

CONCRETE SHEET PILE DATA						
PILE TYPE	TOTAL NO. REQUIRED	NO. OF PILES IN STORED INVENTORY	REMAINING NUMBER REQUIRED	L (FT.)	X (FT.)	TOTAL LIN. FT.
A1	2	---	2	32'-0"	7'-6"	64
A2	267	---	267	26'-0"	5'-0"	6,942
A3	146	134	12	29'-0"	6'-0"	348
A4	198	---	198	32'-0"	7'-6"	6,336
A5	135	55	80	35'-0"	9'-0"	2,800
A6	8	---	8	32'-0"	7'-6"	256
A7	1	---	1	35'-0"	9'-0"	35
A8	1	---	1	35'-0"	9'-0"	35
A9	1	---	1	35'-0"	9'-0"	35
A10	1	---	1	35'-0"	9'-0"	35
C1	2	---	2	32'-0"	7'-6"	64
C2	2	---	2	32'-0"	7'-6"	64

SEE "CONCRETE SHEET PILE RETAINING WALL, SHEET PILE DETAILS", SHEETS 7 THRU 11 OF 11, FOR PILE TYPES.

A TOTAL OF 189 PRESTRESSED CONCRETE SHEET PILES WERE FABRICATED FOR ANOTHER PROJECT THAT HAS BEEN TERMINATED. THESE PILES WHICH ARE LISTED IN THE ABOVE TABLE HAVE BEEN STORED AND SHALL BE USED ON THIS PROJECT. SEE SPECIAL PROVISION FOR CONCRETE SHEET PILE WALL FOR THE STORAGE LOCATIONS AND REQUIRED COORDINATION TO OBTAIN THE STORED CONCRETE SHEET PILES.

DESIGN PARAMETERS

CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS:
8000 PSI (MIN.)

CONCRETE COMPRESSIVE STRENGTH AT RELEASE OF PRESTRESSING:
5600 PSI (MIN.)

UNIFORM COMPRESSION AFTER PRESTRESSED LOSSES:
1000 PSI (MIN.)

PICK-UP, STORAGE, AND TRANSPORTATION:
0.0 PSI TENSION WITH 1.5 TIMES SELF WEIGHT

ALL PRESTRESSING STRANDS SHALL BE 0.6" DIA, 7-WIRE LOW RELAXATION GRADE 270 STRANDS CONFORMING TO AASHTO M203. STRAND SAMPLING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

PROPOSED DEVICES FOR LIFTING PILES, RECESS DETAILS, AND PATCHING MATERIAL SHALL BE DETAILED IN SHOP DRAWINGS. AFTER ATTACHMENTS HAVE BEEN REMOVED, OPENINGS SHALL BE REPAIRED SUCH THAT THE APPEARANCE OF THE PILE IS UNIFORM.

INSTALL PILES USING A METHOD APPROVED BY THE ENGINEER, WHEREBY THE HEAD OF THE PILE IS NOT DAMAGED.

ALL CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

PICK-UP OF PILE MAY BE EITHER A SINGLE POINT PICK-UP OR A TWO POINT PICK-UP AS SHOWN.

FOUNDATION NOTES

CONSTRUCT CONCRETE SHEET PILE RETAINING WALLS IN ACCORDANCE WITH SECTION 452 OF THE STANDARD SPECIFICATIONS EXCEPT USE CONCRETE SHEET PILES IN LIEU OF STEEL SHEET PILES.

INSTALL CONCRETE SHEET PILES TO TIP ELEVATIONS NO HIGHER THAN AS SHOWN ON THE PLANS.

