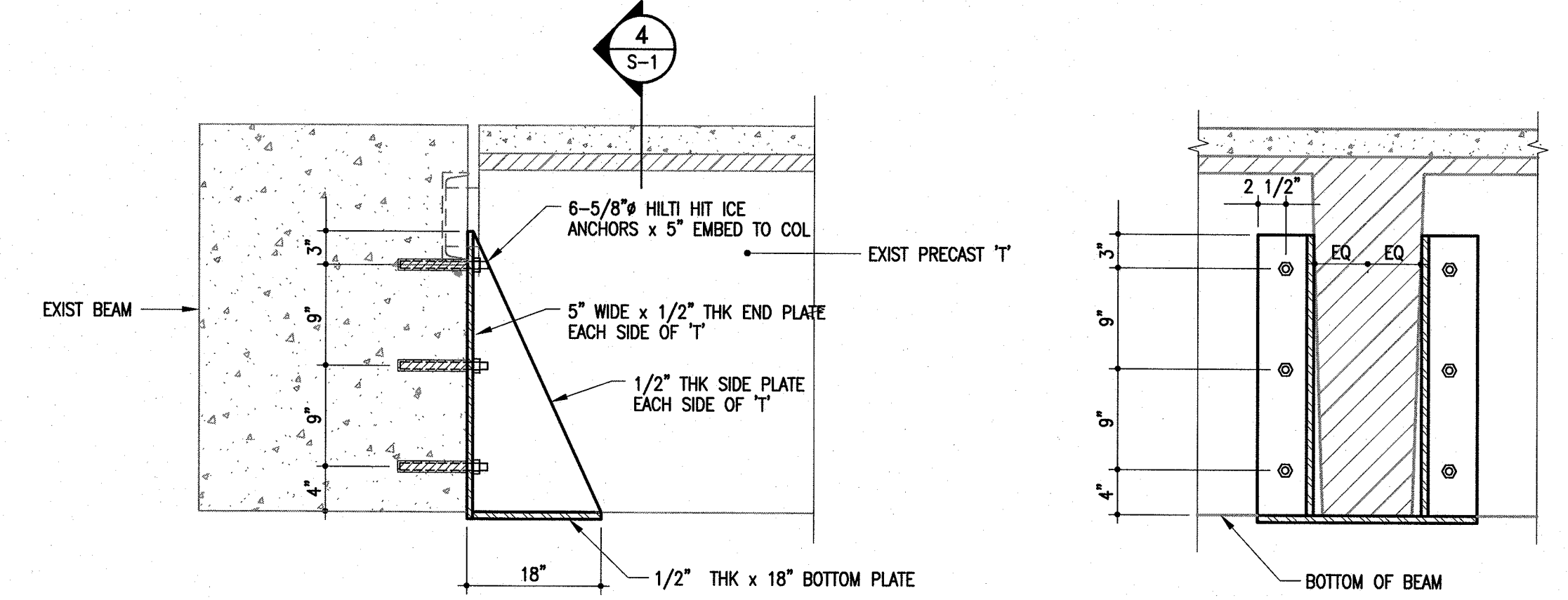
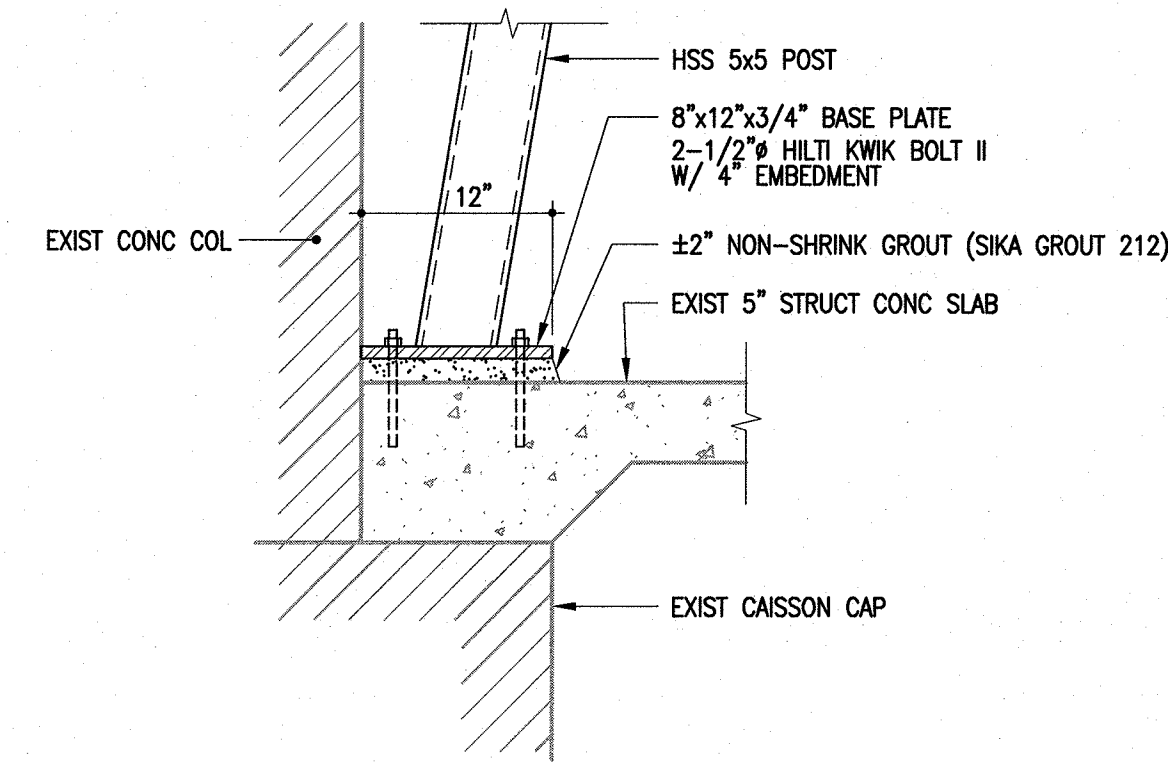
