Benchmark: Cut square on northwest corner of sign foundation at north side of Harrison Street, approximately 80' west of west line of Morgan Street. Elevation 593.07. Cut square on east wall of Morgan Street at approximately centerline of I-290, near north entrance to CTA. Elevation 600.63.

Existing Structure: NONE

Traffic Control: Traffic to be maintained on WB I-290 during construction.

Salvage: NONE

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
6th Edition with 2013 Interim Revisions

DESIGN STRESSES

FIELD UNITS

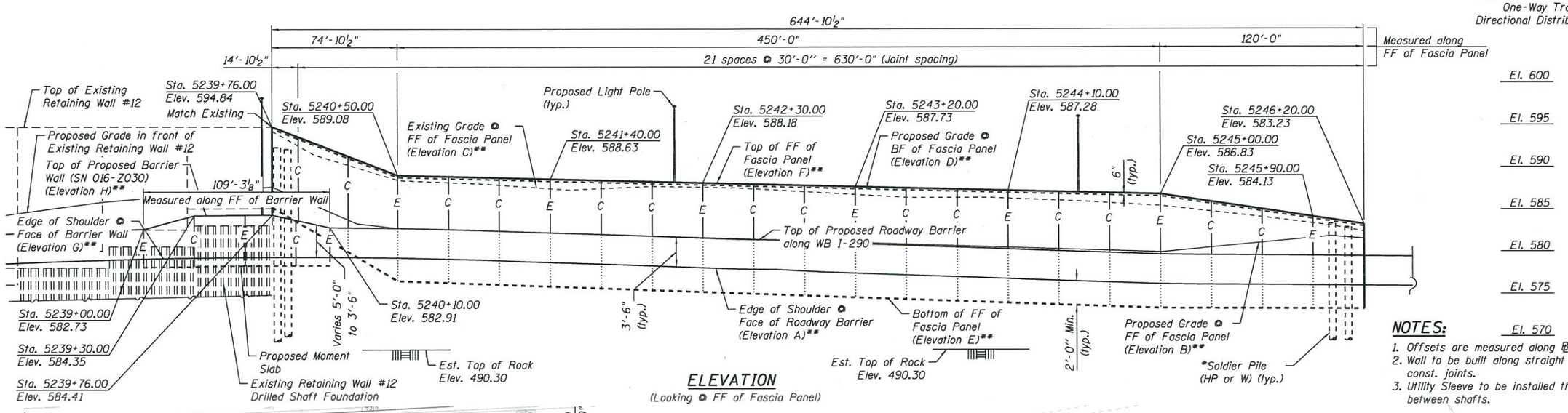
f'c = 3,500 psi (Cast-in-Place)
fy = 60,000 psi (Reinforcement)

SOLDIER PILES

fy = 50,000 psi (AASHTO M270 Gr. 50)

HIGHWAY CLASSIFICATION

F.A.I. Rte. WB I-290
Functional Class: Interstate
ADT: 84,300 (2012); 88,000 (2040)
ADTT: 2,841 (2012); 2,966 (2040)
DHV: 6,150 (2040)
Design Speed: 50 m.p.h.
Posted Speed: 45 m.p.h.
One-Way Traffic
Directional Distribution: NA

