F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
59	*	WILL	608	347
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (26, 26HB-1 & 114) R-2
CONTRACT NO. 60363

FOR INFORMATION ONLY

BENCHMARK:

TBM#1 Top of a large nail set in the east face of power pole on west side of West Frontage Rd. near ℄ Interstate 55 Sta. 116+00. El. 595.91.

EXISTING STRUCTURE:

S.N. 099-0030 Four span, 269'-8" back to back of abutments, continuous steel multi-beam bridge on multi-column concrete piers and open abutments. 26' between barriers. Existing structure is approximately 2500' north of proposed structure.

SALVAGE:

None.

STAGING:

Traffic will be maintained on existing NB IL 59 Exit Ramp until proposed structure is constructed. Frontage roads will be relocated prior to construction of proposed structure.

DESIGN SPECIFICATIONS:

2002 AASHTO Standard Specifications for Highway Bridges

DESIGN LOADING:

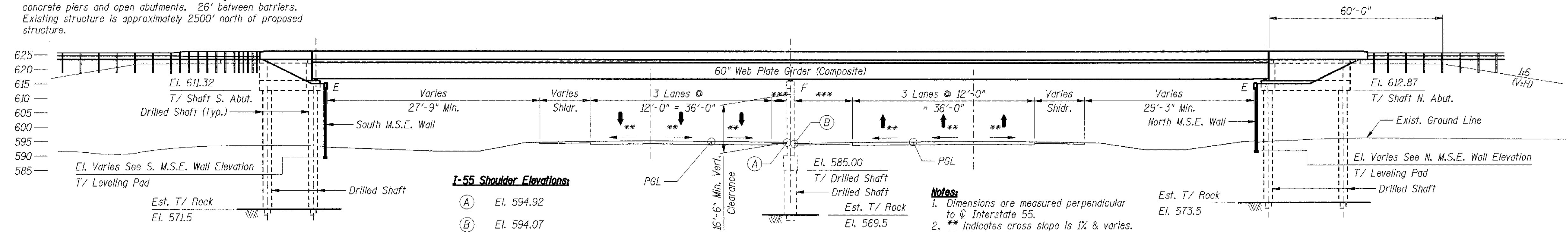
Roadway Live Load: HS 20-44
Future Wearing Surface = 50 psf

DESIGN STRESSES:

Concrete, f'c = 3,500 psi
Reinforcement, fy = 60,000 psi
Structural Steel, fy = 50,000 psi (M 270 Grade 50)

SEISMIC DATA:

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



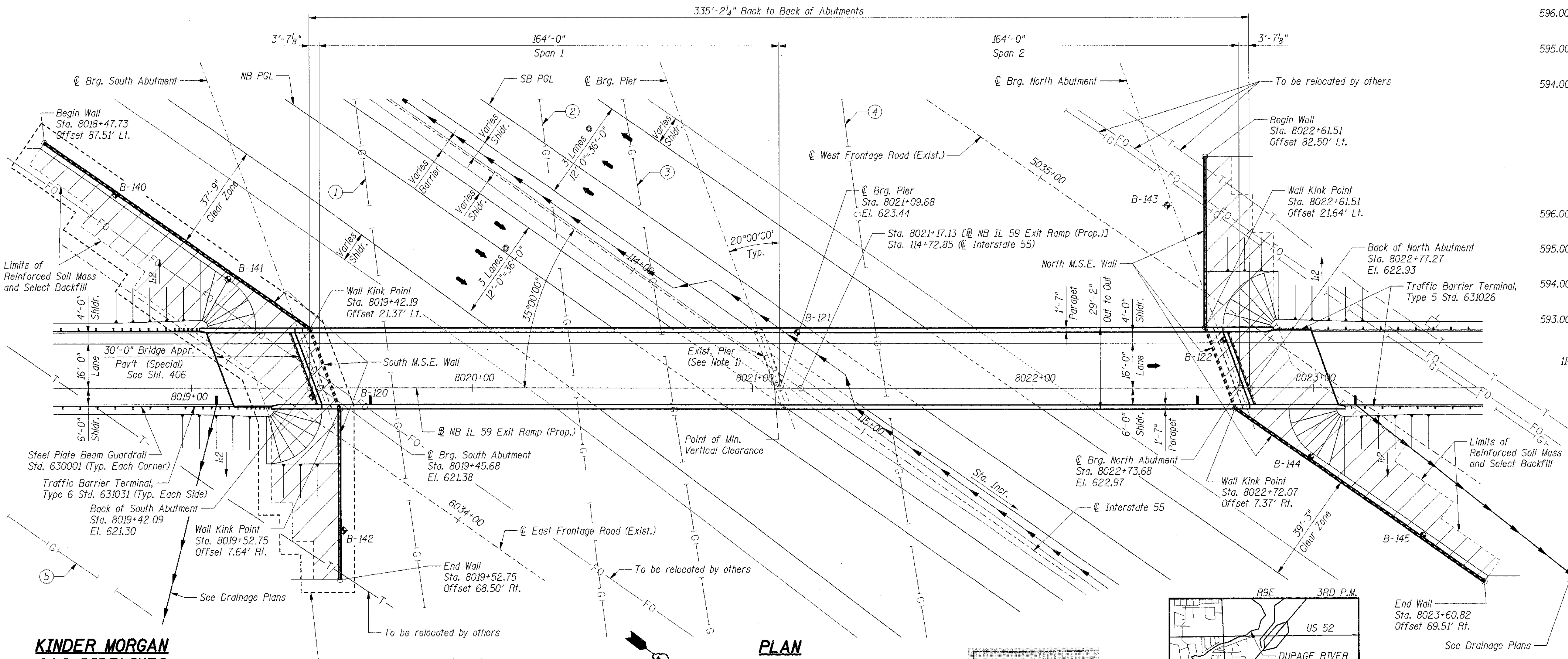
I-55 Shoulder Elevations:

