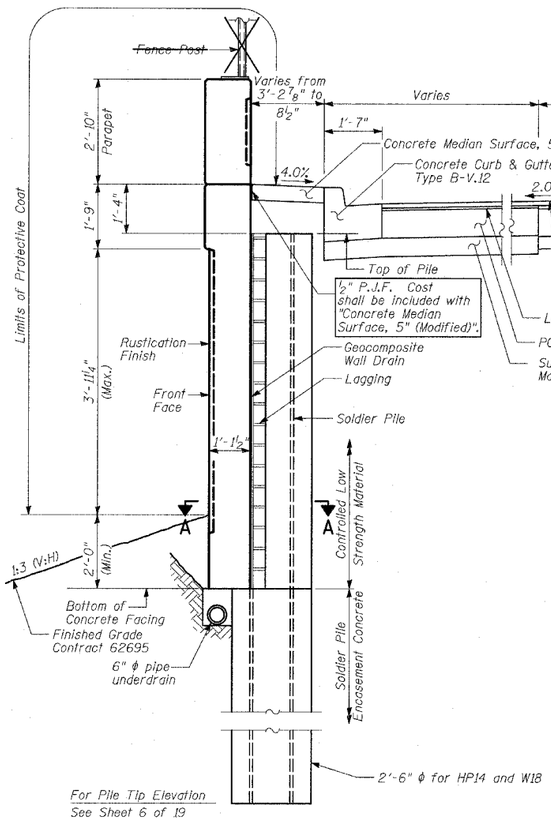
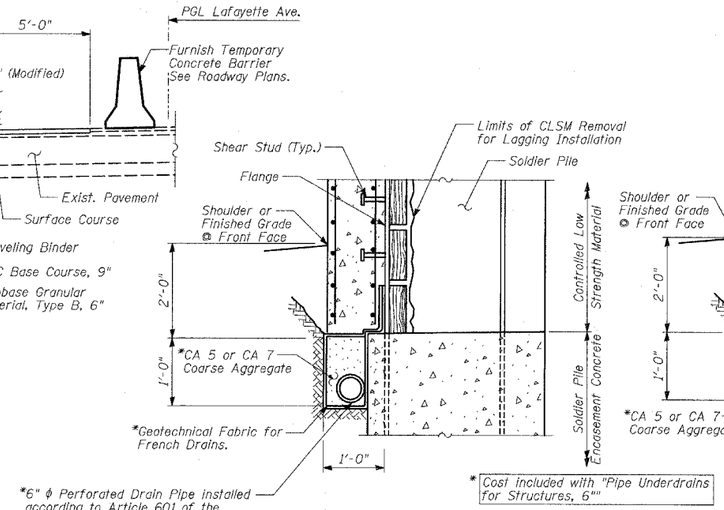
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	907	525
STA. 1200+00.00	TO STA. 1365+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717 & 1818) R-9				62695

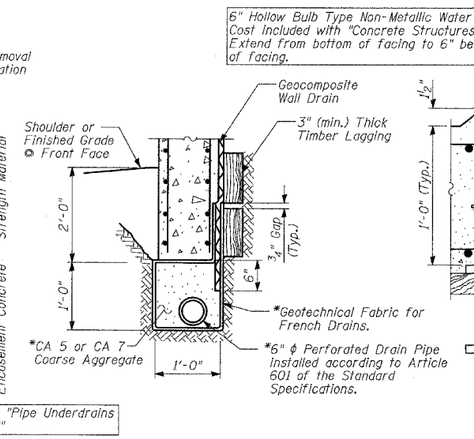


CROSS SECTION THRU WALL

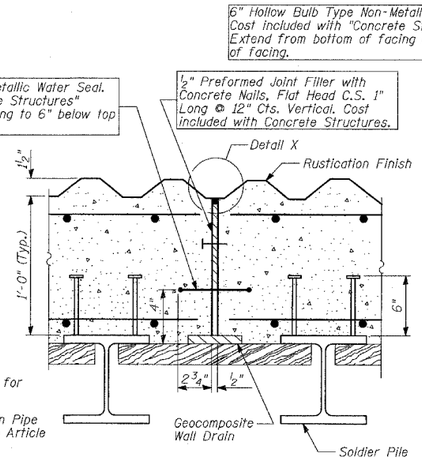


* Cost included with "Pipe Underdrains for Structures, 6""

