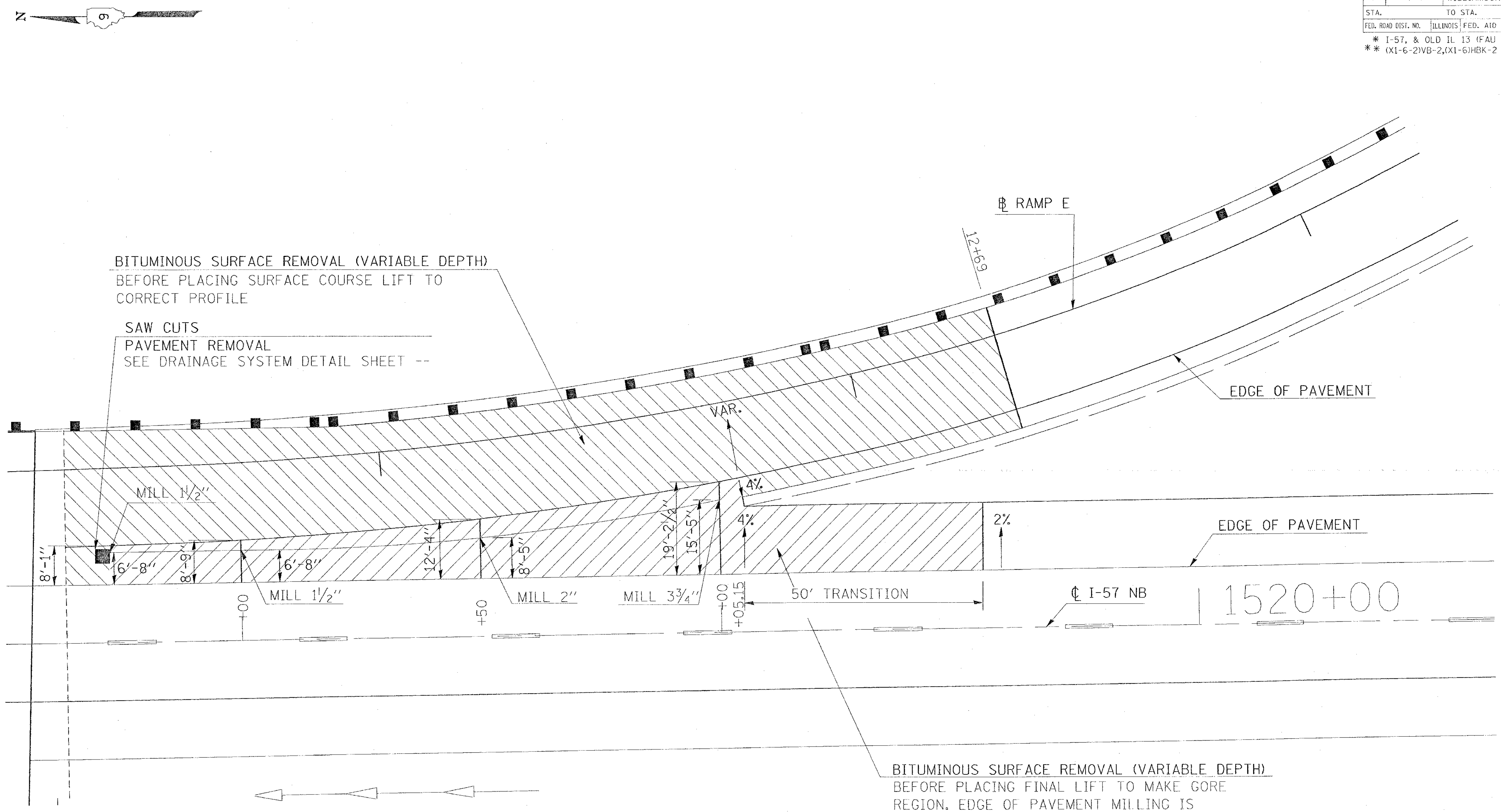
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	* *	WILLIAMSON	917	801
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

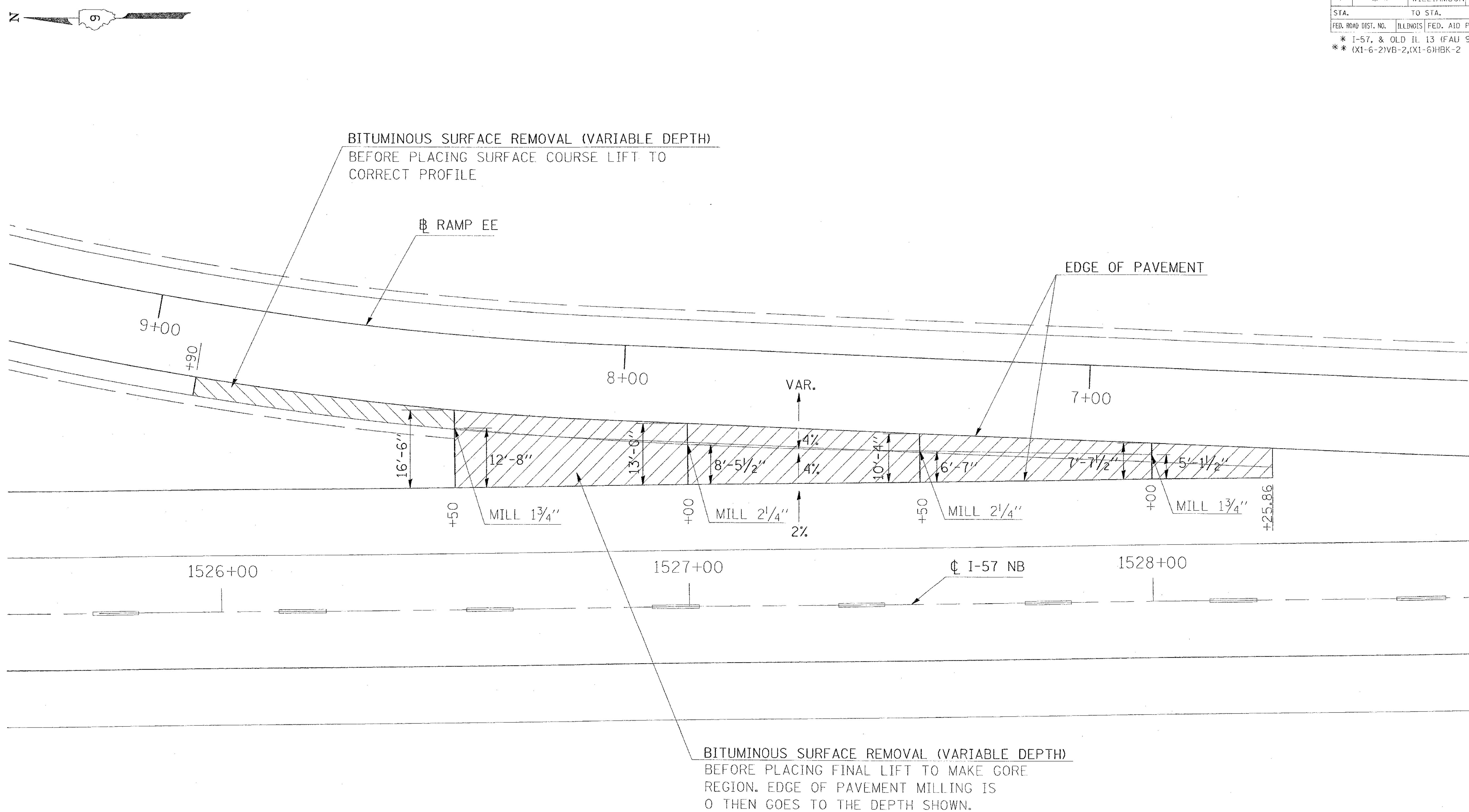
MILLING DETAIL RAMP E

SCALE: VERT. HORIZ. 10 | DRAWN BY CNH
DATE | CHECKED BY

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	* *	WILLIAMSON	917	802
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

MILLING DETAIL RAMP EE

SCALE: VERT. 10 HORIZ.
DATE

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CHECKED BY

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CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	803
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
* * (X1-6-2)VB-2,(X1-6)HBK-2

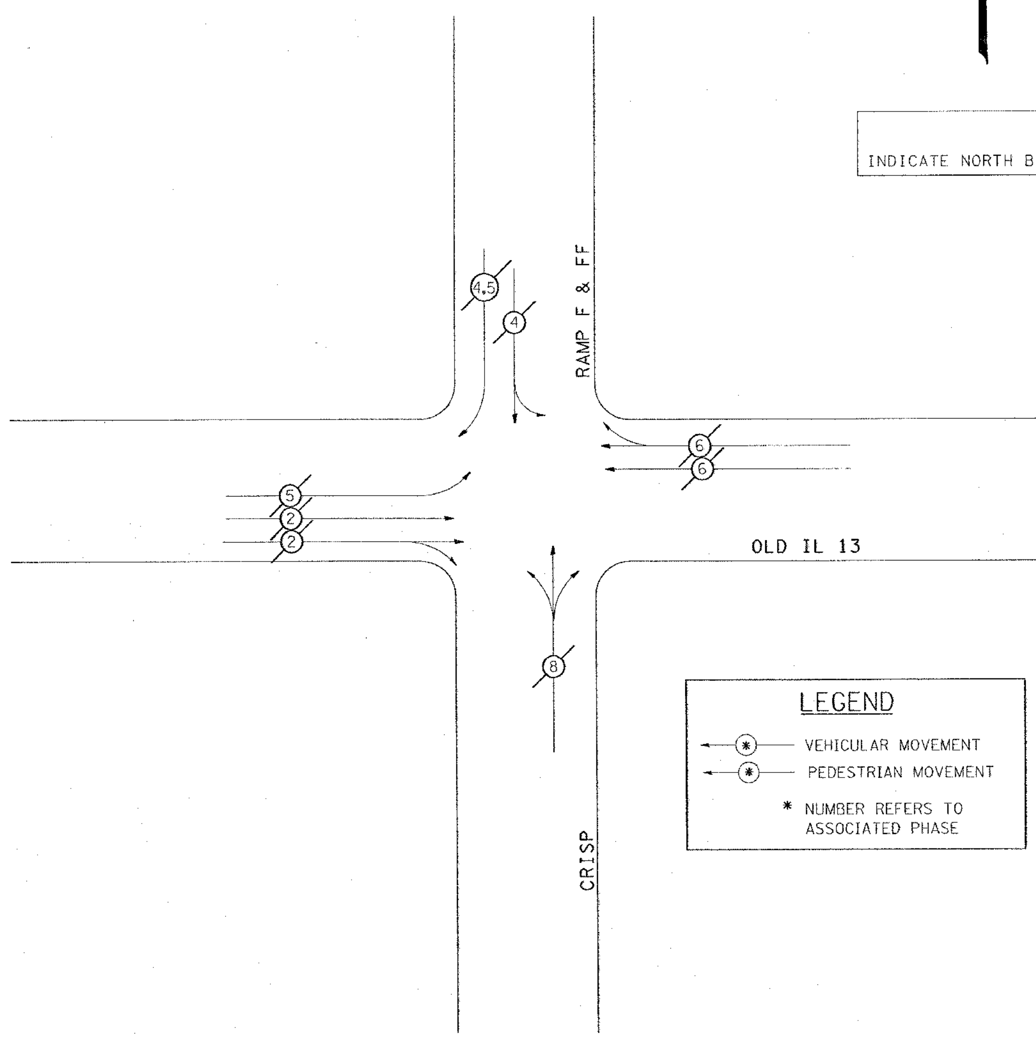
PHASE DESIGNATION DIAGRAM

NAME OF INTERSECTION: OLD IL 13 AT I-57 WEST

CONTROLLER SPECIFIED: FULL ACTUATED CONTROLLER, STANDARD SEQUENCE IV.
8 PHASE TYPE IV CONTROLLER CABINET

INDICATE NORTH BY ARROW

REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED AS SHOWN.

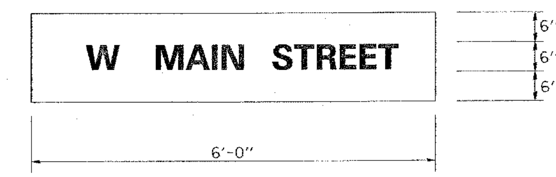


REVISIONS

DRAWN	1-31-90
REVISED	5-30-90
REVISED	12-18-01
REVISED	

STD. 9-66

SIGN PANEL - TYPE 1



TO BE USED:

RT. STA. 771+77 (OLD IL 13) MAST ARM
LT. STA. 772+67 (OLD IL 13) MAST ARM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL:

PHASE DESIGNATION DIAGRAM; SIGN PANEL - TYPE 1

SCALE: VERT. HORIZ. NONE

DATE

DRAWN BY CNH

CHECKED BY JCK

PLOT DATE = 10/14/2006
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DETAIL OF DETECTOR LOOPS

NOTES

(APPLIES TO 6′ x 6′ LOOPS ONLY)

1. THE DETECTOR LOOPS SHALL BE TYPE I. EACH DETECTOR LOOP SHALL HAVE 3 TURNS OF LOOP WIRE AND BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 886 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
2. BEGINNING LEAD WIRES SHALL BE CONNECTED TO THE BLACK LEAD AND THE ENDING LEAD WIRES SHALL BE CONNECTED TO THE WHITE LEAD OF THE TWIN TWISTED FEED CABLES AT THE SPLICE POINT.
3. WHERE THE LOOPS ARE INSTALLED PRIOR TO RESURFACING, THE LOOP CORNERS SHALL BE DIAGONALLY CUT.

LOOP LEGEND

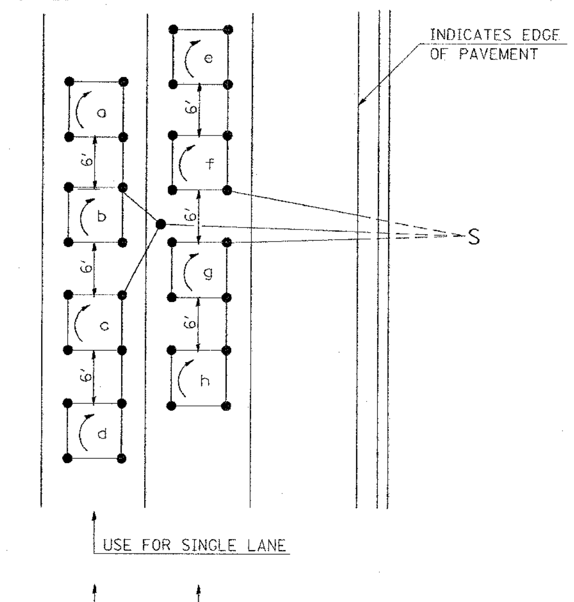
(CLOCKWISE ROTATION FOR LOOP WIRES

S INDICATES SPLICE POINT FOR DETECTOR LOOP LEAD

● INDICATES 2″ CORE-DRILL

LOOP LAYOUT

ALL LOOPS ARE 6′ x 6′



DETAIL 6′ x 6′ DETECTOR LOOPS

STD. 9-92

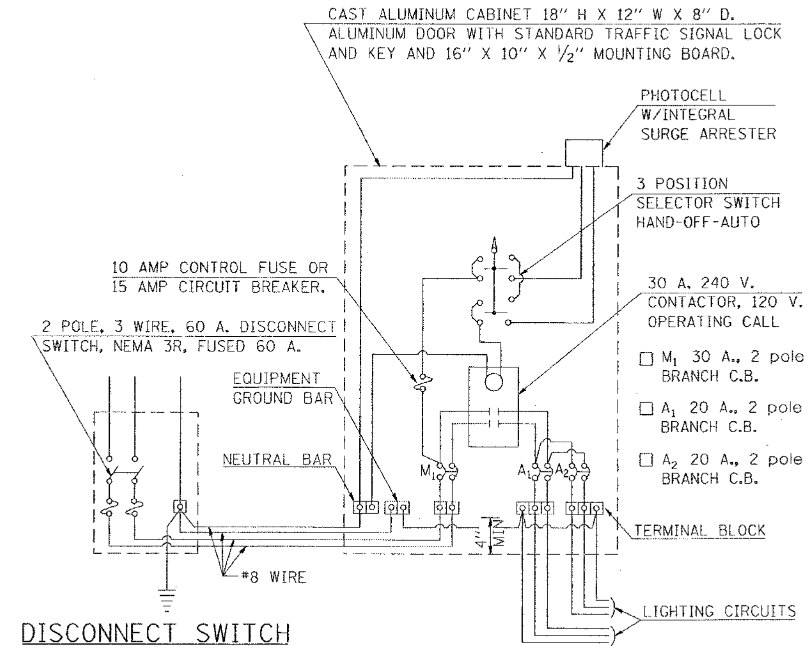
REVISIONS	
REDRAWN	5-13-02
REVISED	10-26-05
REVISED	
REVISED	

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	804
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