Ⓐ El. 594.92
Ⓑ El. 594.07

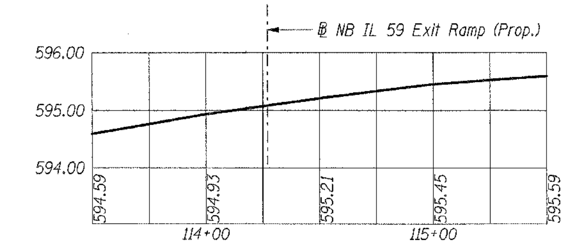
Notes:

1. Dimensions are measured perpendicular to ℄ Interstate 55.
2. ** indicates cross slope is 1% & varies.
3. *** indicates shoulder varies. 6'-6" max. 3'-3" min.

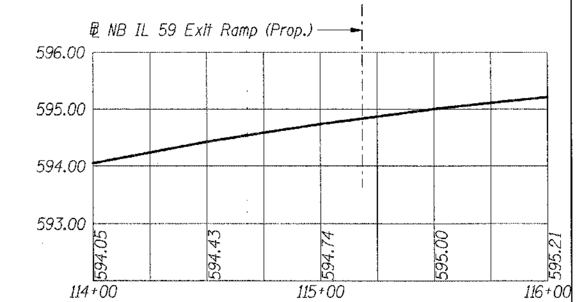
ELEVATION



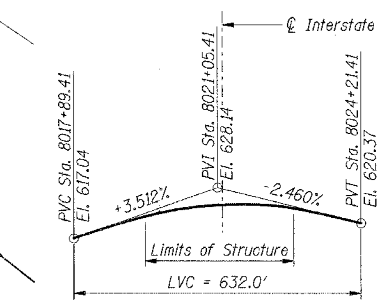
PLAN



PROFILE GRADE NB INTERSTATE 55



PROFILE GRADE SB INTERSTATE 55



PROFILE GRADE NB IL 59 EXIT RAMP (PROP.)

KINDER MORGAN GAS PIPELINES

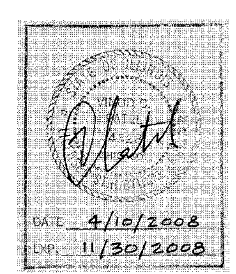
ID	DESIGNATION	DIAMETER
①	GC #1	30"
②	AM #4	36"
③	AM #2	24"
④	GC #3	36"
⑤	GC #2	36"

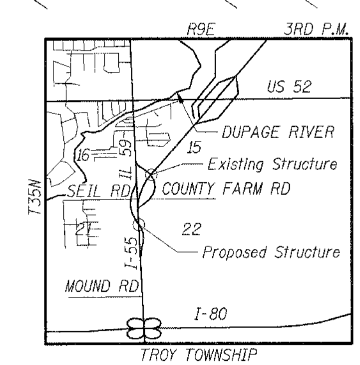
LEGEND

Symbol	Description
B-0	Soil Boring Location
—T—	Exist. Telephone Line
—G—	Exist. Gas Line
—FO—	Exist. Fiber Optic Line
-□-	Exist. Electrical Pole
→	Prop. Storm Sewer
▮	Drainage Scupper or Inlet

