

**Government
of Canada**

**Gouvernement
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Parks Canada

Parcs Canada

**Georgian Bay and
Ontario East Field Unit**

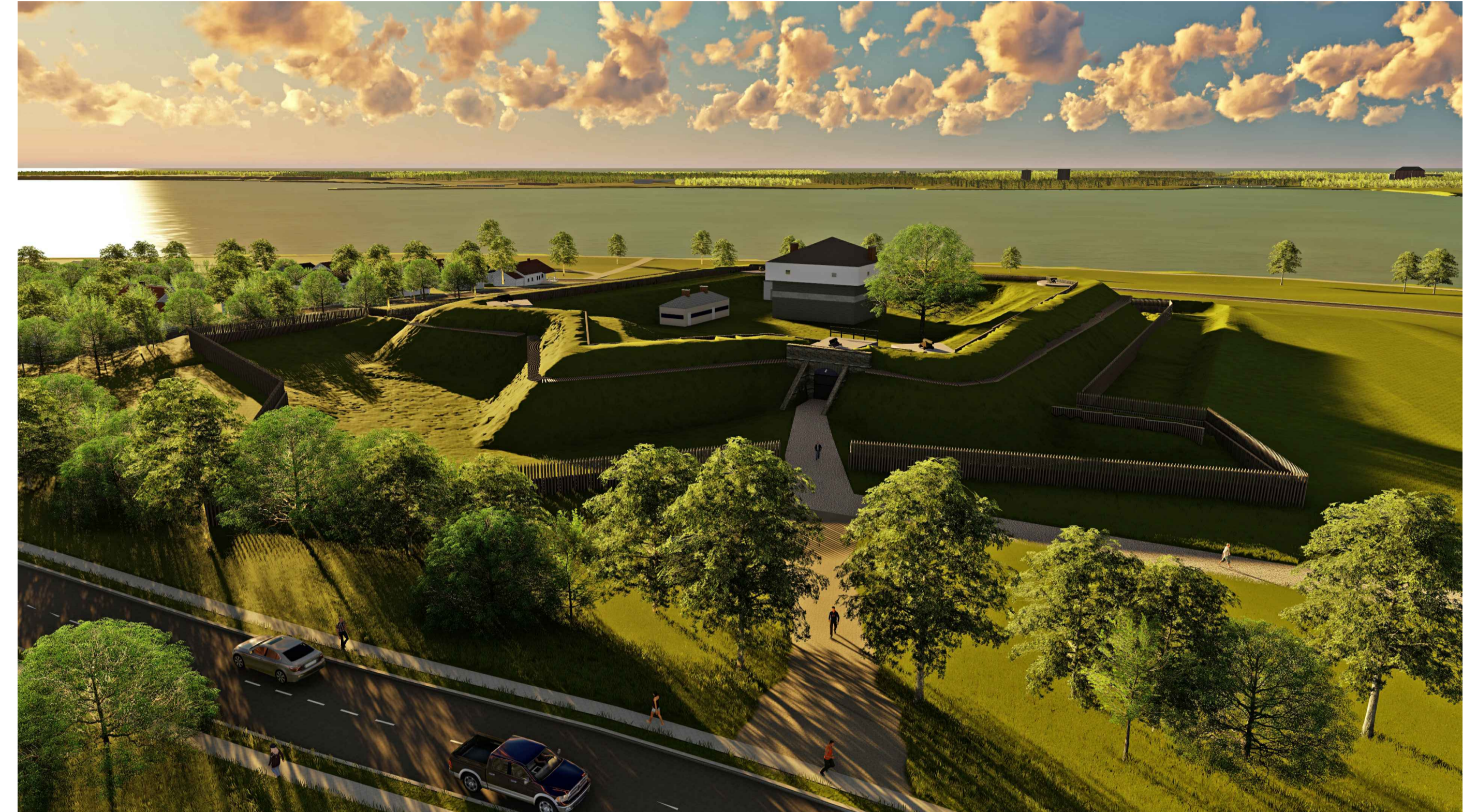
**Baie-Georgienne et Unité
de terrain de l'est de
l'Ontario**

FORT WELLINGTON NATIONAL HISTORIC SITE EASTERN PALISADE REHABILITATION

PRESCOTT, ONTARIO

PROJECT NO. 1175

ISSUED FOR TENDER - June 18, 2021



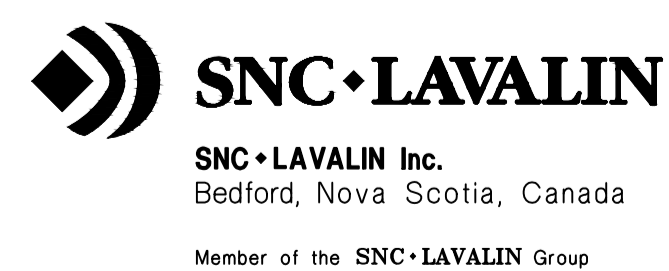
DRAWING LIST

CIVIL

- C01 EXISTING SITE PLAN
- C02 SITE PLAN

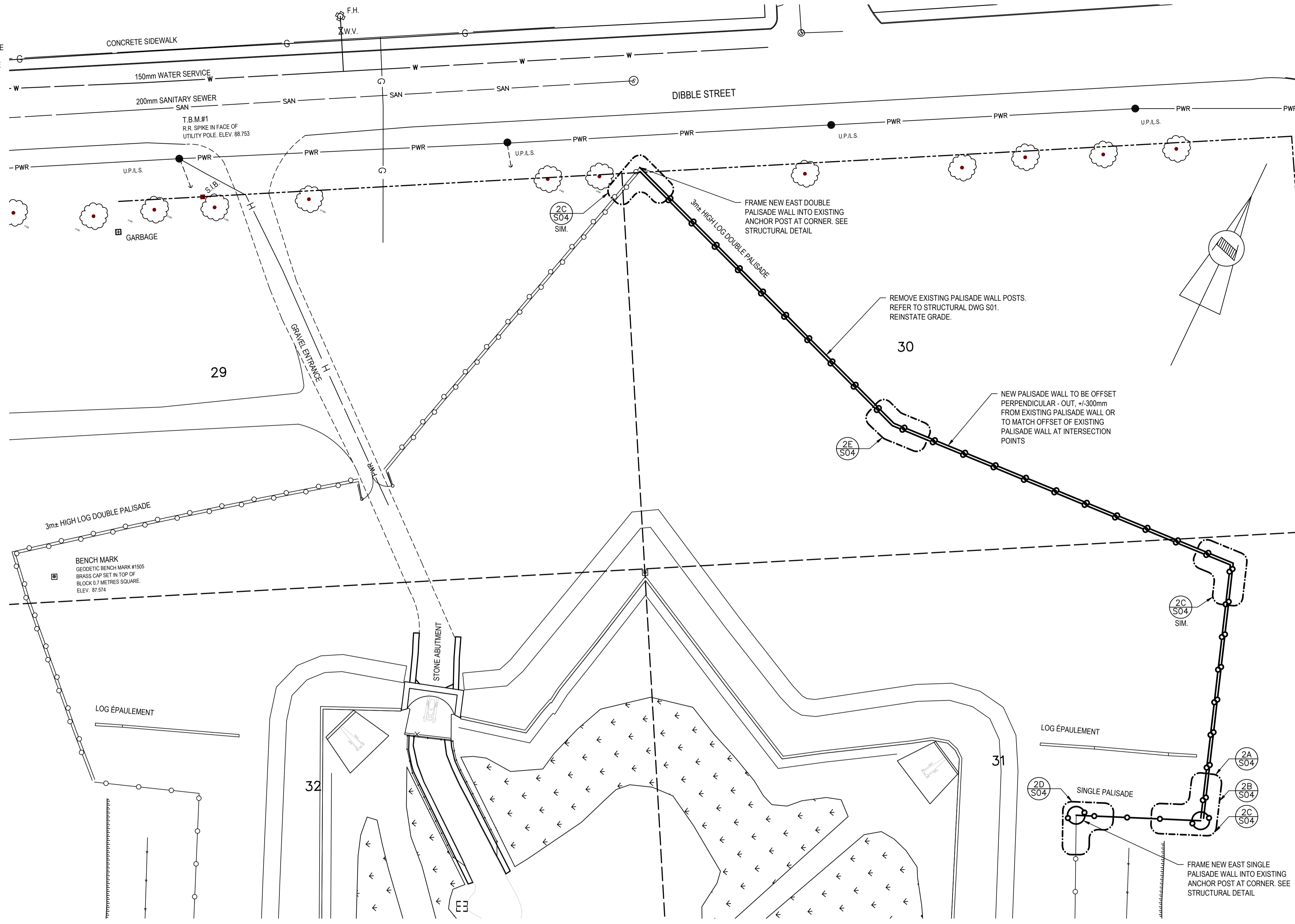
STRUCTURAL

- S01 PALISADES GENERAL NOTES AND SECTIONS
- S02 PALISADES SECTIONS
- S03 PALISADE DETAILS AND SECTIONS
- S04 PALISADE LAYOUTS, SECTIONS AND DETAILS



LEGEND

- EXISTING DOUBLE PALISADE
- EXISTING SINGLE PALISADE
- NEW DOUBLE PALISADE
- NEW SINGLE PALISADE

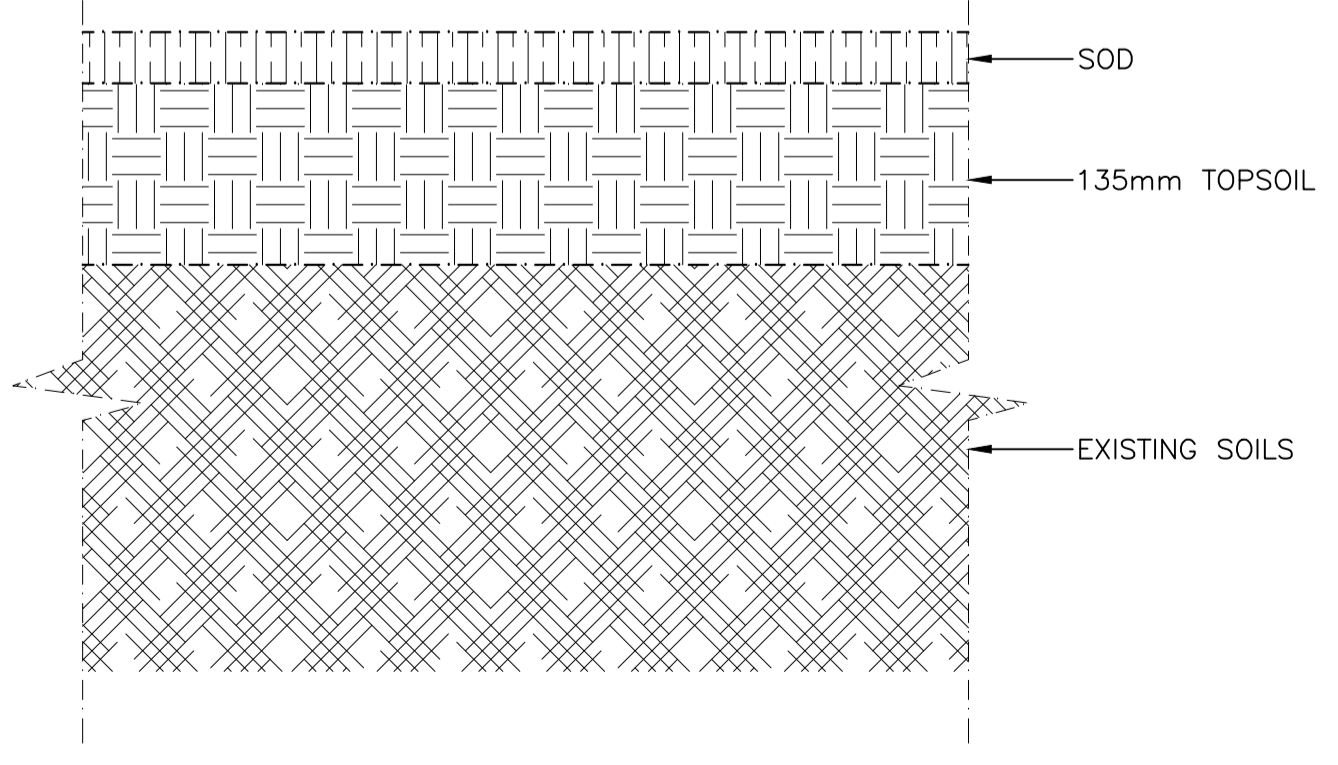


BENCH MARK
 GEODETIC BENCH MARK #1535
 BRASS CAP SET IN TOP OF
 BLOCK 0.7 METRES SQUARE.
 ELEV. 87.574

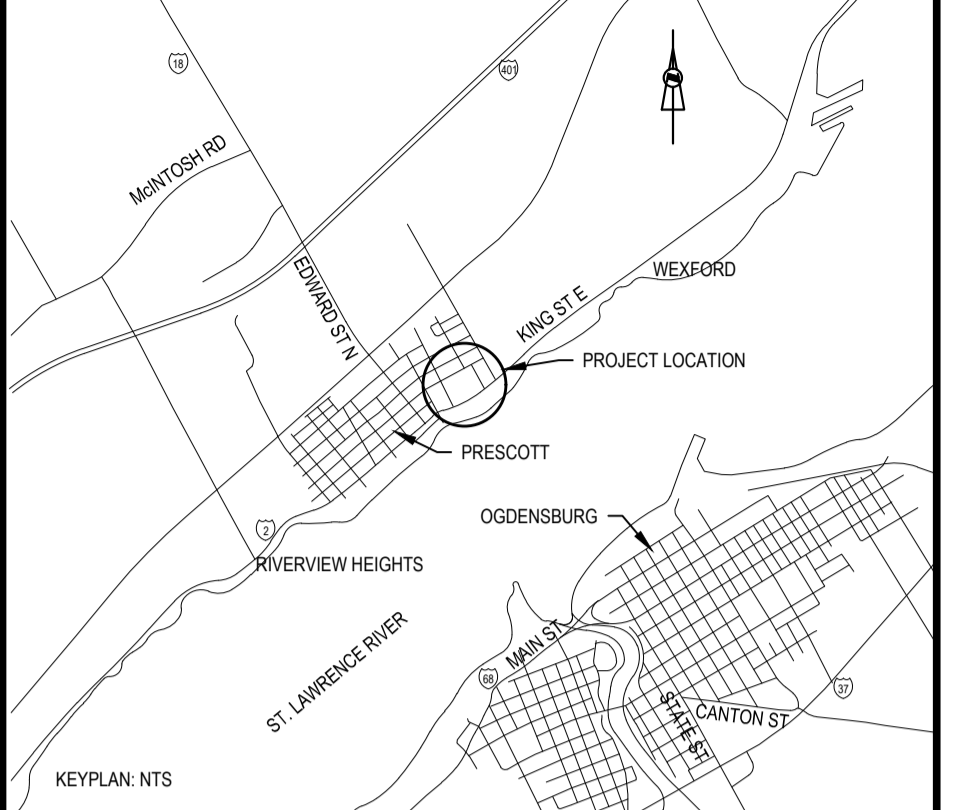
LOG ÉPAULEMENT

LOG ÉPAULEMENT

FRAME NEW EAST SINGLE
 PALISADE WALL INTO EXISTING
 ANCHOR POST AT CORNER. SEE
 STRUCTURAL DETAIL



LANDSCAPE REINSTATEMENT **1**
 SCALE : N.T.S. **C02**



- NOTES:
1. ALL ELEVATIONS AND COORDINATES GIVEN AND NOTED ARE IN METERS. ALL SURVEY INFORMATION PROVIDED IS NOT REFERENCED TO A GEODETIC DATUM OR REFERENCED TO A SURVEY / CONTROL MONUMENT. ALL CO-ORDINATES SHOWN ARE APPROXIMATE IN NAD83, ZONE 18 COORDINATE SYSTEM.
 2. ALL ELEVATIONS AND COORDINATES SHOWN ARE APPROXIMATE. CONTRACTOR TO SURVEY SITE PRIOR TO CONSTRUCTION. PROVIDE SURVEY ELEVATIONS AND COORDINATES TO DEPARTMENTAL REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK TO ALLOW FOR CONFIRMATION OF DESIGN.
 3. ALL ELEVATIONS TO BE REINSTATED TO EXISTING UNLESS OTHERWISE NOTED.
 4. ALL DISTURBED EXISTING SURFACES TO BE REINSTATED TO MATCH EXISTING UNLESS OTHERWISE NOTED.
 5. POINTS PROVIDED ARE INTENTIONALLY NOT IN SEQUENTIAL ORDER.

