F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62301	*(1818, ETC, 2324,6-1PIR-10			

Benchmark: BM No. 3538
"*" Cut on Easterly flange bolt of fire hydrant at Northeast corner of 47th Street and La Salle St.
El. 17.31

All elevations are based on the Chicago City Datum (C.C.D.)

Salvage: None

Existing Structure Description:

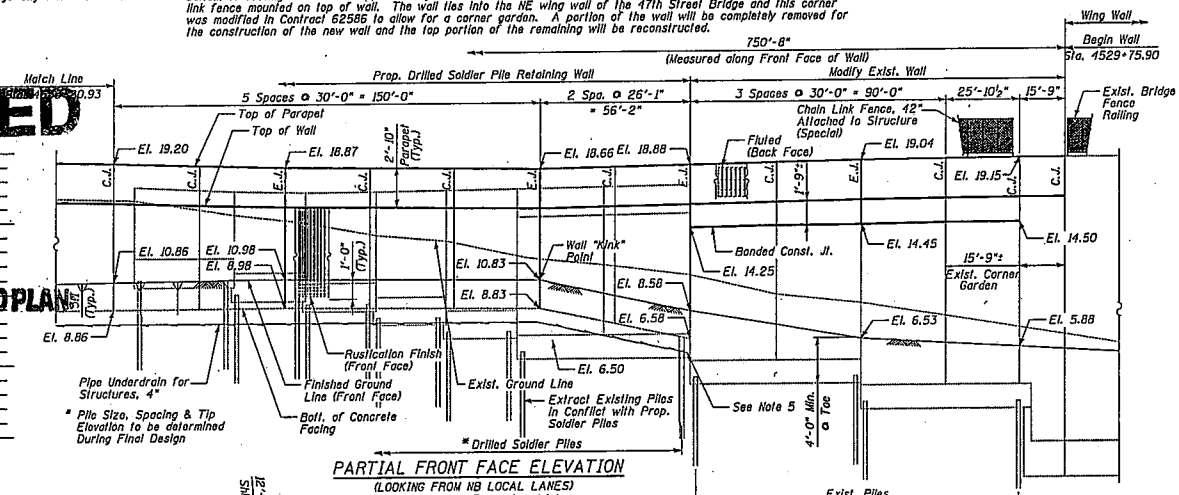
The existing wall was built in 1962 as part of Section 2122-907HB and Section 2122-921 PT. 1 in two phases designated as part of the 47th Street Bridge (S.N. 016-1156) and Wall "E-4". The existing wall is a cast-in-place concrete cantilever type on pile supported footings with a total length of 323'-4". The height from top of wall to bottom of footing varies from approximately 18'-9" to 7'-0" with a 1'-3" thick stem. There is an existing chain link fence mounted on top of wall. The wall ties into the NE wing wall of the 47th Street Bridge and this corner was modified in Contract 62586 to allow for a corner garden. A portion of the wall will be completely removed for the construction of the new wall and the top portion of the remaining will be reconstructed.

*APPROVED

MAY 03 2006

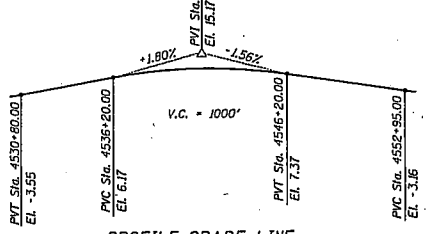
AS A BASIS FOR PREPARATION OF DETAILED PLANS

* Subject to FHWA Approval



PARTIAL FRONT FACE ELEVATION

(LOOKING FROM NB LOCAL LANES)
EJ - Denotes Expansion Joint
CJ - Denotes Construction Joint