Notes:

1. Center pier constructed under a separate previous contract (Contract 62895).





LOCATION MAP

SHT. S-1 OF S-24

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 338 (ILLINOIS ROUTE 59)
IL ROUTE 59 OVER F.A.I. 55 (I-55)
SECTION (26, 26HB-1 & 114) R-2
STRUCTURE NUMBER 099-4642
STATION 8021+17.13, WILL COUNTY

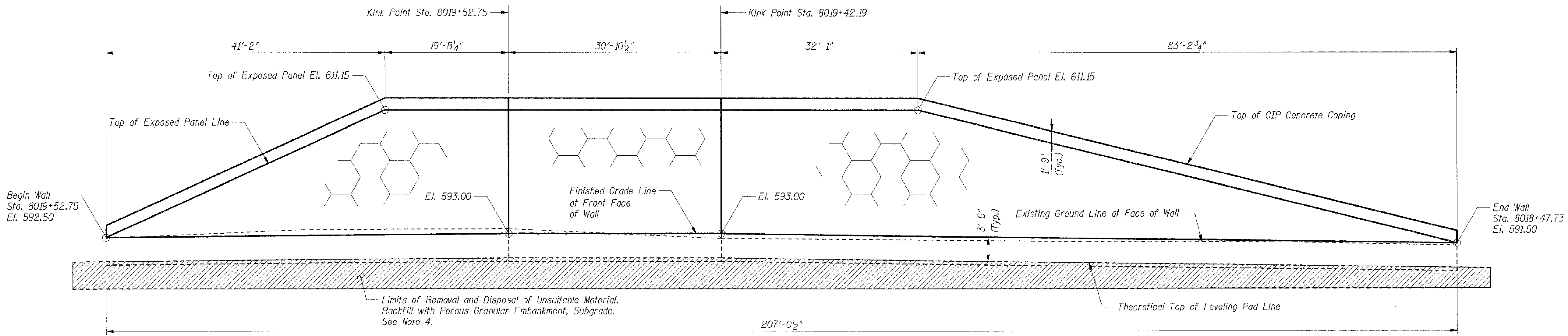
GENERAL PLAN AND ELEVATION

DATE: 03/14/08
DRAWN BY: TMH
CHECKED BY: MDB

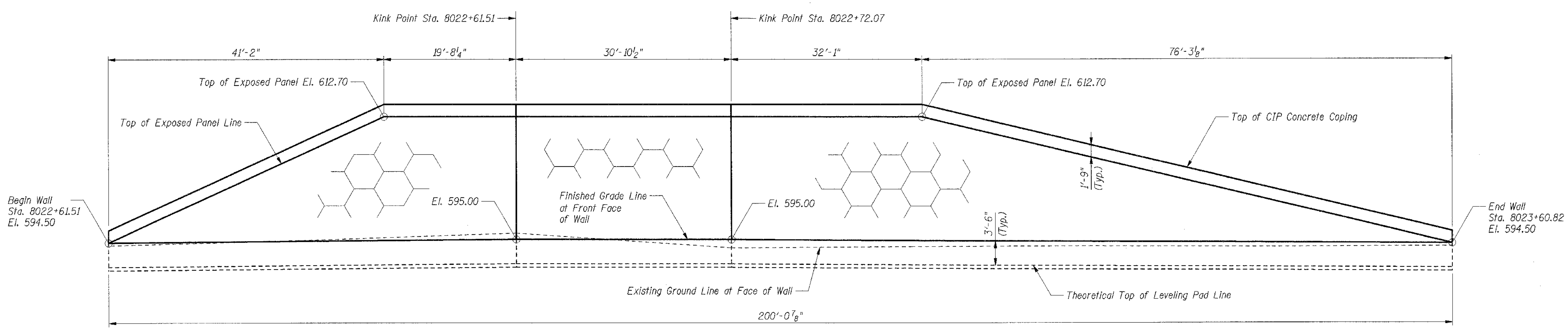
TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312616-0000

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
59	*	WILL	608	367
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (26, 26HB-1 & 114) R-2
CONTRACT NO. 60363



SOUTH M.S.E. WALL
(Developed Elevation)



NORTH M.S.E. WALL
(Developed Elevation)