CONTROL INSTALLATION SIGNAL CABINET MOUNTED



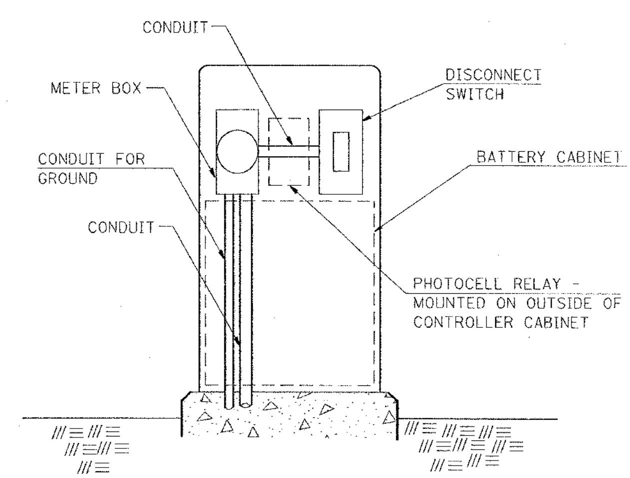
DISCONNECT SWITCH

PHOTOCELL RELAY

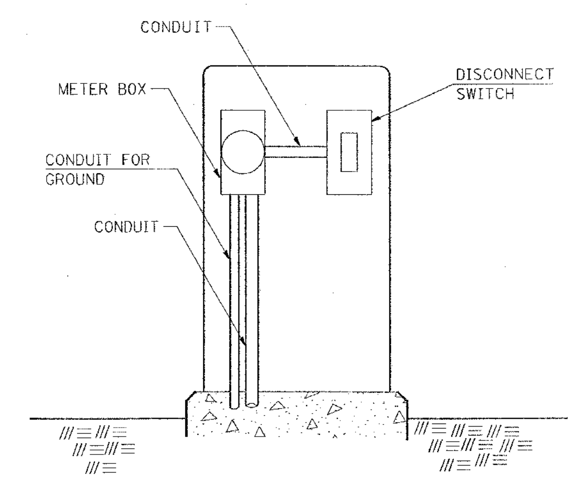
STD. 9-113

REVISIONS	
DRAWN	5-13-02
REVISED	
REVISED	
REVISED	

SERVICE INSTALLATION DETAILS



SERVICE INSTALLATION (SPECIAL)
WITH PHOTOCELL RELAY
AND WITH BATTERY CABINET
SETTING ON THE EXPANDED
TYPE "D" FOUNDATION



SERVICE INSTALLATION (SPECIAL)

STD. 9-68

REVISIONS	
DRAWN	1-31-90
REVISED	2-24-92
REVISED	
REVISED	

NOTE:
MATERIAL AND SIZE OF CONDUIT AND CABLE AS REQUIRED BY UTILITY COMPANY

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

DETECTOR LOOPS; CONTROL INSTALLATION SIGNAL CABINET MOUNTED; SERVICE INSTALLATION

SCALE: VERT. NONE HORIZ.

DATE

DRAWN BY CNH

CHECKED BY JCK

PLOT DATE = 10/13/2006
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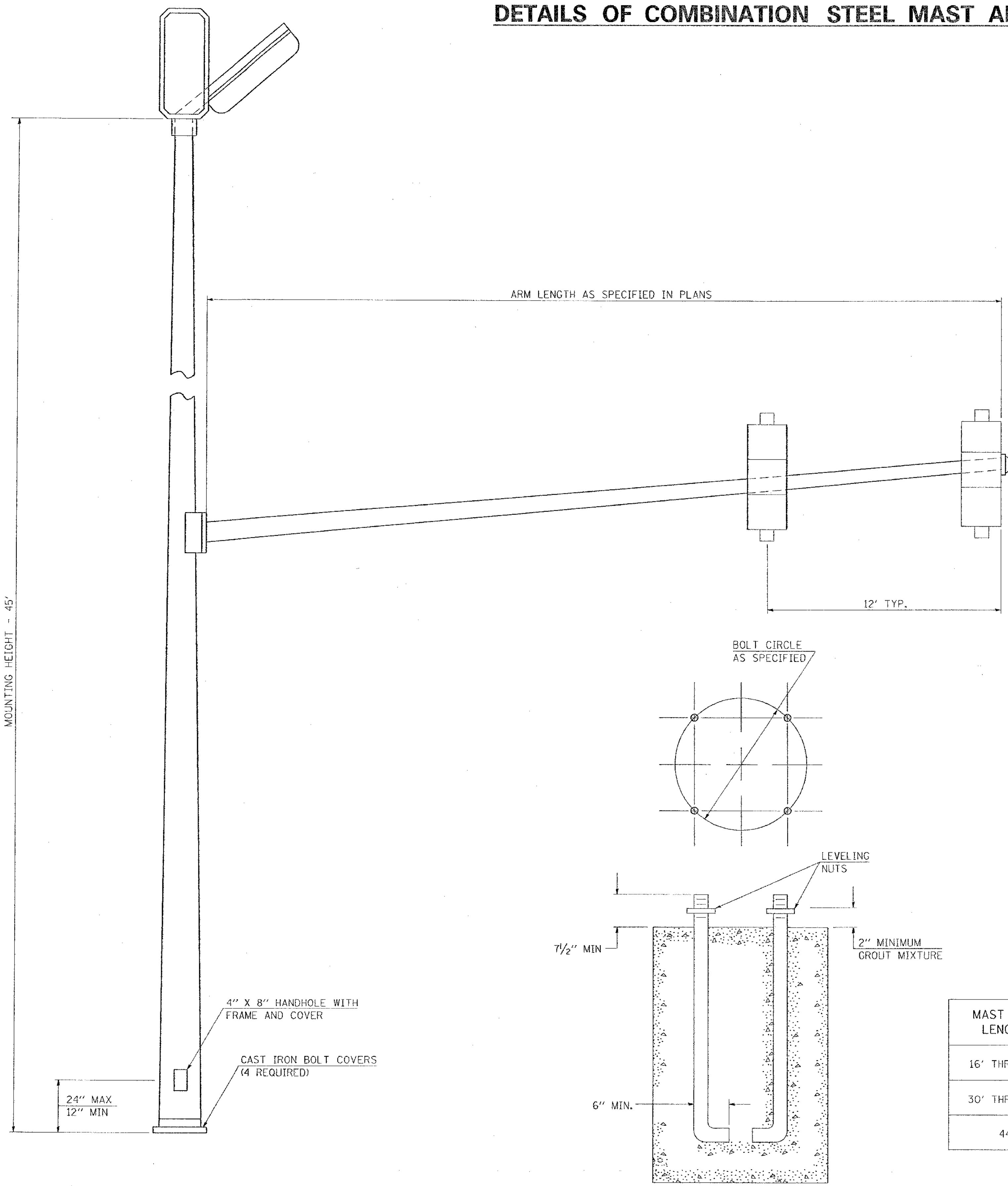
USER NAME = headon

DETAILS OF COMBINATION STEEL MAST ARM ASSEMBLY AND POLE

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	805
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



GENERAL NOTES

1. THE COMBINATION MAST ARM ASSEMBLY AND POLE SHALL BE CONSTRUCTED WITH ONE PIECE MAST ARMS AND POLE OR OTHER EQUIVALENT SECTIONAL DESIGN.

2. THE CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS SHOWING DESIGN MATERIALS, THICKNESS OF SECTIONS, WELD SIZES, AND ANCHOR BOLTS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. THESE DRAWINGS SHALL BE AT LEAST 17" BY 22" IN SIZE AND OF ADEQUATE QUALITY FOR MICROFILMING.

3. THE TYPE OF SIGNAL HEAD MOUNTING BRACKET TO BE USED SHALL BE APPROVED BY THE ENGINEER.

4. THE SIGNAL HEAD (INCLUDING BACKPLATE WHEN USED) SHALL NOT BE LESS THAN 16' OR MORE THAN 18' ABOVE THE CROWN OF PAVEMENT.

5. THE MANUFACTURER WILL BE ALLOWED TO SLOT THE BASE PLATE IN WHICH OTHER BOLT CIRCLES MAY FIT, PROVIDING THAT THESE SLOTS DO NOT OFFSET THE INTEGRITY OF THE POLE.

6. COMBINATION MAST ARM ASSEMBLIES AND POLES SHALL NOT BE INSTALLED WITHOUT THE LUMINAIRE.

7. THE ANCHOR BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

8. FOR MAST ARMS LESS THAN 32', THE 72" x30" SIGN S BE MOUNTED ON THE MAST ARM POLE INSTEAD OF THE ARM.

MAST ARM LENGTH	BOLT CIRCLE	ANCHOR BOLT SIZE
16' THRU 28'	15"	1½" X 60"
30' THRU 42'	18"	1½" X 60"
44'	18"	1¾" X 90"

STD. 9-70

REVISIONS

DRAWN	2-13-90	REVISED	5-14-02
REVISED	8-16-94	REVISED	
REVISED	12-18-01	REVISED	
REVISED	2-19-02	REVISED	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL:

COMBINATION STEEL MAST ARM ASSEMBLY AND POLE

SCALE: VERT. NO SCALE HORIZ.

DATE

DRAWN BY CNH

CHECKED BY

CONTRACT NO. 98950

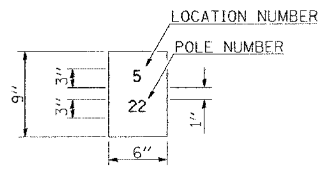
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
✳	✳✳	WILLIAMSON	917	806
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

✳ I-57, & OLD IL 13 (FAU 9629)
✳✳ (X1-6-2)VB-2,(X1-6)HBK-2

POLE STANDARDS

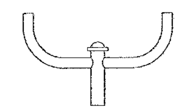
"INSTALL AND ORIENT ARM BRACKET OVER POLE TENON AND FIRMLY HAND TIGHTEN THE TWO SET SCREWS. USE THIRD HOLE IN ARM BRACKET AS A GUIDE TO DRILL A 9/64 DIAMETER HOLE THROUGH TENON. INSTALL AND TIGHTEN SELF-TAPPING SCREW. TIGHTEN SET SCREWS AN ADDITIONAL 1/4 TO 3/8 TURN WITH HEX KEY (NOT PROVIDED). INSTALL LOCKNUTS ON SET SCREWS IF THREADED PROJECTION ALLOWS."

POLE SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR 80 MPH WIND LOADING AND 90 LB. 4.0 SQ. FT E.P.A. LUMINAIRE.

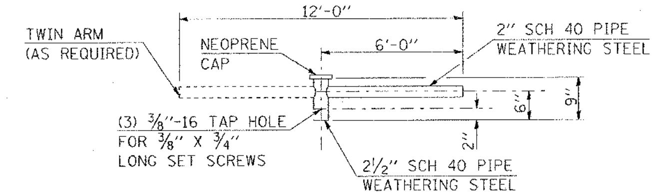


THE CONTRACTOR SHALL FURNISH AND INSTALL A LIGHT POLE IDENTIFICATION OF EACH NEW LIGHT POLE, AS SHOWN ABOVE, INCIDENTAL TO THE RESPECTIVE LIGHT POLE PAY ITEM. THE NUMERALS SHALL BE 3", SERIES "D", BLACK, SCREENED ON SILVER-WHITE TYPE B PRESSURE SENSITIVE REFLECTIVE SHEETING CONFORMING TO THE REQUIREMENTS OF SECTION 1602.01 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. THE NUMERALS SHALL CONFORM TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS".

THE LIGHT POLE IDENTIFICATION SHALL BE APPLIED TO SIGN BASE MATERIAL AS SPECIFIED IN SECTION 719.11 OF THE STANDARD SPECIFICATIONS, APPROXIMATELY 7" ABOVE THE ADJACENT PAVEMENT GRADE VISIBLE TO APPROACHING TRAFFIC IN ACCORDANCE WITH HIGHWAY STANDARD 2319.

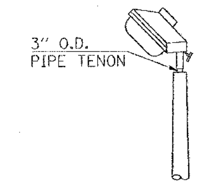


☒ TWIN TENON

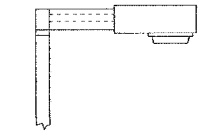


☐ TENON MOUNT BRACKET ARM

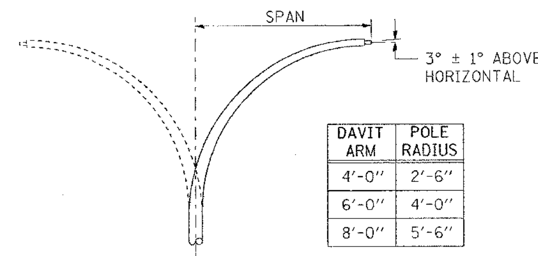
NOTE: SINGLE OR TWIN ARM ASSEMBLY SHALL BE TILTED 3° ABOVE HORIZONTAL.



☐ TENON



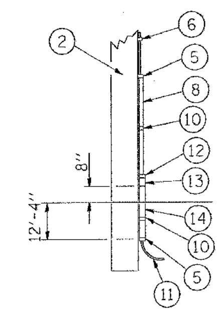
☐ SHORT BRACKET



DAVIT ARM	POLE RADIUS
4'-0"	2'-6"
6'-0"	4'-0"
8'-0"	5'-6"

☐ DAVIT ARM (AND OR)

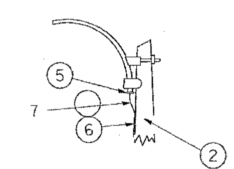
☐ DAVIT ARM-TWIN



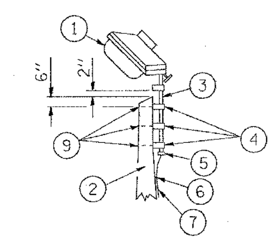
DETAILS FOR UNDERGROUND DISTRIBUTION IF REQUIRED

☐ POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
65'-0"	12'-0"
60'-0"	10'-0"
55'-0"	9'-0"
50'-0"	8'-0"
45'-0"	7'-0"
40'-0"	6'-6"
35'-0"	6'-0"
30'-0"	5'-6"

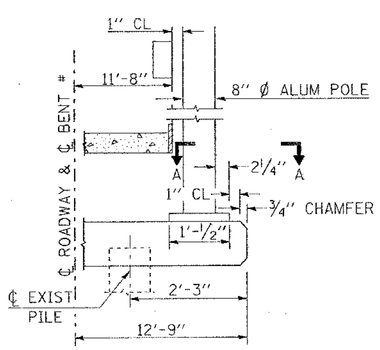


☐ MAST ARM

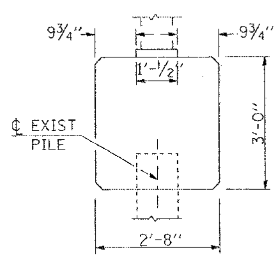


☐ TENON

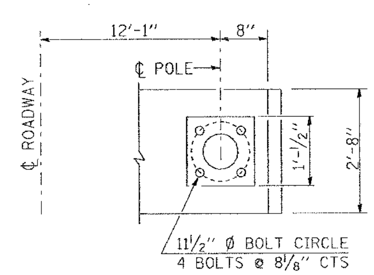
1. LUMINAIRE
2. WOOD POLE, CLASS 3 OR BETTER
3. 2 1/2" GALV. STEEL CONDUIT
4. SINGLE OFFSET POLE BAND
5. CONDUIT BUSHING
6. CABLE CLAMPS ON 2' CENTERS
7. 2/C #12 TYPE USE CABLE
8. 1" GALV. STEEL CONDUIT 10' IN LENGTH
9. 5/8" Ø HOT DIPPED GALVANIZED BOLT WITH FLAT WASHER & LOCKNUT (3 REQ'D)
10. CONDUIT CLAMPS ON 3' CENTERS
11. UNIT DUCT
12. THREADED REDUCER
13. "C" CONDULET, THREADED
14. 1 1/2" GALV. STEEL CONDUIT FOR 1 UNIT DUCT OR 3" GALV. STEEL CONDUIT FOR 2 OR 3 UNIT DUCTS.