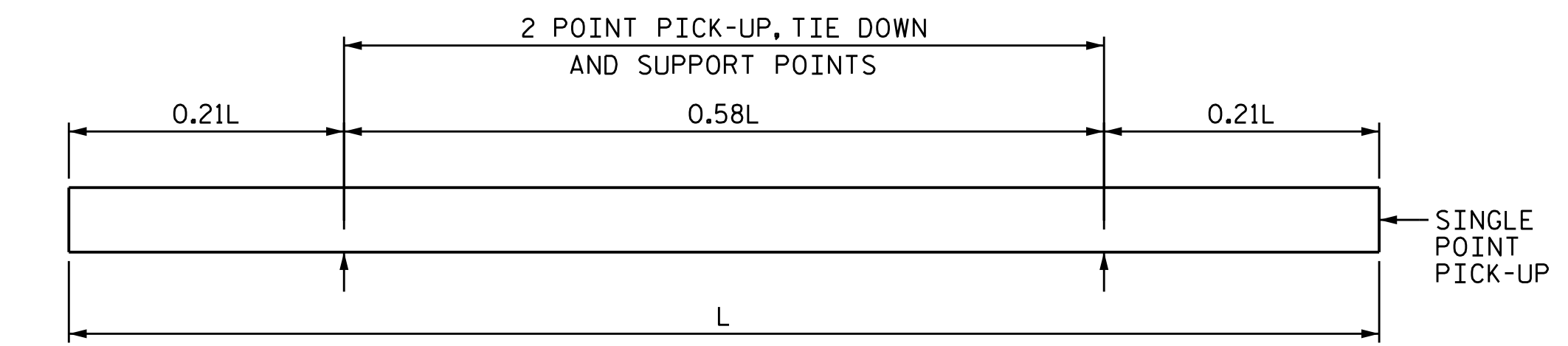
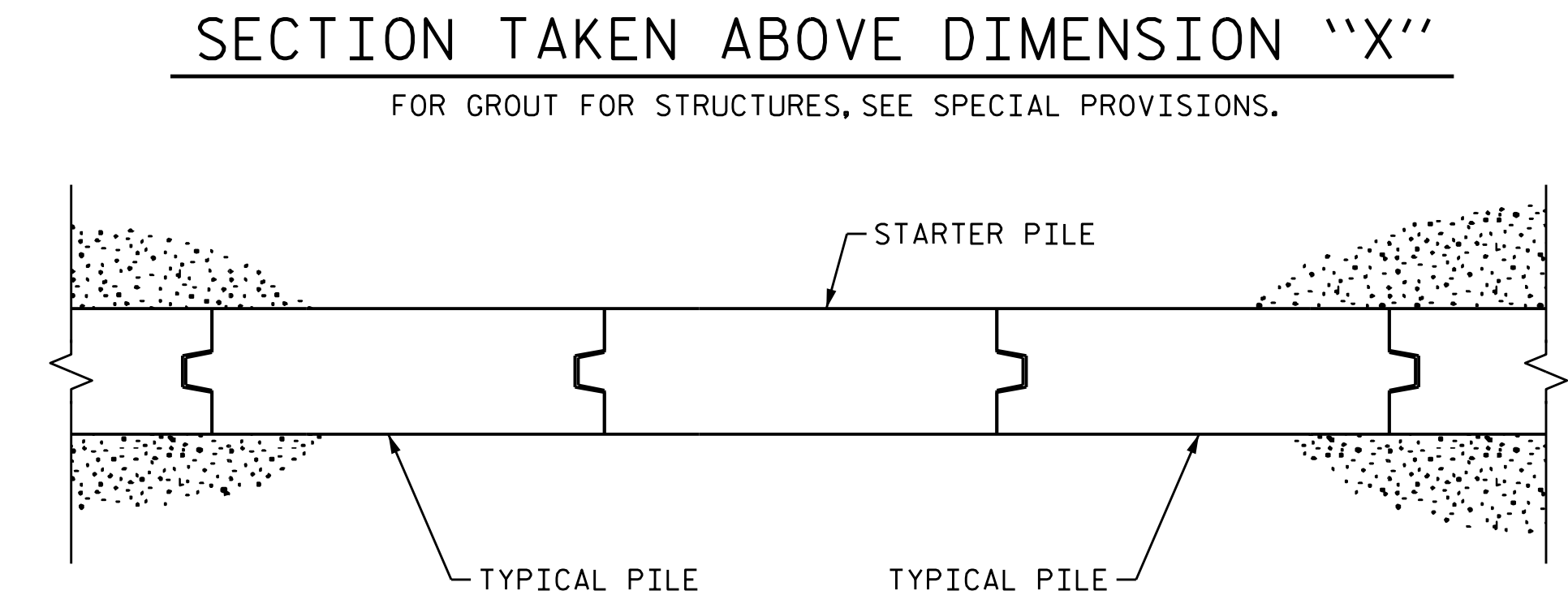
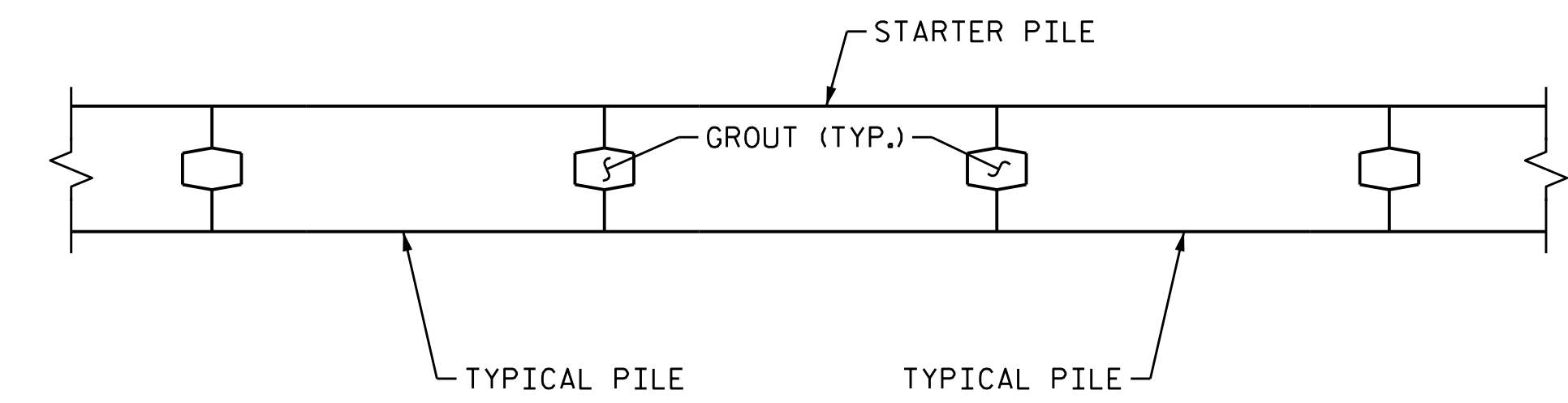
