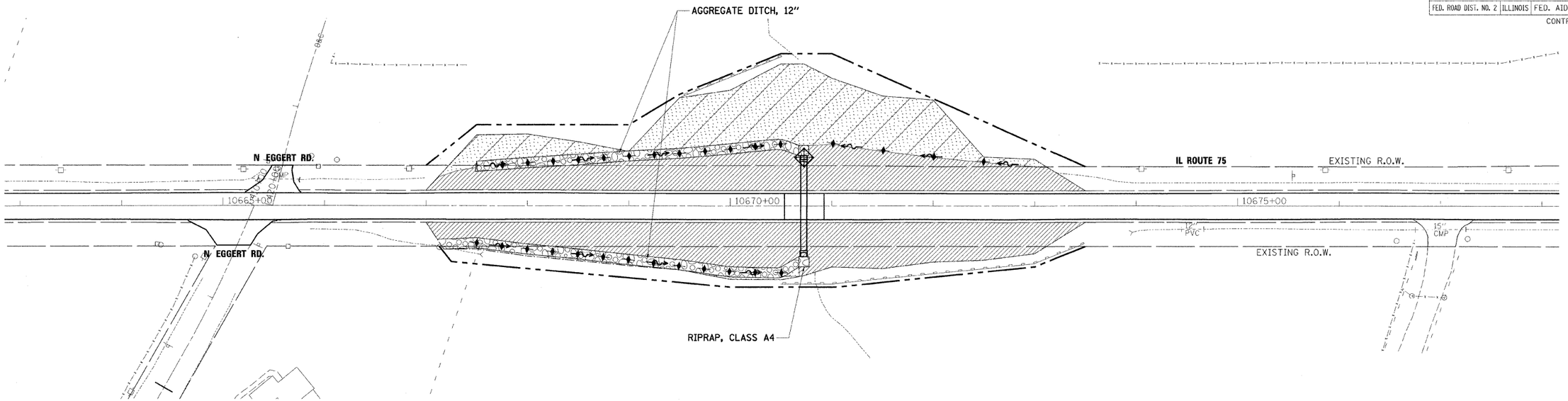
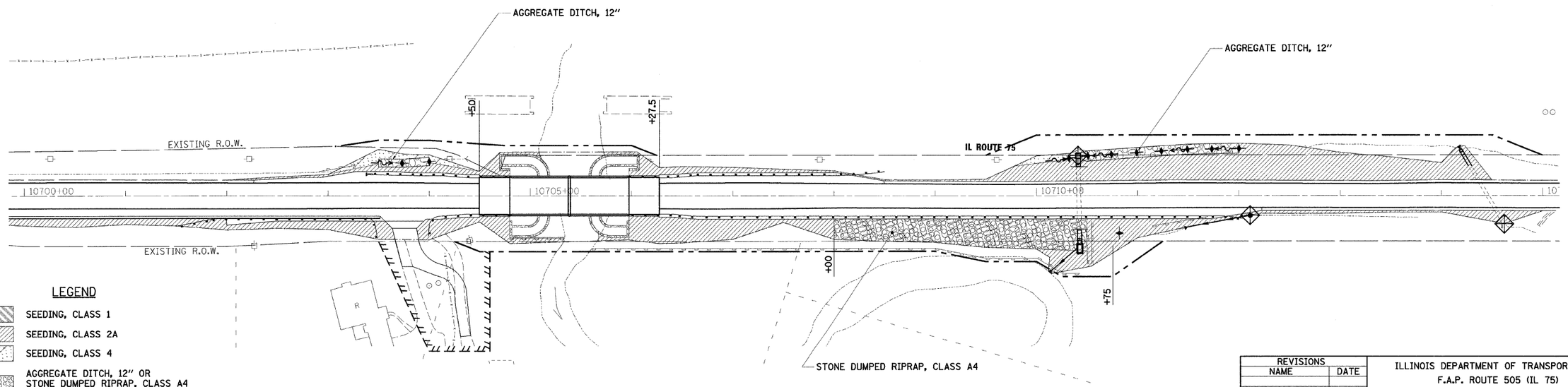
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	101
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER

NOTE:
SEE BRIDGE PLANS FOR
STONE DUMPED RIPRAP, CLASS A4
AROUND BRIDGE OVER
ROCK RUN CREEK

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

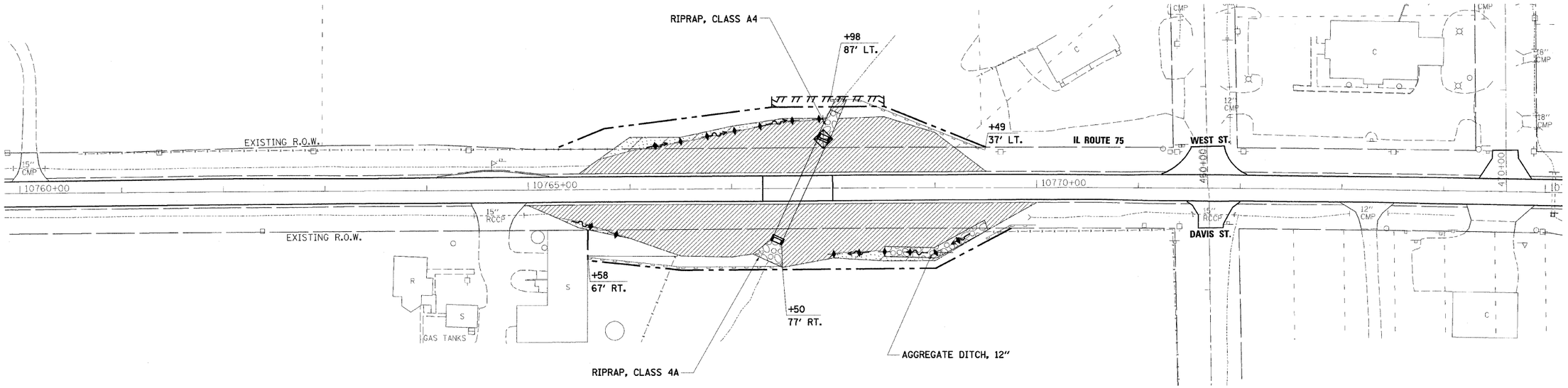
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

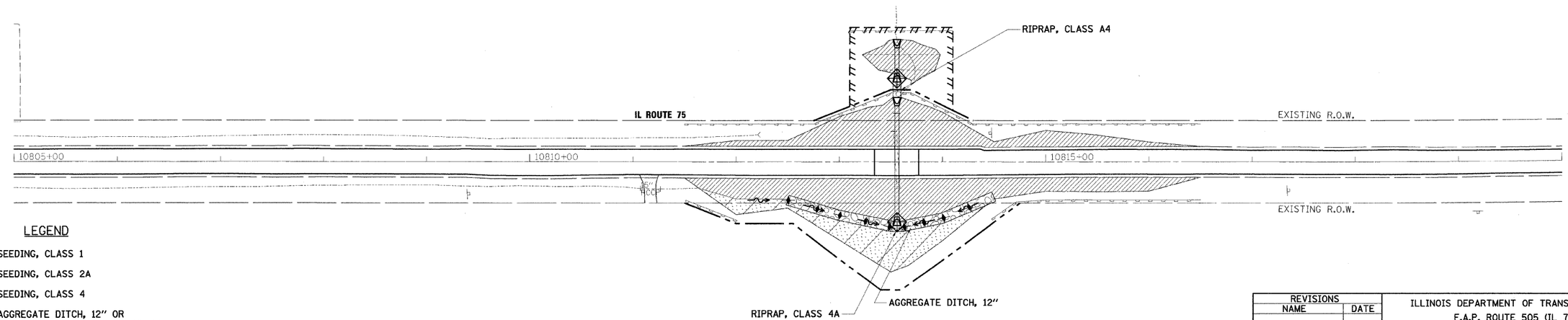
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = h:\111495800\il 75.3p eastsoedb\design\195801_Erosion_02.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	102
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

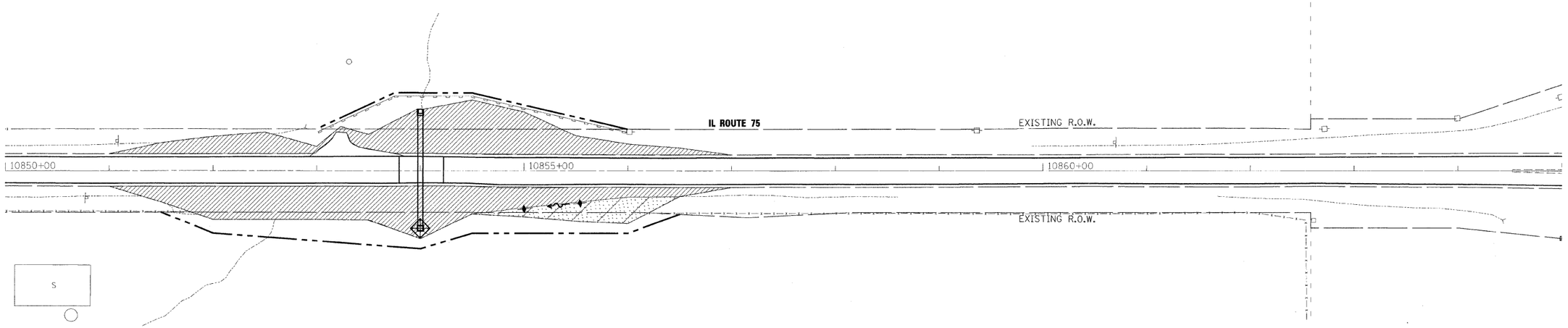
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

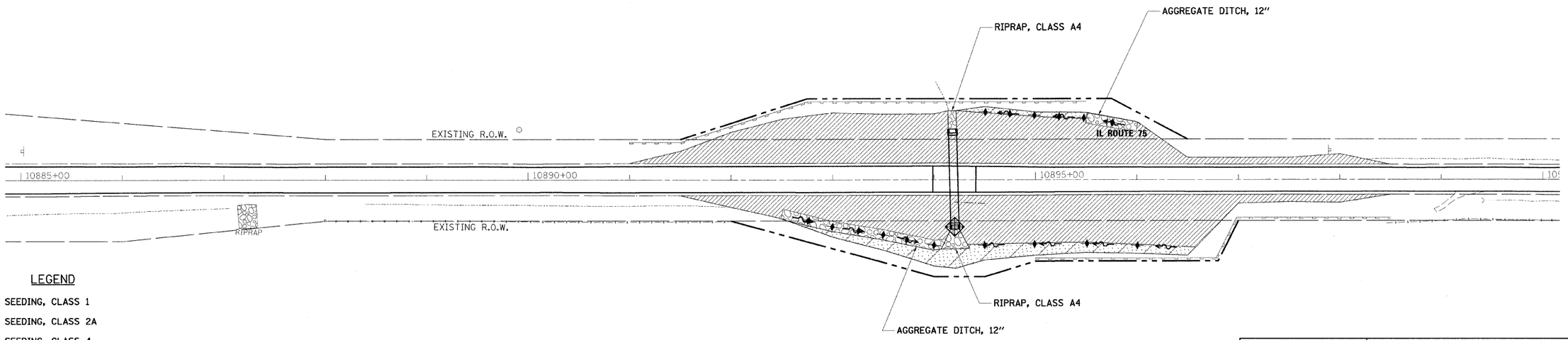
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\11195800\il 75.3p east\cadd\design\195801_Erosion_03.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	103
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

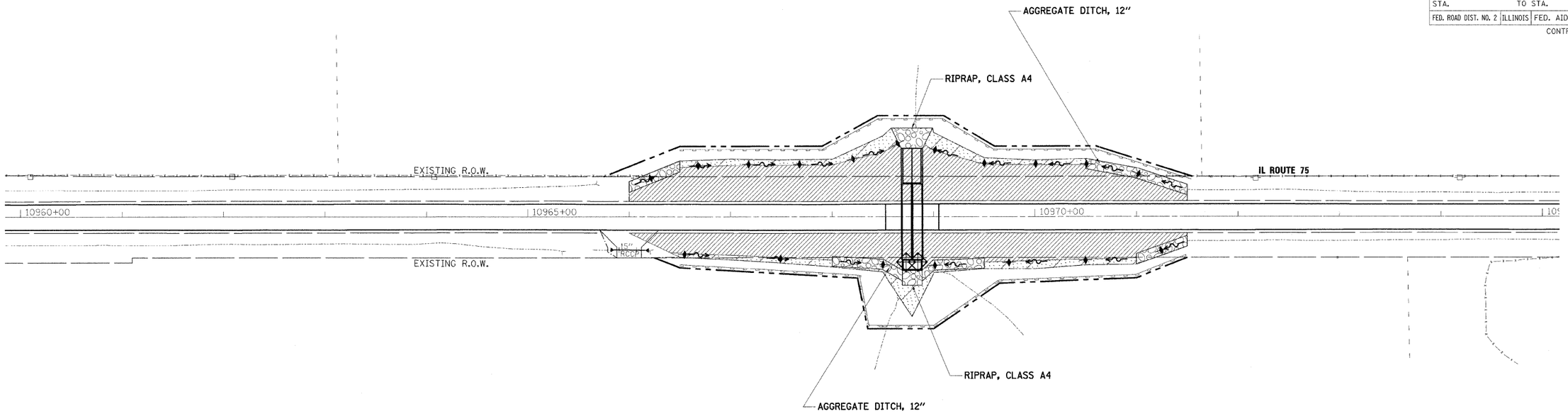
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

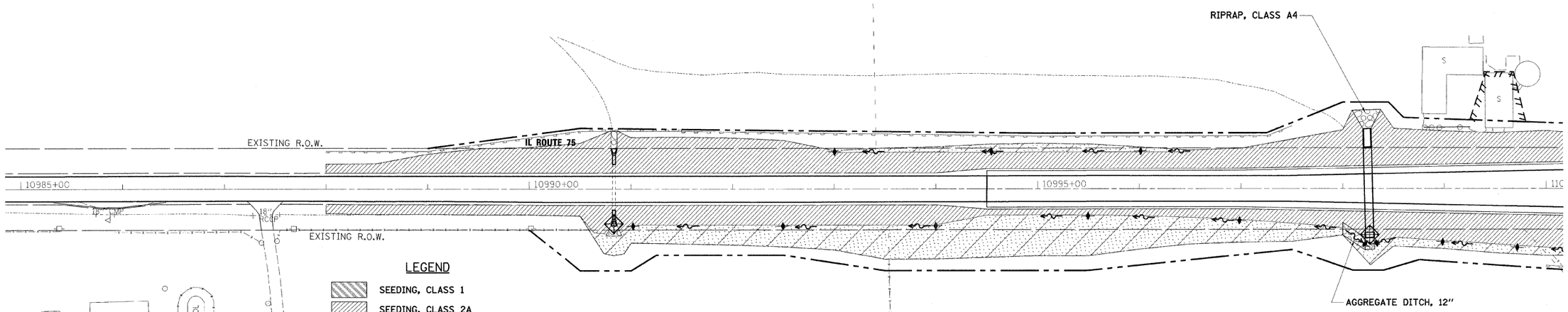
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\11195820\x1 75_3p east\cadd\design\195801_Erosion_04.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Yg-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	104
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

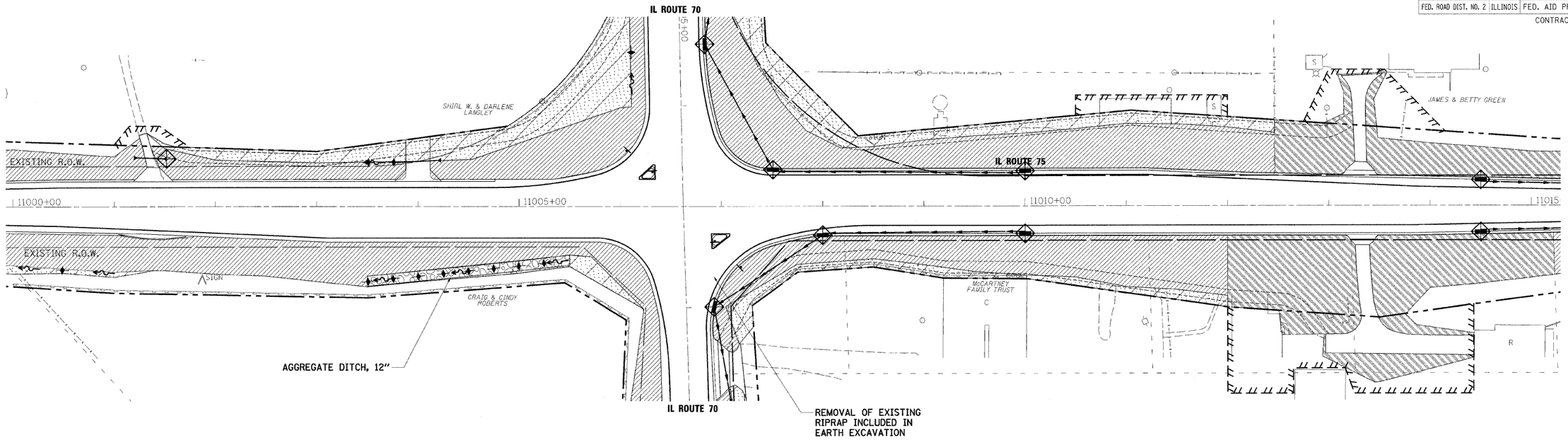
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

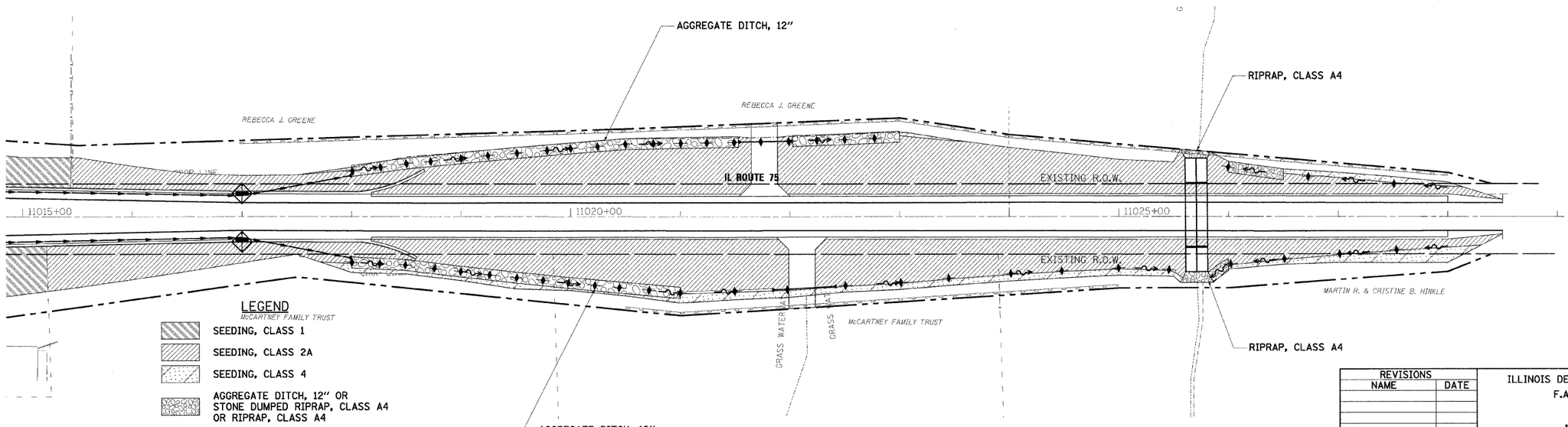
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\111RS0800\11 75_3p east\sodd\design\195880_Erosion_05.dgn
PLOT SCALE = 1.000
USER NAME = JTreacy
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	105
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

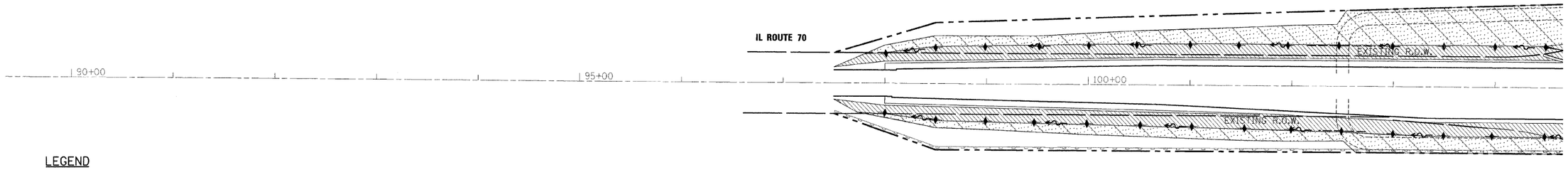
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

3/3/2009 9:37:03 AM K:\IL95800\IL75_3p east\cadd\design\95801_Erosion_06.dgn
PLOT DATE = 3/3/2009
FILE NAME = K:\IL95800\IL75_3p east\cadd\design\95801_Erosion_06.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

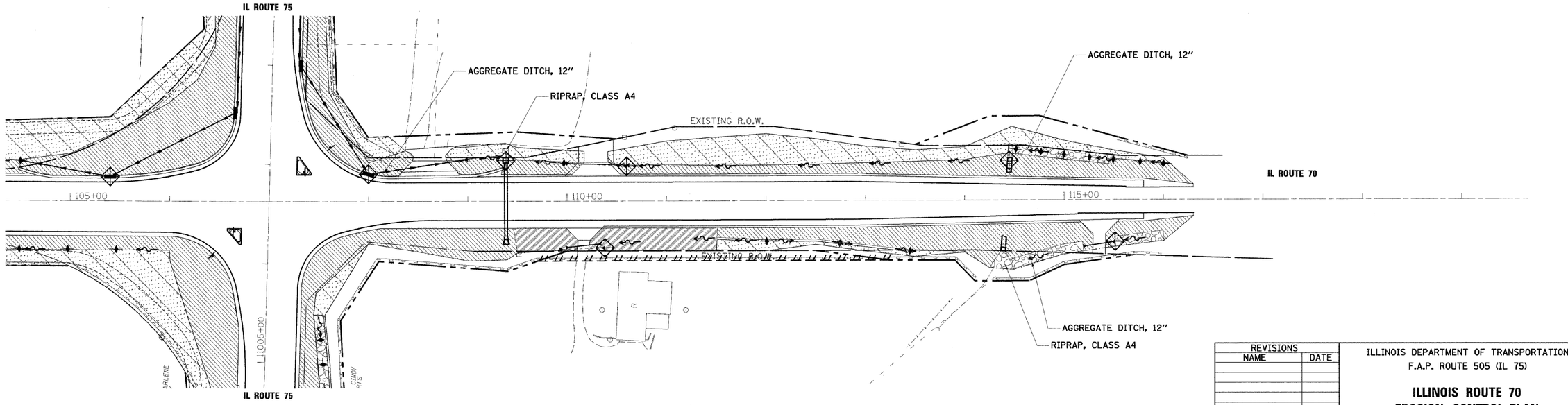
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	106
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970



LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 70
EROSION CONTROL PLAN

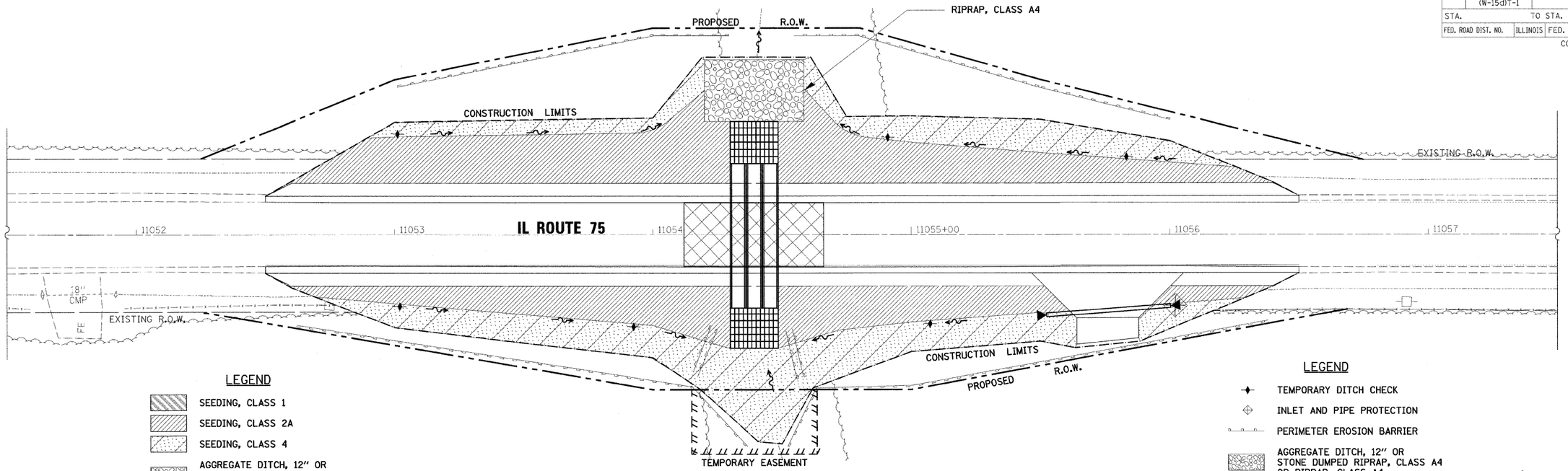
SCALE: VERT.
HORIZ. 1"=50'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = h:\11195800\ildesign\195801_Erosion_07.dgn
PLOT SCALE = 1.000
USER NAME = JTraceu
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-1, 111BR-1 Yg-15d-RS-1 & (W-15d)T-1	STEPHENSON & WINNEBAGO	335	107
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

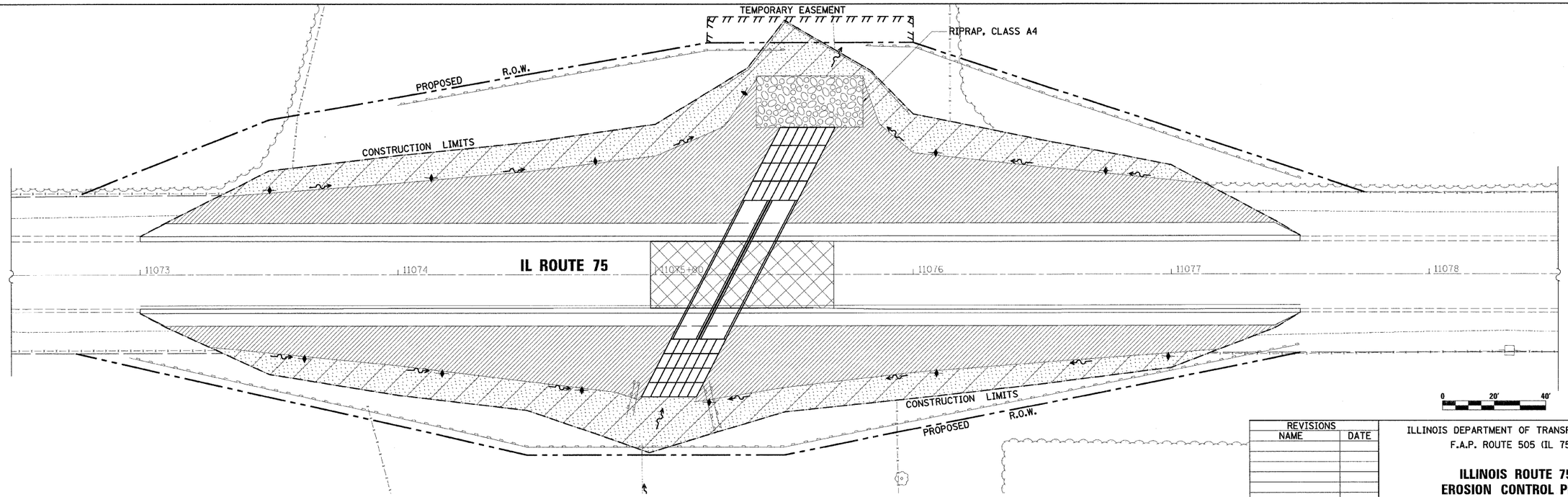


LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4

LEGEND

- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
EROSION CONTROL PLAN

SCALE: VERT.
HORIZ. 1"=50'
DATE: 12/15/06

DRAWN BY JMC
CHECKED BY DWB

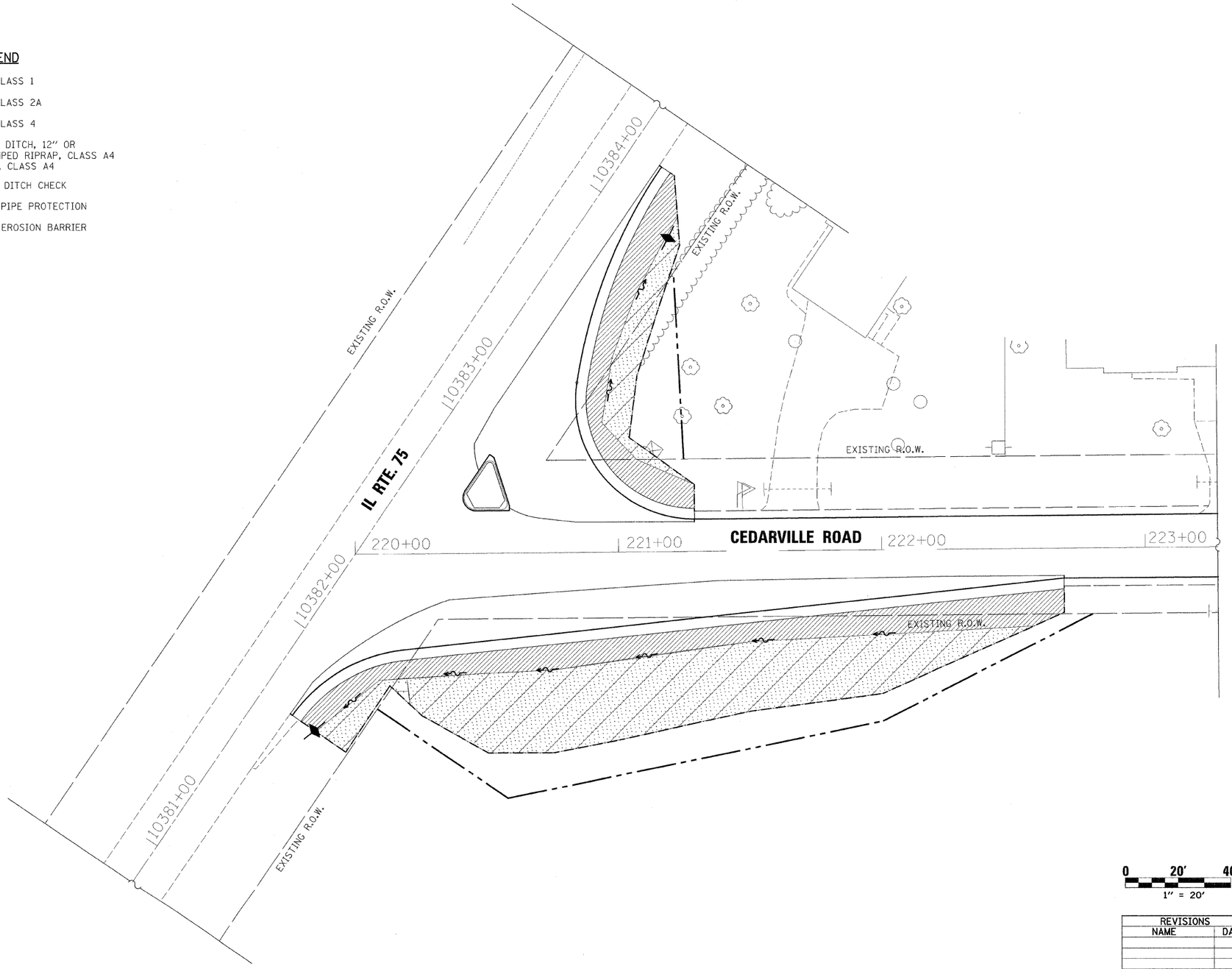
3/3/2009 9:37:08 AM K:\ill75214\Cadd\Design\75214 Erosion.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	108
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER



0 20' 40'

1" = 20'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

DETOUR EROSION CONTROL PLAN
CEDARVILLE & IL RTE. 75

SCALE: VERT.
HORIZ. 1" = 20'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

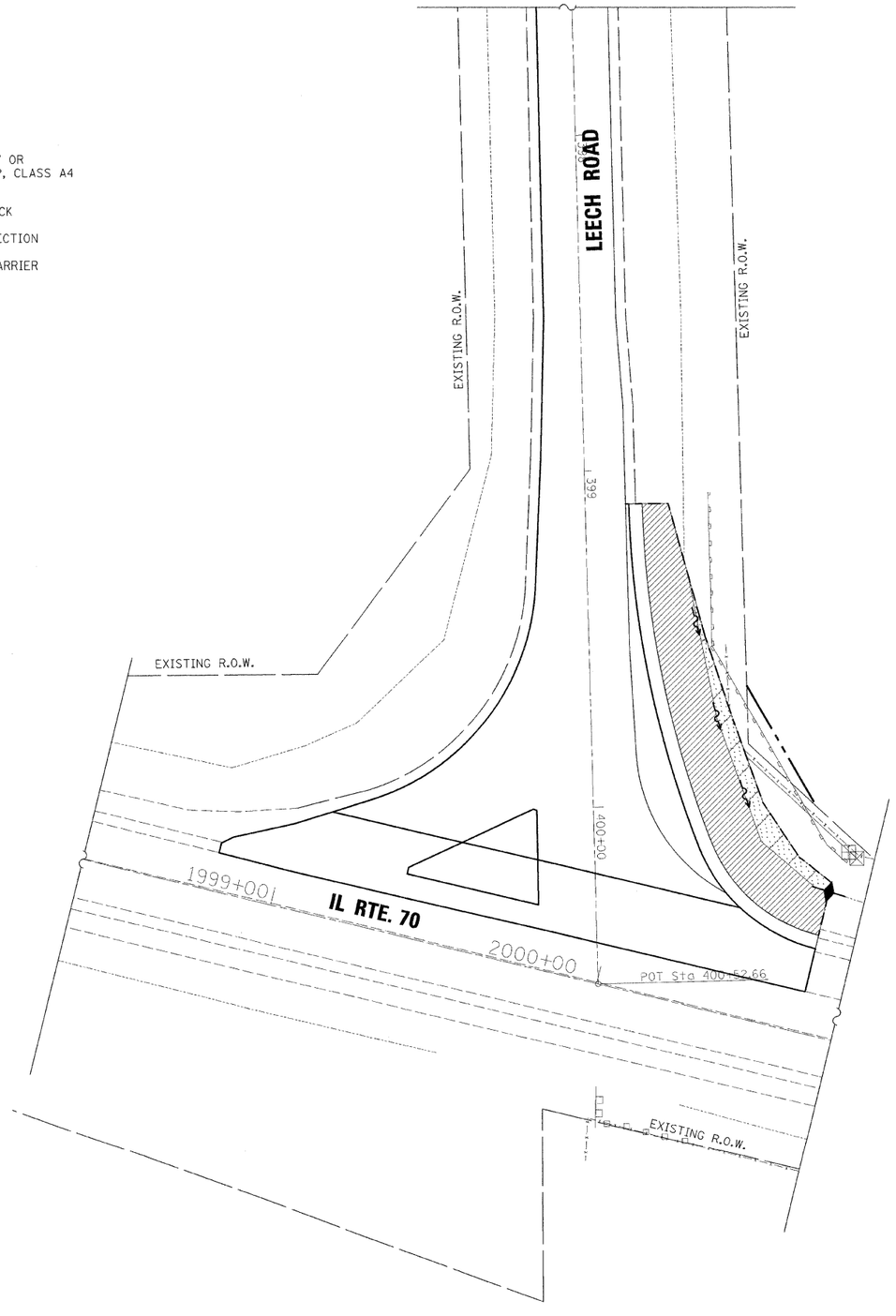
PLOT DATE = 3/3/2009
FILE NAME = k:\11195820\IL 75_3F East\CADD\Design\195820_Det_Erosion_01.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	109
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER



N

0 20' 40'

1" = 20'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

DETOUR EROSION CONTROL PLAN
LEECH ROAD & IL RTE. 70

SCALE: VERT.
HORIZ. 1" = 20'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

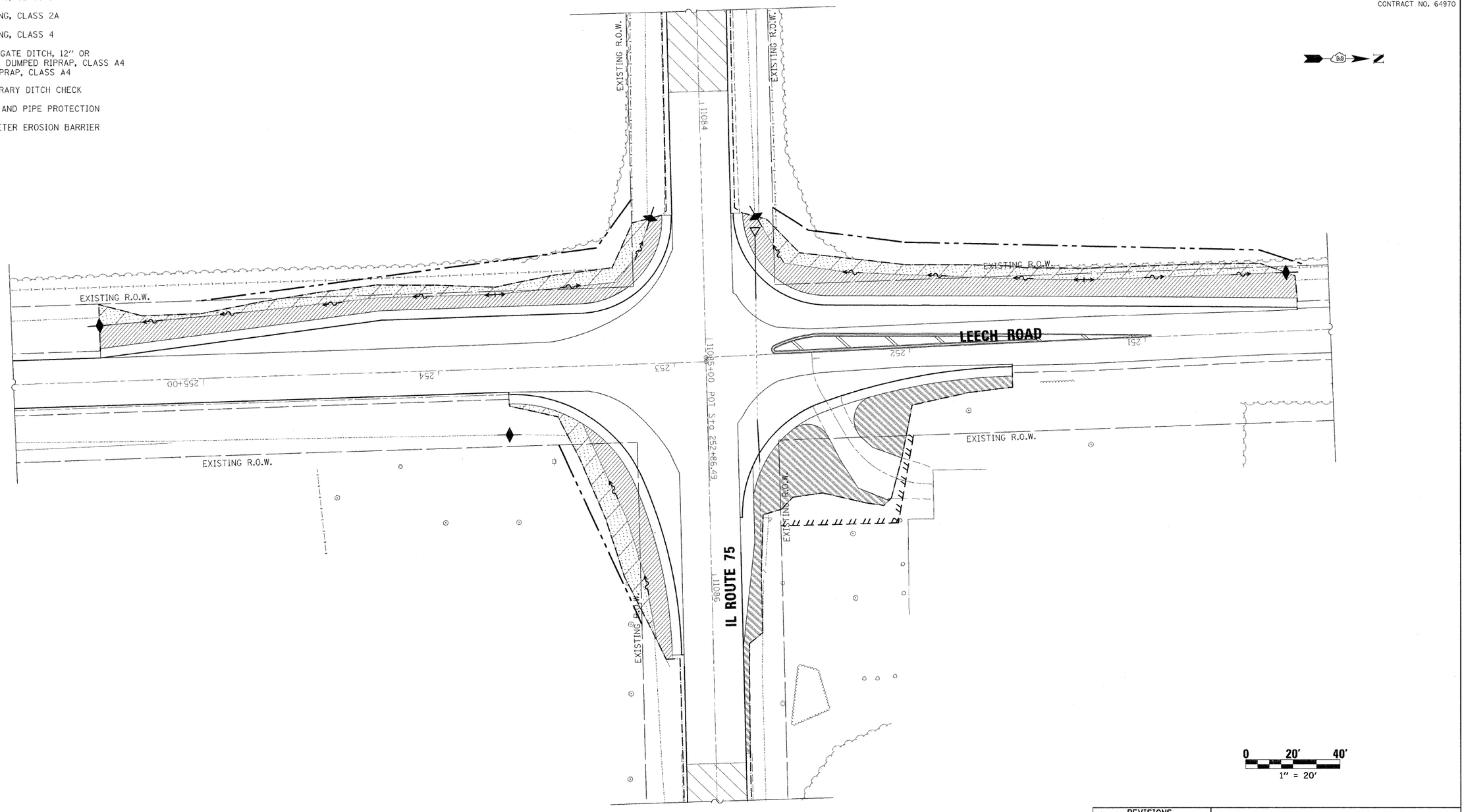
PLOT DATE = 3/3/2009
FILE NAME = k:\11195080\IL 75_3F East\CADD\Design\195080_Det_Erosion_02.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	110
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER



0 20' 40'
1" = 20'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

DETOUR EROSION CONTROL PLAN
LEECH ROAD & IL RTE. 75

SCALE: VERT.
HORIZ. 1" = 20'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

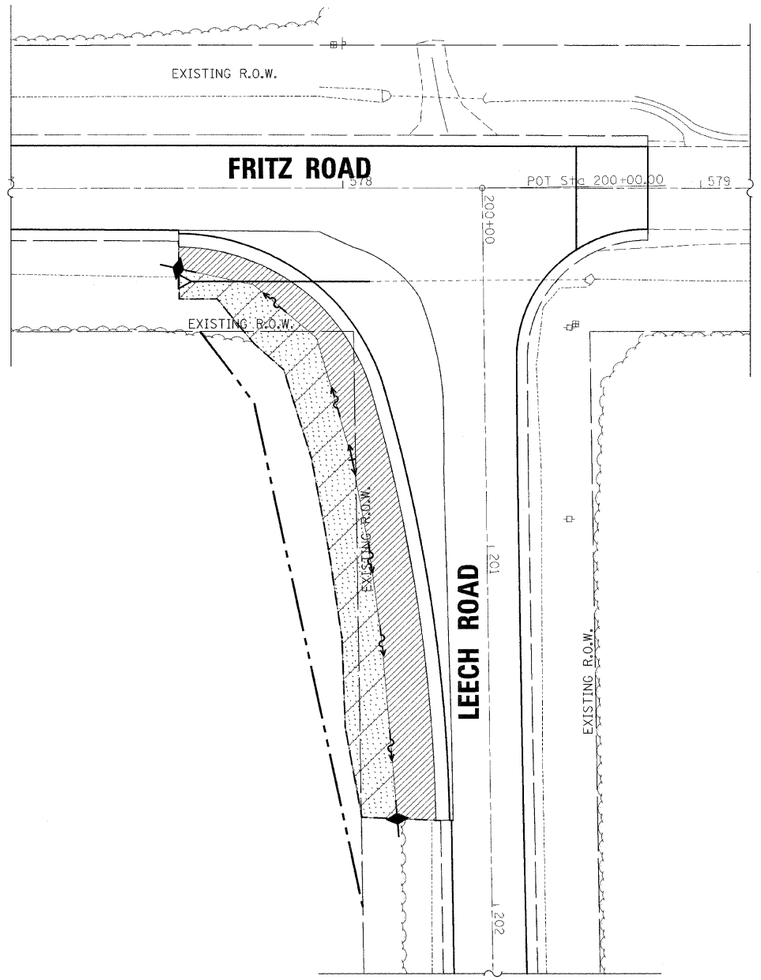
PLOT DATE = 3/3/2009
FILE NAME = k:\11195802\IL 75_3F East\CADD\Design\1195801_Det_Erosion_03.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	111
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

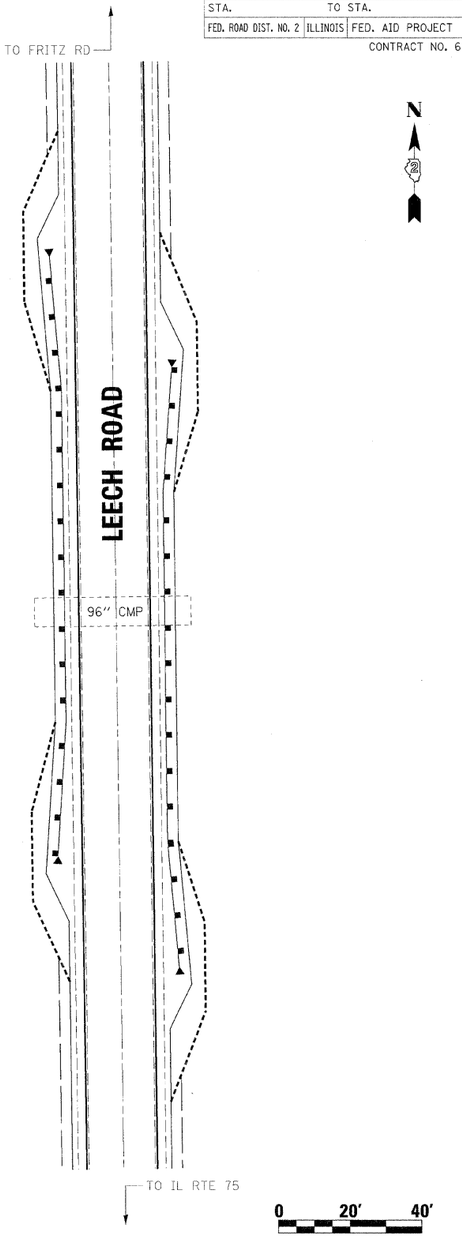
CONTRACT NO. 64970

LEGEND

- SEEDING, CLASS 1
- SEEDING, CLASS 2A
- SEEDING, CLASS 4
- AGGREGATE DITCH, 12" OR STONE DUMPED RIPRAP, CLASS A4 OR RIPRAP, CLASS A4
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER



EXIST. CURVE 1280
PI STA. = 578+79.54
Δ = 0° 45' 31" (RT)
D = 0° 07' 01"
R = 49,029.81'
T = 324.54'
L = 649.07'
E = 1.07'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 575+55.00
P.T. STA. = 582+04.07



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

DETOUR EROSION CONTROL PLAN
LEECH ROAD & FRITZ ROAD

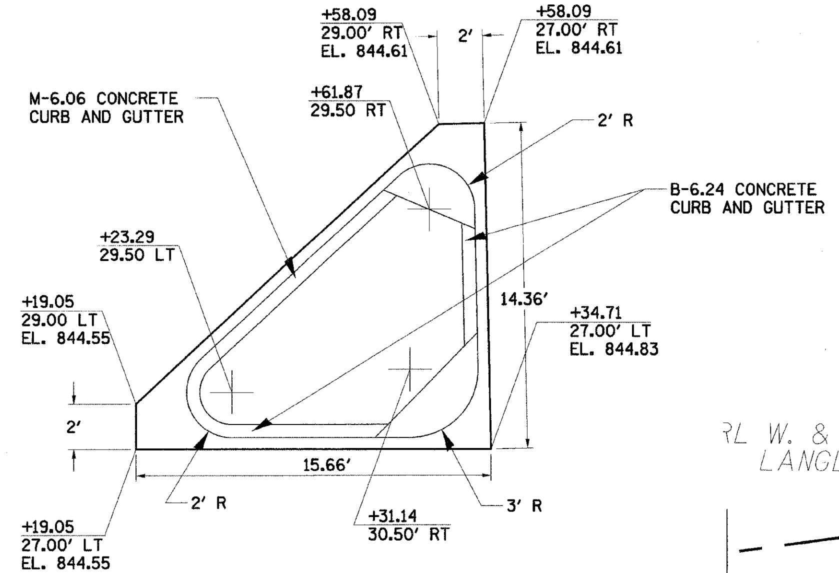
SCALE: VERT.
HORIZ. 1" = 20'
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

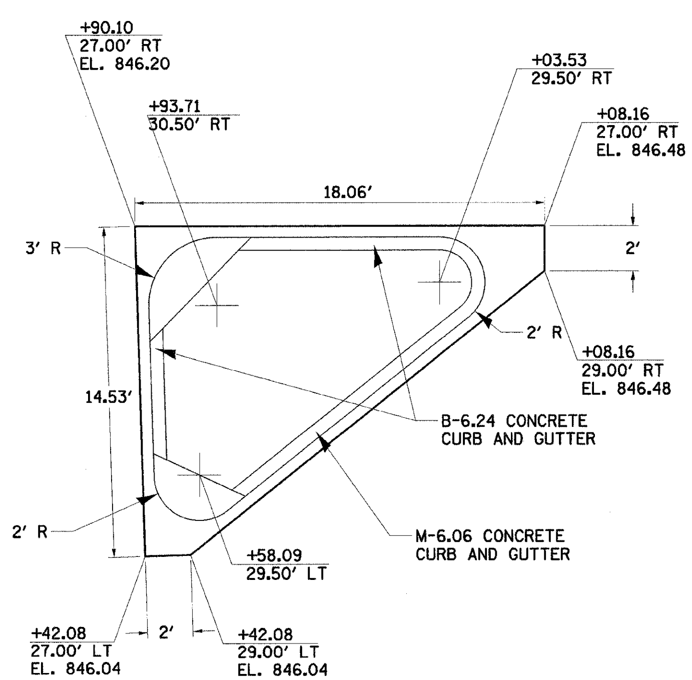
PLOT DATE = 3/3/2009
FILE NAME = k:\11r5808\IL 75_3P East\CADD\Design\15808_Det_Erosion_04.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	112
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

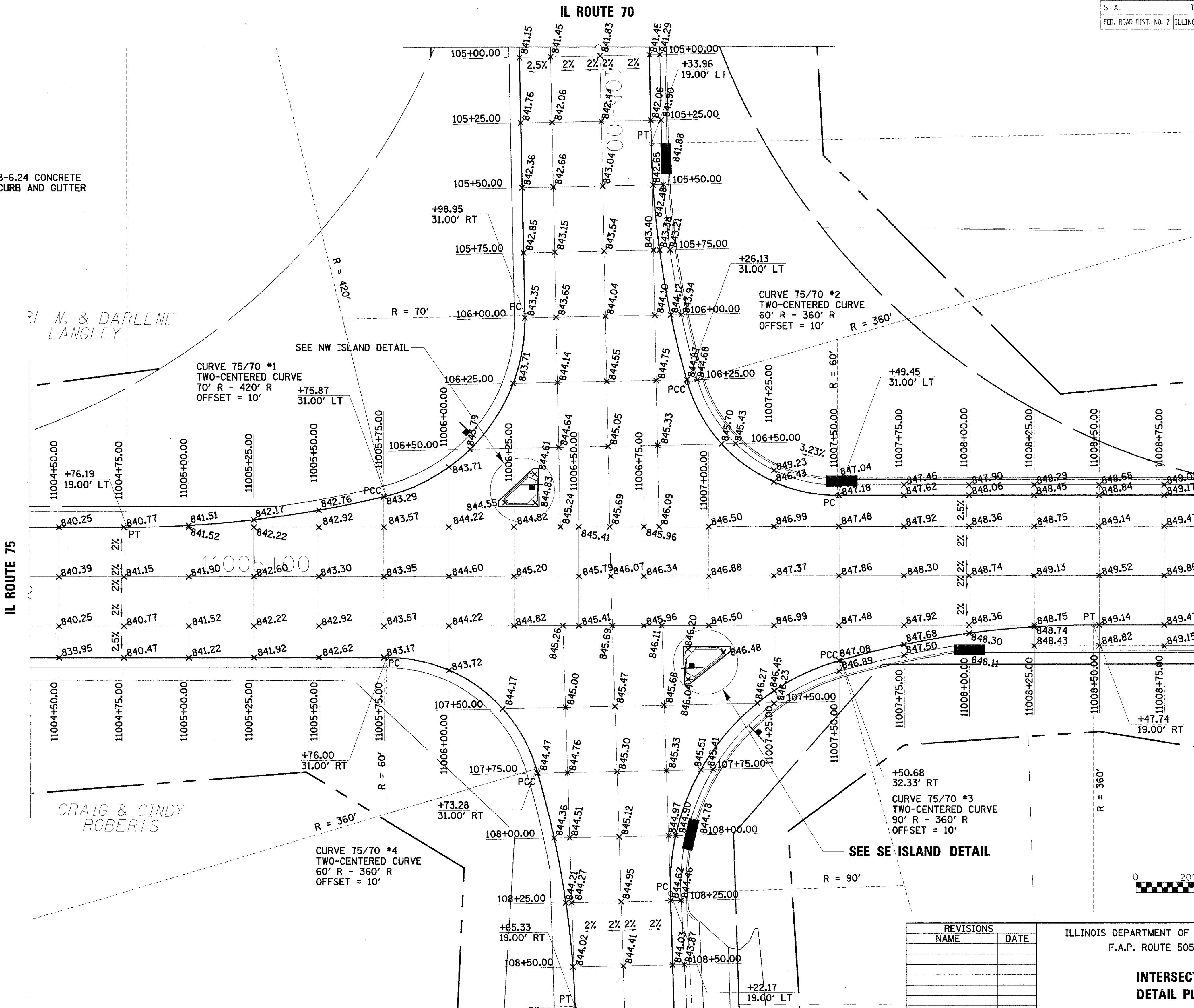
CONTRACT NO. 64970



NW ISLAND DETAIL



SE ISLAND DETAIL



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

INTERSECTION DETAIL PLAN

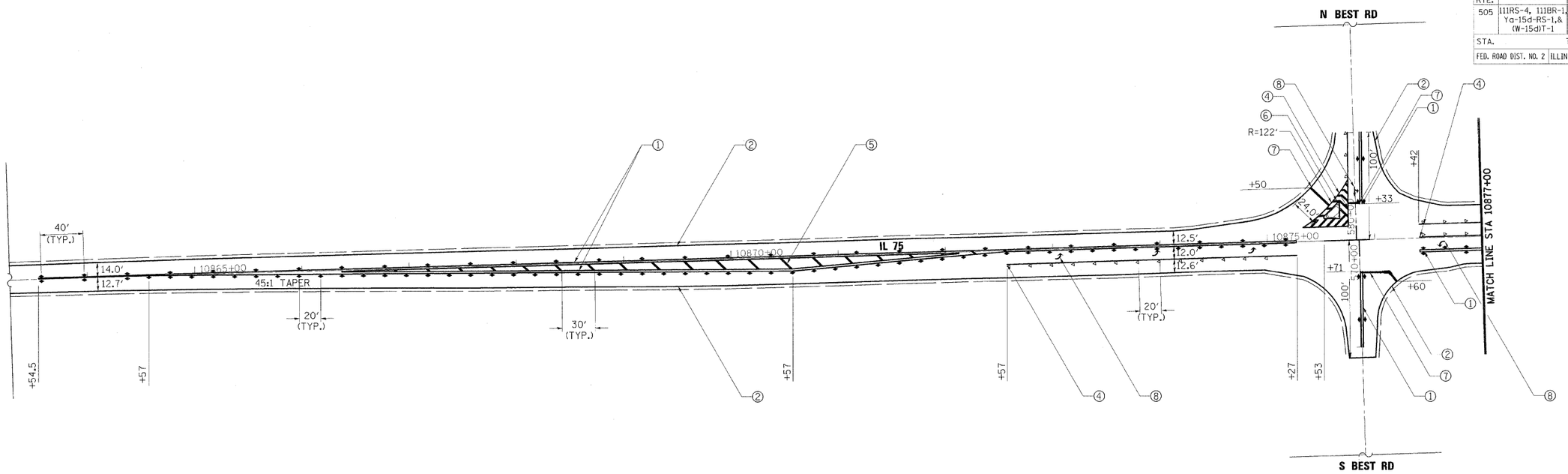
SCALE: VERT.
HORIZ. 1" = 20'
DATE: 3/3/09

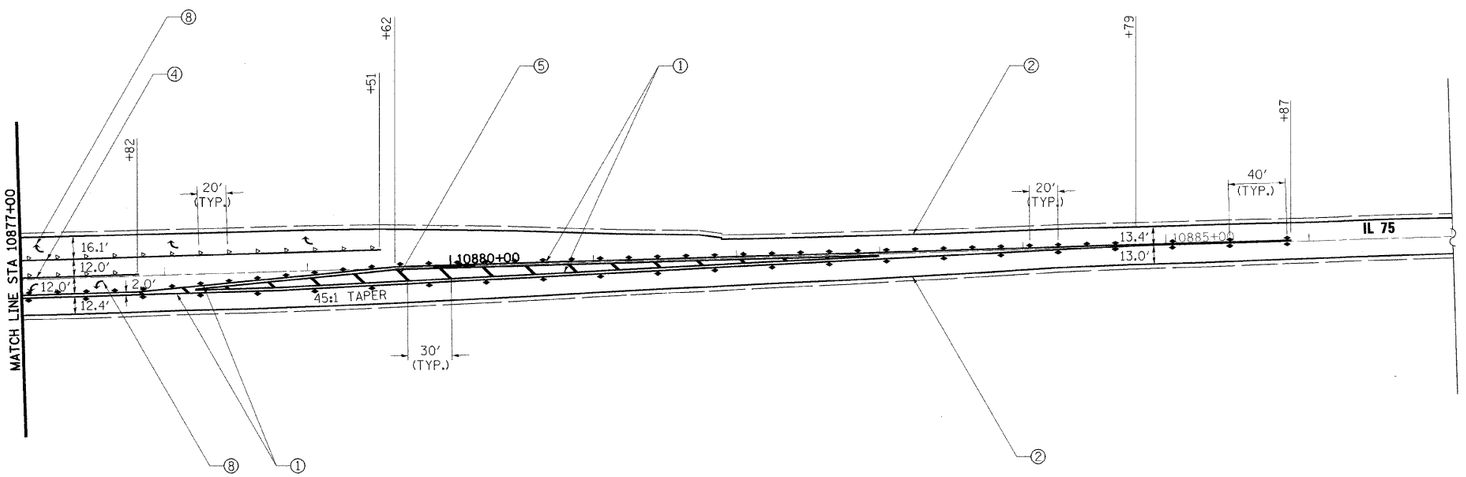
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\1195800\IL 75_3P East\CADD\Design\195801_Paving_IL75_IL70.dgn
PLOT SCALE = 1:20
USER NAME = JTracey
MODEL = Default

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	113
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





NOTE:
ALL PAVEMENT MARKING DETAILED ON THIS SHEET SHALL CONSIST OF THERMOPLASTIC PAVEMENT MARKING

PAVEMENT MARKING LEGEND

① 4" DOUBLE YELLOW SOLID LINE	▶ ONE-WAY AMBER MARKER
② 4" WHITE SOLID LINE	▷ ONE-WAY CRYSTAL MARKER
③ NOT USED	◆ TWO-WAY AMBER MARKER
④ 8" WHITE SOLID LINE	
⑤ 12" YELLOW SOLID LINE	
⑥ 12" WHITE SOLID LINE	
⑦ 24" WHITE SOLID LINE	
⑧ WHITE LETTERS & SYMBOLS	

0 50' 100'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

PAVEMENT MARKING DETAILS BEST RD

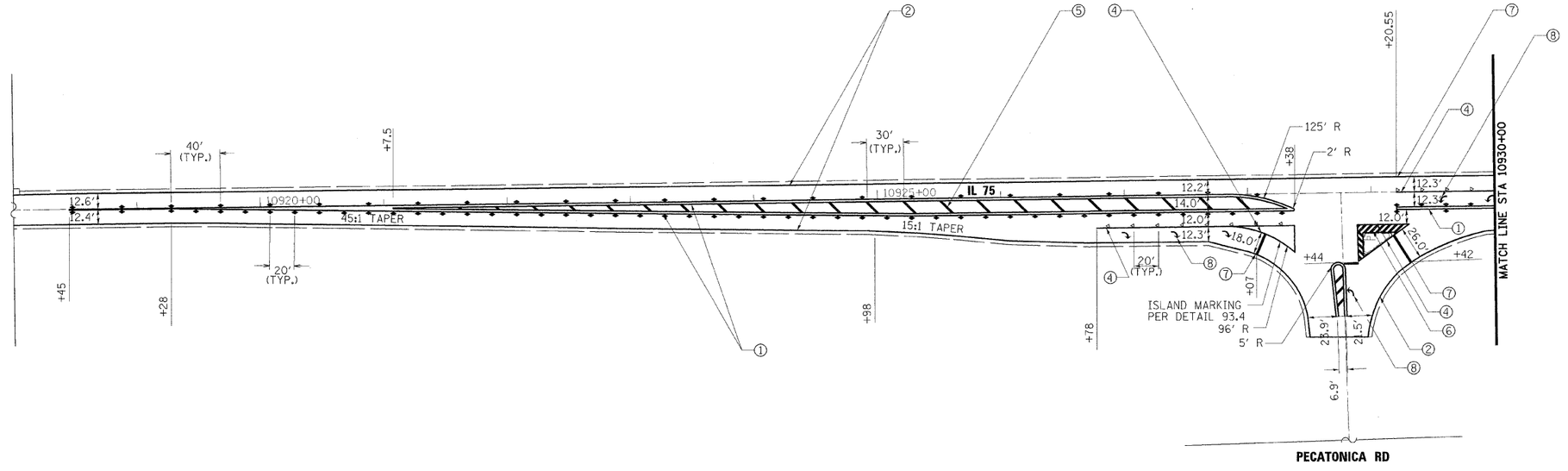
SCALE: VERT.
HORIZ.
DATE: 3/3/09

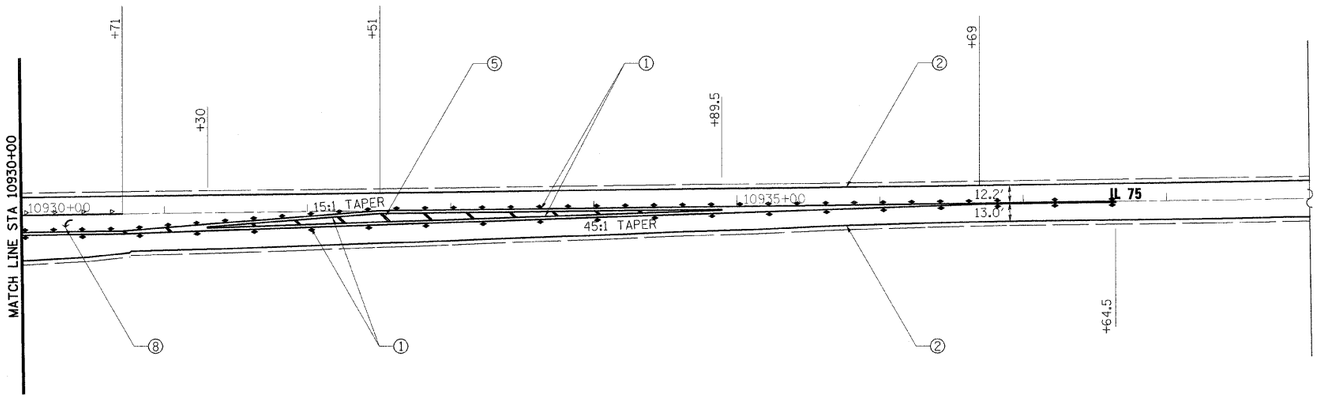
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\111RS504\IL 75_3F East\CADD\Design\175881_PM.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Best Rd

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	114
STA.		TO STA.		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





NOTE:
ALL PAVEMENT MARKING DETAILED ON THIS SHEET SHALL CONSIST OF THERMOPLASTIC PAVEMENT MARKING

PAVEMENT MARKING LEGEND

1. 4" DOUBLE YELLOW SOLID LINE
2. 4" WHITE SOLID LINE
3. NOT USED
4. 8" WHITE SOLID LINE
5. 12" YELLOW SOLID LINE
6. 12" WHITE SOLID LINE
7. 24" WHITE SOLID LINE
8. WHITE LETTERS & SYMBOLS

- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

0 50' 100'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

PAVEMENT MARKING DETAILS PECATONICA RD

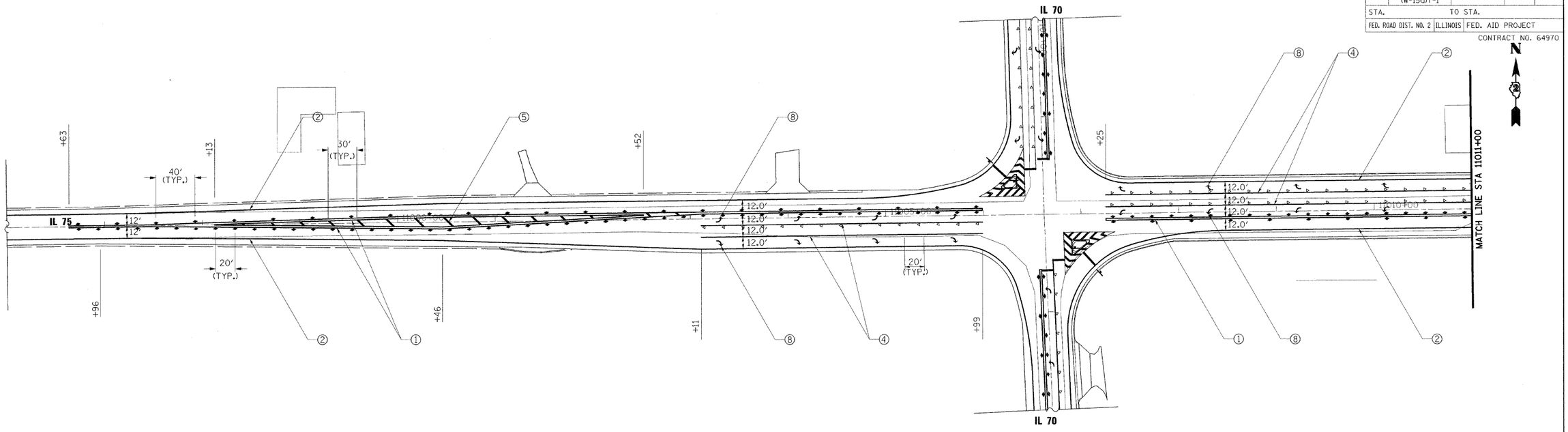
SCALE: VERT.
HORIZ.
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

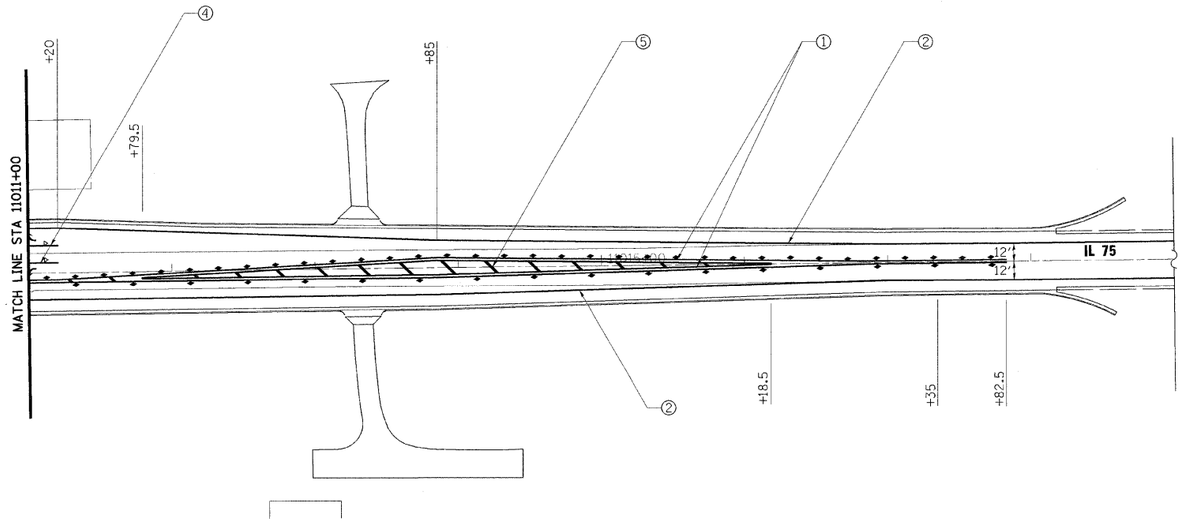
PLOT DATE = 3/3/2009
FILE NAME = k:\11*95680\IL 75_2P East\CADD\Design*5681.PM.dgn
PLOT SCALE = 100.0000
USER NAME = JTracey
MODEL = Pecatonica Rd

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	115
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970



FOR PAVEMENT MARKING ON IL 70, SEE NEXT SHEET.