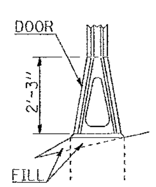
BENT #
(LOOKING)



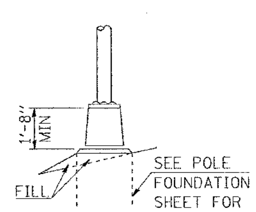
☐ BRIDGE PIER MOUNT



SECTION A-A

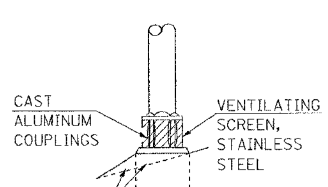


☐ STAINLESS STEEL FLAIR BASE

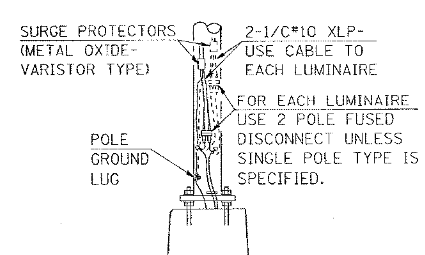


☐ TRANSFORMER BASE

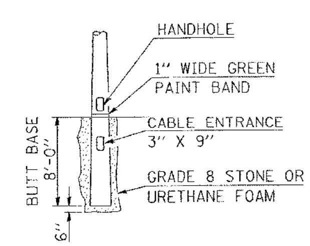
☐ FRANGIBLE



☐ BREAKAWAY COUPLING



☐ ANCHOR



☐ BUTT BASE

STD. 9-115

REVISIONS	
DRAWN	2-9-01
REVISED	4-14-02
REVISED	
REVISED	

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

POLE STANDARDS

SCALE: VERT. HORIZ. NONE

DATE

DRAWN BY CNH

CHECKED BY JCK

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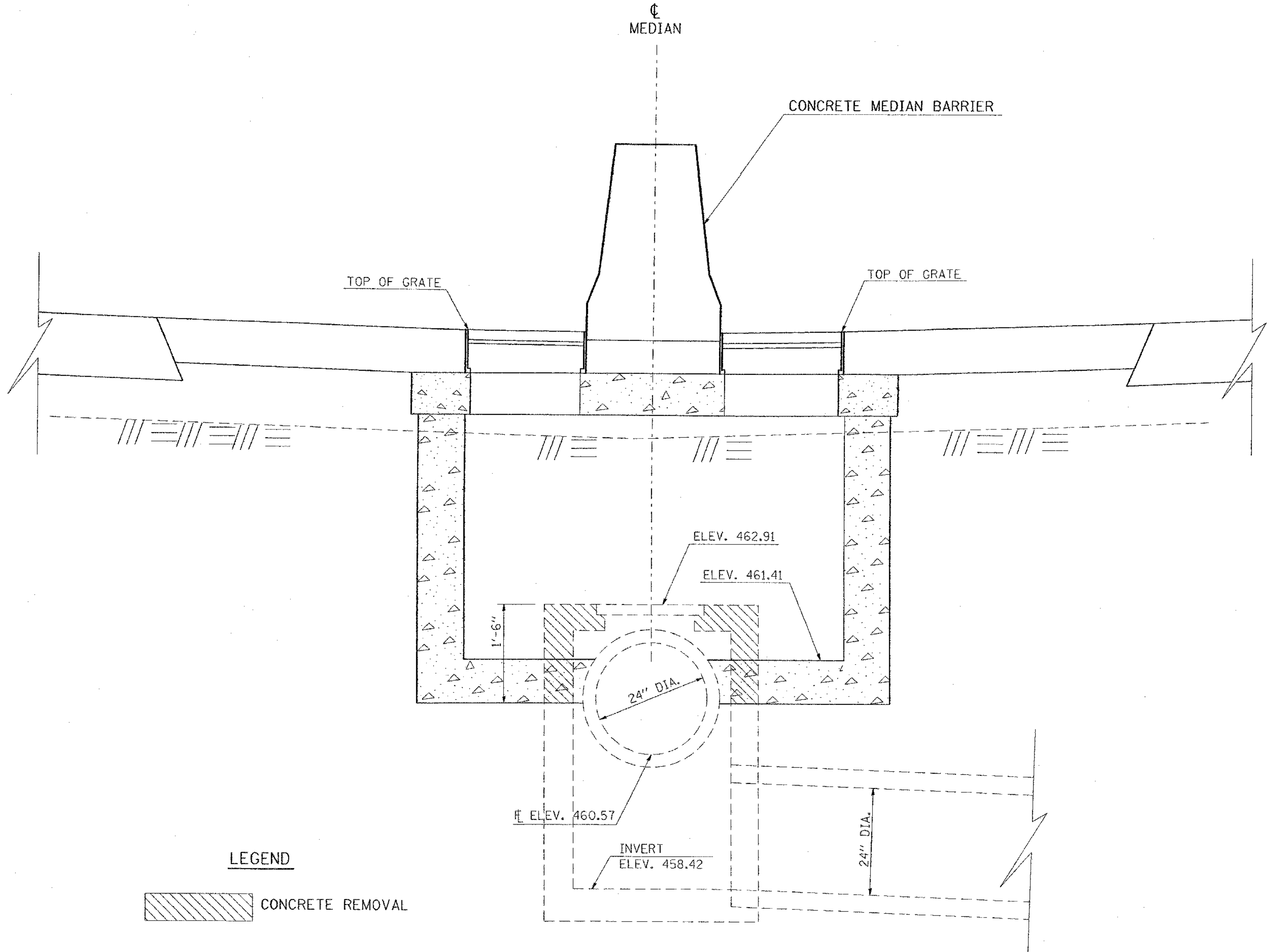
USER NAME = heedin

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	807
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (XI-6-2)VB-2,(XI-6)HBK-2



LEGEND

CONCRETE REMOVAL

NOTES:

1. REMOVAL OF A PORTION OF THE EXISTING INLET SHALL BE IN ACCORDANCE WITH THESE DETAILS AND THE APPLICABLE PORTIONS OF SECTION 605 OF THE STANDARD SPECIFICATIONS. THE INTENT IS TO REMOVE THE ENTIRE TOP SLAB AND A PORTION OF ALL FOUR WALLS FROM THE EXISTING INLET. THE COST OF THE REMOVAL SHALL BE INCLUDED IN THE CONTRACT PRICE, EACH, FOR **DRAINAGE STRUCTURES, TYPE 4.**
2. SEE STANDARDS 602106 AND 637006 FOR ADDITIONAL DETAILS.
3. RETAIN THE RE-BARS EXPOSED WHEN THE WALLS OF THE EXISTING INLET ARE REMOVED. BEND THE BARS AS DIRECTED BY THE ENGINEER, AND INCORPORATE THEM INTO THE FLOOR OF THE NEW DRAINAGE STRUCTURE.
4. THE RE-BARS SHOWN ON STANDARD 602106 IN THE FLOOR OF THE DRAINAGE STRUCTURE MAY BE CUT TO FIT AS DIRECTED BY THE ENGINEER.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF DRAINAGE STRUCTURE, TYPE 4

TO BE USED AT I-57 STA. 1518+01

SCALE: VERT. HORIZ. NONE

DATE

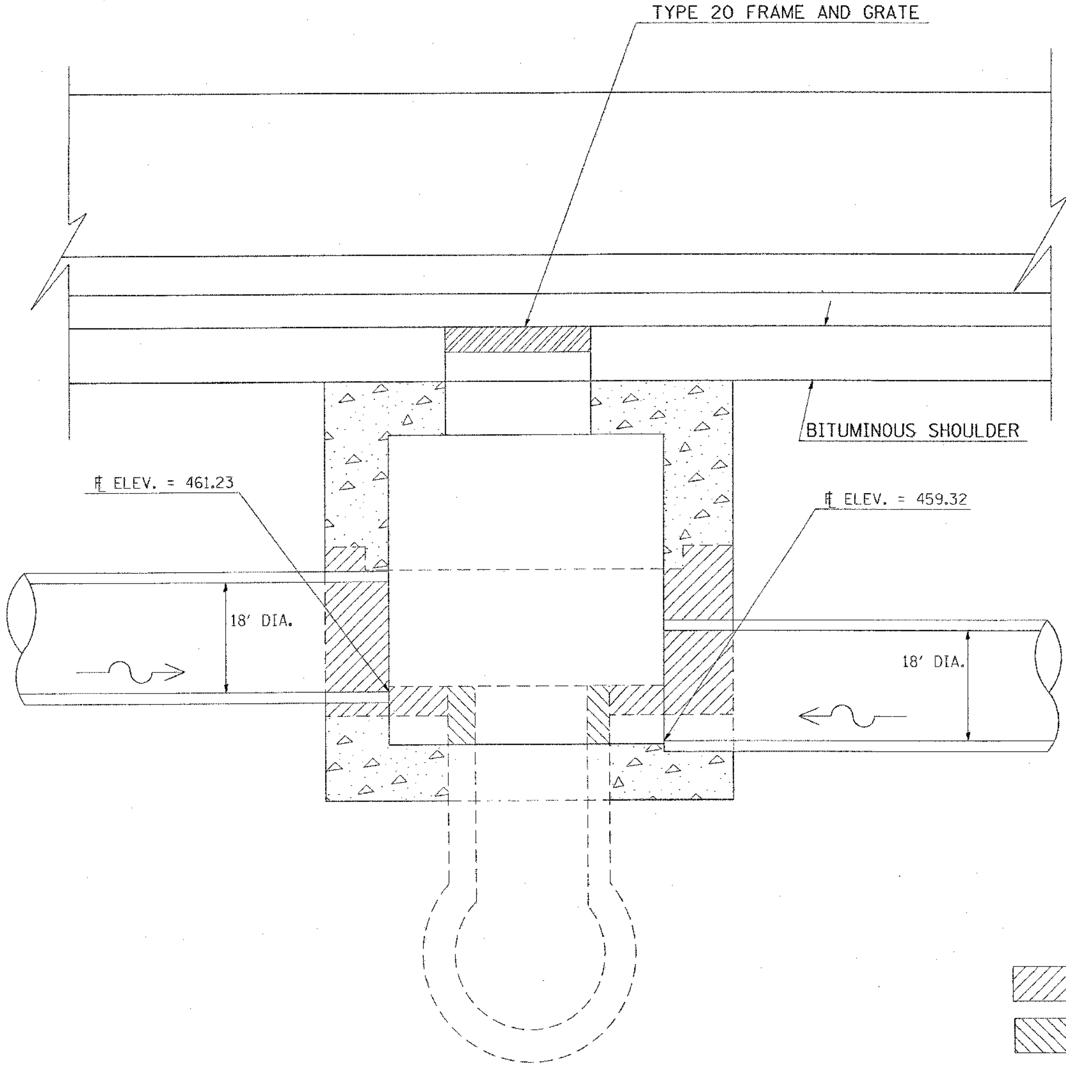
DRAWN BY CNH

CHECKED BY EES

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	808
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (XI-6-2)VB-2,(XI-6)HBK-2

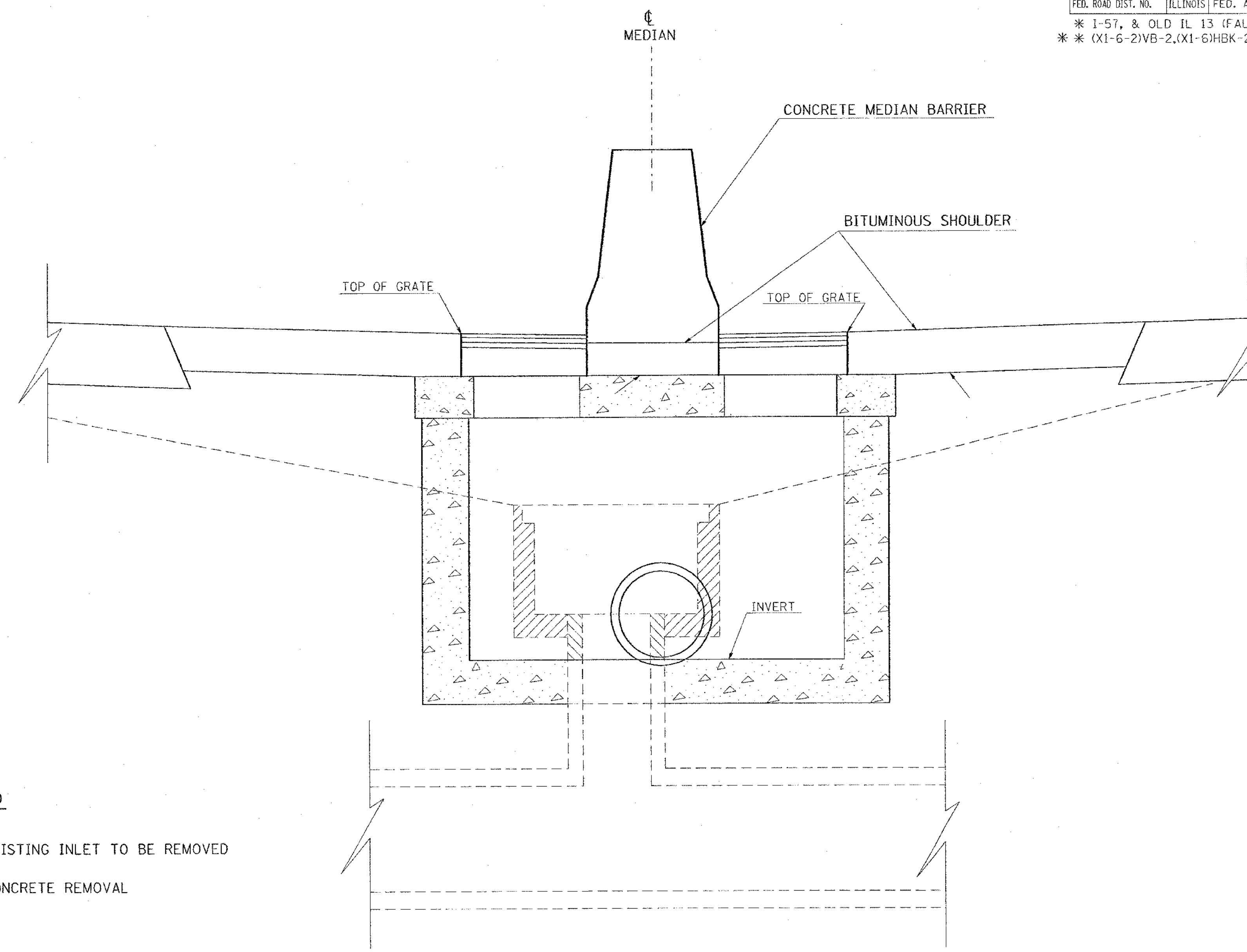


FRONT ELEVATION
(LOOKING EAST)

LEGEND

EXISTING INLET TO BE REMOVED

CONCRETE REMOVAL



SIDE ELEVATION
(LOOKING SOUTH)

NOTES:

1. REMOVAL OF THE EXISTING INLET SHALL BE PERFORMED IN ACCORDANCE WITH THESE DETAILS AND THE APPLICABLE PORTIONS OF SECTION 605 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL USE PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING RISER PIPE THAT IS TO REMAIN IN PLACE.

2. THE COST FOR REMOVING A PORTION OF THE EXISTING CONCRETE RISER PIPE, AS SHOWN IN THESE DETAILS, SHALL BE INCLUDED IN THE CONTRACT PRICE, EACH, FOR **DRAINAGE STRUCTURES, TYPE 4.**

3. SEE STANDARD 602106 FOR ADDITIONAL DETAILS.

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USER NAME = headon

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF DRAINAGE STRUCTURE, TYPE 4
TO BE USED AT STA. 1538+70

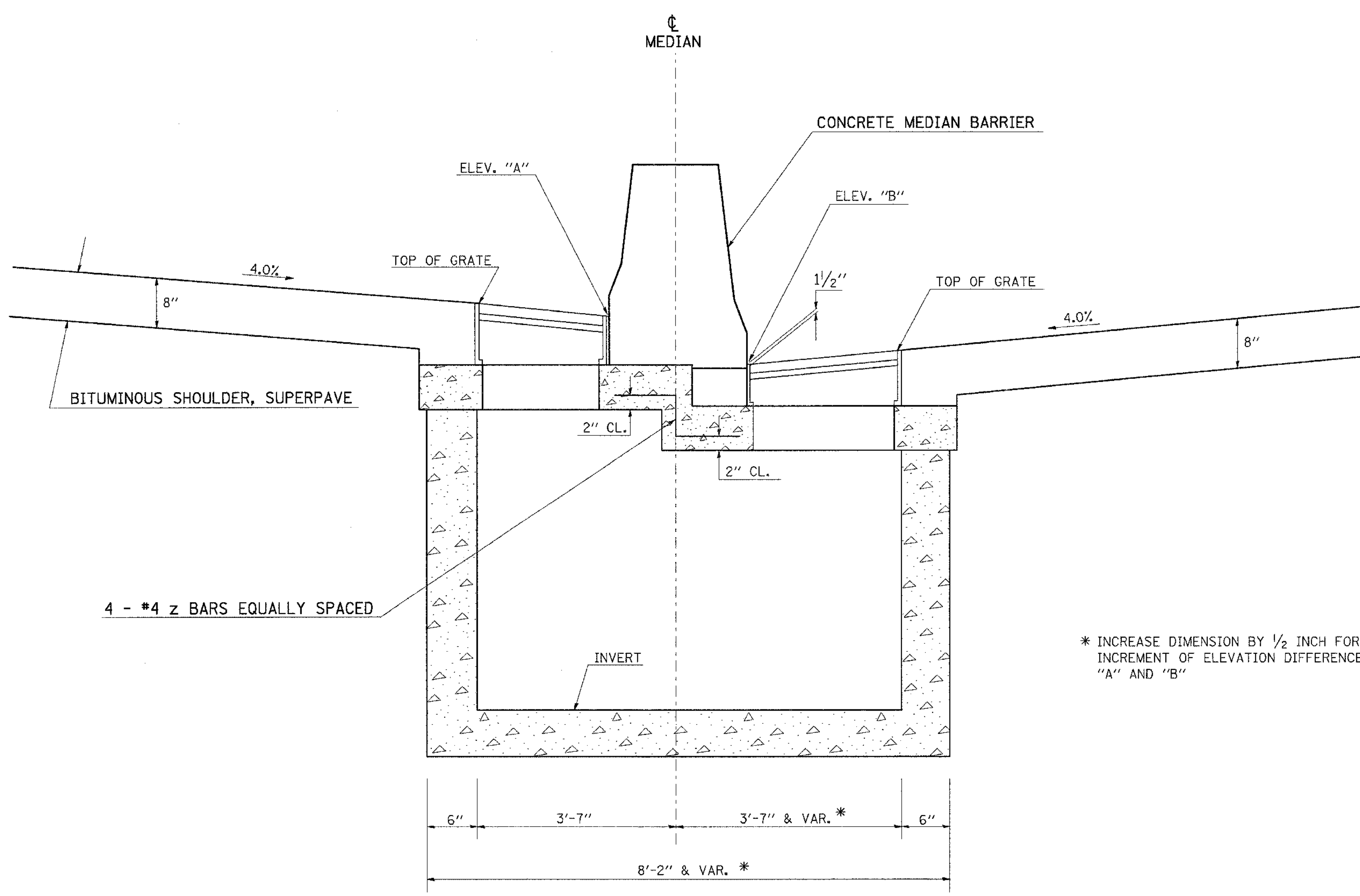
SCALE: VERT. NONE
HORIZ.
DATE

DRAWN BY CNH
CHECKED BY EES

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	809
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

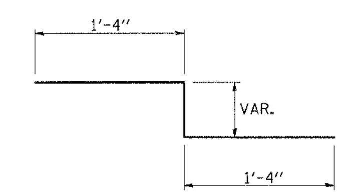
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



* INCREASE DIMENSION BY ½ INCH FOR EACH 6" INCREMENT OF ELEVATION DIFFERENCE BETWEEN "A" AND "B"

NOTES:

1. SEE STANDARDS 602106 AND 637006 FOR ADDITIONAL DETAILS.
2. USE 8 T_1 REINFORCEMENT BARS (4 ON EACH SIDE) IN THE CENTER PORTION OF THE LID INSTEAD OF 7 AS SHOWN ON THE STANDARD.
3. THE #4 z BARS MAY BE CUT AND BENT TO FIT IN THE FIELD.
4. THE #6 TRANSVERSE BARS SHOWN ON STANDARD 602106 MAY BE CUT INTO EQUAL LENGTHS TO FIT THE TWO HALVES OF THE LID AT DIFFERENT ELEVATIONS.
5. THE ADDITIONAL REINFORCEMENT BARS REQUIRED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR **DRAINAGE STRUCTURES, TYPE 4**, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.