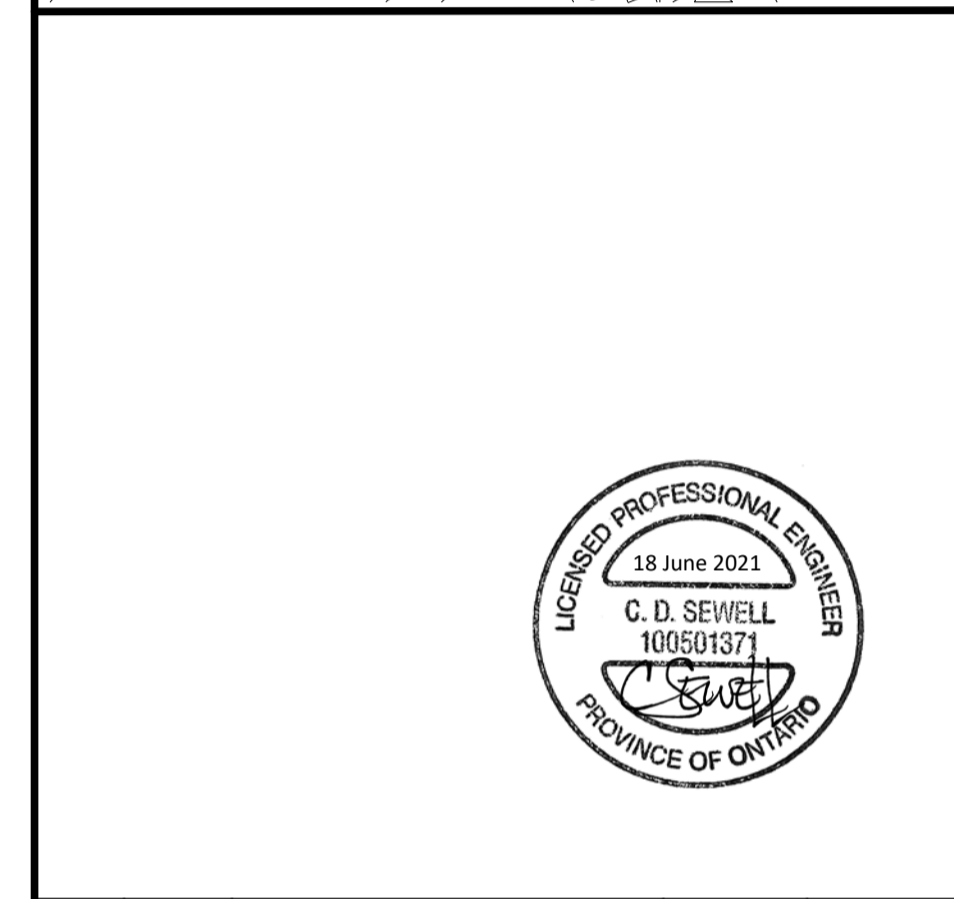
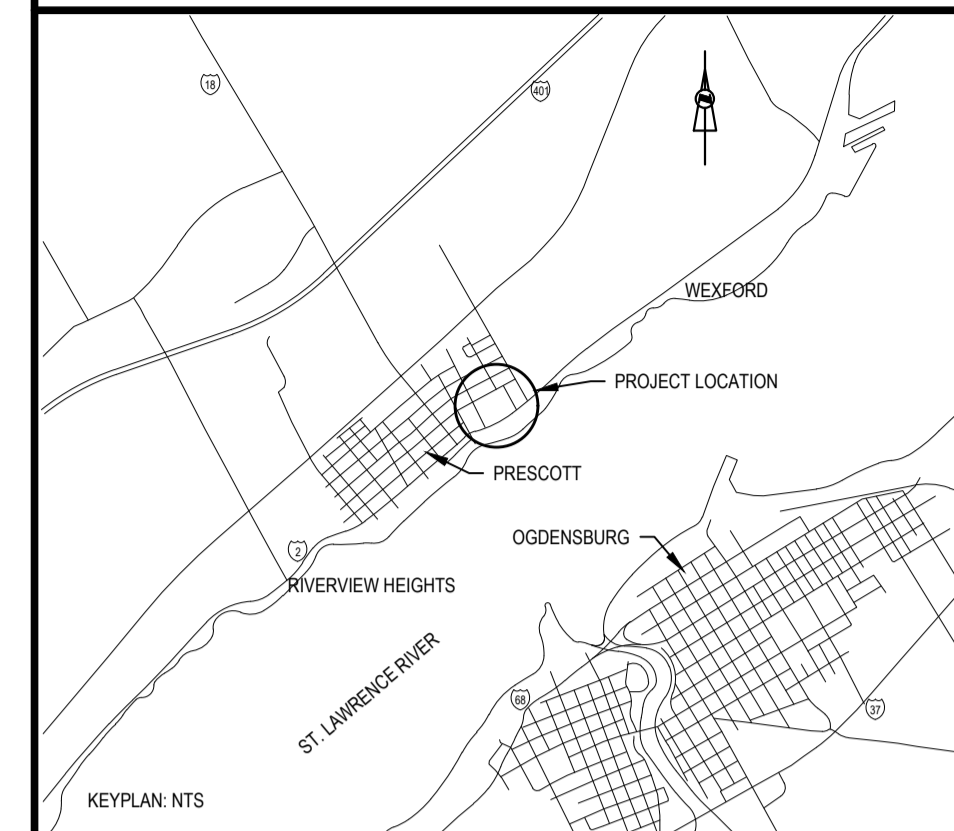
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No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
Revision / Revision				
A		Detail number	A Numéro de détail	
B		Sheet number	B Numéro de la feuille	
Linear dimensions in millimetres			Dimensions linéaires en millimètres	
Consultant's Name Nom de l'expert-conseil			Eng. Stamp Sceau de l'ingénieur	

SNC-LAVALIN
 SNC-LAVALIN Inc.
 Halifax, Nova Scotia, Canada
 Member of the SNC-LAVALIN Group

Project title/Titre du projet
**FORT WELLINGTON : EASTERN
 PALISADE REHABILITATION**

Drawing title/Titre du dessin
SITE PLAN

Designed by/Concept par I.W.	Date 2021/04/15
Drawn by/Dessiné par J.M.	Date 2021/04/15
Checked by/Véifié par K.K.	Date 2021/04/15
Project No./No. du projet 1175	Scale/Échelle 1:250
Drawing Set No./No. de série du dessin X	Sheet No./ Node la feuille C02



C01	2021/06/18	ISSUED FOR TENDER		
No.	Date	Description	Drawn by / Dessiné par	Approved / Approuvé

Revision / Revision	
A	Detail number / A Numéro de détail
B	Sheet number / B Numéro de la feuille
Linear dimensions in millimetres / Dimensions linéaires en millimètres	
Consultant's Name / Nom de l'expert-conseil	
SNC-Lavalin Inc. Bedford, Nova Scotia, Canada	
Member of the SNC-Lavalin Group	
Eng. Stamp / Sceau de l'ingénieur	

Project title/Titre du projet
FORT WELLINGTON : EASTERN PALISADE REHABILITATION

Drawing title/Titre du dessin
PALISADE GENERAL NOTES AND SECTIONS

Designed by/Concept par HM/CS	Date 2021/04/15
Drawn by/Dessiné par LPI/JV	Date 2021/04/15
Checked by/Vérifié par CS	Date 2021/04/15
Project No./No. du projet 1175	Scale/Échelle AS NOTED
Drawing Set No./No. de série du dessin X	Sheet No./N° de la feuille S01

PILE TYPE	FACTORED BENDING MOMENT AT GROUND LEVEL	FACTORED DOWNWARD AXIAL LOAD
A	5 kN-m	5 kN

NOTES:
1. REFER TO GEOTECHNICAL REPORT IN SPECIFICATIONS FOR SOILS CONDITIONS AND BEDROCK LOCATION.

NOTE:
* REFER TO AVERAGE POST DIAMETERS IN SPECIFICATIONS.

STRUCTURAL NOTES

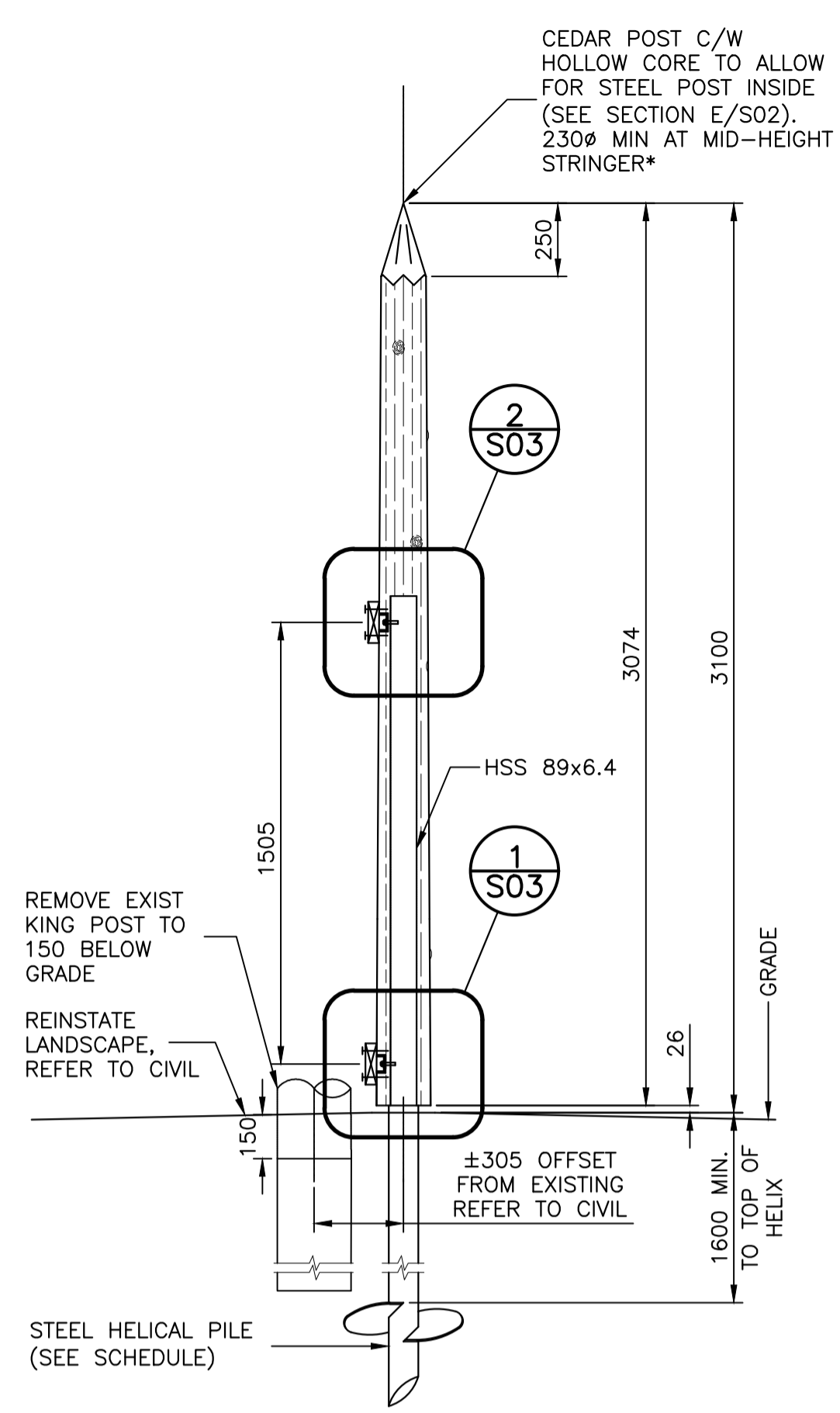
- GENERAL
- DESIGN AND CONSTRUCTION OF NEW STRUCTURE, AND EXISTING STRUCTURE AFFECTED BY MODIFICATIONS, CONFORMS TO STRUCTURAL REQUIREMENTS OF PART 4 OF NATIONAL BUILDING CODE OF CANADA (NBC) 2015. REMAINDER OF EXISTING STRUCTURE, WHERE NOT AFFECTED BY MODIFICATIONS, WAS NOT REVIEWED AND REMAINS RESPONSIBILITY OF OTHERS.
 - CARRY OUT WORK IN ACCORDANCE WITH ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT.
 - THE STRUCTURAL DRAWINGS ARE INTENDED TO WORK TOGETHER AND BE COMPLEMENTARY WITH PROJECT SPECIFICATIONS. CONSULT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - READ DRAWINGS IN CONJUNCTION WITH APPLICABLE DISCIPLINE DRAWINGS. CROSS REFERENCE ELEVATIONS, SLOPES AND DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS WITH CIVIL DRAWINGS. NOTIFY DEPARTMENTAL REPRESENTATIVE AND ENGINEER OF DISCREPANCIES PRIOR TO COMMENCING WORK.
 - REFER TO REVISION COLUMN FOR LIMITATIONS ON DRAWING USE. DO NOT CONSTRUCT FROM DRAWINGS UNLESS ISSUED "FOR CONSTRUCTION".
 - DO NOT SCALE OFF DRAWINGS. FOLLOW FIGURED DIMENSIONS ONLY.
 - LINEAR DIMENSIONS SHOWN ON DWGS ARE IN MILLIMETERS. COORDINATE WITH CIVIL.
 - VERIFY DIMENSIONS AND DETAILS IN FIELD AND REPORT DISCREPANCIES AND INCOMPATIBILITIES TO DEPARTMENTAL REPRESENTATIVE PRIOR TO COMMENCING WORK.
 - CONTRACTOR IS RESPONSIBLE FOR SAFETY ASPECTS OF CONSTRUCTION AND INTEGRITY OF STRUCTURES DURING ERECTION INCLUDING, BUT NOT LIMITED TO, DESIGN AND CONSTRUCTION OF TEMPORARY SUPPORTS, BRACING, AND SHORING.
 - CONTRACTOR SHALL REVIEW SHOP DRAWINGS FOR COMPLETENESS AND COMPLIANCE WITH DRAWINGS, AND FOR CONFORMANCE WITH CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION PRIOR TO SUBMITTAL TO DEPARTMENTAL REPRESENTATIVE.
 - WHERE INDICATED, TRADES SHALL SUBMIT SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN ONTARIO PRIOR TO FABRICATION.
 - MARK-UP AND MAINTAIN A SET OF STRUCTURAL DRAWINGS WITH AS-BUILT DIMENSIONS AND DETAILS MODIFIED DURING CONSTRUCTION. PROVIDE COPIES TO DEPARTMENTAL REPRESENTATIVE IF REQUESTED.