PIPE UNDERDRAIN DETAIL AT SOLDIER PILE

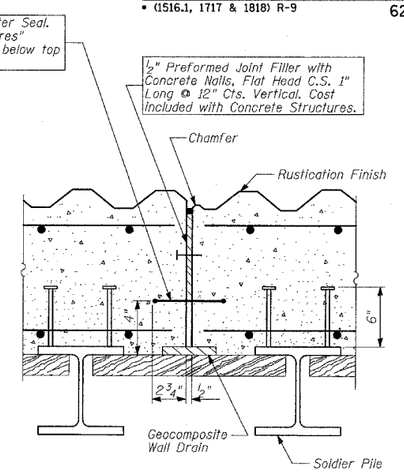


PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES



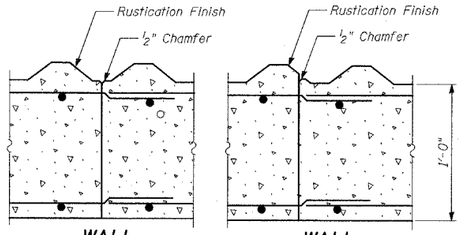
EXPANSION JOINT DETAILS

(Joint in Valley)



EXPANSION JOINT DETAILS

(Joint on Diagonal)



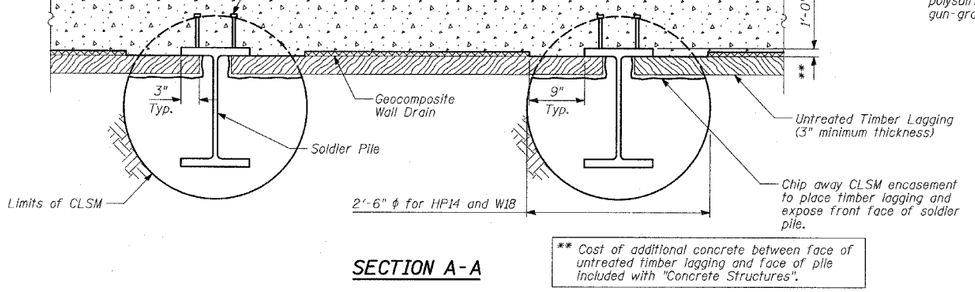
WALL

(Joint in Valley)

WALL

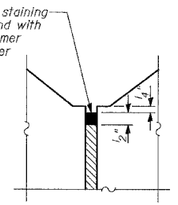
(Joint on Diagonal)

CONSTRUCTION JOINT DETAILS



SECTION A-A

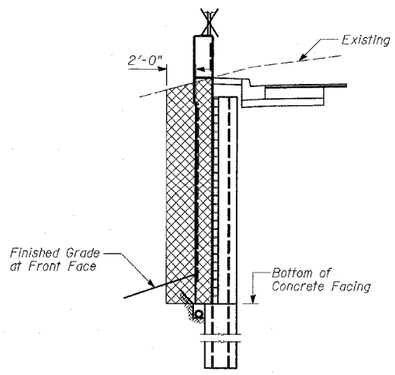
** Cost of additional concrete between face of untreated timber lagging and face of pile included with "Concrete Structures".



DETAIL X

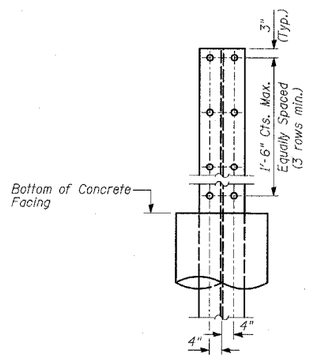
NOTES:

1. The geocomposite wall drain shall be constructed according to Section 591 of the Standard Specifications.
2. The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and the minimum tabulated unit stress in bending (F_b), used in the design of timber lagging shall be 1000 psi.
3. Stud shear connectors shall be ¾" ϕ x 6" granular or solid flux filled headed studs, automatically end welded to the front flange of the soldier piles.



STRUCTURE EXCAVATION

(For Proposed Wall)



SHEAR STUD CONNECTOR DETAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	CU YD	363
Stud Shear Connectors	EACH	618
Untreated Timber Lagging	SQ FT	2,576
Geocomposite Wall Drain	SQ YD	318
Pipe Underdrains for Structures, 6"	FOOT	570

SHEET 9 OF 19

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG LAFAYETTE AVE.
89TH ST. TO 88TH ST.
WALL 38
WALL CROSS SECTIONS & DETAILS

S.N. 016-W950 — DESIGNED BY: MI, MAF
SCALE: N.T.S. — DRAWN BY: MAF
DATE: MARCH 25, 2005 — CHECKED BY: TD, MI

TY·LIN INTERNATIONAL

$FILES
$TIMES
$DATES