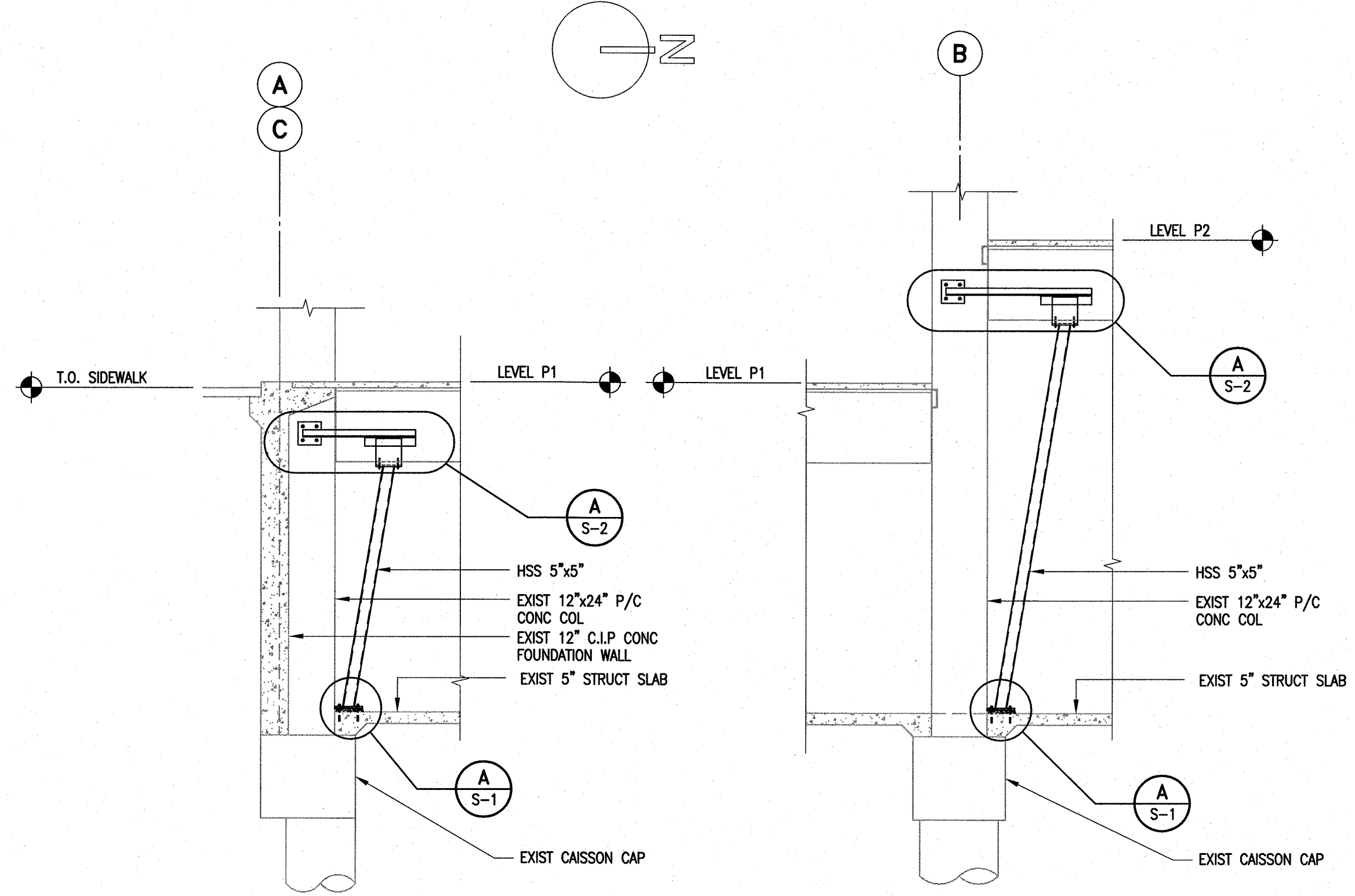