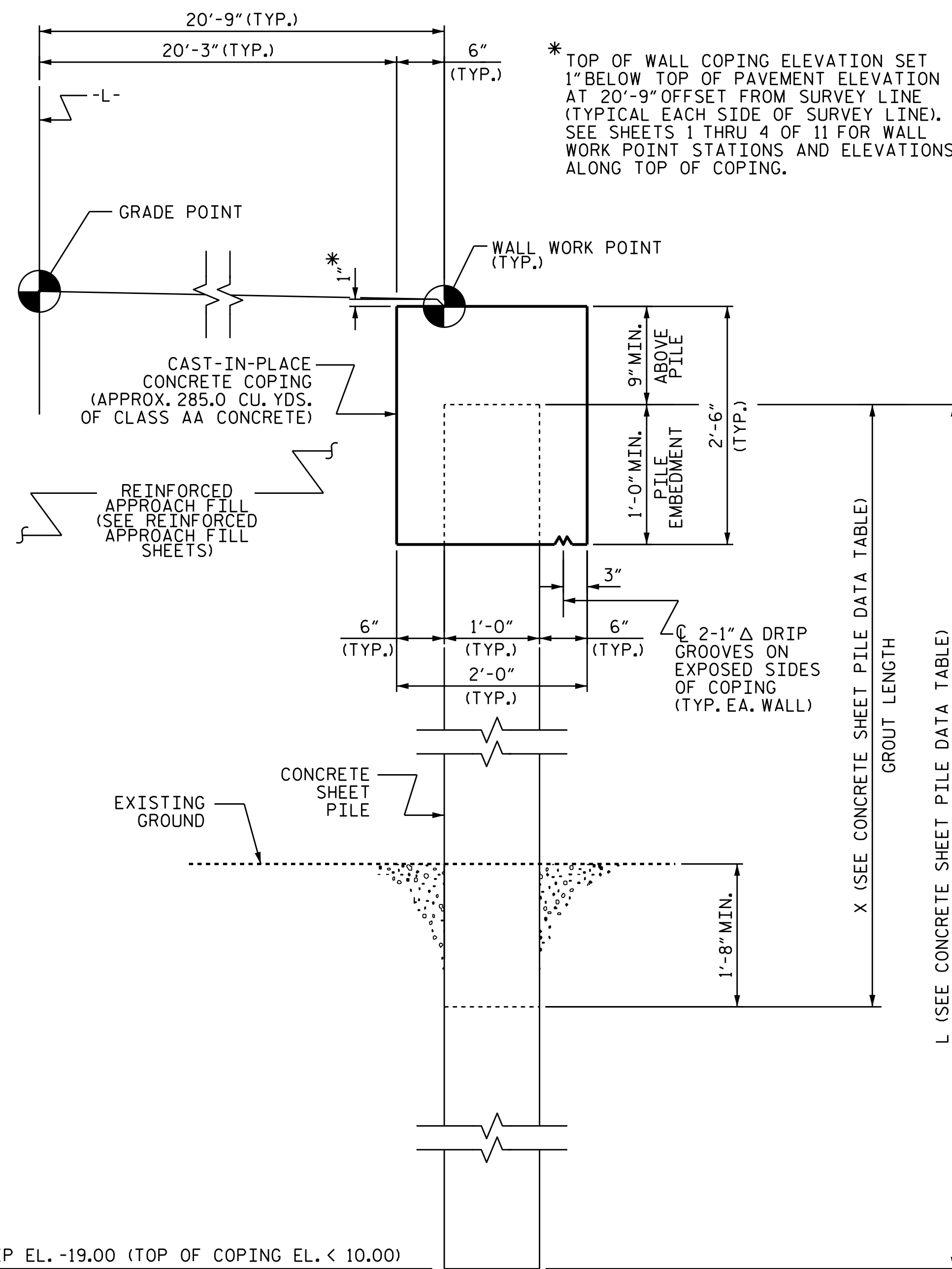
USE JETTING, DRIVING, OR A COMBINATION OF JETTING AND DRIVING TO ATTAIN THE MINIMUM TIP ELEVATION NO HIGHER THAN REQUIREMENTS. SEE PILE JETTING SPECIAL PROVISION FOR JETTING REQUIREMENTS AND RESTRICTIONS.