NOTES:
ALL PAVEMENT MARKING DETAILED ON THIS SHEET SHALL BE THERMOPLASTIC

PAVEMENT MARKING LEGEND

1. 4" DOUBLE YELLOW SOLID LINE
2. 4" WHITE SOLID LINE
3. NOT USED
4. 8" WHITE SOLID LINE
5. 12" YELLOW SOLID LINE
6. 12" WHITE SOLID LINE
7. 24" WHITE SOLID LINE
8. WHITE LETTERS & SYMBOLS

- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

0 50' 100'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

PAVEMENT MARKING DETAILS IL 75

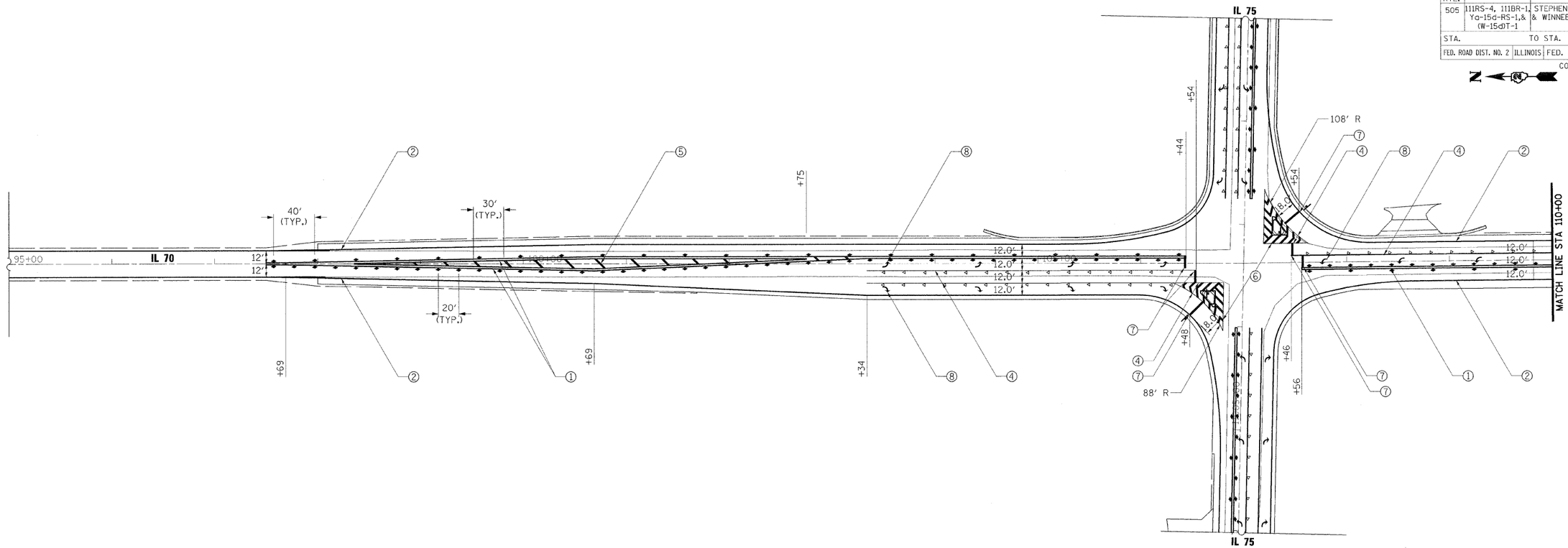
SCALE: VERT.
HORIZ.
DATE: 3/3/09

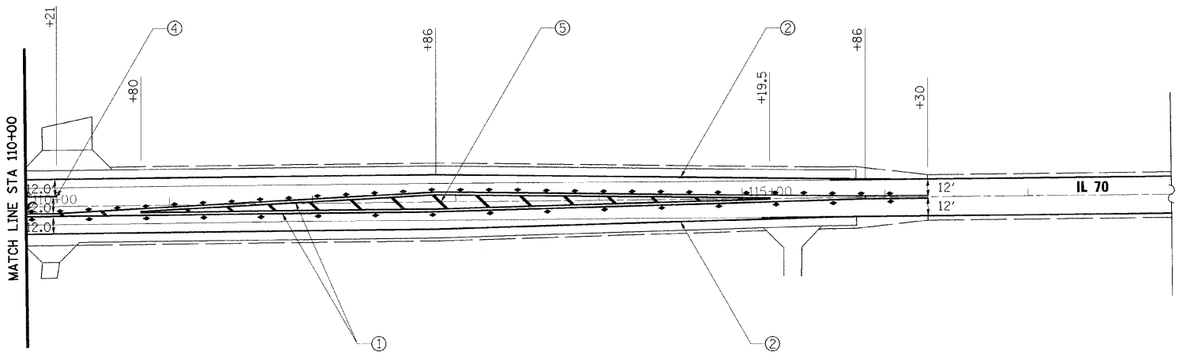
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\11ps608\IL 75_3P East\CADD\Design\195681.PM.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = IL 75

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	116
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970





FOR PAVEMENT MARKING ON IL 75, SEE PREVIOUS SHEET.

ALL PAVEMENT MARKING DETAILED ON THIS SHEET SHALL BE THERMOPLASTIC

PAVEMENT MARKING LEGEND

1. 4" DOUBLE YELLOW SOLID LINE
2. 4" WHITE SOLID LINE
3. NOT USED
4. 8" WHITE SOLID LINE
5. 12" YELLOW SOLID LINE
6. 12" WHITE SOLID LINE
7. 24" WHITE SOLID LINE
8. WHITE LETTERS & SYMBOLS

- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

0 50' 100'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

PAVEMENT MARKING DETAILS IL 70

SCALE: VERT.
HORIZ.
DATE: 3/3/09

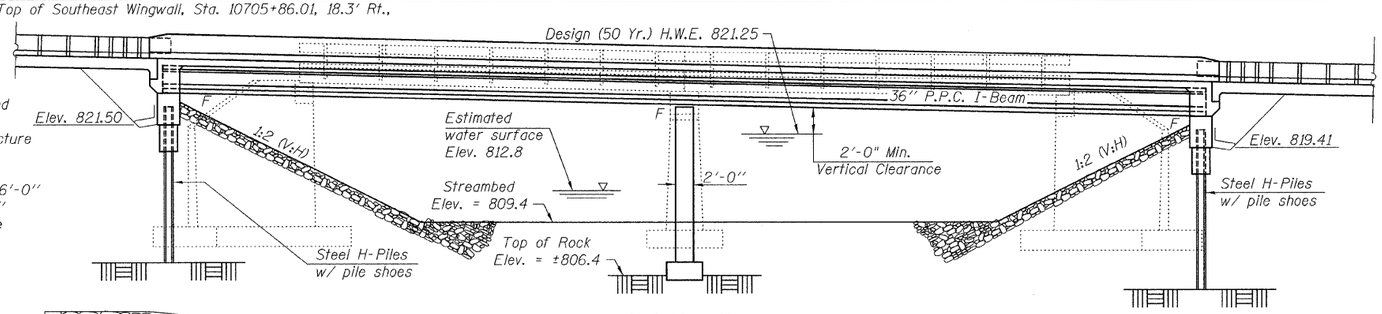
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/3/2009
FILE NAME = k:\il195801\IL 75_3P East\CADD\Design\195801_PM.dgn
PLOT SCALE = 100.0000
USER NAME = JTracey
MODEL = Il 70

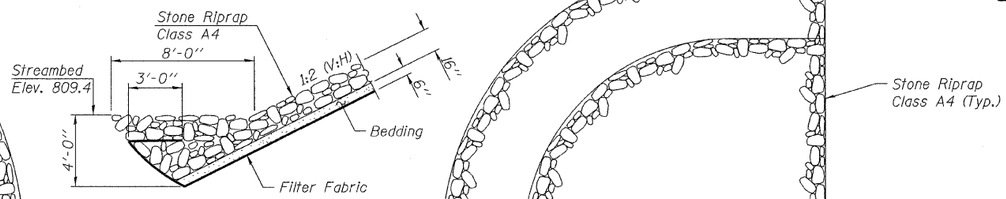
Bench Mark: Chiseled Square, Top of Southeast Wingwall, Sta. 10705+86.01, 18.3' Rt., Elev. 824.47

Existing Structure: Structure number 089-0040, built in 1928 as S.B.I. 75, Sec. 111B. Portions of the substructure and the superstructure were rebuilt in 1973. The rebuilt superstructure is a PPC deck beam bridge with a 5" concrete overlay and closed abutments. Two-span 86'-0" back to back abutments, 33'-0" out to out width. Traffic to be detoured.

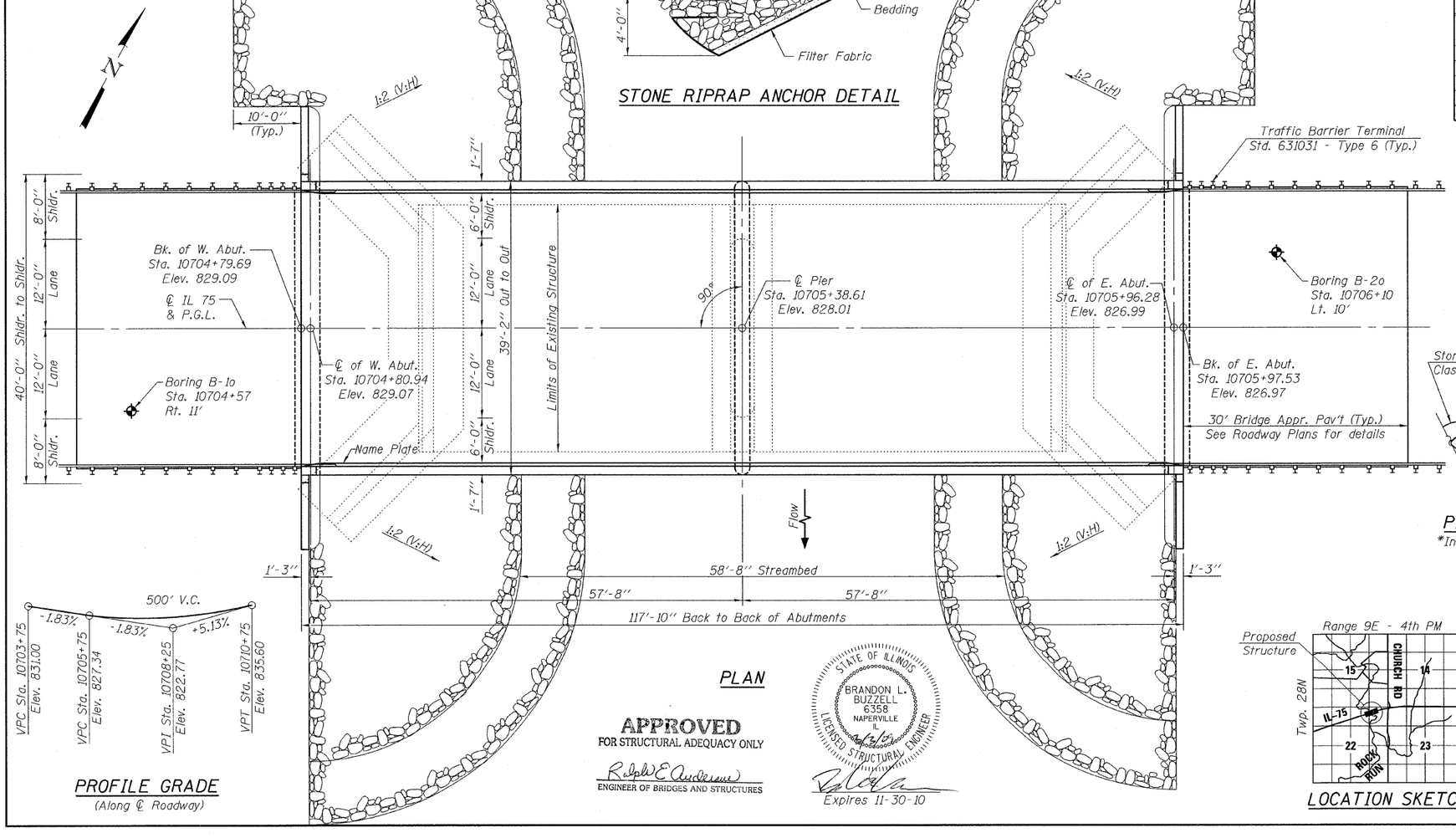
No Salvage.



ELEVATION



STONE RIPRAP ANCHOR DETAIL



PLAN

PROFILE GRADE
(Along ℄ Roadway)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE
IL
12/3/09
LICENSED STRUCTURAL ENGINEER
Expires 11-30-10

Design Scour Elevations		
West Abutment	Pier	East Abutment
824.6	806.4	822.6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	117
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
18 SHEETS

Contract #64970

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

STATION 10705+38.61
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC. 111B
LOADING HS20
STR. NO. 089-0084

NAME PLATE

See Std. 515001

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½" ϕ low lax. strands)
f_{si} = 201,960 psi (½" ϕ low lax. strands)

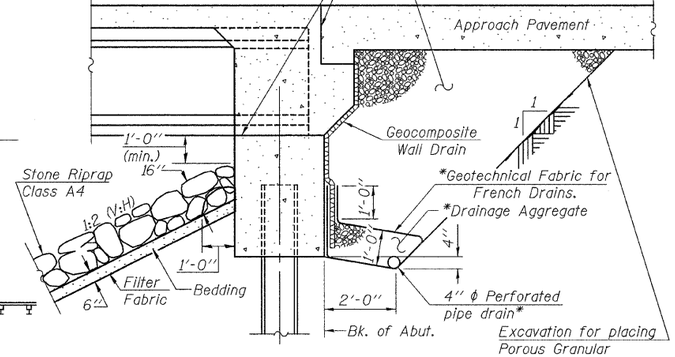
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.032g
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 23.03 Sq. Mi. Prop. Low Grade El. 826.22 ℄ Sta. 10707+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	2382	564	599	819.89	0.34	0.31	820.23	820.20
Design	50	3590	662	717	821.25	0.48	0.45	821.73	821.70
Base	100	4092	701	762	821.74	0.53	0.49	822.27	822.23
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	5275	785	860	822.79	0.73	0.66	823.52	823.45



PIPE UNDERDRAIN AND RIPRAP DETAIL

*Included in the cost of Pipe Underdrains for Structures, 4".

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

LOCATION SKETCH

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

K:\11196880\Structures\Rock Run Bridge\Final Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	118
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
18 SHEETS

Contract #64970

GENERAL NOTES:

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

All Construction joints shall be bonded.

Removal of existing Steel Bridge Rail is included with Removal of Existing Structures.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement designated (E) shall be epoxy coated.

The contrator is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of beams when developing construction procedures for removal and replacement of the superstructure.

Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		270	270
Rock Excavation for Structures	Cu. Yd.		3	3
Concrete Superstructure	Cu. Yd.	163.9		163.9
Concrete Structures	Cu. Yd.		102.7	102.7
Furnishing and Erecting Precast Prestressed Concrete I Beams, 36 in	Foot	695		695
Reinforcement Bars, Epoxy Coated	Pound	33,840	9610	43,450
Furnishing Steel Piles HP 12x53	Foot		157.5	157.5
Driving Piles	Foot		157.5	157.5
Test Pile Steel HP 12x53	Each		2	2
Pile Shoes	Each		12	12
Name Plates	Each	1		1
Bridge Deck Grooving	Sq. Yd.	445		445
Protective Coat	Sq. Yd.	570		570
Bar Splicers	Each	76		76
Stone Riprap, Class A4	Sq. Yd.		1027	1027
Porous Granular Embankment (Special)	Cu. Yd.		125	125
Geocomposite Wall Drain	Sq. Yd.		73	73
Filter Fabric	Sq. Yd.		1027	1027
Pipe Underdrains for Structures, 4"	Foot		142	142
Cofferdams	Each		1	1
Cofferdam Excavation	Cu. Yd.		55	55
Concrete Encasement	Cu. Yd.		4.2	4.2
Anchor Bolts, 1½"	Each		4	4
Asbestos Bearing Pad Removal	Each		22	22

INDEX OF SHEETS

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND TOTAL BILL OF MATERIAL
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

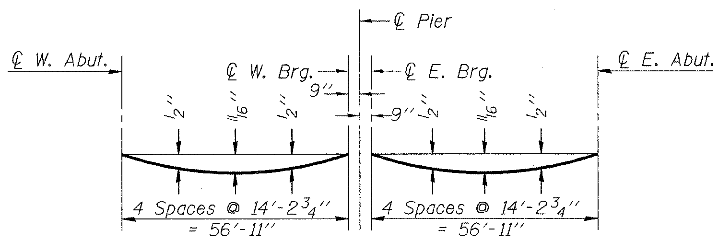
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

5/8/2009 K:\111*95820\Structures\Rock Run Bridge\Final Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	119
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 3
18 SHEETS

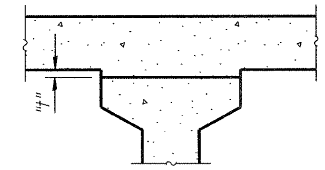
Contract #64970



DEAD LOAD DEFLECTION DIAGRAM

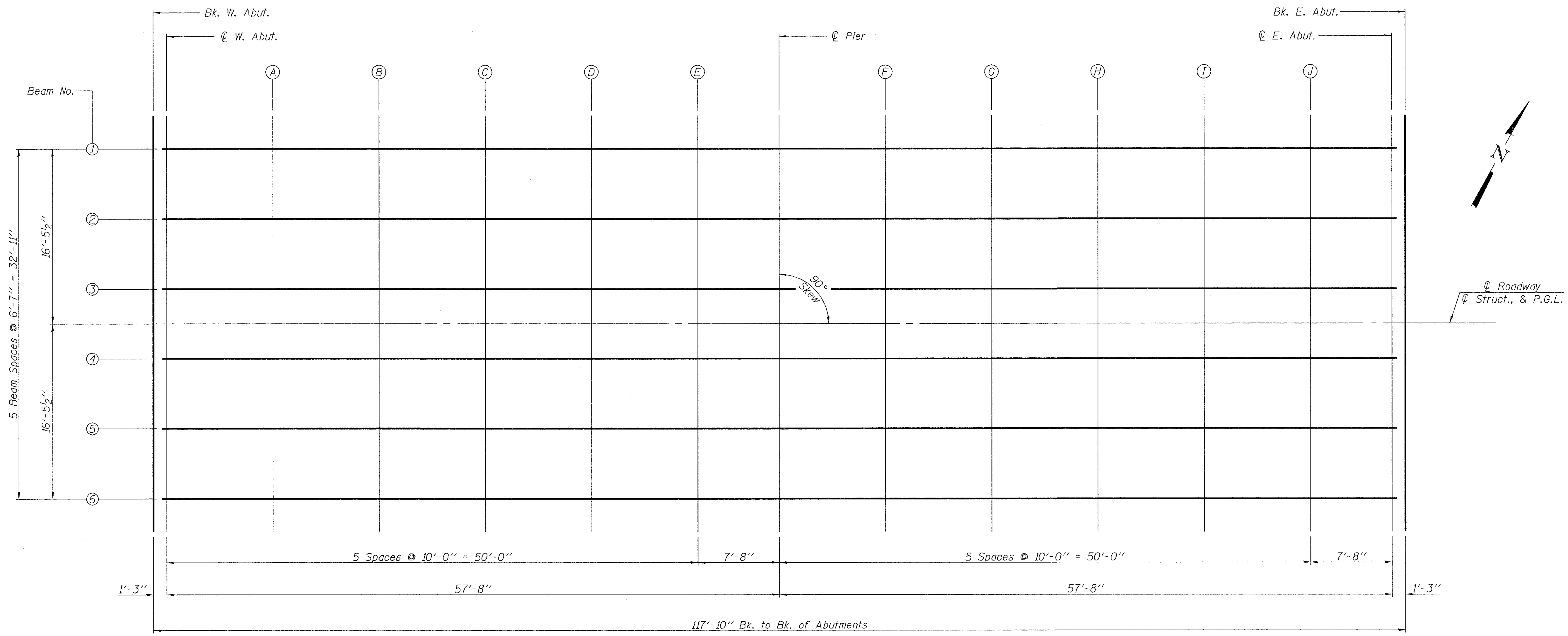
(Includes weight of concrete, excluding beams).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheet 4 of 18.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on Sheet 4 of 18, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



PLAN

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - I

IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

3/2/2009 K:\1195800\Structures\Rock Run Bridge\Final_Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	120
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
18 SHEETS

Contract #64970

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	-16.46	828.81	828.81
℄ W. Abut.	10704+80.94	-16.46	828.79	828.79
A	10704+90.94	-16.46	828.60	828.63
B	10705+00.94	-16.46	828.42	828.47
C	10705+10.94	-16.46	828.24	828.29
D	10705+20.94	-16.46	828.05	828.10
E	10705+30.94	-16.46	827.87	827.89
℄ Pier	10705+38.61	-16.46	827.73	827.73
F	10705+48.61	-16.46	827.55	827.57
G	10705+58.61	-16.46	827.36	827.41
H	10705+68.61	-16.46	827.18	827.24
I	10705+78.61	-16.46	827.00	827.04
J	10705+88.61	-16.46	826.83	826.85
℄ E. Abut.	10705+96.28	-16.46	826.71	826.71
Back E. Abut.	10705+97.53	-16.46	826.69	826.69

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	-9.88	828.93	828.93
℄ W. Abut.	10704+80.94	-9.88	828.91	828.91
A	10704+90.94	-9.88	828.73	828.76
B	10705+00.94	-9.88	828.55	828.59
C	10705+10.94	-9.88	828.36	828.42
D	10705+20.94	-9.88	828.18	828.22
E	10705+30.94	-9.88	828.00	828.02
℄ Pier	10705+38.61	-9.88	827.86	827.86
F	10705+48.61	-9.88	827.67	827.70
G	10705+58.61	-9.88	827.49	827.54
H	10705+68.61	-9.88	827.31	827.36
I	10705+78.61	-9.88	827.13	827.17
J	10705+88.61	-9.88	826.95	826.98
℄ E. Abut.	10705+96.28	-9.88	826.83	826.83
Back E. Abut.	10705+97.53	-9.88	826.81	826.81

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	-3.29	829.04	829.04
℄ W. Abut.	10704+80.94	-3.29	829.01	829.01
A	10704+90.94	-3.29	828.83	828.86
B	10705+00.94	-3.29	828.65	828.70
C	10705+10.94	-3.29	828.47	828.52
D	10705+20.94	-3.29	828.28	828.33
E	10705+30.94	-3.29	828.10	828.12
℄ Pier	10705+38.61	-3.29	827.96	827.96
F	10705+48.61	-3.29	827.78	827.80
G	10705+58.61	-3.29	827.59	827.64
H	10705+68.61	-3.29	827.41	827.47
I	10705+78.61	-3.29	827.23	827.27
J	10705+88.61	-3.29	827.06	827.08
℄ E. Abut.	10705+96.28	-3.29	826.94	826.94
Back E. Abut.	10705+97.53	-3.29	826.92	826.92

℄ STRUCTURE, ℄ ROADWAY, & PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	0.00	829.09	829.09
℄ W. Abut.	10704+80.94	0.00	829.07	829.07
A	10704+90.94	0.00	828.88	828.91
B	10705+00.94	0.00	828.70	828.75
C	10705+10.94	0.00	828.52	828.57
D	10705+20.94	0.00	828.33	828.38
E	10705+30.94	0.00	828.15	828.17
℄ Pier	10705+38.61	0.00	828.01	828.01
F	10705+48.61	0.00	827.83	827.85
G	10705+58.61	0.00	827.64	827.69
H	10705+68.61	0.00	827.46	827.52
I	10705+78.61	0.00	827.28	827.32
J	10705+88.61	0.00	827.11	827.13
℄ E. Abut.	10705+96.28	0.00	826.99	826.99
Back E. Abut.	10705+97.53	0.00	826.97	826.97

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	3.29	829.04	829.04
℄ W. Abut.	10704+80.94	3.29	829.01	829.01
A	10704+90.94	3.29	828.83	828.86
B	10705+00.94	3.29	828.65	828.70
C	10705+10.94	3.29	828.47	828.52
D	10705+20.94	3.29	828.28	828.33
E	10705+30.94	3.29	828.10	828.12
℄ Pier	10705+38.61	3.29	827.96	827.96
F	10705+48.61	3.29	827.78	827.80
G	10705+58.61	3.29	827.59	827.64
H	10705+68.61	3.29	827.41	827.47
I	10705+78.61	3.29	827.23	827.27
J	10705+88.61	3.29	827.06	827.08
℄ E. Abut.	10705+96.28	3.29	826.94	826.94
Back E. Abut.	10705+97.53	3.29	826.92	826.92

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	9.88	828.93	828.93
℄ W. Abut.	10704+80.94	9.88	828.91	828.91
A	10704+90.94	9.88	828.73	828.76
B	10705+00.94	9.88	828.55	828.59
C	10705+10.94	9.88	828.36	828.42
D	10705+20.94	9.88	828.18	828.22
E	10705+30.94	9.88	828.00	828.02
℄ Pier	10705+38.61	9.88	827.86	827.86
F	10705+48.61	9.88	827.67	827.70
G	10705+58.61	9.88	827.49	827.54
H	10705+68.61	9.88	827.31	827.36
I	10705+78.61	9.88	827.13	827.17
J	10705+88.61	9.88	826.95	826.98
℄ E. Abut.	10705+96.28	9.88	826.83	826.83
Back E. Abut.	10705+97.53	9.88	826.81	826.81

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back W. Abut.	10704+79.69	16.46	828.81	828.81
℄ W. Abut.	10704+80.94	16.46	828.79	828.79
A	10704+90.94	16.46	828.60	828.63
B	10705+00.94	16.46	828.42	828.47
C	10705+10.94	16.46	828.24	828.29
D	10705+20.94	16.46	828.05	828.10
E	10705+30.94	16.46	827.87	827.89
℄ Pier	10705+38.61	16.46	827.73	827.73
F	10705+48.61	16.46	827.55	827.57
G	10705+58.61	16.46	827.36	827.41
H	10705+68.61	16.46	827.18	827.24
I	10705+78.61	16.46	827.00	827.04
J	10705+88.61	16.46	826.83	826.85
℄ E. Abut.	10705+96.28	16.46	826.71	826.71
Back E. Abut.	10705+97.53	16.46	826.69	826.69

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - II
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

K:\1195680\Structures\Rock Run Bridge\Final Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	121
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
18 SHEETS

Contract #64970

NORTH CURB LINE

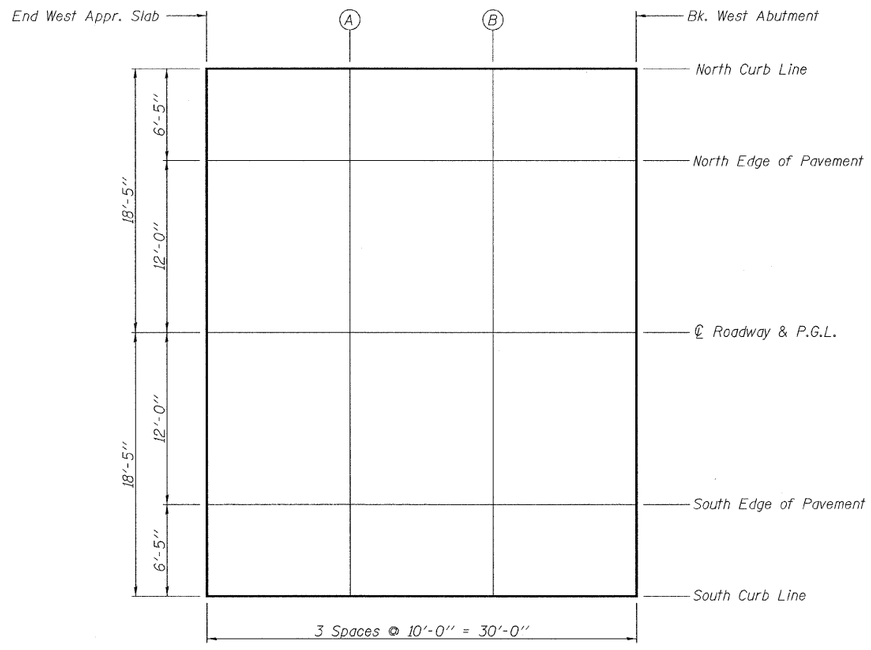
Location	Station	Offset	Theoretical Grade Elevations
End West Appr. Slab	10704+49.69	-18.42	829.33
A	10704+59.69	-18.42	829.14
B	10704+69.69	-18.42	828.96
Bk. West Abutment	10704+79.69	-18.42	828.78

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End West Appr. Slab	10704+49.69	-12.00	829.46
A	10704+59.69	-12.00	829.28
B	10704+69.69	-12.00	829.09
Bk. West Abutment	10704+79.69	-12.00	828.91

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
End West Appr. Slab	10704+49.69	0.00	829.65
A	10704+59.69	0.00	829.46
B	10704+69.69	0.00	829.28
Bk. West Abutment	10704+79.69	0.00	829.09



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End West Appr. Slab	10704+49.69	12.00	829.46
A	10704+59.69	12.00	829.28
B	10704+69.69	12.00	829.09
Bk. West Abutment	10704+79.69	12.00	828.91

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End West Appr. Slab	10704+49.69	18.42	829.33
A	10704+59.69	18.42	829.14
B	10704+69.69	18.42	828.96
Bk. West Abutment	10704+76.69	18.42	828.78

E-AS

11-1-06

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY BLB

3/2/2009 K:\11\99888\Structures\Rock Run Bridge\Final_Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	122
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 6
18 SHEETS

Contract #64970

NORTH CURB LINE

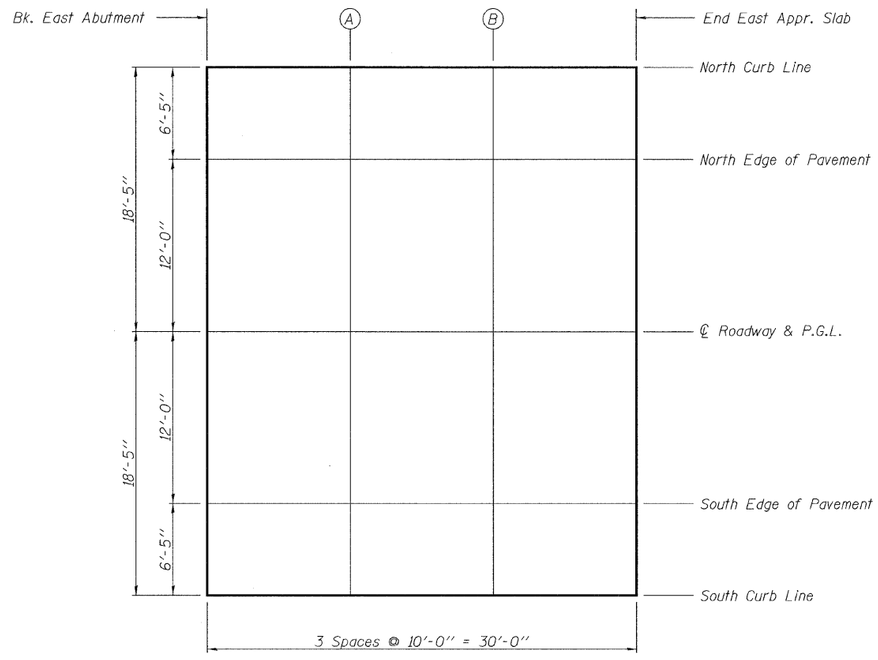
Location	Station	Offset	Theoretical Grade Elevations
Bk. East Abutment	10705+97.53	-18.42	826.65
A	10706+07.53	-18.42	826.50
B	10706+17.53	-18.42	826.37
End East Appr. Slab	10706+27.53	-18.42	826.25

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. East Abutment	10705+97.53	-12.00	826.78
A	10706+07.53	-12.00	826.64
B	10706+17.53	-12.00	826.51
End East Appr. Slab	10706+27.53	-12.00	826.39

℄ ROADWAY & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
Bk. East Abutment	10705+97.53	0.00	826.97
A	10706+07.53	0.00	826.82
B	10706+17.53	0.00	826.69
End East Appr. Slab	10706+27.53	0.00	826.58



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. East Abutment	10705+97.53	12.00	826.78
A	10706+07.53	12.00	826.64
B	10706+17.53	12.00	826.51
End East Appr. Slab	10706+27.53	12.00	826.39

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. East Abutment	10705+97.53	18.42	826.65
A	10706+07.53	18.42	826.50
B	10706+17.53	18.42	826.37
End East Appr. Slab	10706+27.53	18.42	826.25

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

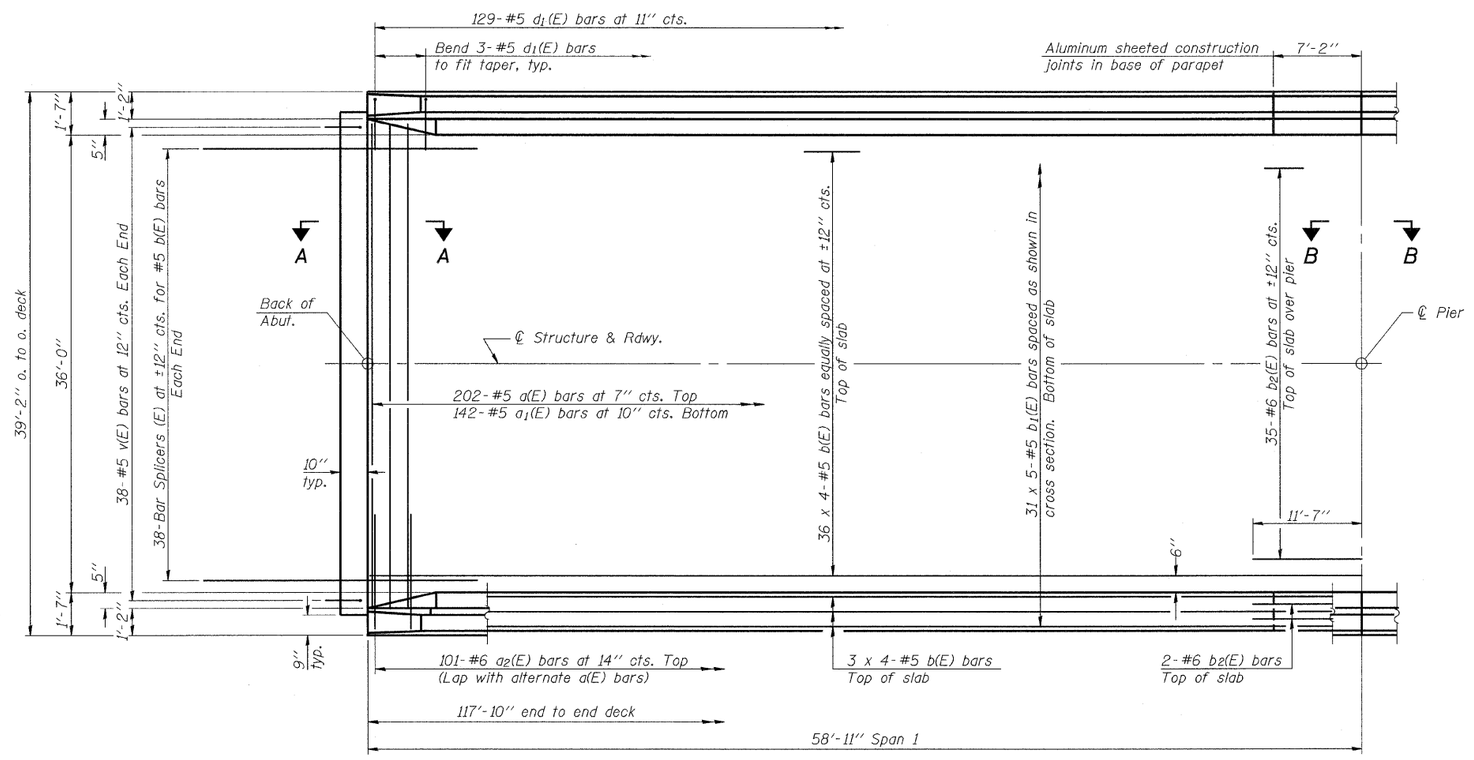
E-AS 11-1-06

3/2/2009 K:\111958020\Structures\Rock Run Bridge\Final_Plans.dgn

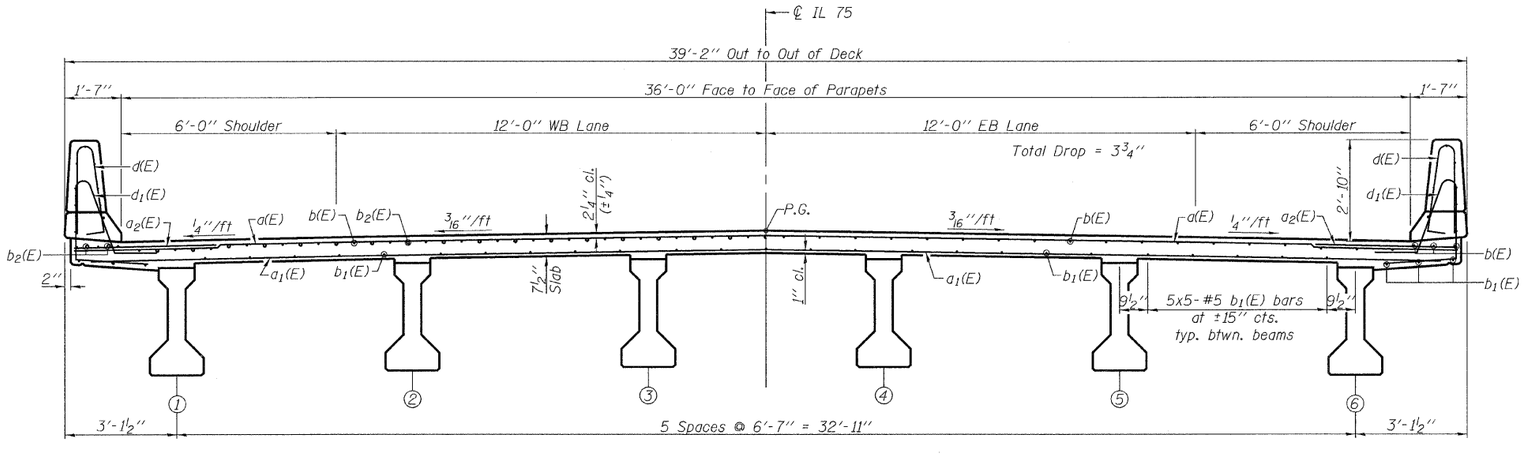
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	123
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 7
18 SHEETS

Contract #64970



HALF PLAN



NEAR PIER NEAR MIDSPAN

CROSS SECTION
(Looking East)

NOTES:

See Sheet 8 of 18 for Superstructure Details, Bill of Materials, and parapet reinforcement.
See Sheet 9 of 18 for Section A-A, Section B-B, and Diaphragm Details.
See Sheet 16 of 18 for Bar Splicer Details.
Bars indicated thus 36 x 4-#5 etc. indicates 36 lines of bars with 4 lengths per line.
Minimum bar lap for #5 bar = 2'-2".

SI-2-0 10-22-04

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

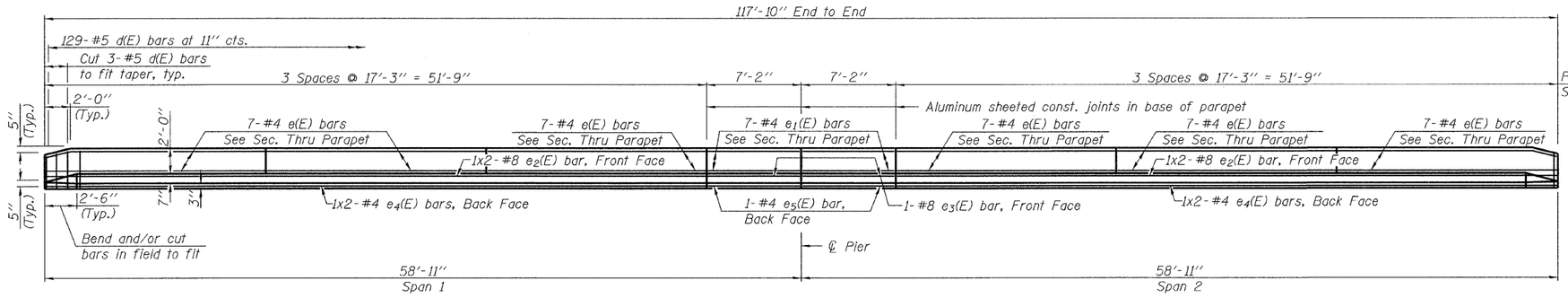
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

K:\111960800\Structures\Rock Run Bridge\Final_Plans.dgn
3/2/2009

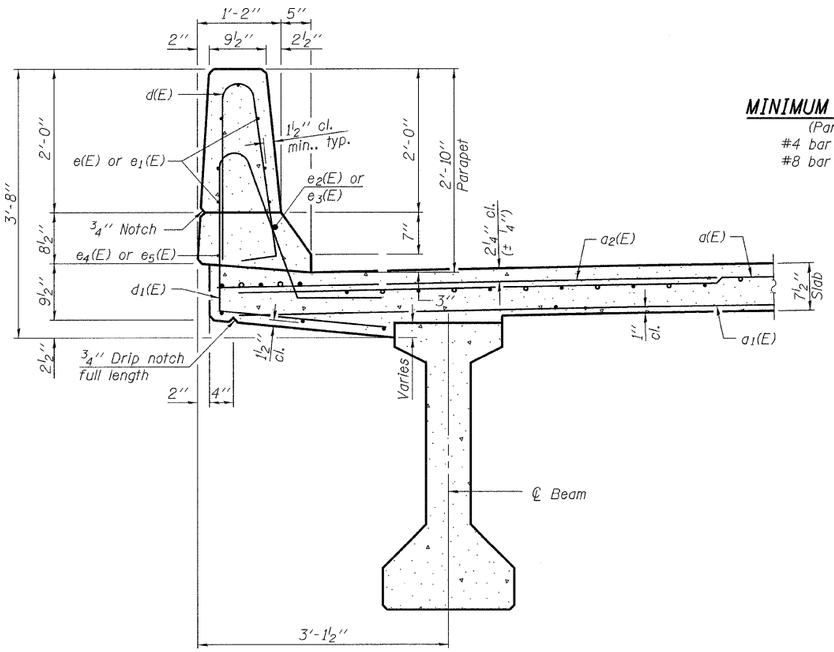
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	124
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 8
18 SHEETS

Contract #64970



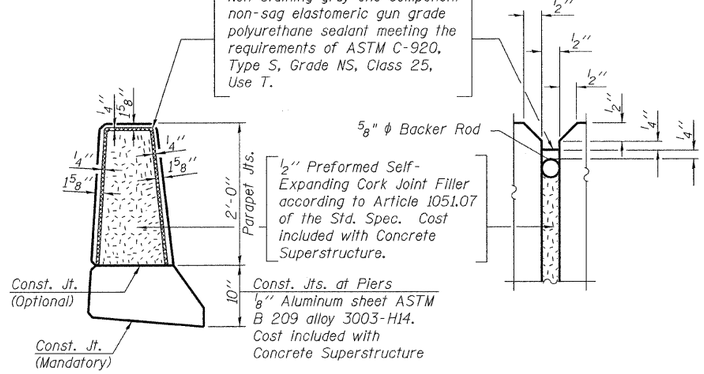
INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET

MINIMUM BAR LAP

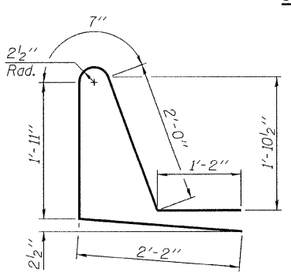
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



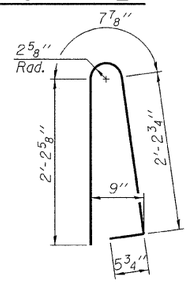
PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

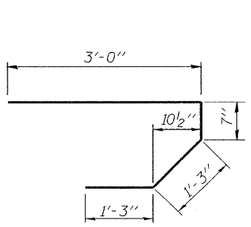
Bar	No.	Size	Length	Shape
a(E)	202	#5	38'-7"	——
a1(E)	142	#5	37'-11"	——
a2(E)	202	#6	4'-6"	——
b(E)	168	#5	31'-1"	——
b1(E)	155	#5	25'-3"	——
b2(E)	39	#6	23'-2"	——
d(E)	258	#5	5'-7"	
d1(E)	258	#5	7'-10"	
e(E)	84	#4	16'-11"	——
e1(E)	28	#4	6'-10"	——
e2(E)	8	#8	27'-6"	——
e3(E)	4	#8	6'-10"	——
e4(E)	8	#4	26'-5"	——
e5(E)	4	#4	6'-10"	——
m(E)	4	#6	37'-5"	——
m1(E)	6	#6	38'-11"	——
m2(E)	24	#6	8'-9"	——
m3(E)	20	#6	4'-10"	——
m4(E)	4	#6	2'-1"	——
m5(E)	20	#4	5'-10"	——
m6(E)	6	#8	5'-6"	——
s(E)	72	#4	6'-1"	
s1(E)	62	#4	9'-10"	
s2(E)	25	#4	9'-6"	
v(E)	76	#5	3'-3"	
Reinforcement Bars, Epoxy Coated			Lbs.	33,840
Concrete Superstructure			Cu. Yds.	163.9
Bar Splicers			Each	76



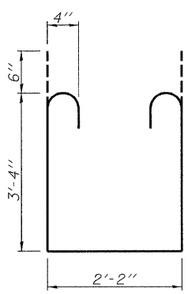
BAR d1(E)



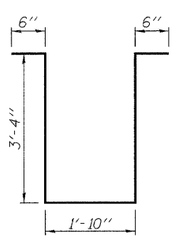
BAR d(E)



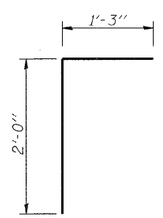
BAR s(E)



BAR s1(E)



BAR s2(E)



BAR v(E)

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

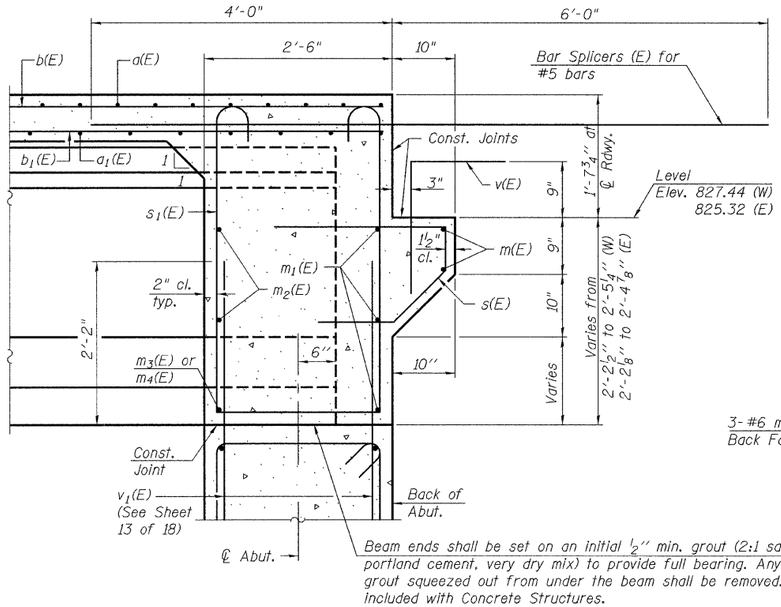
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

K:\111195800\Structures\Rock Run Bridge\Final_Plans.dgn
3/2/2009

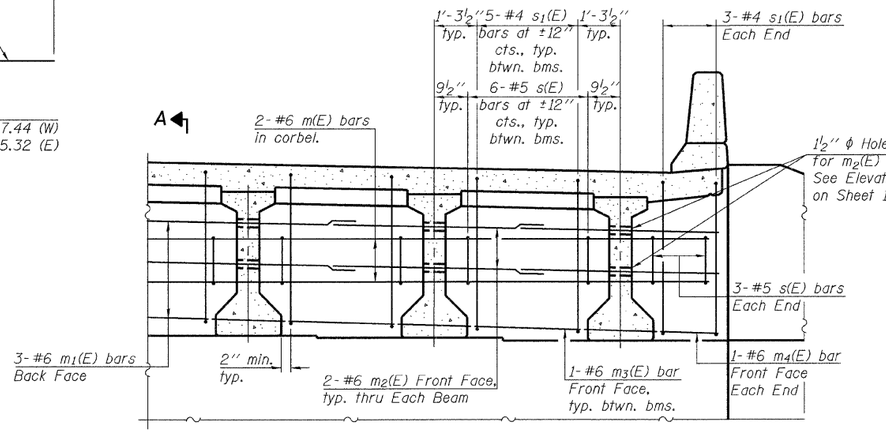
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	125
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 9
18 SHEETS

Contract #64970

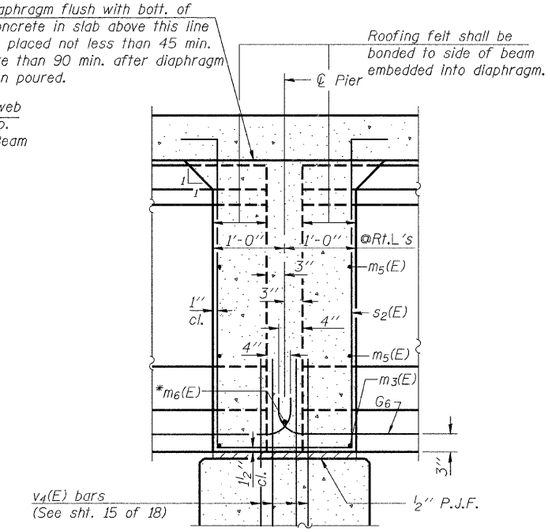


SECTION A-A



DIAPHRAGM ELEVATION AT ABUTMENT

Pour diaphragm flush with bott. of slab. Concrete in slab above this line shall be placed not less than 45 min. nor more than 90 min. after diaphragm has been poured.



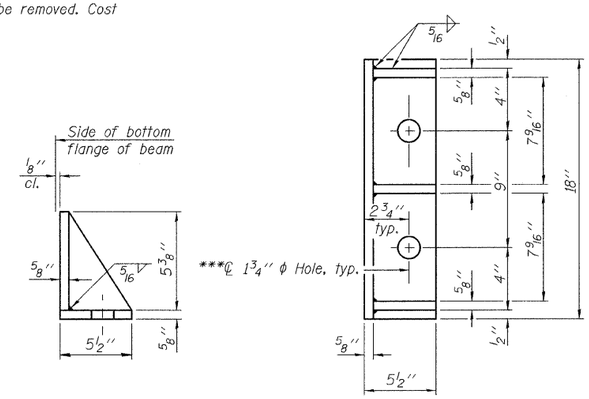
*Tightly fasten the #8 bars together with No. 9 wire ties.

SECTION B-B AT PIER

(Fixed)

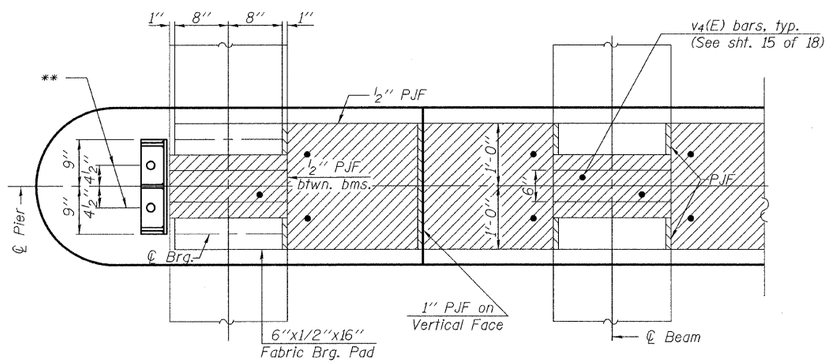
MIN. BAR LAP

#6 bar = 2'-9"



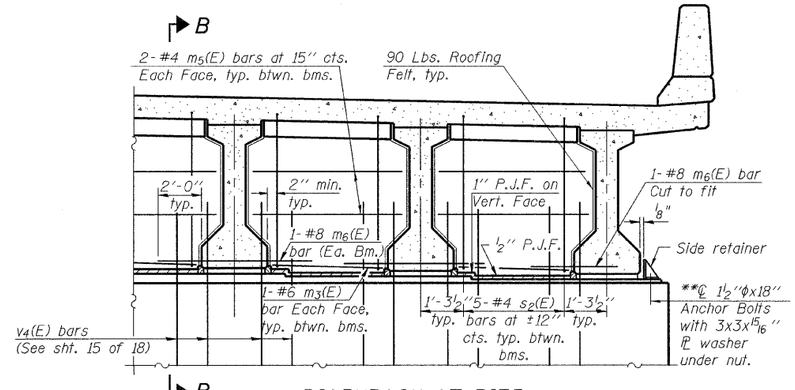
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BEARING PAD DETAIL AT PIER

**Holes in cap to be drilled after beams are in place



DIAPHRAGM AT PIER

(Fixed)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 18.

Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 18.

For details of bars s(E), s_1(E) and s_2(E) see sheet 8 of 18.

The s(E), s_1(E) and s_2(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

Cost of 90 Lb. roofing felt is included with Concrete Superstructure.

The side retainer shall be galvanized after shop fabrication according to AASHTO M 111. Cost of side retainer and anchor bolts shall be included with Concrete Structures.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

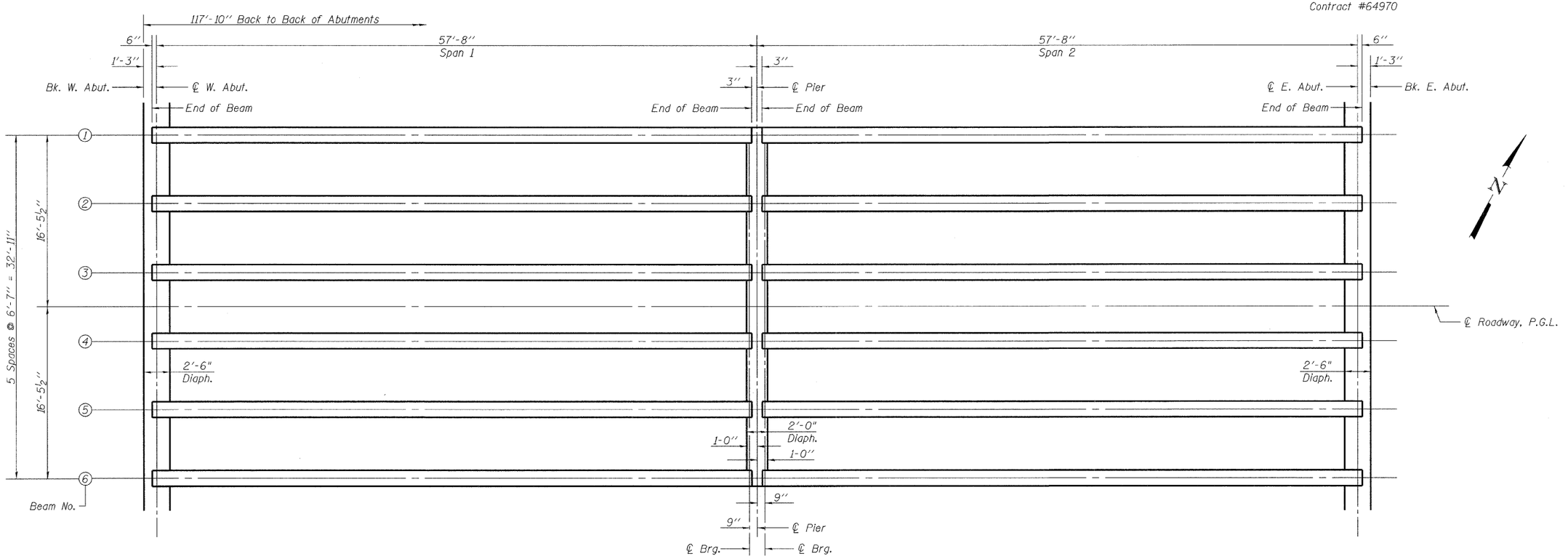
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

K:\111R5808\Structures\Rock Run Bridge\Final_Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	126
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
18 SHEETS

Contract #64970



FRAMING PLAN

INTERIOR BEAM MOMENT TABLE			
		0.4 Sp. #1 0.6 Sp. #2	Pier
I	(in^4)	48,648	-
I'	(in^4)	169,118	-
S_b	(in^3)	3165	-
S_b'	(in^3)	5838	-
S_t	(in^3)	2358	-
S_t'	(in^3)	24,057	-
D_ℓ	(k/')	1.005	-
M_ℓ	('k)	418	-
s_ℓ	(k/')	0.450	0.450
$M_{s\ell}$	('k)	105	187
M_L	('k)	367	279
M (Imp)	('k)	99	75

INTERIOR BEAM REACTION TABLE			
		Abut.	Pier Span 1 Pier Span 2
R_ℓ	(k)	29.0	29.0
$R_{s\ell}$	(k)	9.8	16.2
R_L	(k)	34.6	21.6
Imp.	(k)	9.3	5.8
R (Total)	(k)	82.7	72.6

I and I' are the moment of inertia and composite moment of inertia of the beam section.

S_b and S_b' are the non-composite and composite section modulus for the bottom fiber of the prestressed beam.