#4 z BAR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF DRAINAGE STRUCTURE, TYPE 4
WHERE NB AND SB LANES ARE AT DIFFERENT ELEVATIONS

SCALE: VERT. HORIZ. NONE
DATE

DRAWN BY CNH
CHECKED BY EES

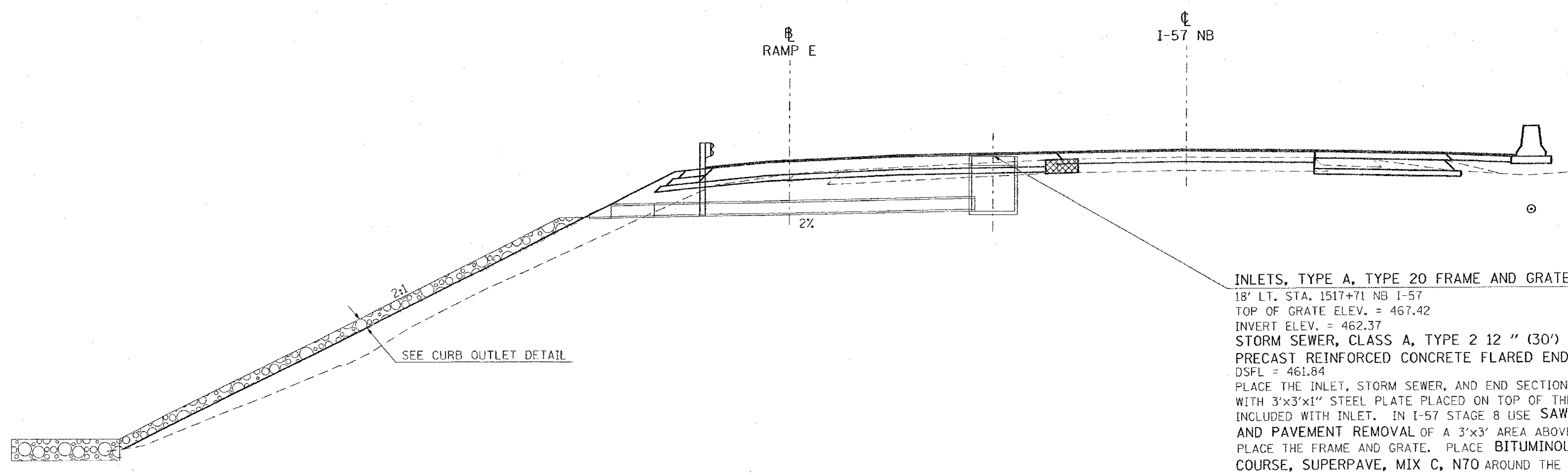
PLOT DATE = 12/13/2006
FILE NAME = o:\projects\d902802\old13\old13p3.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = headcn

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	810
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

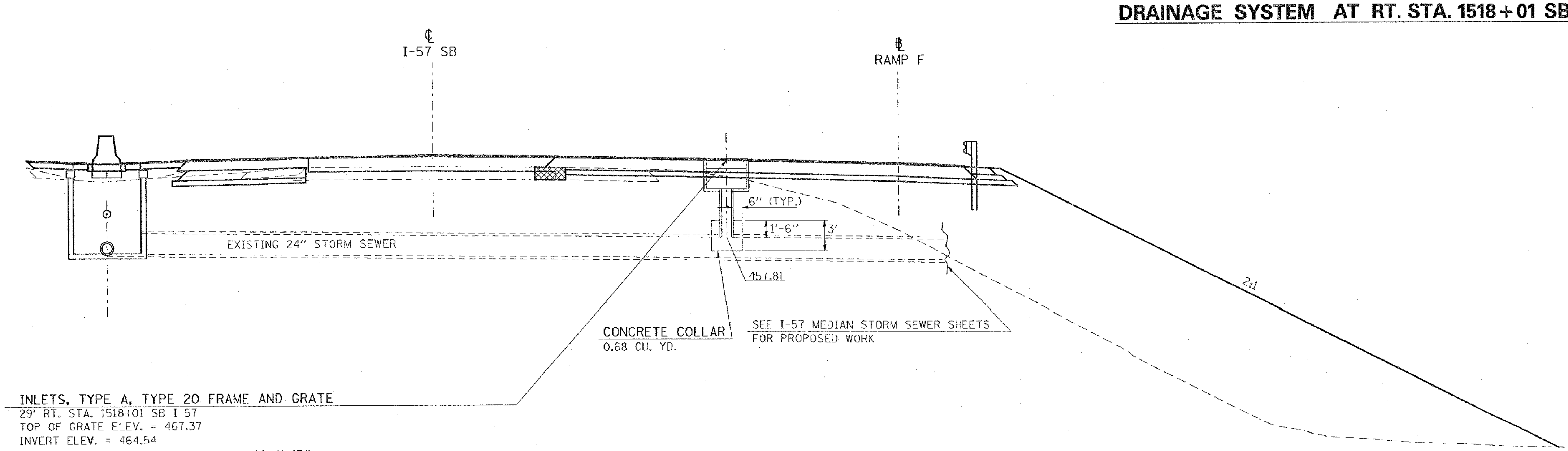
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

DRAINAGE SYSTEM AT LT. STA. 1517+71 NB I-57



INLETS, TYPE A, TYPE 20 FRAME AND GRATE
18' LT. STA. 1517+71 NB I-57
TOP OF GRATE ELEV. = 467.42
INVERT ELEV. = 462.37
STORM SEWER, CLASS A, TYPE 2 12 " (30')
PRECAST REINFORCED CONCRETE FLARED END SECTION 12"
DSFL = 461.84
PLACE THE INLET, STORM SEWER, AND END SECTION IN I-57 STAGE 4 WITH 3'x3'x1" STEEL PLATE PLACED ON TOP OF THE INLET COST TO BE INCLUDED WITH INLET. IN I-57 STAGE 8 USE SAW CUTS AND PAVEMENT REMOVAL OF A 3'x3' AREA ABOVE THE INLET AND PLACE THE FRAME AND GRATE. PLACE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N70 AROUND THE FRAME.

DRAINAGE SYSTEM AT RT. STA. 1518+01 SB I-57



INLETS, TYPE A, TYPE 20 FRAME AND GRATE
29' RT. STA. 1518+01 SB I-57
TOP OF GRATE ELEV. = 467.37
INVERT ELEV. = 464.54
STORM SEWER, CLASS A, TYPE 2 12 " (5')
CUT OPENING IN EXIST. 24" RCCP FOR PROPOSED 12" STORM SEWER AND GROUT THE PROPOSED STORM SEWER INTO EXIST. PIPE. COST TO BE INCLUDED WITH THE PROPOSED STORM SEWER.
PLACE THE INLET, STORM SEWER IN I-57 STAGE 4 WITH A 3'x. .' STEEL PLATE PLACED ON TOP OF THE INLET COST TO BE INCLUDED WITH INLET. IN I-57 STAGE 8 USE SAW CUTS AND PAVEMENT REMOVAL OF A 3'x3' AREA ABOVE THE INLET AND PLACE THE FRAME AND GRATE. PLACE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N70 AROUND THE FRAME.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
DRAINAGE SYSTEMS AT
LT STA. 1517+71 NB I-57 AND
RT. STA. 1518+01 SB I-57

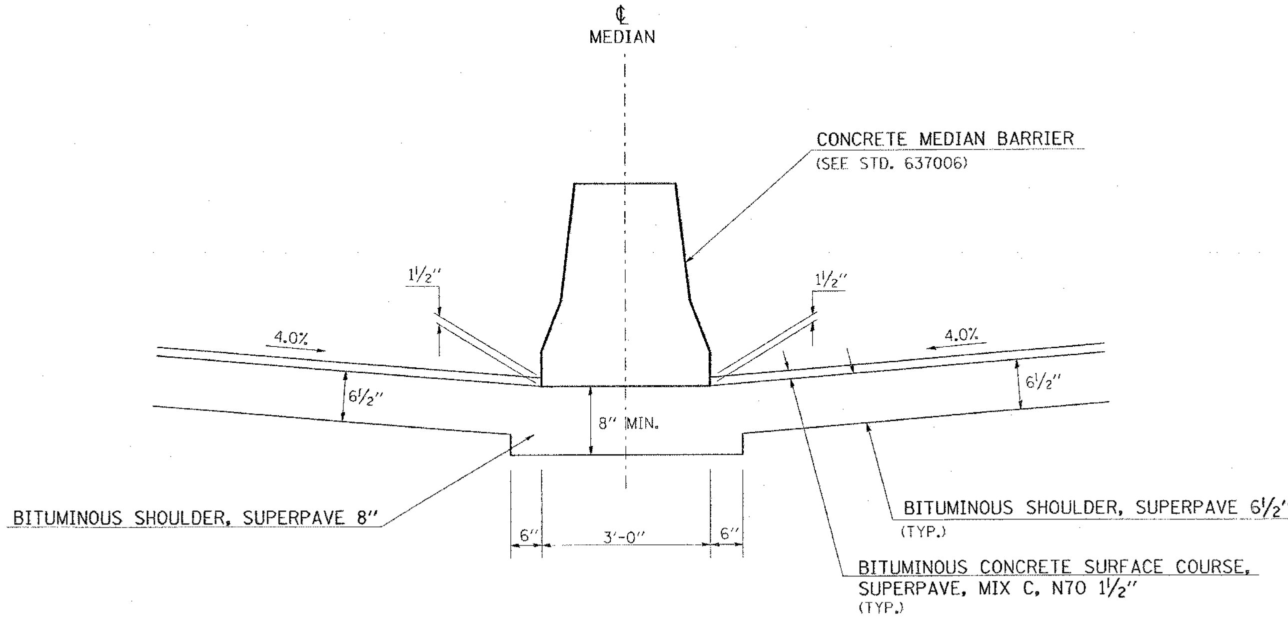
SCALE: VERT. HORIZ. NO SCALE
DATE
DRAWN BY CNH
CHECKED BY

PLOT DATE = 10/14/2006
FILE NAME = c:\projects\d902802\old13\old13p3.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = headon

CONTRACT NO. 98950

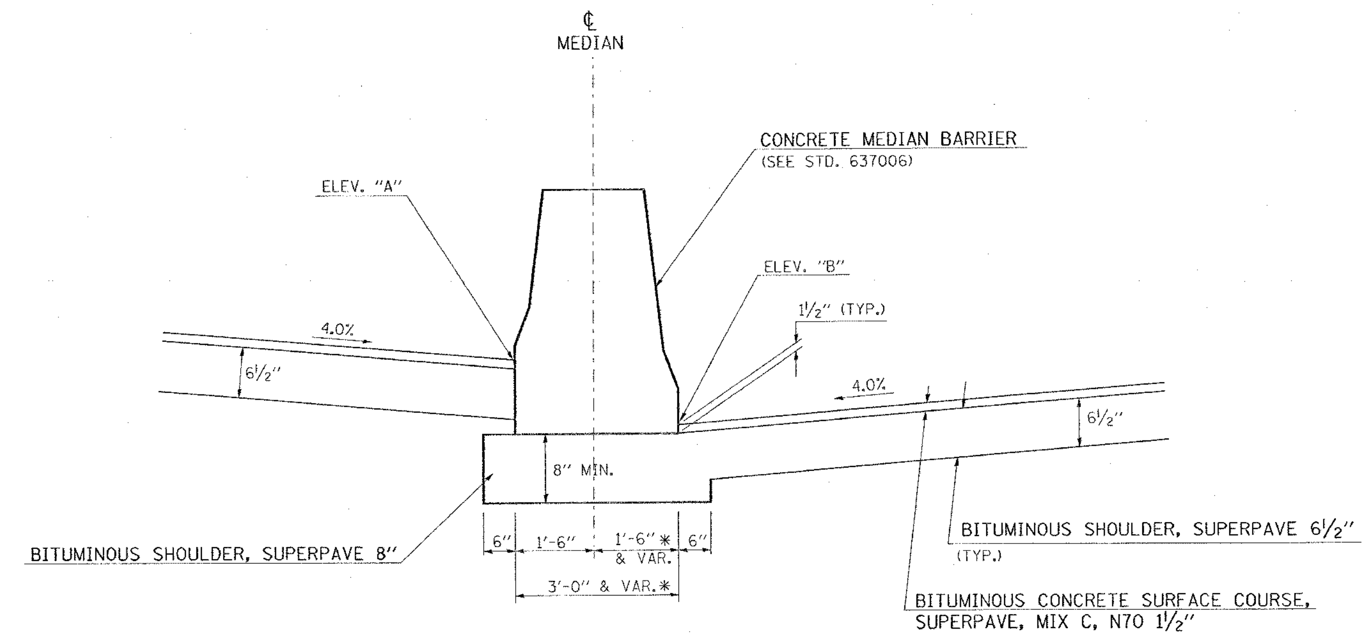
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	811
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (XI-6-2)VB-2,(XI-6)HBK-2



CASE 1

(NB AND SB LANES ARE AT SAME ELEVATION)



CASE 2

(NB AND SB LANES ARE AT DIFFERENT ELEVATIONS)

* INCREASE DIMENSION BY ½ INCH FOR EACH 6" INCREMENT OF ELEVATION DIFFERENCE BETWEEN "A" AND "B"

NOTES:

1. THE METHOD AND SEQUENCE OF CONSTRUCTION WILL BE THE CONTRACTORS OPTION, BUT SHALL BE APPROVED BY THE ENGINEER.
2. PAYMENT FOR BITUMINOUS SHOULDER, SUPERPAVE, 6½" SHALL BE BASED ON THE NUMBER OF SQUARE YARDS ACTUALLY PLACED TO THE DIMENSIONS SHOWN, AND NO ADDITIONAL PAYMENT WILL BE MADE IF THE CONTRACTOR CHOOSES TO BUILD THE SHOULDER TO A GREATER THICKNESS.