DESIGN LOADS

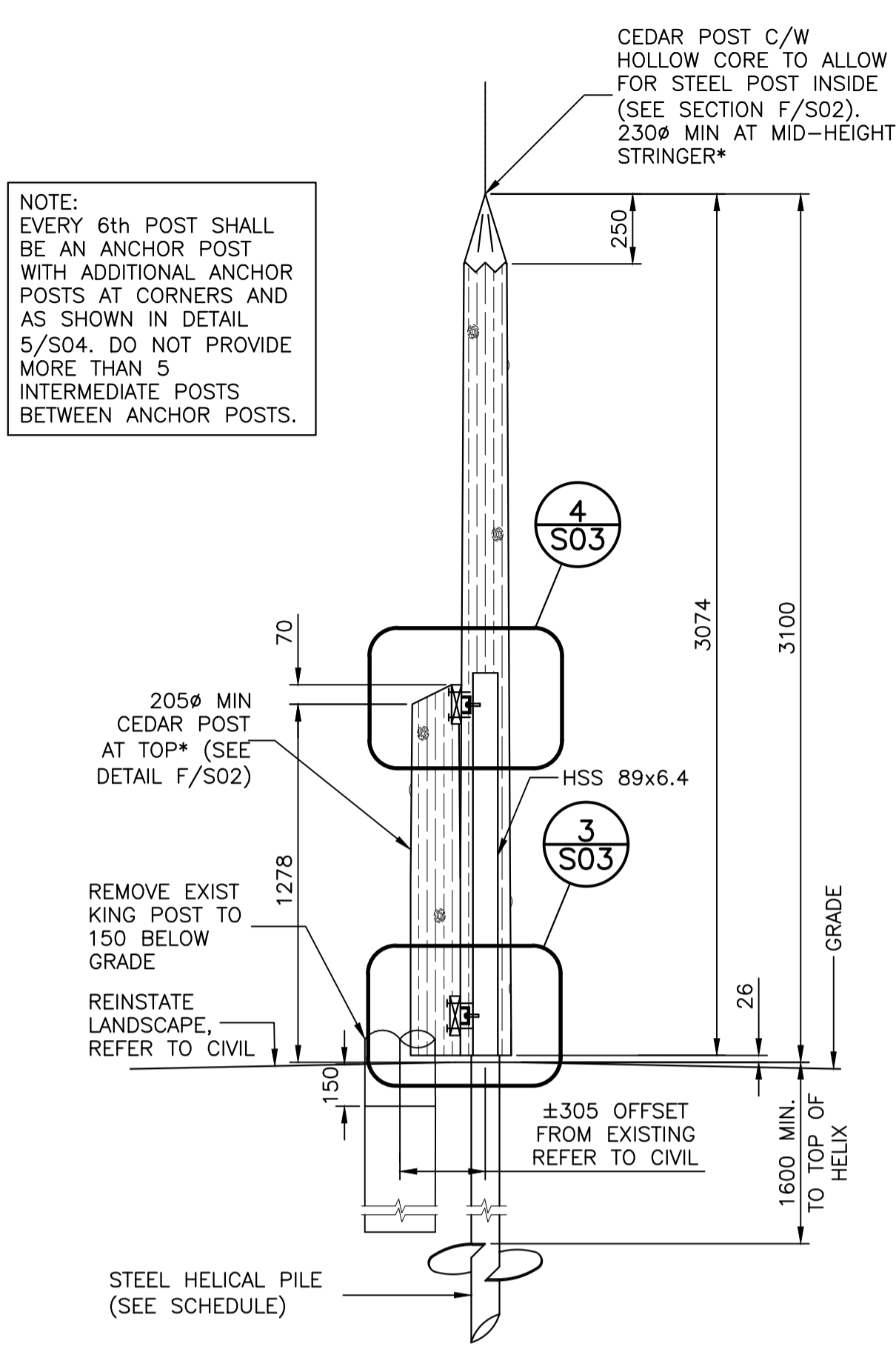
- DESIGN LOADS:
CLIMATIC DATA IS DERIVED FROM NBC 2015 APPENDIX C FOR PRESCOTT, ONTARIO. STRUCTURE IMPORTANCE CATEGORY: NORMAL.
a) GROUND SNOW LOAD
 I_s : ULS = 1.0 SLS = 0.9 S_s = 2.2 kPa S_r = 0.4 kPa
b) WIND: (HOURLY WIND PRESSURE)
 I_w : ULS = 1.0 SLS = 0.75 Q_{100} = 0.44 kPa
- CONSTRUCTION LOADS SHALL NOT EXCEED SPECIFIED DESIGN LOADS.
- ADDITIONAL LOADS AS REQUIRED FOR TEMPORARY CONSTRUCTION CONDITIONS TO BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN ONTARIO.
- LOADS AND FORCES SHOWN ON DRAWINGS ARE UNFACTORED (SERVICE) LOADS U.N.O.

ABBREVIATIONS

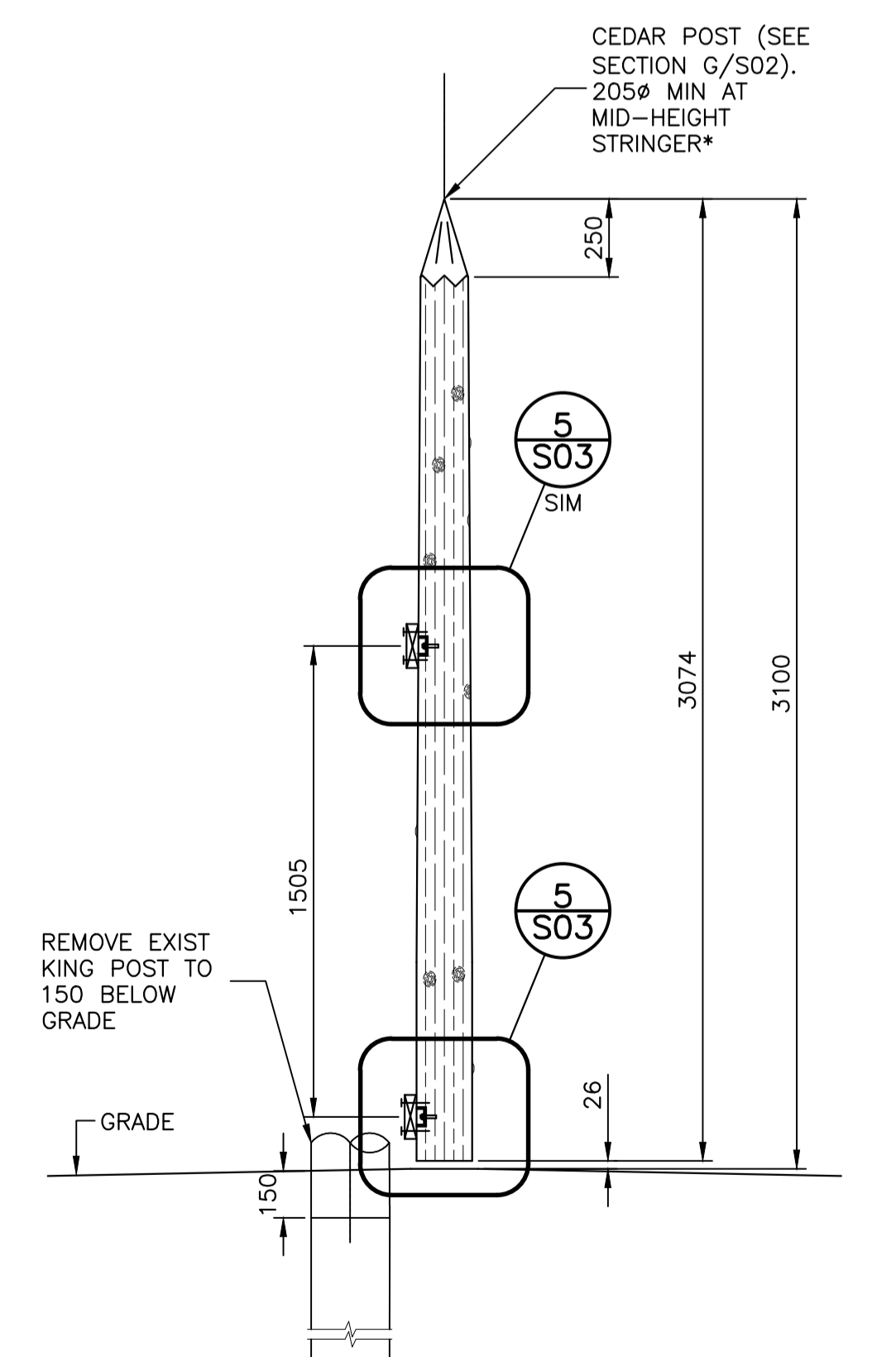
BOT = BOTTOM	LG = LONG
BTWN = BETWEEN	MAX. = MAXIMUM
C.L. = CENTRE LINE	MIN. = MINIMUM
CONN. = CONNECTION	N.T.S. = NOT TO SCALE
CONT. = CONTINUOUS	O.J. = ON CENTER
COORD. = COORDINATE	SCHED. = SCHEDULE
CW = COMPLETE WITH	SIM. = SIMILAR
DIA. = DIAMETER	STRD = STANDARD
DWG = DRAWING	t = THICKNESS
EA. = EACH	T&B = TOP AND BOTTOM
EQ = EQUAL	THK = THICK
E.S. = EACH SIDE	T.O. = TOP OF
E.W. = EACH WAY	TYP. = TYPICAL
EXT. = EXTERIOR	U.N.G. = UNLESS NOTED OTHERWISE
FOUND. = FOUNDATION	US = UNDERSIDE
GALV. = GALVANIZED	VERT. = VERTICAL
HORZ. = HORIZONTAL	W/ = WITH
INCL. = INCLUDING	W/O = WITHOUT
INT. = INTERIOR	



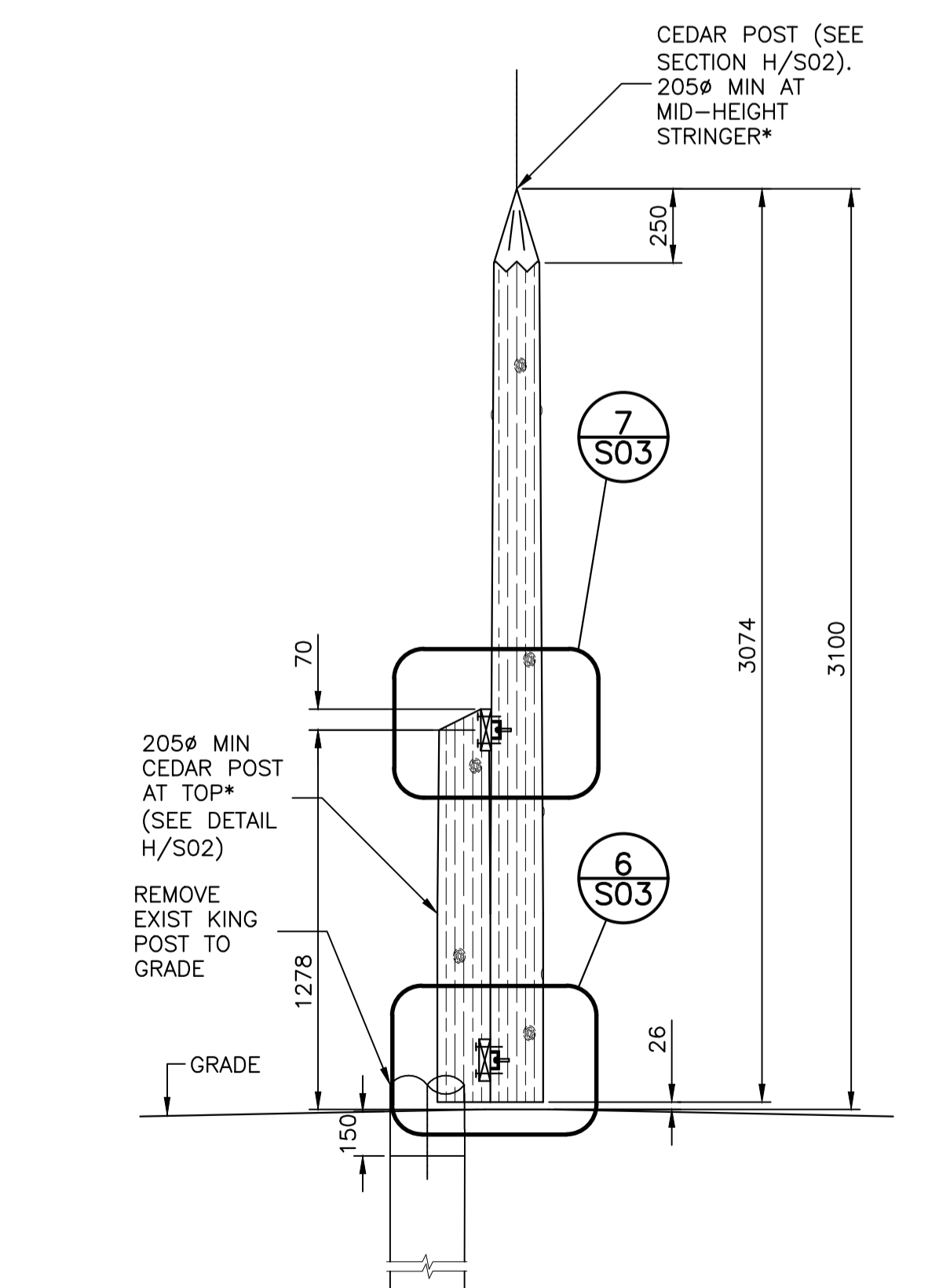
TYPICAL SECTION AT ANCHOR POST (SINGLE WALL) SCALE: 1:20 A S01



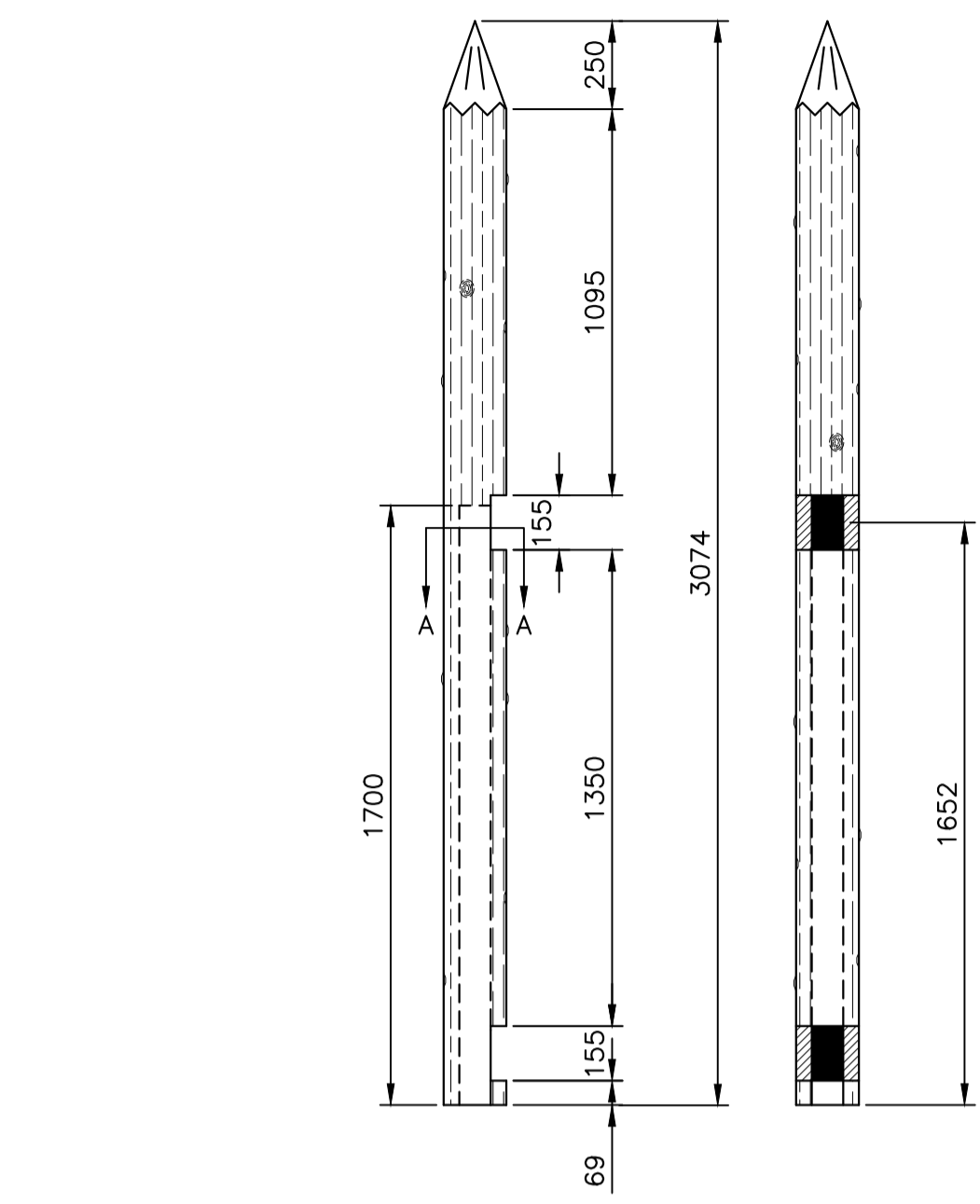
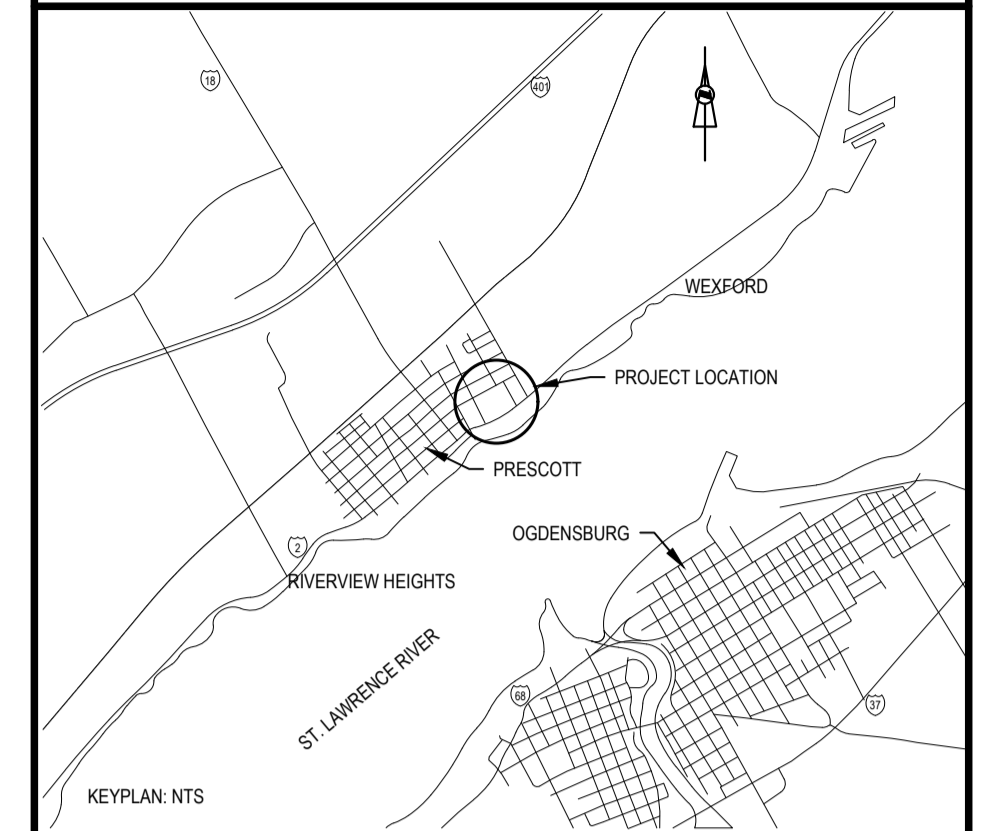
TYPICAL SECTION AT ANCHOR POST (DOUBLE WALL) SCALE: 1:20 B S01