S_t and S_t' are the non-composite and composite section modulus for the top fiber of the prestressed beam.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN AND
BEAM MOMENT AND REACTION TABLE
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

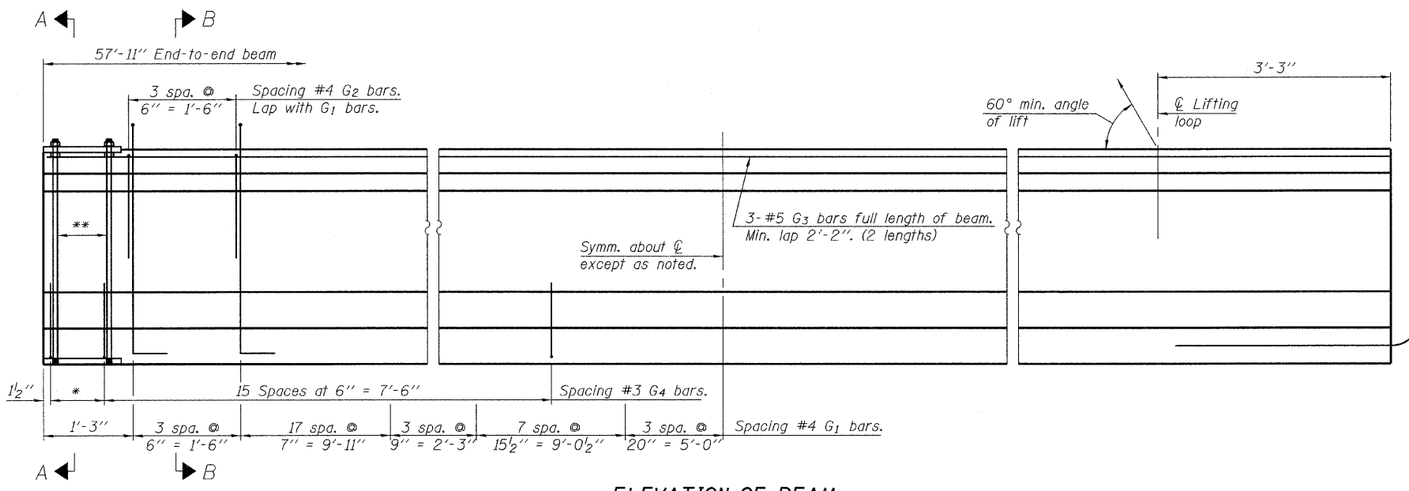
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

3/2/2009 K:\1119980\Structures\Rock Run Bridge\Final Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	127
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 11
18 SHEETS

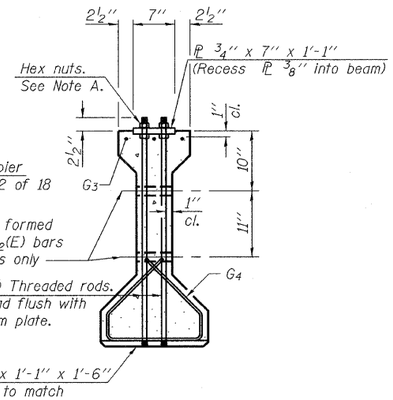
Contract #64970



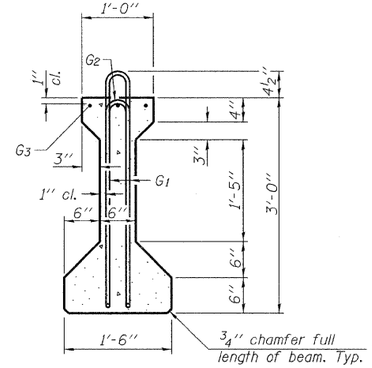
* 3 spaces at 3" = 9".
** 4-¾" ϕ threaded dowel rods at 3" cts., each face.

ELEVATION OF BEAM
(Showing reinforcement & dimensions)

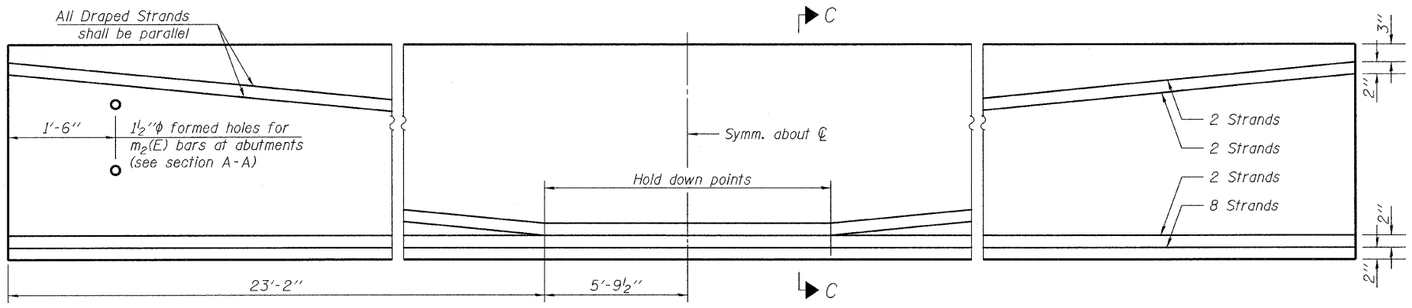
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



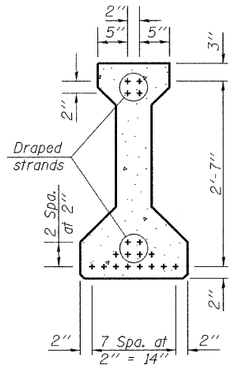
SECTION A-A



SECTION B-B



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C

BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G_1	67	#4	7'-5"	⊓L
G_2	8	#4	3'-10"	⊓
G_3	6	#5	30'-1"	—
G_4	38	#3	4'-1"	⌓
G_6	2	#8	3'-9"	⌒

Notes:
See sheet 12 of 18 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5000 psi.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

36" P.P.C. I-BEAM
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009
DRAWN BY LCM
CHECKED BY WJV

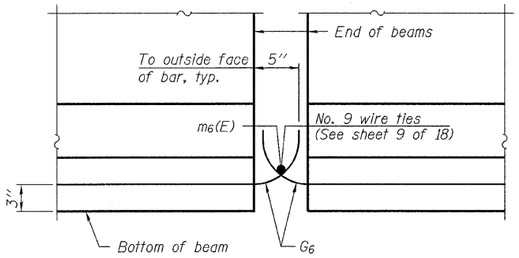
PI-4-36 7-15-05

3/2/2009 K:\11195800\Structures\Rock Run Bridge\Final Plans.dgn

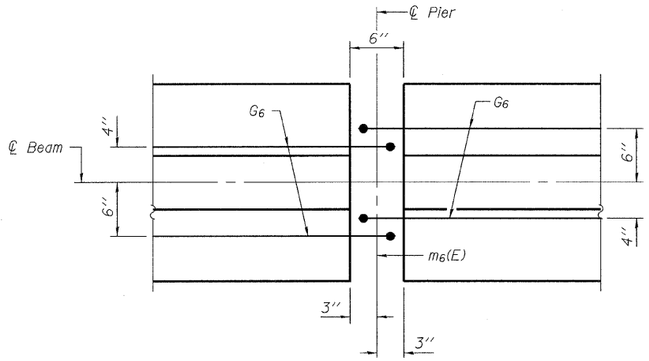
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	128
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 12
18 SHEETS

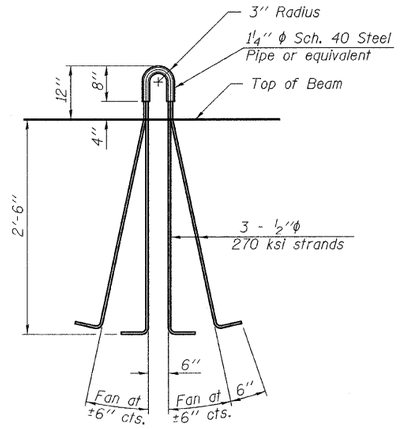
Contract #64970



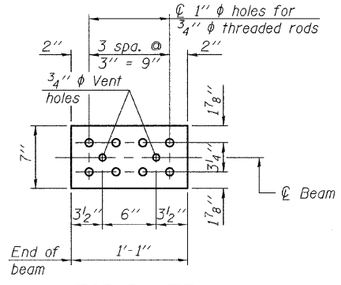
ELEVATION OF BEAM AT PIER



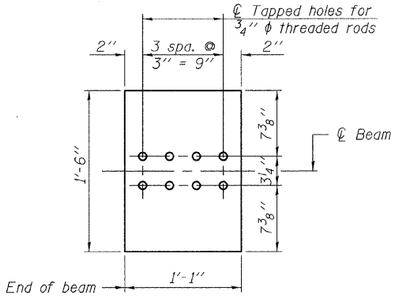
PLAN OF BEAM AT PIER



LIFTING LOOP DETAIL



TOP PLATE



BOTTOM PLATE

See bearing details for pintle hole locations when required.

NOTES

Inserts for ¾" ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

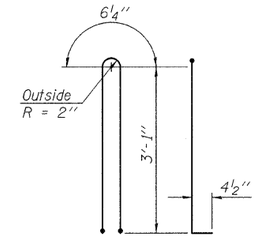
A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Cut G6 bars when necessary to maintain 1½" clearance.

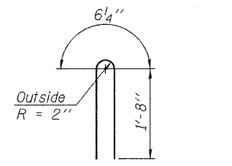
The bottom plates and studs shall be galvanized according to AASHTO M111.

Threaded rods shall be ASTM F 1554 Grade 55.

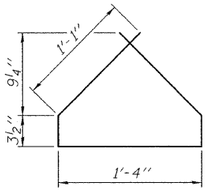
The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 36 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.



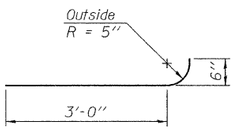
BAR G1



BAR G2



BAR G4



BAR G6

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	Ft.	695

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

36" P.P.C. I-BEAM DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009
DRAWN BY LCM
CHECKED BY WJV

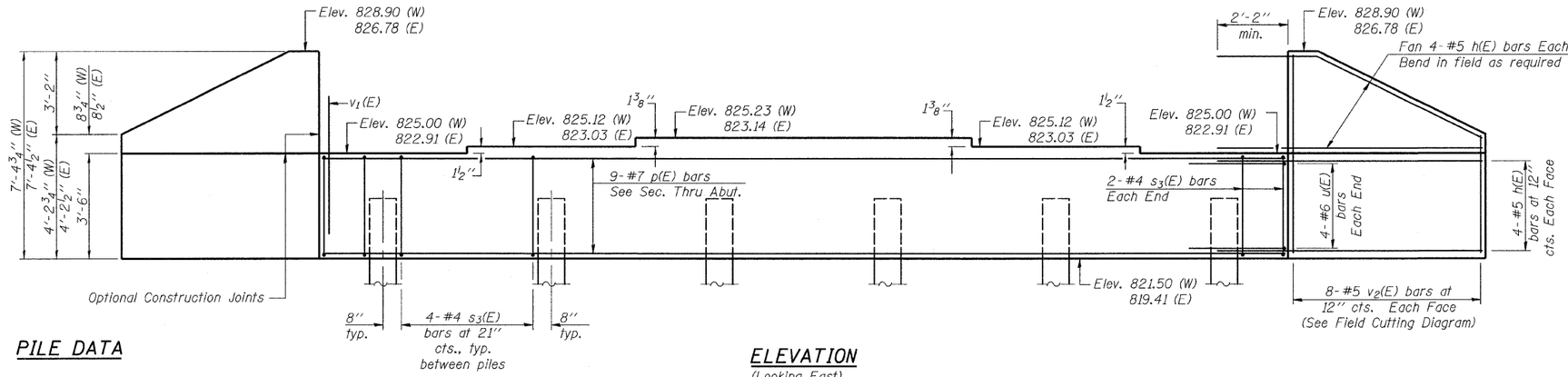
PI-4-36D 7-15-05

K:\111SB\02A\Structures\Rock Run Bridge\Final Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	129
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 13
18 SHEETS

Contract #64970

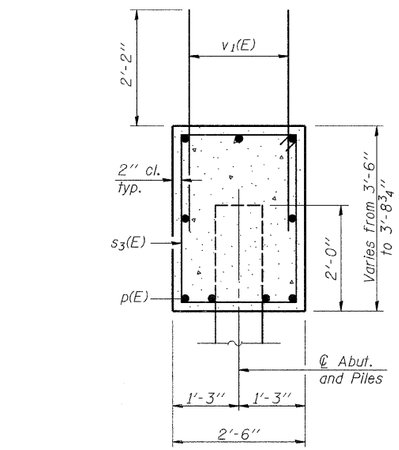


PILE DATA

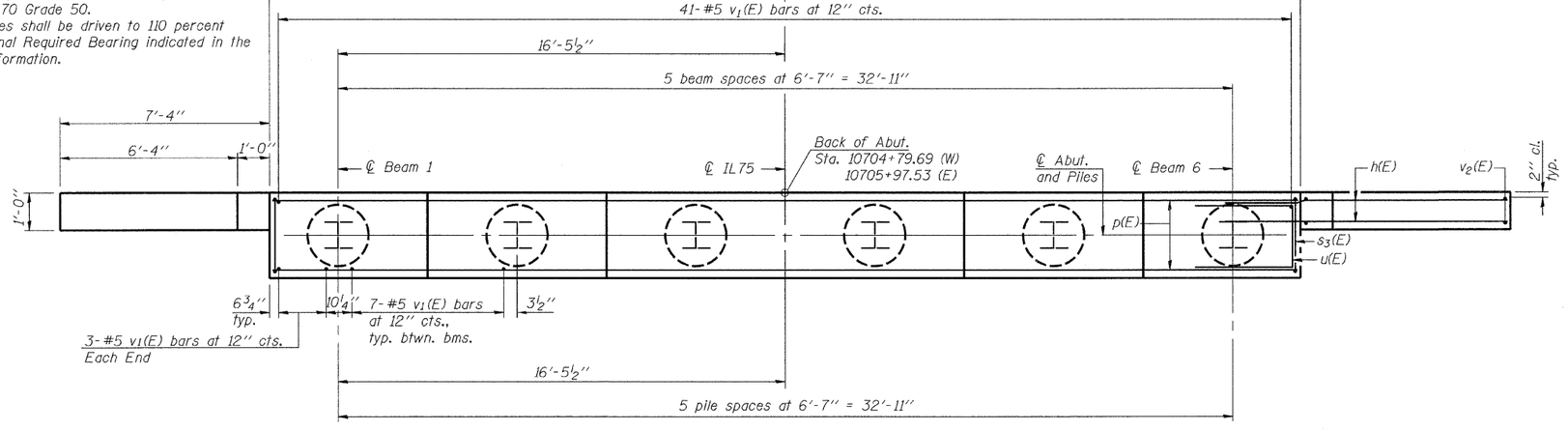
Type & Size: Steel HP 12x53 with Pile Shoes
Nominal Required Bearing: 419 kips
Allowable Resistance Available: 140 kips
Est. Length: 17.8' (East Abutment)
13.7' (West Abutment)
No. Req'd: 5 (East Abutment) plus 1 Test Pile
5 (West Abutment) plus 1 Test Pile
The Steel H-piles shall be according to AASHTO M270 Grade 50.
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

ELEVATION

(Looking East)

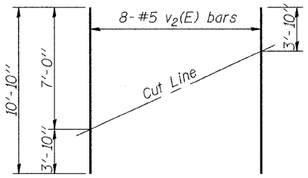


SEC. THRU ABUT.



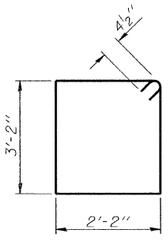
PLAN

Notes:
Pour steps monolithically with cap.
All edges shall have standard 3/4" chamfers.
For details of piles and Concrete Encasement, see sheet 14 of 18.

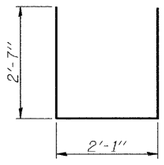


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s3(E)



BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	64	#5	9'-6"	
p(E)	18	#7	38'-11"	
s3(E)	48	#4	11'-5"	
u(E)	16	#6	7'-3"	
v1(E)	164	#5	4'-4"	
v2(E)	32	#5	10'-10"	
Concrete Structures		Cu. Yd.	32.7	
Reinforcement Bars, Epoxy Coated		Pound	3710	
Structure Excavation		Cu. Yd.	270	
Furnishing Steel Piles HP 12x53		Foot	157.5	
Driving Piles		Foot	157.5	
Test Pile Steel HP 12x53		Each	2	
Pile Shoes		Each	12	
Concrete Encasement		Cu. Yd.	4.2	

*Structure Excavation for W. Abut. = 135 Cu. Yd., E. Abut. = 135 Cu. Yd.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

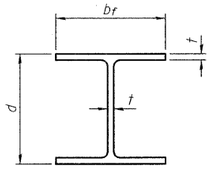
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

K:\111958080\Structures\Rock Run Bridge\Final Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	130
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

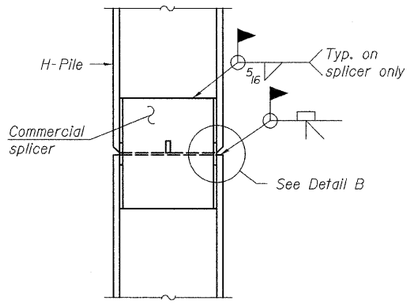
SHEET NO. 14
18 SHEETS

Contract #64970

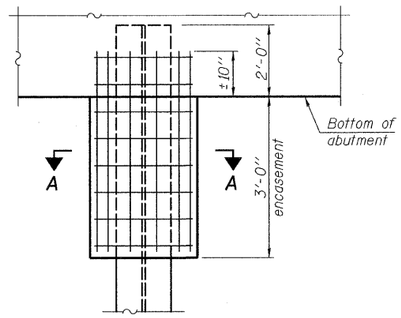


STEEL PILE TABLE

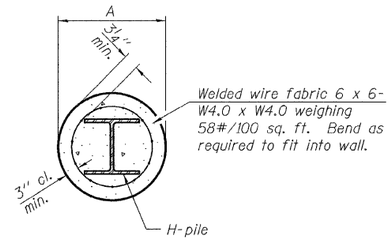
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION



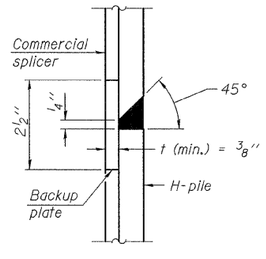
ELEVATION



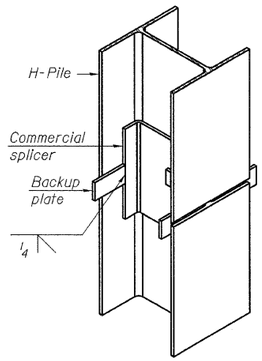
SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.

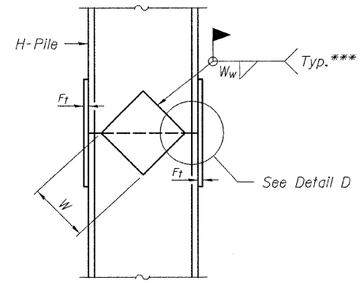
PILE ENCASEMENT



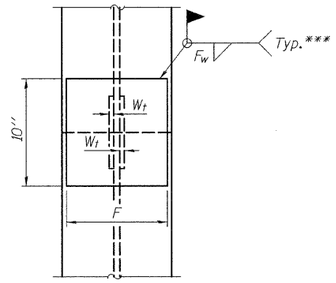
DETAIL "B"



ISOMETRIC VIEW

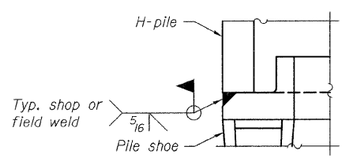


ELEVATION



END VIEW

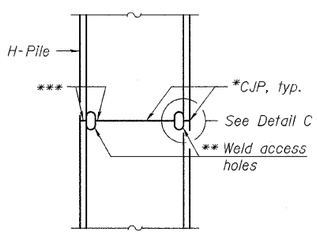
WELDED COMMERCIAL SPLICE



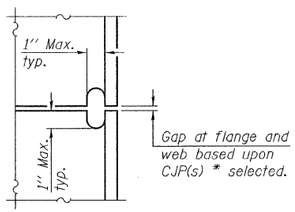
ELEVATION

DETAIL A

H-PILE SHOE ATTACHMENT

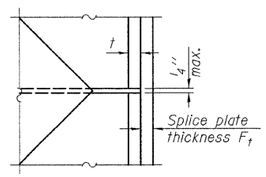


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4" from end of each pile.

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL H-PILE DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

F-HP

11-1-06

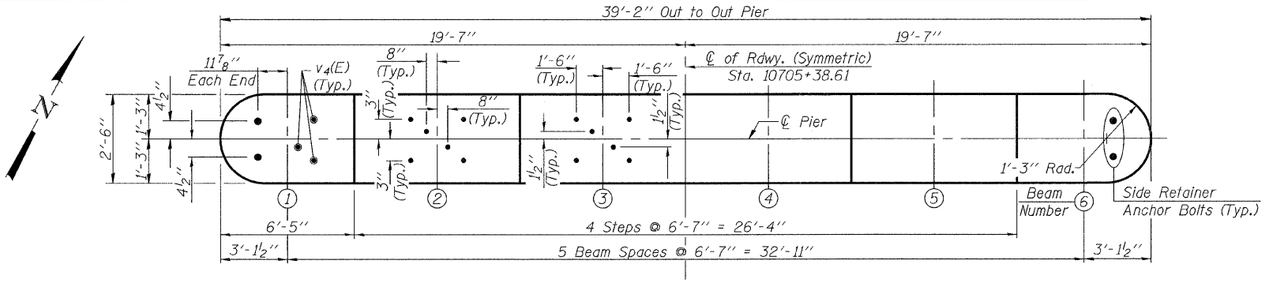
3/2/2009 K:\111195800\Structures\Rock Run Bridge\Final Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	131
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

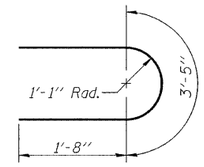
SHEET NO. 15
18 SHEETS

Contract #64970

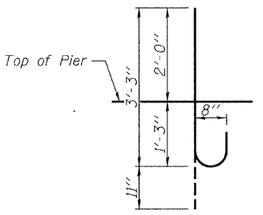
Notes:
Space reinforcement in pier to miss anchor bolts.
Pour steps monolithically with pier.
All edges shall have standard $\frac{3}{4}$'' chamfers.
See Sheet 9 of 18 for Anchor Bolt Installation.
See Sheet 9 of 18 for additional reinforcement and anchor bolt location detail.
Contractor shall submit a design of the cofferdam to the Engineer for approval.
Minimum bar lap for #4 bar = 1'-8".
Bars indicated thus 11x2-#4 etc. indicates 11 lines of bars with 2 lengths per line.



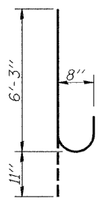
TOP PLAN



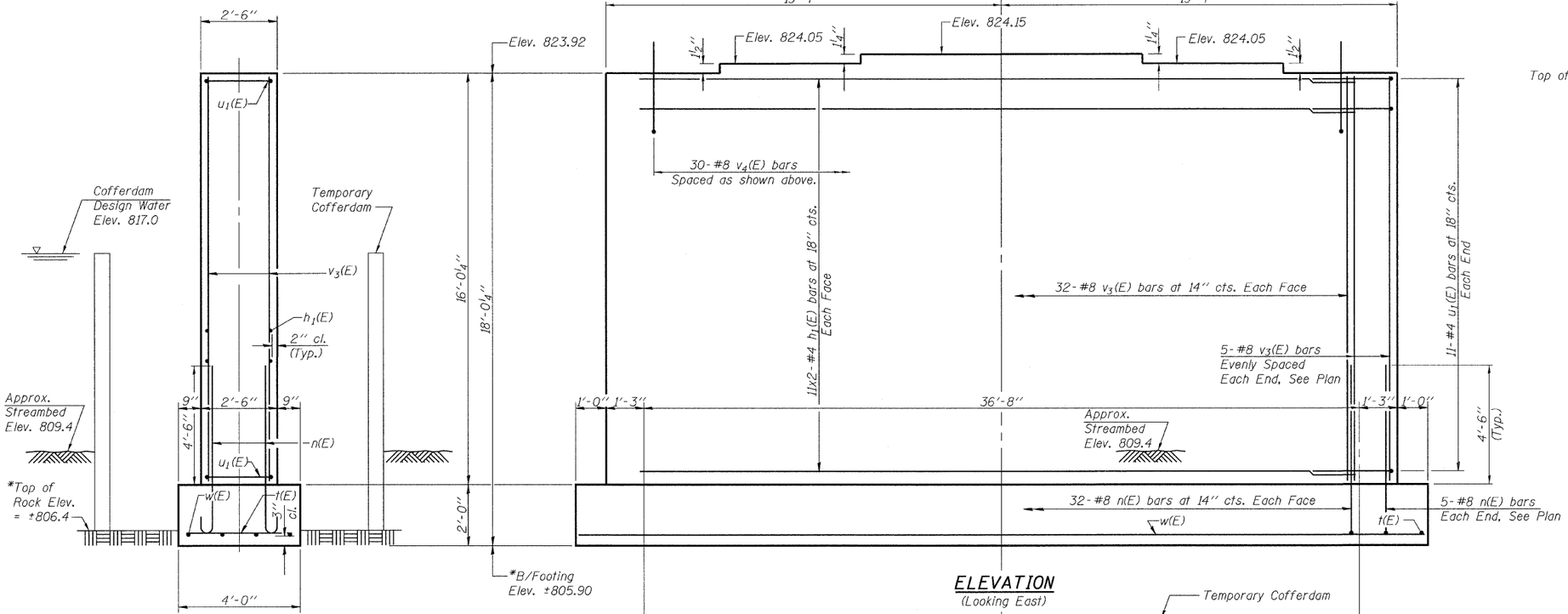
BAR $u_1(E)$



BAR $v_4(E)$

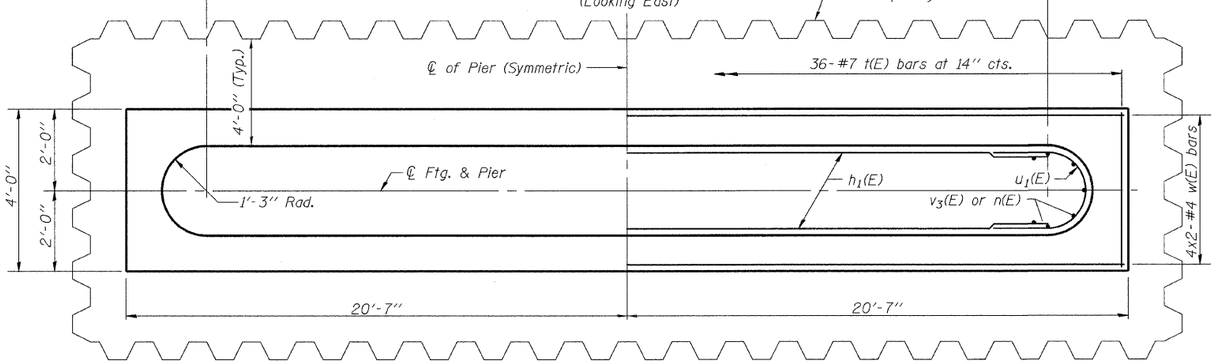


BAR n(E)



END VIEW

ELEVATION
(Looking East)



FOOTING PLAN
Maximum Bearing Pressure = 5.9 ksf

* Indicated bottom of footing elevations are based on available subsurface data, the bottom of footing should be set a minimum of 6'' into sound rock. The Contractor shall delay ordering the Pier reinforcement until the rock elevation can be verified. If the total height of the wall is increased by more than 2 feet from that shown on the plans due to the encountered rock elevation, the wall and footing should be redesigned.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	44	#4	19'-2"	——
n(E)	74	#8	7'-2"	⊃
t(E)	36	#7	3'-6"	——
$u_1(E)$	22	#4	6'-9"	⊃
$v_3(E)$	74	#8	15'-9"	——
$v_4(E)$	30	#8	4'-2"	⊃
w(E)	8	#4	21'-2"	——
Concrete Structures			Cu. Yd.	70
Reinforcement Bars, Epoxy Coated			Pound	5900
Cofferdam Excavation			Cu. Yd.	55
Rock Excavation for Structures			Cu. Yd.	3

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

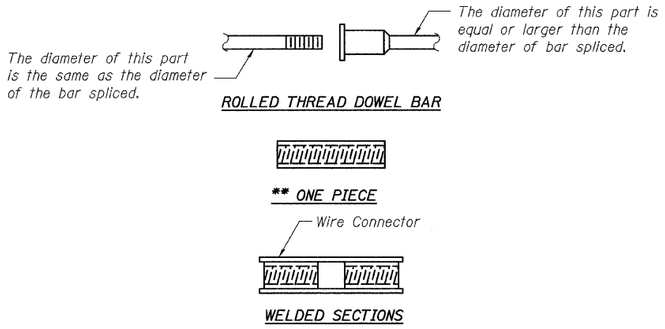
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

3/2/2009 K:\111195800\Structures\Rock Run Bridge\Final Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	132
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

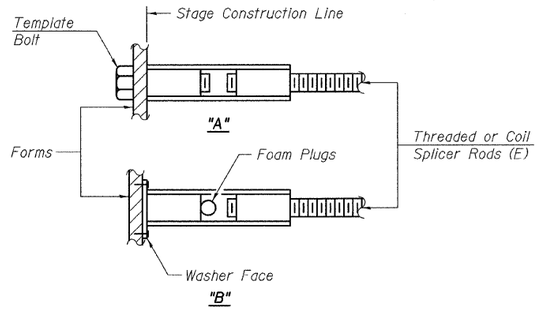
SHEET NO. 16
18 SHEETS

Contract #64970



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

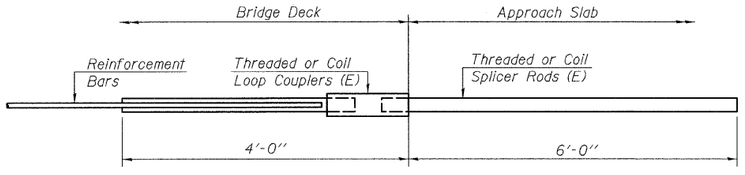
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

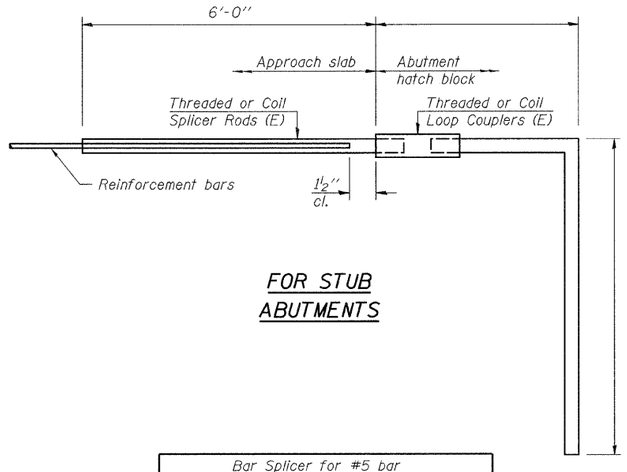
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



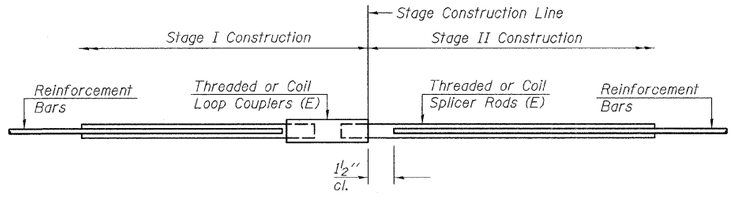
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 76



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



STANDARD

Bar Size	No. Assemblies Required	Location

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPICER ASSEMBLY DETAILS
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

BSD-1 11-1-06

3/2/2009 K:\111958800\Structures\Rock Run Bridge\Final Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	133
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 17
18 SHEETS

Contract #64970

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 10/18/04

ROUTE FAP 505 DESCRIPTION P92-164-00 IL 75, bridge, Rock Run Creek on IL 75 LOGGED BY W. Garza

SECTION 109RS-2, 110RS-1, 111RS-3, YA-15D-RS LOCATION Rock Run Twp. - 22NE, SEC. , TWP. 28N, RNG. 9E

COUNTY Stephenson DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 089-0040
Station 10705+39

BORING NO. B-1o
Station 10704+57
Offset 11.00ft Rt CL
Ground Surface Elev. 100.7 ft

Surface Water Elev. 85.2 ft
Stream Bed Elev. 81.2 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4" Asphalt MEDIUM gray SILTY CLAY LOAM		0.5 P	18
98.20	2		
MEDIUM gray SILTY LOAM	1 3	0.5 B	24
96.70			
-5			
SOFT/MEDIUM gray SILTY LOAM with ORGANICS	1 1	0.5 B	27
94.20	1		
STIFF gray SILTY LOAM	1 1 3	1.2 B	22
91.70			
-10			
STIFF gray SILTY LOAM	2 2 4	1.5 B	20
88.70			
MEDIUM tan/gray weathered LIMESTONE	4 8 15		
86.70			
-15			
VERY DENSE tan weathered LIMESTONE	100/4"		
85.20			
Borehole continued with rock coring.			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 10/18/04

ROUTE FAP 505 DESCRIPTION P92-164-00 IL 75, bridge, Rock Run Creek on IL 75 LOGGED BY W. Garza

SECTION 109RS-2, 110RS-1, 111RS-3, YA-15D-RS LOCATION Rock Run Twp. - 22NE, SEC. , TWP. 28N, RNG. 9E

COUNTY Stephenson CORING METHOD ____

STRUCT. NO. 089-0040
Station 10705+39

CORING BARREL TYPE & SIZE ____

BORING NO. B-1o
Station 10704+57
Offset 11.00ft Rt CL
Ground Surface Elev. 100.7 ft

Core Diameter 1.5 in
Top of Rock Elev. 88.70 ft
Begin Core Elev. 85.20 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: tan-buff, horizontally fractured in 1/4" to 3" segments with minor pitting evident throughout.	1	100	0	1.6	
-20					
80.20					
Dolomite: as above	2	100	0	2	
-25					
75.20					
Dolomite: light gray, otherwise as above. T.S.F.: 74.5 to 74.0	3	100	23	2.4	1063
-30					
70.20					
End of Boring					
-35					

Color pictures of the cores ____
Cores will be stored for examination until ____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS - I
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

K:\11195800\Structures\Rock Run Bridge\Final_Plans.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	111B	STEPHENSON	335	134
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 18
18 SHEETS

Contract #64970

Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 10/19/04

ROUTE FAP 505 DESCRIPTION P92-164-00 Bridge on IL 75, Rock Run Creek LOGGED BY W. Garza
SECTION 109RS-2, 110RS-1, 111RS-3, YA-15D-RS LOCATION Rock Run Twp. - 22 NE, SEC. , TWP. 28N, RNG. 9E
COUNTY Stephenson DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.
Station 10705+39
BORING NO. B-2o
Station 10706+10
Offset 10.00ft Lt CL
Ground Surface Elev. 98.4 ft

Surface Water Elev. 85.2 ft
Stream Bed Elev. 81.2 ft
Groundwater Elev.:
First Encounter 80.9 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
0				12" Asphalt
		0.8 P	17	MEDIUM brown SILTY CLAY LOAM
95.90				
	2			MEDIUM brown SILTY CLAY LOAM
	2 3	0.8 B	21	
94.40				
-5				
	1 1 2	0.5 P	25	MEDIUM/SOFT brown/gray SILTY LOAM
91.90				
	2 4 4	0.8 P	15	MEDIUM gray SANDY LOAM
89.40				
-10				
	4 3 3	0.6 B	29	MEDIUM dark gray SILTY LOAM with fine SAND lens
86.90				
	1 2 3	0.9 B	29	MEDIUM dark gray SILTY CLAY LOAM
83.90				
-15				
	1 3 4			LOOSE gray dirty SAND & GRAVEL
81.90				
-20				
	8 5 8			MEDIUM gray tan dirty weathered LIMESTONE
79.40				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	8 7 9			MEDIUM gray dirty SAND & GRAVEL
76.40				
	46			VERY DENSE tan weathered LIMESTONE
	100/5"			
74.40				
-25				Borehole continued with rock coring.
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
IDOT

ROCK CORE LOG

Page 1 of 1

Date 10/19/04

ROUTE FAP 505 DESCRIPTION P92-164-00 Bridge on IL 75, Rock Run Creek LOGGED BY W. Garza
SECTION 109RS-2, 110RS-1, 111RS-3, YA-15D-RS LOCATION Rock Run Twp. - 22 NE, SEC. , TWP. 28N, RNG. 9E
COUNTY Stephenson CORING METHOD

STRUCT. NO.
Station 10705+39
BORING NO. B-2o
Station 10706+10
Offset 10.00ft Lt CL
Ground Surface Elev. 98.4 ft

CORING BARREL TYPE & SIZE
Core Diameter 1.5 in
Top of Rock Elev. 76.40 ft
Begin Core Elev. 74.40 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)	
-25	1	95	0	2	0	Dolomite: tan-buff, horizontally fractured in 1/4" to 3" segments with minor pitting evident throughout.
69.40						
-30	2	100	15	2.4	1109	Dolomite: as above
64.40						
-35	3	100	0	2.4	0	Dolomite: light gray, otherwise as above
59.40						
-40						End of Boring

Color pictures of the cores _____
Cores will be stored for examination until_____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS - II
IL-75 OVER ROCK RUN CREEK
FAP RTE 505 - SECTION 111B
STEPHENSON COUNTY
STATION 10705+38.61
STRUCTURE NO. 089-0084

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

K:\1115950800\Structures\Rock Run Bridge\Final_Plans.dgn
3/2/2009

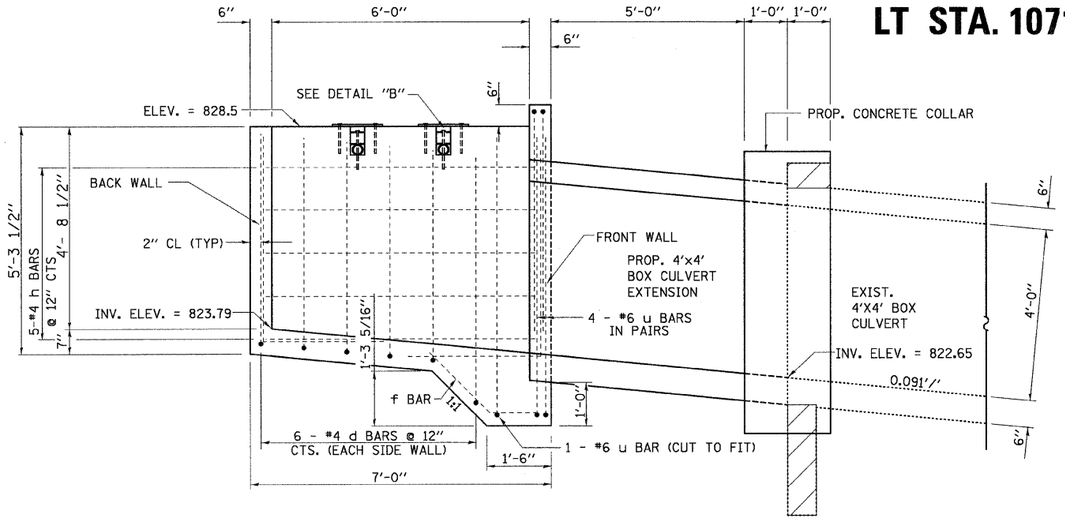
CONTRACT NO. 64970

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	STEPHENSON	335	135
STA. _____		TO STA._____		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

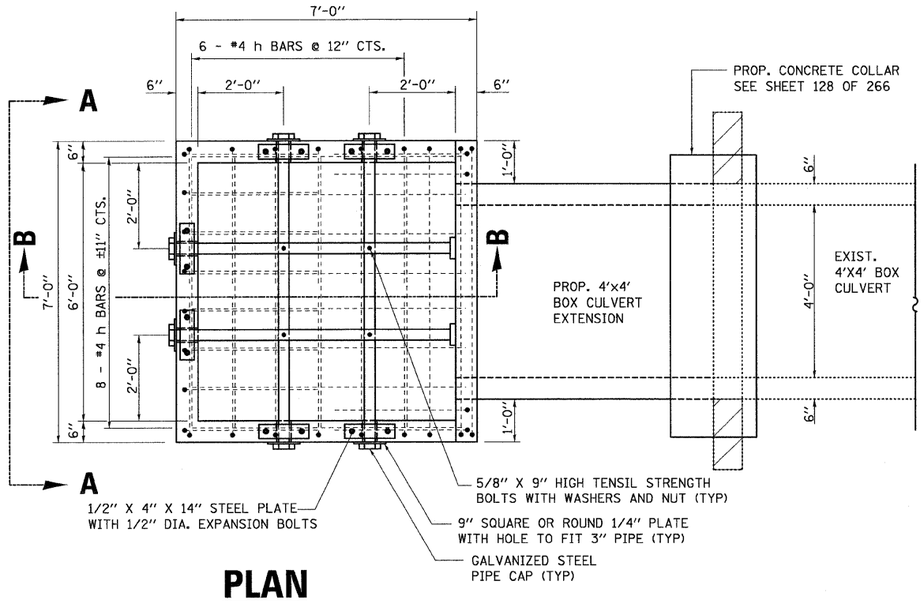
*FAP 505 (IL 75)
**111RS-4, 111BR-1, Yo-15d-RS-1,& (W-15d)T-1

DROP BOX NO. 2

LT STA. 10710+42

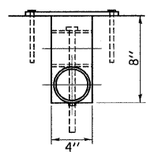


SECTION B–B

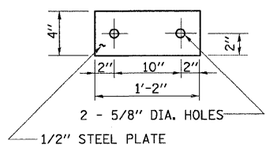


PLAN

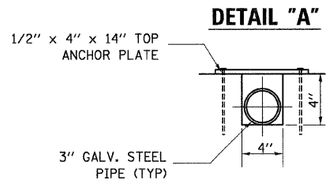
DETAIL "B"



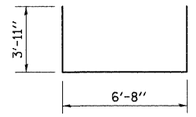
TOP ANCHOR PLATE



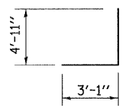
DETAIL "A"



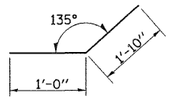
BAR u



BAR d



BAR f



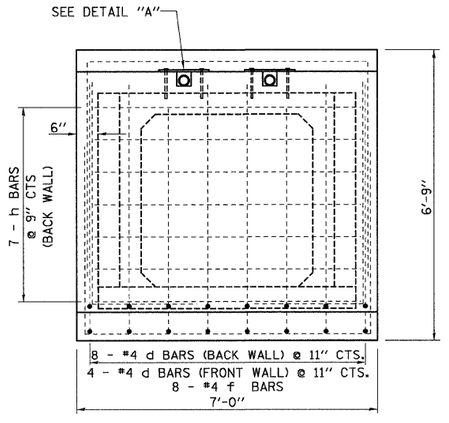
BILL OF MATERIALS
(FOR REINFORCEMENT)

BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	24	8'-0"	128.26
f	4	8	2'-10"	15.14
h	4	31	6'-8"	138.05
u	6	5	14'-6"	108.90

DESCRIPTION	UNIT	QTY
CONCRETE STRUCTURES	CU YD	3.8
REINFORCEMENT BARS	LB	400

BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	2 @ 7'-0"
	FOOT	2 @ 7'-0"
3" GALV PIPE CAPS	EACH	8
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	6
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	6
5/8" x 9" GALV. STEEL BOLTS	EACH	4
EXPANSION BOLTS 1/2"Ø	EACH	12



VIEW A–A

GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPEICAL PROVISION.

SEE PLAN AND PROFILE SHEET 57 OF 335 FOR MORE INFORMATION.

SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSED STONE.

THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE. BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 3/2/2009
FILE NAME = #FILE#
PLOT SCALE = 1:50
USER NAME = #USER#

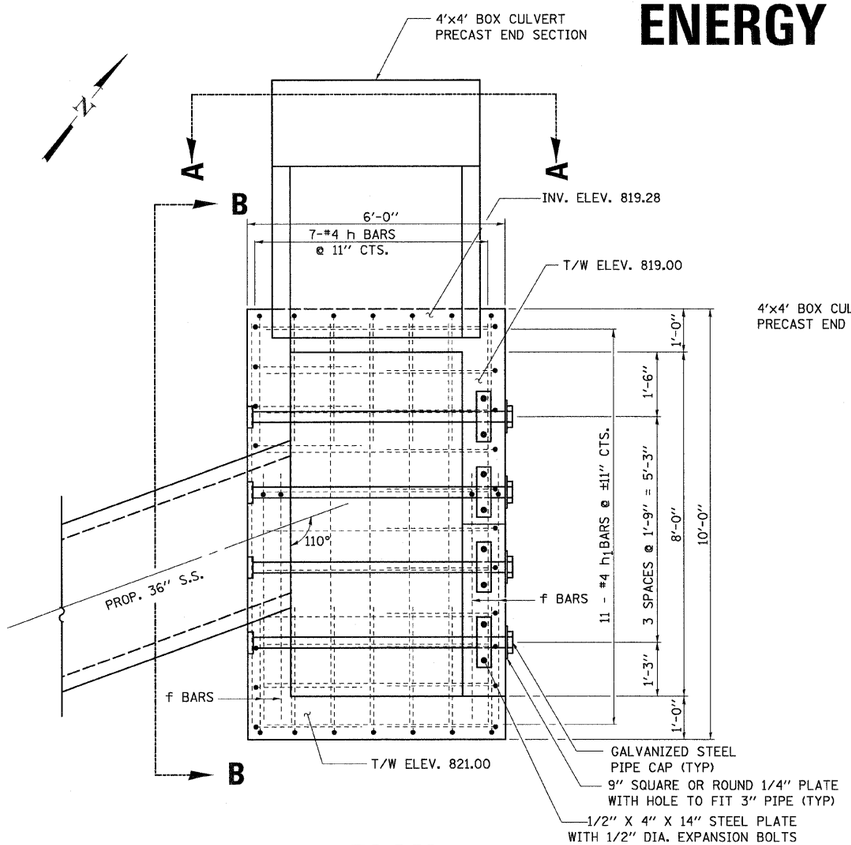
CONTRACT NO. 64970

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	STEPHENSON	335	136
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

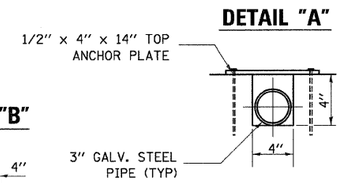
*FAP 505 (IL 75)
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

ENERGY DISSIPATION STRUCTURE

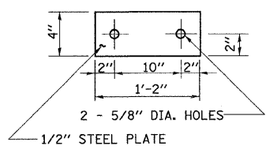
RT STA. 10710 + 42



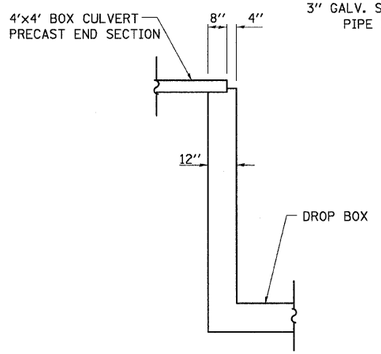
DETAIL "A"



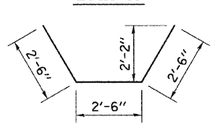
TOP ANCHOR PLATE



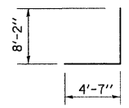
DETAIL "B"



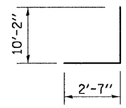
BAR x



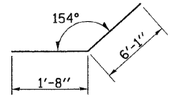
BAR d_1



BAR d



BAR f



BILL OF MATERIALS
(FOR REINFORCEMENT)

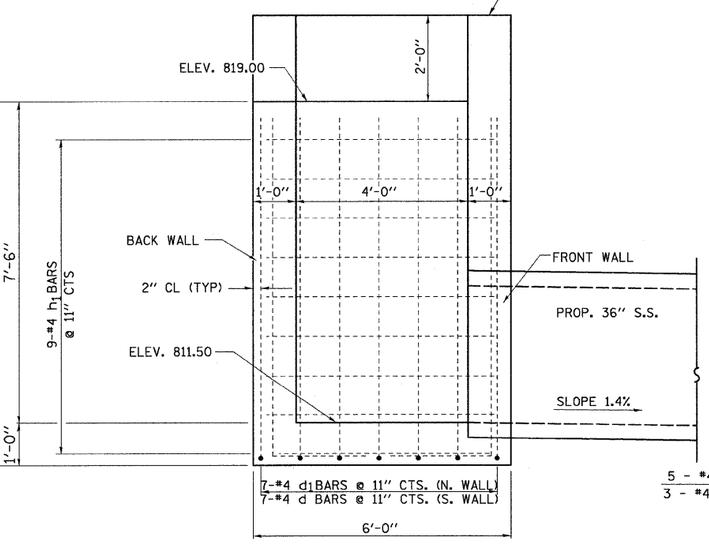
BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	16	12'-9"	136.27
d_1	4	15	12'-9"	127.76
f	4	8	7'-9"	41.42
h	4	18	9'-8"	116.23
h_1	4	29	5'-8"	109.77

DESCRIPTION	UNIT	QTY
CONCRETE STRUCTURES	CU YD	11.8
REINFORCEMENT BARS	LB	540

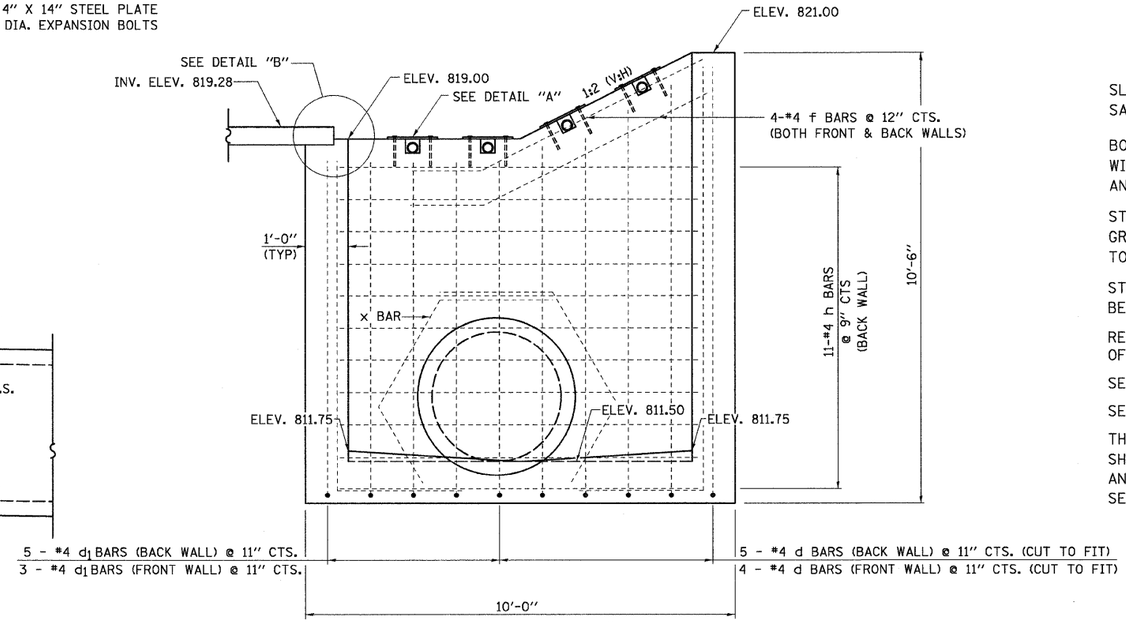
BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	4 @ 6'-0"
3" GALV PIPE CAPS	EACH	8
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	4
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	4
EXPANSION BOLTS 1/2"Ø	EACH	8

PLAN



VIEW A–A



SECTION B–B

GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISION.

SEE PLAN AND PROFILE SHEET 59 OF 335 FOR MORE INFORMATION.

SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSHED STONE.

THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE, CAPS, BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 3/2/2009
FILE NAME = #FILE#
PLOT SCALE = 1.50
USER NAME = #USER#

CONTRACT NO. 64970

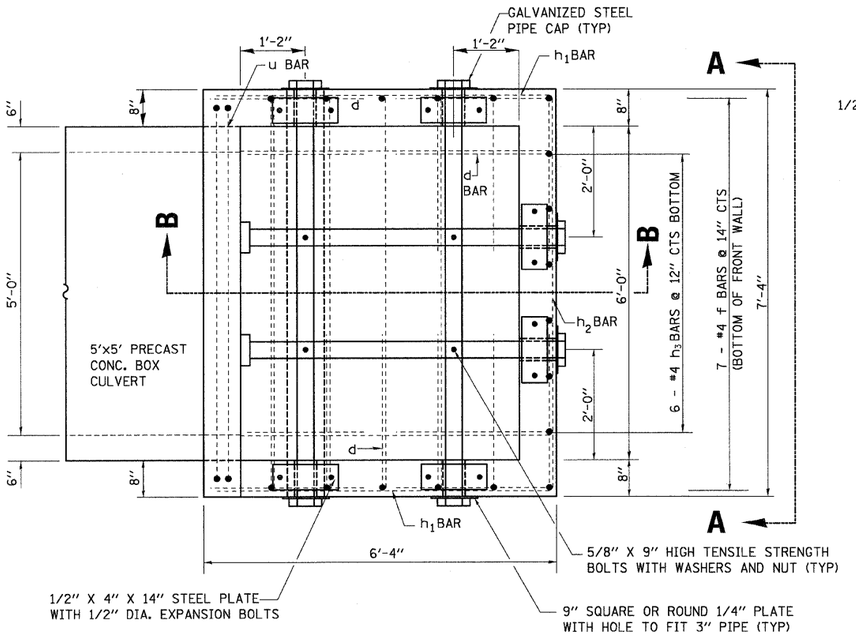
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WINNEBAGO	335	137
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

*FAP 505 (IL 75)
**111RS-4, 111BR-1, Yc-15d-RS-1,& (W-15d)T-1

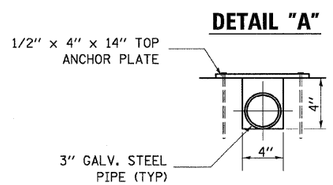
DROP BOX NO. 6

RT STA. 10854 + 01

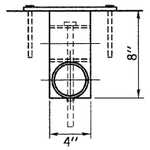
PLAN



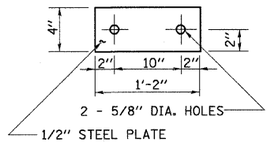
DETAIL "A"



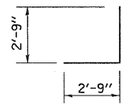
DETAIL "B"



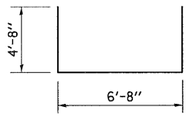
TOP ANCHOR PLATE



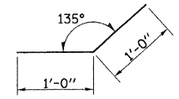
BAR d



BAR u



BAR f



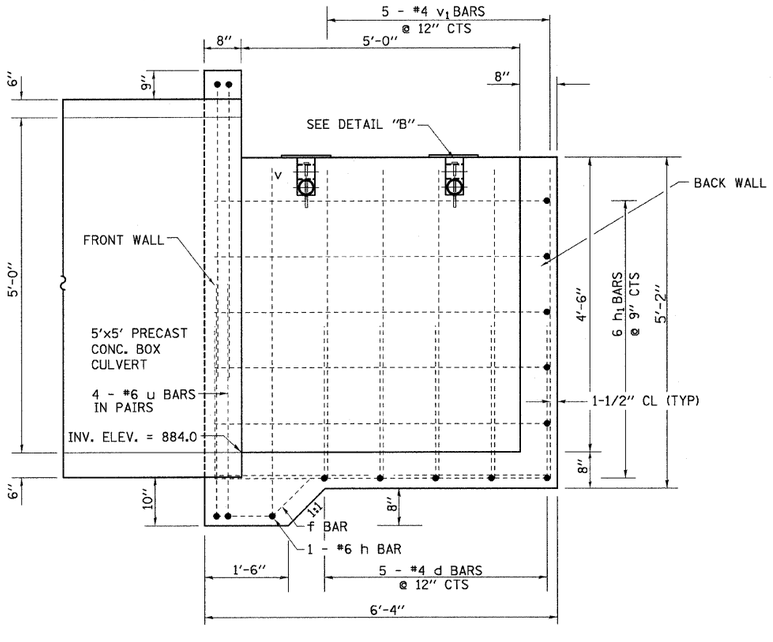
BILL OF MATERIALS
(FOR REINFORCEMENT)

BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	19	5'-6"	69.81
f	4	7	2'-0"	9.35
h	6	1	7'-0"	10.52
h_1	4	12	6'-0"	48.10
h_2	4	6	7'-0"	28.06
h_3	4	6	5'-4"	21.37
u	6	4	16'-0"	96.19
v	4	2	5'-6"	7.35
v_1	4	19	4'-10"	61.34
DESCRIPTION			UNIT	QTY
CONCRETE STRUCTURES			CU YD	3.7
REINFORCEMENT BARS			LB	350

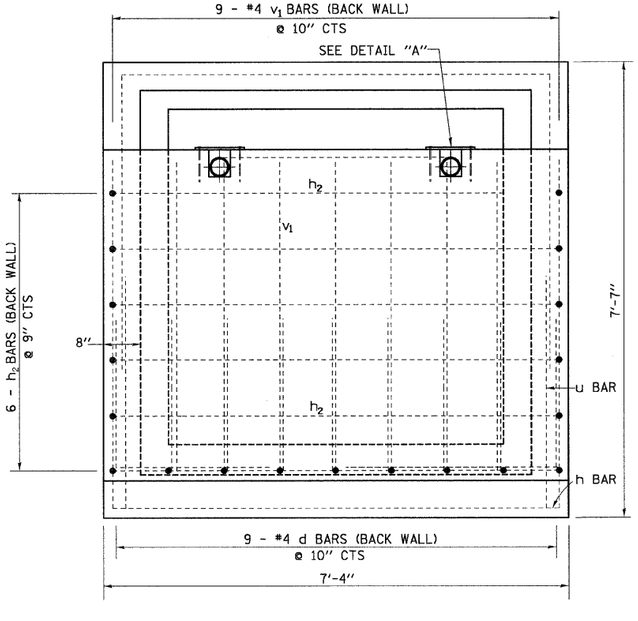
BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	2 @ 7'-10"
	FOOT	2 @ 5'-8"
3" GALV PIPE CAPS	EACH	8
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	6
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	6
5/8" x 9" GALV. STEEL BOLTS	EACH	4
EXPANSION BOLTS 1/2"Ø	EACH	12

SECTION B–B



VIEW A–A



GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISION.

SEE PLAN AND PROFILE SHEET 66 OF 335 FOR MORE INFORMATION.

SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSHED STONE.

THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE, CAPS, BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 3/2/2009
FILE NAME = #FILE1#
PLOT SCALE = 1.50
USER NAME = #USER#

CONTRACT NO. 64970

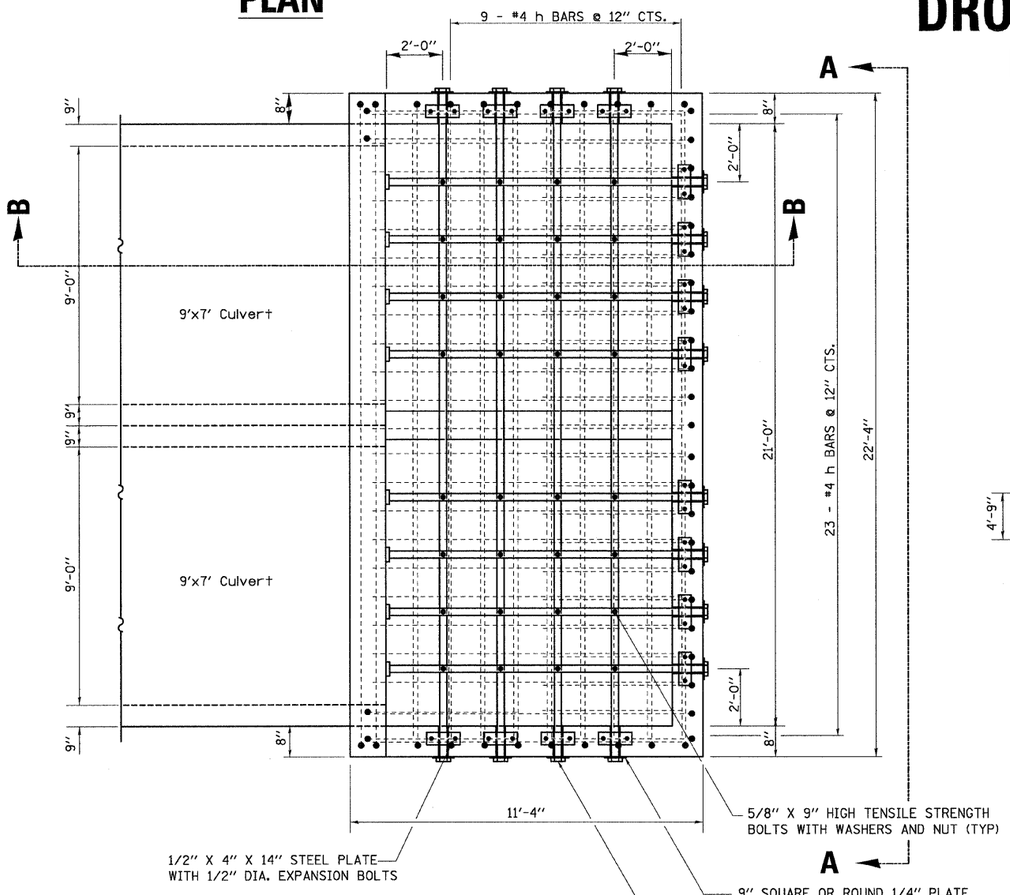
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WINNEBAGO	335	138
STA. _____	TO STA._____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

*FAP 505 (IL 75)
**111RS-4, 111BR-1, Yd-15d-RS-1,& (W-15d)T-1

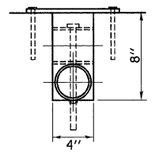
DROP BOX NO. 8

RT STA. 10968 + 79

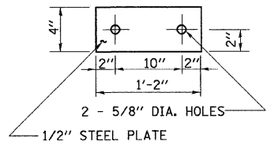
PLAN



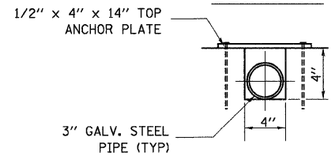
DETAIL "B"



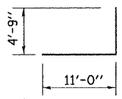
TOP ANCHOR PLATE



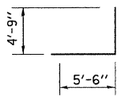
DETAIL "A"



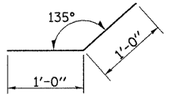
BAR d1



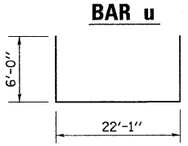
BAR d



BAR f



BAR u



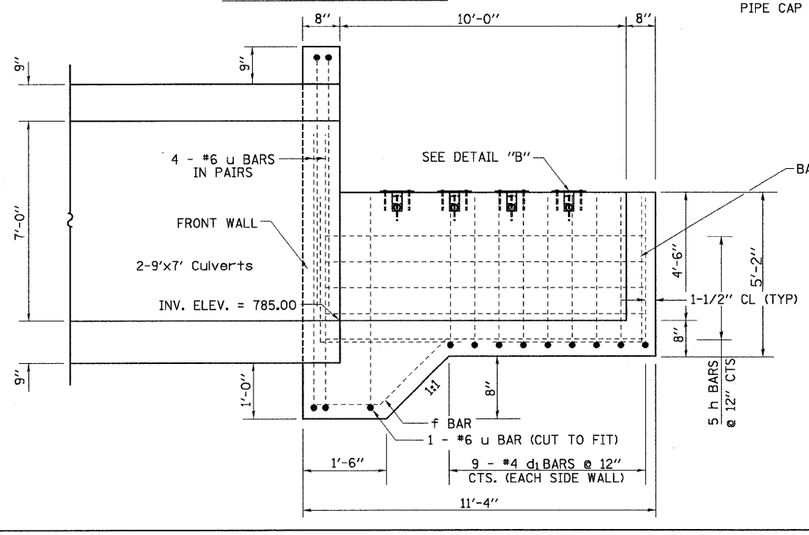
BILL OF MATERIALS
(FOR REINFORCEMENT)

BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	27	10'-3"	184.87
d_1	4	18	15'-9"	189.38
f	4	23	2'-0"	30.73
h	6	37	11'-1"	615.95
h_1	6	5	21'-1"	158.34
u	6	5	34'-1"	255.97
DESCRIPTION			UNIT	QTY
CONCRETE STRUCTURES			CU YD	15.3
REINFORCEMENT BARS			LB	1440

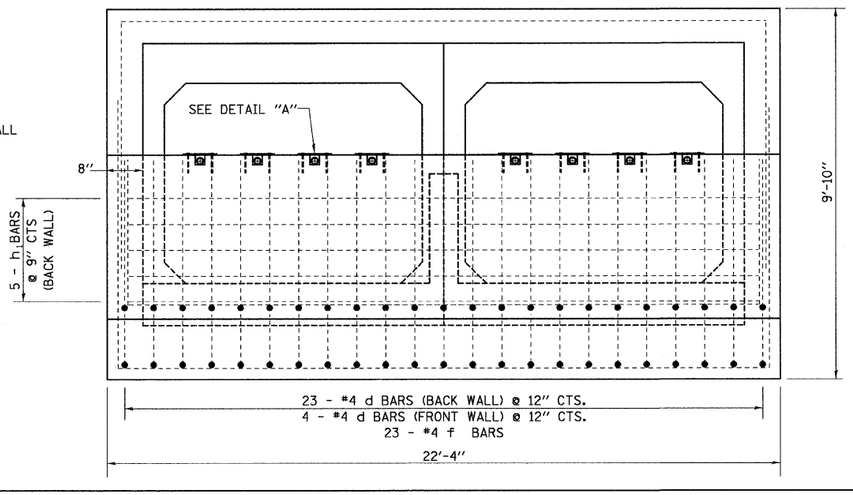
BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	8 @ 22'-4"
	FOOT	4 @ 10'-10"
3" GALV PIPE CAPS	EACH	24
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	16
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	16
5/8" x 9" GALV. STEEL BOLTS	EACH	32
EXPANSION BOLTS 1/2"Ø	EACH	32

SECTION B–B



VIEW A–A



GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISION.