PROFILE GRADE LINE

Along @ NB Local Lanes

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

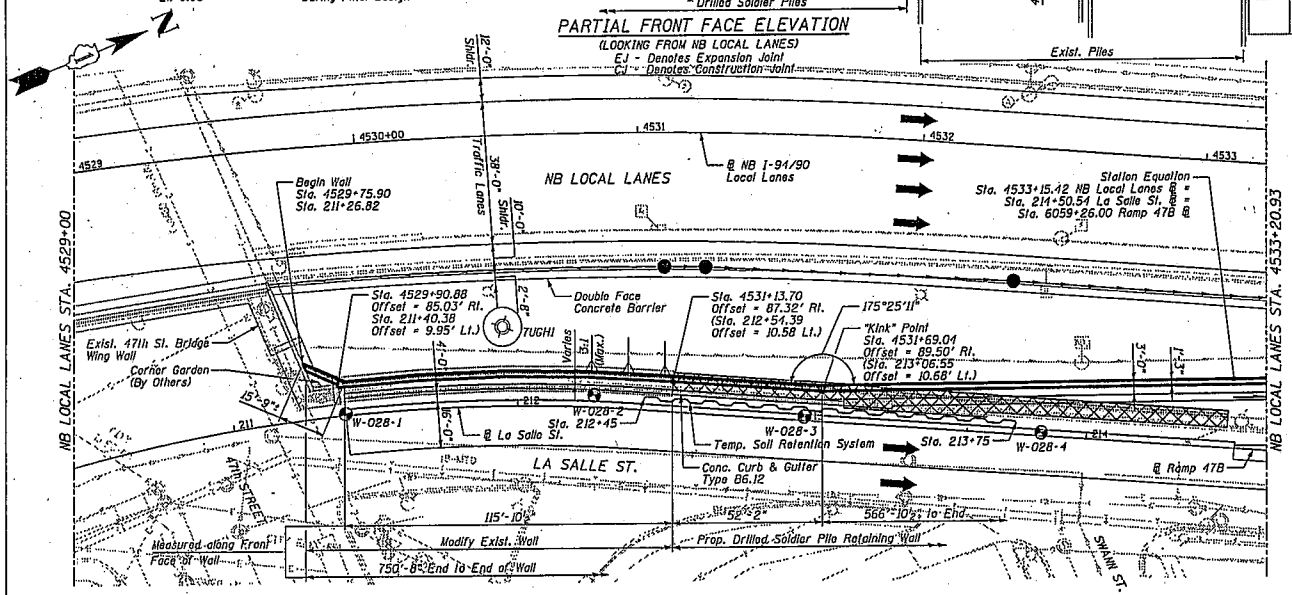
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Gr 36) Soldier Piles

HIGHWAY CLASSIFICATION

NB LOCAL LANES	RAMP 47B	LA SALLE ST.
Class: Interstate	Class: Ramp	Class: Urban Collector
DHV: 7280 (2000) 6722 (2020)	DHV: 323 (2000) 715 (2020)	DHV: 859 (2000) 791 (2010)
ADT: 80,815 (2000)	ADT: 4810 (2000)	ADT: Not available from Phase I
Design Speed: 60 mph	Design Speed: 40 mph	Design Speed: 30 mph

Notes:

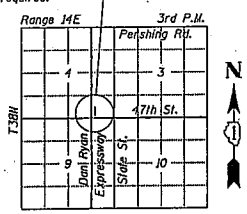
1. Offsets given to Back Face of Wall. Station and offsets in parentheses are along Frontage Road or ramp.
2. HMLT, foundations and work pads by others. See Special Provisions for Contractor Cooperation.
3. Wall to be built along straight chords between const. joints.
4. Min. Facing in contact with soldier pile shall be 3'-0".
5. Connect underdrain to Catch Basin or other roadway drainage as required.



