

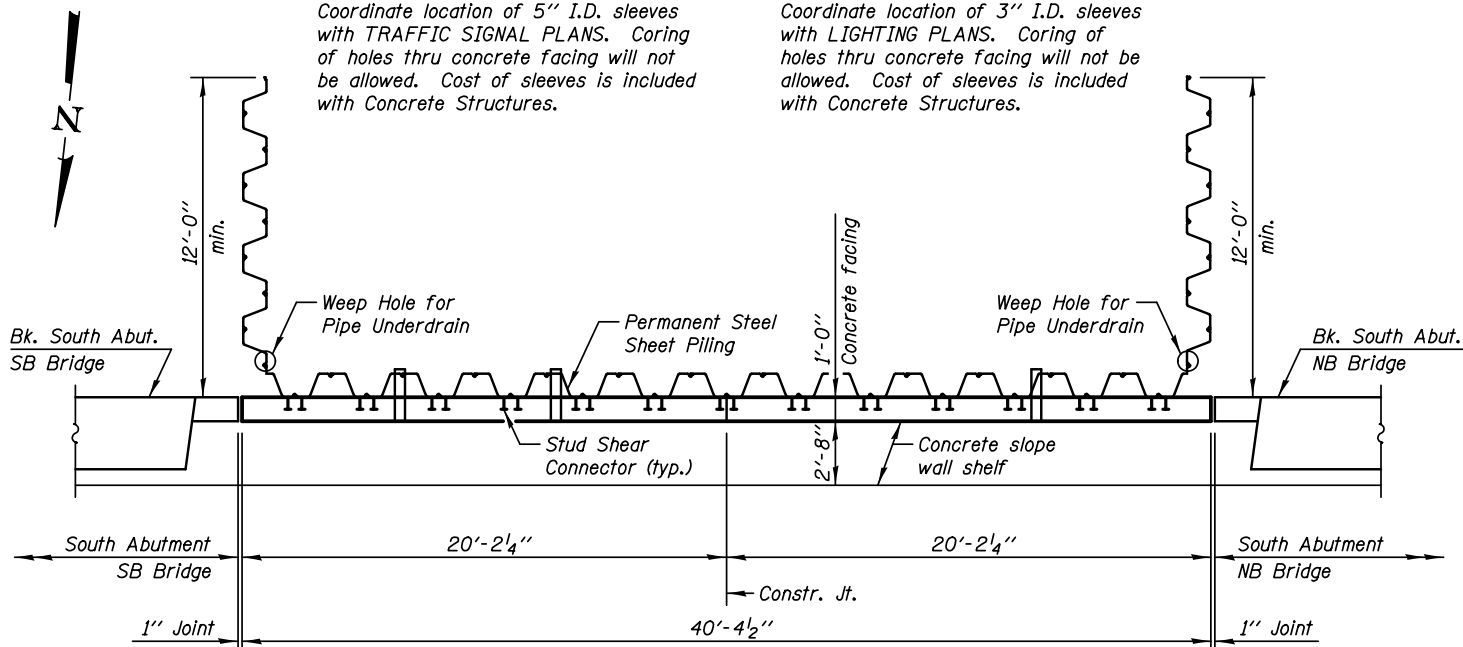
**ELEVATION - NORTH FACE**  
(Looking South)

**NOTE A**

Coordinate location of 5" I.D. sleeves with TRAFFIC SIGNAL PLANS. Coring of holes thru concrete facing will not be allowed. Cost of sleeves is included with Concrete Structures.