SEE PLAN AND PROFILE SHEET 72 OF 335 FOR MORE INFORMATION.

SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSHED STONE.

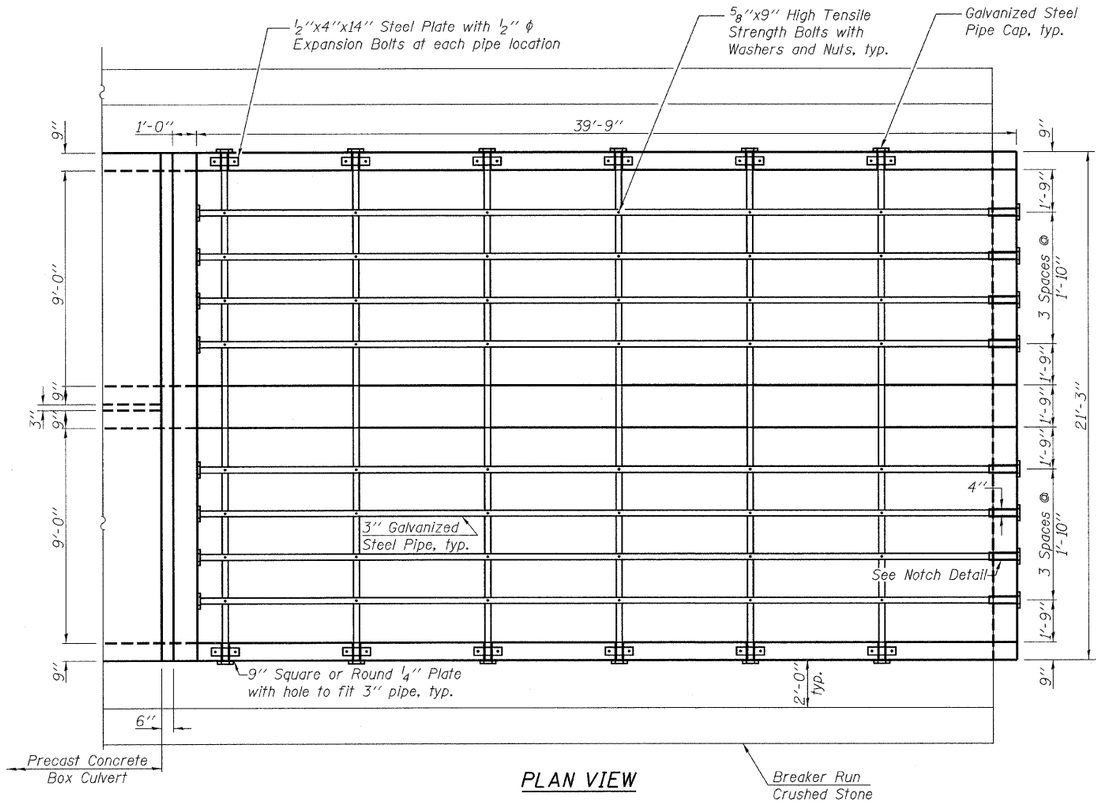
THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE, CAPS, BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 3/2/2009
FILE NAME = #FILEL#
PLOT SCALE = 1.159
USER NAME = #USER#

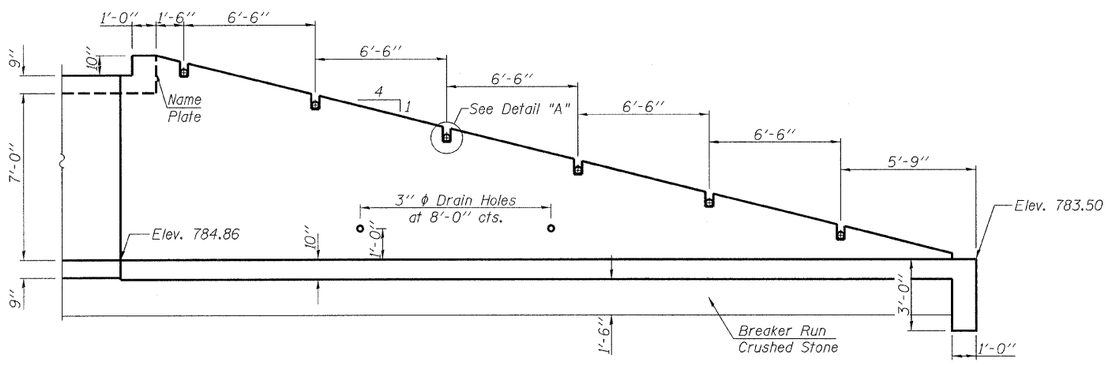
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	139
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
3 SHEETS

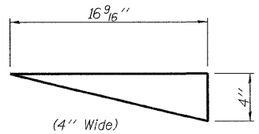
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970



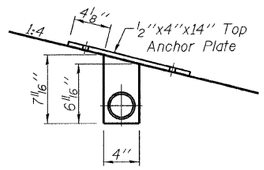
PLAN VIEW



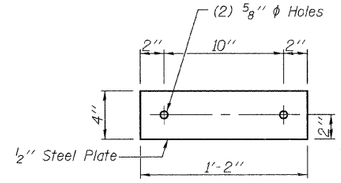
PROFILE VIEW



NOTCH DETAIL



DETAIL "A"

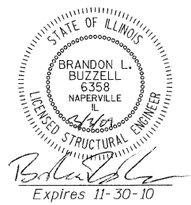


TOP ANCHOR PLATE

STATION 10968+79
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC 109RS-2, Ya-15d-RS-1
LOADING HS20
STR. NO. 101-2048

NAME PLATE

See Std. 515001
Located on the NE Headwall.
Locate to miss pipe grating.



GENERAL NOTES

Reinforcement bars shall conform to the requirements of A.S.T.M. A 706 Gr 60. See Special Provisions.

The distance from the top of headwall or wingwall to the adjacent ground surface shall be 3 inches (nominal), but in no case greater than 4 inches.

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for Concrete Structures.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel Pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.

See Plan and Profile Sheet 72 of 335 for more information.

See Sheet 159 of 335 for details of Breaker Run Crushed Stone.

If the Contractor elects to use precast construction, the Precaster shall provide complete details in the shop drawings for review by the Engineer.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 8
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 10968+79
STRUCTURE NO. 101-2048

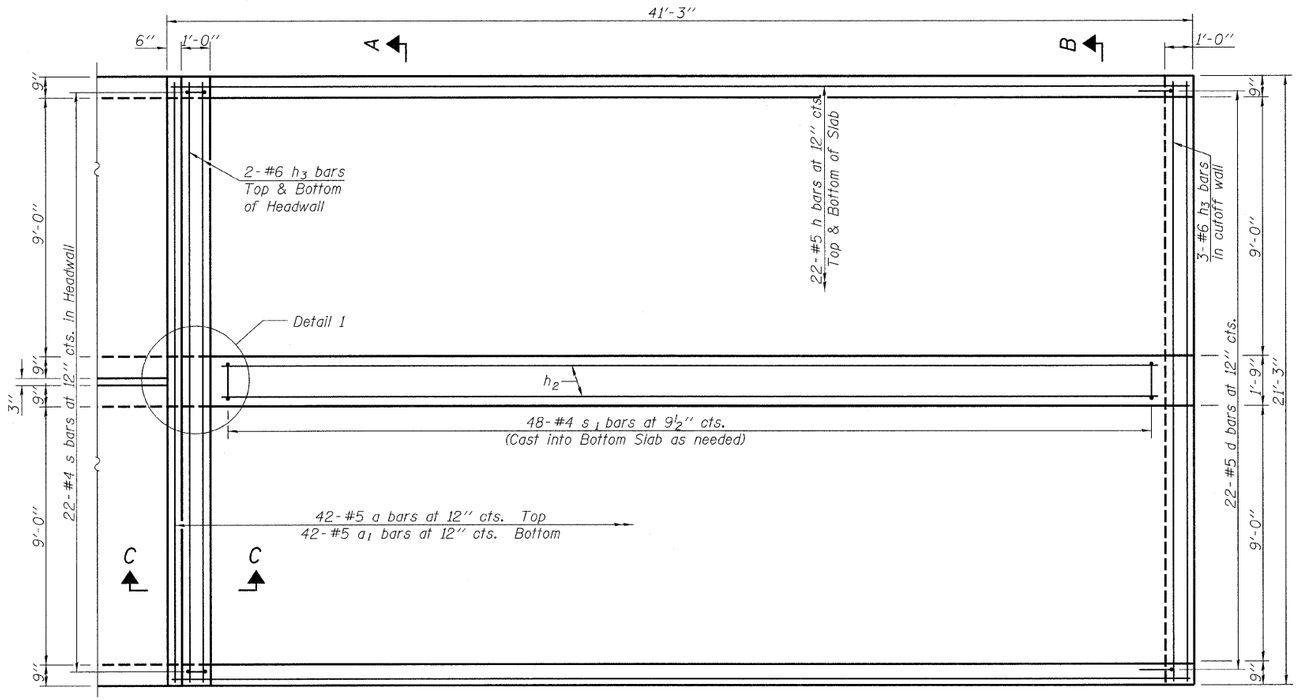
DATE: 3/03/2009 DRAWN BY JMT CHECKED BY WJV

3/2/2009 K:\111956802\IL 75_3P East\Structures\Culvert 08 Extension.dgn

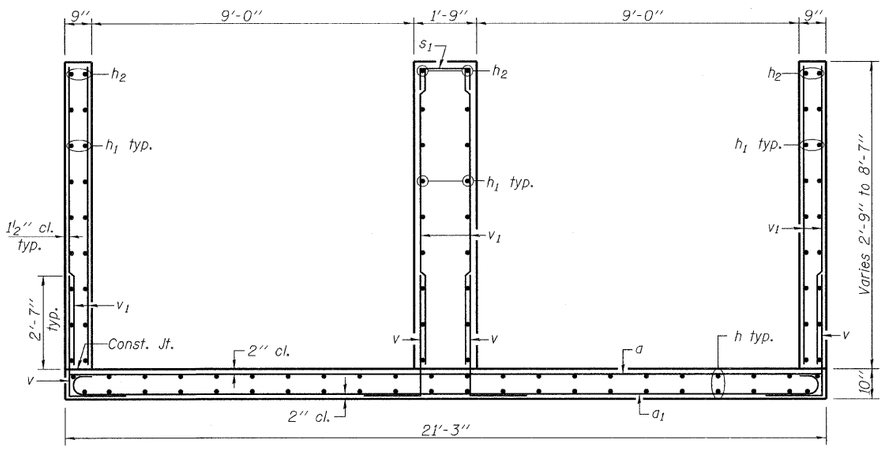
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	140
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
3 SHEETS

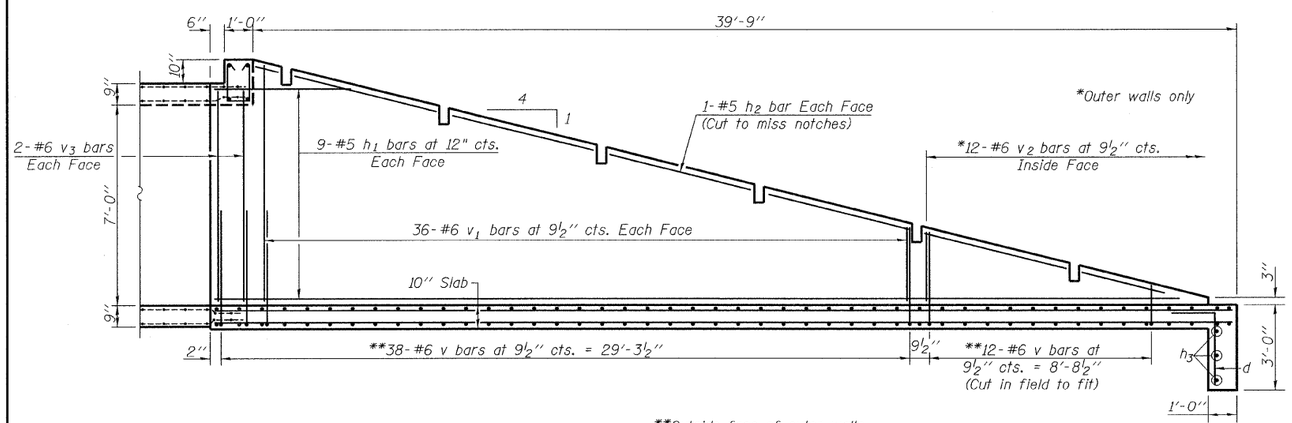
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970



PLAN

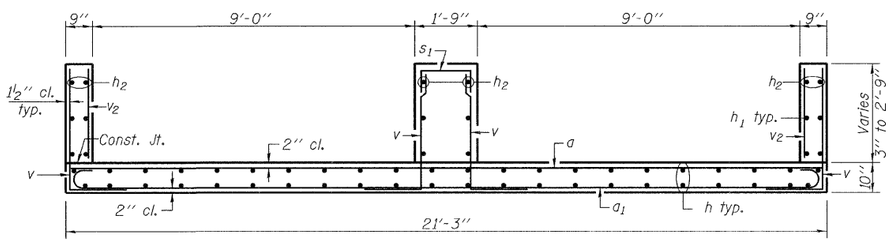


SECTION A-A



**Outside face of outer walls, both faces of center wall

LONGITUDINAL SECTION



SECTION B-B

NOTES

See Sheet 1 of 3 for General Notes.

See Sheet 3 of 3 for Section C-C and Detail 1.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

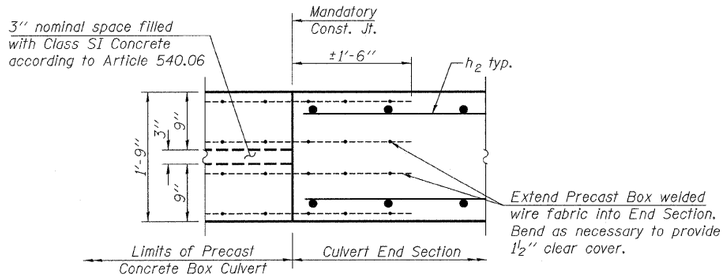
ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 8
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 10968+79
STRUCTURE NO. 101-2048

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

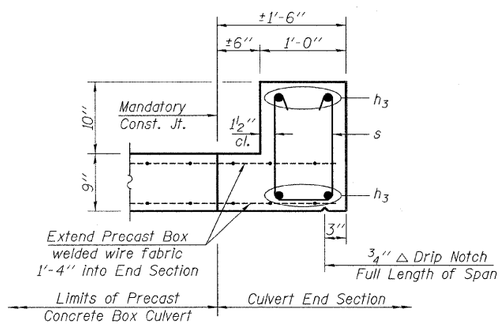
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	141
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 3
3 SHEETS

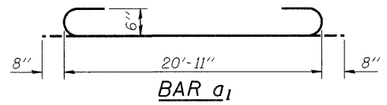
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970



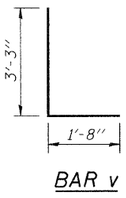
DETAIL 1



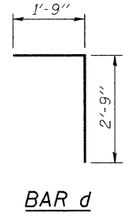
SECTION C-C



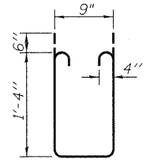
BAR a_1



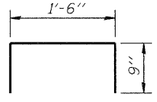
BAR v



BAR d



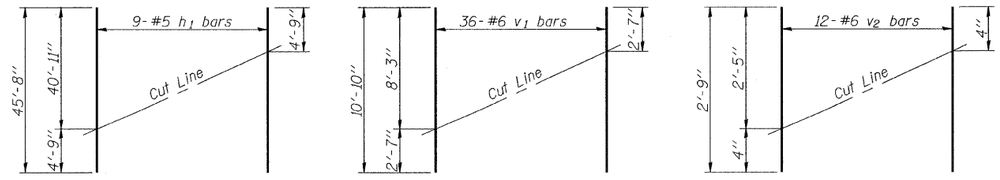
BAR s



BAR s_1

END SECTION BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	42	#5	20'-11"	——
a_1	42	#5	22'-3"	⊂⊃
d	22	#5	4'-6"	⌝
h	44	#5	40'-11"	——
h_1	27	#5	45'-8"	——
h_2	6	#5	39'-4"	——
h_3	7	#6	20'-11"	——
s	22	#4	4'-5"	⊔
s_1	48	#4	3'-0"	⊓
v	200	#6	4'-11"	L
v_1	108	#6	10'-10"	——
v_2	12	#6	2'-9"	——
v_3	12	#6	7'-5"	——
Reinforcement Bars			Pound	9,250
Concrete Structures			Cu. Yd.	52.2



FIELD CUTTING DIAGRAMS

Order bars full length. Cut as shown and use remainder of bars in opposite face (h_1,v_1) or opposite wingwall (v_2).

NOTE

See Sheet 1 of 3 for General Notes.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 8
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 10968+79
STRUCTURE NO. 101-2048

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY WJV

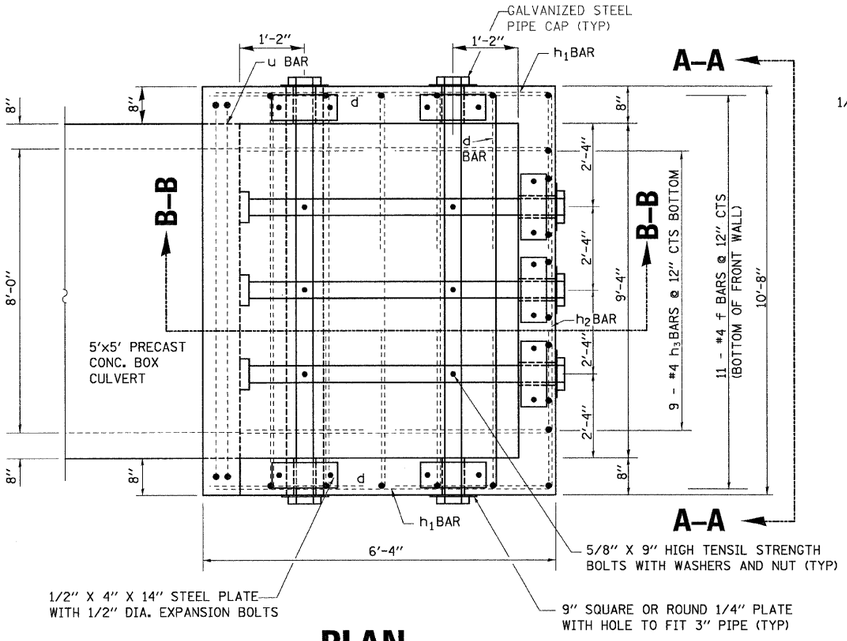
CONTRACT NO. 64970

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WINNEBAGO	335	142
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

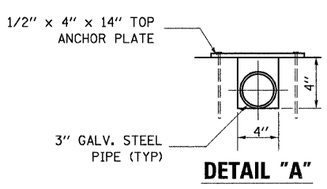
*FAP 505 (IL 75)
**111RS-4, 111BR-1, Yd-15d-RS-1,& (W-15d)T-1

DROP BOX NO. 10

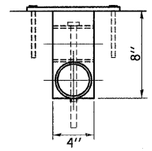
RT STA. 10998 + 25



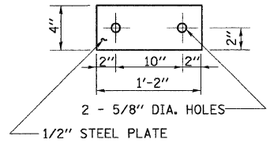
PLAN



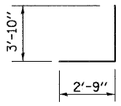
DETAIL "A"



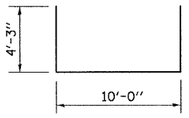
DETAIL "B"



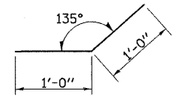
TOP ANCHOR PLATE



BAR d



BAR u



BAR f

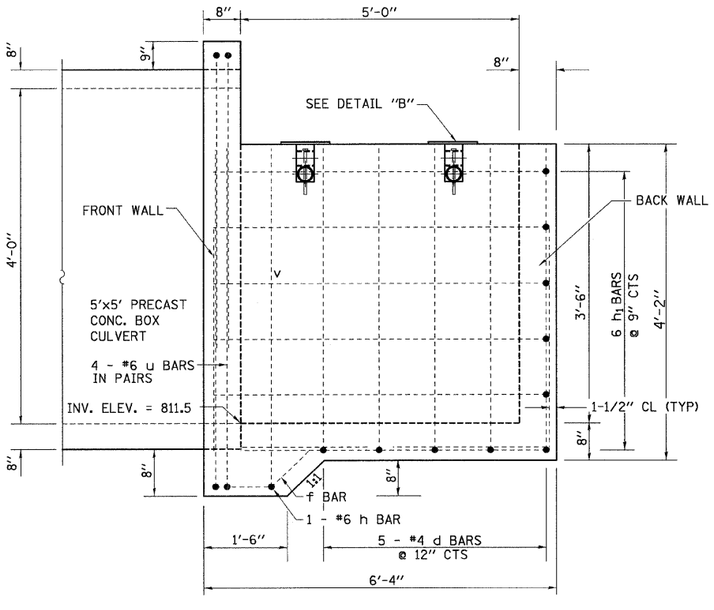
BILL OF MATERIALS
(FOR REINFORCEMENT)

BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	22	6'-7"	96.57
f	4	11	2'-0"	14.70
h	6	1	10'-4"	15.53
h_1	4	12	6'-0"	48.10
h_2	4	6	10'-4"	41.42
h_3	4	9	5'-4"	32.06
u	6	4	18'-6"	111.22
v	4	2	4'-6"	6.01

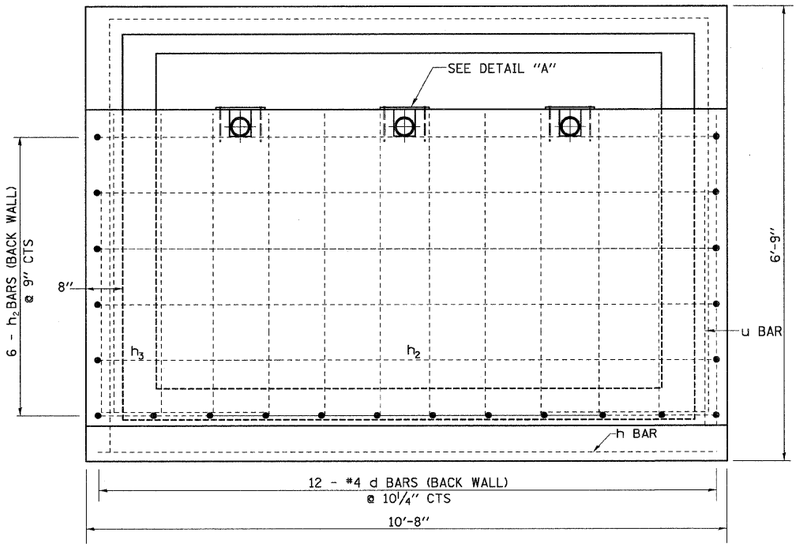
DESCRIPTION	UNIT	QTY
CONCRETE STRUCTURE	CU YD	4.2
REINFORCEMENT BARS	LB	360

BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	2 @ 11'-2"
	FOOT	3 @ 5'-8"
3" GALV PIPE CAPS	EACH	10
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	7
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	7
5/8" x 9" GALV. STEEL BOLTS	EACH	6
EXPANSION BOLTS 1/2"Ø	EACH	14



SECTION B–B



VIEW A–A

GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISION.

SEE PLAN AND PROFILE SHEET 74 OF 335 FOR MORE INFORMATION.

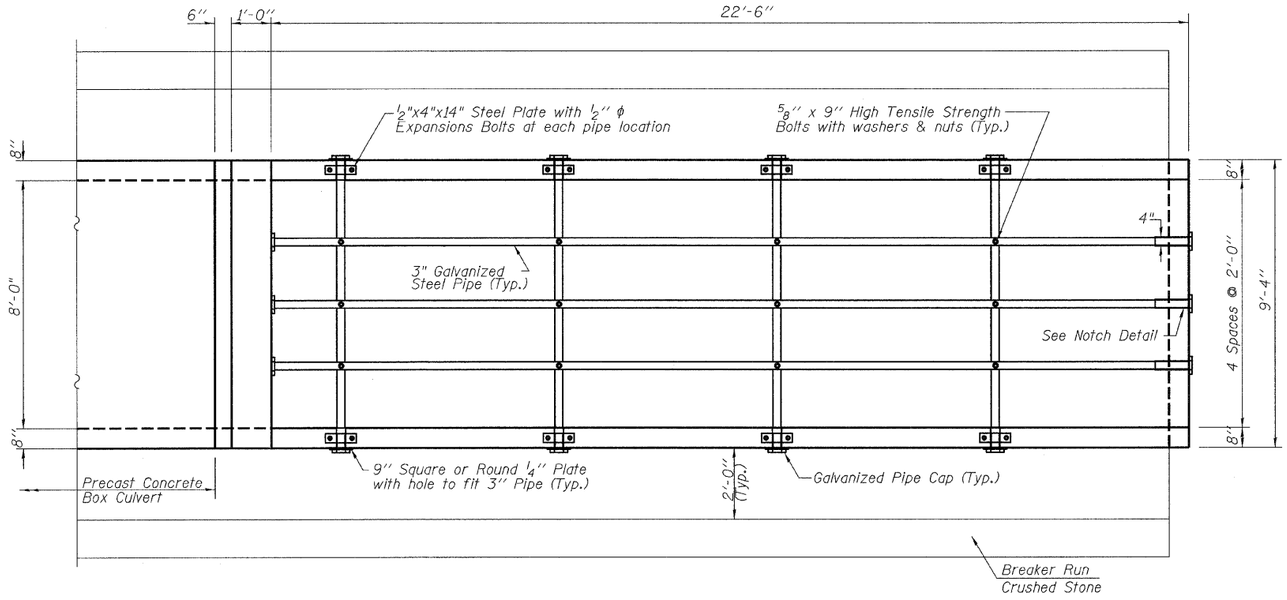
SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSHED STONE.

THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE, CAPS, BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

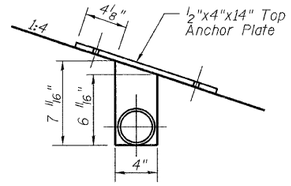
PLOT DATE = 3/2/2009
FILE NAME = c:\FILE\#
PLOT SCALE = 1.50
USER NAME = #USER#

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	143
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

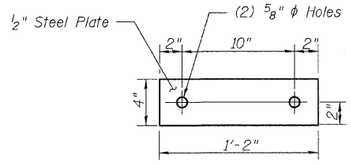
SHEET NO. 1
2 SHEETS



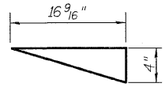
PLAN VIEW



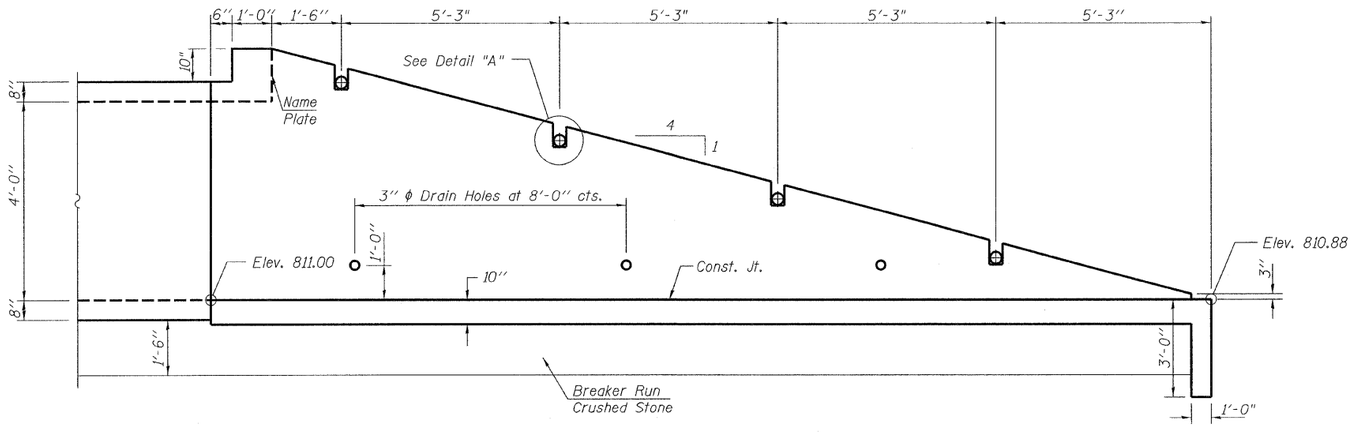
DETAIL "A"



TOP ANCHOR PLATE



NOTCH DETAIL
(4" Wide)



PROFILE VIEW

STATION 10998+25
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC 109RS-2, Ya-15d-RS-1
LOADING HS20
STR. NO. 101-1319

NAME PLATE
See Std. 515001
Located on the NE Headwall.
Locate to miss pipe grating.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of A.S.T.M. A 706 Gr 60 (IL Modified). See Special Provisions.

The distance from the top of headwall or wingwall to the adjacent ground surface shall be 3 inches (nominal), but in no case greater than 4 inches.

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for Concrete Structures.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel Pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B. Schedule 40. and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.

See Plan and Profile Sheet 74 of 335 for more information.

See Sheet 159 of 335 for details of Breaker Run Crushed Stone.

If the Contractor elects to use precast construction, the Precaster shall provide complete details in the shop drawings for review by the Engineer.

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE
IL
LICENSED STRUCTURAL ENGINEER
Expires 11-30-08

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

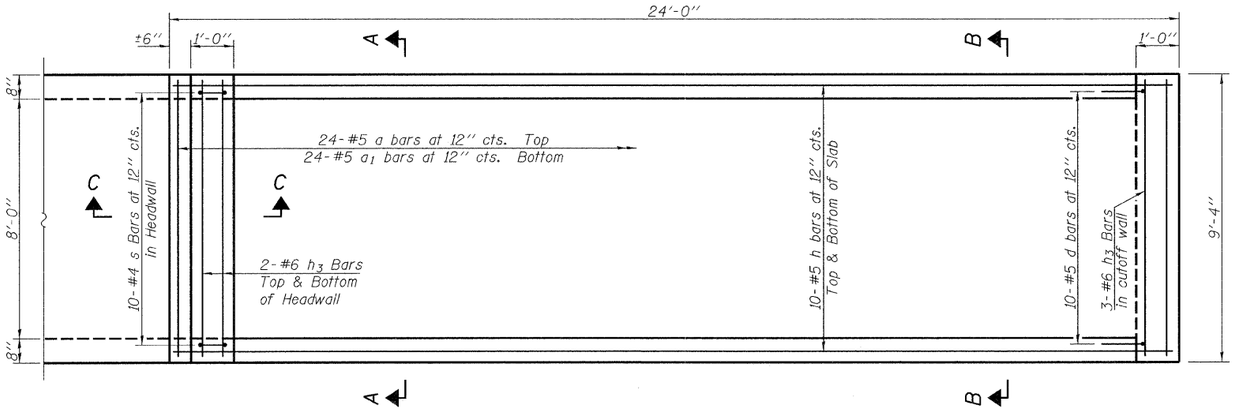
GRATED CULVERT EXTENSION NO. 10
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
•111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 10998+25

DATE: 3/03/2009
DRAWN BY BLB
CHECKED BY WJV

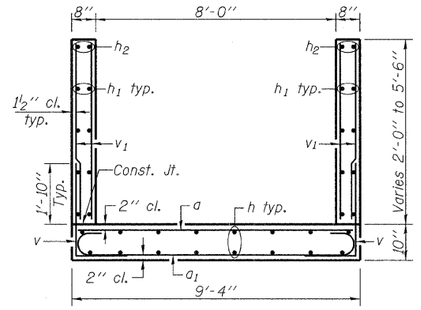
3/2/2009 K:\1195808\IL 75_3P East\Structures\Culvert 10 Extension.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	144
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

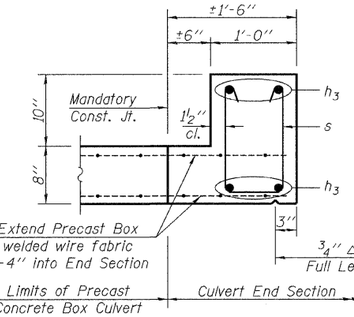
SHEET NO. 2
2 SHEETS



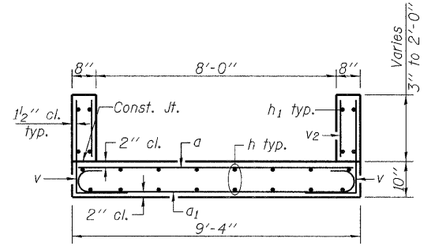
PLAN



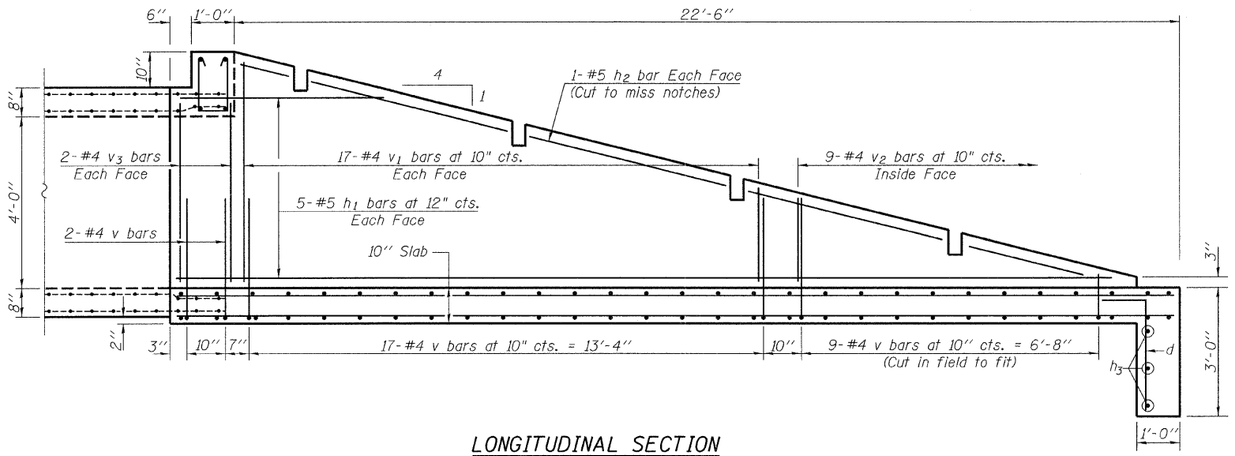
SECTION A-A



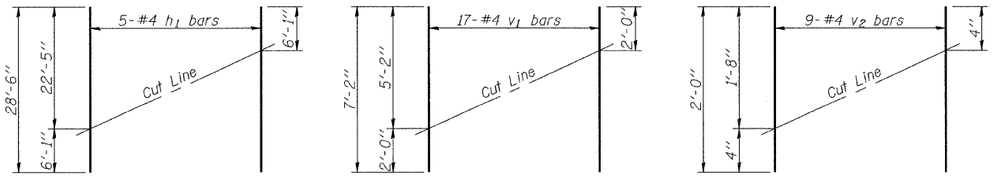
SECTION C-C



SECTION B-B

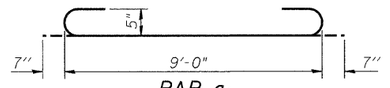


LONGITUDINAL SECTION

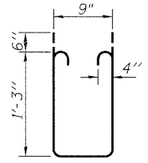


FIELD CUTTING DIAGRAMS

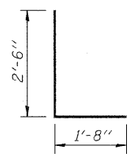
Order bars full length. Cut as shown and use remainder of bars in opposite face (v_1, h_1) or opposite wingwall (v_2).



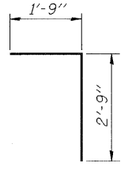
BAR a_1



BAR s



BAR v



BAR d

END SECTION
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	24	#5	9'-0"	——
a_1	24	#5	10'-2"	⊂ ⊃
d	10	#5	4'-6"	⌐
h	20	#5	23'-8"	——
h_1	10	#5	28'-6"	——
h_2	4	#5	21'-9"	——
h_3	7	#6	9'-0"	——
s	10	#5	4'-3"	□
v	56	#4	4'-2"	L
v_1	34	#4	7'-2"	——
v_2	9	#4	2'-0"	——
v_3	8	#4	4'-3"	——
Reinforcement Bars			Pound	1,910
Concrete Structures			Cu. Yd.	11.6

NOTE

See Sheet 1 of 2 for General Notes.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

GRATED CULVERT EXTENSION NO. 10
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
•111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 10998+25

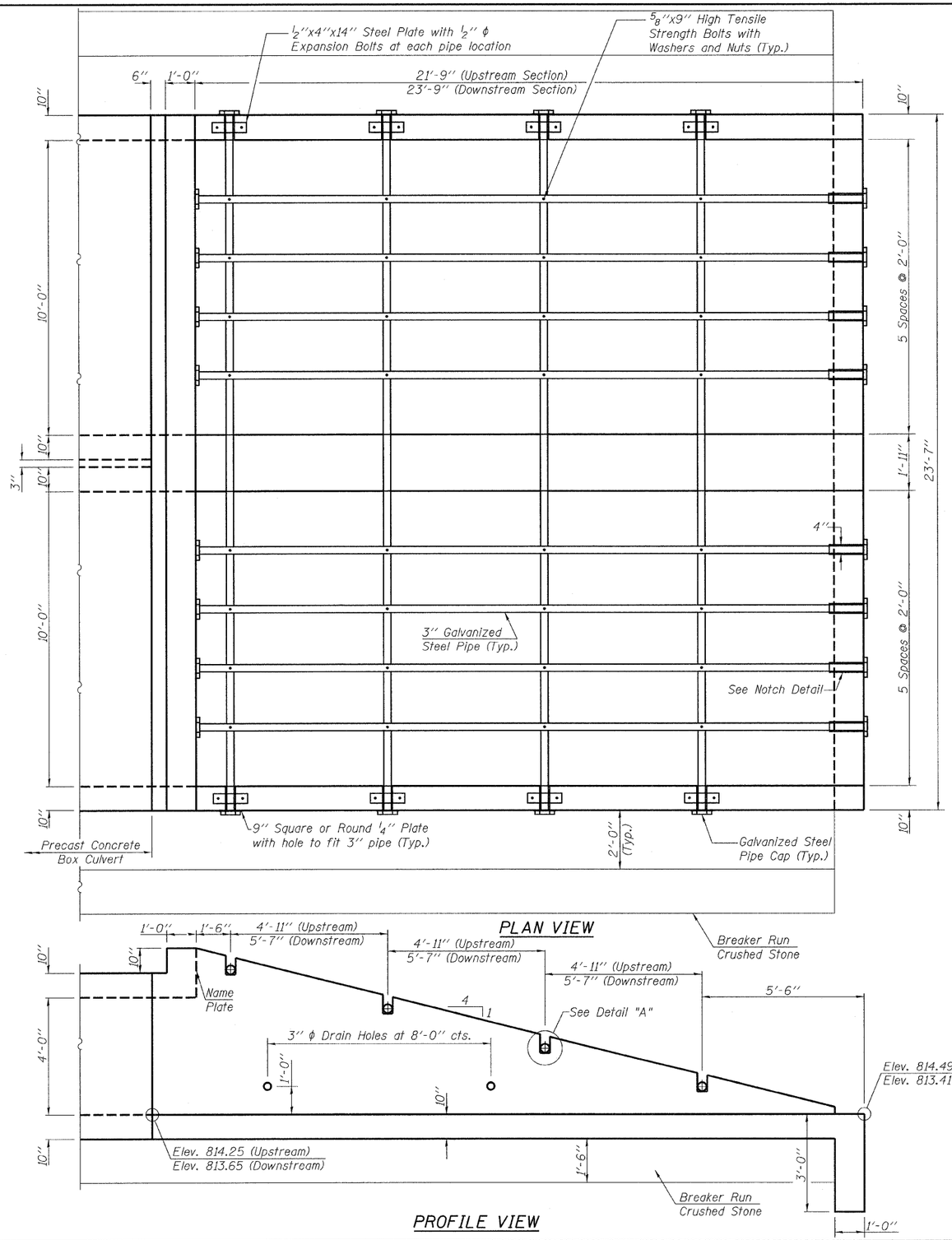
DATE: 3/03/2009
DRAWN BY BLB
CHECKED BY WJV

K:\111R9588\IL 75_3P East\Structures\Culvert 10 Extension.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	145
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

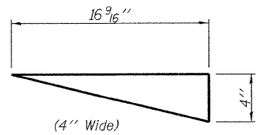
SHEET NO. 1
3 SHEETS

**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970

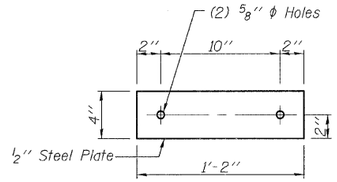


PLAN VIEW

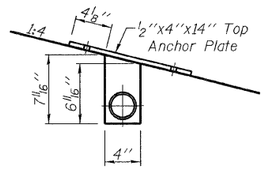
PROFILE VIEW



NOTCH DETAIL



TOP ANCHOR PLATE



DETAIL "A"

STATION 11025+71
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC 109RS-2, Ya-15d-RS-1
LOADING HS20
STR. NO. 101-2049

NAME PLATE
See Std. 515001
Located on the SE Headwall.
Locate to miss pipe grating.

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE
IL
3/6
LICENSED STRUCTURAL ENGINEER
Expires 11-30-10

GENERAL NOTES

Reinforcement bars shall conform to the requirements of A.S.T.M. A 706 Gr 60. See Special Provisions.

The distance from the top of headwall or wingwall to the adjacent ground surface shall be 3 inches (nominal), but in no case greater than 4 inches.

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for Concrete Structures.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel Pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.

See Plan and Profile Sheet 76 of 335 for more information.

See Sheet 159 of 335 for details of Breaker Run Crushed Stone.

If the Contractor elects to use precast construction, the Precaster shall provide complete details in the shop drawings for review by the Engineer.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

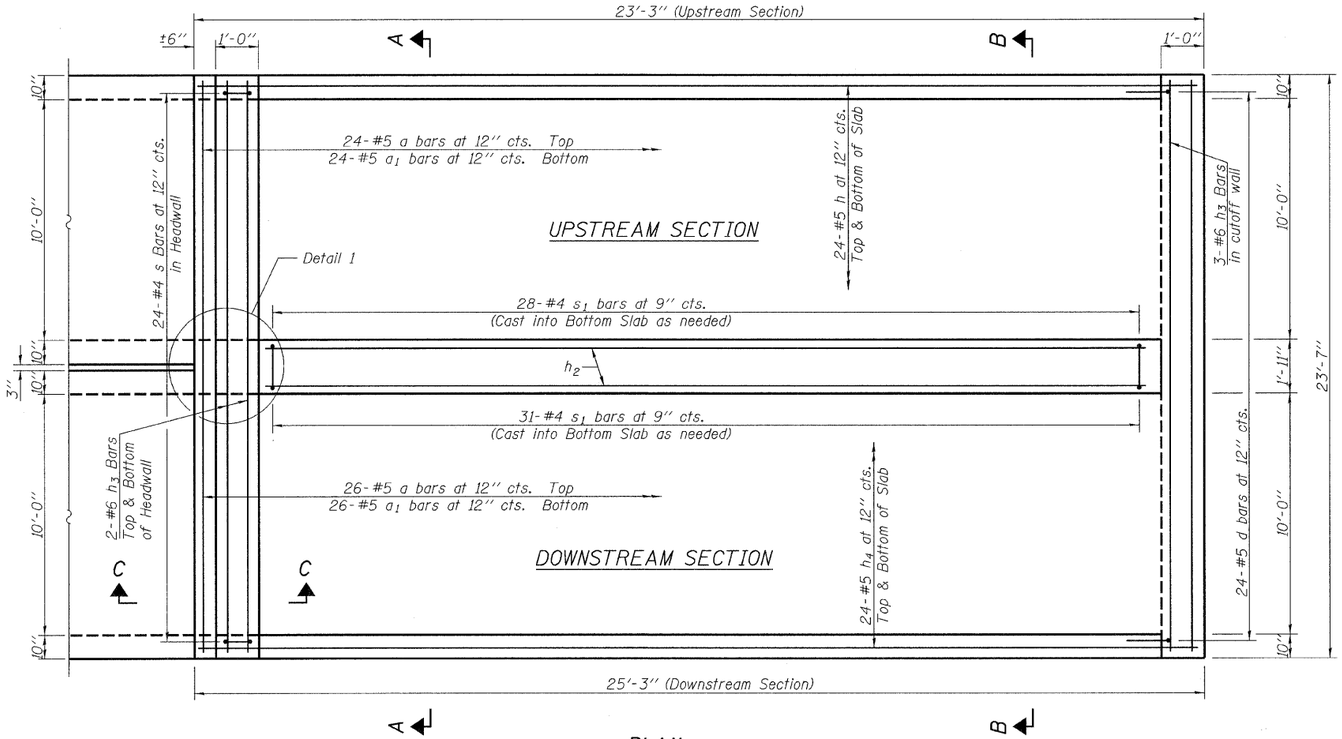
ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 11
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
•111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 11025+71
STRUCTURE NO. 101-2049
DATE: 3/03/2009 DRAWN BY BLB CHECKED BY WJV

3/27/2009 K:\111958801NL_75_39 East\Structures\Culvert 11 Extension.dgn

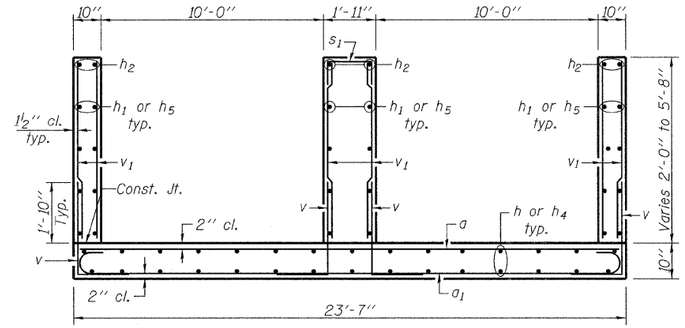
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	146
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
3 SHEETS

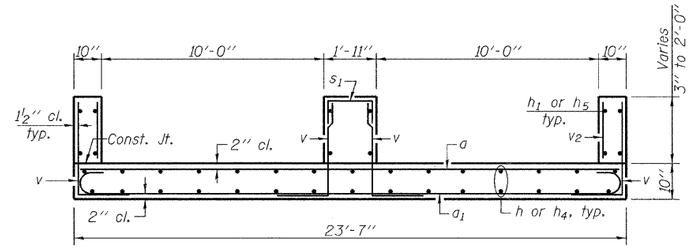
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970



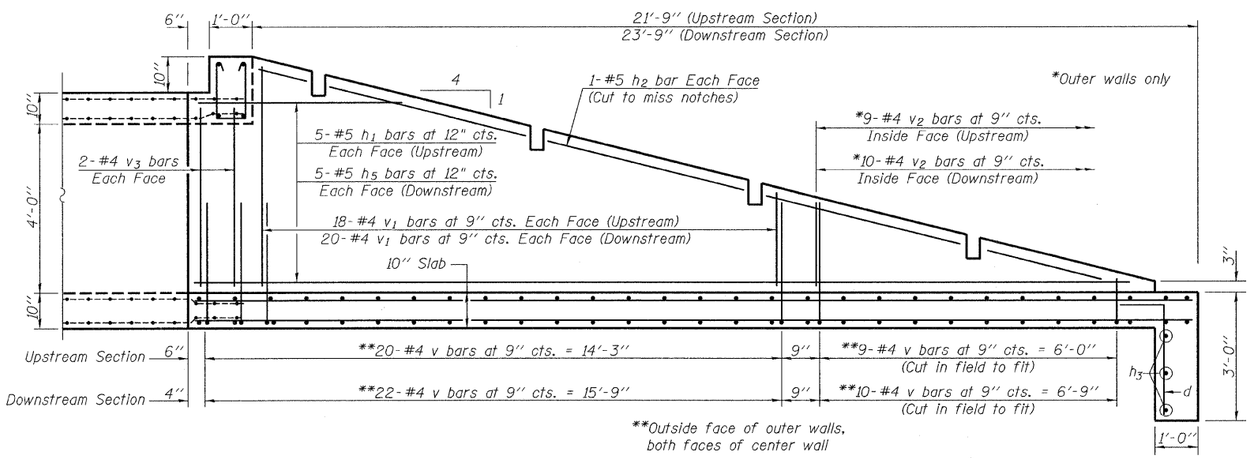
PLAN



SECTION A-A



SECTION B-B



LONGITUDINAL SECTION

NOTES

See Sheet 1 of 3 for General Notes.

See Sheet 3 of 3 for Section C-C and Detail 1.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

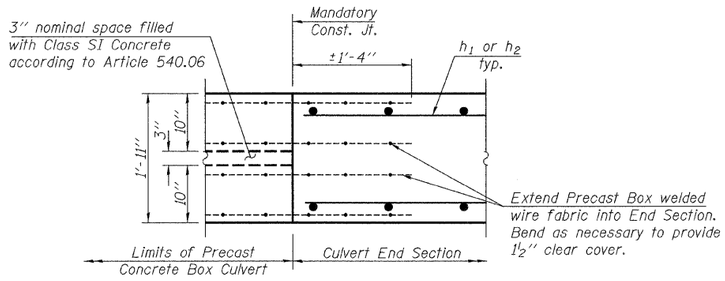
ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 11
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 11025+71
STRUCTURE NO. 101-2049
DATE: 3/03/2009
DRAWN BY BLB
CHECKED BY WJV

3/2/2009 K:\11195800\IL 75_3P East\Structures\Culvert 11 Extension.dgn

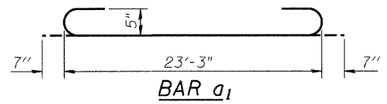
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	147
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 3
3 SHEETS

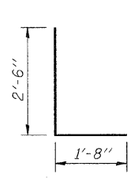
**111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
Contract # 64970



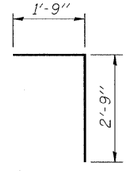
DETAIL 1



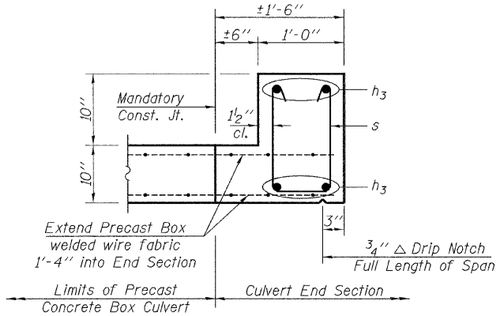
BAR a_1



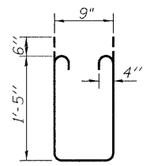
BAR v



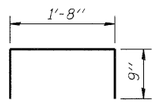
BAR d



SECTION C-C



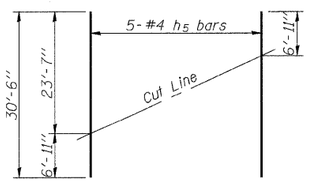
BAR s

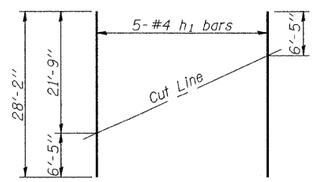


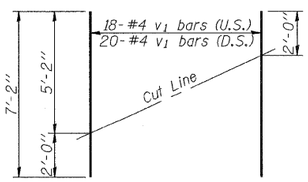
BAR s_1

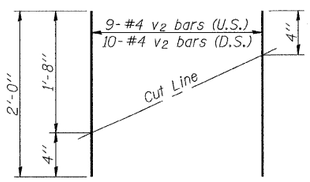
BILL OF MATERIAL
TWO END SECTIONS

Bar	No.	Size	Length	Shape
a	50	#5	23'-3"	———
a_1	50	#5	24'-5"	⊂——⊃
d	48	#5	4'-6"	⌝
h	48	#5	22'-11"	———
h_1	15	#5	28'-2"	———
h_2	12	#5	22'-9"	———
h_3	14	#6	23'-3"	———
h_4	48	#5	24'-11"	———
h_5	15	#5	30'-6"	———
s	48	#5	4'-7"	⊔
s_1	59	#4	3'-2"	⊓
v	244	#4	4'-2"	L
v_1	114	#4	7'-2"	———
v_2	38	#4	2'-0"	———
v_3	24	#4	4'-5"	———
Reinforcement Bars			Pound	6,650
Concrete Structures			Cu. Yd.	61.4









NOTE

See Sheet 1 of 2 for General Notes.

FIELD CUTTING DIAGRAMS

Order bars full length. Cut as shown and use remainder of bars in opposite face (h_1,h_4,v_1) or opposite wingwall (v_2).

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GRATED CULVERT EXTENSION NO. 11
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION
*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
WINNEBAGO COUNTY
STATION 11025+71
STRUCTURE NO. 101-2049
DATE: 3/03/2009
DRAWN BY BLB
CHECKED BY WJV

K:\11IY9388\IL 75_3P East\Structures\Culvert 11 Extension.dgn
3/2/2009

CONTRACT NO. 64970

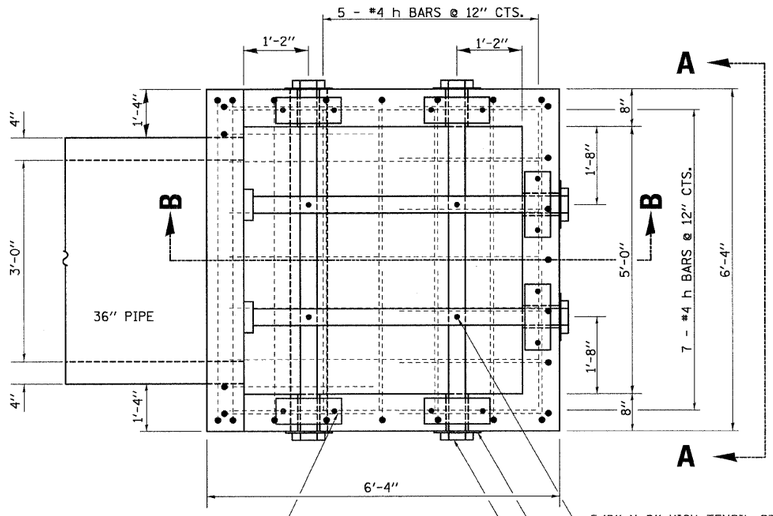
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WINNEBAGO	335	148
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

*FAP 505 (IL 75)
**111RS-4, 111BR-1, Yd-15d-RS-1,& (W-15d)T-1

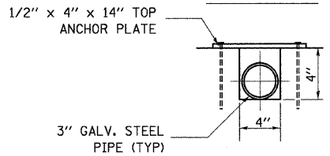
DROP BOX NO. 12

RT STA. 109 + 39

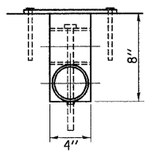
PLAN



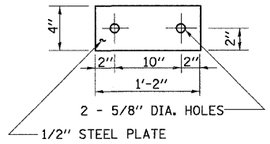
DETAIL "A"



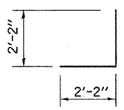
DETAIL "B"



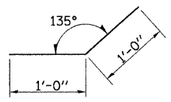
TOP ANCHOR PLATE



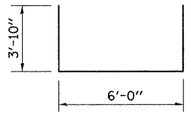
BAR d



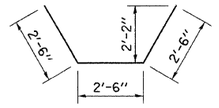
BAR f



BAR u



BAR x



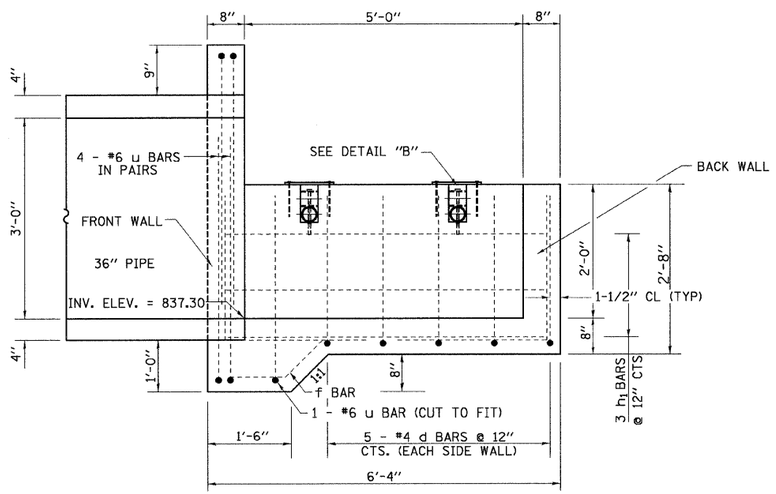
BILL OF MATERIALS
(FOR REINFORCEMENT)

BAR	SIZE	NO.	LENGTH	WEIGHT (LB)
d	4	21	4'-4"	60.79
f	4	7	2'-0"	9.35
h	6	12	6'-0"	108.14
u	6	5	13'-7"	102.01
x	4	2	7'-6"	10.02
DESCRIPTION			UNIT	QTY
CONCRETE STRUCTURES			CU YD	2.5
REINFORCEMENT BARS			LB	290

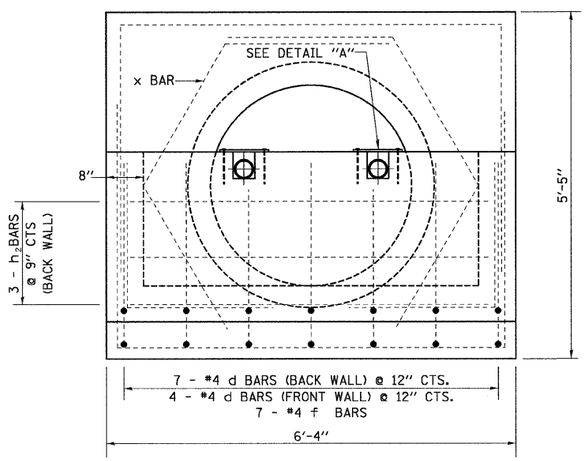
BILL OF MATERIALS
(FOR GRATED DROP BOX)

DESCRIPTION	UNIT	QTY.
3" GALVANIZED STEEL PIPE	FOOT	2 @ 6'-4"
	FOOT	2 @ 5'-8"
3" GALV PIPE CAPS	EACH	8
1/4" GALV. STEEL PLATE (9" NOMINAL)	EACH	6
1/2" x 4" x 14" GALV. STEEL PLATE	EACH	6
5/8" x 9" GALV. STEEL BOLTS	EACH	4
EXPANSION BOLTS 1/2"Ø	EACH	12

SECTION B–B



VIEW A–A



GENERAL NOTES:

SLOPE FLOW LINE OF THE DROP BOX AT THE SAME RATE AS THE FLOW LINE OF THE BOX CULVERT.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRATOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A 706 GR 60 (IL MODIFIED). SEE SPECIAL PROVISION.

SEE PLAN AND PROFILE SHEET 78 OF 335 FOR MORE INFORMATION.

SEE SHEET 159 OF 335 FOR DETAILS OF BREAKER RUN CRUSHED STONE.

THE CONTRACT UNIT PRICE "CU. YD." FOR CONCRETE STRUCTURES SHALL INCLUDE THE GALVANIZED PIPE. BOLTS, NUTS, WASHERS, AND STEEL PLATES, AND ALL APPLICABLE WORK ACCORDING TO SECTION 503 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 3/2/2009
FILE NAME = #FILE1#
PLOT SCALE = 1x50
USER NAME = #USER#

Bench Mark: GPS control point at Station 11055+65.22, 29.18' Rt. Elev. 810.62.

Existing Structure: SN 101-1044 is a 7'x2' reinforced concrete box culvert. Culvert length of 31'-0". Traffic to be detoured.