PARTIAL PLAN

LEGEND

- Soil Boring Location
- High Mast Lighting Foundation and Tower (See Notes)
- Removal of Exist. Structures
- Proposed Drainage Structure
- Proposed Underdrain
- Proposed Storm Sewer



LOCATION SKETCH

SHEET 1 OF 4

REVISIONS	
NAME	DATE

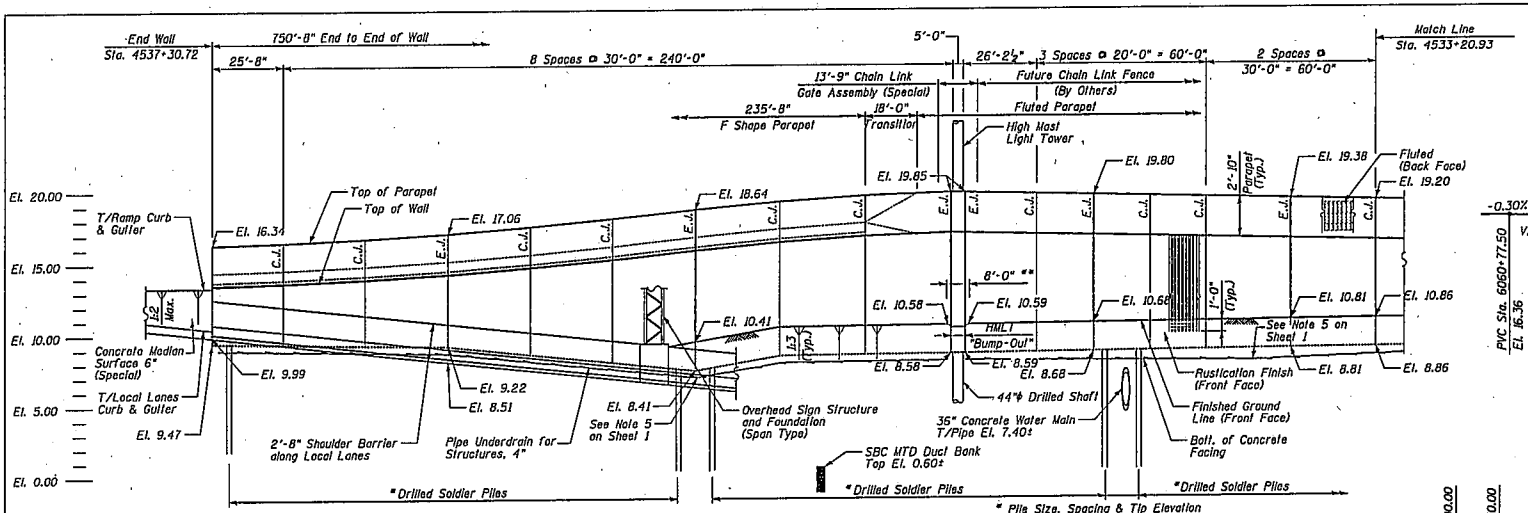
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)
COOK COUNTY
STA. 4529+75.90 TO STA. 4537+30.74
RETAINING WALL N-47N-R
GENERAL PLAN 1
S.N. 016-W977

SCALE: NTS — DRAWN BY: MTR
DATE: APRIL 3, 2006 — CHECKED BY: BLU

4/10/2006 10:47:07 AM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62301 *1818, ETC, 2324.6-IPIR-10



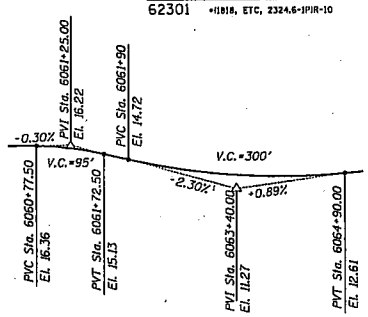
PARTIAL FRONT FACE ELEVATION

(LOOKING FROM NB LOCAL LANES)