TYPICAL SECTION AT INTERMEDIATE POST (SINGLE WALL) SCALE: 1:20 C S01

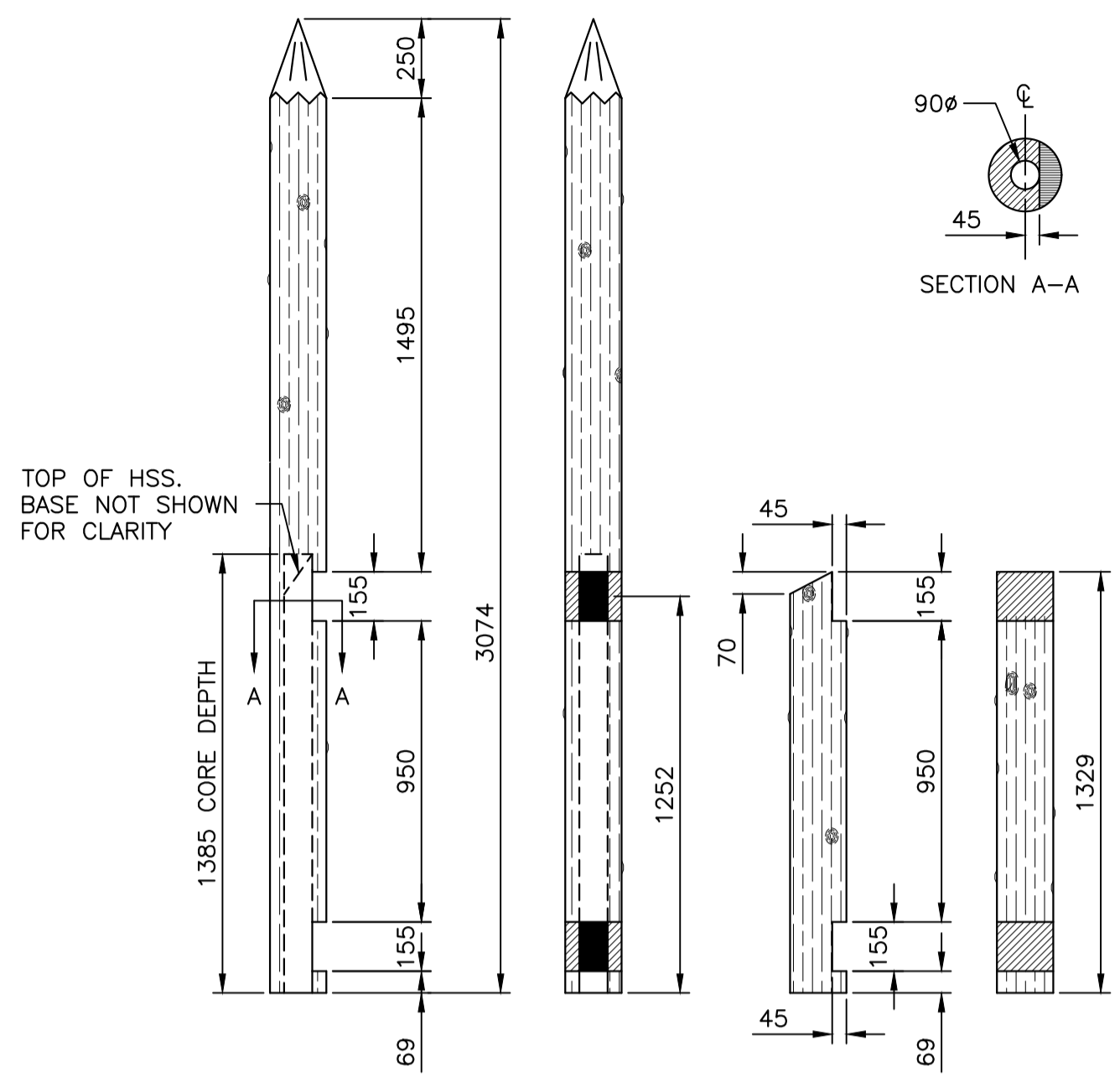


TYPICAL SECTION AT INTERMEDIATE POST (DOUBLE WALL) SCALE: 1:20 D S01



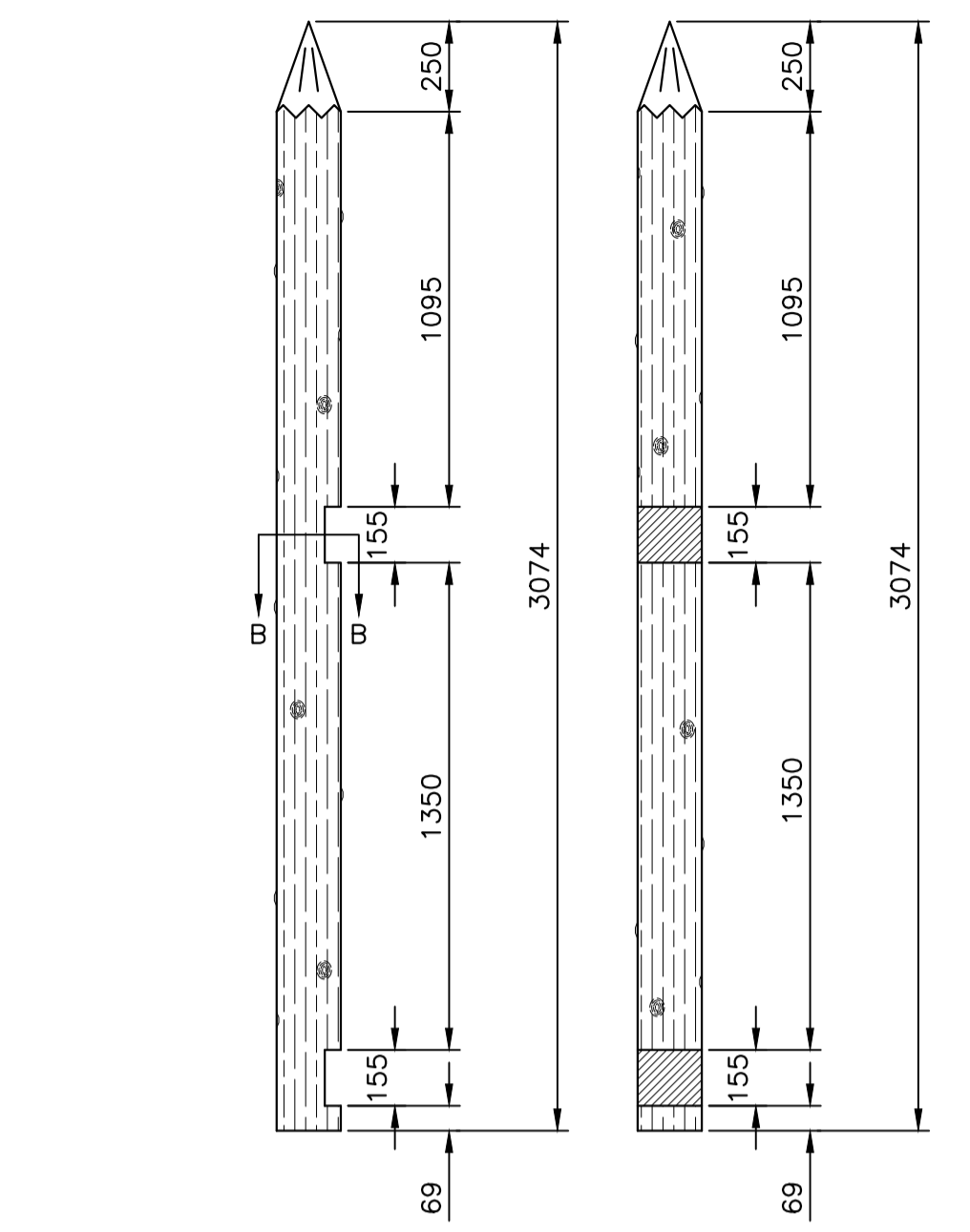
PALISADE ANCHOR POST (SINGLE WALL)
 SCALE : 1:20

E
S02



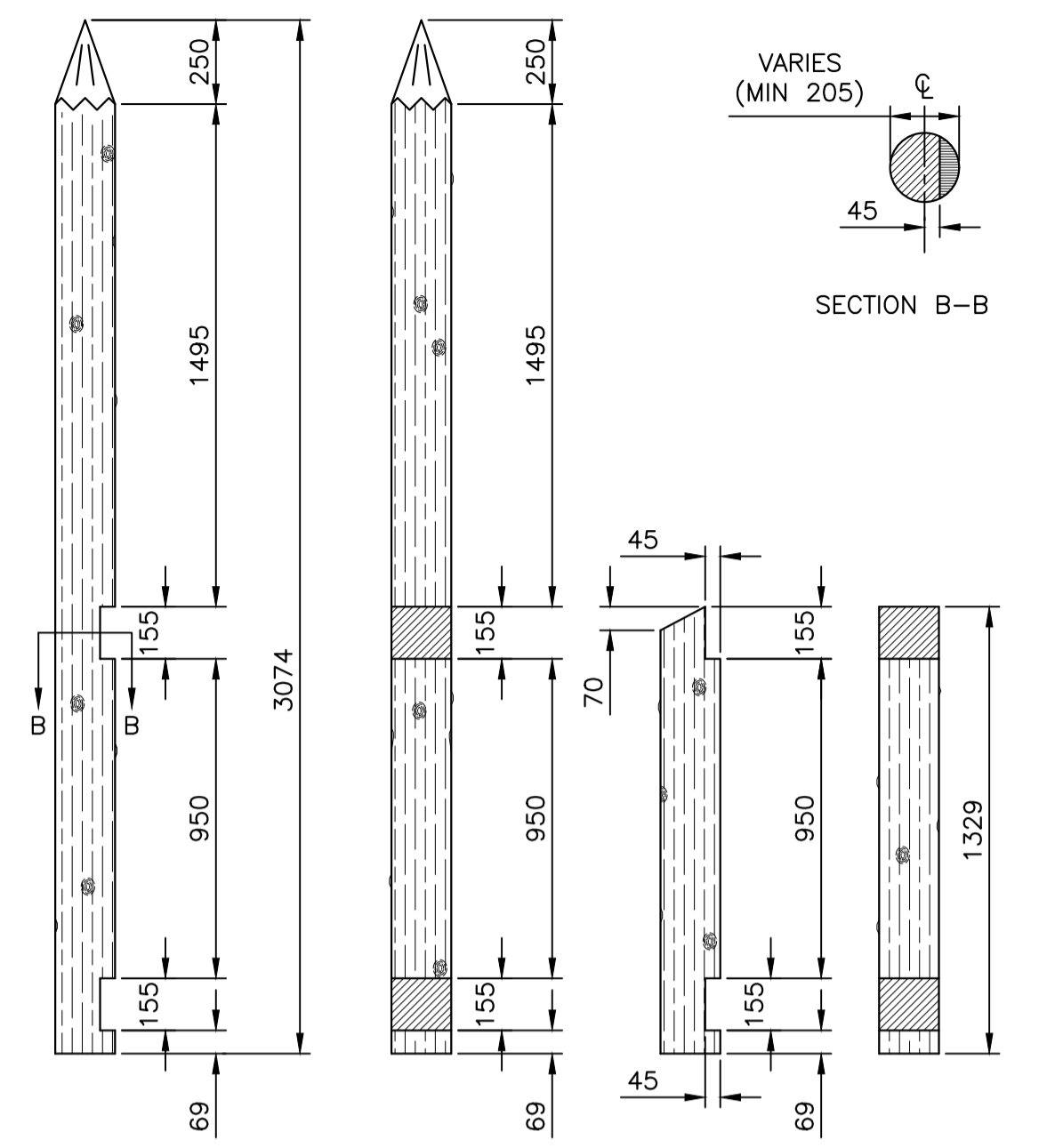
PALISADE ANCHOR POST (DOUBLE WALL)
 SCALE : 1:20