PLOT DATE = 10/14/2006
FILE NAME = c:\projects\d902802\old13\old13p3.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = headon

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF BITUMINOUS SHOULDER UNDER CONCRETE MEDIAN BARRIER

SCALE: VERT. HORIZ. NONE

DATE

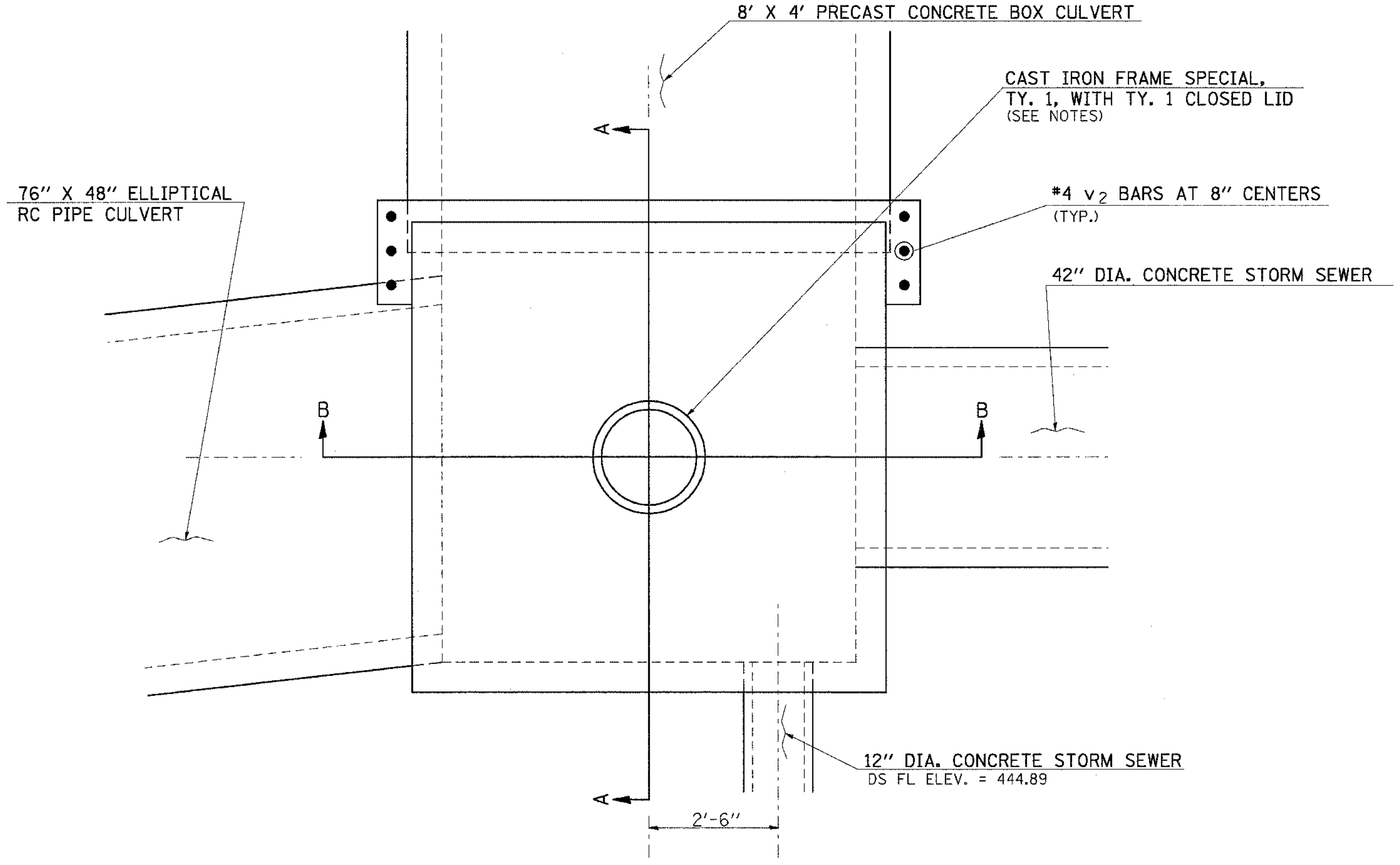
DRAWN BY CNH

CHECKED BY EES

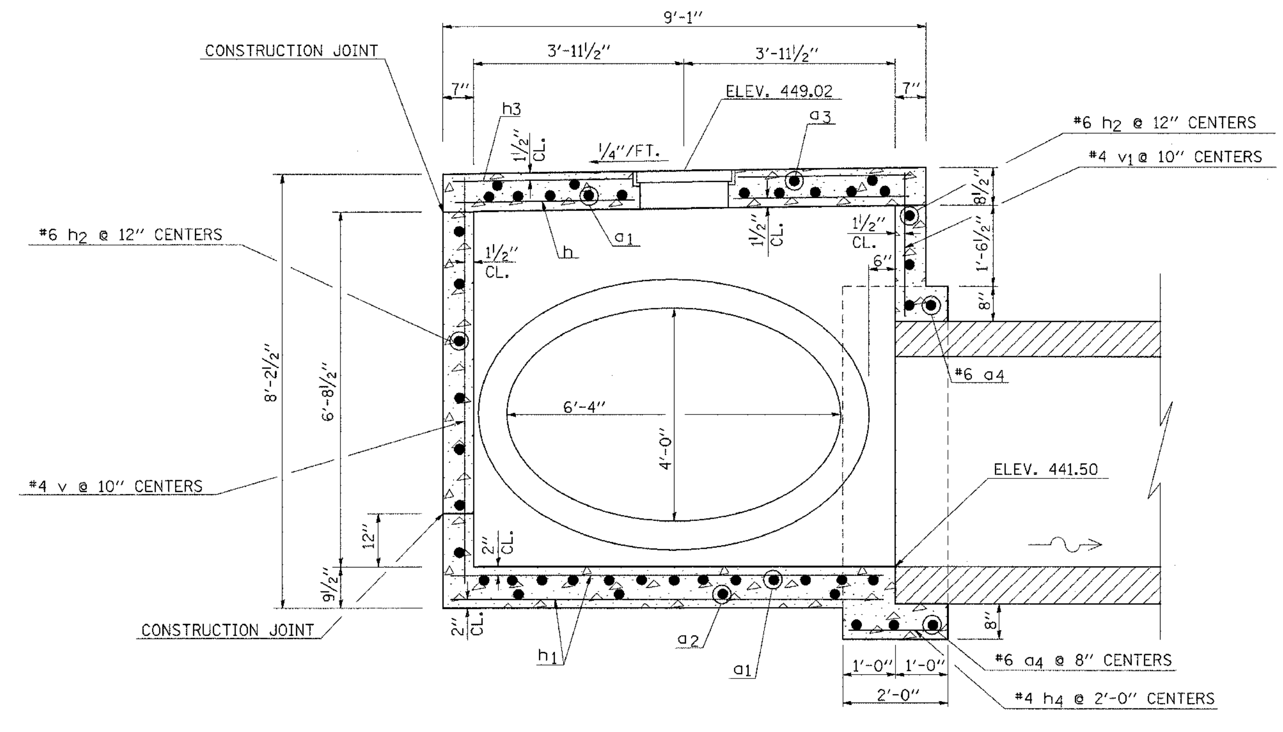
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	812
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

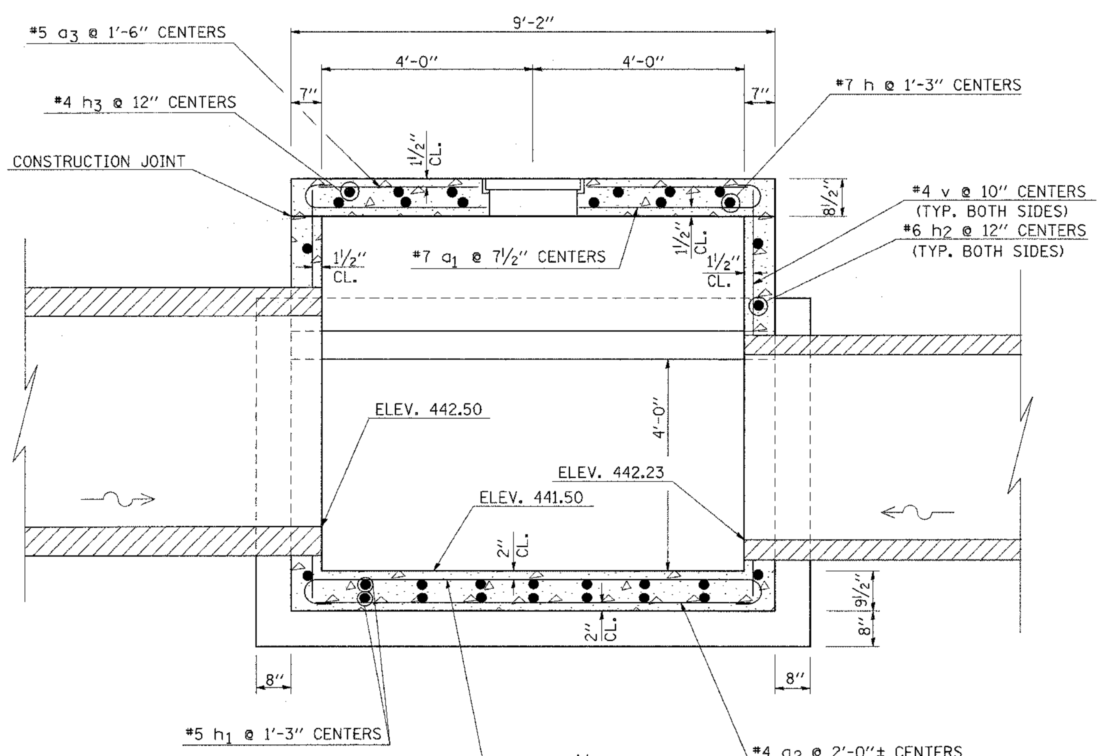
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



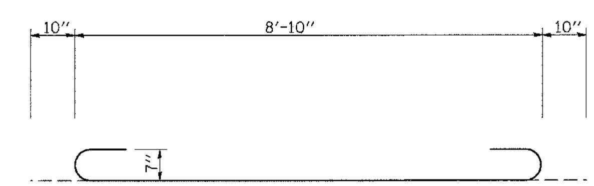
PLAN VIEW



SECTION A-A



SECTION B-B



a1 BAR

BILL OF MATERIAL

BAR	NUMBER	SIZE	LENGTH
a1	26 *	#7	10' -6"
a2	4	#4	8' -3"
a3	6 **	#5	8' -3"
a4	4	#6	10' -5"
h	7 **	#7	8' -10"
h1	14	#5	8' -3"
h2	22	#6	8' -10"
h3	7 **	#4	8' -10"
h4	6	#4	1' -9"
v	30	#4	7' -11"
v1	11	#4	3' -5"
v2	6	#4	6' -5"
CLASS SI CONCRETE		CU. YDS.	8.98
REINFORCEMENT BARS		LBS.	990
REINFORCEMENT BARS (EPOXY COATED)		LBS.	500
CAST IRON FRAME, SPECIAL, TY. 1 WITH TY. 1 CLOSED LID		EACH	1

* 13 OF THE a1 BARS ARE TO BE EPOXY COATED.
** EPOXY COATED

NOTES

1. BECAUSE OF THE CAST IRON FRAME AND CONCRETE PIPES CONNECTING TO THE PROPOSED JUNCTION BOX, IT WILL BE NECESSARY FOR THE CONTRACTOR TO CUT SOME OF THE a1, a3, h, h2, h3, and v BARS IN THE FIELD TO FIT. PIECES CUT FROM THESE BARS SHALL BE USED TO COMPLETE THE LINES OF REINFORCEMENT BARS AS SHOWN ON THESE DETAILS AND AS DIRECTED BY THE ENGINEER.
2. ALL REINFORCEMENT BARS TOTALLY WITHIN THE TOP SLAB SHALL BE EPOXY COATED.
3. THE HOOKS OF THE a1 BARS MAY BE TILTED IF NECESSARY TO PROVIDE THE SPECIFIED CLEARANCE.
4. THREE V BARS ARE TO BE PLACED VERTICALLY, AS DIRECTED BY THE ENGINEER, IN THE COLLAR AT EACH SIDE OF THE 8' x 4' BOX CULVERT.
5. SEE DISTRICT STANDARD 9-18 (SHEET 815) FOR DETAILS OF THE CAST IRON FRAME, SPECIAL, TYPE 1, WITH TYPE 1 CLOSED LID.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS OF JUNCTION BOX

RIGHT OF STATION 773+75 (OLD ROUTE 13)

SCALE: VERT. HORIZ. NONE
DATE
DRAWN BY CNH
CHECKED BY EES

PLOT DATE = 12/8/2006
FILE NAME = d:\projects\98202\old13\old13p3.dgn
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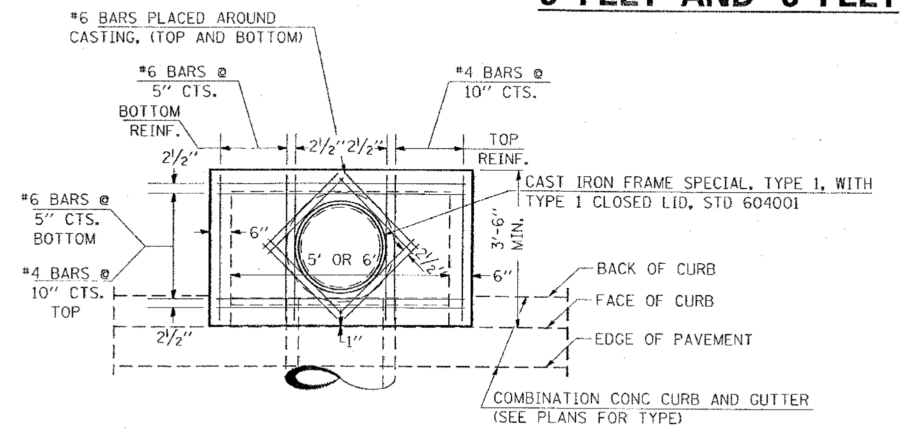
USER NAME = headen

CONTRACT NO. 98950

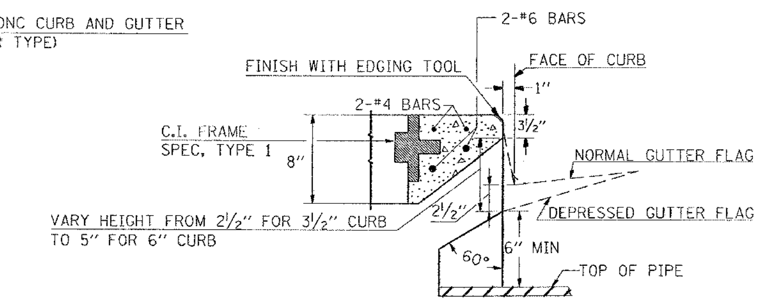
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	813
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

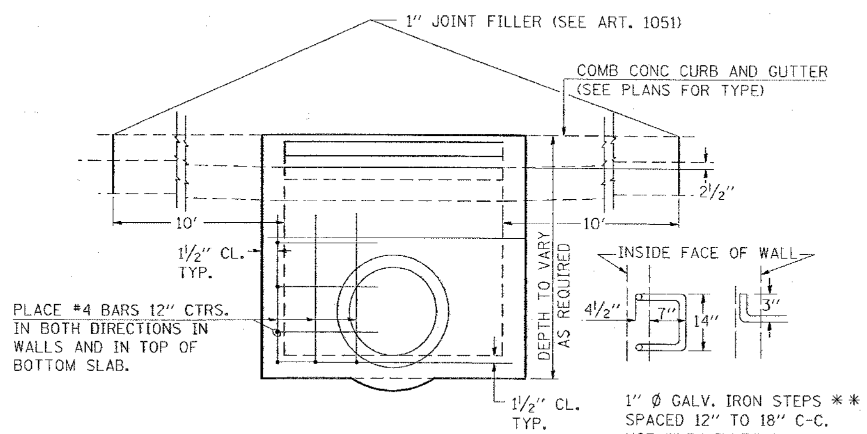
DETAILS OF INLET SPECIAL, TYPE 3, 5 FEET AND 6 FEET



PLAN



SECTION A-A



ELEVATION

DESIGN	PIPE DIA	"D"
A	18"&LESS	2'-6"
B	21"&24"	3'-0"
C	27"&30"	3'-7"
D	33"&36"	4'-2"
E	42"	4'-9"
F	48"	5'-0"
G	54"	6'-1"

NOTES:

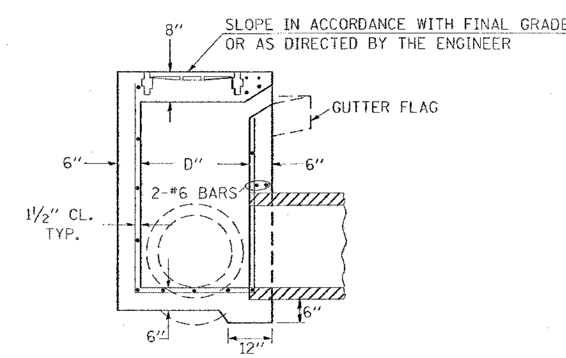
PROVIDE 1½" CLEARANCE TYP. ALL REINFORCEMENT UNLESS OTHERWISE SPECIFIED.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. SET FACE OF INLET 1" BEHIND FACE OF CURB. DEPRESS GUTTER FLOWLINE AT INLET 2½" BELOW NORMAL GUTTER FLOWLINE. CONSTRUCT TRANSITION IN FLOWLINE IN 10 FEET EACH SIDE OF INLET. PIPES TO BE CONNECTED TO INLET AS SHOWN ON STORM SEWER LAYOUT.

INLETS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR **INLET, SPECIAL, TYPE 3, 5 FEET** OR **INLET, SPECIAL, TYPE 3, 6 FEET** WHICH PRICE SHALL INCLUDE THE CAST IRON FRAME, SPECIAL, TYPE I WITH TYPE 1 CLOSED LID, THE REINFORCEMENT BARS, METAL STEPS AND JOINT FILLER.