EJ - Denotes Expansion Joint
CJ - Denotes Construction Joint

* Pile Size, Spacing & Tip Elevation to be determined During Final Design

** No Rustication Finish on Front Face



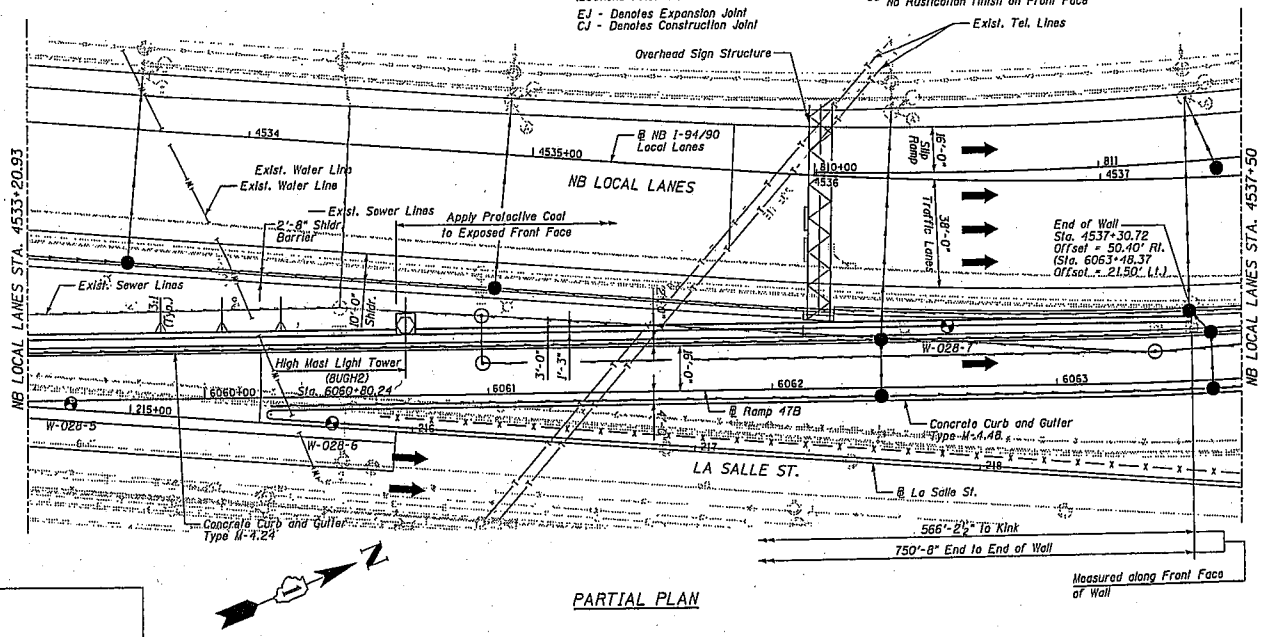
PROFILE GRADE LINE

Along @ Ramp 47B

Sta. 211+00.00	Sta. 211+50.00	Sta. 212+00.00	Sta. 212+50.00	Sta.213+00.00	Sta. 213+50.00	Sta. 214+00.00	Sta. 214+50	Sta. 215+00.00
El. 16.36	El. 15.82	El. 15.74	El. 15.63	El. 15.38	El. 15.40	El. 15.57	El. 15.96	El. 16.34

E.O.P. ELEVATIONS

Along @ La Salle St.



PARTIAL PLAN

LEGEND

- Soil Boring Location
- High Mast Lighting (Wall Mounted)
- Proposed Drainage Structure
- Proposed Underdrain
- Proposed Storm Sewer

Notes:

1. HMLT will be incorporated into Retaining Wall supported on Independent Drilled Shaft Foundations.
2. Piles shall be spaced to span over Exist. Utilities as required during Final Design. Special Concrete Facing Details will be developed as necesssary.