F
S02



PALISADE INTERMEDIATE POST (SINGLE WALL)
 SCALE : 1:20

G
S02

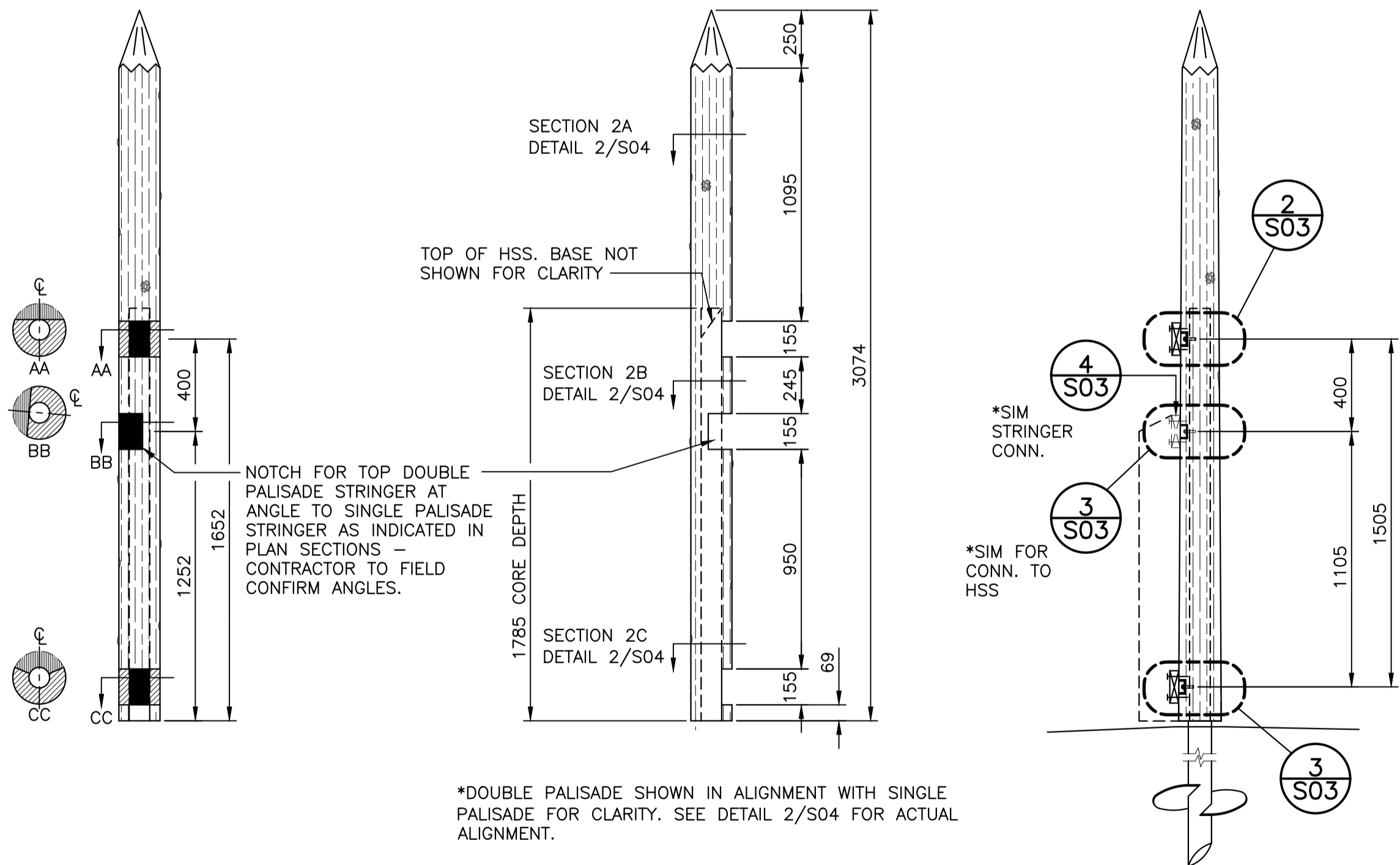


PALISADE INTERMEDIATE POST (DOUBLE WALL)
 SCALE : 1:20

H
S02

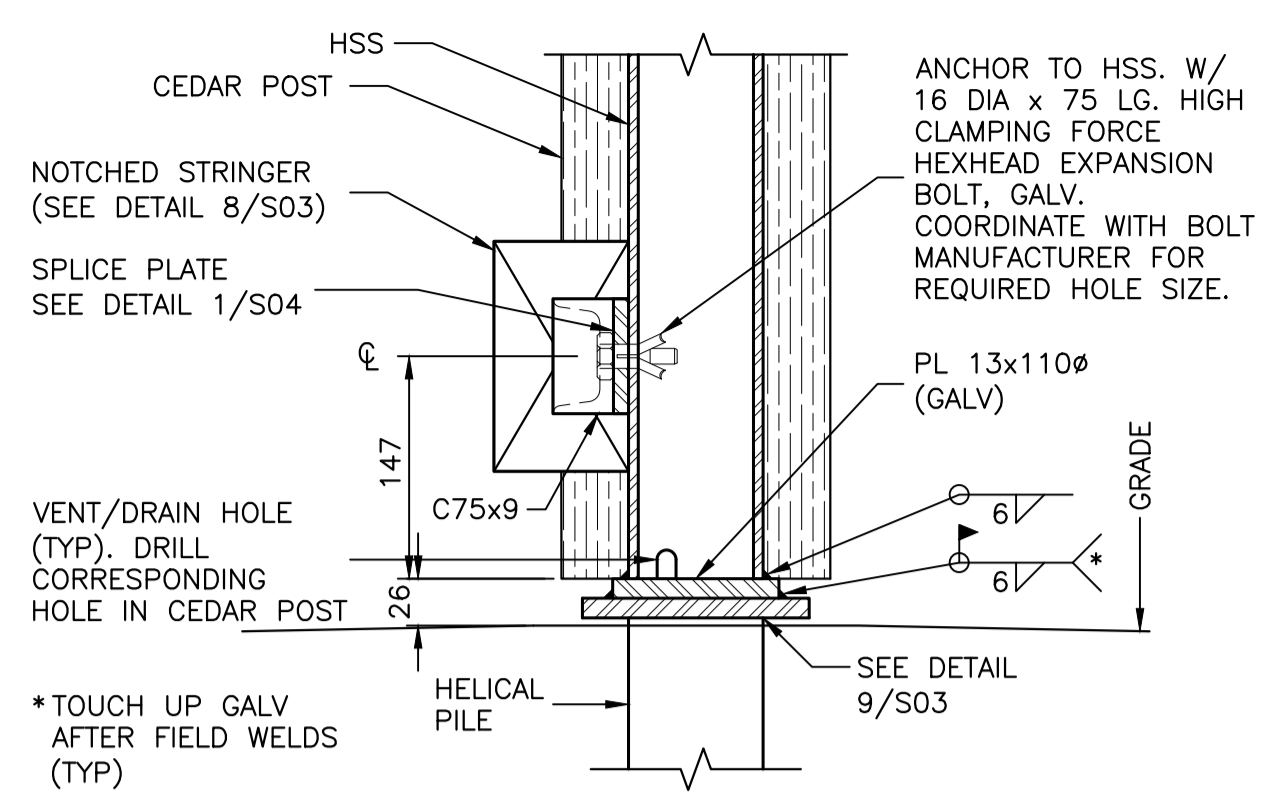
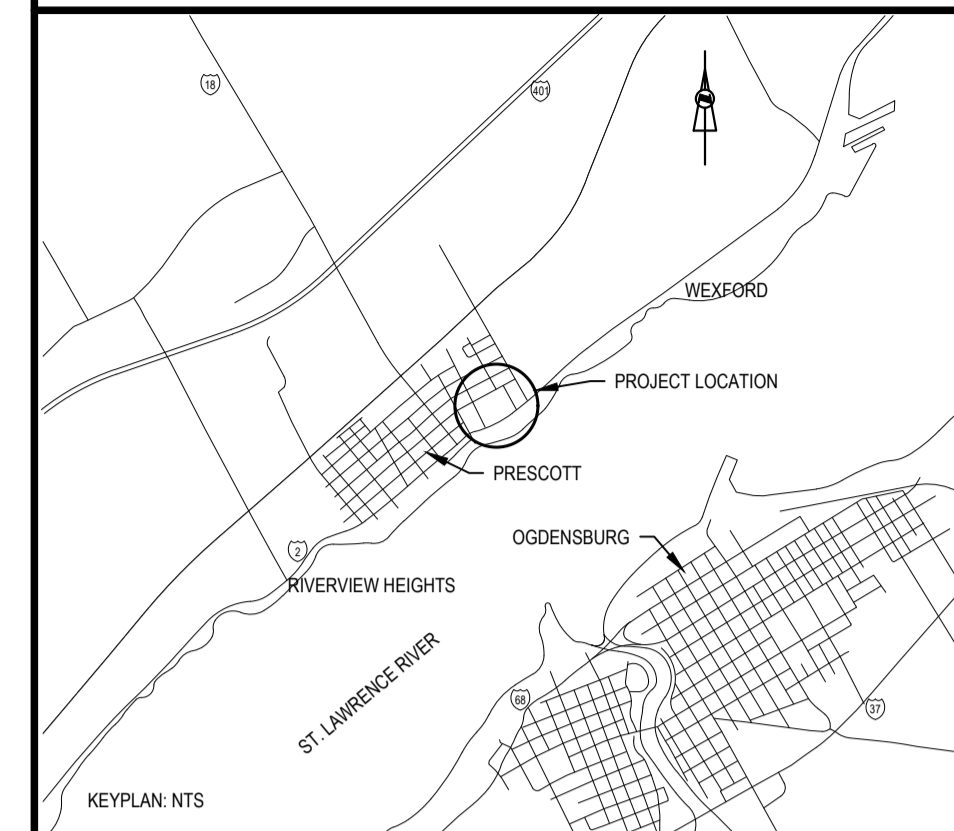
Professional Engineer Seal: C. D. SEWELL, 100501371, 18 June 2021, PROVINCE OF ONTARIO.

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No.	Date	Description	Drawn by / Dessiné par	Approved / Approuvé
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A	Detail number	A Numéro de détail		
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Consultant's Name / Nom de l'expert-conseil		Eng. Stamp / Sceau de l'ingénieur		
SNC-LAVALIN				
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Project title / Titre du projet				
FORT WELLINGTON : EASTERN PALISADE REHABILITATION				
Drawing title / Titre du dessin				
PALISADE SECTIONS				
Designed by / Concept par		Date		
HM/CS		2021/04/15		
Drawn by / Dessiné par		Date		
LP/JJV		2021/04/15		
Checked by / Vérifié par		Date		
CS		2021/04/15		
Project No. / No. du projet		Scale / Échelle		Sheet No. / Node la feuille
1175		AS NOTED		
Drawing Set No. / No. de série du dessin				
X		S02		

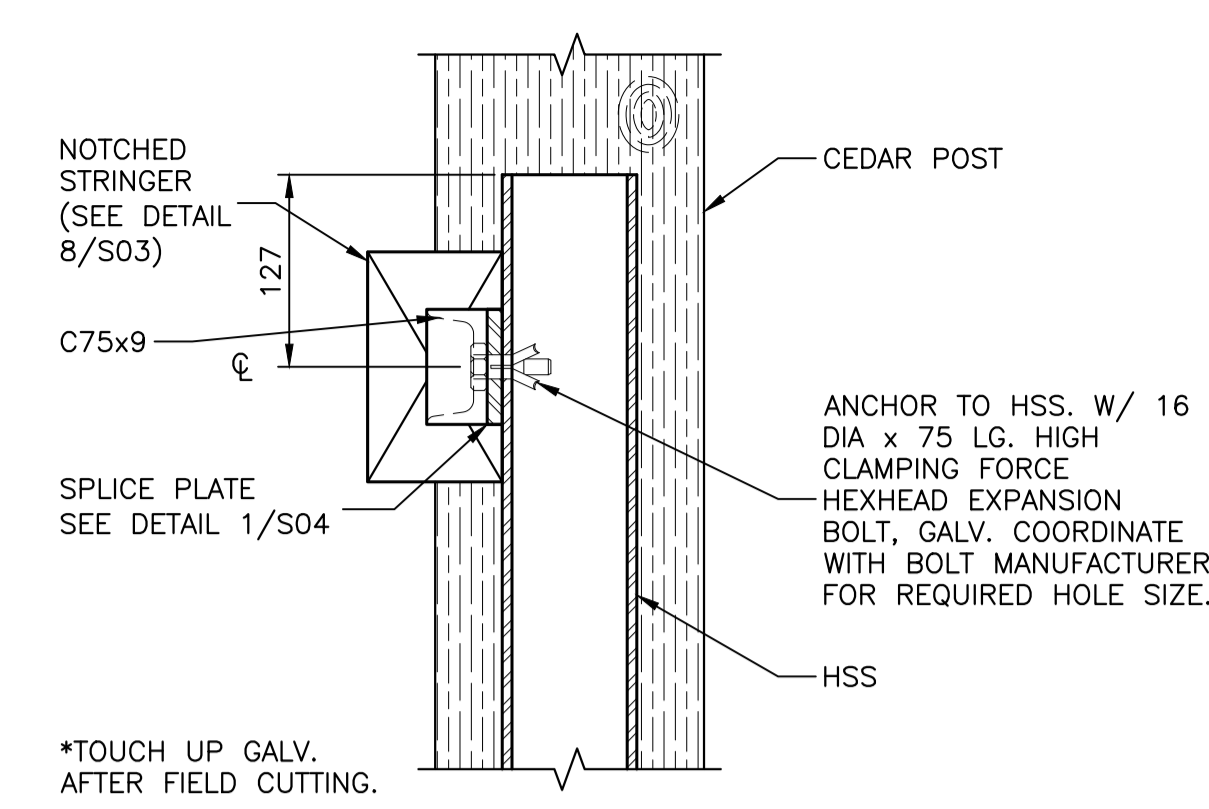


PALISADE CORNER ANCHOR POST AT DOUBLE TO SINGLE CONNECTION
 SCALE : 1:20

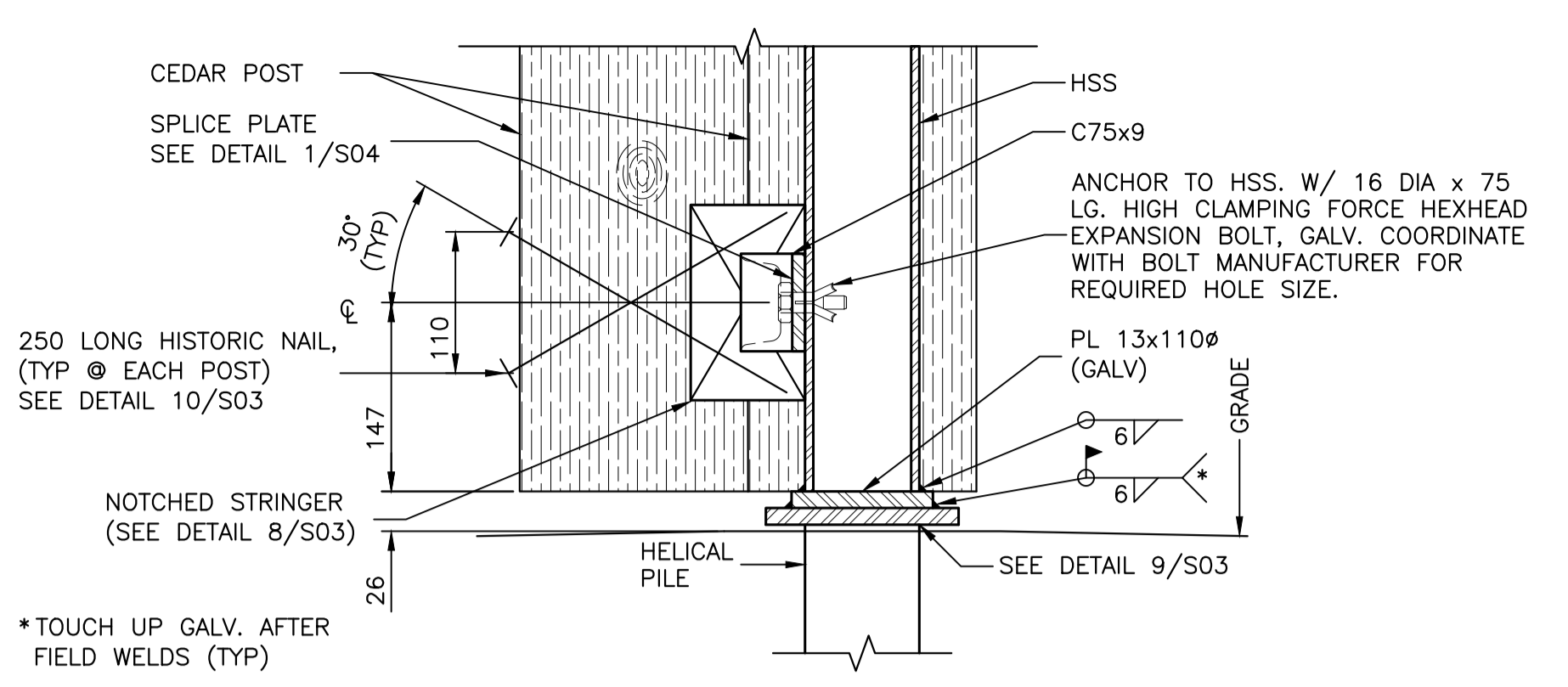
J
S02



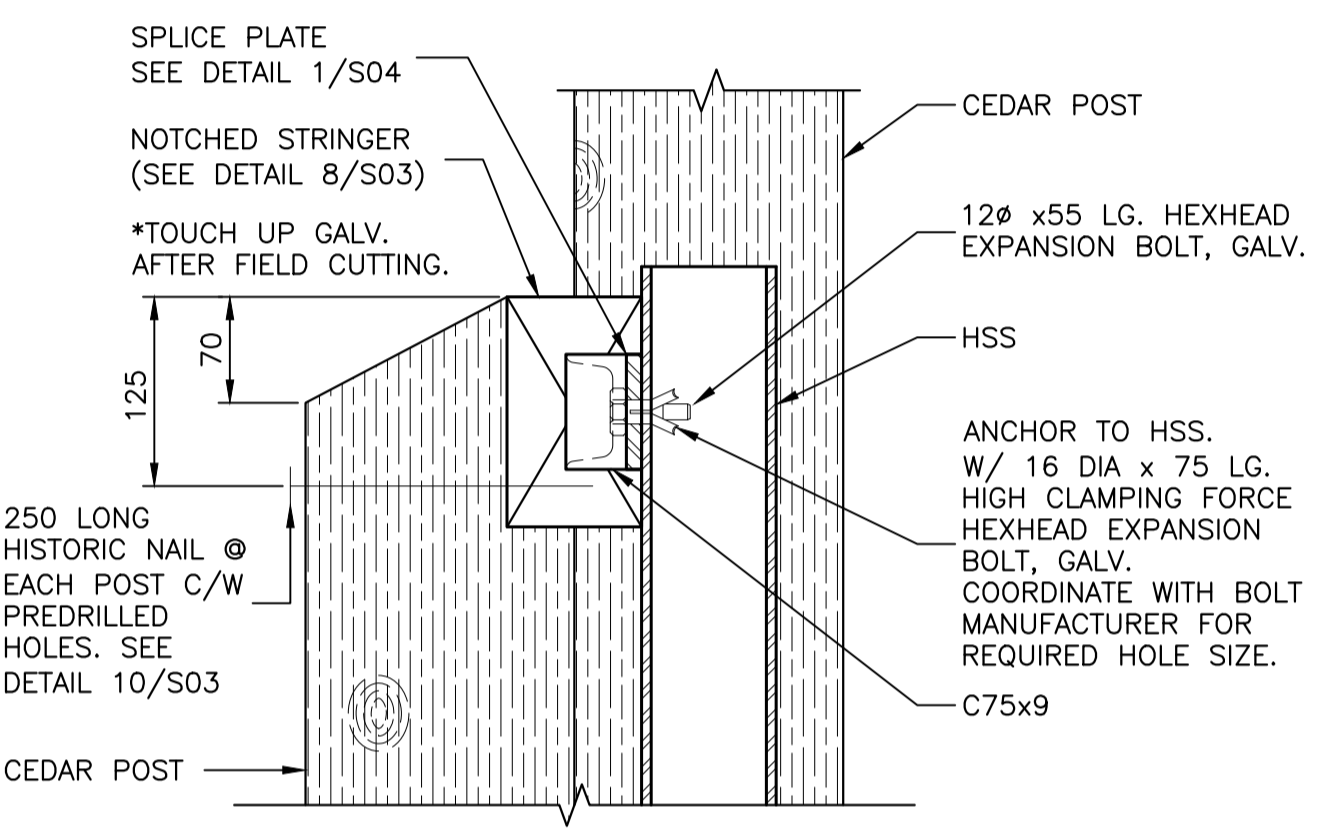
TYPICAL BOTTOM CONNECTION DETAIL AT ANCHOR POST (SINGLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