Notes:
1. Work this sheet with Sht. S-22.
2. For plans of walls, see Sht. S-1.
3. Wall alignment offsets and stations are referenced to Front Face of wall. See Typical MSE wall Sections, Sht. S-22.
4. Unsuitable material shall be removed from within the limits shown at a minimum and as directed by the Engineer; and backfilled with Porous Granular Embankment, Subgrade. Removal and Disposal of Unsuitable Material will be measured in its original position by taking cross-sections after removal has been completed and then computing volume in cubic yards by average end area method. Porous Granular Embankment, Subgrade will be paid for at the same volume as Removal and Disposal of Unsuitable Material. Removal and backfill beyond 1V:2H exacavation slope will not be measured for payment. Pavement removal will be measured and paid for separately, and shall not be included for payment with Removal and Disposal of Unsuitable Material.

FOR INFORMATION ONLY

SHT. S-21 OF S-24

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 338 (ILLINOIS ROUTE 59)
IL ROUTE 59 OVER F.A.I. 55 (I-55)
SECTION (26, 26HB-1 & 114) R-2
STRUCTURE NUMBER 099-4642
STATION 8021+17.13, WILL COUNTY

MSE WALL ELEVATIONS

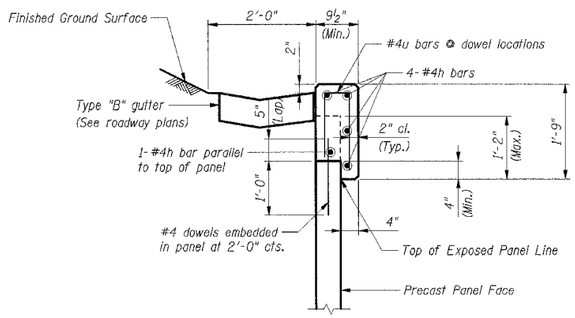
DRAWN BY: CCE
DATE: 03/14/08
CHECKED BY: TMH

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE 312/616-0000

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
59	*	WILL	608	368
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (26, 26HB-1 & 114) R-2
CONTRACT NO. 60363

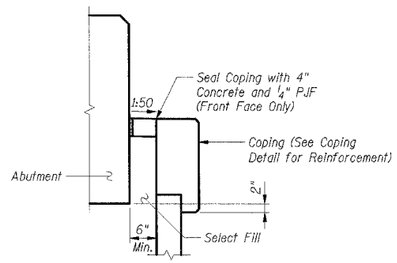
FOR INFORMATION ONLY



COPING DETAIL

The cost of concrete and reinforcement for coping shall be included with Mechanically Stabilized Earth Retaining Wall.

The cost of 4" concrete seal and ¼" PJF shall be included with Mechanically Stabilized Earth Retaining Wall.