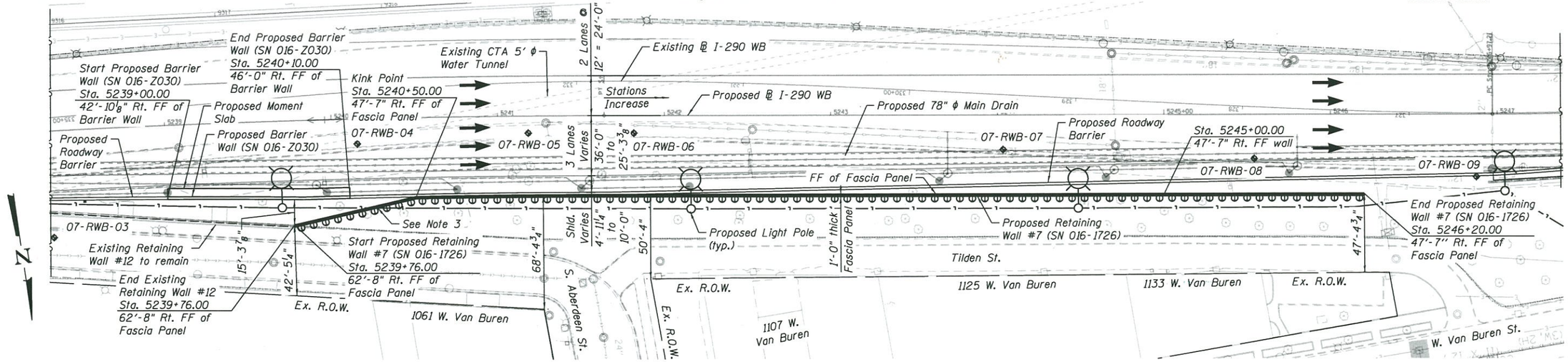


ELEVATION

(Looking @ FF of Fascia Panel)

NOTES:

1. Offsets are measured along ℄ I-290 WB.
2. Wall to be built along straight chords between const. joints.
3. Utility Sleeve to be installed through wall between shafts.



PLAN

LEGEND:

Combined Sewer	Fire Hydrant	C = Construction Joint
Electric —E—	Light Pole	E = Expansion Joint
Existing Storm Sewer	Soil Boring Location	FF = Front Face
	Existing Fence	BF = Back Face
Proposed Storm Sewer	Direct Burial Cable —L—	

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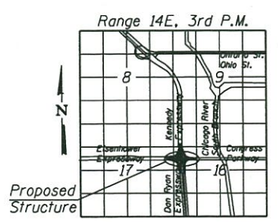
SEP 30 2014
AS A BASIS FOR PREPARATION OF DETAILED PLANS

* Pile selection, spacing, tip elevation, and shaft diameter to be determined in the final design.

** See Elevation Tables Sheet 2.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
RETAINING WALL 7
F.A.I. RTE. 290 - SECTION 2013-077R
COOK COUNTY
STATION 5239+76.00 TO 5246+25.00
STRUCTURE NO. 016-1726

AECOM

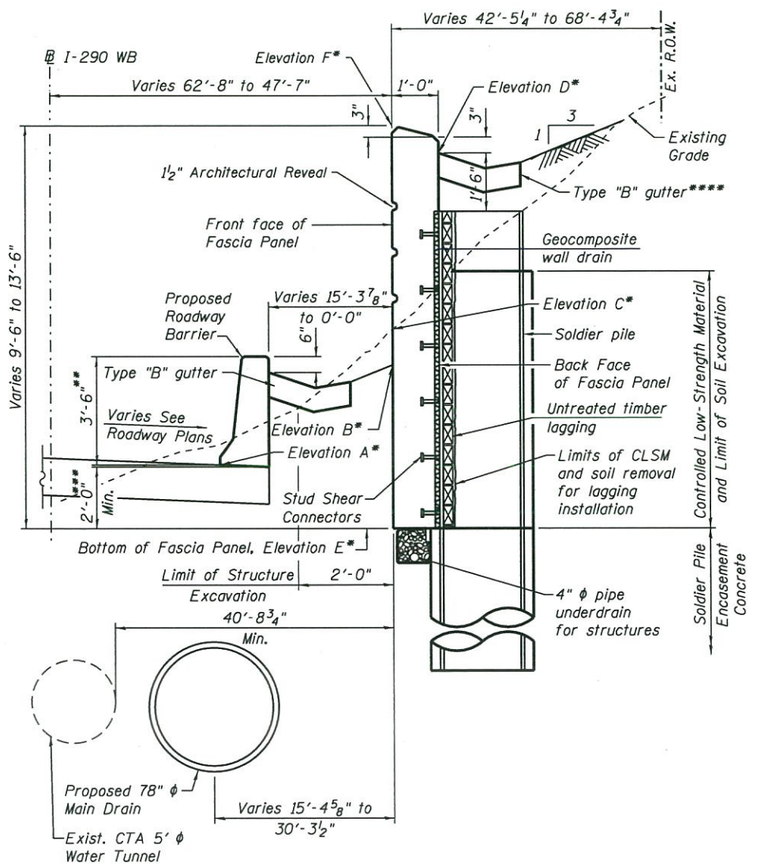
USER NAME = dunkerleyb	DESIGNED - JSK	REVISED	
	CHECKED - EJO	REVISED	
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED	
PLOT DATE = 9/15/2014	CHECKED - EJO	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2013-077R	COOK	3	1
		CONTRACT NO. 60X61		
	ILLINOIS FED. AID PROJECT			