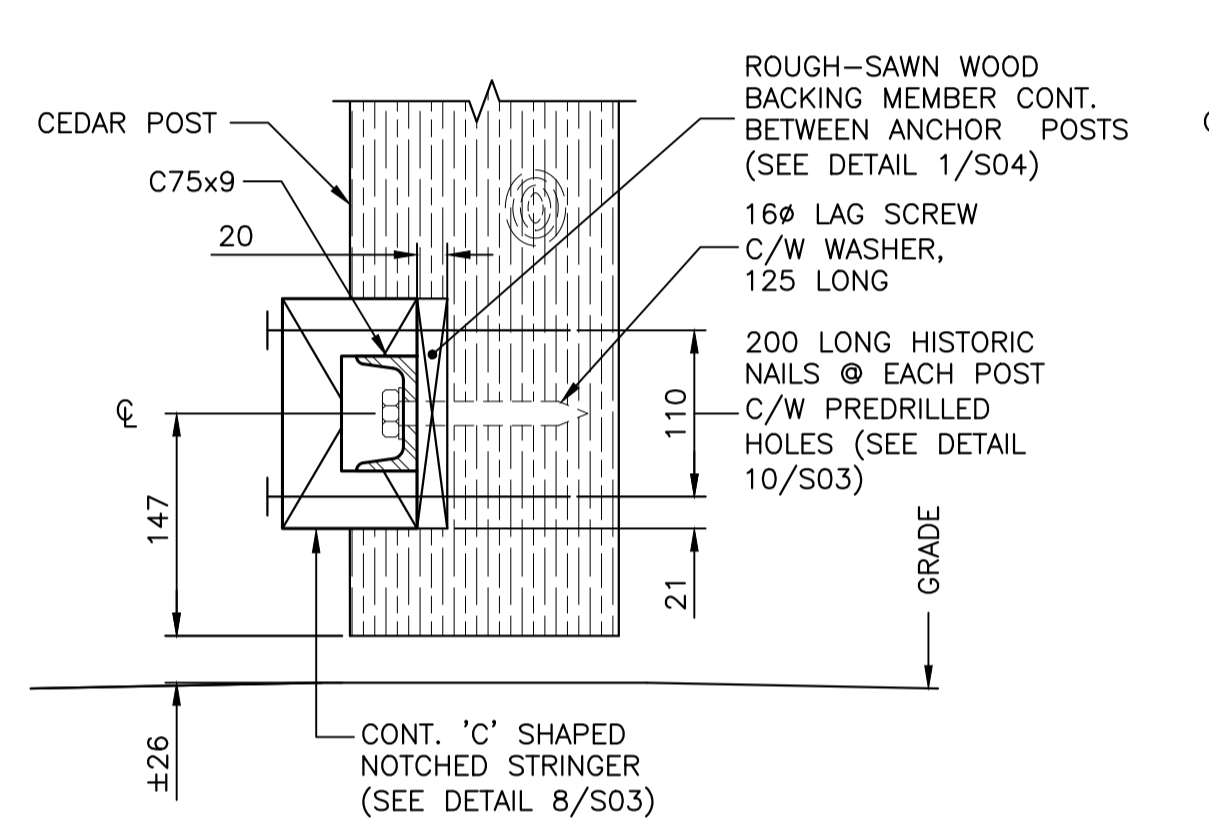
TYPICAL TOP CONNECTION DETAIL AT ANCHOR POST (SINGLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



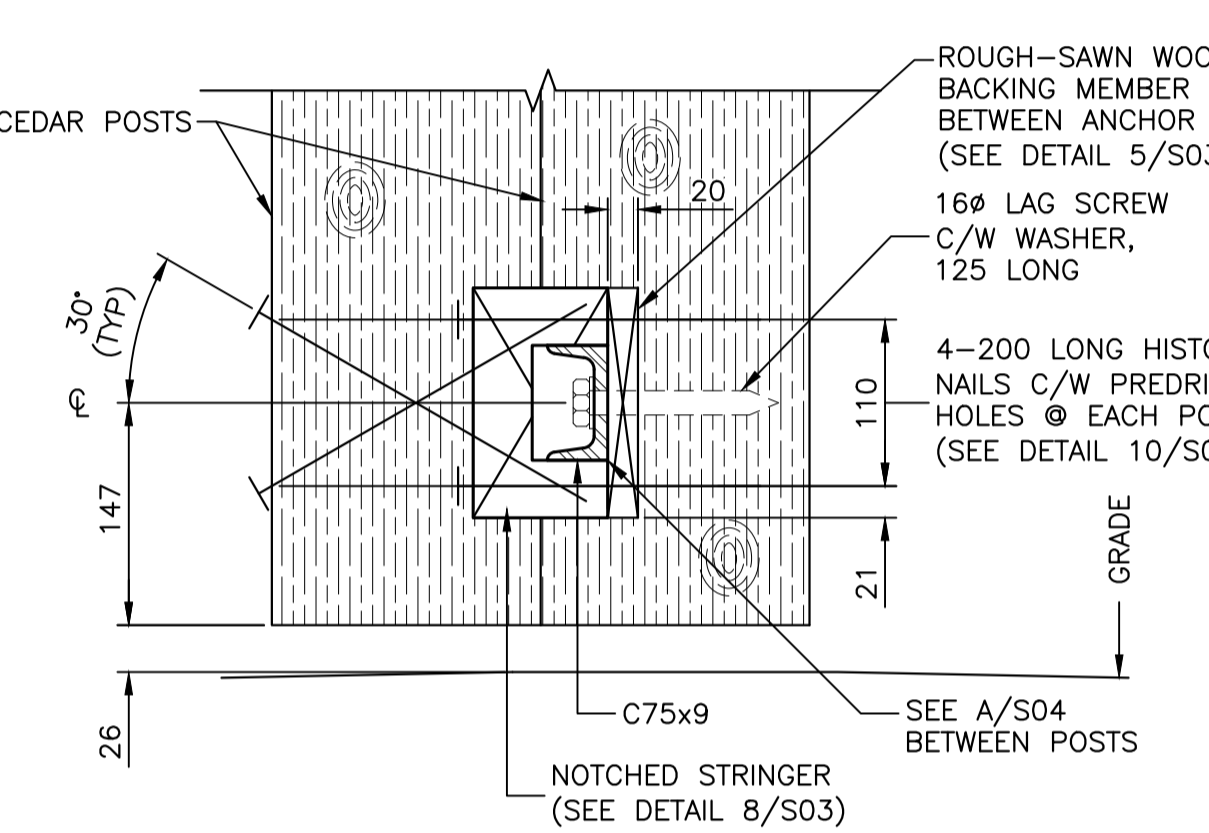
TYPICAL BOTTOM CONNECTION DETAIL AT ANCHOR POST (DOUBLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



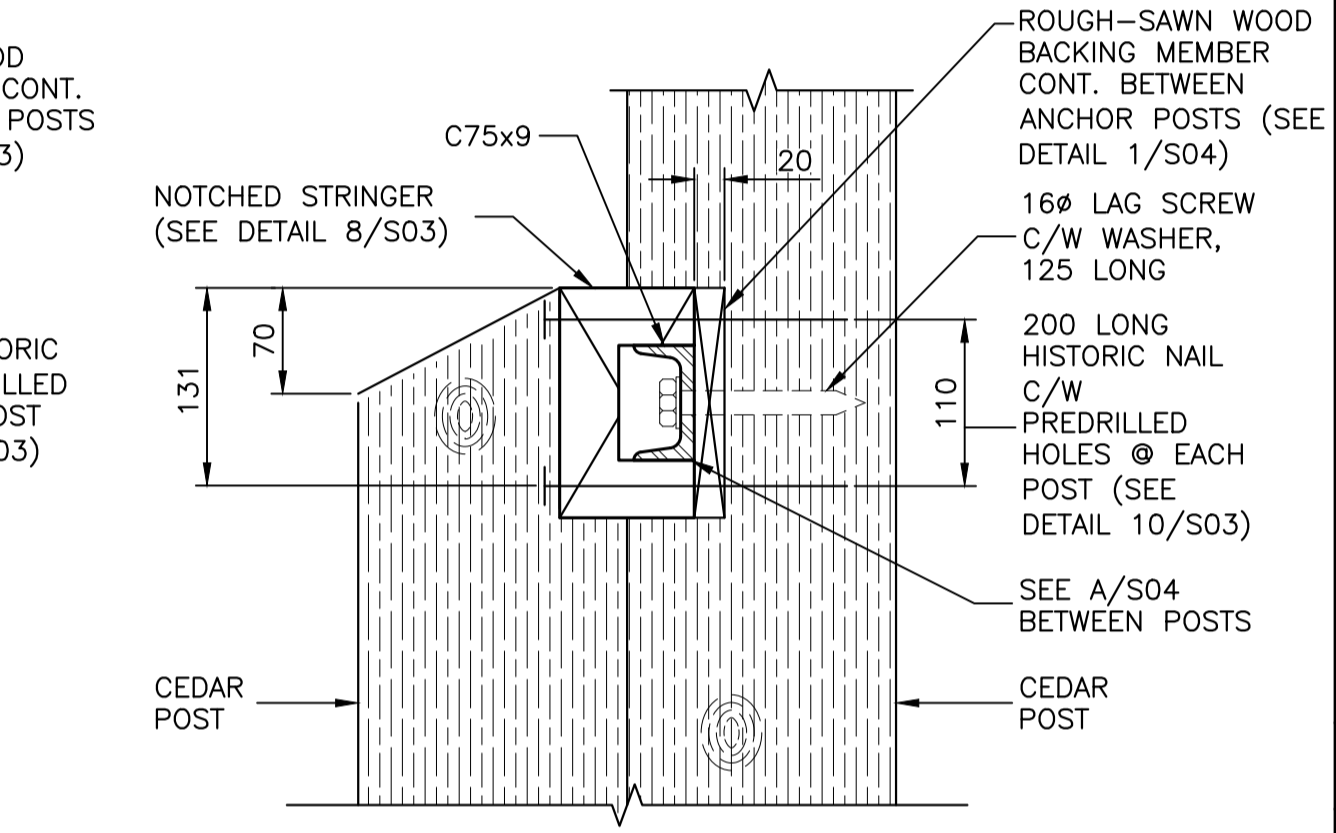
TYPICAL TOP CONNECTION DETAIL AT ANCHOR POST (DOUBLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



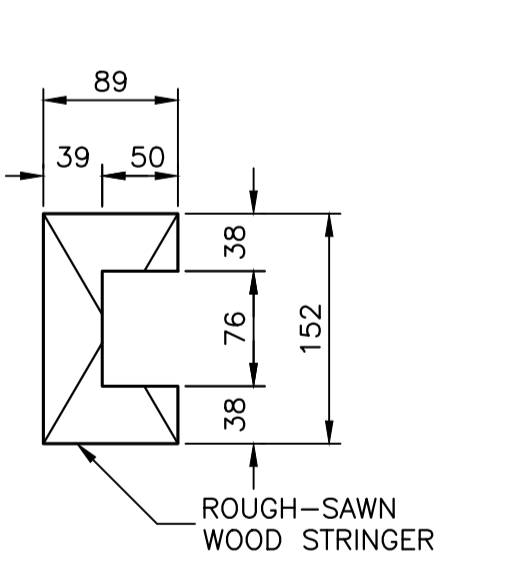
TYPICAL CONNECTION DETAIL AT INTERMEDIATE POST (SINGLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



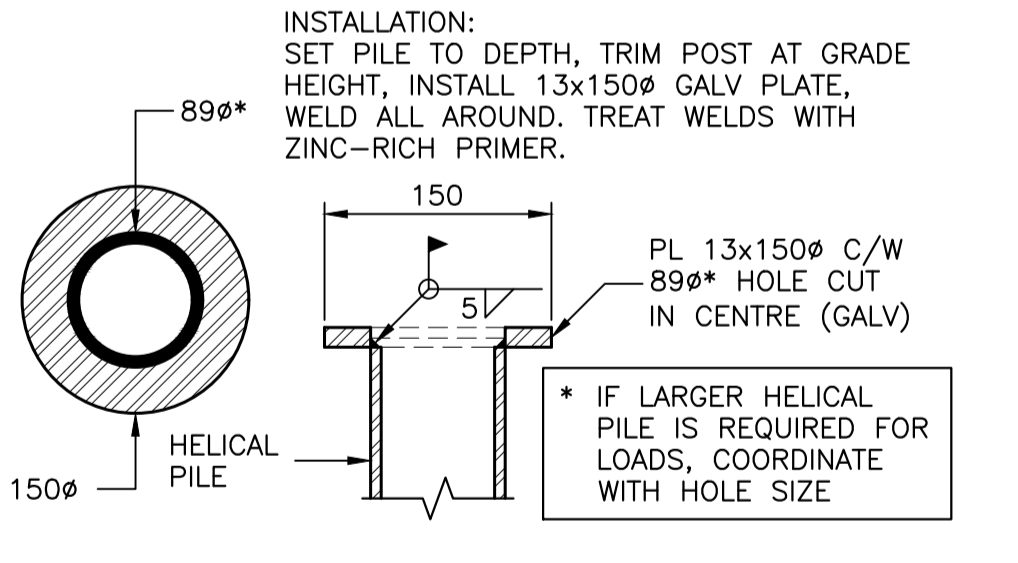
TYPICAL BOTTOM CONNECTION DETAIL AT INTERMEDIATE POST (DOUBLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



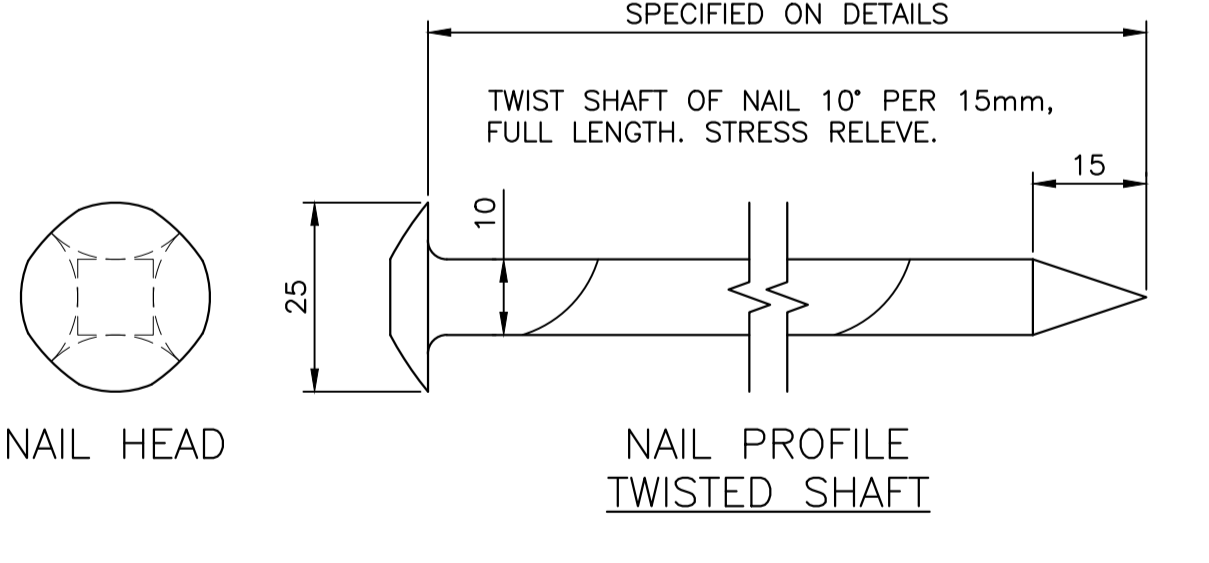
TYPICAL TOP CONNECTION DETAIL AT INTERMEDIATE POST (DOUBLE WALL)
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