SHEET 2 OF 4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

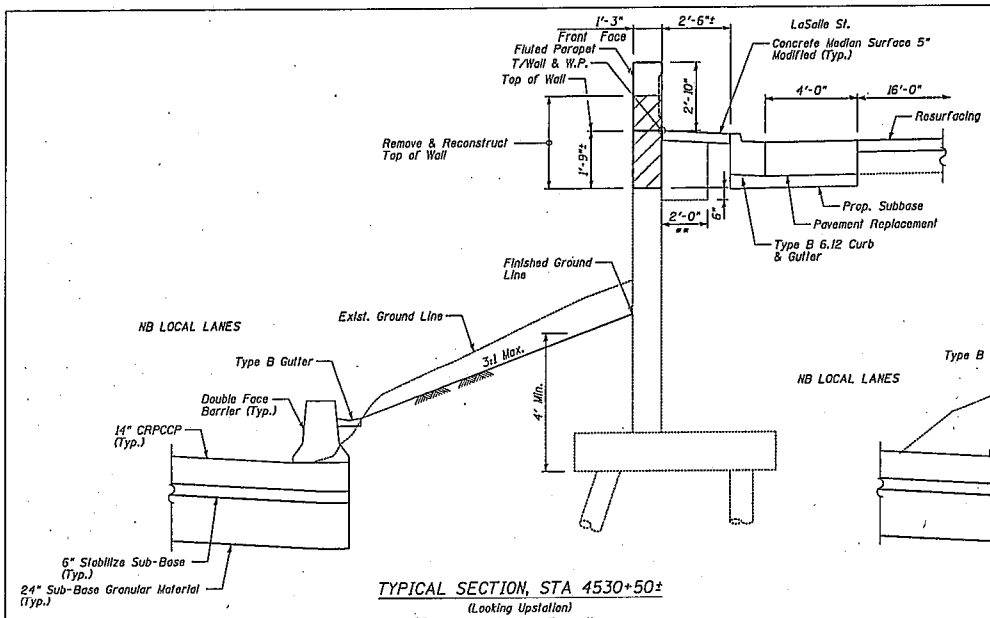
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)
COOK COUNTY
STA. 4529+75.50 TO STA. 4537+30.74
RETAINING WALL N-47N-R
GENERAL PLAN 2
S.N. 016-W977