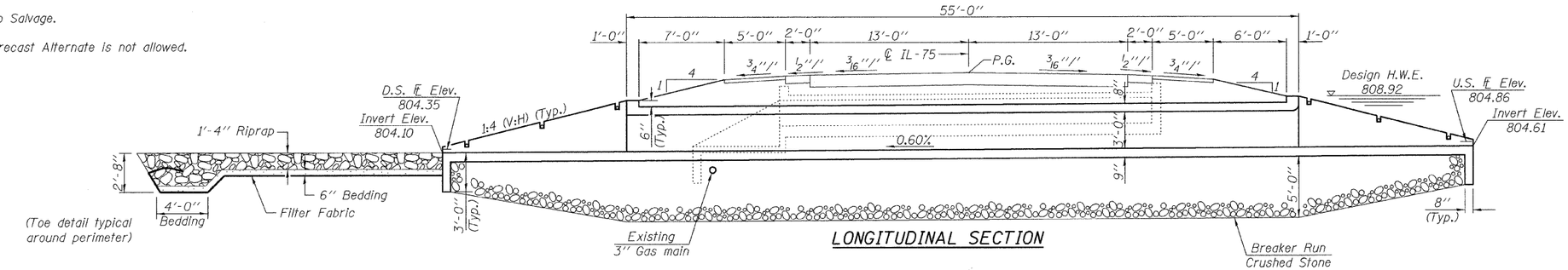
No Salvage.

Precast Alternate is not allowed.

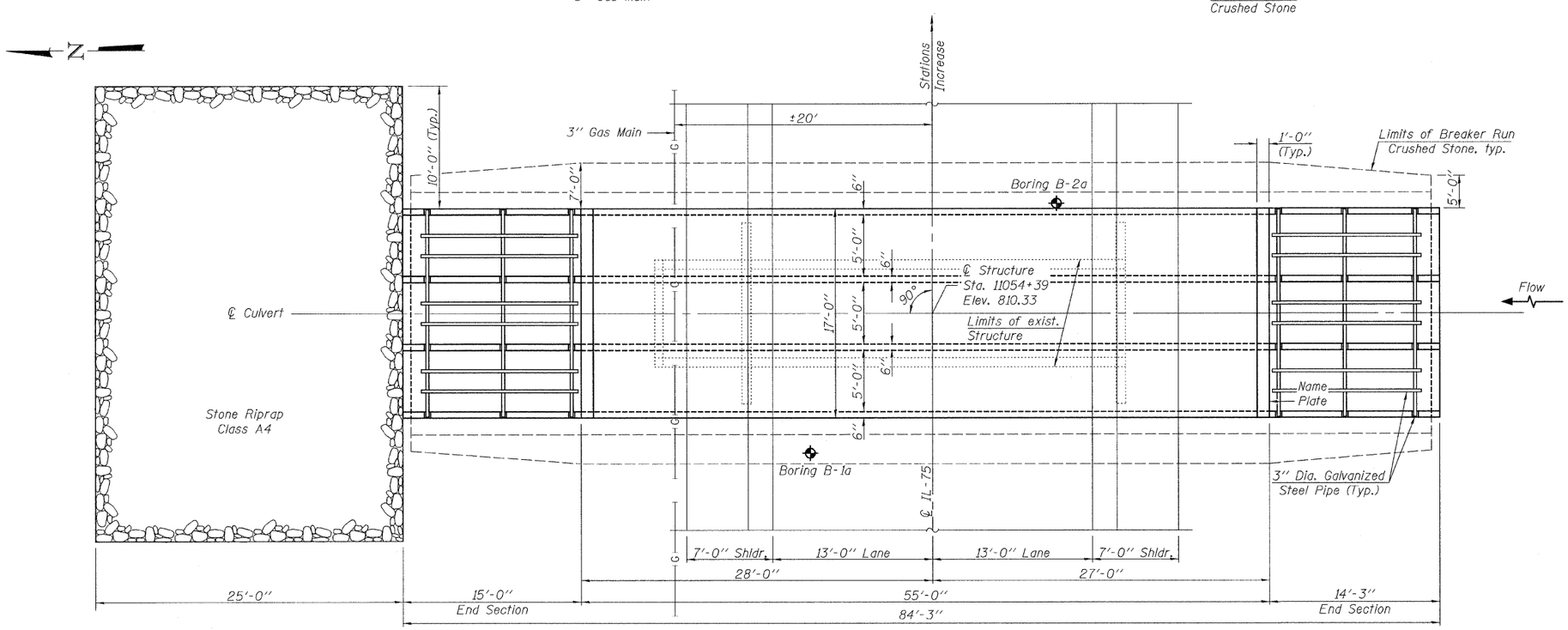
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	149
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
5 SHEETS

Contract # 64970
** (W-15d) T-1



LONGITUDINAL SECTION



PLAN

INDEX OF SHEETS

STATION 11054+39
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC. (W-15d)T-1
LOADING HS20
STRUCTURE NO. 101-1083

NAME PLATE

See Std. 515001

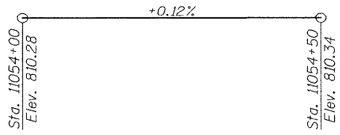
GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

The proposed grated end sections (headwalls and wingwalls) shall extend less than four inches (i.e. 3 inches typical) above the adjacent ground elevation.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

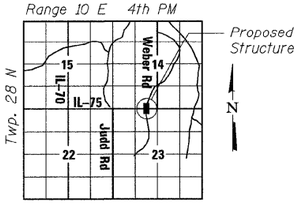
See Sheet 3 of 5 for Breaker Run Crushed Stone details.



PROFILE GRADE
(along ℄ roadway)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE
IL
LICENSED STRUCTURAL ENGINEER
Expires 11-30-10



LOCATION SKETCH

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 35,000 psi (steel pipe)

WATERWAY INFORMATION

Drainage Area = 170 Acres — Low Grade Elev. 810.26 @ Sta. 11052+83

Flood	Freq. Yr.	Q C.F.S.	Headwater El. Exist.	Prop.
Ten-Year	10	220	810.53	807.76
Design	50	309	810.63	808.92
Base	100	357	810.67	809.66
Ex Overtopping	<1	98	810.26	
Pr Overtopping	159	391		810.26

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 14	Each	1
Concrete Box Culverts	Cu. Yd.	82.7
Reinforcement Bars	Pound	14,750
Stone Riprap, Class A4	Sq. Yd.	103
Filter Fabric	Sq. Yd.	103
Breaker Run Crushed Stone	Ton	683
Name Plates	Each	1

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
IL-75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11054+39
STRUCTURE NO. 101-1083

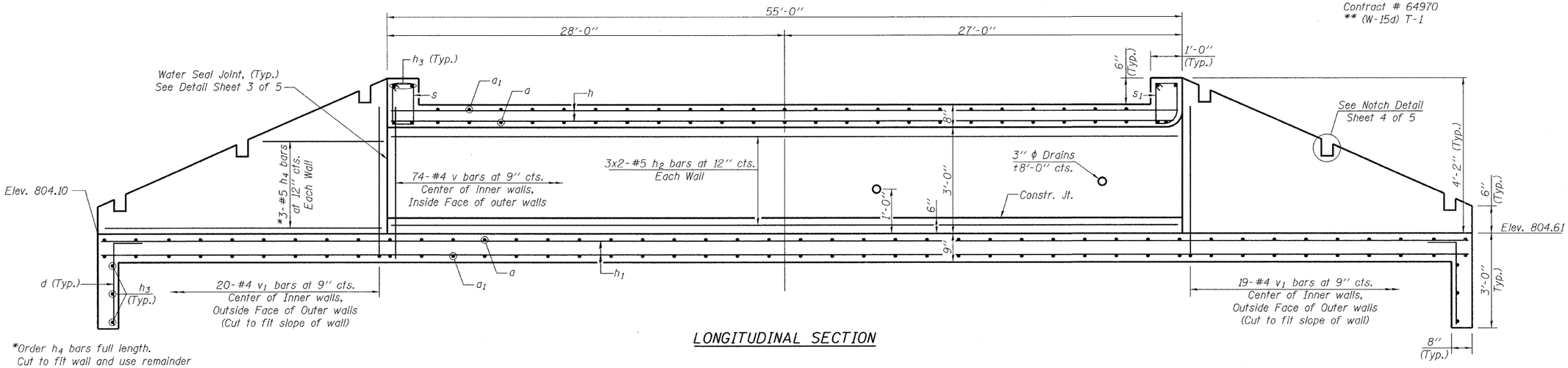
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

K:\11179214\Structures\3 cell.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	150
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
5 SHEETS

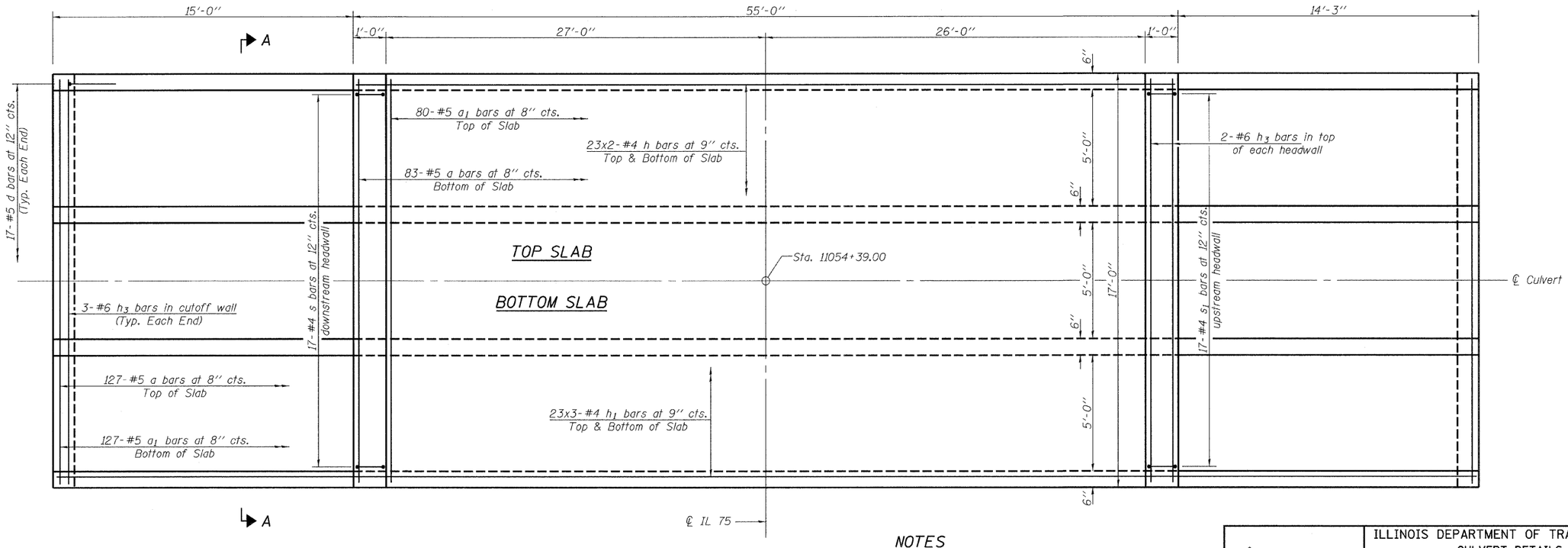
Contract # 64970
** (W-15d) T-1



LONGITUDINAL SECTION

*Order h_4 bars full length.
Cut to fit wall and use remainder
of bars in opposite end.

Z



PLAN

NOTES

Bars indicated thus 14x3-#4 etc. indicates 14 lines of bars with 3 lengths per line.

Minimum lap length for #4 bars = 1'-8", #5 bars = 2'-2".

See Sheet 3 of 5 for cross section thru barrels, Section A-A, and headwall details.

See Sheet 4 of 5 for End Section details.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS I
IL-75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11054+39
STRUCTURE NO. 101-1083

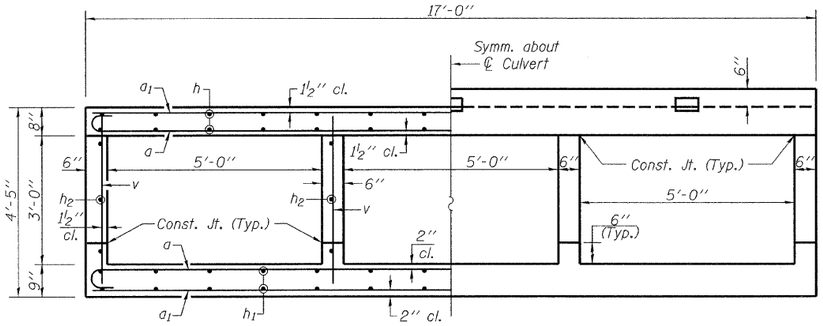
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

3/2/2009 K:\11179214\Structures\3 cell.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	151
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

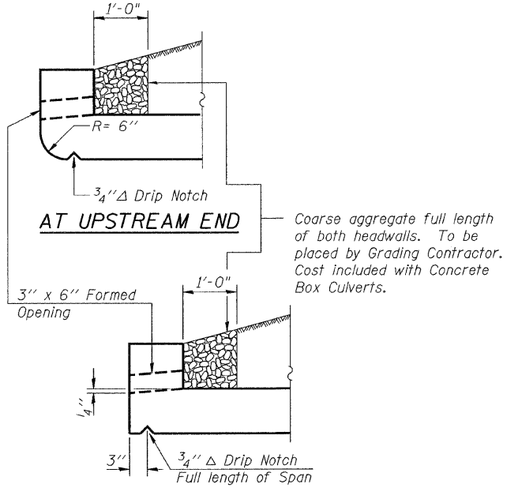
SHEET NO. 3
5 SHEETS

Contract # 64970
** (W-15d) T-1

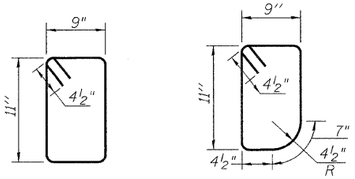


HALF SECTION
THRU BARREL

HALF ELEVATION
AT END OF BARREL

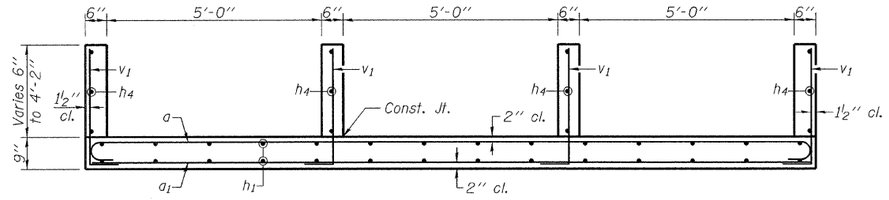


DRAIN DETAIL

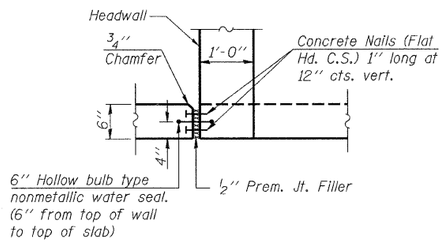


BILL OF MATERIAL

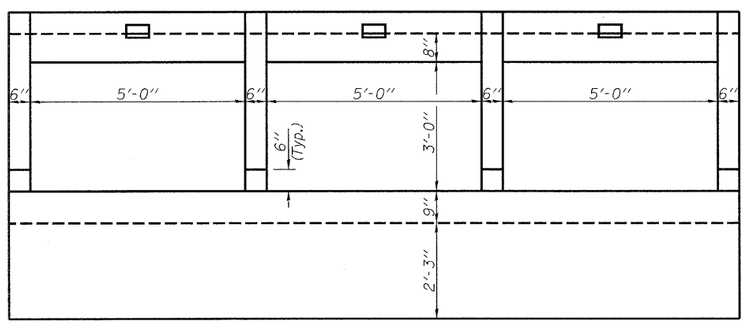
Bar	No.	Size	Length	Shape
a	210	#5	17'-10"	
a1	207	#5	16'-8"	
d	34	#5	4'-6"	
h	92	#4	28'-2"	
h1	138	#4	29'-1"	
h2	24	#5	28'-6"	
h3	10	#6	16'-8"	
h4	12	#5	21'-2"	
s	17	#4	4'-1"	
s1	17	#4	3'-11"	
v	296	#4	4'-1"	
v1	156	#4	5'-3"	
Concrete Box Culverts			Cu. Yd.	82.7
Reinforcement Bars			Pound	14,750
Breaker Run Crushed Stone			Ton	683



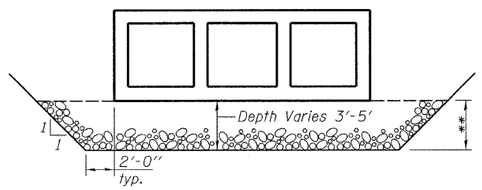
SECTION A-A



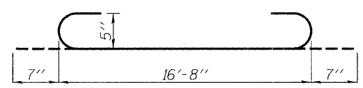
WATER SEAL JOINT DETAIL
Cost of Water Seal Joint included with Concrete Box Culverts



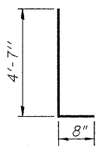
END ELEVATION



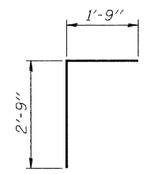
BREAKER RUN CRUSHED STONE DETAIL
** See Schedule of Quantities on sheet 23 of 335 for Removal of Unsuitable Material



BAR a



BAR v1



BAR d

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS II
IL-75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11054+39
STRUCTURE NO. 101-1083

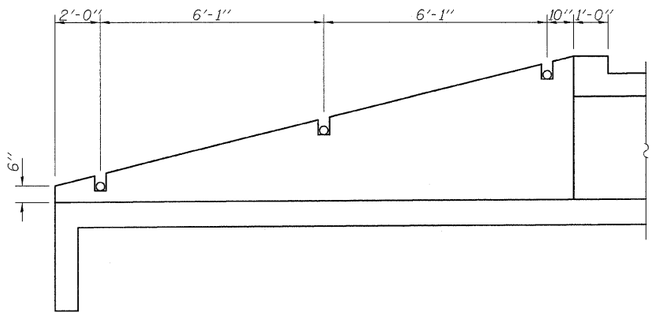
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

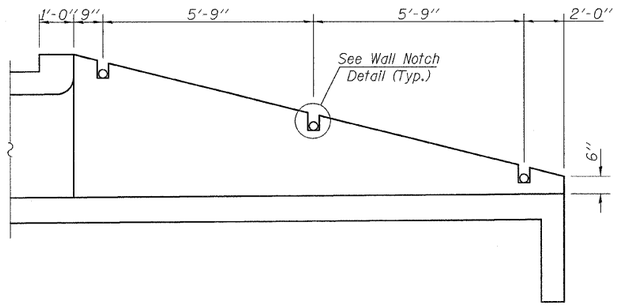
3/2/2009 K:\11179214\Structures\3 cell.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	152
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

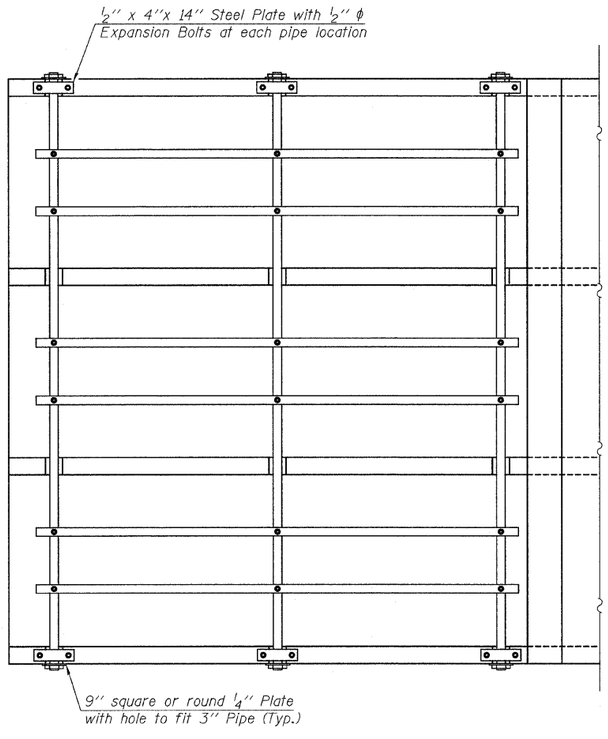
SHEET NO. 4
5 SHEETS

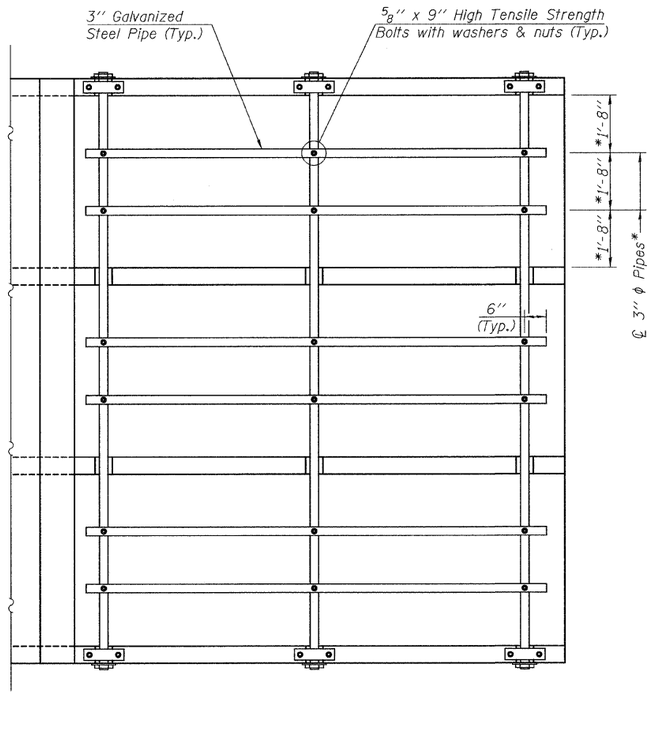
Contract # 64970
** (W-15d) T-1





ELEVATION





*Typ. Each Cell

PLAN

N

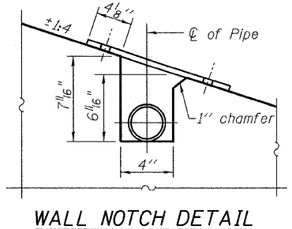
NOTES

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for Concrete Box Culverts.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the standard specification and shall be galvanized.

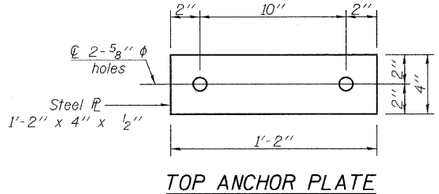
Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.



WALL NOTCH DETAIL

(Typical center and outside walls)



TOP ANCHOR PLATE

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS III
IL-75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11054+39
STRUCTURE NO. 101-1083

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

K:\11792141\Structures\3 cell.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	153
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
5 SHEETS

Contract # 64970
** (W-15d) T-1

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/4/06

ROUTE FAP 505 DESCRIPTION P92-102-06 IL 75 box culvert .1 m. W. of Weber Road LOGGED BY J. Strating

SECTION (W-15D)/T-1 LOCATION Durand Twp. - 14 SW, SEC. , TWP. 28N, RNG. 10E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-1044
Station 11054+42

BORING NO. B-1a
Station ± 12 W of CL
Offset 10.00ft N CL
Ground Surface Elev. 99.80 ft

Surface Water Elev. 96.00 ft
Stream Bed Elev. 96.00 ft

Groundwater Elev.:
First Encounter 87.8 ft ▼
Upon Completion 61.3 ft ▽
After ___ Hrs. ___ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			
97.80		0.5 P	24.0
STIFF brown SILTY LOAM	2		
	2	1.3 P	24.0
96.30	5		
MEDIUM brown/gray SILTY LOAM -5	2		
	2	0.8 B	26.0
93.80	3		
MEDIUM black SILTY LOAM	1		
	1	0.5 B	44.0
91.30	3		
MEDIUM dark brown SILTY CLAY LOAM -10	1		
	3	0.9 B	26.0
88.80	2		
VERY SOFT tan/brown SANDY LOAM ▼	1		
	2	0.2 P	16.0
86.30	2		
VERY SOFT tan SANDY LOAM -15	1		
	1	0.2 P	14.0
83.30	3		
MEDIUM tan weathered limestone ledge	5		
	14		
81.30	13		
STIFF tan LOAM TILL -20	5		
STIFF tan LOAM TILL (continued)			
78.80	5	2.0 B	11.0
	8		
STIFF tan LOAM TILL	6		
	6	1.5 B	11.0
76.30	8		
VERY STIFF tan LOAM TILL -25	9		
	12	2.5 P	10.0
73.80	14		
VERY STIFF gray LOAM TILL	8		
	15		9.0
71.30	22		
HARD gray LOAM TILL with LIMESTONE -30	22		
	25		8.0
68.80	22		
STIFF gray LOAM TILL	7		
	9	2.0 P	7.0
66.30	12		
VERY STIFF gray LOAM TILL -35	8		
	12	2.5 P	9.0
63.80	14		
VERY STIFF gray CLAY LOAM TILL	8		
	11	3.5 B	11.0
61.30 ▽	13		
End of Boring -40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/4/06

ROUTE FAP 505 DESCRIPTION P92-102-06 IL 75 box culvert, .1 m. W. of Weber Road LOGGED BY J. Strating

SECTION (W-15D)/T-1 LOCATION Durand Twp. - 14 SW, SEC. , TWP. 28N, RNG. 10E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-1044
Station 11054+42

BORING NO. B-2a
Station 9' E. of CL
Offset 10.00ft S CL
Ground Surface Elev. 99.80 ft

Surface Water Elev. 96.00 ft
Stream Bed Elev. 96.00 ft

Groundwater Elev.:
First Encounter 85.3 ft ▼
Upon Completion 83.3 ft ▽
After ___ Hrs. ___ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM dark brown SILTY CLAY LOAM			
97.80		0.5 P	15.0
No Recovery	1		
	1		
96.30	2		
SOFT gray/brown SILTY LOAM -5	1		
	2	0.3 B	29.0
93.80	2		
SOFT brown SILTY LOAM	0		
	1	0.3 P	34.0
91.30	3		
MEDIUM brown SILTY CLAY LOAM -10	1		
	3	0.9 B	31.0
88.30	3		
MEDIUM tan weathered LIMESTONE ledge	1		
	9		
86.30	5		
MEDIUM tan LOAM TILL ▼ -15	1		
	3	0.8 P	13.0
83.80 ▽	4		
MEDIUM tan LOAM TILL	1		
	3	0.6 B	9.0
81.30	6		
STIFF tan LOAM TILL -20	1		
STIFF tan LOAM TILL (continued)			
78.80	5	1.1 B	12.0
	8		
STIFF tan LOAM TILL	6		
	7	1.5 B	12.0
75.80	11		
VERY DENSE tan weathered LIMESTONE -35	32		
	100/9"		
73.80			
End of Boring			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
BORINGS
IL-75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11054+39
STRUCTURE NO. 101-1083

DATE: 3/03/2009 DRAWN BY JMT CHECKED BY BLB

3/4/2009 K:\1179214\Structures\3 cell.dgn

Bench Mark: GPS control point at Station 11072+11.46, 27.87' Rt. Elev. 795.49

Existing Structure: SN 101-1043 is a 30' long 10'x5' reinforced concrete box culvert at Station 11075+52. Traffic to be detoured during construction.

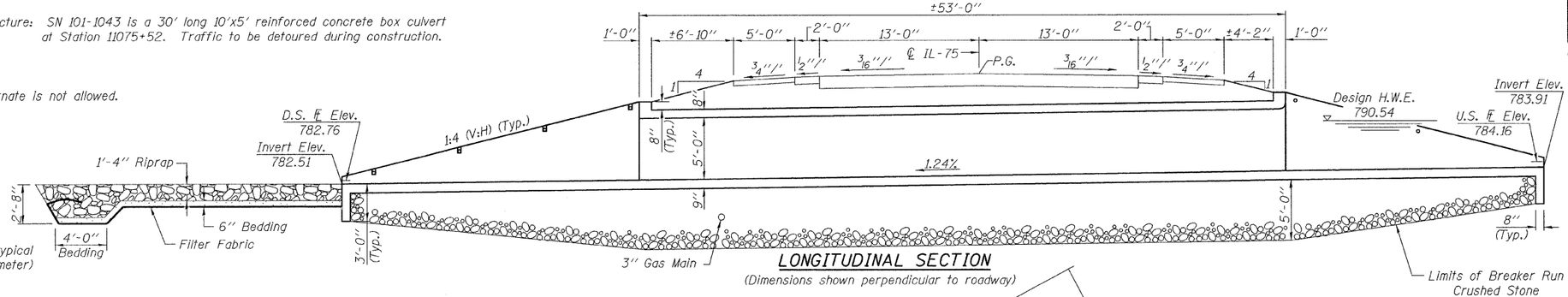
No Salvage.

Precast Alternate is not allowed.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	154
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
5 SHEETS

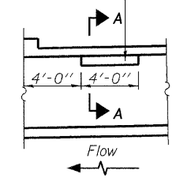
Contract #64970
** (W-15d) T-1



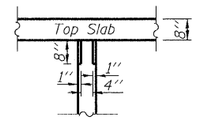
LONGITUDINAL SECTION

(Dimensions shown perpendicular to roadway)

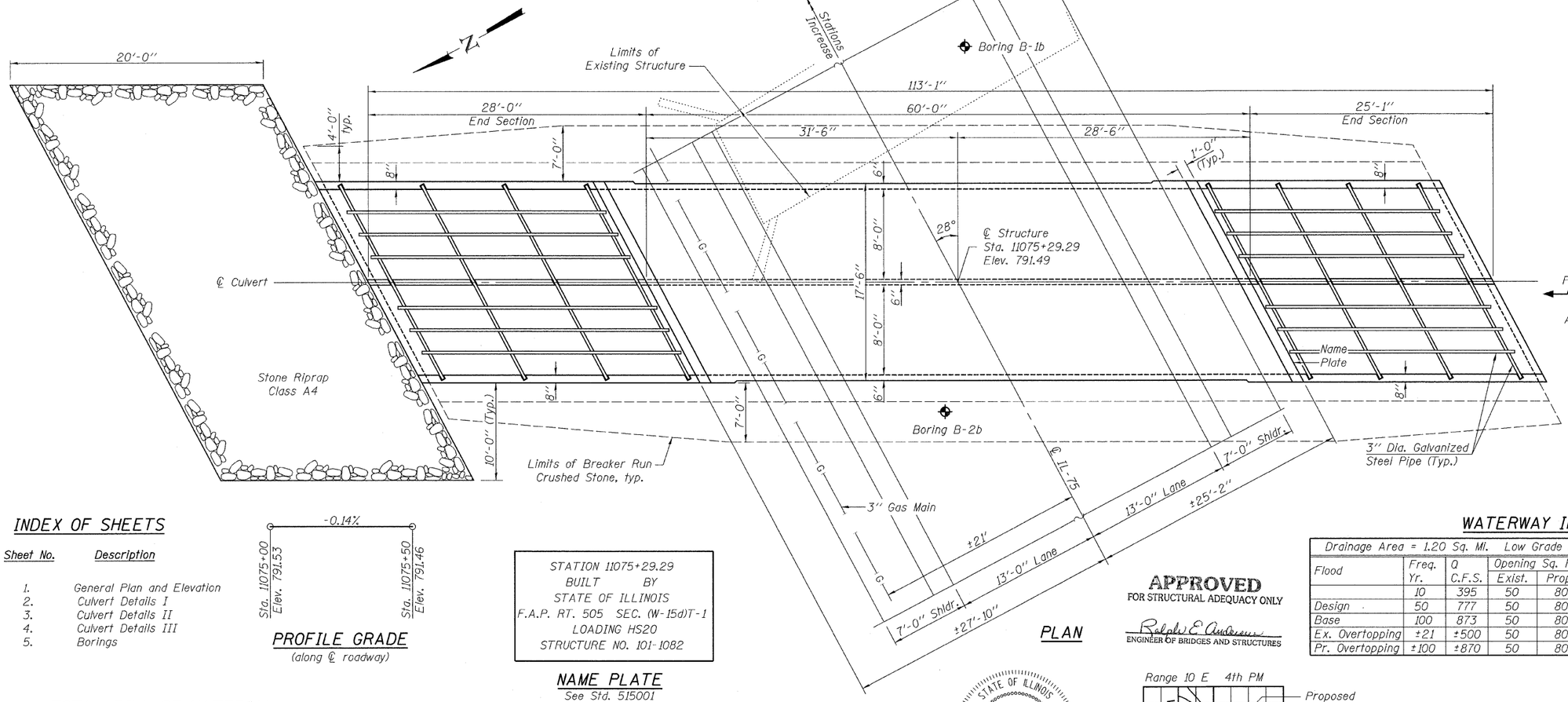
Notch formed by rough finished board attached to and removed with formwork, each interior wall. (Do not chamfer)



LONGITUDINAL SECTION



SECTION A-A



PLAN

PHOEBE NESTING SITE DETAILS

(Downstream End Only)

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 35,000 psi (steel pipe)

INDEX OF SHEETS

PROFILE GRADE

(along ℄ roadway)

STATION 11075+29.29
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 505 SEC. (W-15d)T-1
LOADING HS20
STRUCTURE NO. 101-1082

NAME PLATE

See Std. 515001

WATERWAY INFORMATION

Drainage Area = 1.20 Sq. Mi. Low Grade Elev. 791.41 @ Sta. 11075+88.6

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	395	50	80	786.3	0.50	-0.20	790.39	788.00
Design	50	777	50	80	787.24	1.95	1.99	791.84	790.54
Base	100	873	50	80	787.55	2.22	2.94	792.11	791.49
Ex. Overtopping	±21	±500	50	80	-	1.52	-	791.41	-
Pr. Overtopping	±100	±870	50	80	-	-	2.86	-	791.41

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 15	Each	1
Concrete Box Culverts	Cu. Yd.	113.1
Reinforcement Bars	Pound	38,700
Stone Riprap, Class A4	Sq. Yd.	84
Filter Fabric	Sq. Yd.	84
Breaker Run Crushed Stone	Ton	921
Name Plates	Each	1

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

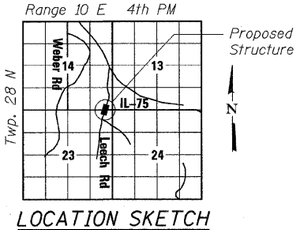
The proposed grated end sections (headwalls and wingwalls) shall extend less than four inches (i.e. 3 inches typical) above the adjacent ground elevation.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

See Sheet 3 of 5 for Breaker Run Crushed Stone detail.

STATE OF ILLINOIS
BRANDON L. BUZZELL
6358
NAPERVILLE
IL
LICENSED STRUCTURAL ENGINEER

Expires 11-30-10



LOCATION SKETCH

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
IL 75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11075+29.29
STRUCTURE NO. 101-1082

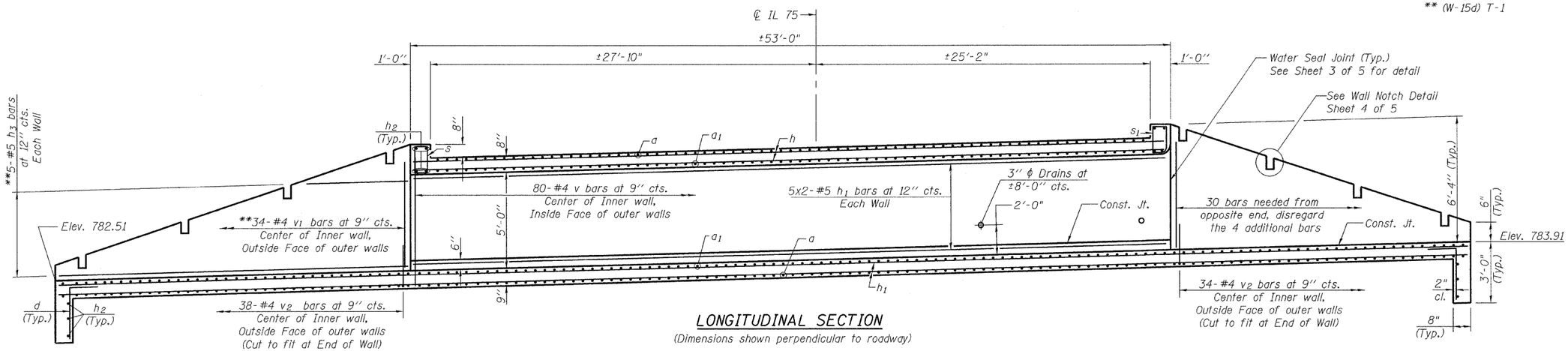
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

K:\1117\214\Structures\2 cell.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	155
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

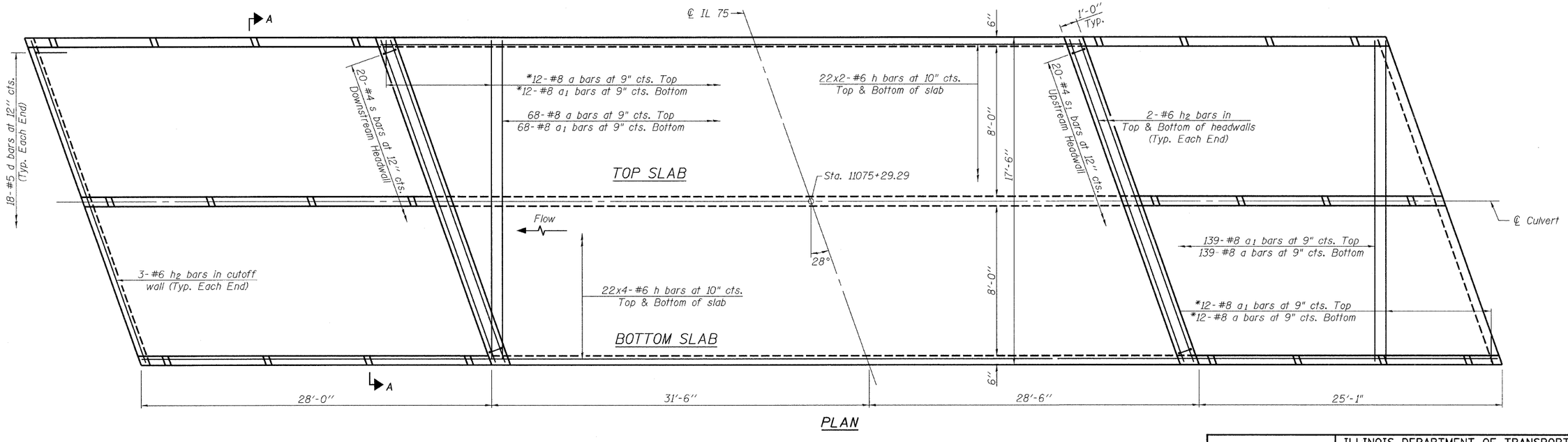
SHEET NO. 2
5 SHEETS

Contract #64970
** (W-15d) T-1



LONGITUDINAL SECTION
(Dimensions shown perpendicular to roadway)

**Order v_1 and h_4 bars full length. Cut to fit wall and use remainder of bars in opposite end.



PLAN

*Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

NOTES

Bars indicated thus 12x2-#5 etc. indicates 12 lines of bars with 2 lengths per line.
Minimum lap length for #5 Bars = 1'-8", #6 Bars = 2'-0".
See Sheet 3 of 5 for cross section thru barrels, Section A-A and headwall details.
See Sheet 4 of 5 for Grated Culvert Extension details.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS I
IL 75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11075+29.29
STRUCTURE NO. 101-1082

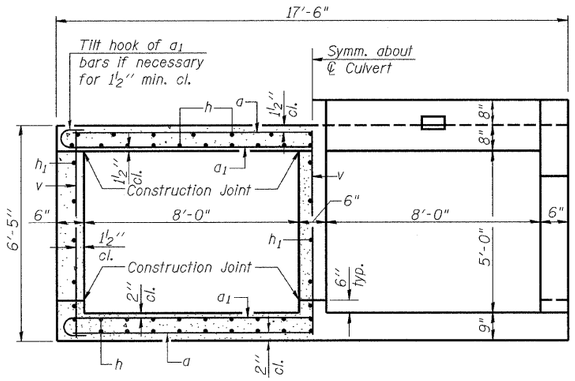
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

3/2/2009 K:\1117921A\Structures\2 cell.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	156
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

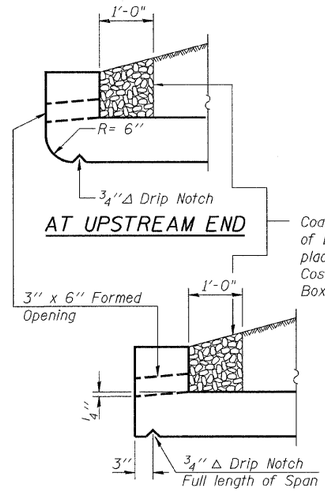
SHEET NO. 3
5 SHEETS

Contract #64970
** (W-15d) T-1

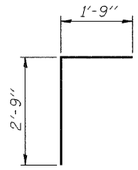


HALF SECTION THRU BARREL

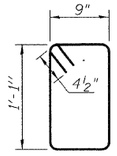
HALF ELEVATION AT END OF BARREL



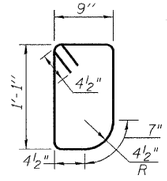
DRAIN DETAIL



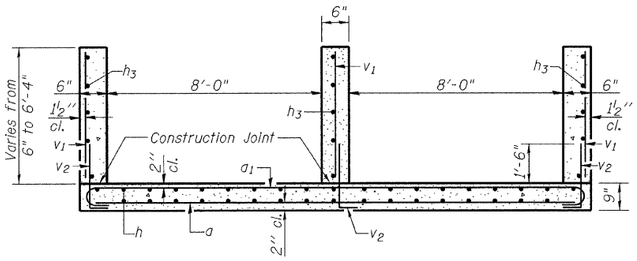
BAR d



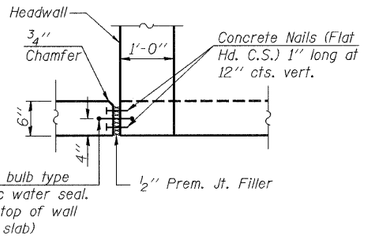
BAR s



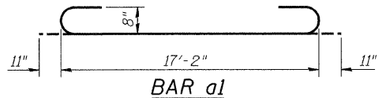
BAR s_1



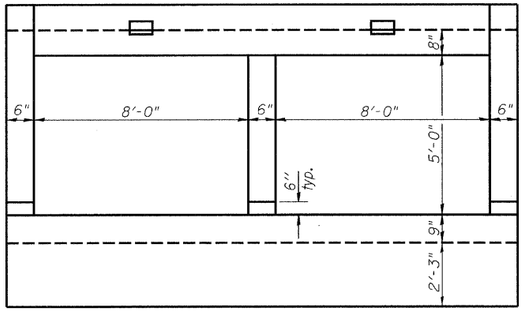
SECTION A-A



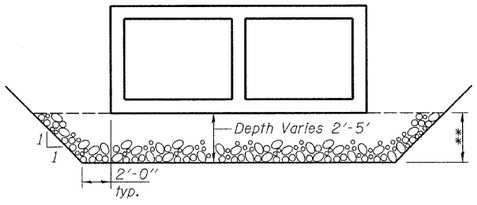
WATER SEAL JOINT DETAIL
Cost of Water Seal Joint Included with Concrete Box Culverts



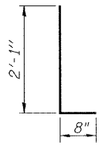
BAR a1



END ELEVATION



BREAKER RUN CRUSHED STONE DETAIL
** See Schedule of Quantities on Sheet 23 of 335 for Removal of Unsuitable Material



BAR v2

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	231	#8	17'-2"	
a_1	231	#8	19'-0"	
d	36	#5	4'-6"	
h	264	#6	31'-0"	
h_1	30	#5	30'-9"	
h_2	14	#6	19'-6"	
h_3	15	#5	35'-0"	
s	20	#4	4'-5"	
s_1	20	#4	4'-3"	
v	240	#4	6'-1"	
v_1	102	#4	7'-7"	
v_2	216	#4	2'-9"	
Concrete Box Culverts			Cu. Yd.	113.1
Reinforcement Bars			Pound	38,700
Breaker Run Crushed Stone			Ton	921

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS II
IL 75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11075+29.29
STRUCTURE NO. 101-1082

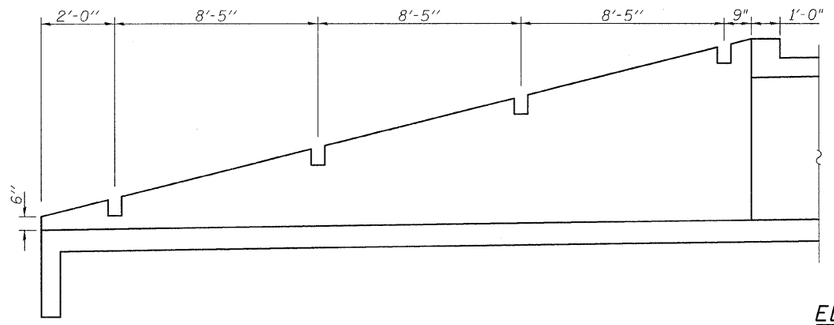
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

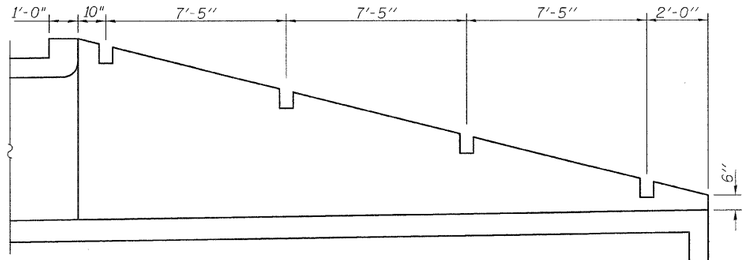
3/2/2009 K:\11179214\Structures\2 cell.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	157
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 4
5 SHEETS

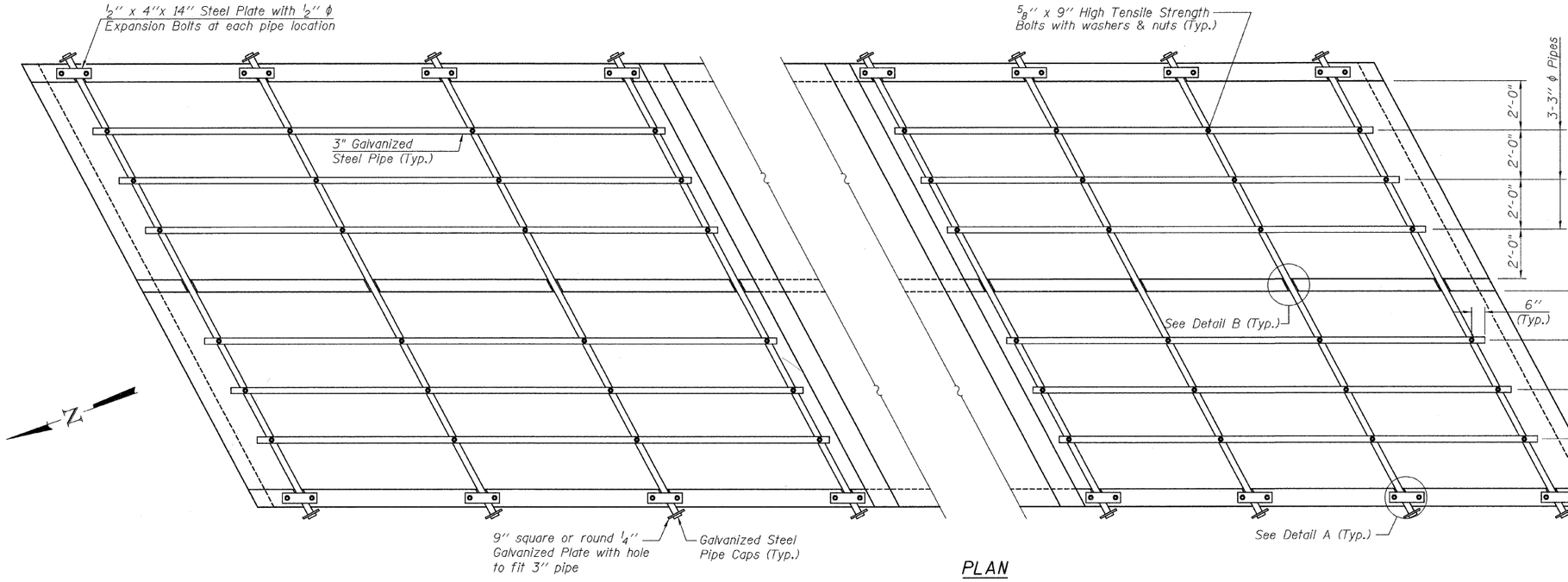
Contract #64970
** (W-15d) T-1





ELEVATION

(Dimensions along centerline of culvert)



PLAN

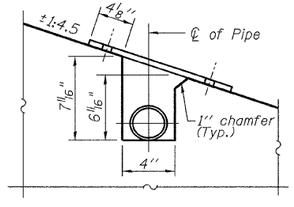
NOTES

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for Concrete Box Culverts.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the standard specification and shall be galvanized.

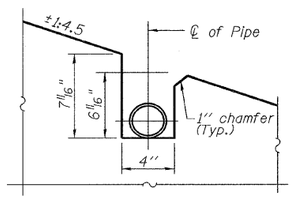
Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.



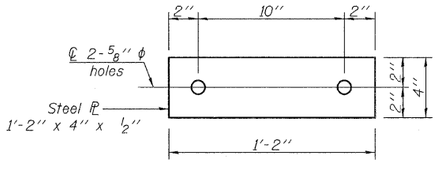
DETAIL A

Notch width perpendicular to pipe



DETAIL B

Notch width perpendicular to pipe



TOP ANCHOR PLATE

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT DETAILS III
IL 75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11075+29.29
STRUCTURE NO. 101-1082

DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

K:\11179214\Structures\2 cell.dgn
3/2/2009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	158
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
5 SHEETS

Contract #64970
** (W-15d) T-1

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/1706

ROUTE FAP 505 DESCRIPTION P92-102-06 IL 75 box culvert, 0.3 m. E. of Weber Road LOGGED BY P. Drezen

SECTION (W-15D)/T-1 LOCATION Durand Twp. - 14 SE, SEC. , TWP. 28N, RNG. 10E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-1043
Station
BORING NO. B-1b
Station +16E
Offset 10.00ft S CL EB Lane
Ground Surface Elev. 99.70 ft

Surface Water Elev. ft
Stream Bed Elev. 93.50 ft
Groundwater Elev.:
First Encounter 86.7 ft ▼
Upon Completion Wash ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
MEDIUM black LOAM			
		0.5 P	22.0
97.70			
MEDIUM brown SILTY LOAM	1		
	2 4	0.5 P	27.0
96.20			
MEDIUM black SILTY LOAM	1		
-5	2 3	0.6 B	26.0
93.70			
MEDIUM gray SILTY CLAY	2		
	2 4	0.6 B	33.0
91.20			
SOFT gray SILTY CLAY	1		
-10	3 5	0.5 B	26.0
88.70			
SOFT gray SILTY CLAY	1		
▼ -12	3 3	0.5 B	23.0
85.70			
MEDIUM tan SAND	2		
-15	5		
83.70	11		
Wash	10		
MEDIUM tan SAND & GRAVEL with weathered LIMESTONE	11		
81.20	13		
-20	18		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
DENSE tan SAND & GRAVEL with weathered LIMESTONE (continued)	24		
78.70	25		
DENSE tan SAND & GRAVEL with weathered LIMESTONE	15		
76.20	19 23		
End of Boring			
-25			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/1706

ROUTE FAP 505 DESCRIPTION P92-102-06 IL 75 box culvert, 0.3 m. E. of Weber Road LOGGED BY P. Drezen

SECTION (W-15D)/T-1 LOCATION Durand Twp. - 14 SE, SEC. , TWP. 28N, RNG. 10E

COUNTY Winnebago DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. 101-1043
Station
BORING NO. B-2b
Station +10 W
Offset 9.00ft N CL WB Lane
Ground Surface Elev. 99.70 ft

Surface Water Elev. ft
Stream Bed Elev. 93.50 ft
Groundwater Elev.:
First Encounter 83.7 ft ▼
Upon Completion Wash ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
SOFT black LOAM			
		0.3 P	19.0
97.70			
SOFT black LOAM	2		
	2 3	0.3 P	25.0
96.20			
MEDIUM brown SANDY LOAM	1		
-5	6 9	0.5 P	16.0
93.70			
MEDIUM black LOAM with 11% ORGANICS	1		
	2 3	1.0 P	56.0
91.20			
SOFT gray SILTY CLAY	2		
-10	2 3	0.5 B	27.0
88.70			
SOFT brown SILTY CLAY	2		
	3 5	0.5 P	24.0
86.20			
VERY SOFT brown SILTY CLAY with SAND lens	1		
-15	2		22.0
▼	3		
83.20			
MEDIUM tan SAND with weathered LIMESTONE	11		
	14		
81.20	15		
-20	20		

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Wash	23		
DENSE tan SAND & GRAVEL (continued)	17		
78.70			
DENSE tan SAND & GRAVEL	22		
	21		
76.20	22		
DENSE tan SAND & GRAVEL	18		
-25	16		
73.70	20		
End of Boring			
-30			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

rjngroup
Excellence through Ownership

200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION
BORINGS
IL 75 OVER UNNAMED TRIBUTARY
TO SOUTH BRANCH OTTER CREEK
FAP RTE 505 - SECTION (W-15d)T-1
WINNEBAGO COUNTY
STATION 11075+29.29
STRUCTURE NO. 101-1082

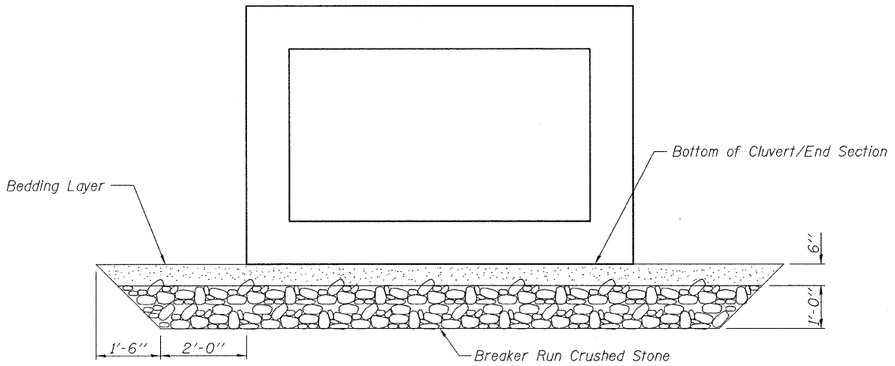
DATE: 3/03/2009
DRAWN BY JMT
CHECKED BY BLB

3/2/2009 K:\11179214\Structures\2 cell.dgn

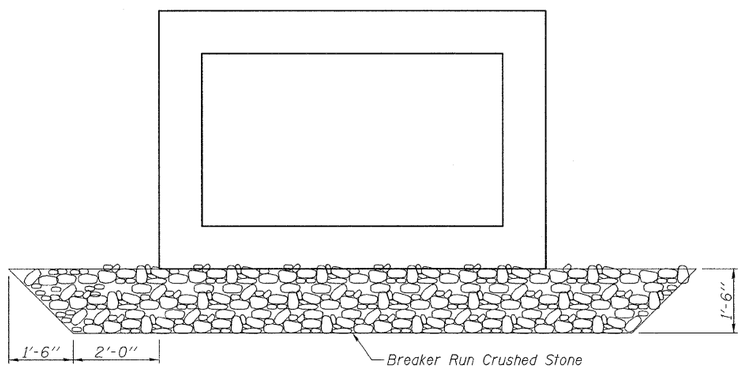
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 505	**	WINNEBAGO	335	159
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
1 SHEETS

**109RS-2, Ya-15d-RS-1
Contract # 64237



PRECAST CONSTRUCTION



CAST-IN-PLACE CONSTRUCTION

NOTE

Depth of Breaker Run Crushed Stone shall be verified in the field by the Geotechnical Engineer.

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

ILLINOIS DEPARTMENT OF TRANSPORTATION

BREAKER RUN CRUSHED STONE DETAIL
IL-75 OVER TRIBUTARY TO PECATONICA RIVER
FAP RTE 505 - SECTION 109RS-2, Ya-15d-RS-1
WINNEBAGO COUNTY

DATE: 3/03/2009

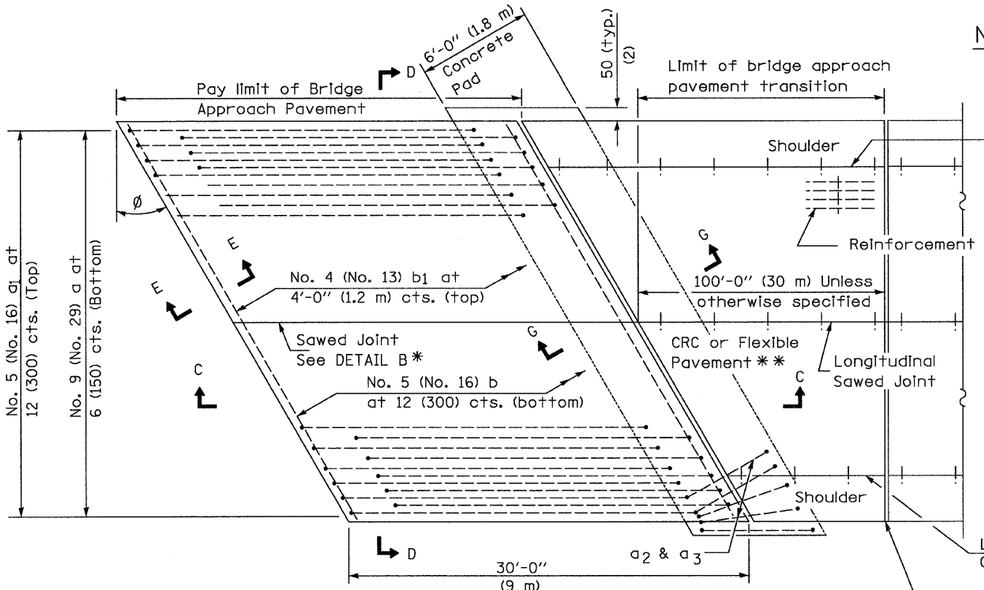
DRAWN BY JMT
CHECKED BY BLB

3/2/2009 K:\IL196808\IL 75_SP East\Structures\Breaker Run Crushed Stone Detail.dgn

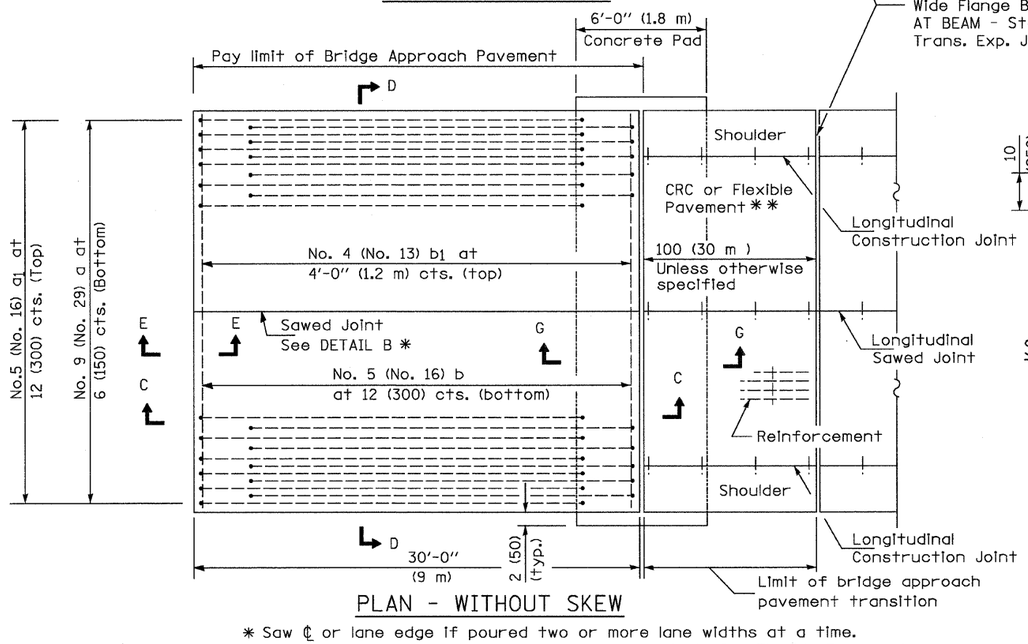
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	160
STA.		TO STA.		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

NEW CONSTRUCTION

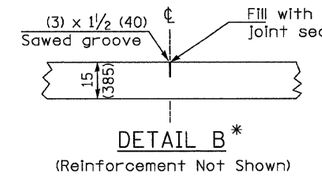


PLAN - WITH SKEW



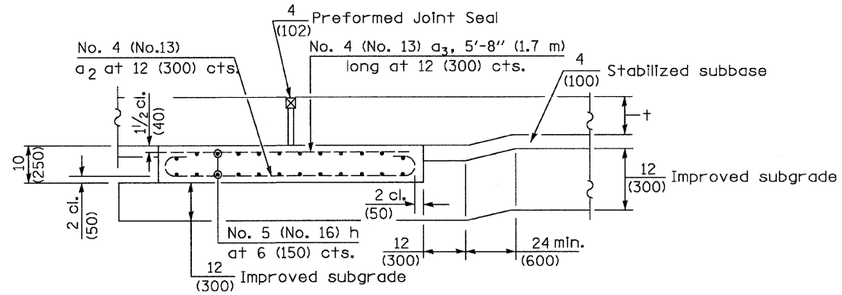
PLAN - WITHOUT SKEW

* Saw ℄ or lane edge if poured two or more lane widths at a time.
** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.



DETAIL B*

(Reinforcement Not Shown)

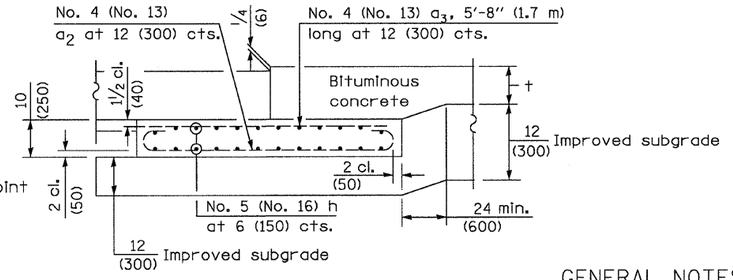


SECTION G-G - RIGID PAVEMENT

(Showing reinforcement)

Rigid Pavement only:

Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)

GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.

See Standard 421001 for reinforcement details not shown.