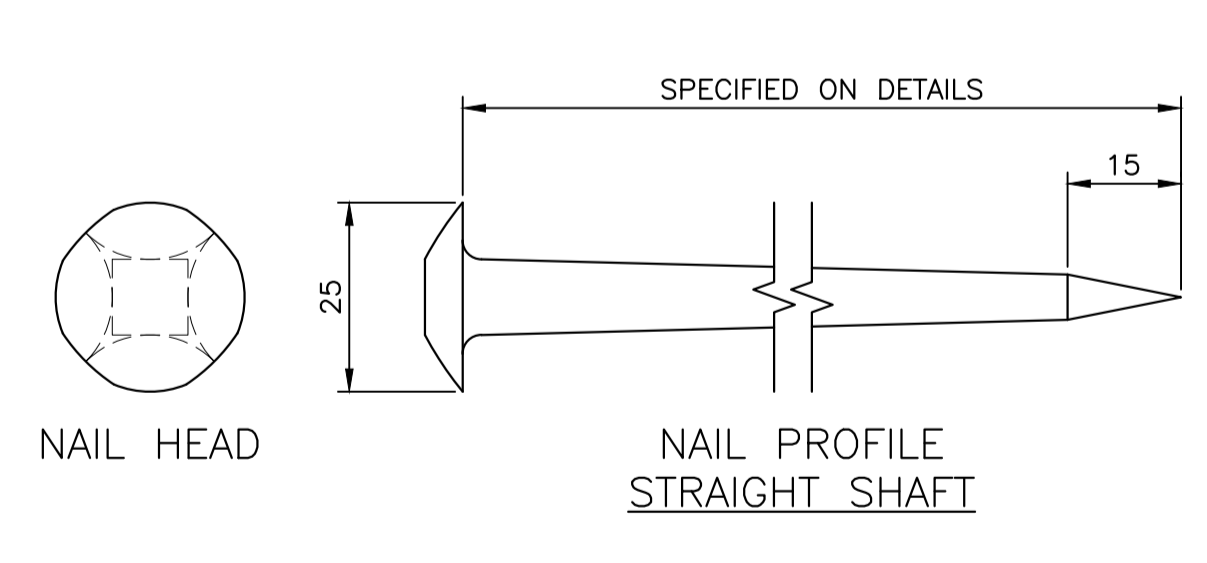
NOTCHED STRINGER MEMBER
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



HELICAL PILE BASE PLATE ASSEMBLY
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm



HISTORIC NAIL
SCALE: 1:1
0mm 10 20 30 40 50 60 70 80 90 100mm



NOTE: USE TWISTED HISTORIC NAILS FOR DOUBLE PALISADE CONNECTION OF SHORT POSTS TO FULL-HEIGHT POSTS. FOR ALL OTHER LOCATIONS, USE STRAIGHT HISTORIC NAILS, U.N.O.



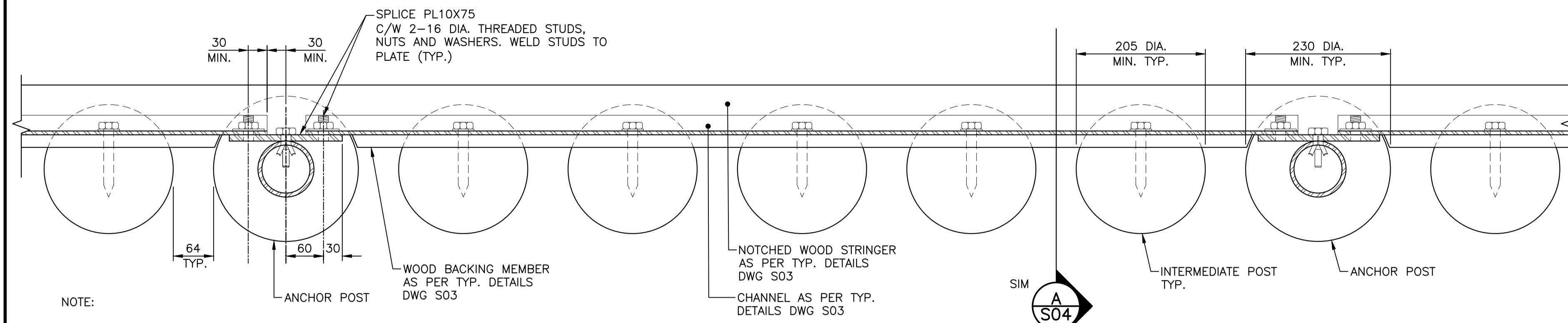
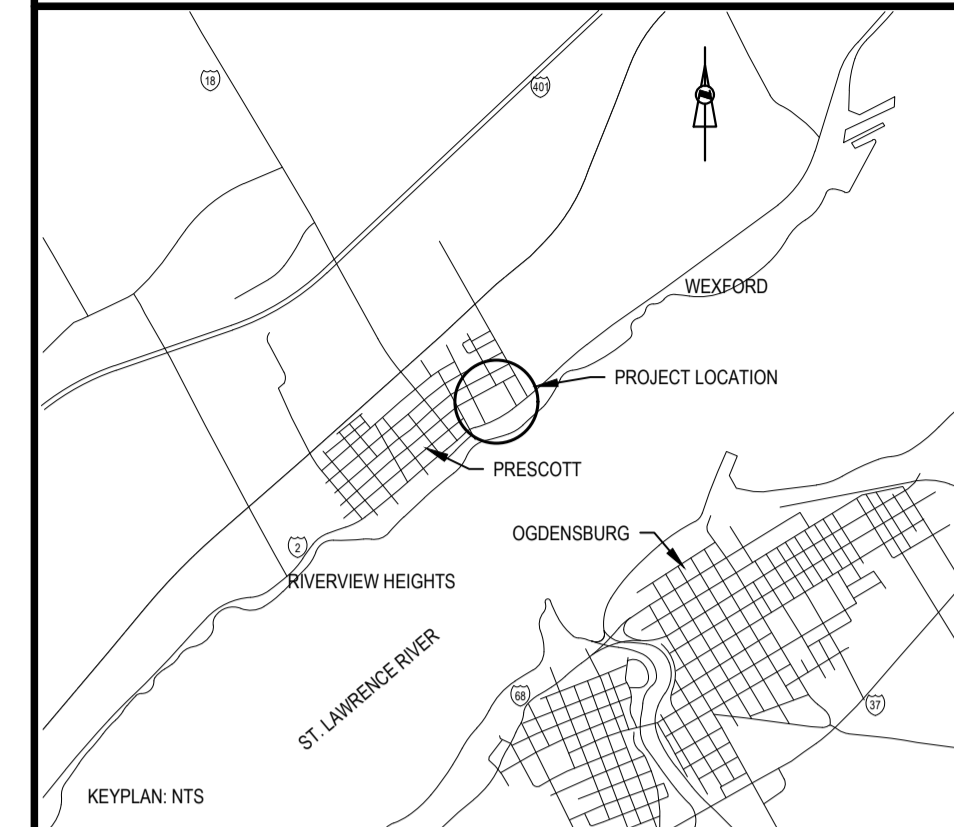
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Consultant's Name / Nom de l'expert-conseil	Eng. Stamp / Sceau de l'ingénieur
<p>SNC-LAVALIN SNC-LAVALIN Inc. Bedford, Nova Scotia, Canada Member of the SNC-LAVALIN Group</p>	

Project title/Titre du projet
FORT WELLINGTON : EASTERN PALISADE REHABILITATION

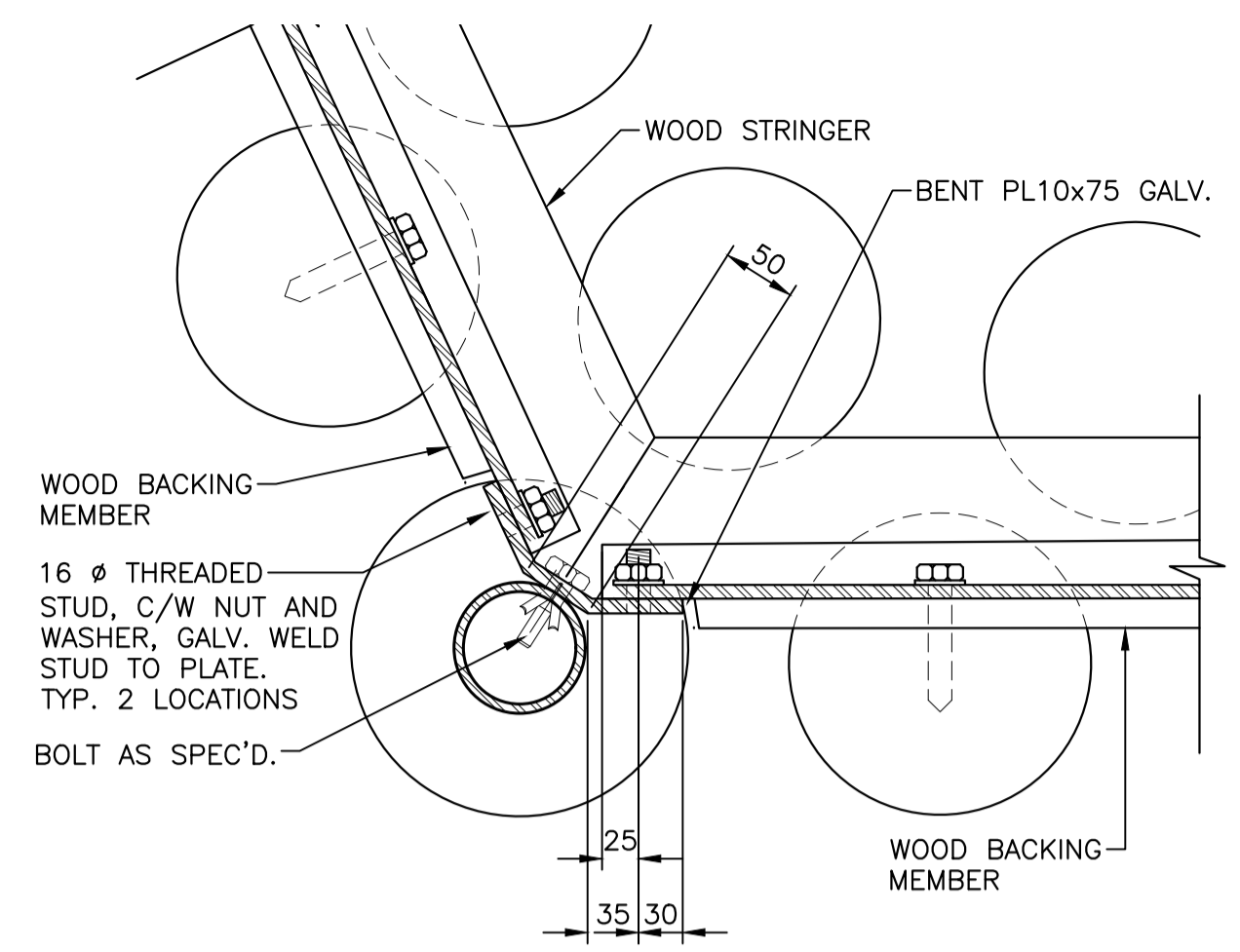
Drawing title/Titre du dessin
PALISADE DETAILS AND SECTIONS

Designed by/Concept par HM/CS	Date 2021/04/15
Drawn by/Dessiné par LP/JV	Date 2021/04/15
Checked by/Vérifié par CS	Date 2021/04/15
Project No./No. du projet 1175	Scale/Échelle AS NOTED
Drawing Set No./No. de série du dessin X	Sheet No./N° de la feuille S03



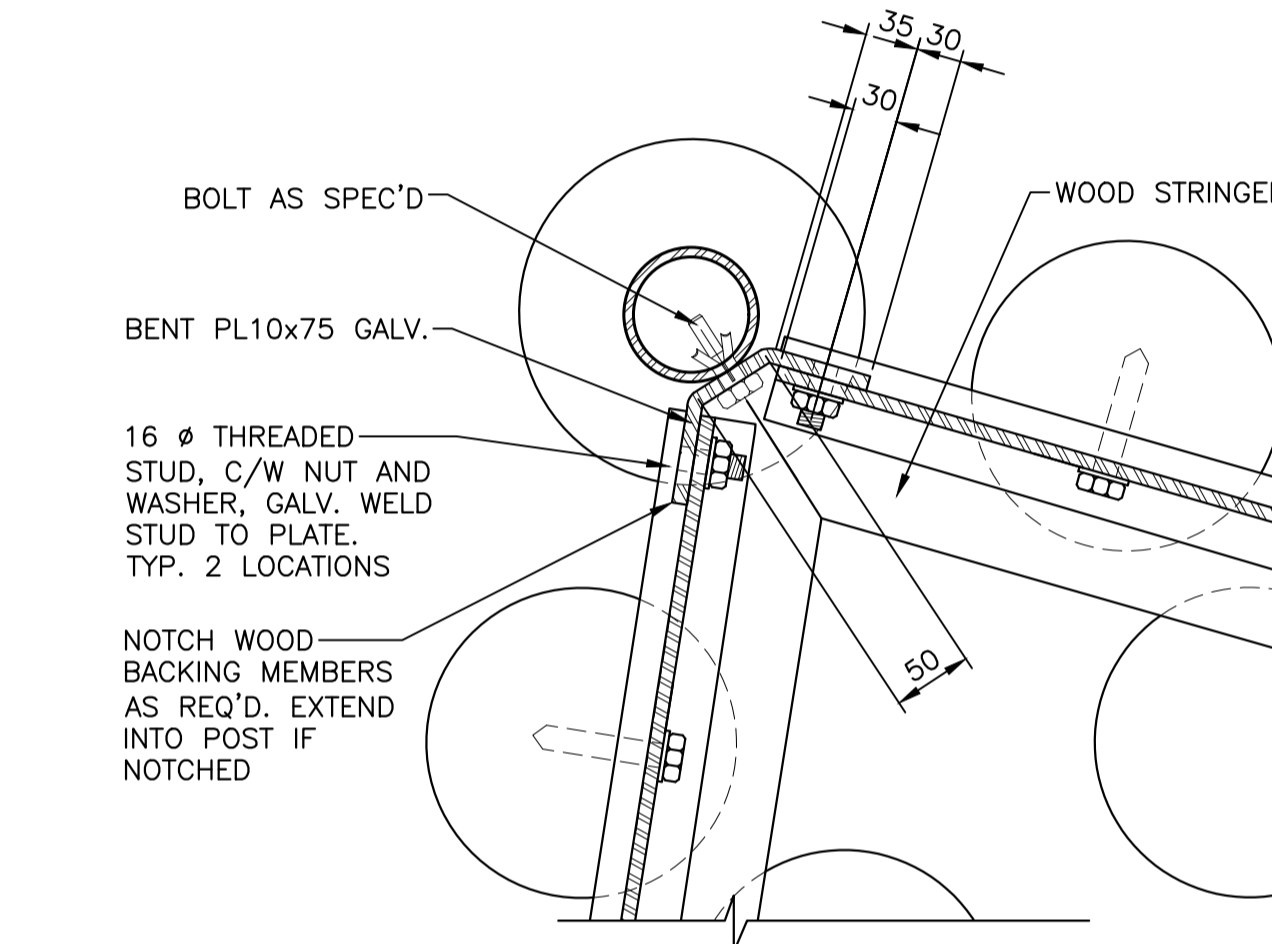
NOTE:
1. SIMILAR FOR DOUBLE PALISADE.
2. APPLICABLE TO BOTH TOP AND BOTTOM CHANNEL LOCATIONS.