**NOTE B**

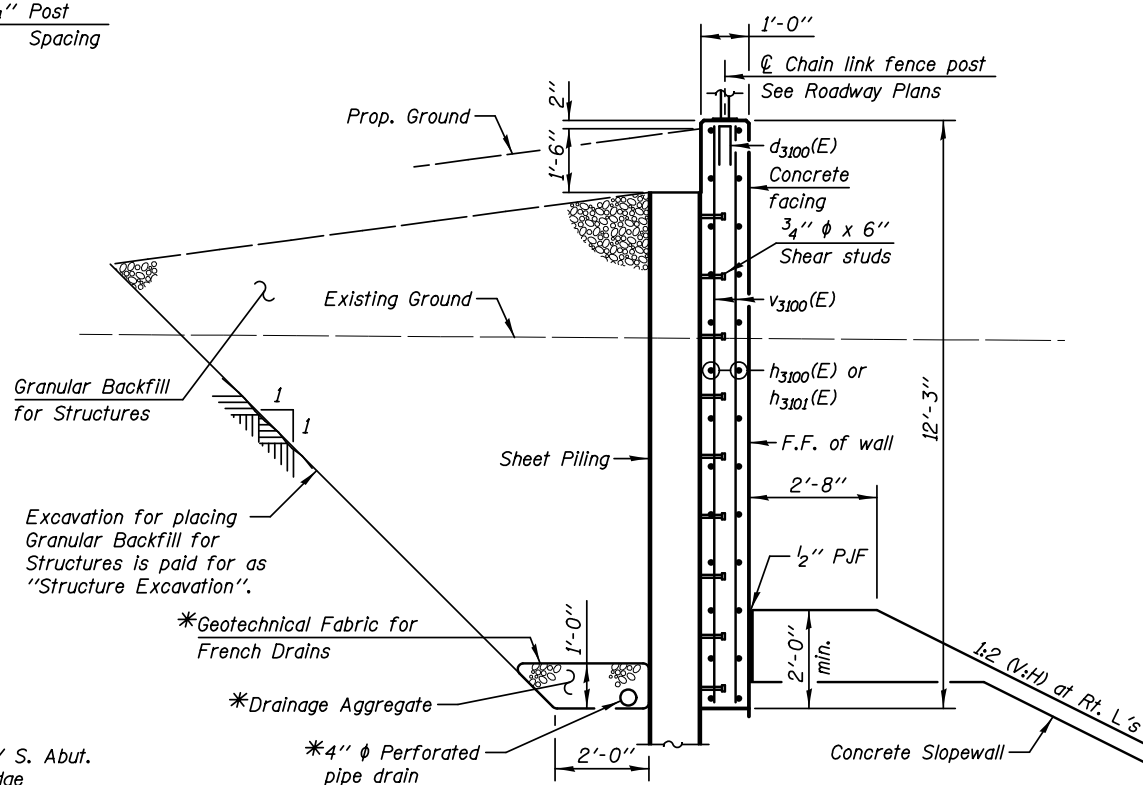
Coordinate location of 3" I.D. sleeves with LIGHTING PLANS. Coring of holes thru concrete facing will not be allowed. Cost of sleeves is included with Concrete Structures.



**PLAN**

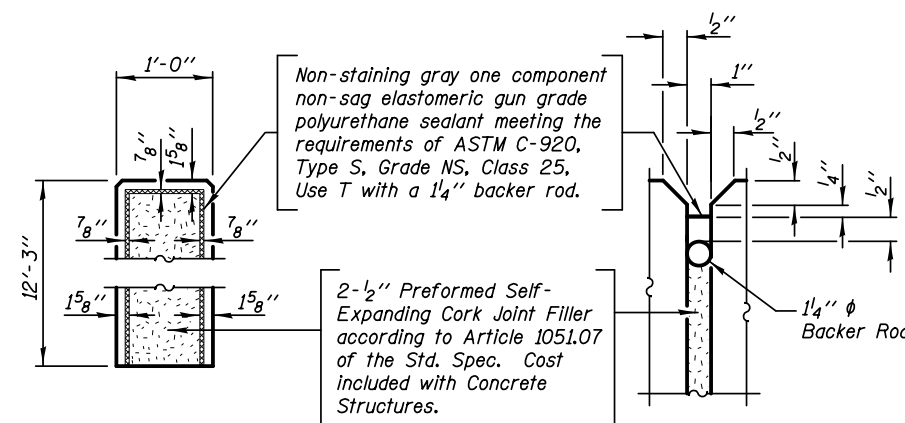
**DESIGN CRITERIA**

Required Section Modulus = 28.6 in<sup>3</sup>/ft  
Minimum Tip Elevation = 697.00