016-1726-CIRCLE100-SHT-ACM-ST-TSL-001



TYPICAL SECTION

(Looking West)

* See Soldier Pile and Lagging Wall or Barrier Wall Elevation Table.

** Proposed Barrier Wall extends from Sta. 5239+00.00 to Sta. 5240+10.00. See Typical Barrier Wall Section and Barrier Wall Elevation Table for heights and elevations.

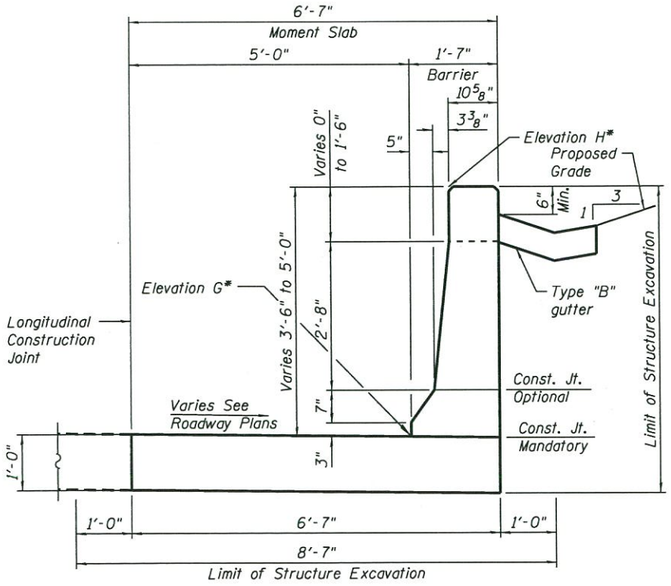
*** Elevation E will provide 2'-0" Min. below finished grade at front face of Fascia Panel for interim and future widening.

**** Type "B" gutter extends from Sta. 5240+50.00 to Sta. 5246+20.00.

SOLDIER PILE AND LAGGING WALL ELEVATION TABLE

Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E	Elevation F
5239+76.00	62'-8" Rt.	579.41	587.76	593.75	594.34	585.34	594.84
5240+01.00	57'-7 1/2" Rt.	579.41	585.57	590.91	592.39	582.38	592.89
5240+26.00	52'-6 1/8" Rt.	579.38	583.38	589.32	590.45	579.42	590.95
5240+50.00	47'-7" Rt.	579.32	582.82	587.80	588.58	576.58	589.08
5240+75.00	47'-7" Rt.	579.21	582.69	587.70	588.46	576.40	588.96
5241+00.00	47'-7" Rt.	579.07	582.57	587.61	588.33	576.22	588.83
5241+25.00	47'-7" Rt.	578.89	582.39	587.25	588.21	576.04	588.71
5241+50.00	47'-7" Rt.	578.73	582.22	586.90	588.08	575.86	588.58
5241+75.00	47'-7" Rt.	578.56	582.06	587.05	587.96	575.68	588.46
5242+00.00	47'-7" Rt.	578.38	581.91	587.20	587.83	575.50	588.33
5242+25.00	47'-7" Rt.	578.19	581.74	587.11	587.71	575.32	588.21
5242+50.00	47'-7" Rt.	578.01	581.58	587.02	587.58	575.14	588.08
5242+75.00	47'-7" Rt.	577.83	581.42	586.78	587.46	574.96	587.96
5243+00.00	47'-7" Rt.	577.65	581.26	586.54	587.33	574.77	587.83
5243+25.00	47'-7" Rt.	577.46	581.09	586.23	587.21	574.59	587.71
5243+50.00	47'-7" Rt.	577.28	580.93	585.92	587.08	574.41	587.58
5243+75.00	47'-7" Rt.	577.10	580.77	585.77	586.96	574.23	587.46
5244+00.00	47'-7" Rt.	576.92	580.61	585.63	586.83	574.05	587.33
5244+25.00	47'-7" Rt.	576.73	580.44	585.49	586.71	573.87	587.21
5244+50.00	47'-7" Rt.	576.55	580.28	585.36	586.58	573.69	587.08
5244+75.00	47'-7" Rt.	576.37	580.12	585.02	586.46	573.51	586.96
5245+00.00	47'-7" Rt.	576.20	579.97	584.69	586.33	573.33	586.83
5245+25.00	47'-7" Rt.	576.13	579.91	584.10	585.58	573.31	586.08
5245+50.00	47'-7" Rt.	576.09	579.85	583.52	584.83	573.29	585.33
5245+75.00	47'-7" Rt.	576.05	579.81	582.82	584.08	573.27	584.58
5246+00.00	47'-7" Rt.	576.00	579.78	582.11	583.33	573.25	583.83
5246+20.00	47'-7" Rt.	575.96	579.74	581.60	582.73	573.23	583.23