See Standard 420001 for joint details not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

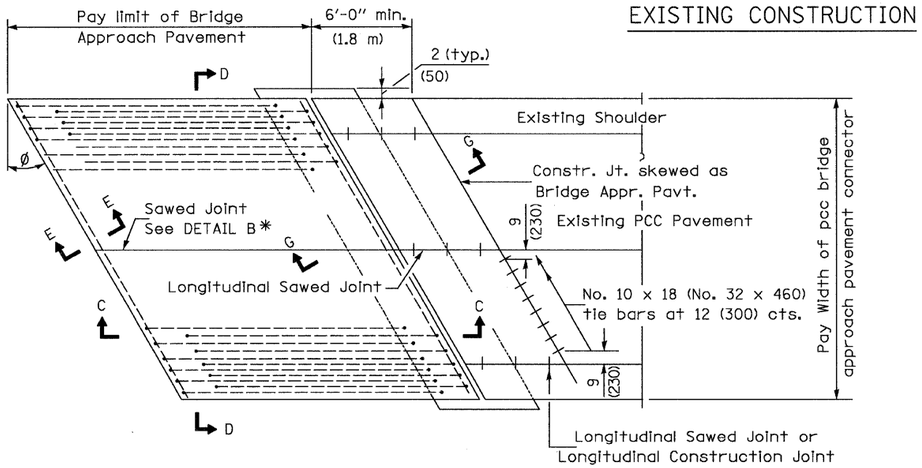
ILLINOIS ROUTE 75
BRIDGE APPROACH PAVEMENT DETAILS
(SHEET 1 of 4)

SCALE: VERT. HORIZ.
DATE: 3/3/09
DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/2/2009
FILE NAME = K:\1195BR\IL 75_3P Exer\CADD\Design\1195BR_BridgeApproachPvmt.dgn
PLOT SCALE = 1.000
USER NAME = JTreasy
MODEL = Sheet 1

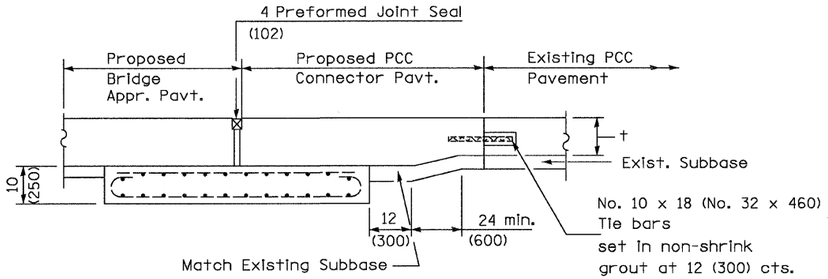
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Yo-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	161
STA.		TO STA.		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

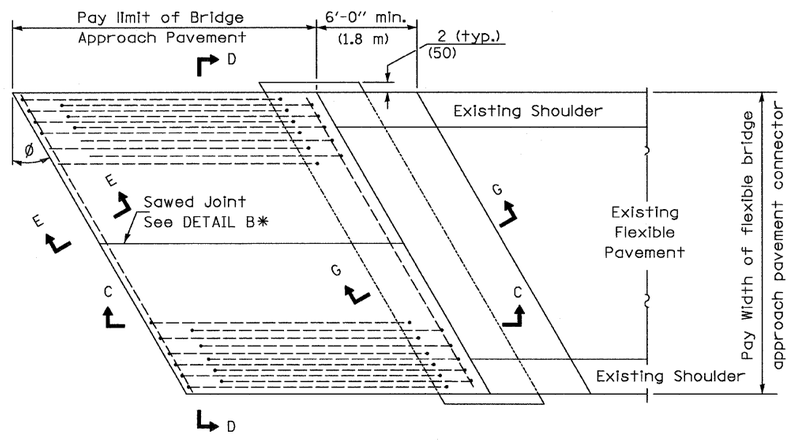


EXISTING CONSTRUCTION

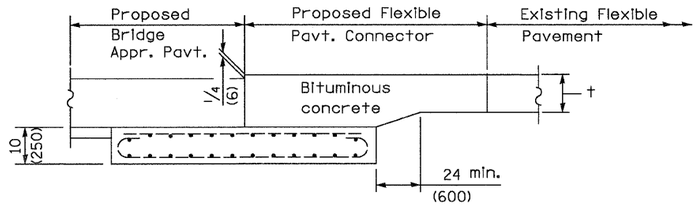
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



SECTION G-G - RIGID PAVEMENT



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)



SECTION G-G - FLEXIBLE PAVEMENT

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
BRIDGE APPROACH PAVEMENT DETAILS
(SHEET 2 of 4)

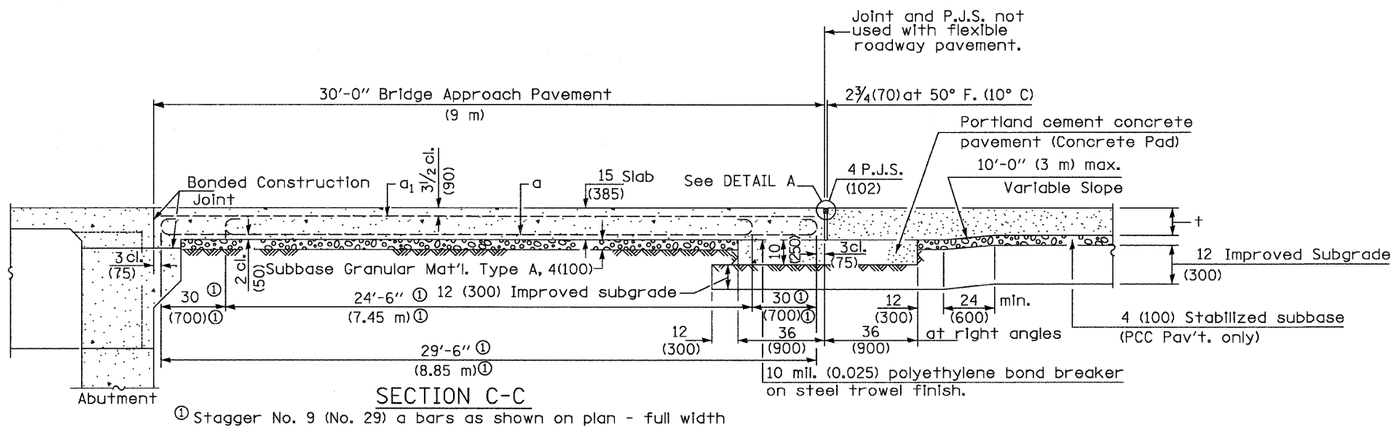
SCALE: VERT.
HORIZ.
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

PLOT DATE = 3/27/2009
PLOT NAME = K:\Jobs\105880\IL 75_SP East\CADD\Design\105881_BridgeApproachPvmt.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Sheet 2

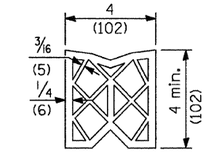
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	162
STA.	TO STA.			
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

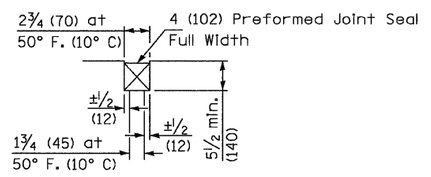


SECTION C-C

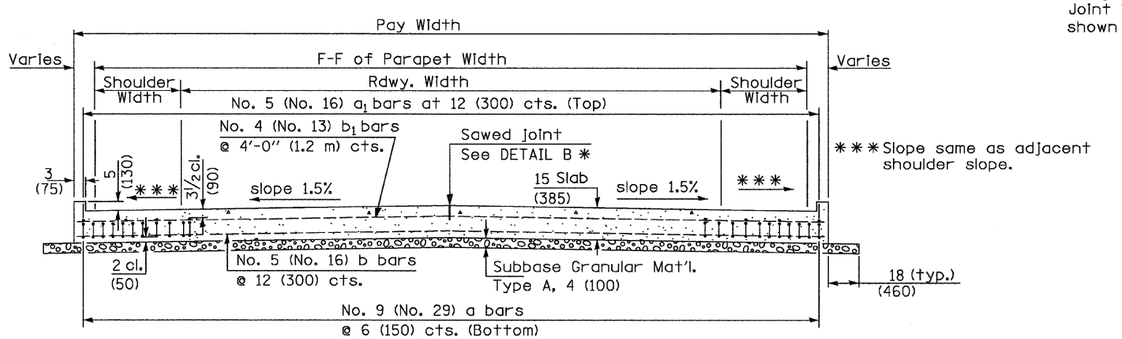
① Stagger No. 9 (No. 29) a bars as shown on plan - full width



PREFORMED JOINT SEAL

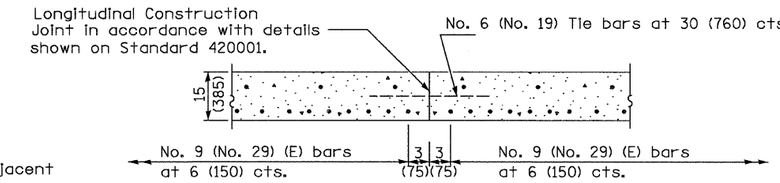


DETAIL A



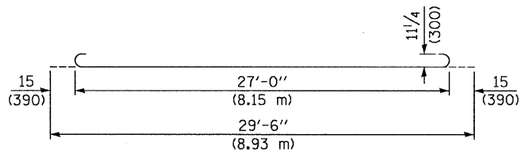
SECTION D-D

(See Plan for Dimensions not shown)

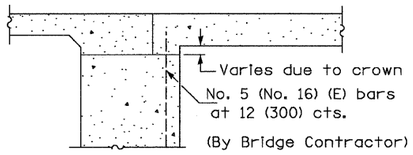


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.

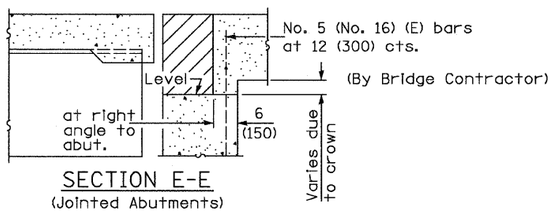


BAR a



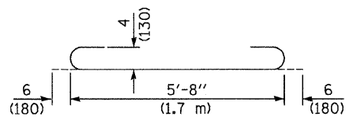
SECTION E-E

(Integral Abutments)



SECTION E-E

(Jointed Abutments)



BAR a_2

DESIGN STRESSES

fy = 60,000 p.s.i. (400 MPa)
f'c = 3,500 p.s.i. (24 MPa)
n = 8.5

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

ILLINOIS ROUTE 75
BRIDGE APPROACH PAVEMENT DETAILS
(SHEET 3 of 4)

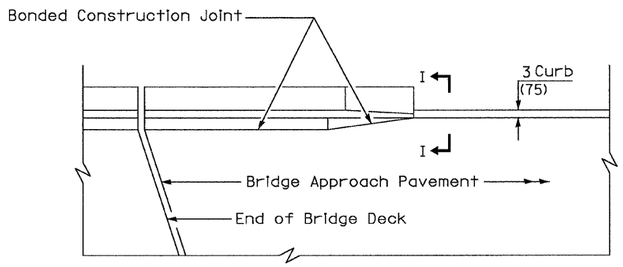
SCALE: VERT.
HORIZ.
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

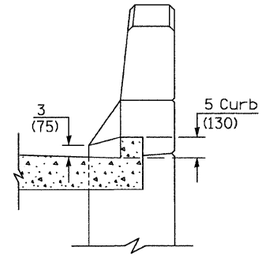
PLOT DATE = 3/2/2009
FILE NAME = c:\projects\95881_75.3P East\CADD\Design\195881_BridgeApproachPvmt.dgn
PLOT SCALE = 1.59
USER NAME = JTracey
MODEL = Sheet 3

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1	STEPHENSON & WINNEBAGO	335	163
STA.		TO STA.		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

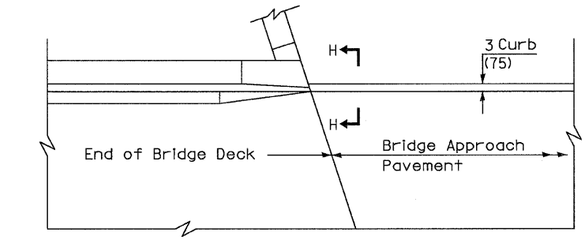
CONTRACT NO. 64970



PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT

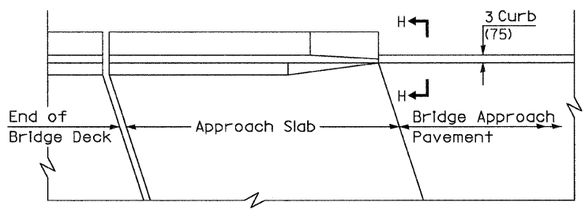


SECTION I - I



PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT

SECTION H - H



PARAPET TO CURB TRANSITION
VAULTED ABUTMENT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 505 (IL 75)

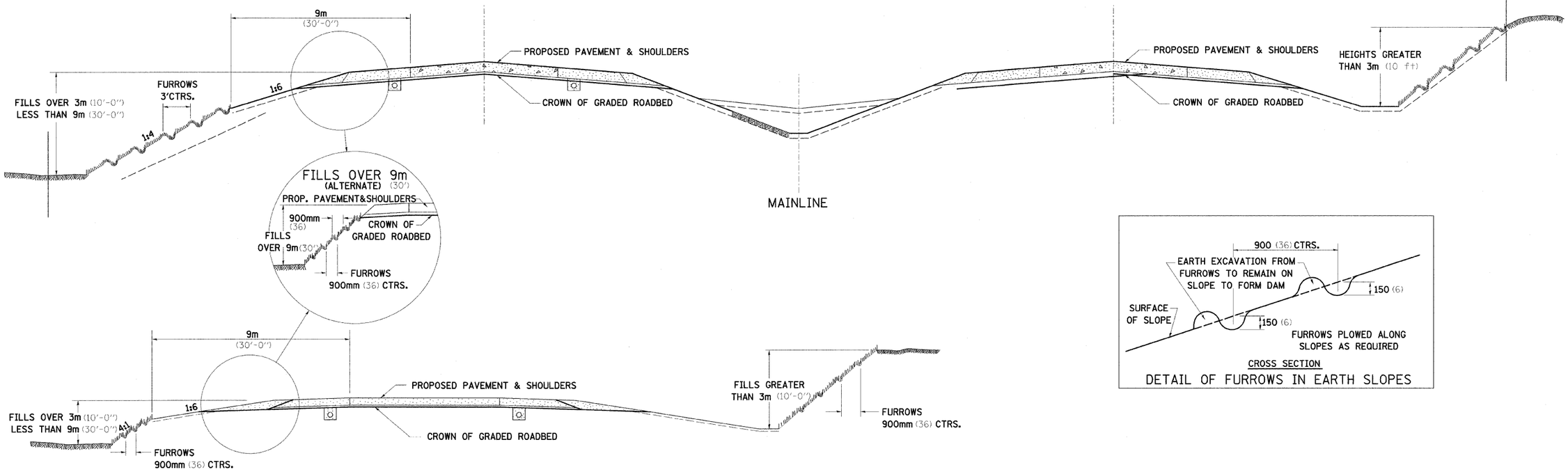
ILLINOIS ROUTE 75
BRIDGE APPROACH PAVEMENT DETAILS
(SHEET 4 of 4)

SCALE: VERT.
HORIZ.
DATE: 3/3/09

DRAWN BY MTH
CHECKED BY SPF

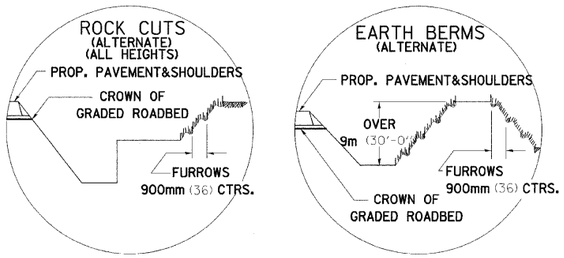
PLOT DATE = 3/2/2009
FILE NAME = K:\IL75SBR\IL 75.3P Exst\CADD\Design\175SBR_BridgeApproachPvmt.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Sheet 4

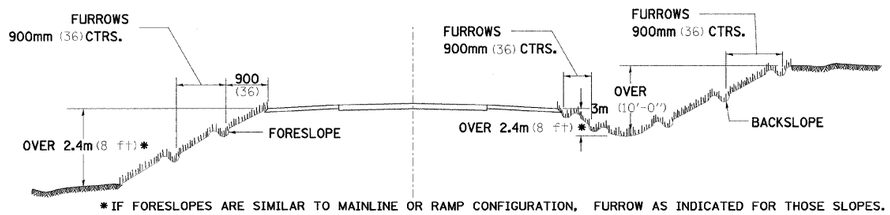
TYPICAL FURROWED ROADWAY SLOPES



DETAIL OF FURROWS IN EARTH SLOPES

RAMPS





*IF FORESLOPES ARE SIMILAR TO MAINLINE OR RAMP CONFIGURATION, FURROW AS INDICATED FOR THOSE SLOPES.

CROSSROAD GRADE SEPERATIONS

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

GENERAL NOTES

IN GENERAL, THE ENTIRE EARTH SURFACE WITHIN THE RIGHT-OF-WAY SHALL BE SEEDED AND MULCHED.

NO AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO THE GRADED ROADBED.

FORESLOPES AND/OR BACKSLOPES 3m (10 ft) OR LESS IN HEIGHT WILL NOT REQUIRE FURROWING UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

FORESLOPES AND/OR BACKSLOPES OVER 3m (10 ft) IN HEIGHT SHALL BE FURROWED. THE OPERATION SHALL INCLUDE FINISHING THE SLOPES TO FINAL LINE AND GRADE, AS SHOWN ON THE CROSS SECTIONS BEFORE FURROWING IS DONE. FURROWS SHALL BE PLOWED ALONG A LEVEL LINE CONFORMING TO THE CONTOURS OF THE SLOPE. THE COST OF FURROWING SHALL BE CONSIDERED INCLUDED IN THE PROJECT COST AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

SEQUENCE AND OPERATION FOR SEEDING, MULCHING AND FURROWING OF ROADWAY SLOPES:

1. SPREAD FERTILIZER.
2. PERFORM THE OPERATION OF GROUND PREPARATION.
3. PLOW FURROWS.
4. PERFORM THE OPERATION OF SEEDING. THE SEED SHALL BE SOWN ON THE SURFACE OF THE PREPARED GROUND AFTER FURROWING.
5. THE OPERATION OF COVERING THE SEED, BY HARROWING OR OTHER MEANS, SHALL BE PERFORMED ONLY IF SO DIRECTED BY THE ENGINEER AND SHALL BE INCLUDED TO THE ITEM OF SEEDING.
6. SECTION 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS NOTED HEREIN.

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

PLOT DATE = 3/2/2009
FILE NAME = N:\111PS680\Il 75_3p eas\cadd\design\195681.Dist_Std.dgn
PLOT SCALE = 1.000
PLOT STYLE = JTracey
USER NAME = Dist Std 01
MODEL =

FILE NAME = *FILE1*	USER NAME = *USER*	DESIGNED -	REVISED - 1-15-08	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REGION 2 / DISTRICT 2 STANDARD**
		DRAWN -	REVISED -		
	PLOT SCALE = 1:50	CHECKED -	REVISED -		SCALE: 1:50 | SHEET NO. OF SHEETS | STA. TO STA.
	PLOT DATE = 3/2/2009	DATE -	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	164
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

STORM WATER POLLUTION PREVENTION PLAN
EROSION CONTROL PLAN

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SITE DESCRIPTION
DESCRIPTION OF CONSTRUCTION ACTIVITY:

THIS PROJECT CONSISTS OF INTERSECTION RECONSTRUCTION, CULVERT REPLACEMENT, BRIDGE REPLACEMENT & ROADWAY RESURFACING

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:
THE SEQUENCE OF EVENTS ARE AS FOLLOW: CLEARING, EMBANKMENT, EXCAVATION, GRADING AND PAVING. THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE "STAGING PLANS".

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT) 118 ACRES
PROPOSED R.O.W (TOTAL PARCEL AREA) 14 ACRES
DISTURBED BY EXCAVATION (E.O.P TO CONSTRUCTION LIMIT) 21 ACRES

SUPPORTING REPORTS AND PLANS
THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, SOILS REPORTS, BORING LOGS
USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE
ROCK RUN CREEK

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES
STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:
PERIMETER EROSION CONTROL SHALL BE PLACED PRIOR TO BEGINNING EARTHWORK.

STABILIZATION PRACTICES DURING CONSTRUCTION:
AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE PROJECT PROGRESSES. SEEDING SHALL BE COMPLETED AS SPECIFIED IN THE EROSION CONTROL/SEEDING MOBILIZATION AND TEMPORARY SEEDING SPECIAL PROVISION.

MAINTENANCE AFTER FINAL GRADING
TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP AND DISTURBED TURF RESEEDED.

PLOT DATE = 3/2/2009
FILE NAME = h:\11195808\v1 75.3p east\osdd\design\195081_Dist_Std.dgn
PLOT SCALE = 1.0000 '/ IN
USER NAME = JTreaney
MODEL = Dist Std 02

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED - 5-12-04	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN -	REVISED -	
	PLOT SCALE = 1:50	CHECKED -	REVISED -	
	PLOT DATE = 3/2/2009	DATE -	REVISED -	

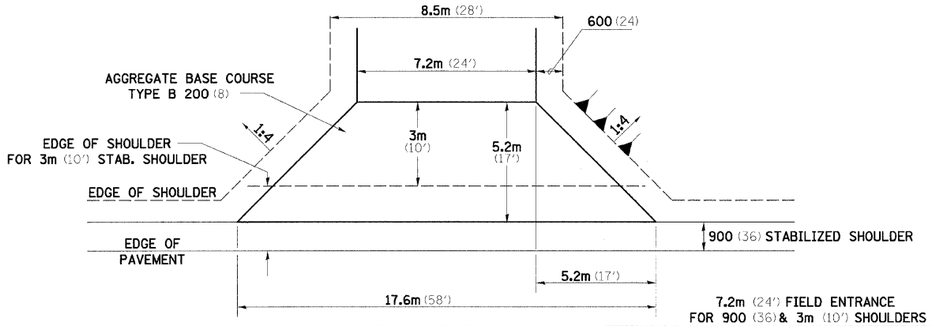
REGION 2 / DISTRICT 2 STANDARD

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	165
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

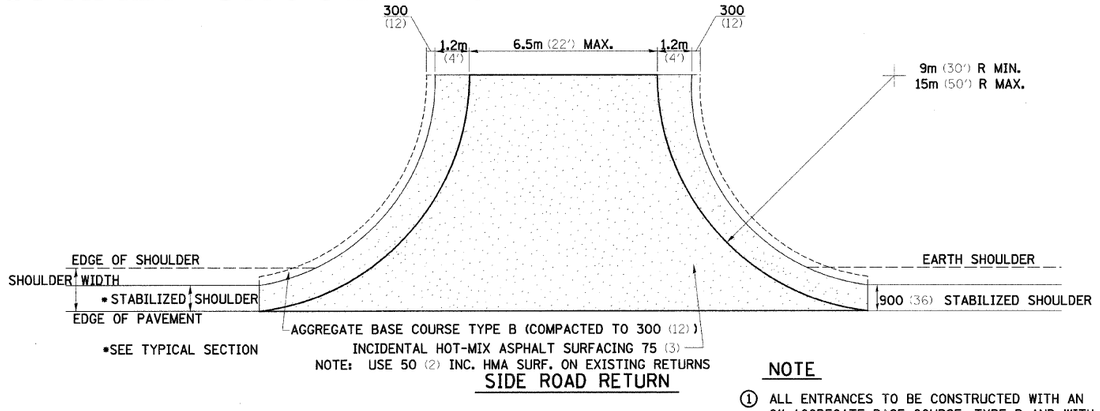
ENTRANCES, SIDEROADS, AND MAILBOX RETURNS WITH 3' OR 10' HOT-MIX ASPHALT SHOULDERS



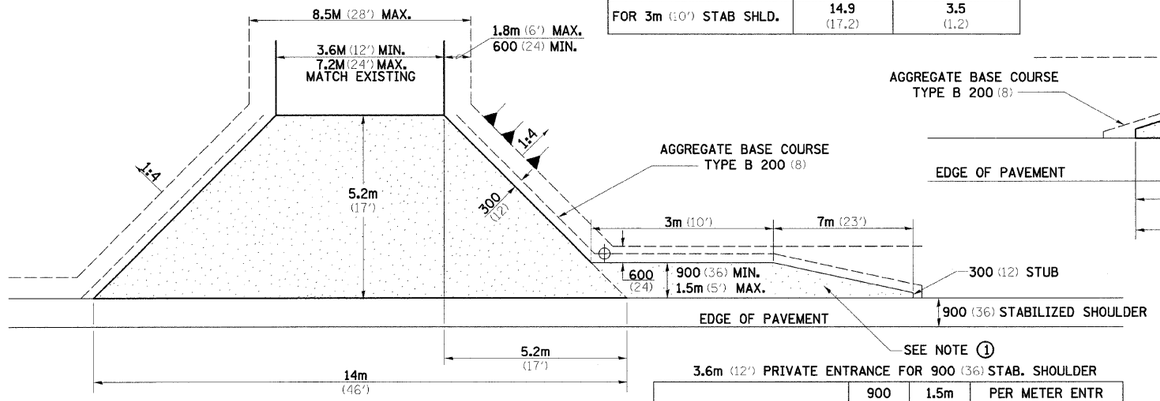
FIELD ENTRANCE

7.2m (24') FIELD ENTRANCE FOR 900 (36) & 3m (10') SHOULDERS

AGG BASE CSE TYPE B M TON (TON)	APRON M TON (TON)	PER METER (FOOT) ADD. RUN
FOR 900 (36) STAB SHLD.	31.3 (35.3)	3.5 (1.2)
FOR 3m (10') STAB SHLD.	14.9 (17.2)	3.5 (1.2)



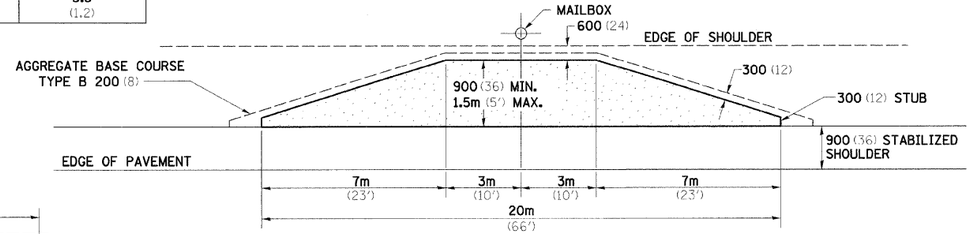
SIDE ROAD RETURN



PRIVATE ENTRANCE FOR 900 (36) STAB. SHOULDERS

3.6m (12') PRIVATE ENTRANCE FOR 900 (36) STAB. SHOULDER

	900 (36)	1.5m (5')	PER METER ENTR (FOOT)
AGG BASE CSE (TON)	29.4 (32.4)	30.8 (33.9)	0.64 (0.7)
INC HMA SURF 50 (2) (TON)	7.8 (8.6)	8.4 (9.3)	0.17 (0.19)
BIT PRIME COAT (TON)	0.08 (0.09)	0.09 (0.10)	0.006 (0.002)

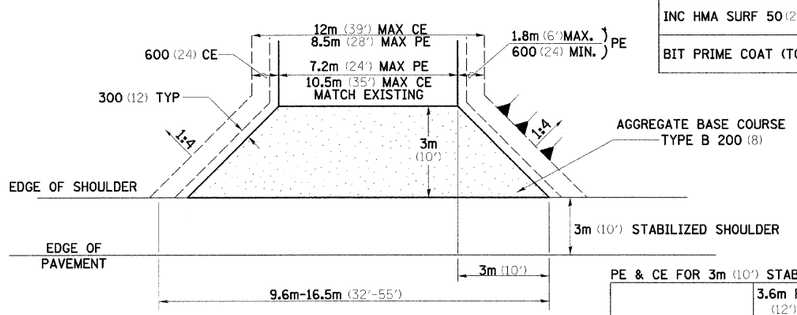


MAILBOX TURNOUT

	900 (36)	1.5m (5')
AGG BASE CSE T-B (TON)	10.7 (11.8)	14.4 (15.9)
INC BIT SURF 50 (2) (TON)	2.2 (2.4)	3.4 (3.8)
BIT PRIME COAT (TON)	0.02 (0.02)	0.04 (0.04)

NOTE

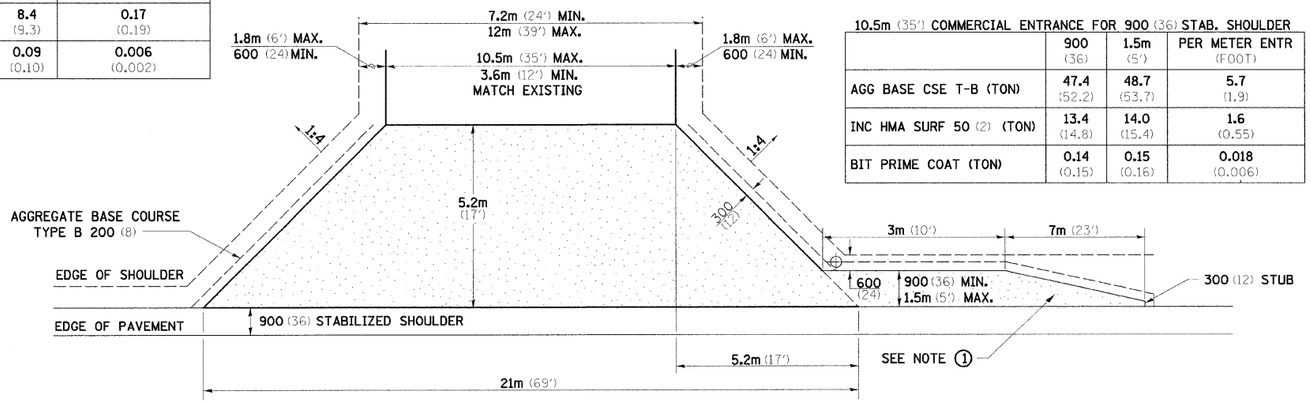
1. ALL ENTRANCES TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
2. TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
3. ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
4. FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN WHICH EVER IS GREATER.
5. QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
6. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



PE & CE FOR 3m (10') STAB. SHOULDERS

PE & CE FOR 3m (10') STAB. SHOULDER

	3.6m PE (12')	10.5m CE (35')
AGG BASE CSE (TON)	11.4 (12.6)	21.9 (24.2)
INC HMA SURF (TON)	3.1 (3.4)	6.3 (7.0)
PRIME (TON)	0.04 (0.04)	0.06 (0.07)



CE FOR 900 (36) STAB. SHOULDERS

10.5m (35') COMMERCIAL ENTRANCE FOR 900 (36) STAB. SHOULDER

	900 (36)	1.5m (5')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	47.4 (52.2)	48.7 (53.7)	5.7 (1.9)
INC HMA SURF 50 (2) (TON)	13.4 (14.8)	14.0 (15.4)	1.6 (0.55)
BIT PRIME COAT (TON)	0.14 (0.15)	0.15 (0.16)	0.018 (0.006)

PLOT DATE = 3/2/2009
FILE NAME = N:\111RS802\d1 75_3p east\osdd\design\195801_Dist_Std.dgn
PLOT SCALE = 1.0000 '/ Inch
USER NAME = JTracey
MODEL = Dist Std 03

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED - 1-15-08
		DRAWN -	REVISED -
	PLOT SCALE = 1:50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

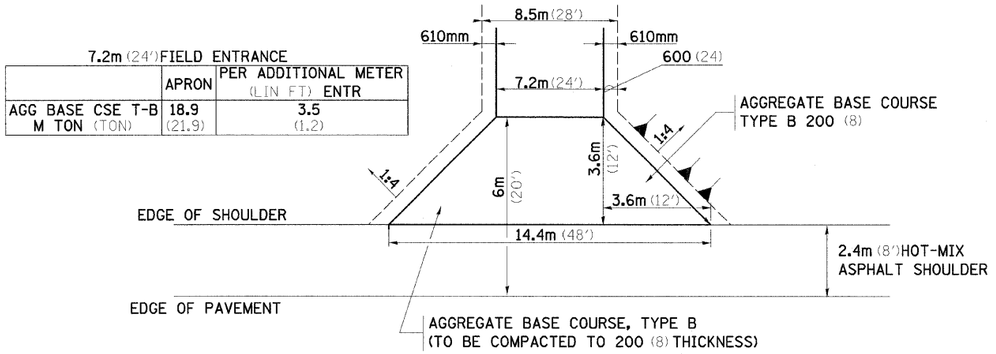
REGION 2 / DISTRICT 2 STANDARD

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

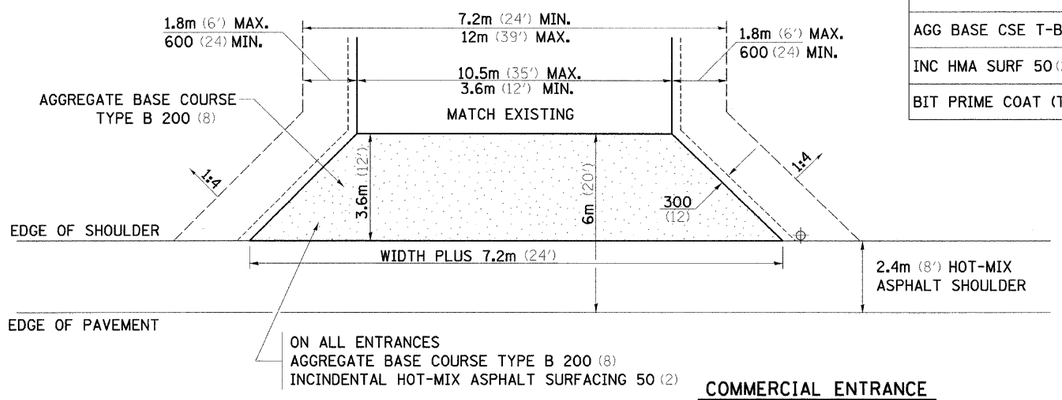
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	166
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

ENTRANCE AND SIDEROADS WITH 2.4m (8') HOT-MIX ASPHALT SHOULDERS



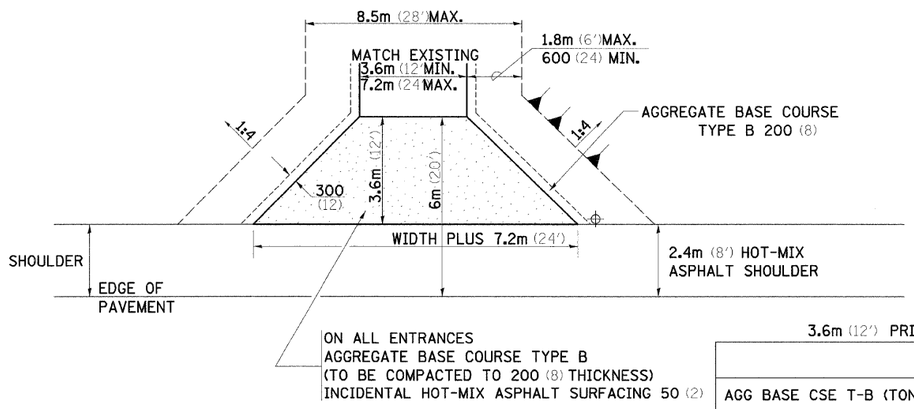
7.2m (24') FIELD ENTRANCE	APRON	PER ADDITIONAL METER (LIN FT) ENTR
AGG BASE CSE T-B M TON (TON)	18.9 (21.9)	3.5 (1.2)

FIELD ENTRANCE



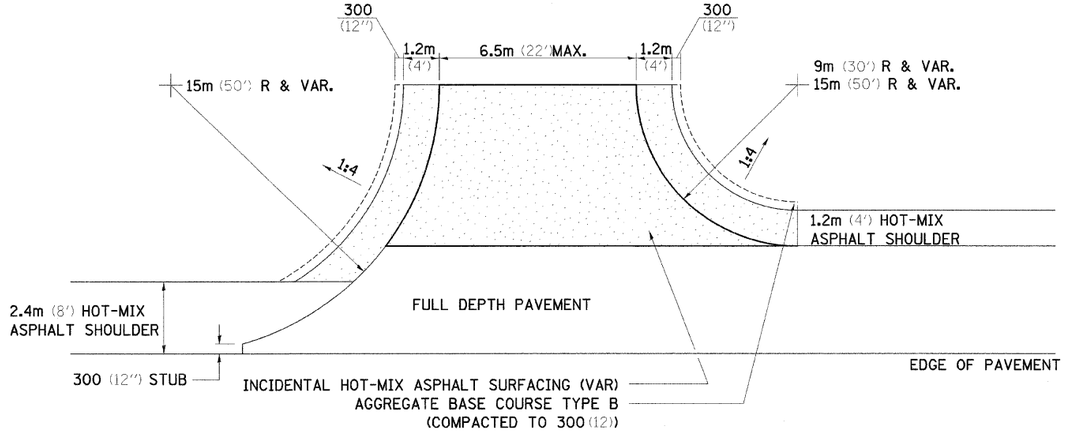
COMMERCIAL ENTRANCE

COMMERICAL ENTRANCE	3.6m (12')	10.5m (35')	PER METER ENTR (FOOT) 3.6m (12')	10.5m (35')
AGG BASE CSE T-B (TON)	14.3 (15.8)	27.0 (29.8)	0.64 (0.70)	1.70 (1.87)
INC HMA SURF 50 (2) (TON)	3.3 (3.6)	6.35 (7.0)	0.14 (0.15)	0.40 (0.44)
BIT PRIME COAT (TON)	0.042 (0.046)	0.082 (0.090)	0.002 (0.002)	0.005 (0.006)



PRIVATE ENTRANCE

3.6m (12') PRIVATE ENTRANCE	3.6m (12')	7.2m (24')	PER METER ENTR (FOOT) 3.6m (12')	7.2m (24')
AGG BASE CSE T-B (TON)	14.3 (15.8)	21.0 (23.1)	0.64 (0.70)	1.20 (1.32)
INC HMA SURF 50 (2) (TON)	3.3 (3.6)	4.9 (5.4)	0.14 (0.15)	0.27 (0.30)
BIT PRIME COAT (TON)	0.042 (0.046)	0.063 (0.069)	0.002 (0.002)	0.004 (0.004)



SIDE ROAD RETURN

NOTE

1. ALL PE & CE ARE TO BE INCIDENTAL HOT-MIX ASPHALT SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
2. FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
3. QUANTITIES ARE CALCULATED WITH 2.4m HOT-MIX ASPHALT SHOULDER IN PLACE. AGGREGATE QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
4. EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE CONSIDERED INCLUDED TO THE AGGREGATE BASE COURSE.
5. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

PLOT DATE = 3/2/2009
FILE NAME = h:\11958800\vl 75_3p east\osdd\design\195801_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 04

FILE NAME = sFILEL*	USER NAME = $USER*	DESIGNED -	REVISED - 1-15-08
		DRAWN -	REVISED -
	PLOT SCALE = 1:50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.

*111RS-4, 111BR-1, Yg-15d-RS-1,& (W-15d)T-1

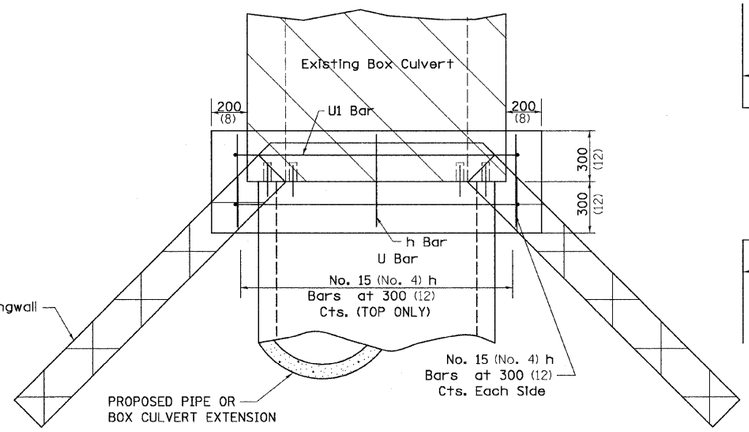
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	167
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 64970

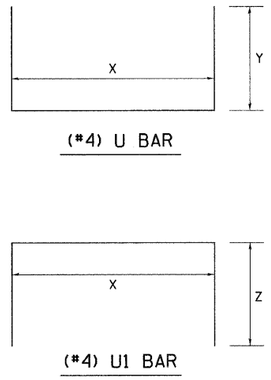
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	•••	335	168
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

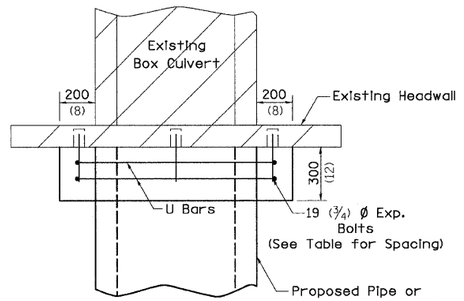
•FAP 505 (IL 75)
••111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1
•••WINNEBAGO AND STEPHENSON

CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS

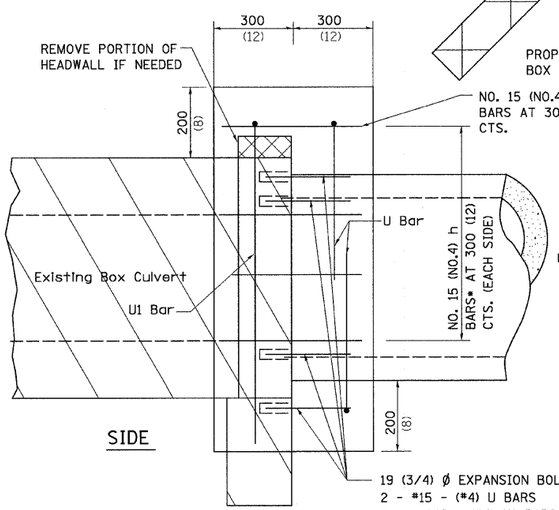


PLAN OF CULVERT WITH ANGLED WING WALLS

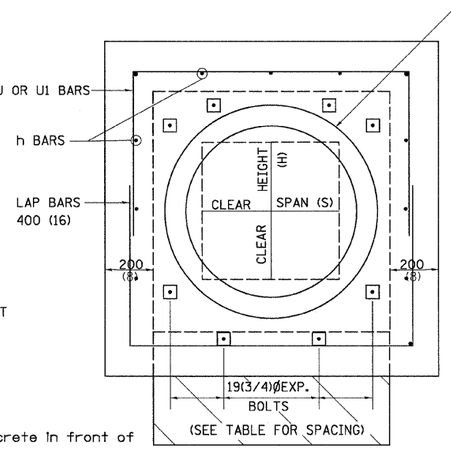




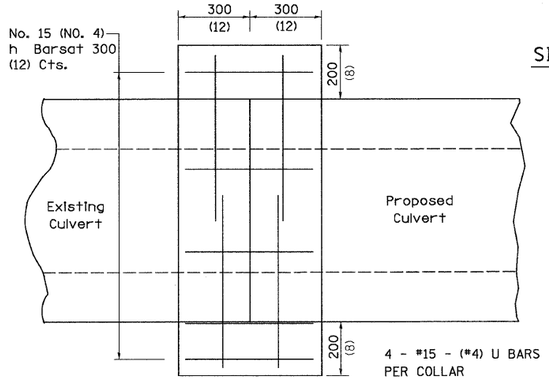
PLAN OF CULVERT WITH STRAIGHT HEADWALL



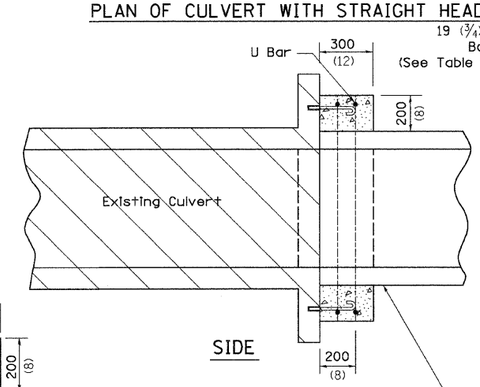
SIDE



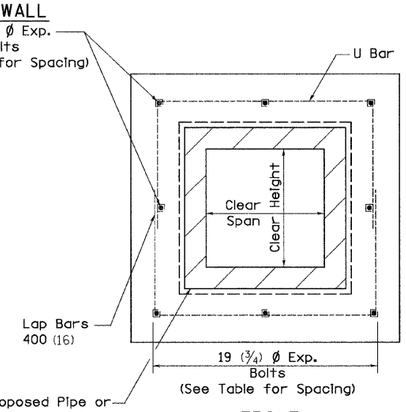
FRONT



CULVERT CONNECTION WITHOUT EXISTING HEADWALL



SIDE



FRONT

PLACEMENT DETAILS FOR EXPANSION BOLTS

H OR S	NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE			
	EXTENSIONS < 4.57m (15')		EXTENSIONS > 4.57m (15')	
	NUMBER	SPACING	NUMBER	SPACING
600 (24)	*		*	
750 (30)	2	450 (18)	2	450 (18)
900 (36)	2	600 (24)	2	600 (24)
1200 (48)	3	450 (18)	3	450 (18)
1500 (60)	4	400 (16)	3	600 (24)
1800 (72)	5	375 (15)	4	500 (20)
2100 (84)	5	450 (18)	4	600 (24)
2400 (96)	6	375 (15)	5	525 (21)
2700 (108)	6	475 (19)	5	600 (24)
3000 (120)	7	450 (18)	6	525 (21)
3300 (132)	8	425 (17)	6	600 (24)
3600 (144)	8	475 (19)	7	550 (22)

* MINIMUM ONE PER SIDE

**Remove all concrete in front of existing concrete headwall. Cost included with Concrete Collar.

Bill of Materials

STATION	DIMENSIONS X	DIMENSIONS Y	DIMENSIONS Z	h Bar No.	U Bar No.	U Bar Length	U_1 Bar No.	U_1 Bar Length	EXPANSION BOLTS No.	CONCRETE COLLAR Cu. yds.	REINF. BARS Lbs.
10990+83 RT**	4'-8"	3'-0"	-	-	4	10'-8"	-	-	8	0.8	30
10990+83 LT	4'-8"	3'-0"	-	-	4	10'-8"	-	-	8	0.8	30
114+42 RT(IL-70)	5'-8"	3'-6"	-	16	4	12'-8"	-	-	8	1.1	50
114+42 LT(IL-70)	5'-8"	3'-6"	-	16	4	12'-8"	-	-	8	1.1	50
10710+42 LT	6'-0"	3'-8"	-	16	4	13'-4"	-	-	8	1.1	60
10710+42 RT	6'-0"	3'-8"	-	16	4	13'-4"	-	-	8	1.1	60
10714+46 RT	5'-6"	3'-5"	5'-6"	16	2	12'-4"	1	16'-6"	8	1.3	50
								Total	56	7.3	330

All h Bars 450 (18) Long

General Notes

Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications

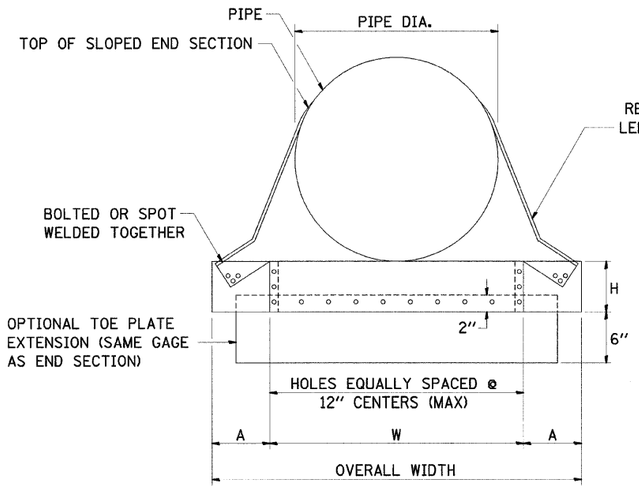
Reinforcement bars shall conform to Section 508 of the Standard Specifications.

The concrete will be paid for at the contract unit price per cubic yard for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per pound for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS of the size indicated, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 8 inches into the new concrete.

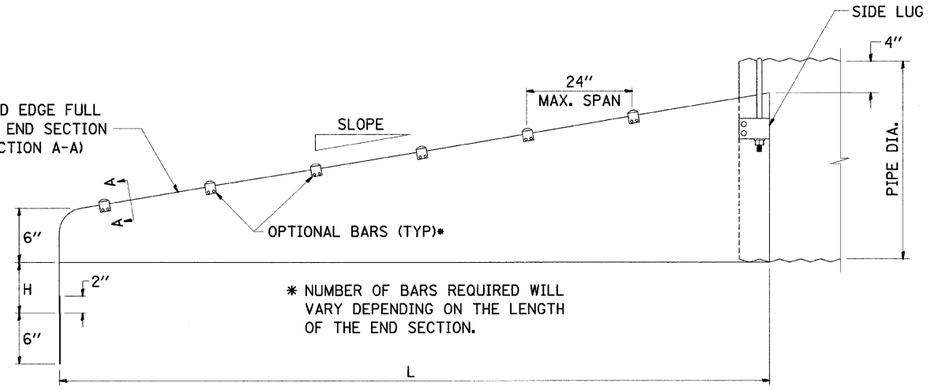
PLOT DATE = 3/2/2009
FILE NAME = #FILE#
PLOT SCALE = 1.50
REFERENCE = #REF#

REVISED 10-15-04

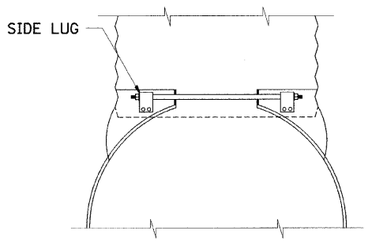
SLOPED METAL END SECTIONS WITH GRATE



FRONT VIEW ROUND PIPE



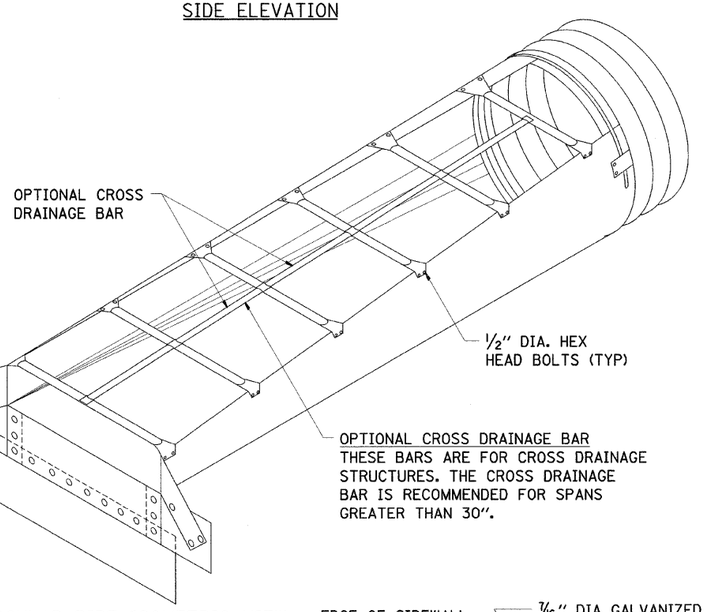
SIDE ELEVATION



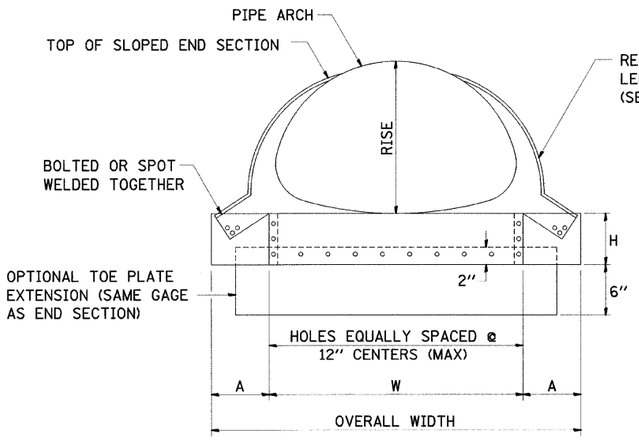
TYPE #2 CONNECTOR DETAILS (SHOWN)

TYPE #1 CONNECTOR DETAILS
THRU 24"
GALVANIZED STRAP

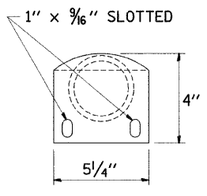
TYPE #2 CONNECTOR DETAILS (SHOWN)
FOR 30" AND LARGER
21" x 15" AND LARGER
½" THREADED ROD W/FLANGED NUT AND SIDE LUG

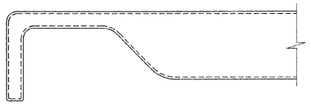


CIRCULAR PIPE ISOMETRIC VIEW



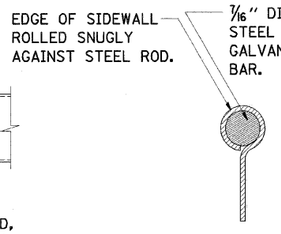
FRONT VIEW PIPE ARCH





3" GALVANIZED PIPE FLATTEN END, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

DETAIL OF OPTIONAL BARS



SECTION A-A

GENERAL NOTES

1. CONNECTORS - ROUND SIZES THRU 24" ATTACH TO PIPE WITH TYPE #1 STRAPS, ALL OTHER SIZES ATTACH WITH TYPE #2 RODS AND LUGS.
2. TOE PLATE EXTENSIONS - WHEN REQUIRED, TOE PLATE EXTENSIONS ARE TO BE THE SAME GAGE AS END SECTION. DIMENSIONS SHALL BE OVERALL WIDTH LESS 6 INCHES BY 8 INCHES HIGH.
3. OPTIONAL BARS - BARS WHEN SPECIFIED, SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE.
4. TYPICALLY PARALLEL BARS ARE PLACED ON 24" CENTERS.
5. TYPICALLY THE CROSS BARS ARE USED ON CROSS DRAIN APPLICATIONS.
6. HOLES FOR BAR ATTACHMENTS SHALL BE PROVIDED ON ALL END SECTIONS.
7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
8. THESE END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR SLOPED METAL END SECTIONS WITH GRATE OF THE DIAMETER SPECIFIED, WHICH SHALL INCLUDE FURNISHING AND INSTALLING THE END SECTION COMPLETE IN PLACE, INCLUDING THE TOE PLATE, EXCAVATING, BACKFILLING, CONNECTING TO THE PIPE, AND CROSS DRAINAGE BARS.

METAL END SECTIONS FOR ROUND PIPE

PIPE DIA. (IN)	MIN. THICK		DIMENSIONS (INCHES)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH (IN.)	SLOPE	LENGTH (IN.)
15	.064	16	8	6	21	37	6:1	30	4:1	20
18	.064	16	8	6	24	40	6:1	48	4:1	32
21	.064	16	8	6	27	43	6:1	66	4:1	44
24	.064	16	8	6	30	46	6:1	84	4:1	56
30	.109	12	12	9	36	60	6:1	120	4:1	80
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300

METAL END SECTIONS FOR PIPE ARCH

EQUIV. DIA. (IN)	(INCHES)		MIN. THICK		DIMENSIONS (INCHES)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH (IN.)	SLOPE	LENGTH (IN.)
18	21	15	.064	16	8	6	27	43	6:1	30	4:1	20
21	24	18	.064	16	8	6	30	46	6:1	48	4:1	32
24	28	20	.064	16	8	6	34	50	6:1	60	4:1	40
30	36	24	.079	14	12	9	41	65	6:1	84	4:1	56
36	42	29	.109	12	12	9	48	72	6:1	114	4:1	76
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222
72	83	57	.109	12	16	12	89	121	4:1	188	6:1	282

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

PLOT DATE = 3/2/2009
FILE NAME = k:\11PS800\...\1 75.3p east\cadd\design\195801.Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 06

FILE NAME = $FILE1$	USER NAME = $USER$	DESIGNED -	REVISED - 5-8-96
		DRAWN -	REVISED -
	PLOT SCALE = 1:50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

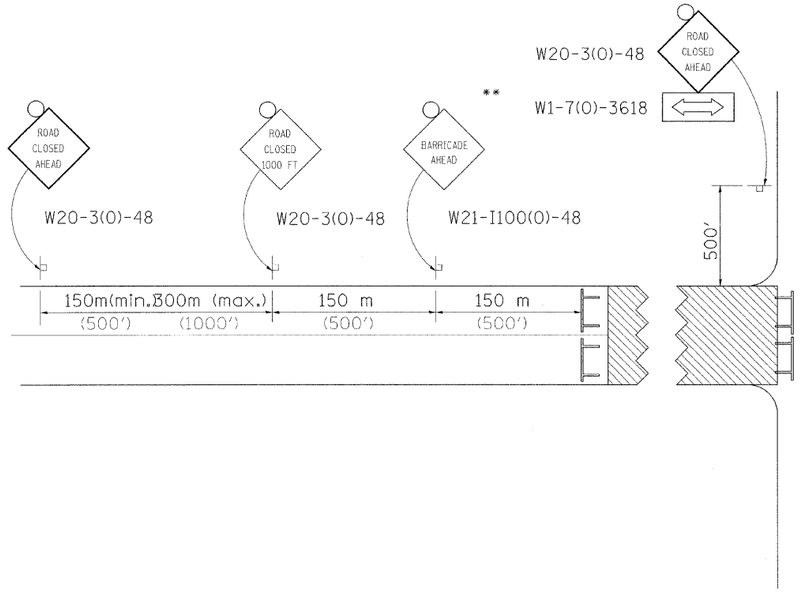
SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.

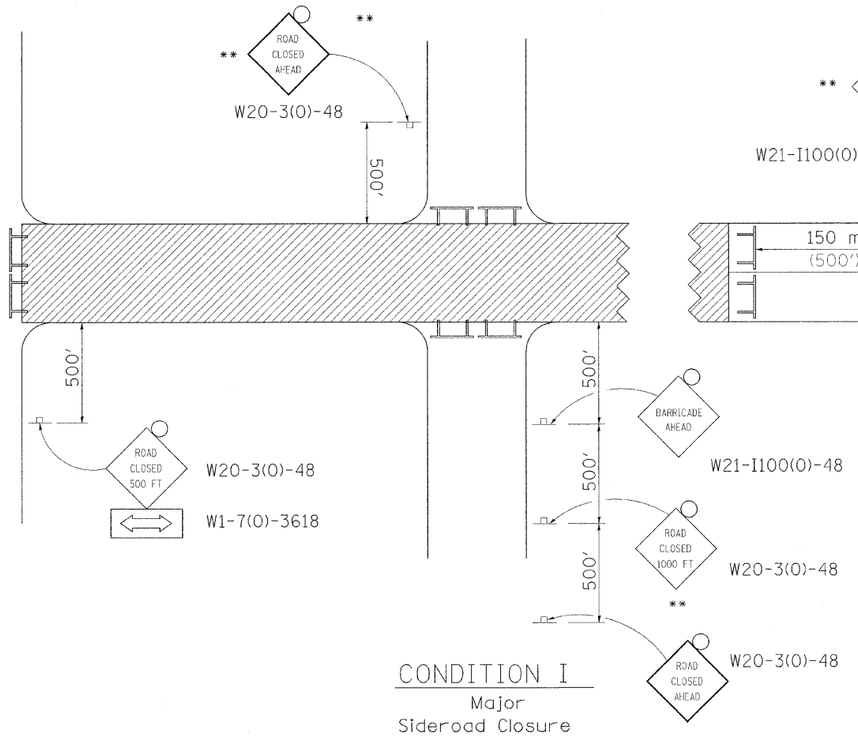
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	169
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

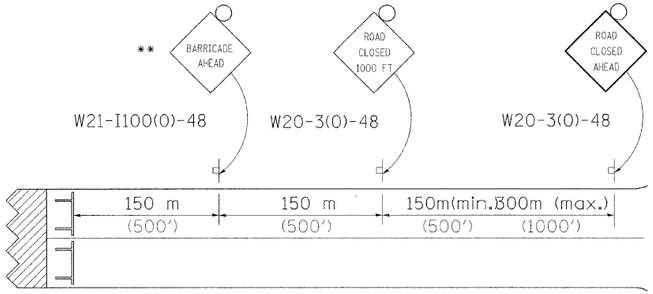
TRAFFIC CONTROL FOR ROAD CLOSURE

CONDITION II

Minor
Sideroad Closure







CONDITION I

Major
Sideroad Closure

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

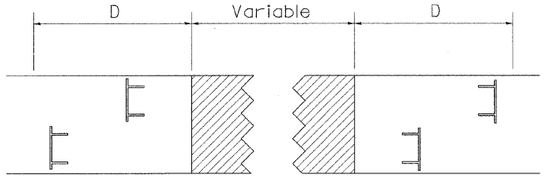
GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250' and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

** Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic. Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To All Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 600 m (2000') an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

SYMBOLS

Work area

Type III Barricade with Flashers

Sign with flashing light

All dimensions are in millimeters (inches) unless otherwise shown.

TYPICAL APPLICATION FOR ROAD CLOSURE

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

PLOT DATE = 3/2/2009
FILE NAME = k:\11795800\i 75_3p east\cadd\design\195801_Dist.Stddgn
PW STYLE = ADOT.tbl
USER NAME = JTracey
MODEL = Dist Std 07

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED - 1-11-08
		DRAWN -	REVISED -
	PLOT SCALE = 1:50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

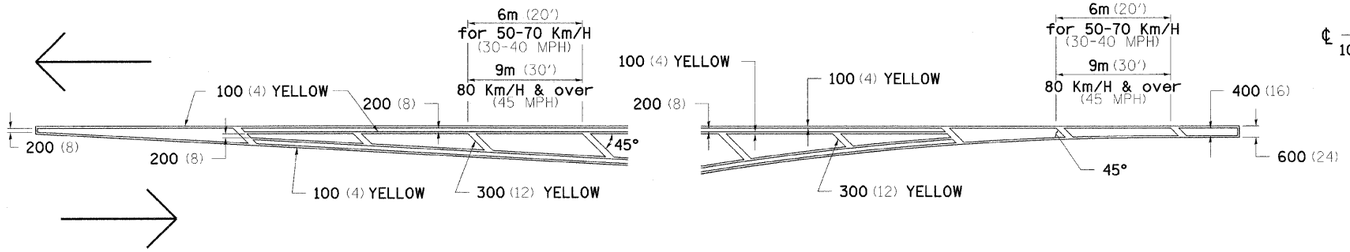
REGION 2 / DISTRICT 2 STANDARD

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. TO STA.