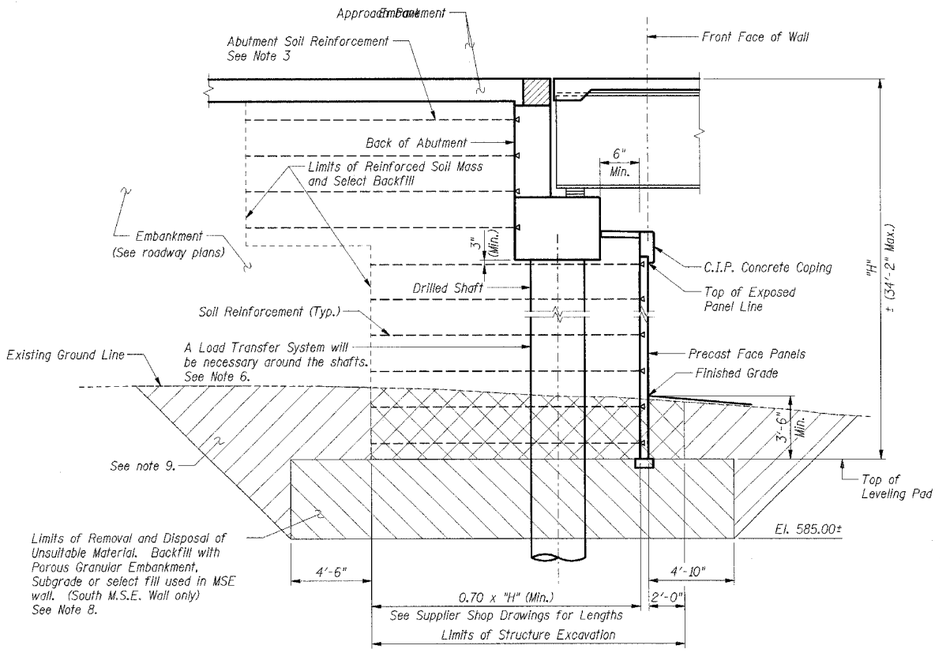
ABUTMENT DETAIL

LEGEND

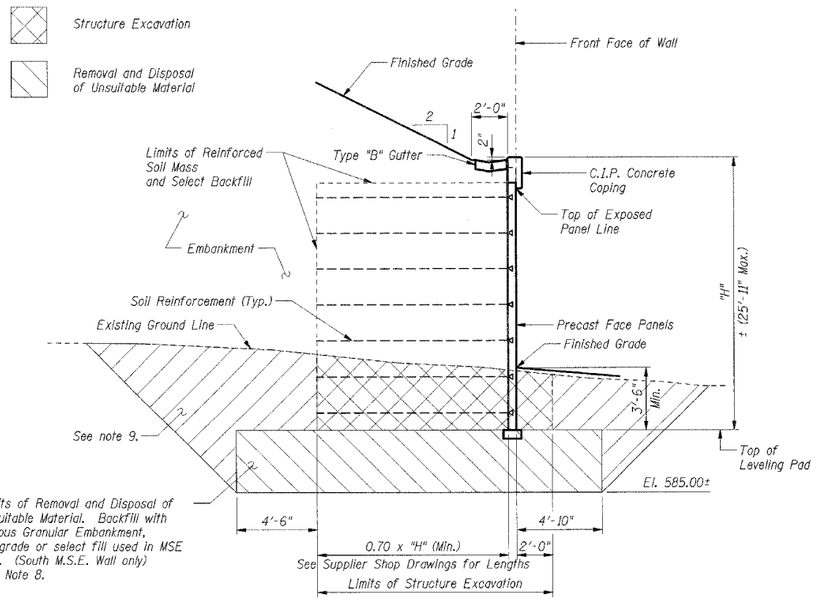
Overexcavation

Structure Excavation

Removal and Disposal of Unsuitable Material



SECTION THRU ABUTMENT



SECTION THRU M.S.E. WALL

Notes:

1. Work this sheet with Sht. S-21.
2. For plans of walls, see Sht. S-1.
3. MSE Wall supplier shall design and supply system to transfer earth pressure of 40 pcf equivalent fluid weight to the back of abument and backwall, plus a longitudinal force of 15.5 k transmitted by the bearings applied to the bridge seats.
4. Finish grade indicated is finished grade line at front face of the wall.
5. Drilled Shafts shall be constructed prior to placement of reinforced select backfill.
6. MSE Wall supplier to design load transfer system to accommodate drilled shafts.
7. Wall alignment stations and offsets are referenced to front face of wall. See typical section this sheet.
8. Unsuitable material shall be removed from within the limits shown at a minimum and as directed by the Engineer; and backfilled with Porous Granular Embankment, Subgrade. Removal and Disposal of Unsuitable Material will be measured in its original position by taking cross-sections after removal has been completed and then computing volume in cubic yards by average end area method. Porous Granular Embankment, Subgrade will be paid for at the same volume as Removal and Disposal of Unsuitable Material. Pavement removal will be measured and paid for separately, and shall not be included for payment with Removal and Disposal of Unsuitable Material.
9. Overexcavation beyond structure excavation and removal of unsuitable material. This area not measured for payment. Backfill overexcavation with same material used for Porous Granular Embankment, Subgrade or select fill used in MSE wall.

BILL OF MATERIAL

Item	Unit	Total
Removal and Disposal of Unsuitable Material	Cu Yd	898
Porous Granular Embankment, Subgrade	Cu Yd	898
Structure Excavation	Cu Yd	1,104
Mechanically Stabilized Earth Retaining Wall	Sq Ft	6,676

SHT. S-22 OF S-24

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 338 (ILLINOIS ROUTE 59)
IL ROUTE 59 OVER F.A.I. 55 (I-55)
SECTION (26, 26HB-1 & 114) R-2
STRUCTURE NUMBER 099-4642
STATION 8021+17.13, WILL COUNTY

MSE WALL DETAILS
AND BILL OF MATERIAL

DRAWN BY: CCE
DATE: 03/14/08 CHECKED BY: TMH

TENG
TENG & ASSOCIATES, INC.
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301 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312/819-0300