Elevation A - Edge of Shoulder at Face of Roadway Barrier
Elevation B - Propsosed Grade at Front Face of Fascia Panel
Elevation C - Existing Grade at Front Face of Fascia Panel
Elevation D - Proposed Grade at Back Face of Fascia Panel
Elevation E - Bottom of Front Face of Fascia Panel / Top of Encasement Concrete
Elevation F - Top of Front Face of Fascia Panel



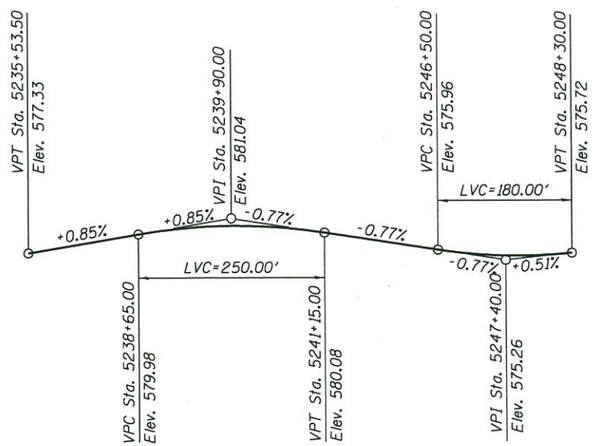
TYPICAL BARRIER WALL SECTION

(Sta. 5239+00.00 to Sta. 5240+10.00)
(Looking West)

BARRIER WALL ELEVATION TABLE

Station	Offset	Elevation G	Elevation H
5239+00.00	42'-10 1/8" Rt.	579.23	582.73
5239+10.00	43'-2 3/4" Rt.	579.28	583.27
5239+20.00	43'-7 3/8" Rt.	579.32	583.81
5239+30.00	43'-11 7/8" Rt.	579.35	584.35
5239+40.00	44'-4 1/2" Rt.	579.38	584.38
5239+50.00	44'-9 1/8" Rt.	579.39	584.39
5239+60.00	45'-1 5/8" Rt.	579.41	584.41
5239+70.00	45'-6 1/4" Rt.	579.41	584.41
5239+76.00	45'-9" Rt.	579.41	584.41
5239+80.00	45'-10 7/8" Rt.	579.41	584.23
5239+90.00	46'-0" Rt.	579.41	583.79
5240+00.00	46'-0" Rt.	579.42	583.35
5240+10.00	46'-0" Rt.	579.41	582.91

Elevation G - Edge of Shoulder at Face of Barrier Wall
Elevation H - Top of Barrier Wall



PROFILE GRADE

(along ℄ I-290 WB)