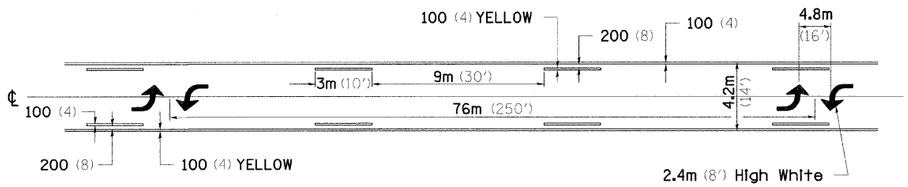
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	170
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

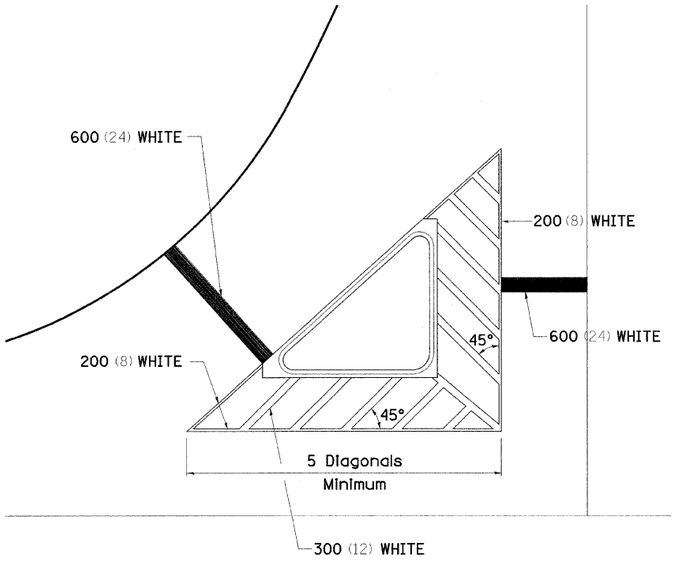


MEDIAN PAVEMENT MARKING

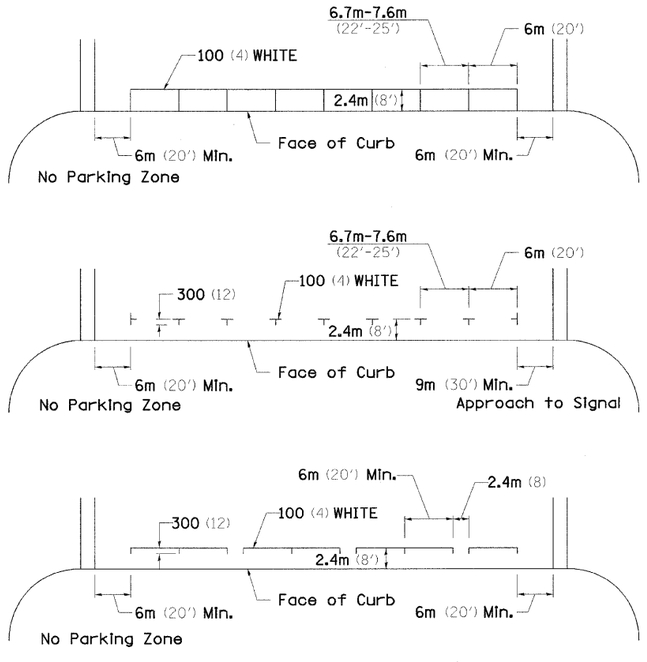


** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

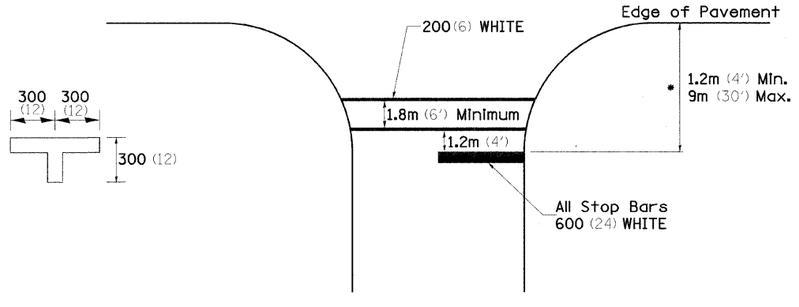


TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

PLOT DATE = 3/2/2009
FILE NAME = k:\111950800\sl 79.3p east\cadd\design\1950801_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTraceny
MODEL = Dist Std 08

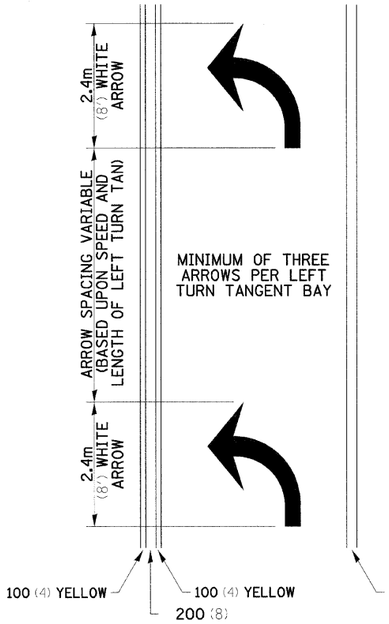
FILE NAME = @FILEL@	USER NAME = @USER@	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED -		
	PLOT SCALE = 1:50	CHECKED -	REVISED -		SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.
	PLOT DATE = 3/2/2009	DATE -	REVISED -		

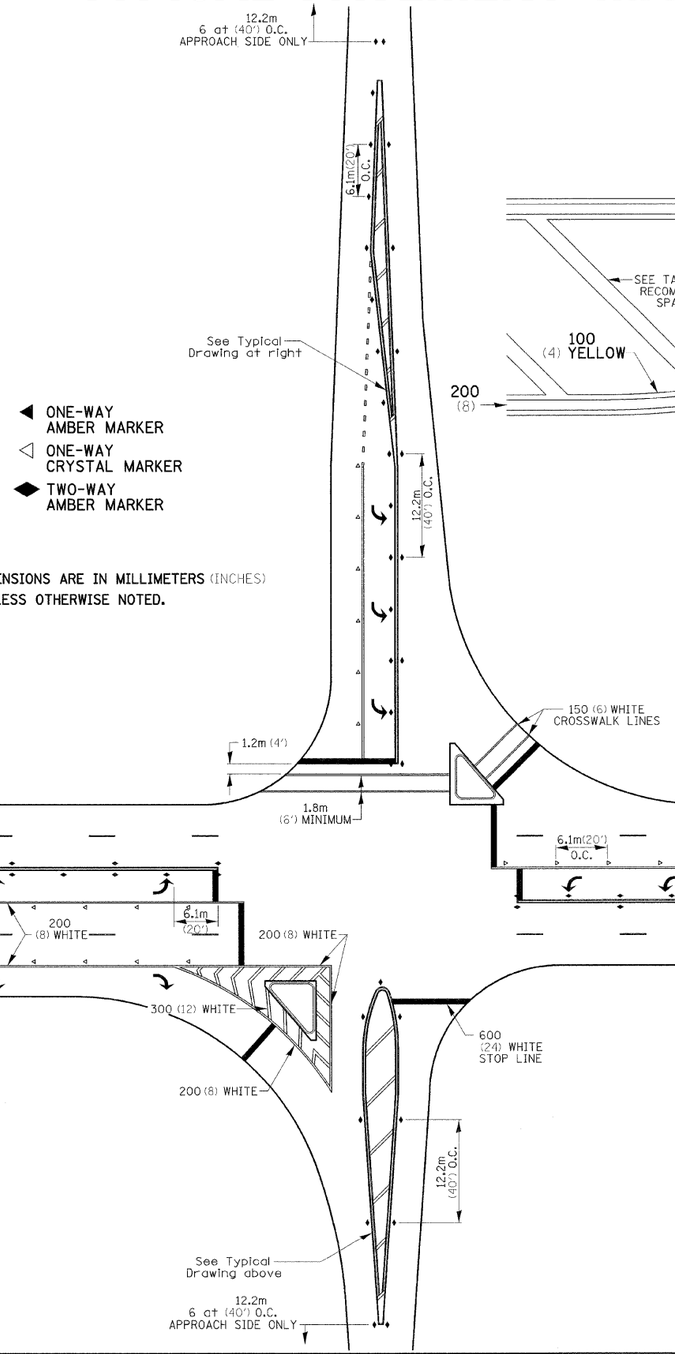
*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	171
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT				

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT

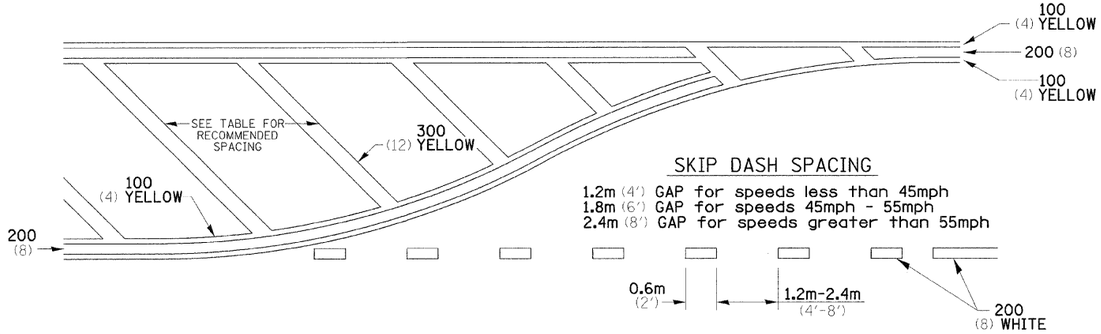




- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



SKIP DASH SPACING

1.2m (4') GAP for speeds less than 45mph
1.8m (6') GAP for speeds 45mph - 55mph
2.4m (8') GAP for speeds greater than 55mph

RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.

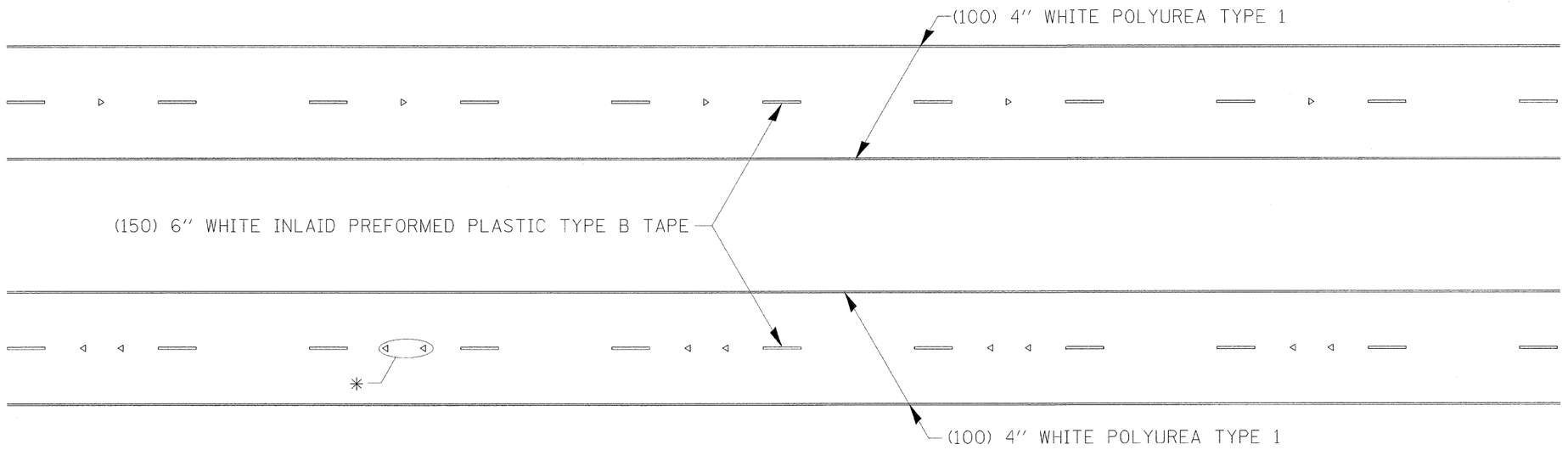
PLOT DATE = 3/2/2009
FILE NAME = k:\111ps802\sl 75.3p east\cadd\design\195801.Dist.Stddgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 09

FILE NAME = $FILE1.$	USER NAME = $USER$	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED -		
	PLOT SCALE = 1:50	CHECKED -	REVISED -		SCALE: 1:50 | SHEET NO. OF SHEETS | STA. TO STA.
	PLOT DATE = 3/2/2009	DATE -	REVISED -		

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

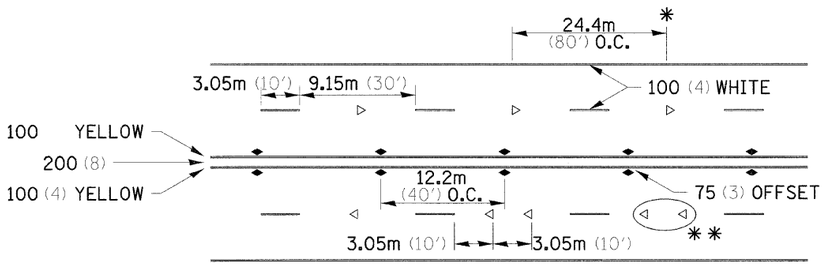
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	172
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 25,000.

MULTI-LANE / DIVIDED



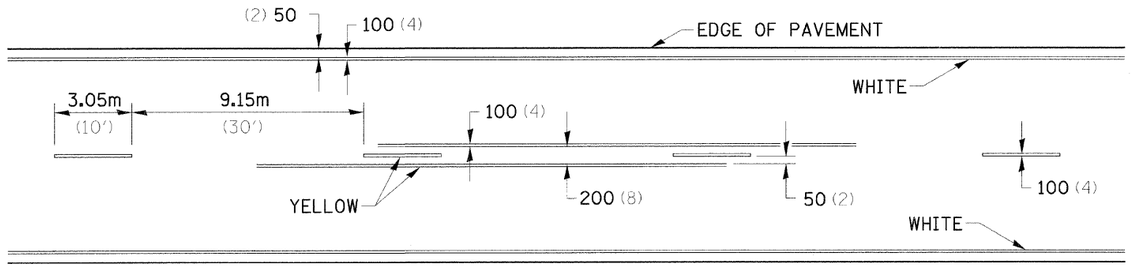
SYMBOLS

* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15Km/H (10MPH) LOWER THAN POSTED SPEEDS.

** USE DOUBLE MARKERS WHEN ADT ≥ 25,000

MULTI-LANE / UNDIVIDED

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



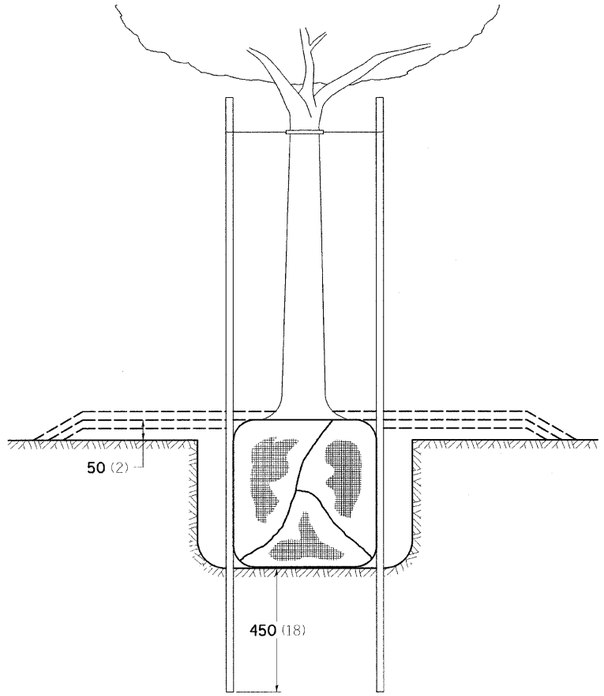
PLOT DATE = 3/2/2009
FILE NAME = n:\111RS802\s1 75_3p eastcadd\design\195801_Dist_Std.dgn
PLOT SCALE = 1.0000 '/ IN.
USER NAME = JTracey
MODEL = Dist Std 10

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED -		
	PLOT SCALE = 1:50	CHECKED -	REVISED -		SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.
	PLOT DATE = 3/2/2009	DATE -	REVISED -		

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	173
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

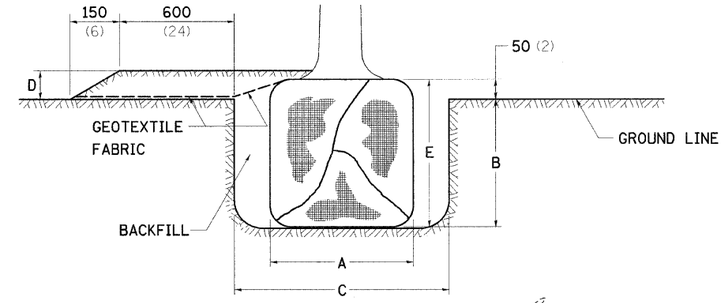
DETAILS OF PLANTING AND BRACING TREES

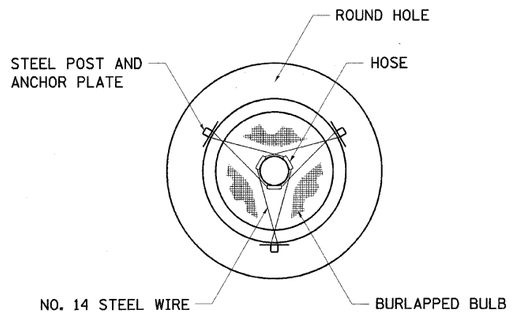


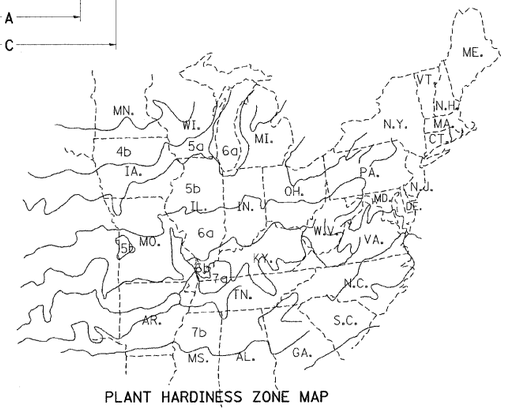
TREES SMALLER THAN 115 (4½) IN DIAMETER

SMALL TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	750 (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	750 (30)	100 (4)	325 (13)	0.41 (0.54)
2.4-3.0m (8'-10') BB	600 (24)	350 (14)	900 (36)	100 (4)	400 (16)	0.47 (0.61)
3.0-3.6m (10'-12') BB	650 (26)	375 (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

LARGE TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	325 (13)	0.47 (0.61)
50-65 (2-2½) BB	600 (24)	350 (14)	1200 (48)	100 (4)	400 (16)	0.60 (0.78)
65-75 (2½-3) BB	700 (28)	425 (17)	1200 (48)	100 (4)	475 (19)	0.60 (0.78)
75-90 (3-3½) BB	800 (32)	425 (17)	1500 (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3½-4) BB	900 (36)	500 (20)	1500 (60)	100 (4)	550 (22)	0.73 (0.96)
100-115 (4-4½) BB	1000 (40)	550 (22)	1800 (72)	100 (4)	600 (24)	0.89 (1.16)
115-125 (4½-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5½) BB	1200 (48)	675 (27)	2100 (84)	100 (4)	725 (29)	1.06 (1.38)

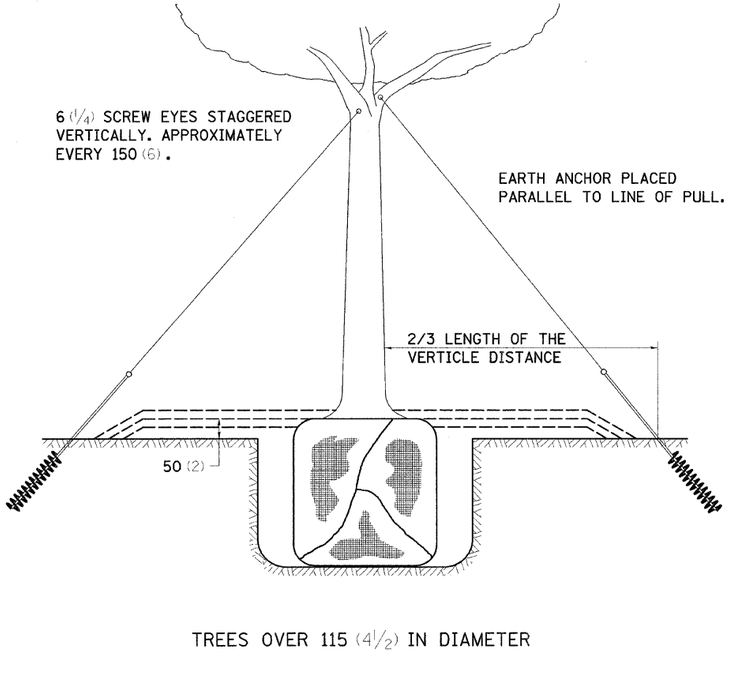




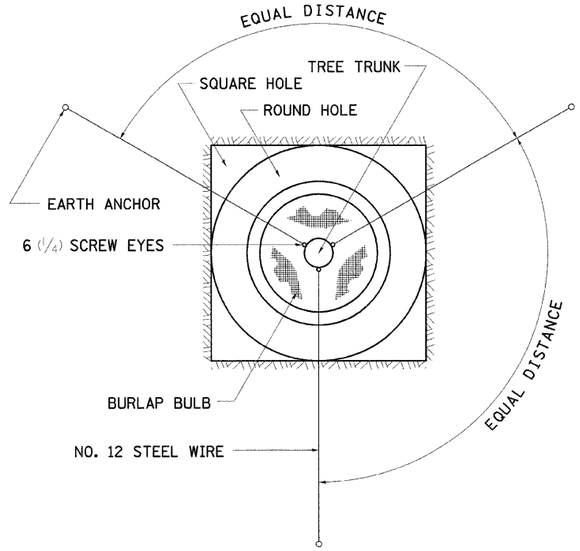


PLANT HARDINESS ZONE MAP

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PUBLICATION NO. 814



TREES OVER 115 (4½) IN DIAMETER



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

•111RS-4, 111BR-1, Yq-15d-RS-1,& (W-15d)T-1

PLOT DATE = 3/2/2009
FILE NAME = H:\11P5880\sl 75.3p east\osdd\design\1P5881Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 12

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED - 10-15-04
		DRAWN -	REVISED -
	PLOT SCALE = 1:50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

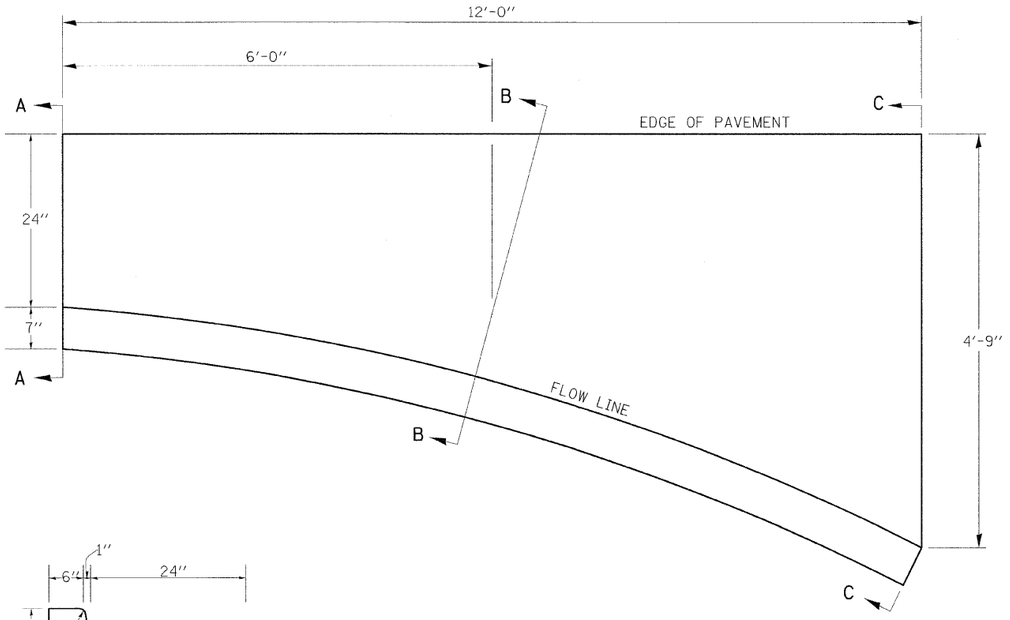
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	•	STEPHENSON	335	174
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

STANDARD INLET FOR CURB & GUTTER TYPE M4–.24



NOTES

Class SI Concrete shall be used throughout.

The Curb and Gutter Inlet will be paid for at the contract unit price per cubic yard for Class SI Concrete (OUTLETS).

Joints shall be constructed in accordance with the requiremtsof Article 606.07 of the Standard Specifications.

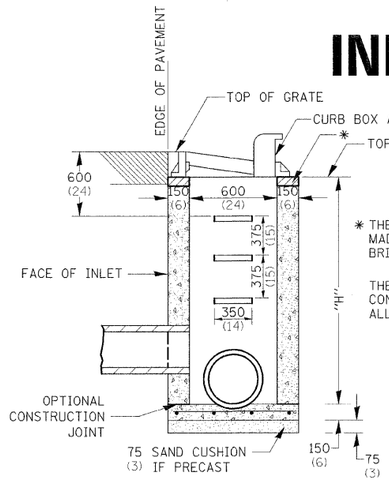
When curb and gutter is constructed adjacent to flexible pavement, a 1″ expansion joint shall be installed at construction joints.

- QUANTITY -

Section A-A to C-C
(1.23 Cu. Yds.)
Class SI Concrete

REVISED - 10-10-06

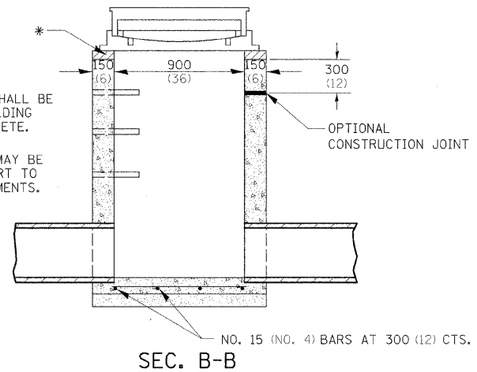
INLET SPECIAL



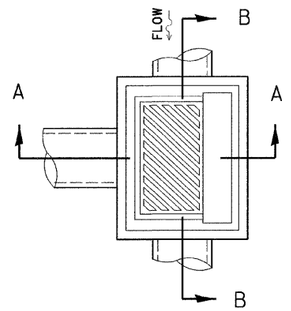
SEC. A-A

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 150 (6) SHORT TO ALLOW FOR FIELD ADJUSTMENTS.



SEC. B-B



NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

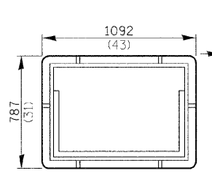
WEIGHT OF CAST IRON FRAME & GRATE = 240 kg (530 lbs.) ± . STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 1.5 m (5 ft) .

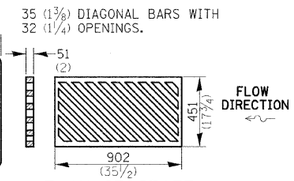
DETAIL OF FRAME & GRATE

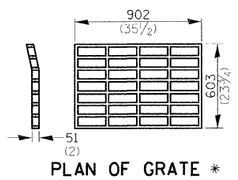
NOTES

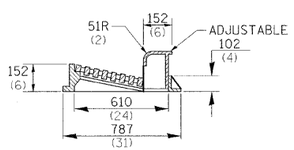
CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 27.5 MPa (4,000 psi) AFTER 28 DAYS.

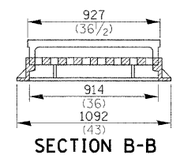
THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.











REVISED - 11-10-94

* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

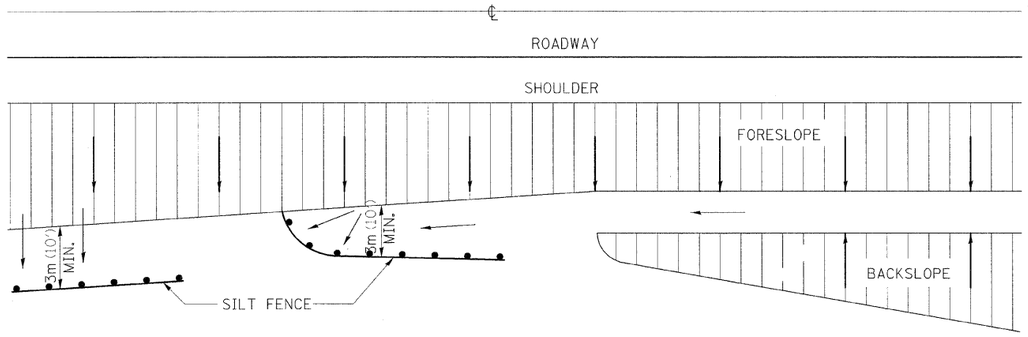
•111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

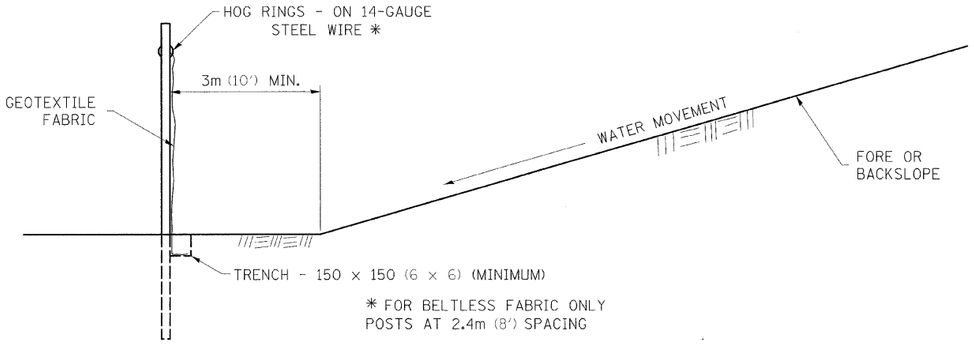
REVISED -	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
REVISED -			505	•	STEPHENSON	335 / 175
REVISED -					CONTRACT NO. 64970	
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	

INLET SPECIAL 10.2

PLOT DATE = 3/2/2009
FILE NAME = h:\111ll5800\11 75.3p east\cadd\design\175801_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 13

EROSION CONTROL DETAILS FOR SILT FENCE





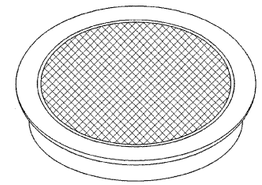
DETAILS OF SILT FERNCE

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

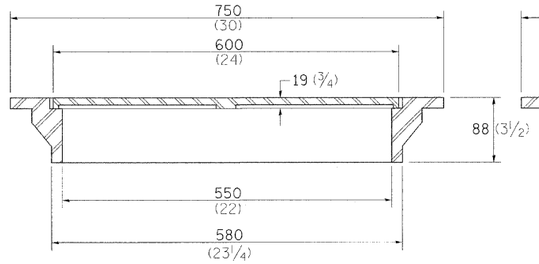
REVISED - 10-22-01

EROSION CONTROL DETAILS FOR SILT FENCE 29.2

FIELD TILE JUNCTION VAULTS 600 (24) AND 900 (36) DIA.

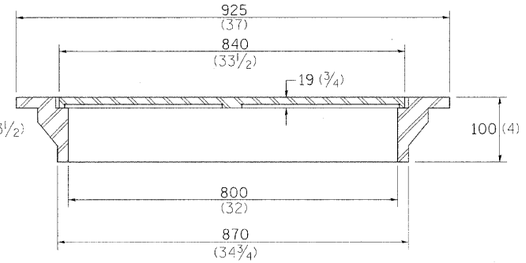


FRAME & LID FOR 600 (24) VAULT

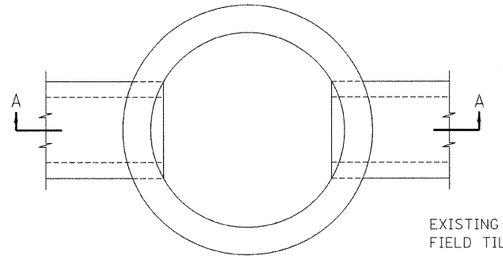


TOTAL WEIGHT: 66 Kg (146 lbs)

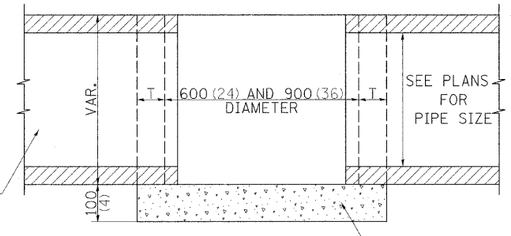
FRAME & LID FOR 900 (36) VAULT



TOTAL WEIGHT: 127 Kg (280 lbs)



PLAN

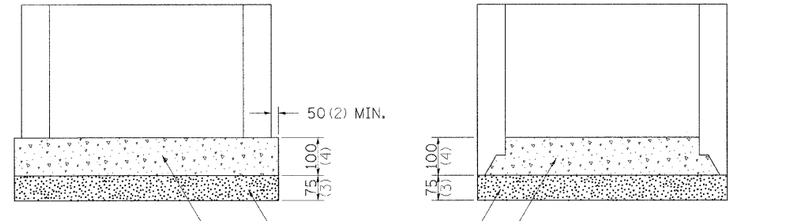


SECTION A-A

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	200 (8)
CAST-IN-PLACE CONCRETE	150 (6)
CONCRETE MASONRY UNIT	125 (5)
PRECAST REINFORCED CONCRETE SECTION	75 (3)

NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



ALTERNATE METHODS

REVISED - 5-03-94

FIELD TILE JUNCTION VAULTS 600 (24) AND 900 (36) DIA. 30.2

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

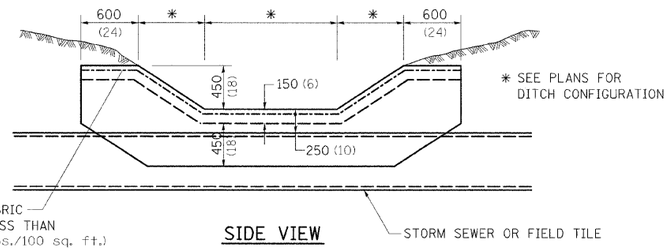
REVISED -	REGION 2 / DISTRICT 2 STANDARD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -					505	*	STEPHENSON	335	176
REVISED -							CONTRACT NO. 64970		
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 3/2/2009
FILE NAME = K:\1195800\IL 75_3P East\CADD\Design\1195801_Dist_Stddgn
PLOT SCALE = 1.0000
USER NAME = JTracey
MODEL = Dist Std 14

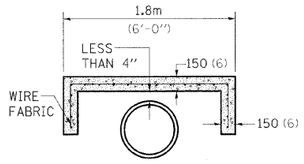
TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES

PAVED DITCH

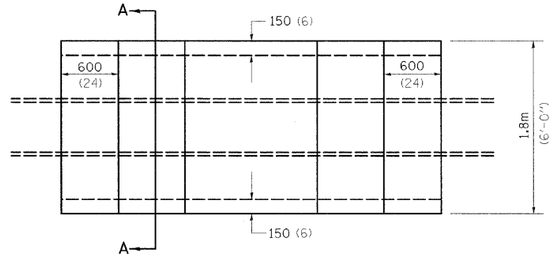
TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS LESS THAN 250mm (10 inches)



SIDE VIEW



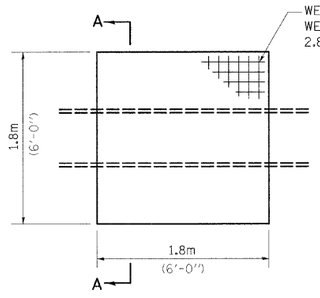
SECTION A-A

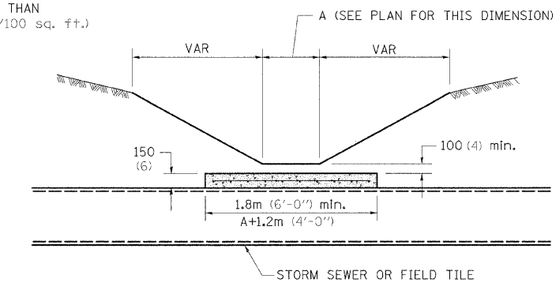


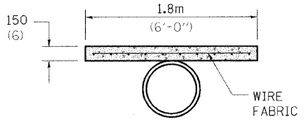
PLAN VIEW

CONCRETE SLAB

TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS 250mm (10 inches) TO 600mm (24 inches)







SECTION A-A

NOTES

THIS WORK SHALL BE DONE IN ACCORDANCE WITH ARTICLE 611.04 OF THE STANDARD SPECIFICATION.

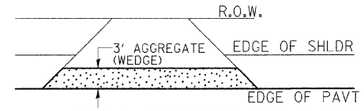
THE CONCRETE SLAB AND PAVED DITCH WILL BE PAID FOR AT THE CONCRETE UNIT PRICE PER CUBIC METER (CUBIC YARD) FOR MISCELLANEOUS CONCRETE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

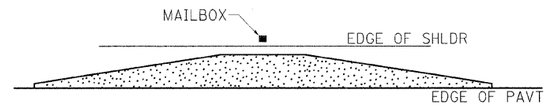
REVISED - 10-15-04

TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES **31.2**

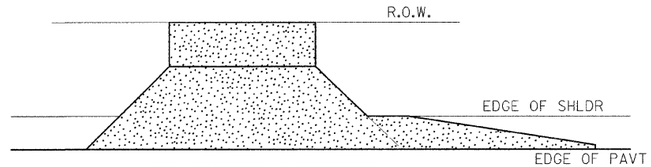
HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR TWO LIFT (3P) RESURFACING PROJECTS



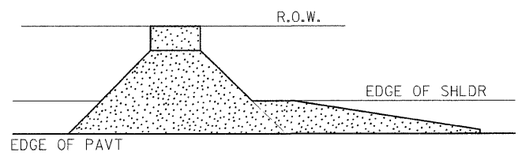
FIELD ENTRANCE



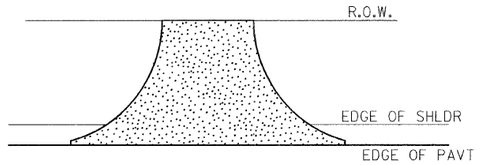
MAILBOX TURNOUT



COMMERCIAL ENTRANCE



PRIVATE ENTRANCE



SIDE ROAD RETURN

NOTE: EXISTING HMA PE's, CE's, SR's, & MB TURNOUTS

Place 2 1/4 " Incidental Hot-Mix Asphalt Surfacing #40800050 on entrance to conform to the existing configuration.

EXISTING AGG. PE's & CE's

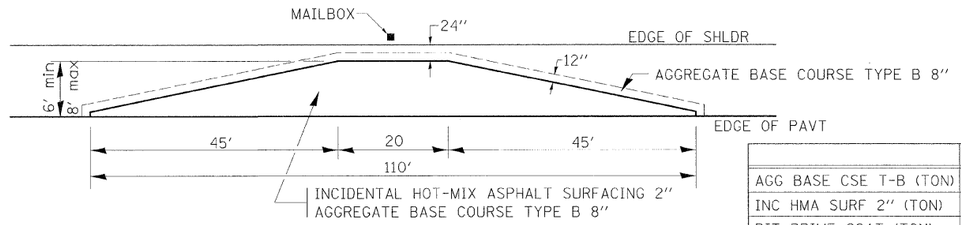
Place 2" Incidental Hot-Mix Asphalt Surfacing #40800050 on existing entrance to conform to the present configuration.

EXISTING AGG. SIDEROADS

Place 3" Incidental Hot-Mix Asphalt Surfacing #40800050 on sideroad to conform to the present configuration.

EXISTING AGG. MAILBOX TURNOUTS

Existing Agg. Mailbox Turnouts shall be constructed as shown below.



	6'	8'
AGG BASE CSE T-B (TON)	24.5	31.1
INC HMA SURF 2" (TON)	7.3	9.8
BIT PRIME COAT (TON)	0.06	0.08

REVISED - 10-21-08

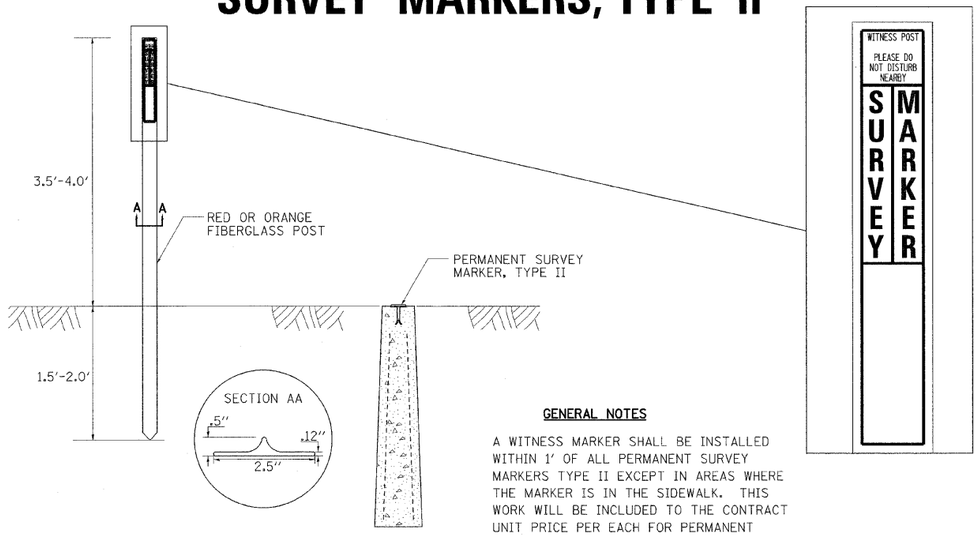
HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR TWO LIFT (3P) RESURFACING PROJECTS **47.2**

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		505	*	STEPHENSON	335	177
REVISED -				CONTRACT NO. 64970		
REVISED -	SCALE: 1:50 SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 3/2/2009
FILE NAME = H:\111RS080\11 75.3p east\osdd\design\195801Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracy
MODEL = Dist Std 15

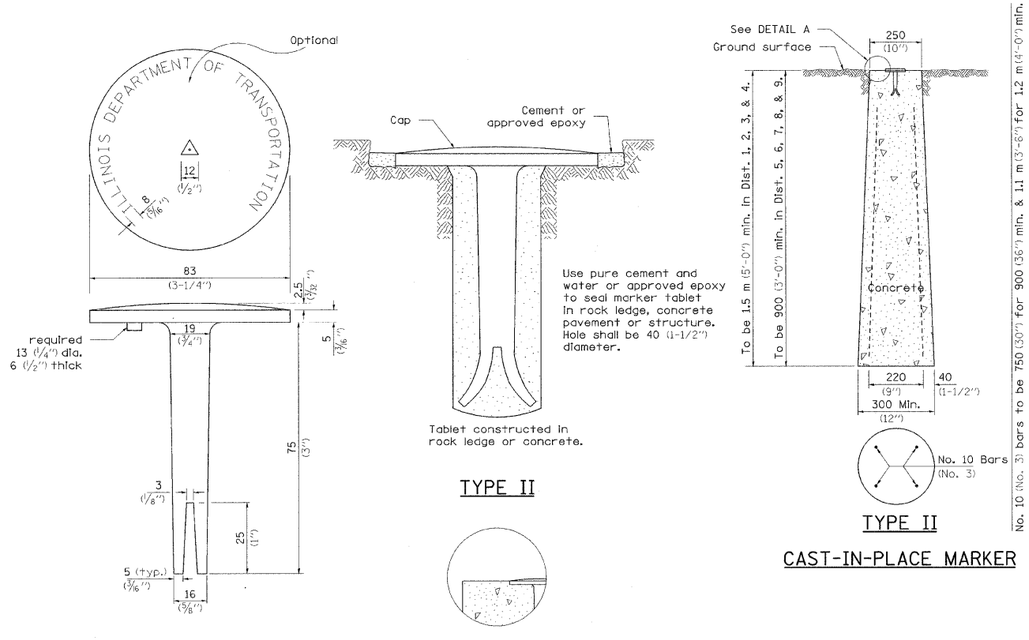
WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

PERMANENT SURVEY MARKERS, TYPE II



BRASS OR ALUMINUM TABLET

TYPE II

TYPE II

CAST-IN-PLACE MARKER

DETAIL A

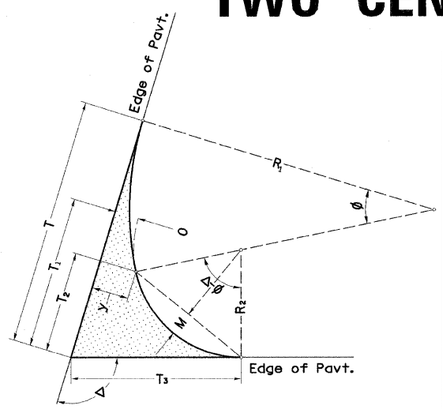
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 10-21-08

PLOT DATE = 3/2/2009
FILE NAME = h:\111rs5b08\s1 75.3p east\cadd\design\19508t.Dist_Std.dgn
CELL SCALE = 1.000000
USER NAME = JTracey
MODEL = Dist Std 16

WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II 66.2

TWO CENTER CURVE DATA



TWO CENTER CURVES

REVISED - 3-22-90

CURVE #	75/70 #1	75/70 #2	75/70 #3	75/70 #4
R_1	420	360	360	360
R_2	70	60	90	60
O	10	10	10	10
Δ	91°09'03"	88°50'57"	91°44'48"	88°15'12"
T	154.69	135.42	165.89	134.7
T_1	71.62	58.61	93.09	57.89
T_2	55	43.24	68.82	42.53
T_3	81.42	68.81	102.79	68.2
y	12	12	13.33	12
4y/9	5.33	5.33	5.93	5.33
y/9	1.33	1.33	1.48	1.33
M	15.38	12.09	19.13	11.9
15M/16	14.42	11.33	17.93	11.16
3M/4	11.53	9.06	14.35	8.92
7M/16	6.73	5.29	8.37	5.21
C	87.55	72.23	110.95	71.73

CURVE #	75/CEDARVILLE #5	FRITZ/LEECH #11	70/LEECH #8	75/LEECH #9	75/LEECH #10
R_1	200	460	300	200	250
R_2	45	60	50	60	50
O	15	12	15	10	10
Δ	124°15'32"	88°53'25"	74°46'00"	90°27'12"	90°14'53"
T	161.83	163.48	119.57	112.54	116.02
T_1	95.31	85.58	34.10	60.55	50.27
T_2	76.00	42.85	17.01	38.27	33.83
T_3	103.24	72.85	53.82	70.49	61.33
y	19.35	16.10	18.08	14.30	13.90
4y/9	8.60	7.16	8.04	6.36	6.18
y/9	2.15	1.79	2.01	1.59	1.54
M	15.73	11.98	5.60	10.45	9.31
15M/16	14.75	11.23	5.25	9.80	8.73
3M/4	11.80	8.99	4.20	7.84	6.98
7M/16	6.88	5.24	2.45	4.57	4.07
C	68.36	71.96	46.00	67.67	58.11

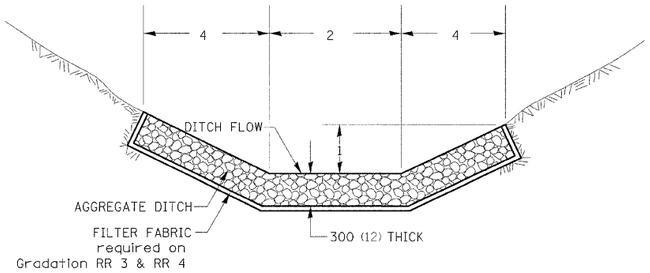
TWO AND THREE CENTER CURVE DATA 92.2

REVISED -	REGION 2 / DISTRICT 2 STANDARD		
REVISED -			
REVISED -			
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS	STA. TO STA.

•111RS-4, 111BR-1, Yg-15d-RS-1,& (W-15d)T-1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	•	STEPHENSON	335	178
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

AGGREGATE DITCH FOR FLEXIBLE DITCH LINING



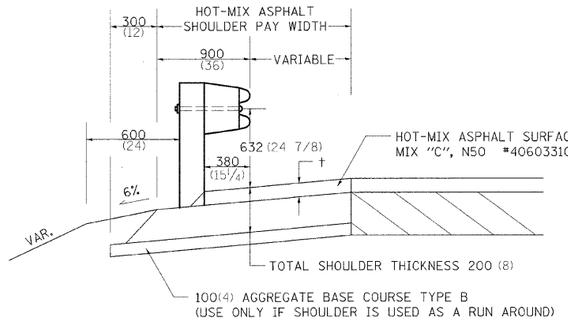
CLASS A4 WILL BE REQUIRED ON THIS PROJECT AT THE LOCATION SHOWN ON THE PLANS. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 283. AGGREGATE DITCH WILL BE MEASURED FOR PAYMENT IN PLACE AND THE AREA COMPUTED IN SQUARE METERS (SQUARE YARD) OF ACTUAL SURFACE AREA. AGGREGATE DITCH WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE METER (SQUARE YARD) FOR AGGREGATE DITCH, 300 mm (12").

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

AGGREGATE DITCH FOR FLEXIBLE DITCH LINING 21.4

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET **632** (24 7/8) FROM THE FINISHED SURFACE.

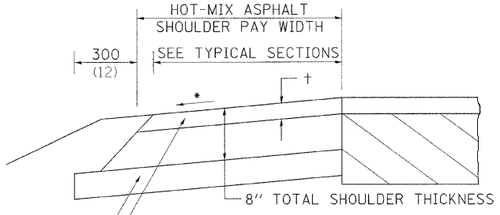
THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE METER (SQUARE YARD) FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL 23.4

HOT-MIX ASPHALT SHOULDER



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 *40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

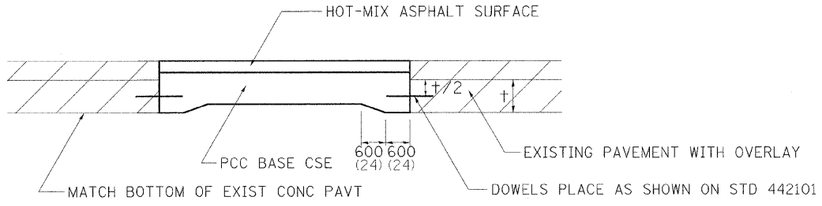
* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

HOT-MIX ASPHALT SHOULDER 23.4a

PORTLAND CEMENT CONCRETE BASE COURSE DETAIL



GENERAL NOTES

THE LONGITUDINAL JOINT & BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD 353001.

PAVEMENT FABRIC SHALL BE PLACED IN ACCORDANCE WITH STANDARD 420601.

THE BASE COURSE SHALL BE TIED TO THE EXISTING PAVEMENT AS SHOWN WITH DOWEL BARS AS SHOWN IN STANDARD 442101. THIS COST TO BE INCLUDED IN THE COST OF THE BASE COURSE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TABLE OF BARS

PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER
200 or greater (8)	38 (1 1/2)	41 (1 5/8)
180 thru 199 (7) (7.99)	32 (1 1/4)	35 (1 3/8)
Less than 180 (7)	25 (1)	29 (1 1/8)

10 BARS FOR 12' PAVEMENT
12 BARS FOR 14' PAVEMENT
14 BARS FOR 16' PAVEMENT

REVISED - 10-10-06

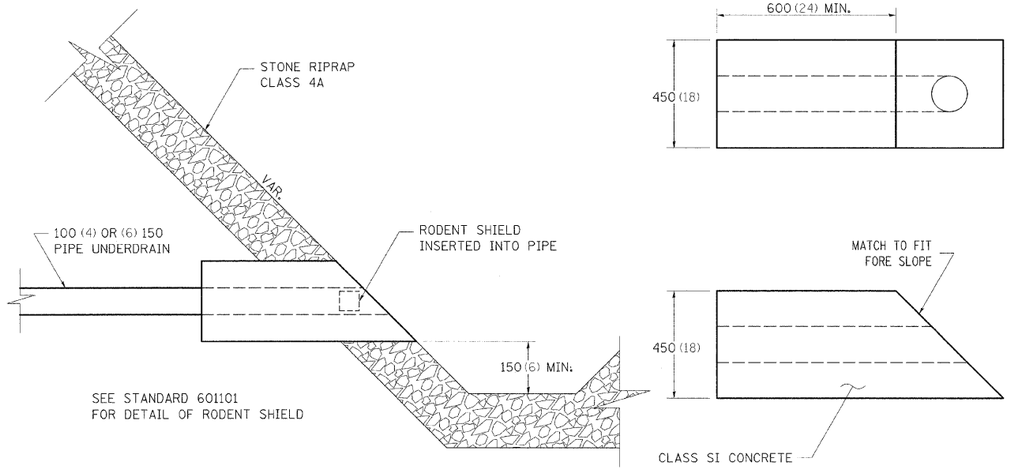
PORTLAND CEMENT CONCRETE BASE COURSE DETAIL 24.4

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

REVISED -	REGION 2 / DISTRICT 2 STANDARD					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -						505	*	STEPHENSON	335	179
REVISED -								CONTRACT NO. 64970		
REVISED -	SCALE: 1:50	SHEET NO.	OF	SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT

PLOT DATE = 3/2/2009
FILE NAME = h:\11195800\sl 75_3p east\eadd\design\195801_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 17

CONCRETE HEADWALLS FOR PIPE DRAINS

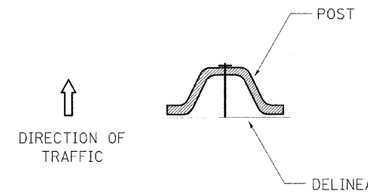


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

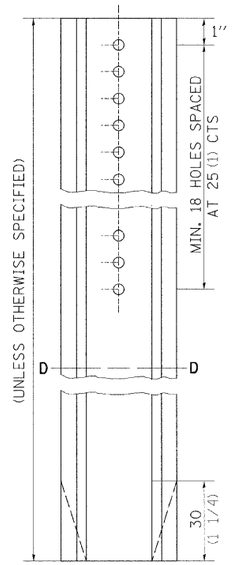
REVISED - 10-15-04

CONCRETE HEADWALLS FOR PIPE DRAINS 27.4

DELINEATOR AND POST ORIENTATION



SECTION D-D



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

DELINEATOR AND POST ORIENTATION 37.4

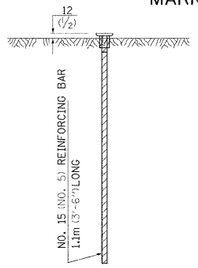
PLOT DATE = 3/2/2009
FILE NAME = h:\11\95800\sl 75_3p eastleadd\design\1595001_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 18

•111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

REVISED -	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -			505	•	STEPHENSON	335	180
REVISED -					CONTRACT NO. 64970		
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

LAND SECTION & REFERENCE MARKERS

REFERENCE MARKER & LAND SECTION MARKER

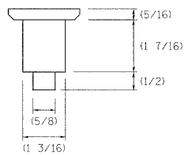


SECTION

R.O.W. CAP

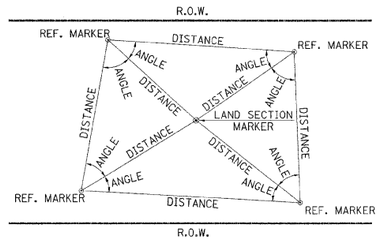
SECTION CORNER CAP

SECTION CORNER TIE POINT CAP



CAP DETAIL

METHOD OF REFERENCING MARKERS



- USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC...)
- IN CULTIVATED FIELDS, SET 600(2') OR MORE BELOW GROUND SURFACE.
- IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL.

METHOD OF REFERENCING POINTS

REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 75(3) BELOW THE SURFACE. LAND SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL NOT BE REPLACED.

METAL CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY IDOT, CALL CHIP CORDELL (815) 284-5370 A MINIMUM OF ONE WEEK BEFORE THE CAPS ARE NEEDED

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 4-22-05

LAND SECTION & REFERENCE MARKERS 63.4

LETTERING FOR NAME PLATE

STATION
BUILT 200 BY
STATE OF ILLINOIS
RTE. SEC.
FA PROJECT
LOADING HS 20
STR. NO.

SEE STD. 515001

STATION	STRUCTURE NO.
10448+72	089-1090
10584+05	089-1091
10655+41	089-1092
10670+72	089-1100
10710+42	089-1069
10714+46	089-1094
10767+68	089-1101
10813+56	089-1093
10854+01	101-1094

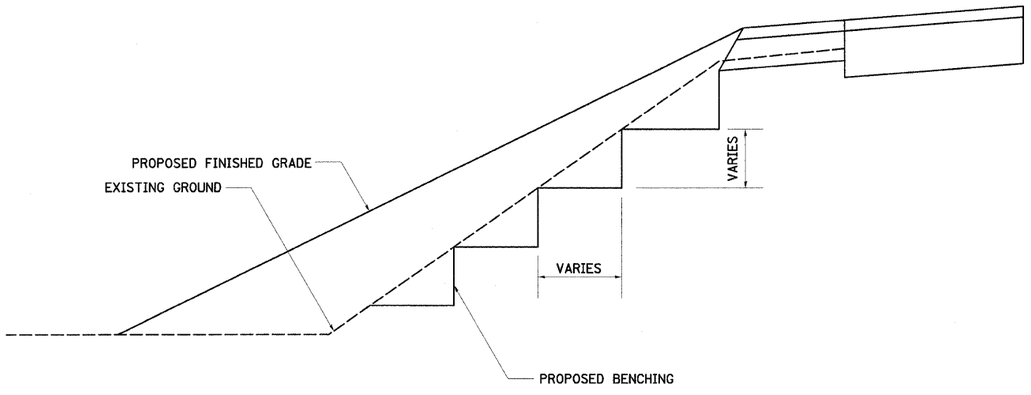
STATION	STRUCTURE NO.
10894+20	101-1320
10968+79	101-2048
10990+83	101-1088
10998+25	101-1319
11025+71	101-2049
11054+39	101-1083
11075+29	101-1082
109+39	101-1089
114+42	101-1051

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 11-01-07

LETTERING FOR NAME PLATE 89.4

TYPICAL BENCHING ON EXISTING EMBANKMENT



REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

TREE REPLACEMENT SCHEDULE

CODE NUMBER	SCIENTIFIC NAME	COMMON NAME	SIZE	UNIT	QUANTITY
A2006514	QUERCUS BICOLOR	SWAMP WHITE OAK	1 3/4" CALIPER B&B	EACH	10
A2006714	QUERCUS MACROCARPA	BUR OAK	1 3/4" CALIPER B&B	EACH	15
A2007814	TILIA AMERICANA	AMERICAN LINDEN/BASSWOOD	1 3/4" CALIPER B&B	EACH	15
B2000562	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	4' HEIGHT,SHRUB FORM,B&B	EACH	24
B2004514	MALUS RED JEWEL	RED JEWEL CRABAPPLE	1 3/4" CALIPER B&B	EACH	25
B2004814	MALUS SARGENTII	SARGENT CRABAPPLE	1 3/4" CALIPER B&B	EACH	30
C2001748	CORNUS SERICEA	CARDINAL REDOSIER DOGWOOD	4' HEIGHT,SHRUB FORM,B&B	EACH	50
D2002272	PICEA PUGENS GLAUCA	COLORADO BLUE SPRUCE	6' HEIGHT, CALIPER B&B	EACH	15
D2003172	PSUEDOTSUGA MENZIESII	DOUGLAS FIR	6' HEIGHT, CALIPER B&B	EACH	10

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 8-10-05

TREE REPLACEMENT SCHEDULE 90.4

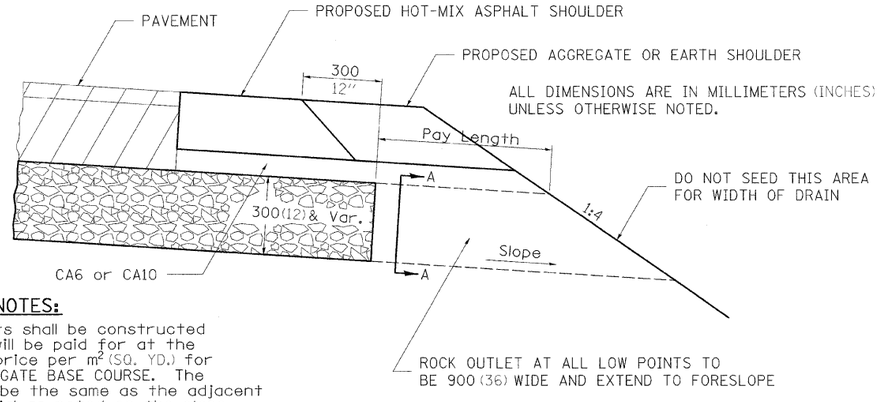
*111RS-4, 111BR-1, Yg-15d-RS-1,& (W-15d)T-1

REVISED -	REGION 2 / DISTRICT 2 STANDARD				
REVISED -					
REVISED -					
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS	STA.	TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	181
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 3/2/2009
FILE NAME = k:\111RS800\sl 75_3p east\cadd\design\195801.Dist.Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 19

DRAIN FOR AGGREGATE BASE COURSE



NOTES:

The rock outlets shall be constructed using CA7 and will be paid for at the contract unit price per m^2 (SQ. YD.) for DRAIN FOR AGGREGATE BASE COURSE. The thickness shall be the same as the adjacent sub-base material as noted on the plans and shall include the cost of the filter fabric. The Rock outlets will be measured in m^2 (SQ. YD.), the width being 900 (36) by the length shown above. The cost of the CA6 or CA10 under the shoulder shall be included in the contract unit price per m^2 (SQ. YD.) for SUB-BASE GRANULAR MATERIAL, TYPE A of the thickness specified. The filter fabric to be used shall conform to the filter fabric used for Riprap.

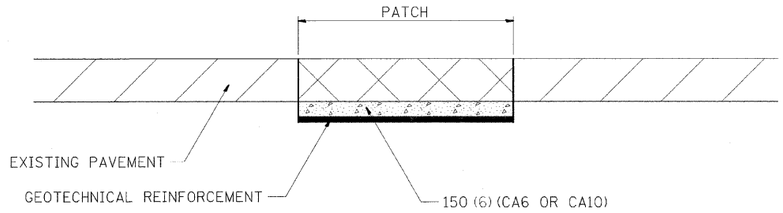
SECTION A-A

NOTE: Slope same as shoulder with 2% min.