SCALE: NTS DRAWN BY: MTR
DATE: APRIL 3, 2006 CHECKED BY: BLU

02-16-07 AU
4/13/2006

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

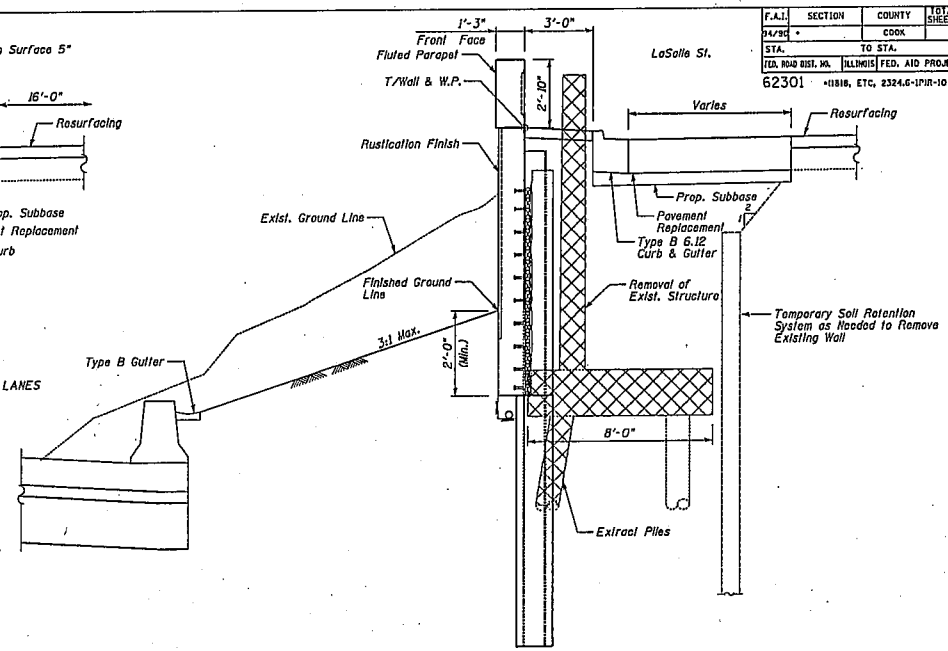
62301 *(1818, ETC, 2324.6-1P)R-10



TYPICAL SECTION, STA 4530+50±

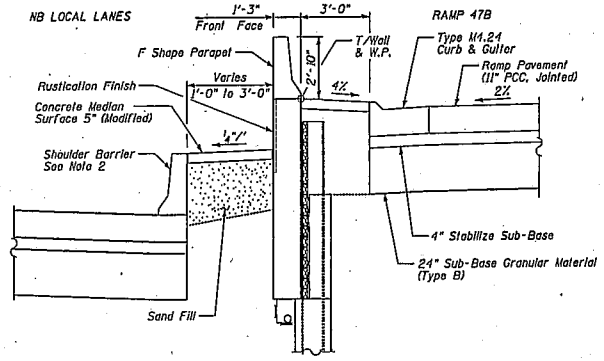
(Looking Upstation)

** Limits of Structure Excavation



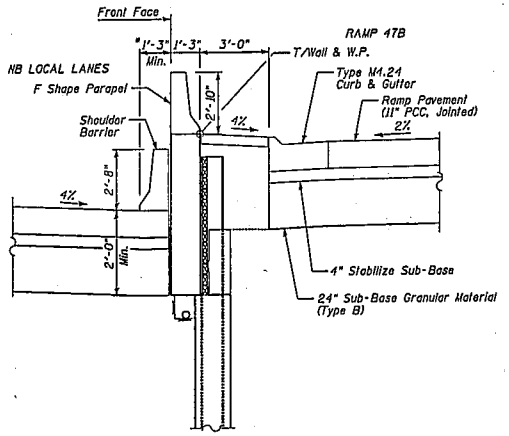
TYPICAL SECTION, STA. 4532+00±

(Looking Upstation)



TYPICAL SECTION, STA. 4536+00±

(Looking Upstation)



TYPICAL SECTION, STA. 4537+50±

(Looking Upstation)

* Varies 2'-3" to 1'-3"

LEGEND

- Concrete Removal
- Removal of Exist. Structures

Notes:

1. Dimensions not indicated are typical to all sections. See Sheet 4.
2. Double Face before Sign Foundation, Single Face after.

SHEET 3 OF 4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)

GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)

COOK COUNTY

STA. 4529+75.90 TO STA. 4537+30.74

RETAINING WALL N-47N-R

TYPICAL SECTIONS

S.N. 016-W977

SCALE: NTS DRAWN BY: KMW

DATE: APRIL 3, 2006 CHECKED BY: BLU

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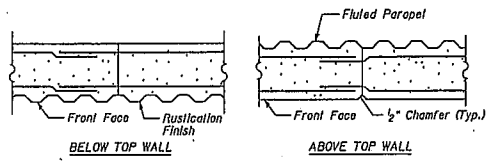
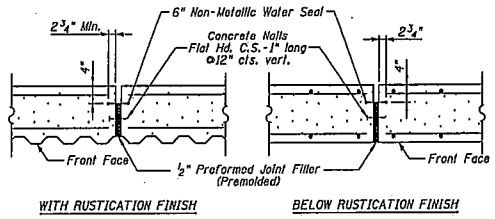
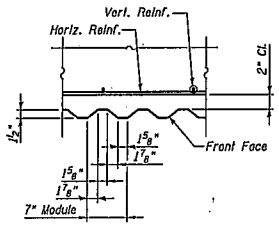
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62301	*(1818, ETC, 2324.6-1PIR-10			