APPROVED
SEP 30 2014
AS A BASIS FOR
PREPARATION OF DETAILED PLANS

SECTION & DETAILS
RETAINING WALL 7
F.A.I. RTE. 290 - SECTION 2013-077R
COOK COUNTY
STATION 5239+76.00 TO 5246+20.00
STRUCTURE NO. 016-1726

AECOM

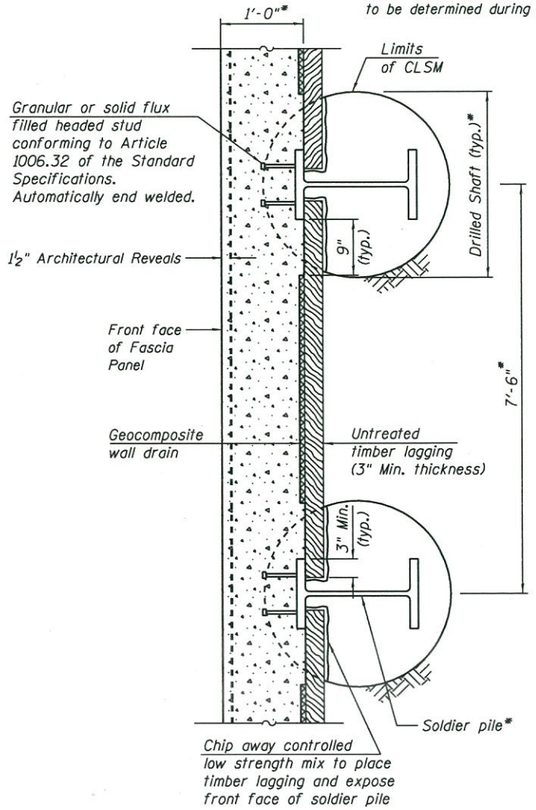
USER NAME = dunkerleyb	DESIGNED - JSK	REVISED	
	CHECKED - EJO	REVISED	
PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED	
PLOT DATE = 9/15/2014	CHECKED - EJO	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

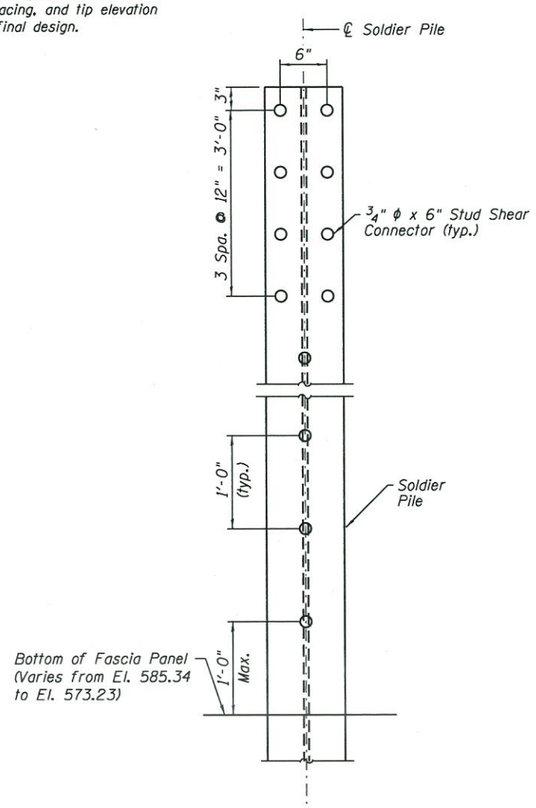
SHEET NO. 2 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2013-077R	COOK	3	2
		CONTRACT NO. 60X61		
	ILLINOIS FED. AID PROJECT			