** THE GALVONIZED IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT WILL CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN, MAY BE USED WHEN APPROVED BY THE ENGINEER.

IF THE INLET IS NOT CAST IN PLACE THEN THE INLET SHALL BE PRODUCED ACCORDING TO THE DEPARTMENT'S CURRENT POLICY MEMORANDUM, "QUALITY CONTROL/QUALITY ASSURANCE PROGRAM FOR PRECAST CONCRETE PRODUCTS".

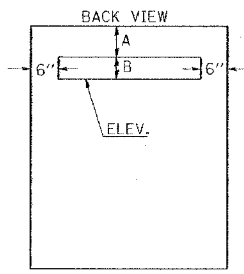


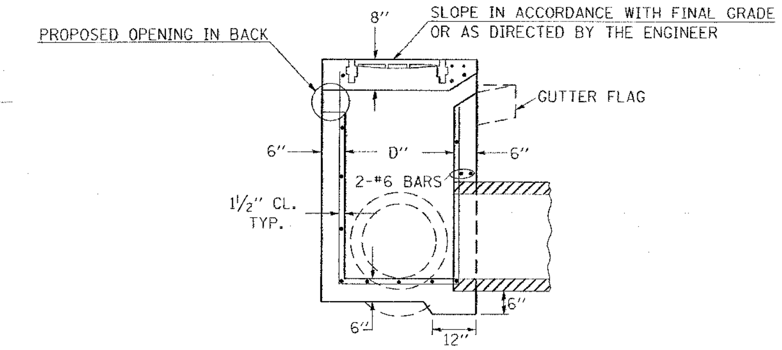
SECTION

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
REVISED	1-19-99
REVISED	5-6-04

STD. 9-1

DETAILS OF INLET SPECIAL, TYPE 3, WITH OPENING BEHIND CURB



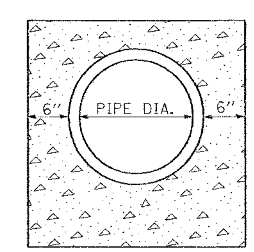


STA.	DISTANCE A	DISTANCE B	ELEV.
775+60	6"	7"	447.96
776+25	6"	7"	448.20
778+00	6"	7"	449.00
779+25	6"	7"	449.60
780+50	9"	7"	450.10

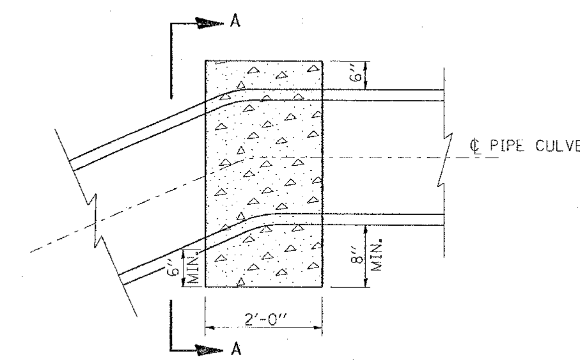
TO BE USED:
RT. STA. 775+60
RT. STA. 776+25
RT. STA. 778+00
RT. STA. 779+25
RT. STA. 780+50

SECTION

DETAIL OF CONCRETE THRUST BLOCK FOR CONCRETE PIPE CULVERT



SECTION A-A



CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH ARTICLES 609.06 AND 609.07 OF THE STANDARD SPECIFICATIONS. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

INLET SPECIAL, TYPE 3, 5 FEET AND 6 FEET; INLET SPECIAL, TYPE 3, WITH OPENING BEHIND CURB; CONCRETE THRUST BLOCK FOR CONCRETE PIPE CULVERT

SCALE: VERT. HORIZ. NONE
DATE
DRAWN BY CNH
CHECKED BY EES

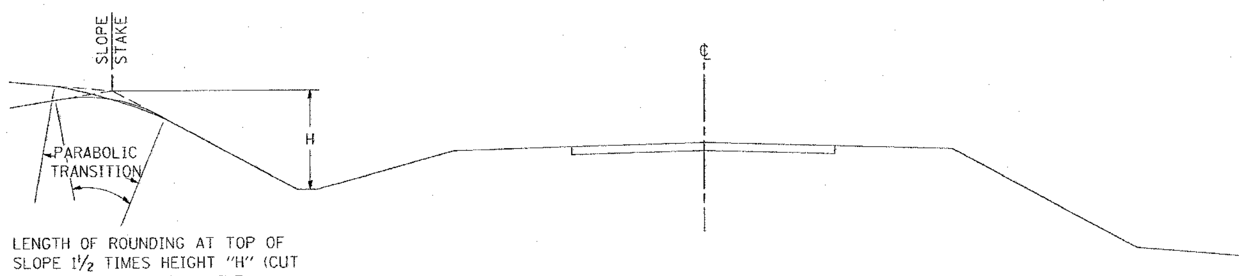
PLOT DATE = 10/14/2006
FILE NAME = c:\projects\d902802\old13\old13p3.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = headon

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	814
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

TYPICAL SECTIONS OF TRANSITIONS OF SLOPES AND INCIDENTAL GRADING

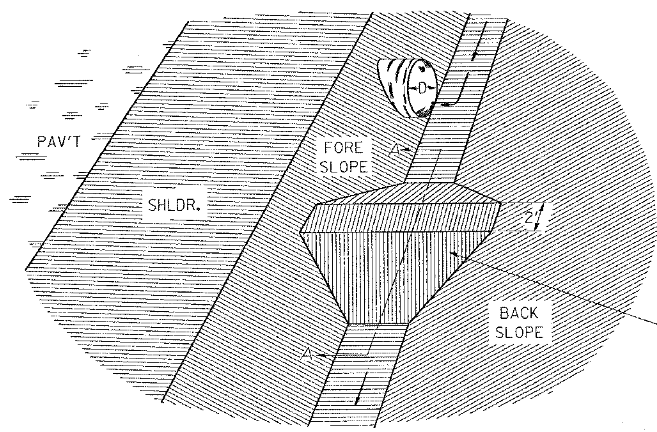


LENGTH OF ROUNDING AT TOP OF SLOPE 1½ TIMES HEIGHT "H" (CUT IN FEET) OR TO R.O.W. LINE

SECTION SHOWING TRANSITIONS OF PROPOSED SLOPES

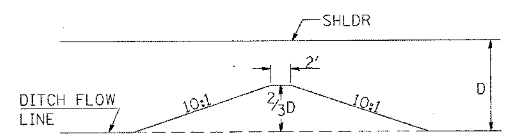
NOTE:

DITCH PLUG TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER, INCLUDED IN THE EARTH EXCAVATION

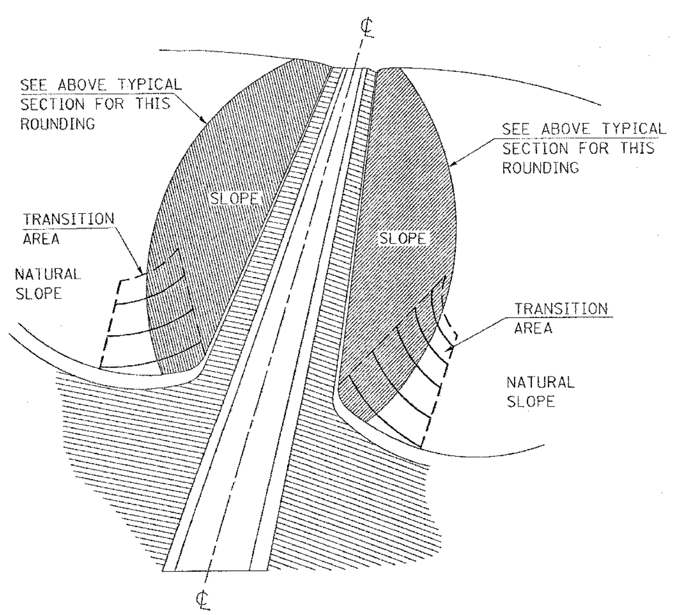


EARTH DITCH PLUG TO BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND TO BE CONSIDERED INCLUDED IN THE EARTH EXCAVATION.

DITCH PLUG DETAIL



SECTION A-A



TRANSITION GRADING

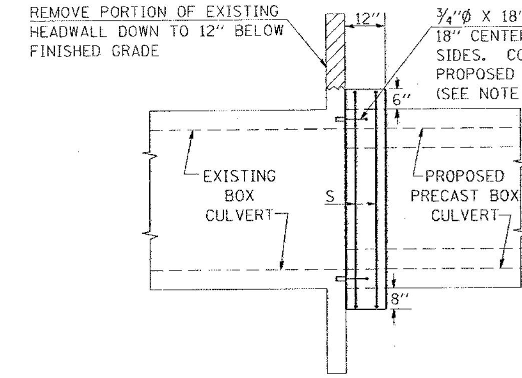
TRANSITION GRADING BETWEEN CUT AND FILL SLOPES AND BETWEEN CUT SLOPES AND NATURAL GROUND WILL BE REQUIRED ON THIS IMPROVEMENT. THE TRANSITION SHALL BE ROUNDED AND STREAMLINED IN ORDER TO BLEND THE CUT SLOPES AND THE FILL SLOPES INTO EACH OTHER AND INTO THE ADJACENT TERRAIN. THE SLOPES AS SHOWN ON THE CROSS SECTIONS IN THESE PLANS MAY BE VARIED SOMEWHAT IN THE TRANSITION AREAS AS DIRECTED BY THE ENGINEER IN ORDER TO MEET THIS GRADING REQUIREMENT. THE QUANTITIES OF EARTH EXCAVATION INVOLVED ARE INCLUDED IN THE BALANCE QUANTITIES SHOWN ON THE PLANS AND NO OTHER COMPENSATION WILL BE ALLOWED.

REVISIONS	
REDRAWN	2-15-89
REVISED	
REVISED	
REVISED	

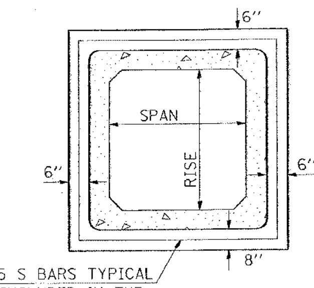
STD. 9-17

DETAIL OF SLOPE TO NATURAL GROUND TRANSITION

DETAILS OF CONCRETE COLLAR FOR PRECAST BOX CULVERT



SIDE VIEW



END VIEW

THE CONCRETE COLLAR SHALL BE CONSIDERED INCLUDED IN **PRECAST CONCRETE BOX CULVERT,** WHICH PRICE SHALL INCLUDE THE REMOVAL OF SUCH PORTIONS OF THE EXISTING HEADWALLS AS MAY BE REQUIRED. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

NOTE:

ANCHOR BOLTS, MEETING THE REQUIREMENTS OF ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS, SHALL EXTEND A MINIMUM OF 9 INCHES INTO THE NEW CONCRETE. EXPANSION SHIELDS SHALL PROVIDE A MINIMUM CERTIFIED PROOF LOAD OF 4080 POUNDS.

TABULATION

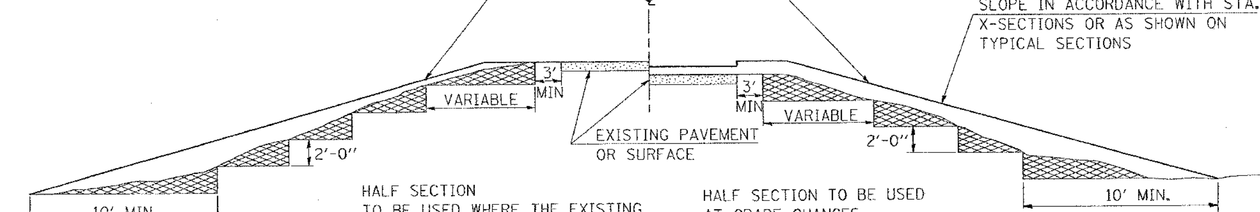
(FOR INFORMATION PURPOSES ONLY)

SPAN X RISE	CLASS SI CONC. CU. YD. (EST.)
2' X 2'	0.26
3' X 2'	0.30
3' X 3'	0.34
4' X 2'	0.36
4' X 3'	0.39
4' X 4'	0.43
5' X 2'	0.41
5' X 3'	0.45
5' X 4'	0.49
6' X 2'	0.47
6' X 3'	0.51
6' X 4'	0.54

REVISIONS	
DRAWN	8-15-89
REVISED	2-15-90
REVISED	8-10-90
REVISED	8-19-94
REVISED	12-17-01
REVISED	
REVISED	
REVISED	

STD. 9-45

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



HALF SECTION TO BE USED WHERE THE EXISTING EMBANKMENT IS TO BE WIDENED

HALF SECTION TO BE USED AT GRADE CHANGES

MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
CHECKED	6-3-99
REVISED	

STD. 9-16

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

SECTIONS OF TRANSITIONS OF SLOPES AND INCIDENTAL GRADING; CONCRETE COLLAR FOR PRECAST BOX CULVERT; CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL

SCALE: VERT. HORIZ. NO SCALE

DATE

DRAWN BY

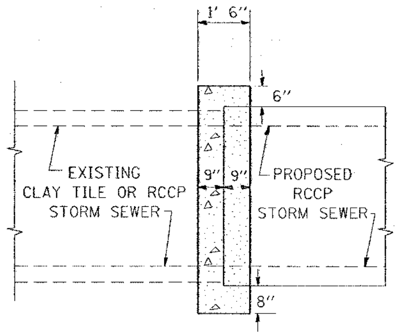
CHECKED BY

CONTRACT NO. 98950

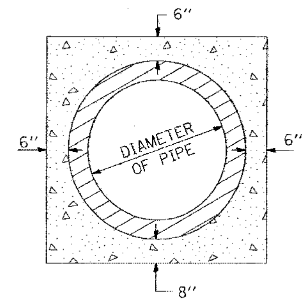
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	815
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

DETAILS OF CONCRETE COLLAR FOR PIPE CULVERT



SIDE VIEW



END VIEW

QUANTITY ONE COLLAR

DIA OF PIPE	CLASS SI CONC CU YD (EST)
12"	0.25
15"	0.29
24"	0.44
30"	
36"	

THE CONCRETE COLLAR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **CONCRETE COLLAR,** AS SHOWN ON THE PLANS. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

TO BE USED:

OLD ROUTE 13:
RT. STA. 775+04
RT. STA. 778+00
RT. STA. 782+25

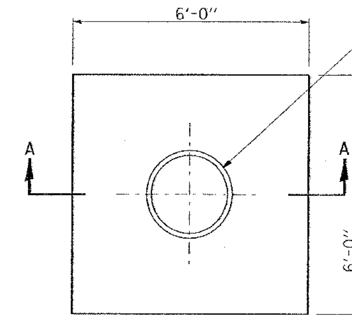
I-57:
RT. STA. 1518+01

REVISIONS

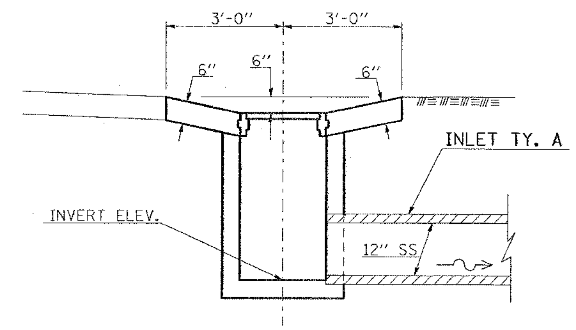
DRAWN	7-2-90
REVISED	9-22-94
REVISED	
REVISED	

MODIFIED STD. 9-77

DETAILS OF CAST IRON FRAMES SPECIAL TYPE 1 WITH TYPE 1 OPEN LID

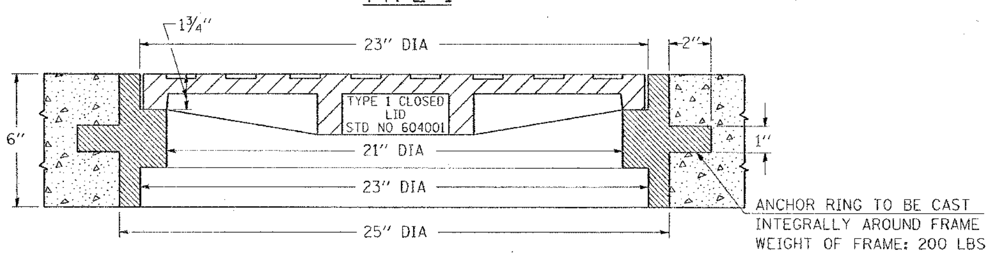


PLAN



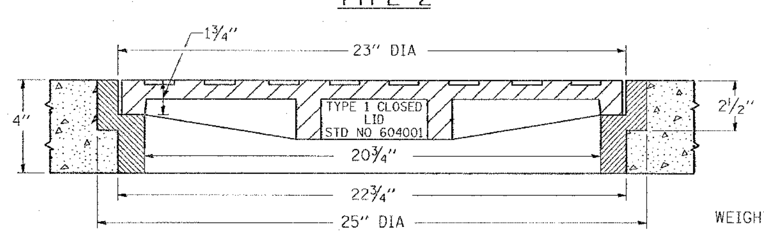
DETAILS OF CAST IRON FRAMES SPECIAL TYPE 1 & TYPE 2 WITH TYPE 1 CLOSED LID

TYPE 1



THE FRAMES MAY BE MADE OF EITHER GRAY IRON CONFORMING TO THE STANDARD SPECIFICATIONS OR DUCTILE IRON CONFORMING TO THE SPECIFICATIONS FOR DUCTILE IRON CASTING, A.S.T.M. DESIGNATION: A536, GRADE 60-45-10.