REVISED - 10-10-06

X0325519 **DRAIN FOR AGGREGATE BASE COURSE** **96.4**

SUBGRADE REPLACEMENT



NOTES:

THE CA 6 OR CA 10 SHALL BE COMPACTED IN A MANNER APPROVED BY THE ENGINEER. IF THE MOISTURE CONTENT OF THE MATERIAL IS SUCH THAT COMPACTION SATISFACTORY TO THE ENGINEER CANNOT BE OBTAINED, SUFFICIENT WATER SHALL BE ADDED SO THAT SATISFACTORY COMPACTION CAN BE OBTAINED.

THE CA 6 OR CA 10 WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU YD FOR GRANULAR SUBGRADE REPLACEMENT

THE GEOTECHNICAL REINFORCEMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR GEOTECHNICAL REINFORCEMENT

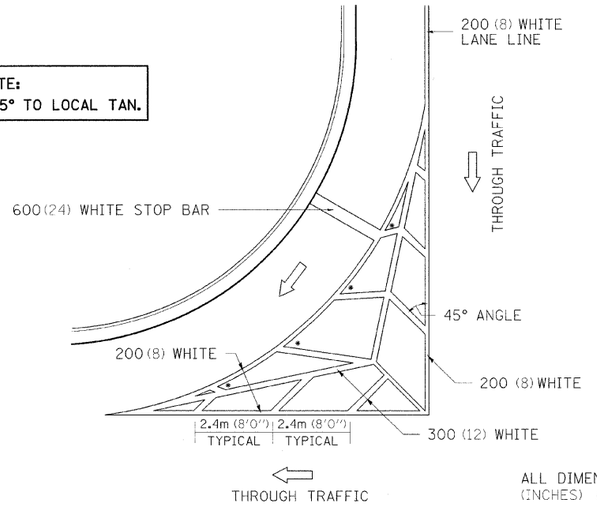
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 1-09-08

SUBGRADE REPLACEMENT **97.4**

TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 2-7-05

TYPICAL MARKING FOR PAINTED ISLANDS **93.4**

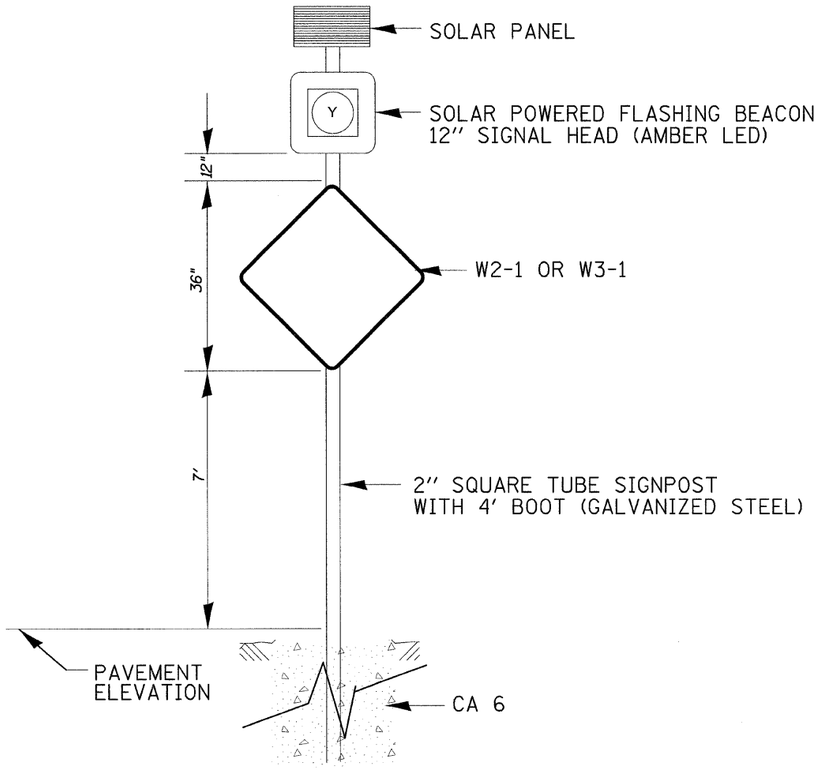
REVISED -	**REGION 2 / DISTRICT 2 STANDARD**						
REVISED -							
REVISED -							
REVISED -	SCALE: 1:50	SHEET NO. OF SHEETS	STA.	TO STA.			

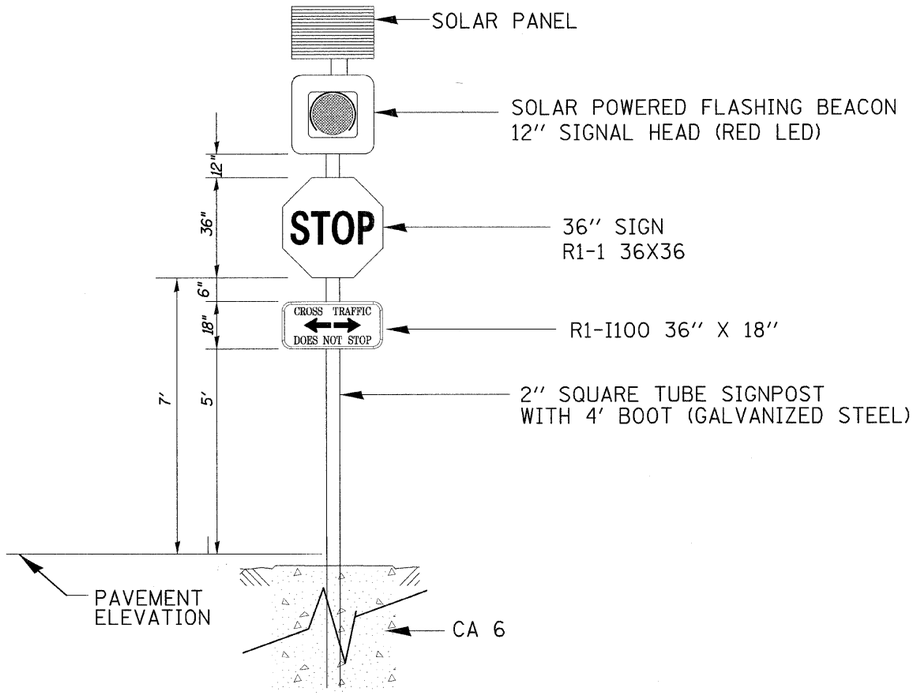
*111RS-4, 111BR-1, Yq-15d-RS-1,& (W-15d)T-1

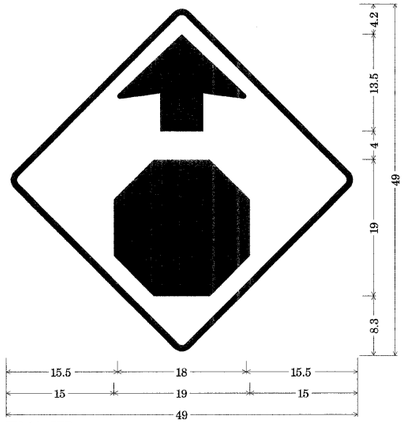
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	182
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 3/2/2009
FILE NAME = k:\11195800\sl 75.3p east\oadd\design\195801_Dist_Std.dgn
PLOT SCALE = 1.000 '/ In.
USER NAME = JTraceu
MODEL = Dist Std 20

SOLAR POWER FLASHING BEACON AND SIGN DETAILS

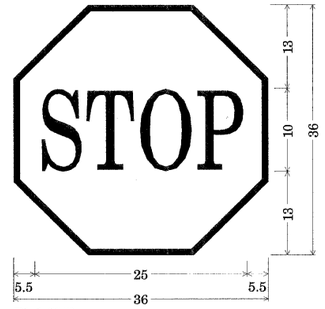




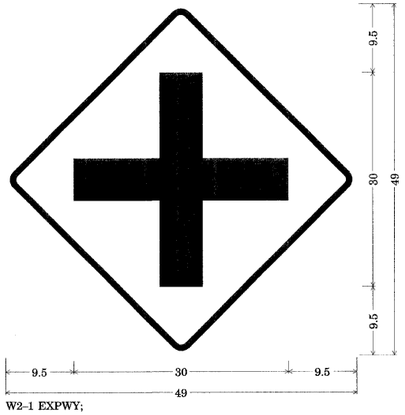


W3-1A STD;
36.0" across sides 2.3" Radius, 0.9" Border, 0.6" Indent, Black on Yellow;
Down Arrow Custom – 13.5" 90{;
Table of letter and object lefts.

15.5
15.0

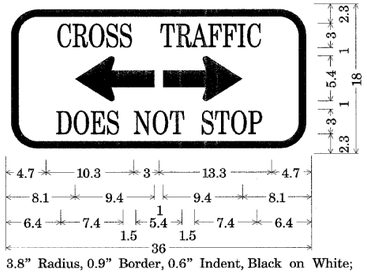


R1-1 STD.;
0.8" Border, White on Red;
Type A (High Intensity) Sheeting
3 Pieces of Sign Fix Brand like material



W2-1 EXPWY;
36.0" across sides 2.3" Radius, 0.9" Border, 0.6" Indent, Black on Yellow;
Table of letter and object lefts.

9.5



3.8" Radius, 0.9" Border, 0.6" Indent, Black on White;
[CROSS TRAFFIC] C;
Standard Arrow Custom 9.4" X 5.4" 180{;
Standard Arrow Custom 9.4" X 5.4" 0{;
[DOES NOT STOP] C 50} spacing;
Type B (Engineering Grade) Sheeting
2 Pieces of Sign Fix Brand like material

NOTE:

THE CONTRACTOR SHALL SUPPLY ALL NECESSARY HARDWARE TO MOUNT THE SIGNS TO THE POST. THIS MOUNTING HARDWARE SHALL BE SIMILAR TO THE SIGN FIX BRAND MATERIAL.

NO FLASHING BEACON SIGNAL WORK SHALL BE ALLOWED TO BEGIN UNTIL ALL COMPONENTS TO COMPLETE THE WORK ARE ON THE JOB SITE.

CONTACT CHRIS ISBELL AT (815-235-7497) AT THE STEPHENSON COUNTY HIGHWAY DEPARTMENT 2 WEEKS PRIOR TO THE PLACEMENT OF SIGNS FOR STAKING AND APPROVAL

SIGNS PROVIDED BY STEPHENSON COUNTY

PLOT DATE = 3/2/2009
FILE NAME = k:\11195820\1 75.3p east\osdd\design\195081_Dist_Std.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = Dist Std 21

FILE NAME = $FILE1$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 1.50	CHECKED -	REVISED -
	PLOT DATE = 3/2/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLAR – POWERED FLASHING BEACON AND SIGN DETAIL

SCALE: 1:50 | SHEET NO. OF SHEETS | STA. | TO STA.

*111RS-4, 111BR-1, Ya-15d-RS-1,& (W-15d)T-1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	*	STEPHENSON	335	183
		CONTRACT NO. 64970		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

•• 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
• STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	••	•	335	184
STA. 10445+00.00		TO STA. 10447+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — DATE
DRAWN — BY
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL — SURVEYED — DATE
DRAWN — BY
TEMPLATE
AREAS
AREAS CHECKED

PLOT DATE = 3/2/2009
FILE NAME = k:\11#5880\s1 75_3p east\roadway\xsheet\11#5880_XS_CULV#17.dgn
PLOT SCALE = 1.000 '/ Inch
USER NAME = JTracey
MODEL = XS_SHEET_1

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

10447+00.00

PR. R.O.W. — EX. ROW — 4:1 — 4:1 — 8.1%/9.1% — 900.50
EE=33.20 SQ. FT.
E=2.00 SQ. FT.
T=19.60 SQ. FT.
TS=15.20 SQ. FT.
1.5%/1.5% — 4:1 — 5.3% — EX. ROW — PR. R.O.W.

10446+50.00

PR. R.O.W. — EX. ROW — 4:1 — 4:1 — 8.3%/9.3% — 902.00
EE=21.40 SQ. FT.
E=2.00 SQ. FT.
T=11.20 SQ. FT.
TS=9.60 SQ. FT.
1.3%/1.3%±g — EX. ROW

10446+00.00

EX. ROW — 4:1 — 4:1 — 9.5% — 903.50
EE=23.80 SQ. FT.
E=0.00 SQ. FT.
T=8.40 SQ. FT.
TS=5.60 SQ. FT.
1.6% — EX. ROW

10445+50.00

EX. ROW — 4:1 — 4:1 — 9.3%/9.3% — 905.00
EE=20.90 SQ. FT.
E=0.00 SQ. FT.
T=8.50 SQ. FT.
TS=5.80 SQ. FT.
1.2% — EX. ROW

10445+00.00

IL RTE 75 (3P)
CULVERT #17

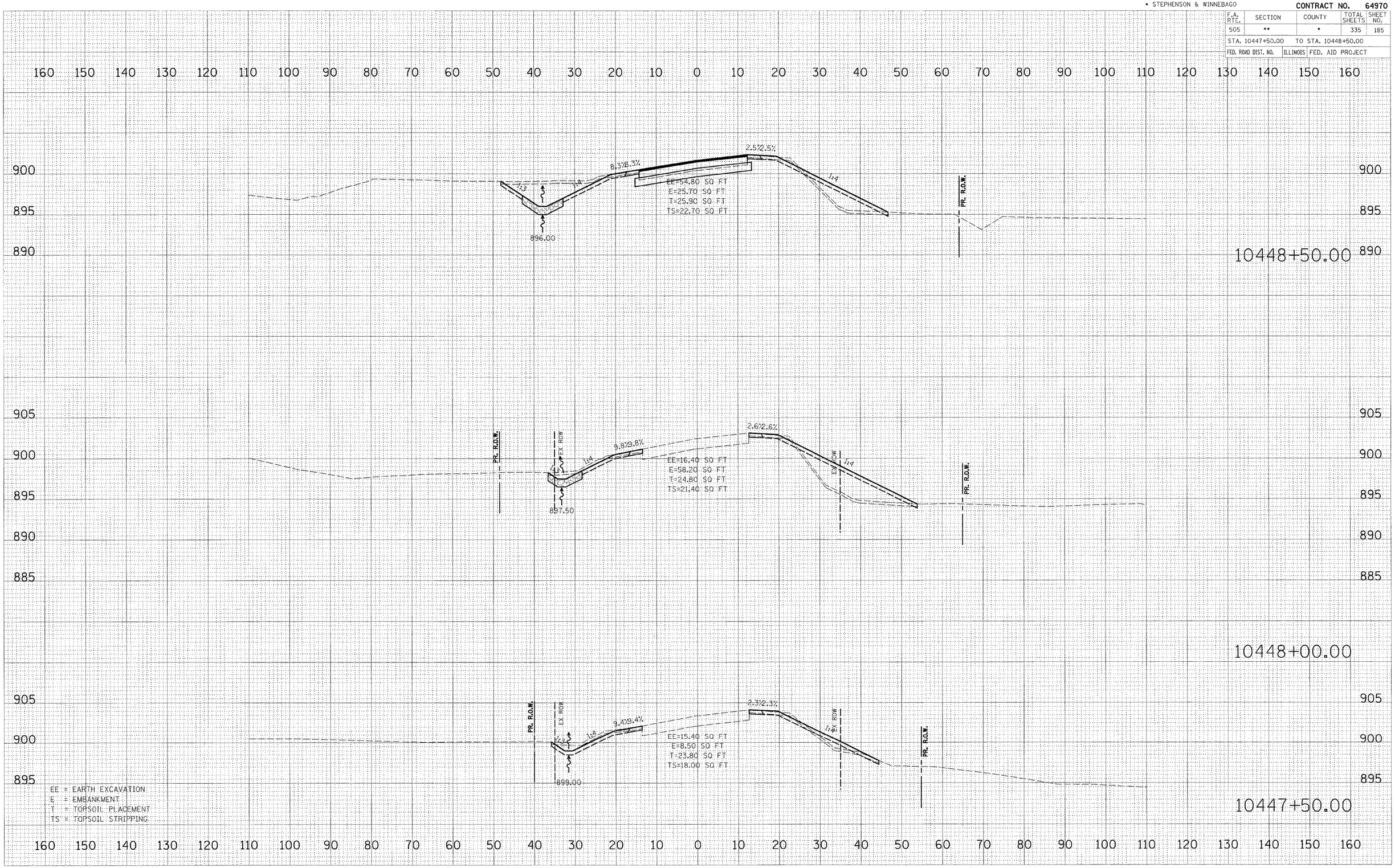
** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	185

STA. 10447+50.00 TO STA. 10448+50.00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

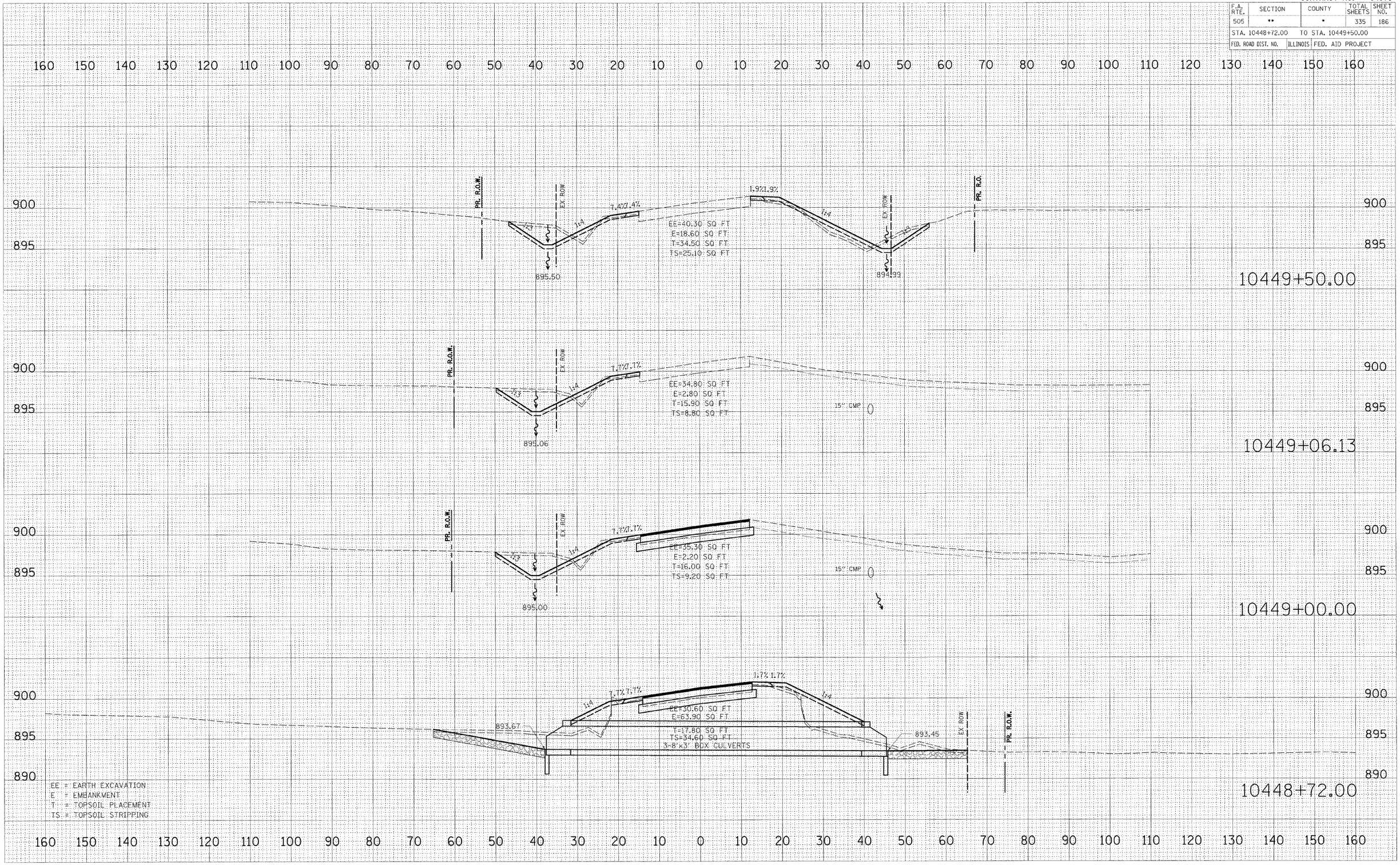
PLOT DATE = 3/2/2009
FILE NAME = k:\11958800\xl 75_3p eastwood\design\RS\RS1\Ya-15d-RS-1_17.dgn
PW FILE NAME = *
DGN SCALE = 1:100
USER NAME = JTmoay
MODEL = XS_SHEET_2

IL RTE 75 (3P)
CULVERT #17

•• 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
• STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	••	•	335	186
STA. 10448+72.00		TO STA. 10449+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



ORIGINAL SURVEY	SURVEYED	BY	DATE
	DRAWN		
	TRACED		
	DESIGNED		
	QUANTITIES		
	CHECKED		
NO.	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	DRAWN		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

PLOT DATE = 3/2/2009
FILE NAME = h:\11958d01\ii 75_3p east\xsdd\Culvert_17.dgn
PLOT SCALE = 1 '/ 10 '
USER NAME = JTracey
MODEL = XS_SHEET_3

IL RTE 75 (3P)
CULVERT #17

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	187
STA. 10450+00.00		TO STA. 10451+06.78		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

905
900
895

EX ROW
COMMERCIAL ENTRANCE
EX ROW
EE=0.40 SQ FT
E=0.20 SQ FT
T=1.90 SQ FT
TS=1.20 SQ FT

10451+06.78

905
900
895

EX ROW
9.0%9.0%
COMMERCIAL ENTRANCE
EX ROW
EE=0.50 SQ FT
E=0.00 SQ FT
T=1.90 SQ FT
TS=1.30 SQ FT

10451+00.00

900
895

1:3
1:4
4.9%4.9%
4.0%4.0%
1:4
1:3
EE=34.80 SQ FT
E=16.80 SQ FT
T=27.90 SQ FT
TS=20.80 SQ FT
896.50
895.79

10450+50.00

900
895

PR. R.O.W.
EX ROW
1:3
1:4
6.1%6.1%
2.9%2.9%
1:4
EX ROW
PR. R.O.W.
EE=36.50 SQ FT
E=30.90 SQ FT
T=31.90 SQ FT
TS=23.40 SQ FT
896.00
895.39

10450+00.00

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED — DRAWN — TRACED — CHECKED — QUANTITIES — AREAS — AREAS CHECKED

ORIGINAL GRADE — SURVEYED — DRAWN — TRACED — CHECKED — QUANTITIES — AREAS — AREAS CHECKED

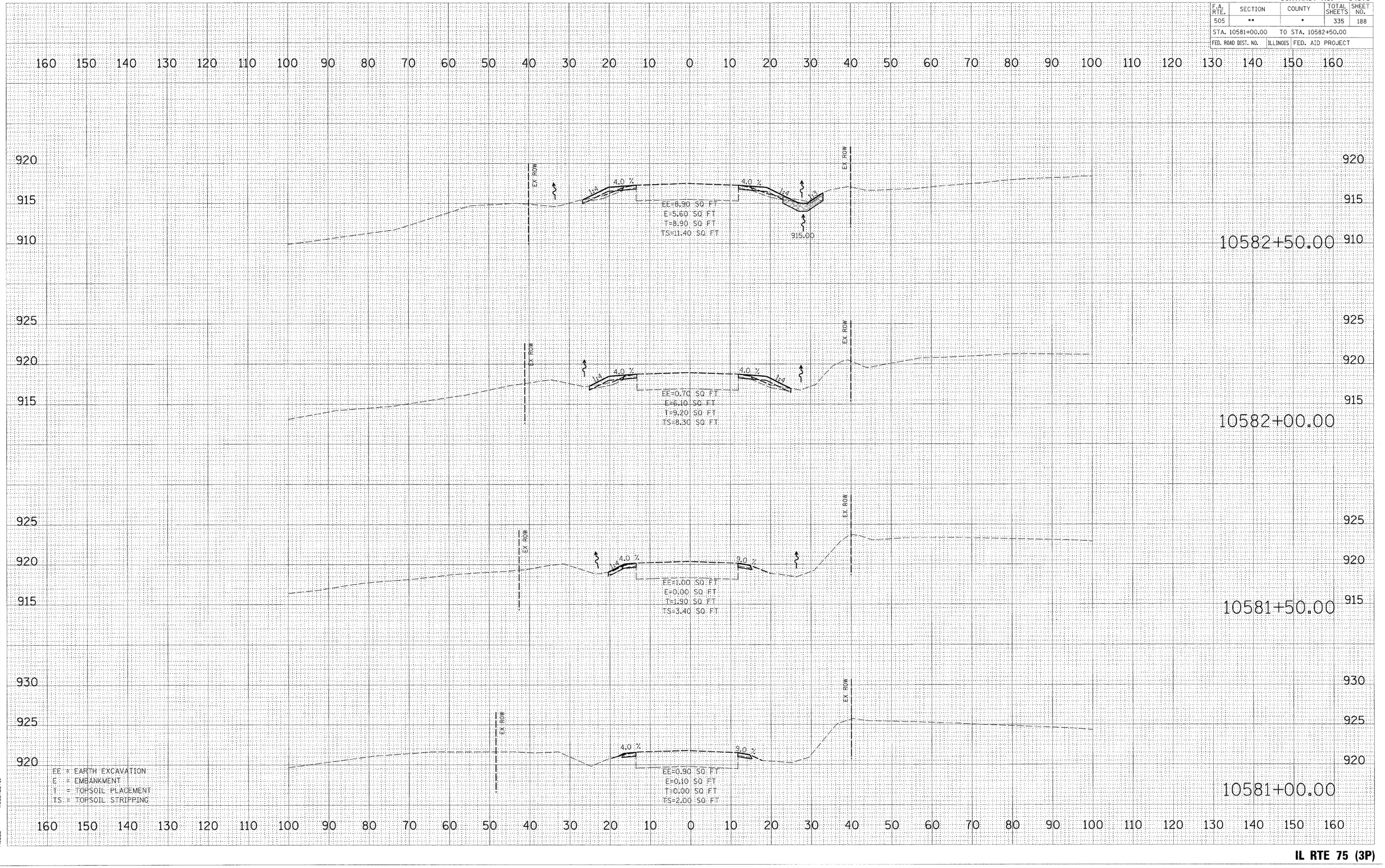
PLOT DATE = 5/2/2009
FILE NAME = h:\11950800\xl 75_3p east\cadd\GeoPak\XS_SHEET_4.dgn
PLOT SCALE = 1.0
USER NAME = JTracey
MODEL = XS_SHEET_4

IL RTE 75 (3P)
CULVERT #17

•• 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
• STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	••	•	335	188
STA. 10581+00.00		TO STA. 10582+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE AREAS — AREAS CHECKED — BY — DATE

PLOT DATE = 3/2/2009
FILE NAME = k:\11rs5800\xs\ 75_3p east\cadd\Geopak\XS\XS_SHEET_1.dgn
PLOT SCALE = 1.000
USER NAME = JTracey
MODEL = XS_SHEET_1

IL RTE 75 (3P)
CULVERT #24

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

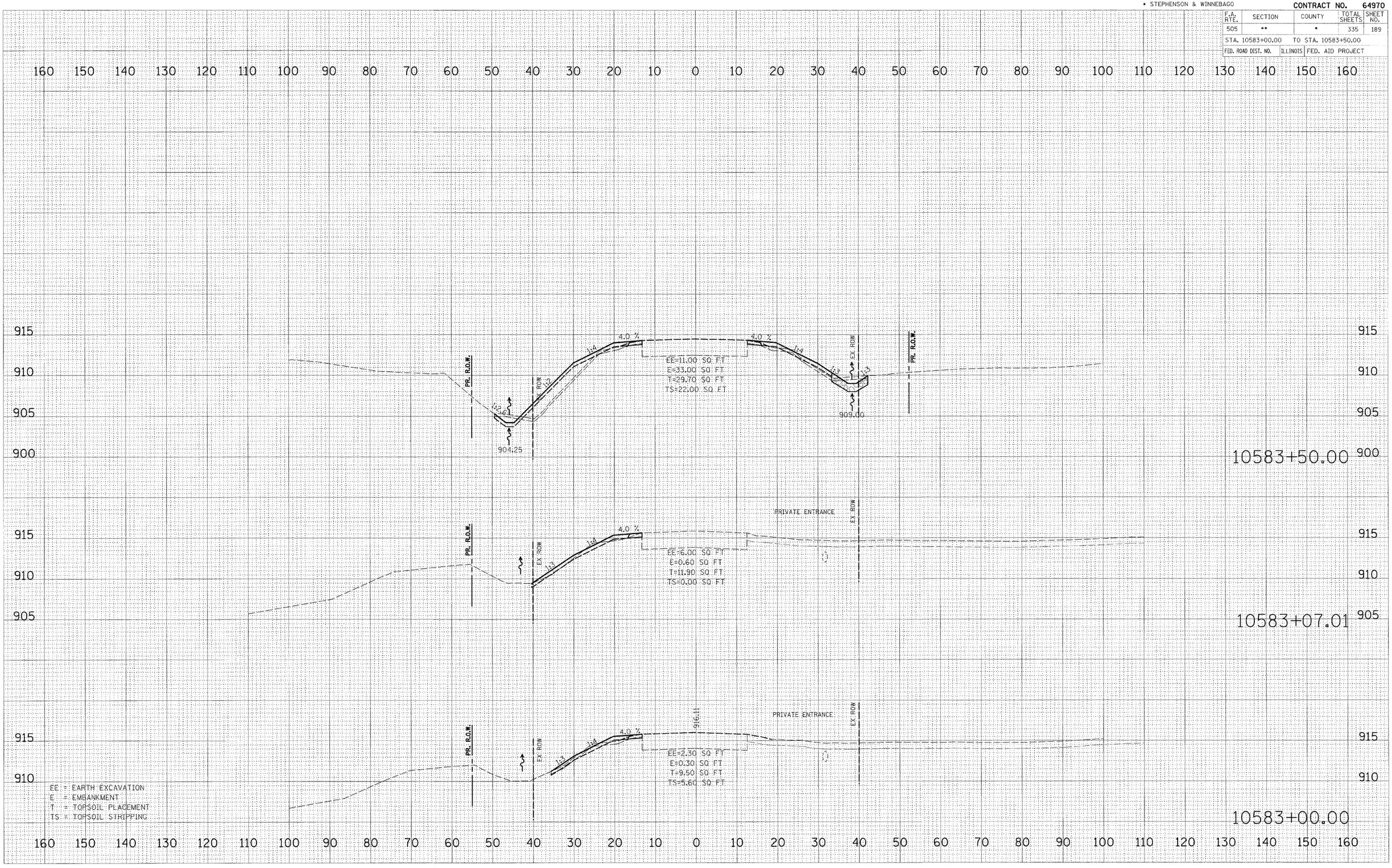
CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	189
STA. 10583+00.00		TO STA. 10583+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY NOTE BOOK NO.
SURVEYED BY
PLOTTED BY
TEMPLATE
AREAS
AREAS CHECKED
DATE

ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED BY
PLOTTED BY
TEMPLATE
AREAS
AREAS CHECKED
DATE

PLOT DATE = 3/2/2009
FILE NAME = h:\175600\xs\75_3p eastcrossXS-24.dgn
PLOT SCALE = 1.0000 '/ IN.
USER NAME = JT-acey
MODEL = XS_SHEET_2



EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

IL RTE 75 (3P)
CULVERT #24

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

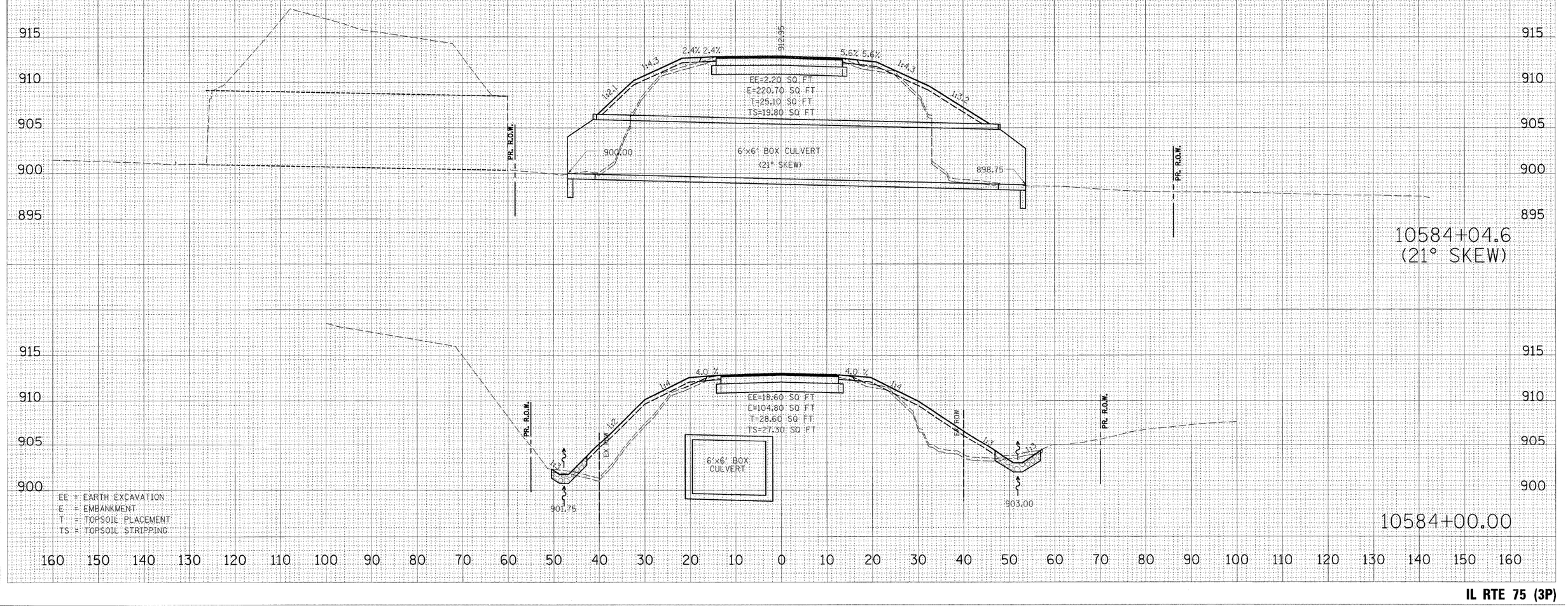
CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	190
STA. 10584+00.00		TO STA. 10584+04.03		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY NOTE BOOK NO.
SURVEYED DATE
CROSS SECTIONED
TEMPLATE
AREAS
AREAS CHECKED
BY DATE

ORIGINAL GRADE
SURVEYED
CROSS SECTIONED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
BY DATE

PLOT DATE = 3/2/2009
FILE NAME = c:\projects\SPS\Stephenson\11 75_3p east\sheets\xs_sheet_3-24.dgn
PLOT SCALE = 1'=10'
USER NAME = JTr-mey
MODEL = XS_SHEET_3



IL RTE 75 (3P)
CULVERT #24

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	191

STA. 10584+50.00 TO STA. 10585+00.00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

	BY	DATE
FINAL SURVEY	SURVEYED	
	DRAWN	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

	BY	DATE
ORIGINAL SURVEY	SURVEYED	
	DRAWN	
NOTE BOOK	TEMPLATE	
NO.	AREAS	
	AREAS CHECKED	

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

920 915 910 905 900 895

PR. R.O.W.

EX. R.O.W.

1:4

4.0 %

904.00

EE=3.00 SQ. FT.
E=105.00 SQ. FT.
T=36.90 SQ. FT.
TS=26.80 SQ. FT.

10585+00.00

902.50

EE=0.90 SQ. FT.
E=94.30 SQ. FT.
T=37.20 SQ. FT.
TS=27.00 SQ. FT.

10584+50.00

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

PLOT DATE = 3/2/2009
FILE NAME = h:\111rs0800\xs\75_3p eastbound\Culvert_#24.dgn
LEVEL = 1
USER NAME = JTrenny
MODEL = XS_SHEET_4

IL RTE 75 (3P)
CULVERT #24

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	192
STA. 10585+50.00		TO STA. 10586+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — BY — DATE
ORIGINAL SURVEY — SURVEYED — BY — DATE
COMPUTED — AREAS
PLOTTED — TEMPLATE — AREAS CHECKED

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

10586+50.00
EE=1.00 SQ FT
E=0.10 SQ FT
T=0.00 SQ FT
TS=2.00 SQ FT

10586+00.00
EE=0.70 SQ FT
E=0.60 SQ FT
T=3.30 SQ FT
TS=4.30 SQ FT

10585+50.00
EE=2.00 SQ FT
E=25.10 SQ FT
T=19.70 SQ FT
TS=15.40 SQ FT

EX. ROW
PR. R.O.W.
4.0 %
1:4

PLOT DATE = 3/2/2009
FILE NAME = h:\111rs68\Ul 75_3p east\cadd\dgn\111rs68xs75_culv#_24.dgn
FILE SCALE = 1:1000
USER NAME = JTrasey
MODEL = XS_SHEET_5

IL RTE 75 (3P)
CULVERT #24

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	193

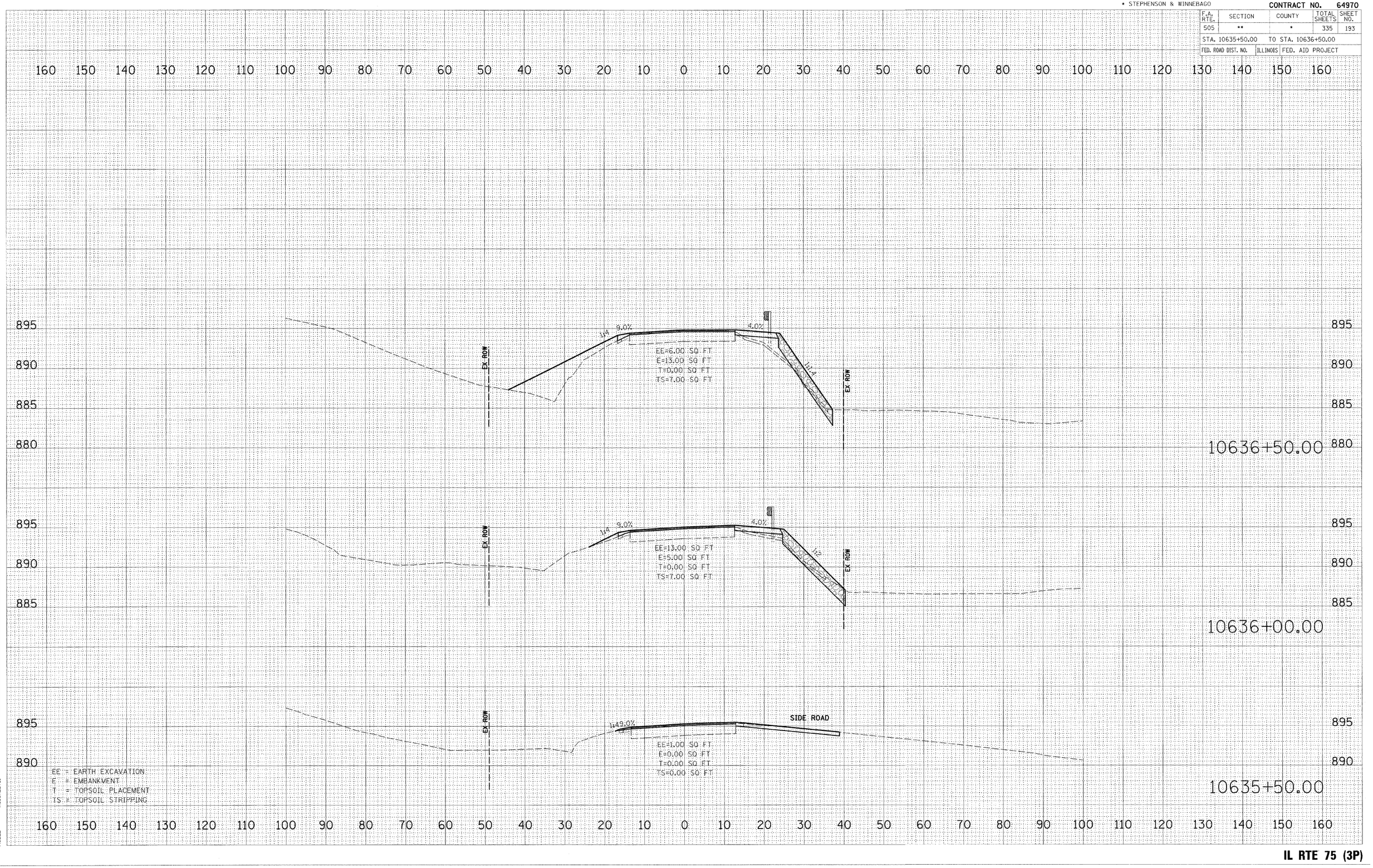
STA. 10635+50.00 TO STA. 10636+50.00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

FINAL SURVEY — SURVEYED / DRAWN / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE
NOTE BOOK — NO.

ORIGINAL SURVEY — SURVEYED / DRAWN / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE
NOTE BOOK — NO.

PLOT DATE = 3/2/2009
FILE NAME = H:\11\95800\xl 75-3p east\cadd\GuardRail\GR_XS_SHEET.dgn
PLOT SCALE = 1.0000 '/ IN.
USER NAME = JTrosey
MODEL = XS_SHEET_1



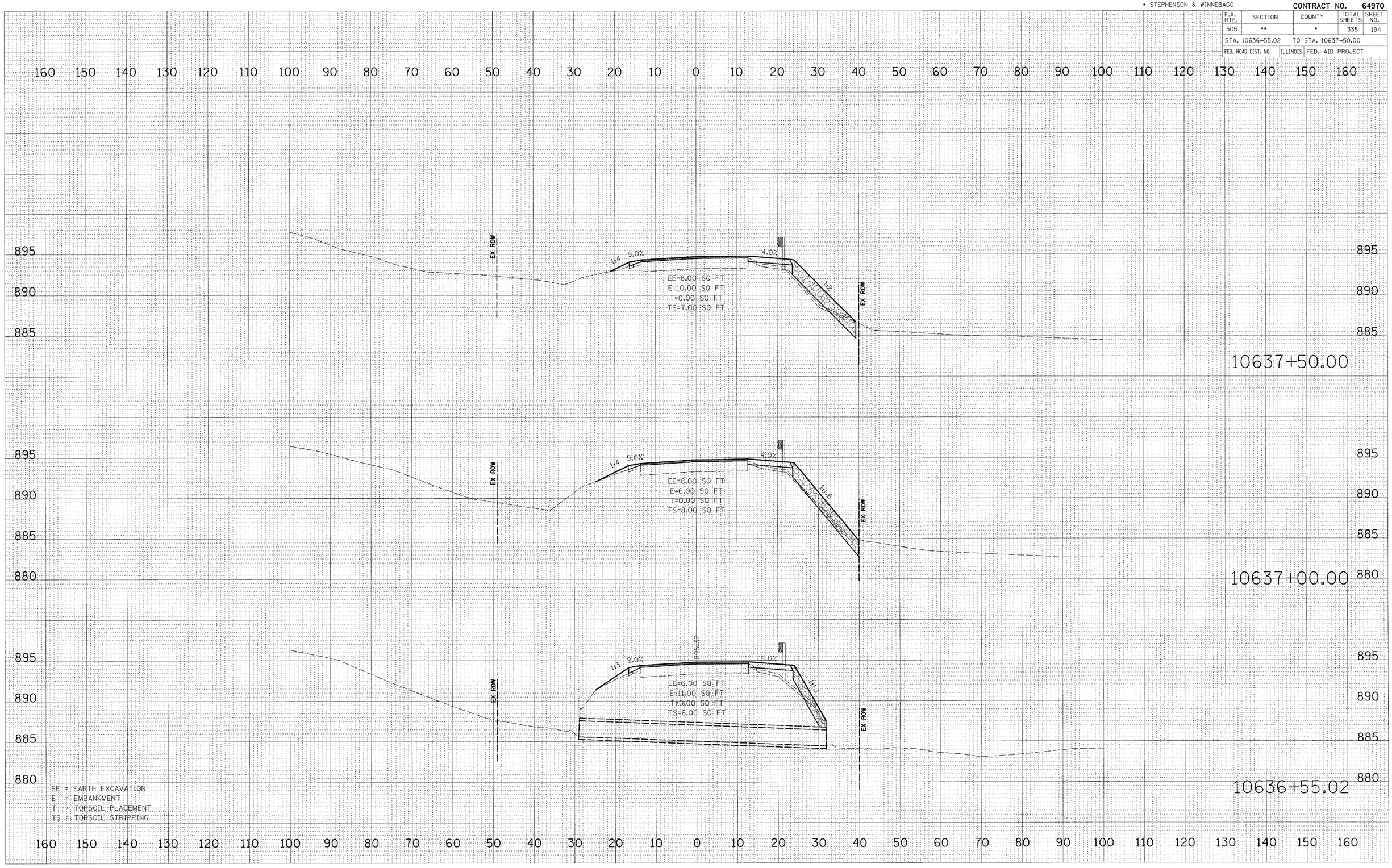
** 111RS-1, 111BR-1 Yc-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	194

STA. 10636+55.02 TO STA. 10637+50.00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



ORIGINAL SURVEY NOTE BOOK NO. | SURVEYED | DRAWN | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

FINAL SURVEY NOTE BOOK NO. | SURVEYED | DRAWN | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE

PLOT DATE = 3/2/2009
FILE NAME = H:\11\95800\s1 75_3p east\roadway\GUARDRAIL\GR1.DGN
PLOT SCALE = 1.0000 '/ IN.
USER NAME = JTracey
MODEL = XS_SHEET_2

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	195

STA. 10638+00.00 TO STA. 10639+00.00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

895
890
885

EX ROW

1:4 9.0%

9.0% 1:4

EE=2.00 SQ FT
E=0.00 SQ FT
T=0.00 SQ FT
TS=1.00 SQ FT

EX ROW

BLDG

77' 77' 77'

10639+00.00

EX ROW

1:4 3.0%

4.0%

1:2.2

EE=2.00 SQ FT
E=26.00 SQ FT
T=8.00 SQ FT
TS=9.00 SQ FT

EX ROW

BLDG

77' 77' 77'

10638+50.00

EX ROW

1:4 3.0%

4.0%

1:2

EE=8.00 SQ FT
E=9.00 SQ FT
T=0.00 SQ FT
TS=7.00 SQ FT

EX ROW

BLDG

77' 77' 77'

10638+00.00

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

	BY	DATE
ORIGINAL		
SURVEYED		
DRAWN		
PLOTTED		
CHECKED		
QUANTITIES		
NOTE BOOK		
NO.	AREAS TEMPLATE	AREAS CHECKED

FINAL SURVEY NOTE BOOK NO.

PLOT DATE = 3/2/2009
FILE NAME = c:\111rs800\x1 75_3p eastroad\Guardrail_Plan
PLOT SCALE = 40 '/ IN
USER NAME = JTracey
MODEL = XS_SHEET_3

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

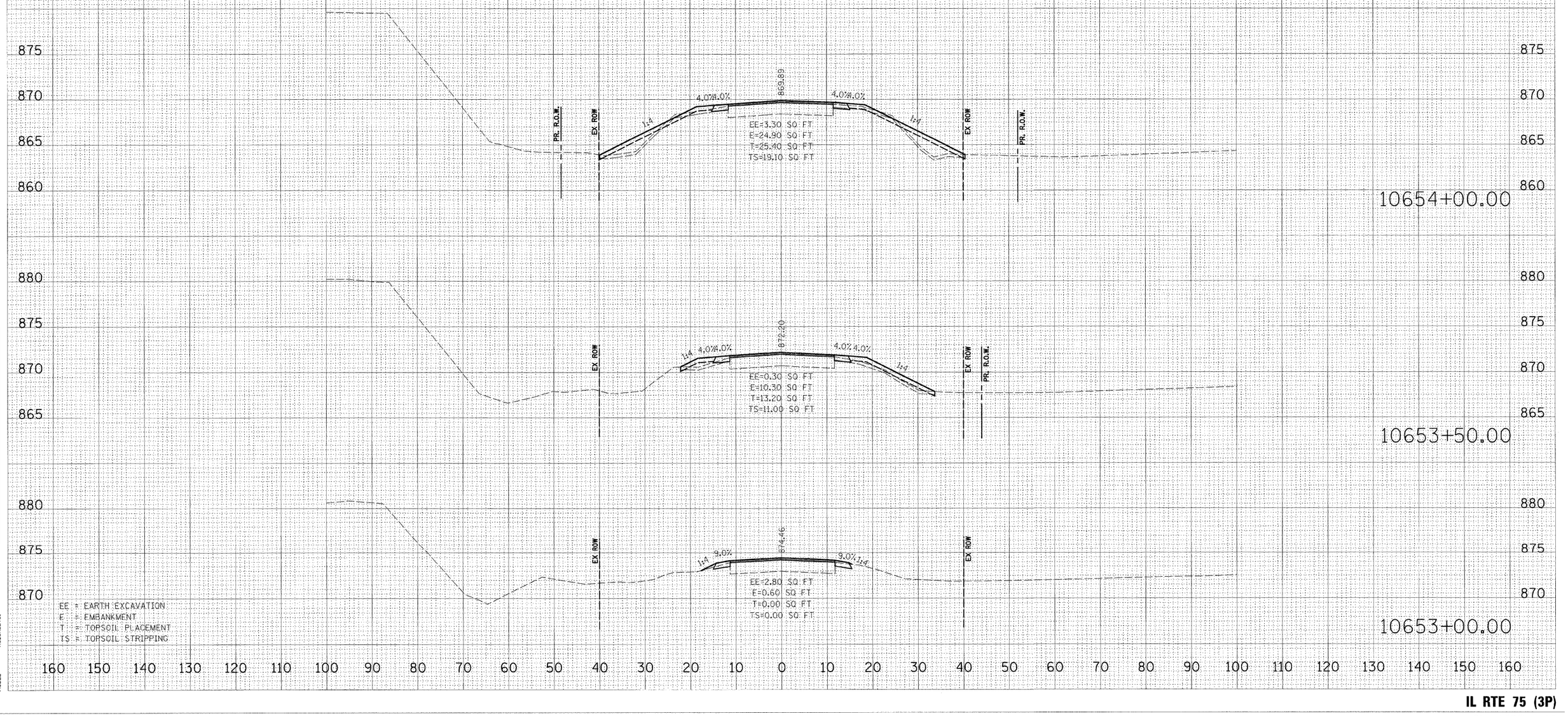
CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	196
STA. 10653+00.00		TO STA. 10654+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — NOTE BOOK NO. — SURVEYED BY — COMPUTED BY — TEMPLATE — AREAS — AREAS CHECKED — DATE

ORIGINAL SURVEY — SURVEYED BY — COMPUTED BY — TEMPLATE — AREAS — AREAS CHECKED — DATE

PLOT DATE = 3/2/2009
FILE NAME = H:\119580\01 75_3p eastroad\Design\XS\SHEET-16.DGN
PLOT SCALE = 100.0000
USER NAME = JTmoody
MODEL = XS_SHEET_1



IL RTE 75 (3P)
CULVERT #16

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	197
STA. 10654+50.00		TO STA. 10655+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY — SURFACE(D) BOUNDARY(D) — NOTE BOOK — TEMPLATE — AREAS — AREAS CHECKED — NO. — BY — DATE

ORIGINAL SURVEY — SURFACED — BOUNDARY — NOTE BOOK — TEMPLATE — AREAS — AREAS CHECKED — NO. — BY — DATE

PLOT DATE = 3/2/2009
FILE NAME = H:\11958\Civil 75_3p esri\roadway\plan\RTE75_XSECT_15.DGN
PLOT SCALE = 1.000 '/ INCH
USER NAME = JTmacy
MODEL = XS_SHEET_2

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

875
870
865
860
855

PR. R.O.W. — EX ROW — 1:4 — 4.0%/4.0% — 866.67 — 4.0%/4.0% — 1:4 — EX ROW — PR. R.O.W.

EE=25.30 SQ FT
E=96.20 SQ FT
T=32.70 SQ FT
TS=27.30 SQ FT

1:3 — 1:3 — 857.50

10655+00.00

PR. R.O.W. — EX ROW — 1:4 — 4.0% — 868.09 — 4.0%/4.0% — 1:4 — EX ROW — PR. R.O.W.

EE=3.00 SQ FT
E=47.30 SQ FT
T=30.70 SQ FT
TS=22.70 SQ FT

861.50

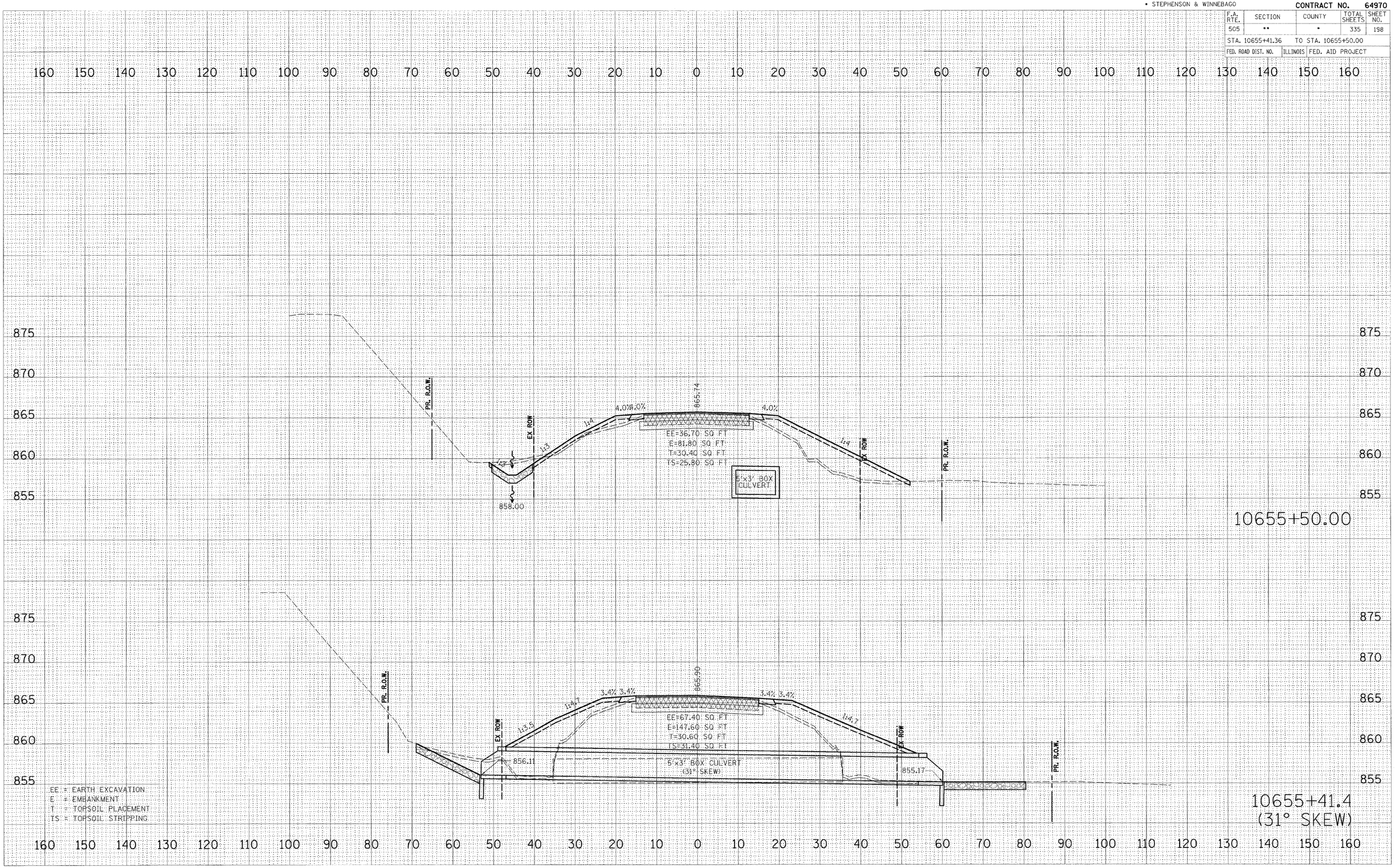
10654+50.00

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

** 111RS-1, 111BR-1 Yα-i5d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	198
STA. 10655+41.36		TO STA. 10655+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY NOTE BOOK NO.
SURVEYED BY
DRAWN BY
TEMPLATE
AREAS
AREAS CHECKED
DATE

ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED BY
DRAWN BY
TEMPLATE
AREAS
AREAS CHECKED
DATE

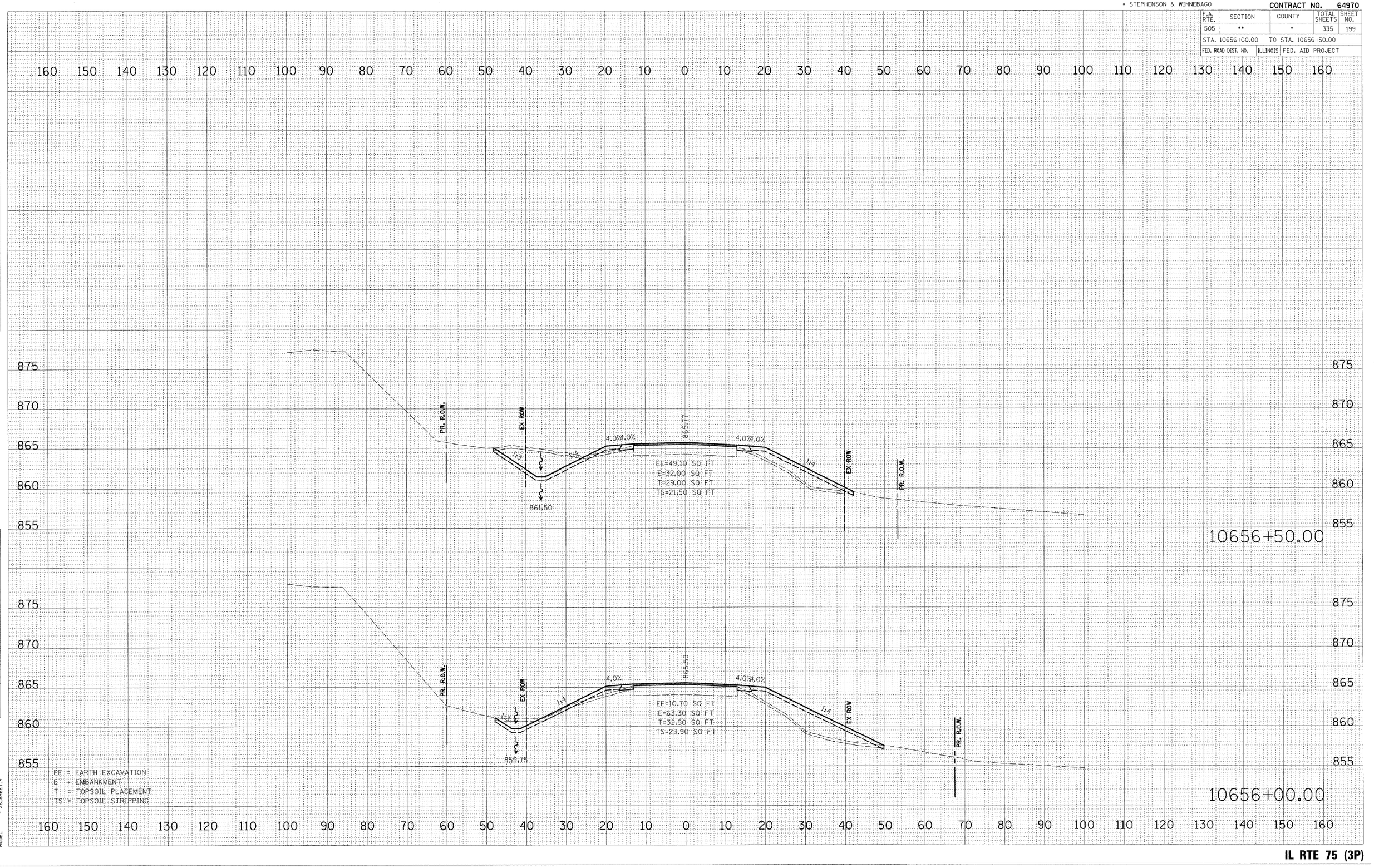
PLOT DATE = 3/2/2009
FILE NAME = h:\111rs505\d-xsht_16.dgn
PLOT SCALE = 1.0000 '/ In.
USER NAME = JT-tracy
MODEL = YS_SHEET_3

IL RTE 75 (3P)
CULVERT #16

** 111RS-1, 111BR-1 Yq-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	199
STA. 10656+00.00		TO STA. 10656+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — DATE
SURVEYED — BY
PLOTTED — DATE
TEMPLATE — BY
AREAS — DATE
AREAS CHECKED — BY

ORIGINAL — DATE
SURVEY — BY
ADJUSTED — DATE
FINAL — BY
NO.

PLOT DATE = 3/2/2009
FILE NAME = h:\111rs6800\xl 75_3p east\roadway\xsheet\111rs1_16.dgn
PLOT SCALE = 1.0000 '/ IN.
USER NAME = JTracey
MODEL = XS_SHEET_4

** 111RS-1, 111BR-1 Ya-15d-RS-1 & (W-15d)T-1
* STEPHENSON & WINNEBAGO

CONTRACT NO. 64970

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
505	**	*	335	200
STA. 10657+00.00		TO STA. 10658+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	DATE
	BY
SURVEYED	
DRAWN	
TEMPLATE	
AREAS	
AREAS CHECKED	
FINAL SURVEY NOTE BOOK	
NO.	

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

875
870
865
860

EX. ROW
1:4 4.0%4.0% 868.33 4.0% 1:4
EE=0.40 SQ FT
E=4.00 SQ FT
T=6.20 SQ FT
TS=6.30 SQ FT
EX. ROW

10658+00.00

PR. R.O.W.
EX. ROW
1:3 1:4 4.0%4.0% 867.32 4.0%4.0% 1:4
865.00
EE=55.90 SQ FT
E=8.10 SQ FT
T=21.00 SQ FT
TS=16.20 SQ FT
EX. ROW

10657+50.00

PR. R.O.W.
EX. ROW
1:3 1:4 4.0%4.0% 866.41 4.0% 1:4
863.25
EE=70.00 SQ FT
E=11.10 SQ FT
T=28.00 SQ FT
TS=20.80 SQ FT
EX. ROW
PR. R.O.W.

10657+00.00

EE = EARTH EXCAVATION
E = EMBANKMENT
T = TOPSOIL PLACEMENT
TS = TOPSOIL STRIPPING

	ORIGINAL	SURVEY	SURVEYED	DRAWN	TEMPLATE	AREAS	AREAS CHECKED	NOTE BOOK	NO.	BY	DATE

PLOT DATE = 3/2/2009
FILE NAME = h:\11\95800\11 75.3p east\xsdn\Ga...
PW ID = ILDOT15_PW
USER NAME = JTr-ney
MODEL = XS_SHEET_5

IL RTE 75 (3P)
CULVERT #16