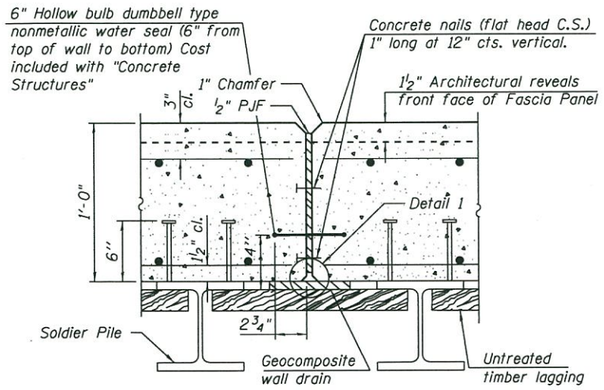
016-1726-CIRCLE100-SHT-ACM-ST-TSL-002



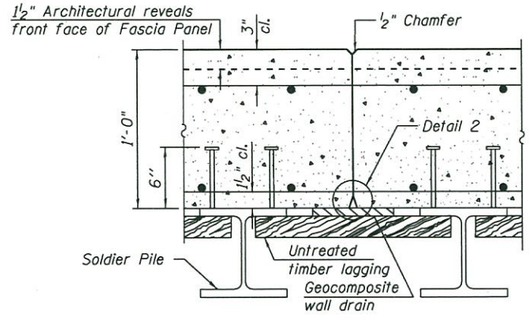
SECTION A-A



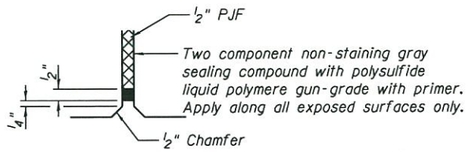
STUD SHEAR CONNECTOR DETAIL



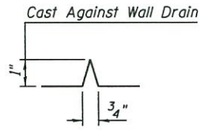
EXPANSION JOINT DETAILS



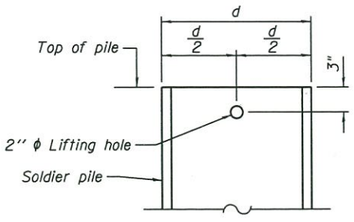
CONSTRUCTION JOINT DETAILS



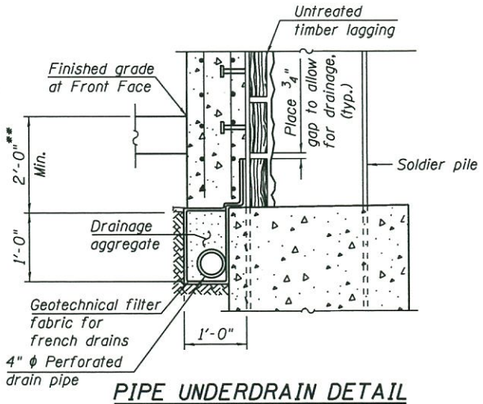
DETAIL 1



DETAIL 2

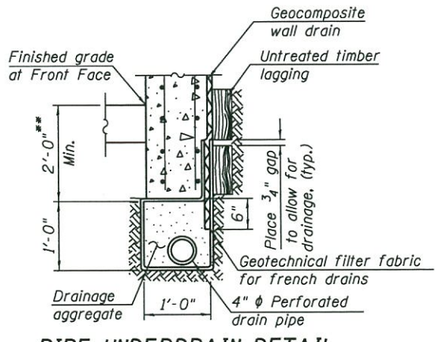


LIFTING HOLE DETAIL



PIPE UNDERDRAIN DETAIL AT SOLDIER PILE

** 2'-0" Min. below finished grade at Front Face of Fascia Panel for interim and future widening.



PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

APPROVED

SEP 30 2014

AS A BASIS FOR PREPARATION OF DETAILED PLANS

SECTION & DETAILS
RETAINING WALL 7
F.A.I. RTE. 290 - SECTION 2013-077R
COOK COUNTY
STATION 5239+76.00 TO 5246+20.00
STRUCTURE NO. 016-1726

AECOM	USER NAME = dunkerleyb	DESIGNED - JSK	REVISED
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	PLOT SCALE = N.T.S.	DRAWN - BRD	REVISED
	PLOT DATE = 9/15/2014	CHECKED - EJO	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 3 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2013-077R	COOK	3	3
		CONTRACT NO. 60X61		
	ILLINOIS	FED. AID PROJECT		

016-1726-CIRCLEI00-SHT-ACM-ST-TSL-003