TYPE 2



WEIGHT OF FRAME: 90 LBS

STD. 9-18

REVISIONS

REDRAWN	2-15-89
REVISED	12-14-01
REVISED	
REVISED	

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL:
CONCRETE COLLAR FOR PIPE CULVERT; CAST IRON FAMES SPECIAL TY. 1 & TY. 2 WITH TY. 1 CLOSED LID; CAST IRON FRAMES SPECIAL TY. 1 WITH TY. 1 OPEN LID

SCALE: VERT. NONE HORIZ.
DATE
DRAWN BY CNH
CHECKED BY EES

PLOT DATE = 10/14/2005
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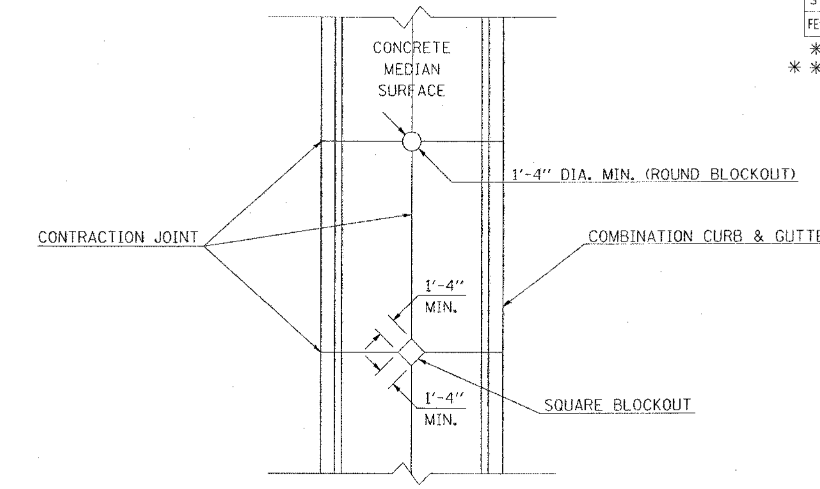
USER NAME = heedon

CONTRACT NO. 98950

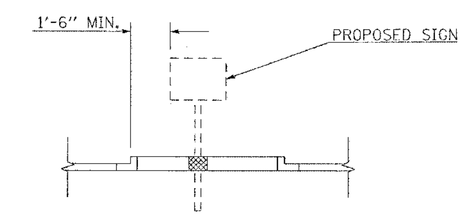
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	816
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

SIGN POST BLOCKOUT



PLAN VIEW

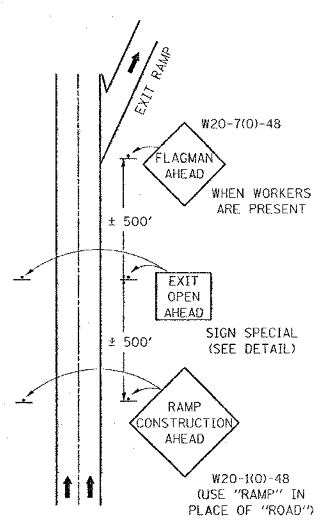


PROFILE VIEW

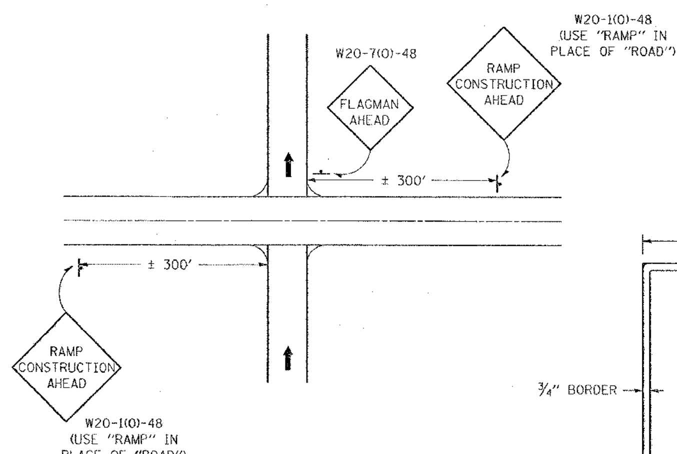
REVISIONS	
DRAWN	4-5-99
REVISED	
REVISED	
REVISED	

STD. 9-107

DETAILS OF SIGNING FOR TRAFFIC CONTROL AT RAMPS



DETAIL 1
MAINLINE SIGNING



DETAIL 2
SIDEROAD SIGNING

BACKGROUND: ORANGE REFLECTORIZED
LEGEND AND BORDER: BLACK
"D" SIZE LETTERS

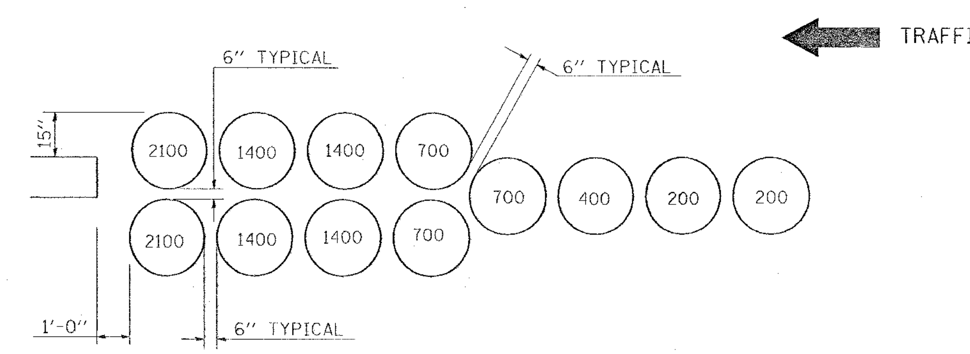
SPECIAL SIGN DETAIL

REVISIONS	
DRAWN	9-7-90
REVISED	8-22-94
REVISED	
REVISED	

STD. 9-82

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3

FOR 55 MPH SPEED LIMIT



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
SIGNING FOR TRAFFIC CONTROL AT RAMPS;
SIGN POST BLOCKOUT
IMPACT ATTENUATORS, TEMPORARY
(NON-REDIRECTIVE) TEST LEVEL 3

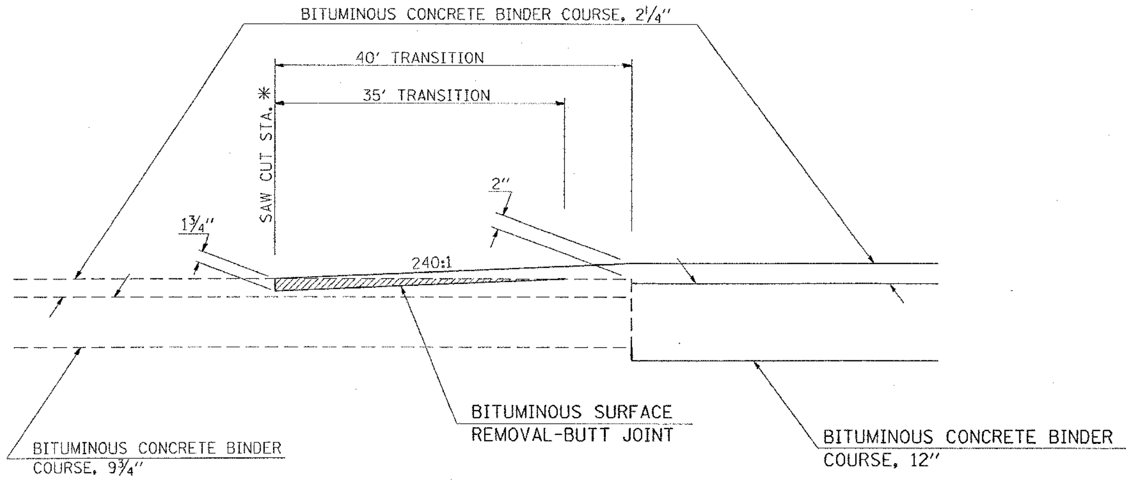
SCALE: VERT. NONE HORIZ.
DATE
DRAWN BY CNH
CHECKED BY

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	817
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

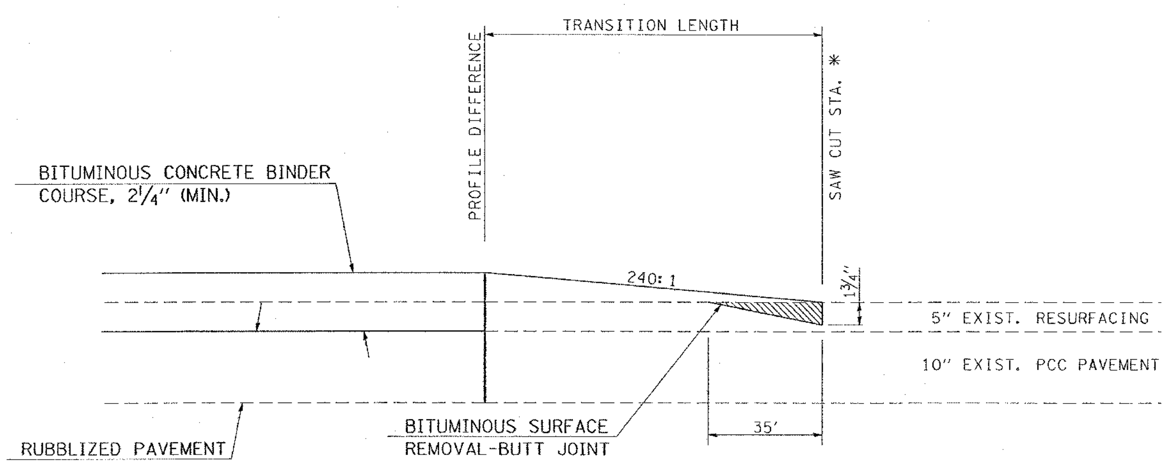
BUTT-JOINT STAGE 4



* TO BE USED:

STA. 1512+60 NB I-57

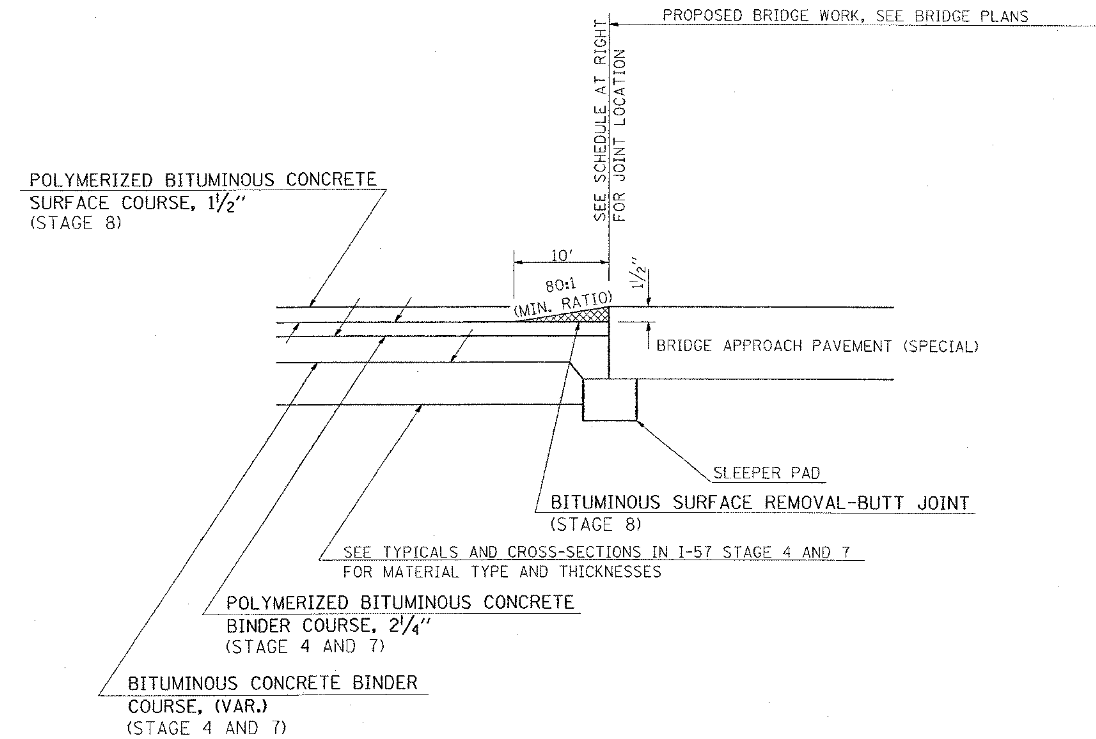
BUTT-JOINT STAGE 7 AND 7A



* TO BE USED:

STAGE	SAW CUT LOCATION	TRANSITION LENGTH	PROFILE DIFFERENCE
7A	STA. 1506+24 I-57 NB	66'	0.275'
7A	STA. 1542+78 I-57 NB	45'	0.1875'
7A	STA. 1506+71 I-57 SB	45'	0.1875'
7	STA. 1542+78 I-57 SB	45'	0.1875'

BUTT-JOINTS AT BRIDGES



TO BE USED	ACTUAL JOINT STATION
NORTHBOUND LANES:	
STAGE 4, 7, AND 8	
SN = 100-0086	1515+63.11
SN = 100-0086	1517+56.11
SN = 100-0084	1528+80.23
SN = 100 0084	1531+14.23
SOUTHBOUND LANES:	
STAGE 4, 7, AND 8	
SN = 100-0087	1515+61.02
SN = 100-0087	1517+54.02
SN = 100-0085	1528+78
SN = 100 0085	1531+12

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

BUTT JOINT STAGE 4; BUTT JOINT STAGE 7 AND 7A; BUTT JOINTS AT BRIDGES

SCALE: VERT. NONE HORIZ.

DATE

DRAWN BY CNH

CHECKED BY

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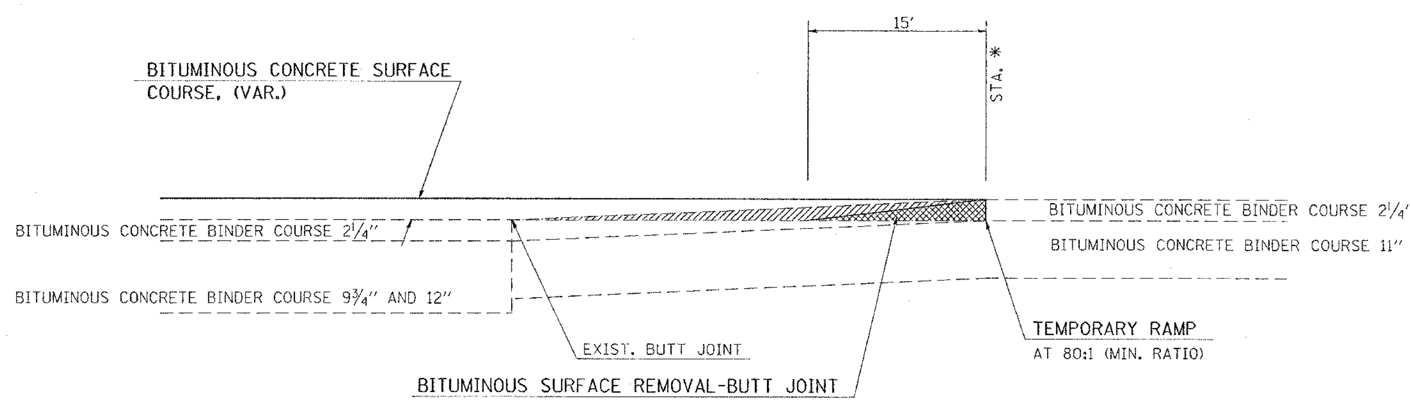
USER NAME = hsedon

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	818
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