TYPICAL PALISADE AND CHANNEL SPLICE PLAN DETAIL
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm
1 S04



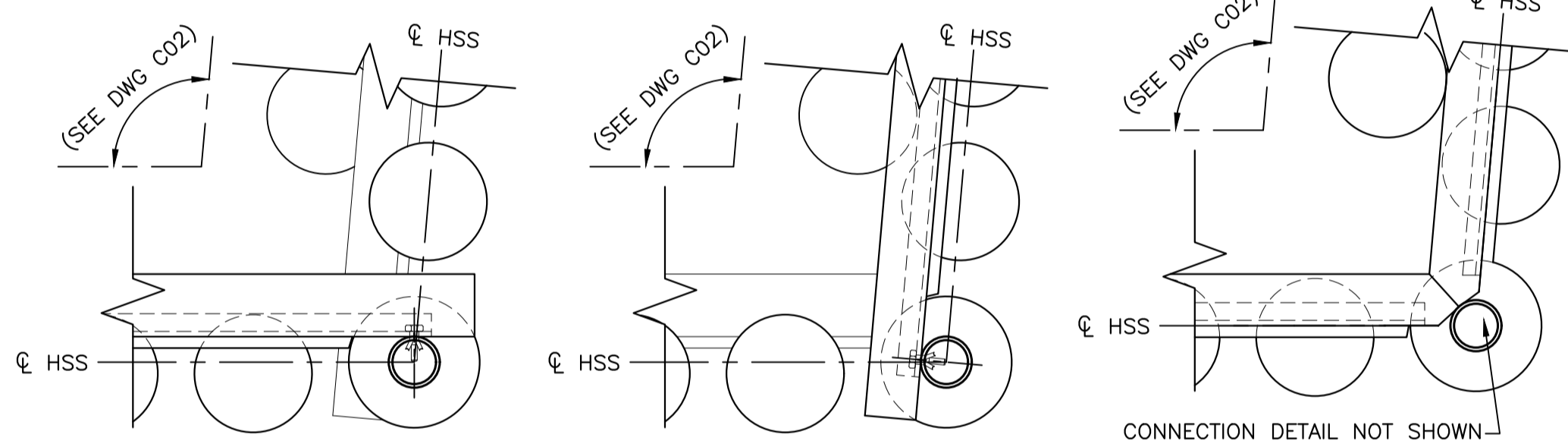
NOTE:
1. CONTRACTOR TO FIELD VERIFY CORNER ANGLE AND COORDINATE W/ POST NOTCH AND BENT PLATE ANGLE AND LENGTHS.

OBTUSE ANGLE



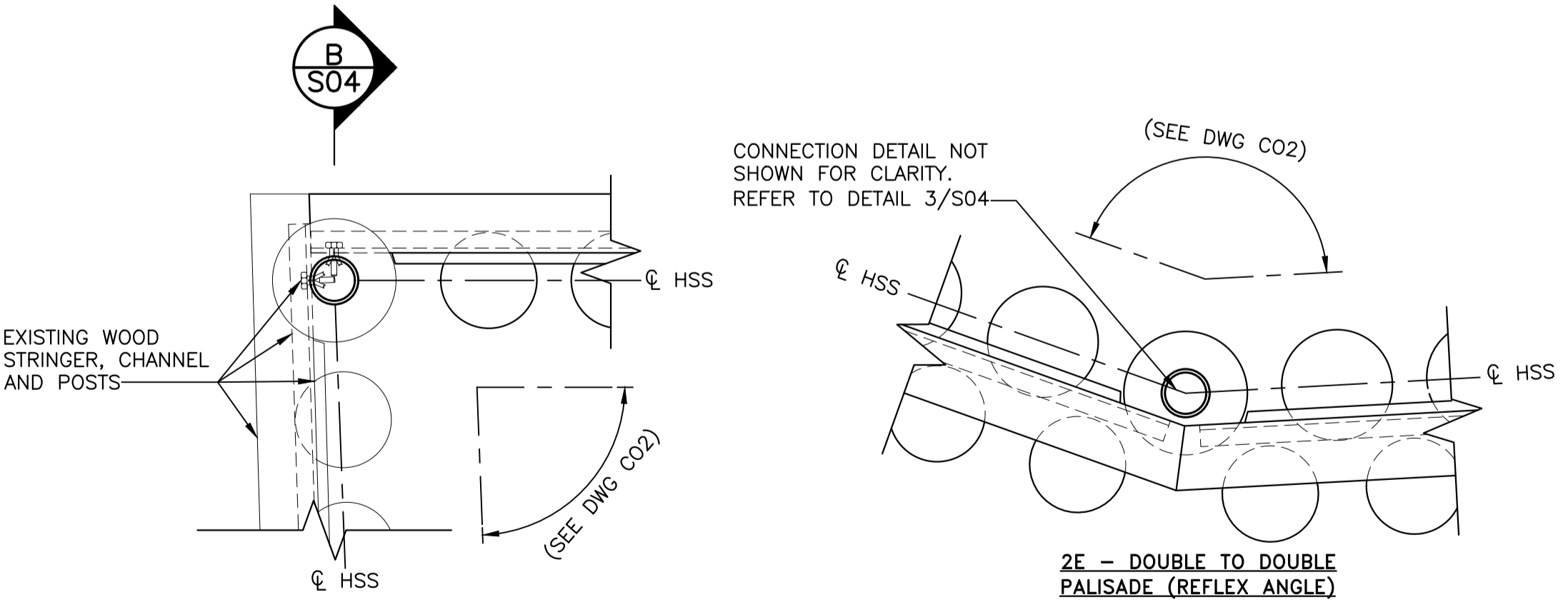
NOTE:
1. APPLIES TO BOTH SINGLE AND DOUBLE PALISADE CORNERS. SHORT POSTS NOT PRESENT AT SINGLE PALISADE.
2. CONTRACTOR TO FIELD VERIFY CORNER ANGLE AND COORDINATE W/ POST NOTCH AND BENT PLATE ANGLE AND LENGTHS.

ACUTE ANGLE



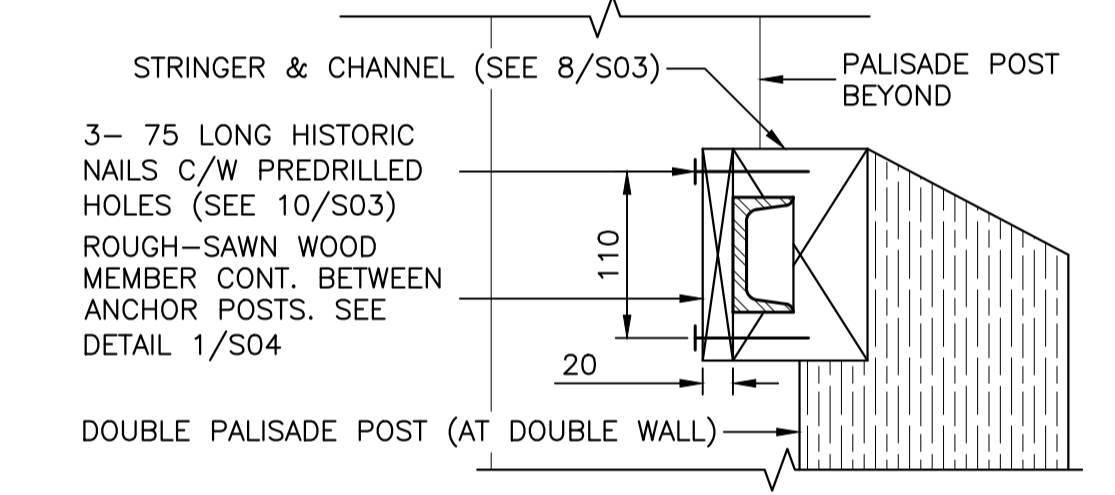
2A - SINGLE TO DOUBLE PALISADE - UPPER STRINGER
NOTE: REFER TO J/S02
2B - SINGLE TO DOUBLE PALISADE - MIDDLE STRINGER
NOTE: REFER TO J/S02
2C - SINGLE TO DOUBLE PALISADE - BOTTOM STRINGER
NOTE: REFER TO J/S02

NOTE:
1. SIM. TO DOUBLE TO DOUBLE PALISADE CONNECTIONS FOR T&B STRINGERS.
2. AT NORTHERN TIP, REMOVE EXISTING STRINGER STUBS AND CONNECT TO EXISTING ANCHOR PLATE. SEE DETAIL 3/S04, SIM.



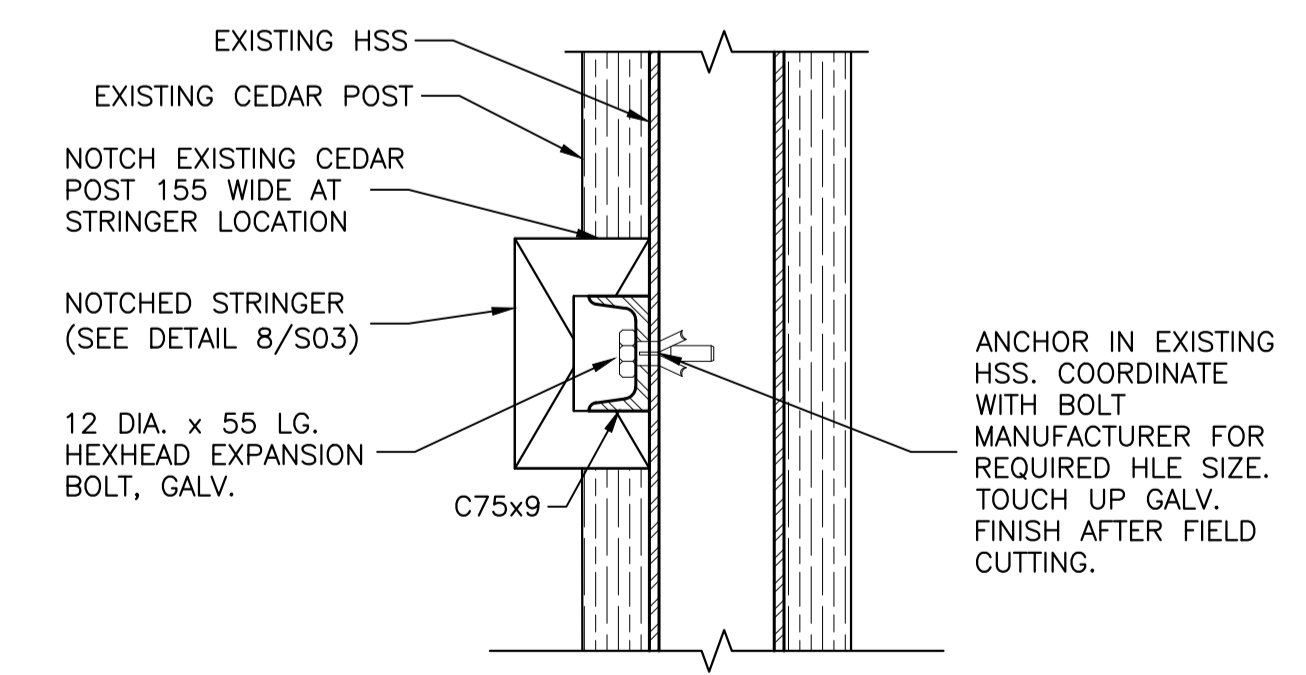
2D - SINGLE TO EXISTING SINGLE PALISADE
2E - DOUBLE TO DOUBLE PALISADE (REFLEX ANGLE)

CORNER DETAILS
SCALE: 1:10
0mm 100 200 300 400 500 600 700 800 900 1000mm
2 S04



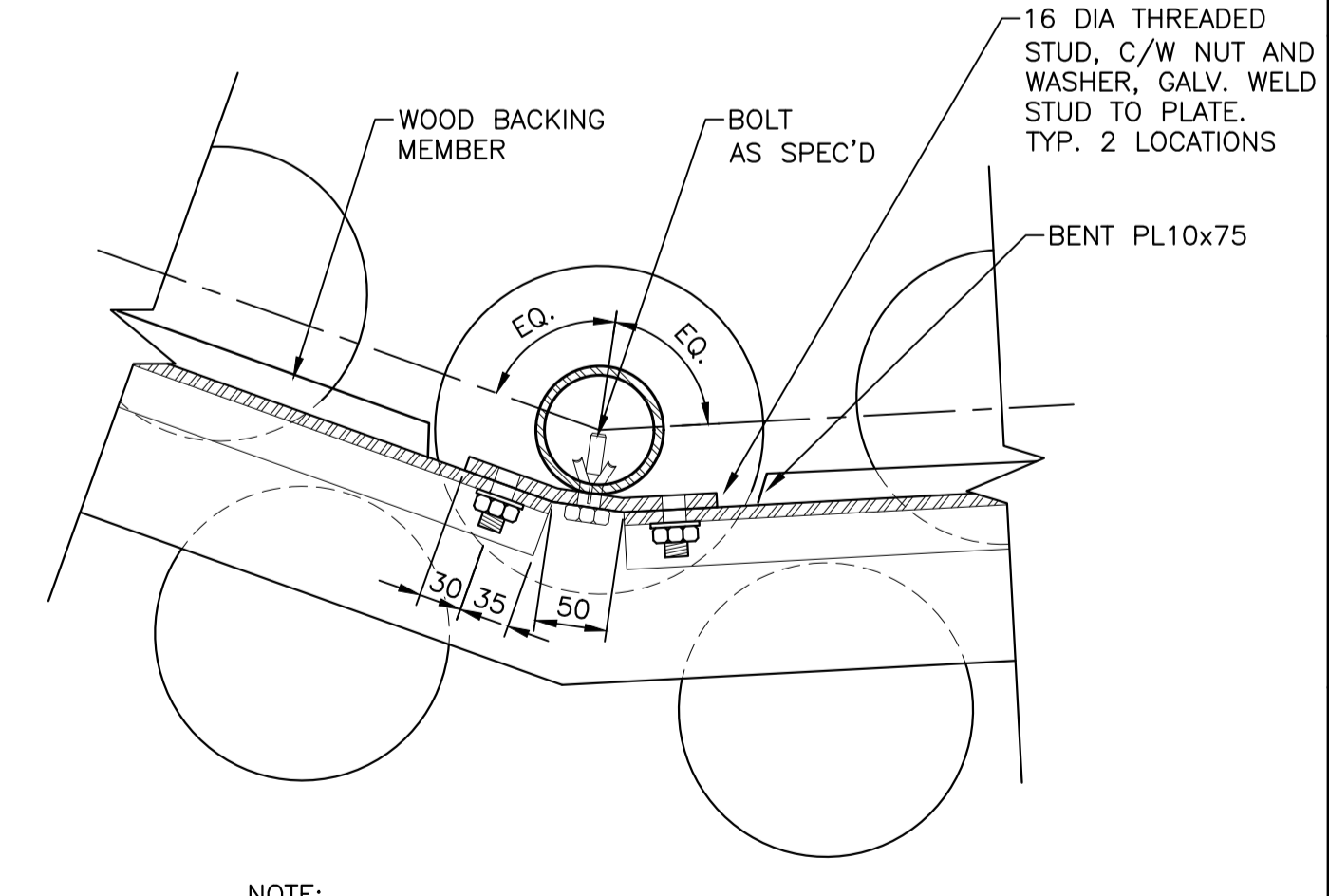
NOTE: TYP. AT T&B STRINGER CONNECTIONS

SECTION - PALISADE WALL
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm
A S04



NOTE: TYP. AT T&B CONNECTIONS

SECTION - ANCHOR POST AT SINGLE TO SINGLE PALISADE WALL CONNECTION
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm
B S04



NOTE:
1. CONTRACTOR TO FIELD VERIFY CORNER ANGLE AND COORDINATE W/ POST NOTCH AND BENT PLATE ANGLE AND LENGTHS.

REFLEX ANGLE

TYPICAL DETAIL - CORNER PALISADE WALL STRINGER AND CHANNEL CONNECTION
SCALE: 1:5
0mm 100mm 200mm 300mm 400mm 500mm
3 S04



C01	2021/06/18	ISSUED FOR TENDER		
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B	Sheet number / B Numéro de la feuille
Linear dimensions in millimetres / Dimensions linéaires en millimètres	
Consultant's Name / Nom de l'expert-conseil	Eng. Stamp / Sceau de l'ingénieur
<p>SNC-LAVALIN SNC-LAVALIN Inc. Bedford, Nova Scotia, Canada Member of the SNC-LAVALIN Group</p>	

Project title/Titre du projet
FORT WELLINGTON : EASTERN PALISADE REHABILITATION

Drawing title/Titre du dessin
PALISADE LAYOUTS, SECTIONS AND DETAILS

Designed by/Concept par HM/CS	Date 2021/04/15
Drawn by/Dessiné par LP/JV	Date 2021/04/15
Checked by/Vérifié par CS	Date 2021/04/15
Project No./No. du projet 1175	Scale/Échelle AS NOTED
Drawing Set No./No. de série du dessin X	Sheet No./N° de la feuille S04