IF USING IMPACT HAMMERS FOR CONCRETE SHEET PILE INSTALLATION, SUBMIT DRIVING EQUIPMENT AS OUTLINED IN SECTION 450-3 OF THE STANDARD SPECIFICATIONS.

FOR JETTING AND OFF-SITE JETTING SPOIL DISPOSAL, SEE PILE JETTING SPECIAL PROVISION.

FOR CONCRETE SHEET PILE RETAINING WALLS AND BRIDGE END BENT CONSTRUCTION SEQUENCE, SEE BRIDGE FOUNDATION NOTES ON PLANS.

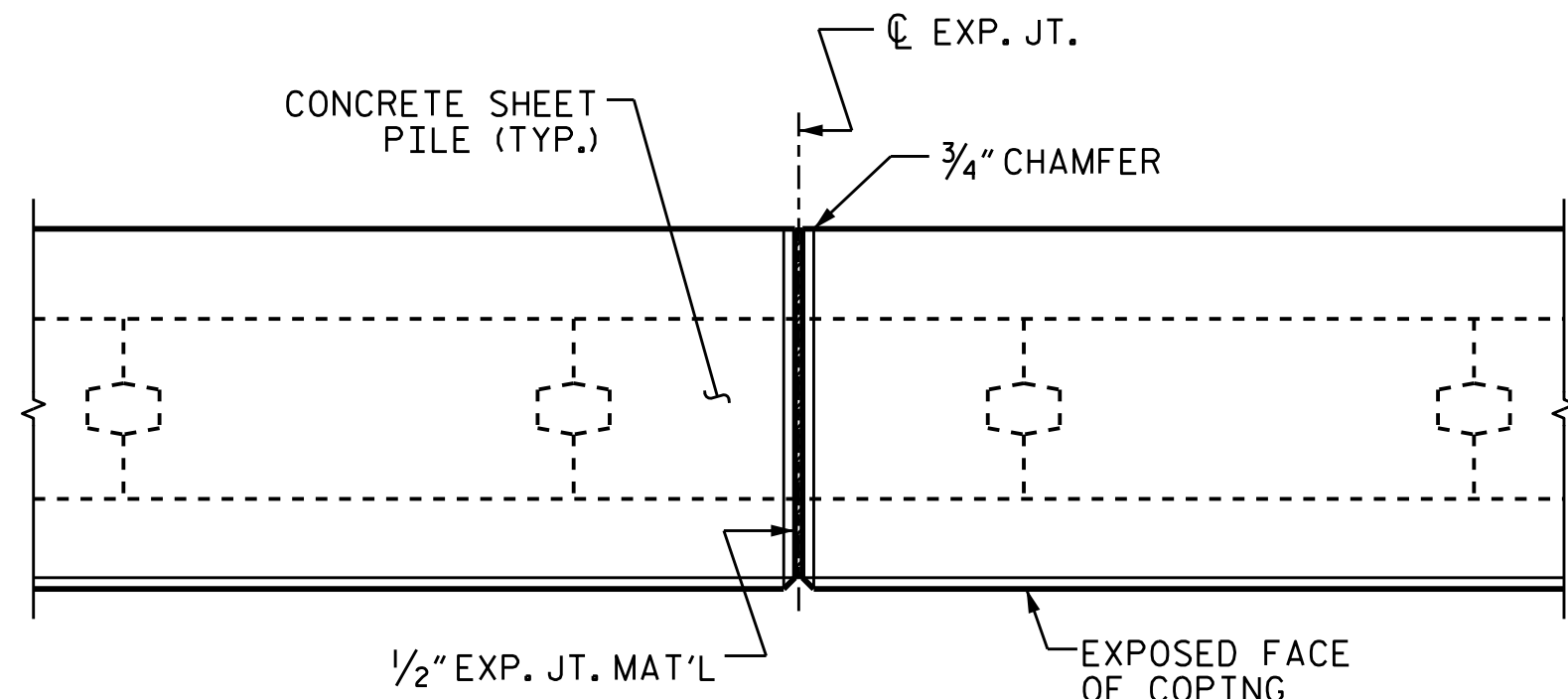
THE SCOUR CRITICAL ELEVATIONS FOR ALL CONCRETE SHEET PILE WALLS ARE ELEVATION -3.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.



TYPICAL SECTION

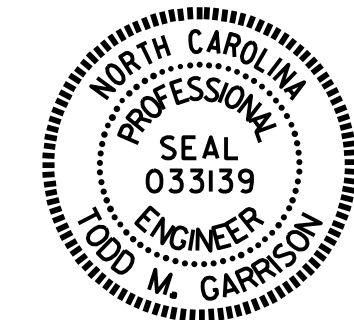
MIN. TIP EL. -19.00 (TOP OF COPING EL. < 10.00)
MIN. TIP EL. -22.00 (TOP OF COPING EL. > 10.00)

CONCRETE SHEET PILE WALL
TOTAL LENGTH = 1,908.67 LIN. FT.



PLAN OF EXPANSION JOINTS IN COPING

NOTE: JOINT LOCATION IN COPING MAY BE SHIFTED TO AVOID PLACING COPING JOINT IN THE SAME LOCATION AS A JOINT BETWEEN ADJACENT CONCRETE SHEET PILES.



DocuSigned by:
8/3/2015

PROJECT NO. B-2500AB
DARE COUNTY
STATION: 3170+75.00 -L-

SHEET 6 OF 11

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONCRETE SHEET PILE RETAINING WALL DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	W-6
1			3			TOTAL SHEETS
2			4			13

DRAWN BY: T. M. GARRISON, P.E. DATE: 6/15
CHECKED BY: M. A. ALLEN DATE: 6/15
DESIGN ENGINEER OF RECORD: T. M. GARRISON, P.E. DATE: 6/15