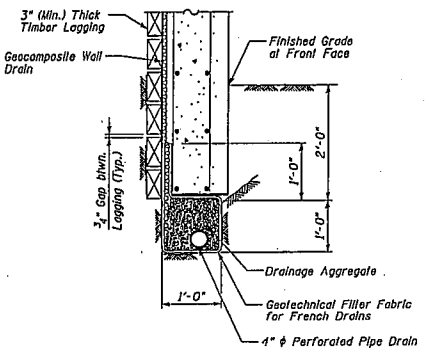
CONSTRUCTION JOINT DETAILS



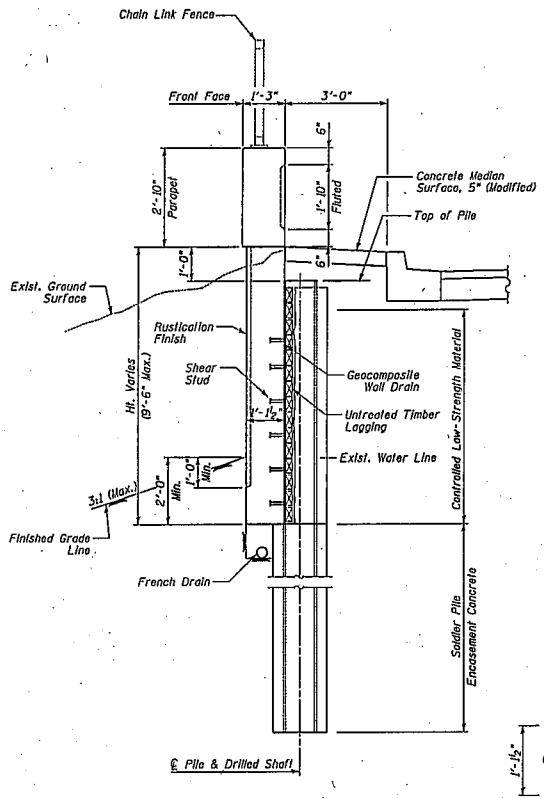
EXPANSION JOINT DETAILS



DETAIL 1

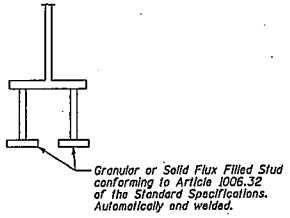


PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

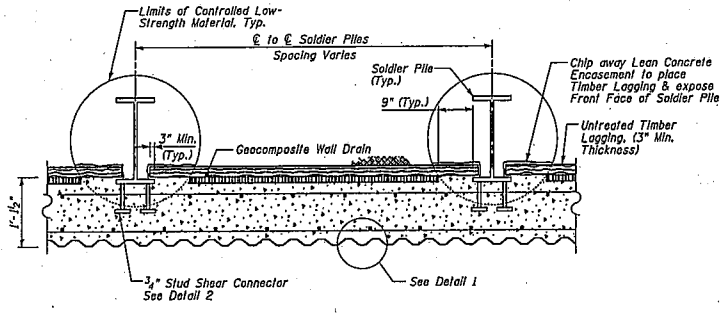


TYP. SECTION THRU PROPOSED WALL

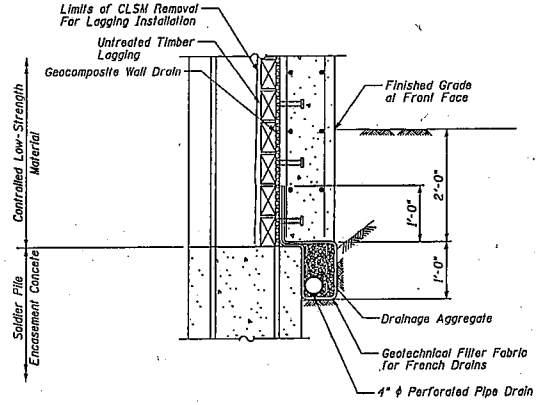
See Sheet 3 for Modifications to this Section



DETAIL 2



SECTION THRU SOLDIER PILE WALL



PIPE UNDERDRAIN DETAIL AT SOLDIER PILES

SHEET 4 OF 4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)
COOK COUNTY
STA. 4529+75.90 TO STA. 4537+30.74
RETAINING WALL N-47N-R
WALL DETAILS
S.N. 016-W977

SCALE: NTS — DRAWN BY: MTR
DATE: APRIL 3, 2006 — CHECKED BY: BLU

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