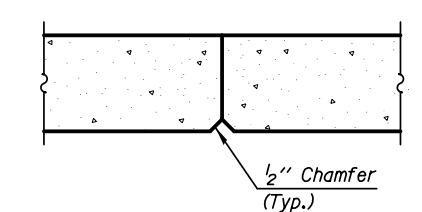


**SECTION THRU SHEET PILING WALL**

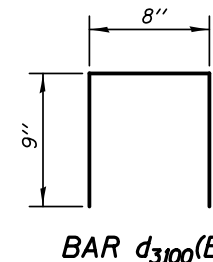
\*Included in the cost of Pipe Underdrains for Structures.



**1" JOINT DETAILS**

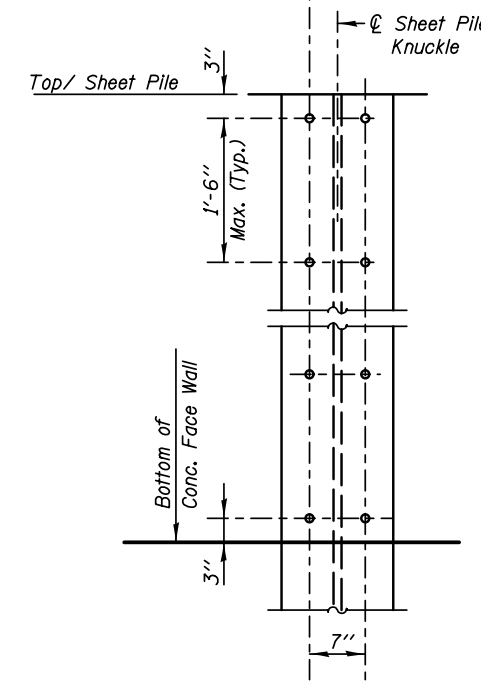


**CONSTRUCTION JOINT DETAIL**



**BAR d<sub>3100</sub>(E)**

3/4" φ x 6" Granular or Solid Flux Filled Studs Automatically end welded to flange (typ.)



**STUD SHEAR CONNECTORS LAYOUT**

**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE		
d <sub>3100</sub> (E)	8	#4	2'-2"	□		
h <sub>3100</sub> (E)	52	#5	19'-10"	—		
h <sub>3101</sub> (E)	26	#5	6'-0"	—		
v <sub>3100</sub> (E)	84	#5	11'-11"	—		
Structure Excavation					Cu. Yd.	97.0
Concrete Structures					Cu. Yd.	20.0
Stud Shear Connectors					Each	234
Reinforcement Bars, Epoxy Coated					Pound	2300
Permanent Steel Sheet Piling					Sq. Ft.	2171.0
Granular Backfill for Structures					Cu. Yd.	115.0
Pipe Underdrains for Structures 4"					Foot	40.0

**NOTES**

See Sheet SA-44, SA-46 and SA-48 for South Abutment Details.

**MIN. BAR LAP**  
#5 - 2'-5"

**TOLLWAY WALL EW123.3R,EB**

**KNIGHT**  
Engineers & Architects

DESIGNED - WPM	REVISIONS
CHECKED - TB	REVISIONS
SCALE - NONE	REVISIONS
DATE - 10/15/2012	REVISIONS
DRAWN - TB	REVISIONS
CHECKED - WPM	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RETAINING WALL - SOUTH ABUTMENT  
S.N. 022-2029 (SB) TOLLWAY B.N. 826  
S.N. 022-2030 (NB) TOLLWAY B.N. 825  
SHEET NO. SA-49 OF 63 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(112 & 113) WRS-5	DUPAGE	963	633
CONTRACT NO. 60131				
ILLINOIS FED. AID PROJECT				