**BASEMENT FLOOR PLAN**

1/16" = 1'-0"  
 \* SHORING SHOWN ON FLOOR LAYOUT IS FOR SUPPORT OF PRECAST 'T' ON LEVEL ABOVE

**SHORING LEGEND**

- SHORING TYPE 'A' - U/S OF LEVEL P1 TO BASEMENT (SEE 1/S-1)
- ⊙ SHORING TYPE 'B' - U/S OF LEVEL P2 TO BASEMENT (SEE 2/S-1)
- ⊗ SHORING TYPE 'C' - U/S OF LEVEL P3/P4 TO LEVEL P1/P2 (SEE 1/S-2 & 2/S-2)
- ⊘ SHORING TYPE 'D' - U/S OF LEVEL P5/P6 TO LEVEL P3/P4 (SEE 1/S-2)
- ⊠ SADDLE BRACKET TYPE 'E' BOLTED TO EXISTING BEAM (SEE 3/S-1)
- ⊡ SADDLE BRACKET TYPE 'F' BOLTED TO EXISTING BEAM (SEE 5/S-1)
- EXISTING SHORING



**1 SECTION - SHORING TYPE 'A'**  
 S-1 1/4" = 1'-0"

**2 SECTION - SHORING TYPE 'B'**  
 S-1 1/4" = 1'-0"

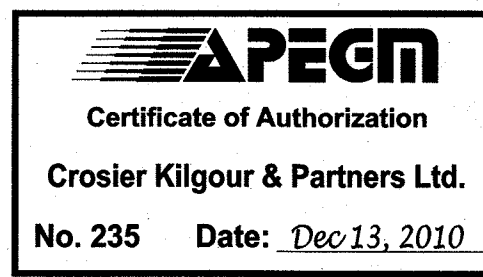
**A DETAIL**  
 S-1 1" = 1'-0"

**3 SECTION - BRACKET TYPE 'E'**  
 S-1 1" = 1'-0"

**4 SECTION**  
 S-1 1" = 1'-0"

**5 SECTION - BRACKET TYPE 'F'**  
 S-1 1" = 1'-0"

**6 SECTION**  
 S-1 1" = 1'-0"



300-275 Carlton Street  
 Winnipeg, Manitoba R3C 5R6  
 T 204. 943. 7501  
 F 204. 943. 7507

**Crosier Kilgour & Partners Ltd.**  
 CONSULTING STRUCTURAL ENGINEERS

The General Contractor shall check & verify all dimensions and report any errors or omissions to the designers.

Project  
**CIVIC CENTRE CAR PARK SHORING INSTALLATION**  
 171 PRINCESS STREET  
 WINNIPEG, MANITOBA

Sheet Title		Sheet No.	
BASEMENT FRAMING PLAN, SECTIONS AND DETAILS		S-1	
Design	Drawn	Checked	Scale
RDM	JLP	DJM	AS NOTED
Date	File		
13 DEC 2010	2010-1074		

No.	Date	Issue/Revision	By
1	13 DEC 2010	ISSUED FOR CONSTRUCTION	DJM