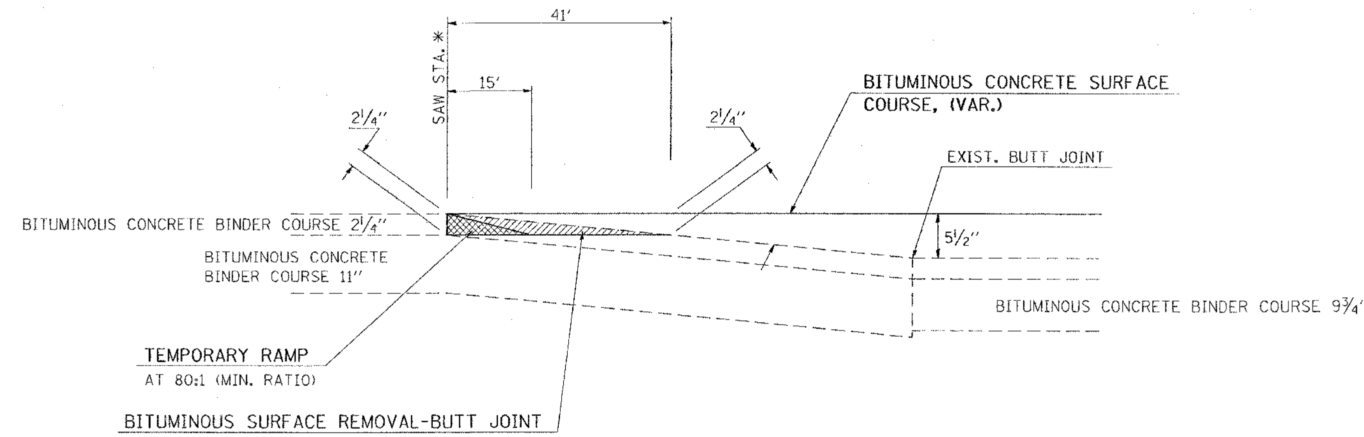
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

BITUMINOUS THICKNESS TRANSITION STAGE 7B



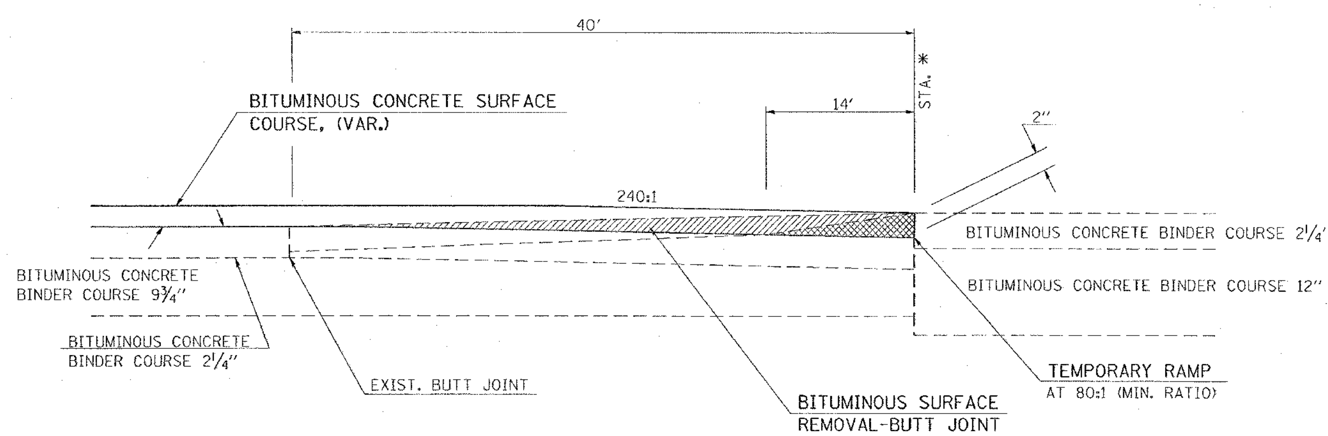
*TO BE USED:
STA. 1510+30 SB I-57

BITUMINOUS THICKNESS TRANSITION STAGE 7B



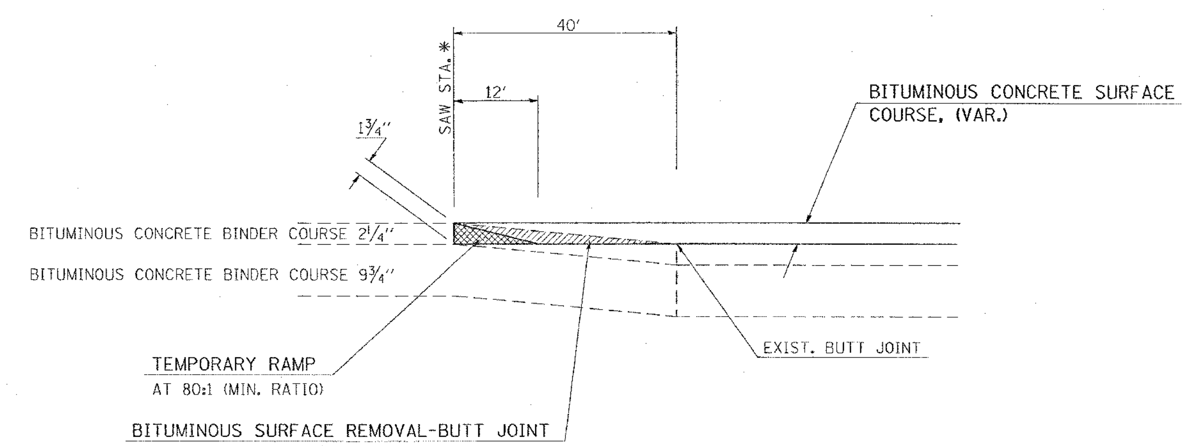
*TO BE USED:
STA. 1536+00 SB I-57

BITUMINOUS THICKNESS TRANSITION STAGE 7B



*TO BE USED:
STA. 1513+00 NB I-57

BITUMINOUS THICKNESS TRANSITION STAGE 7B



*TO BE USED:
STA. 1538+50 NB I-57

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
BITUMINOUS THICKNESS TRANSITIONS STAGE 7B

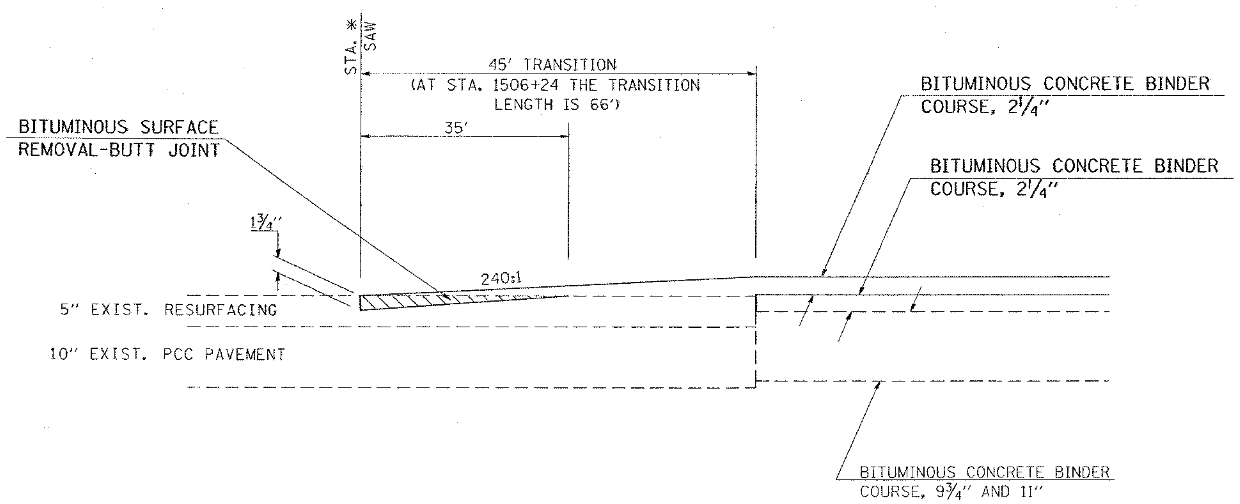
SCALE: VERT. HORIZ. NO SCALE
DATE
DRAWN BY CNH
CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
∗	∗∗	WILLIAMSON	917	819
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 98950

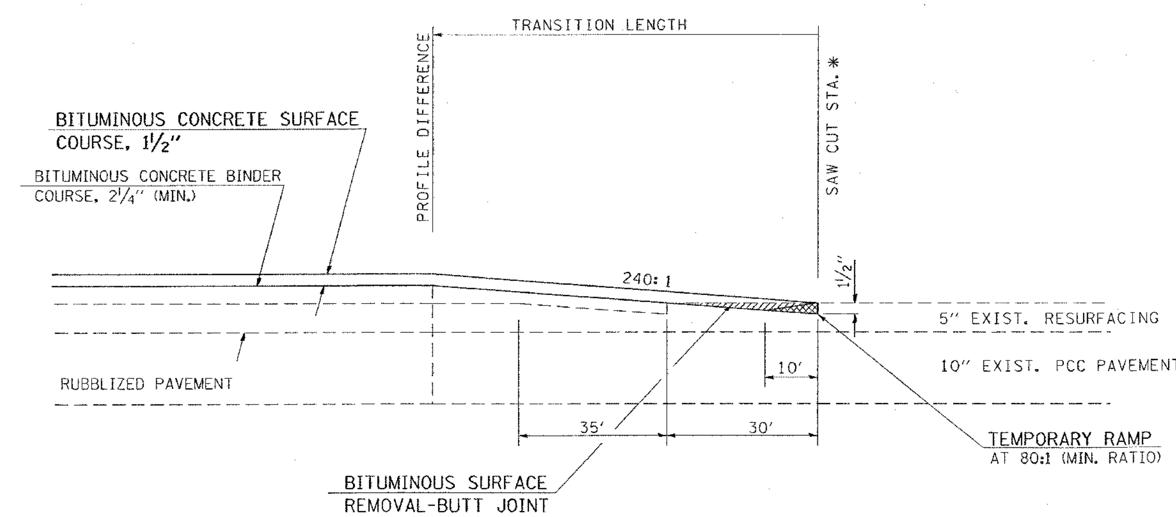
∗ I-57, & OLD IL 13 (FAU 9629)
∗∗ (XI-6-2)VB-2,(XI-6)HBK-2

BUTT-JOINT STAGE 7B



∗ TO BE USED:
STA. 1506+24 NB I-57
STA. 1542+78 NB I-57
STA. 1506+71 SB I-57

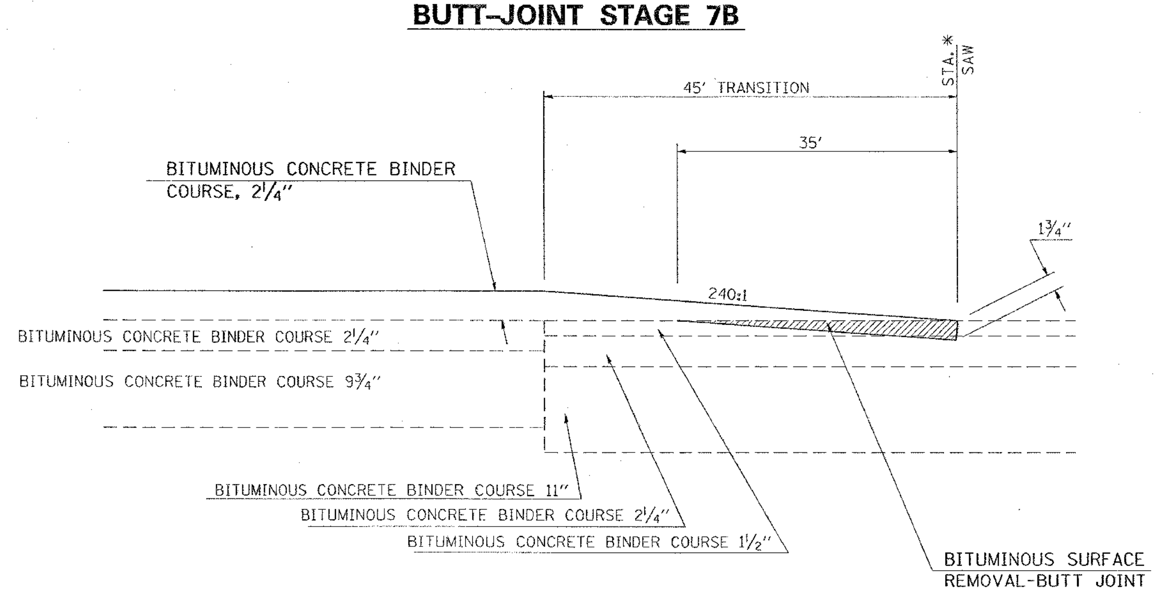
BUTT-JOINT STAGE 8



∗ TO BE USED:

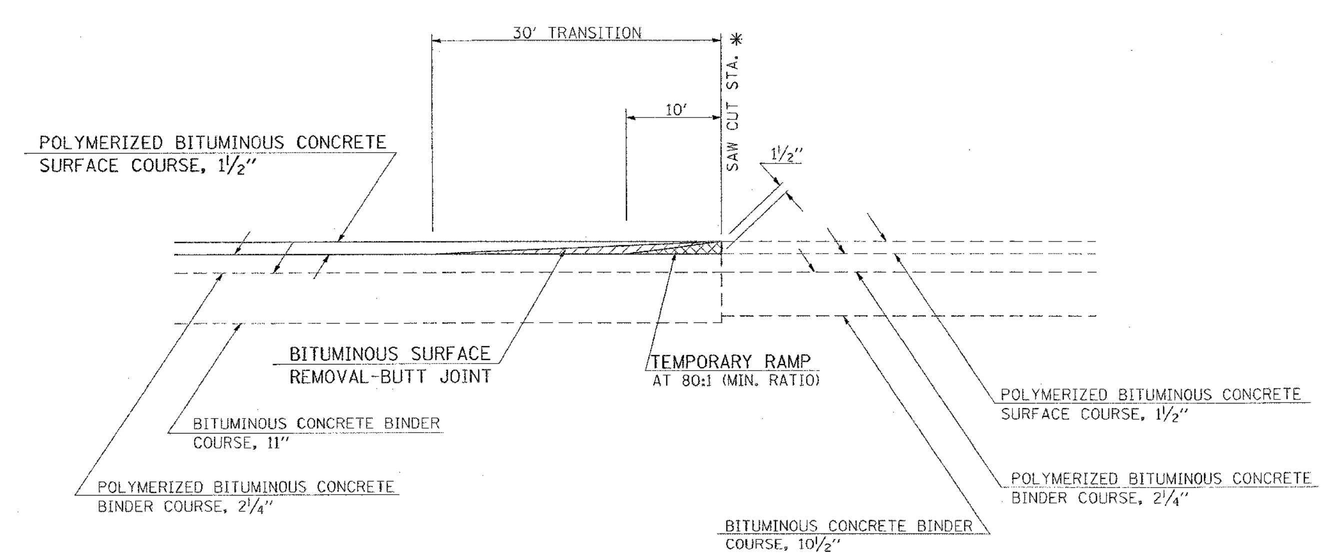
SAW CUT LOCATION	TRANSITION LENGTH	PROFILE DIFFERENCE
STA. 1505+94 I-57 NB	96'	0.40'
STA. 1543+08 I-57 NB	75'	0.3125'
STA. 1506+41 I-57 SB	75'	0.3125'
STA. 1543+08 I-57 SB	75'	0.3125'

BUTT-JOINT STAGE 7B



∗ TO BE USED:
STA. 1542+78 SB I-57

BUTT-JOINT AT RAMPS



∗ TO BE USED:
STA. 5+00 RAMP F
STA. 8+97 RAMP EE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL:
BUTT JOINTS STAGE 7B;
BUTT JOINT STAGE 8;
BUTT JOINT RAMPS F AND EE

SCALE: VERT. HORIZ. NO SCALE
DATE
DRAWN BY CNH
CHECKED BY

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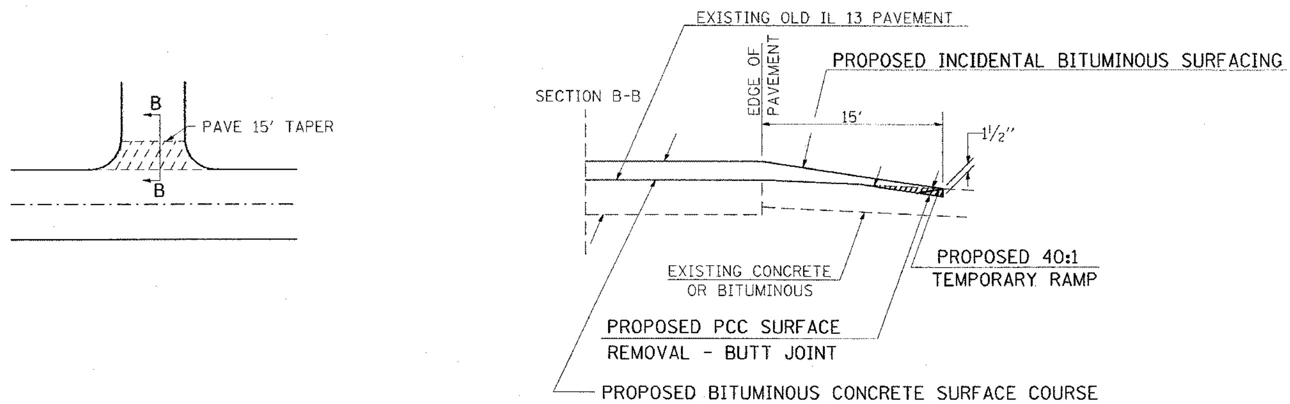
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	820
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

DETAIL OF PCC SIDE ROADS WITH BUTT-JOINT

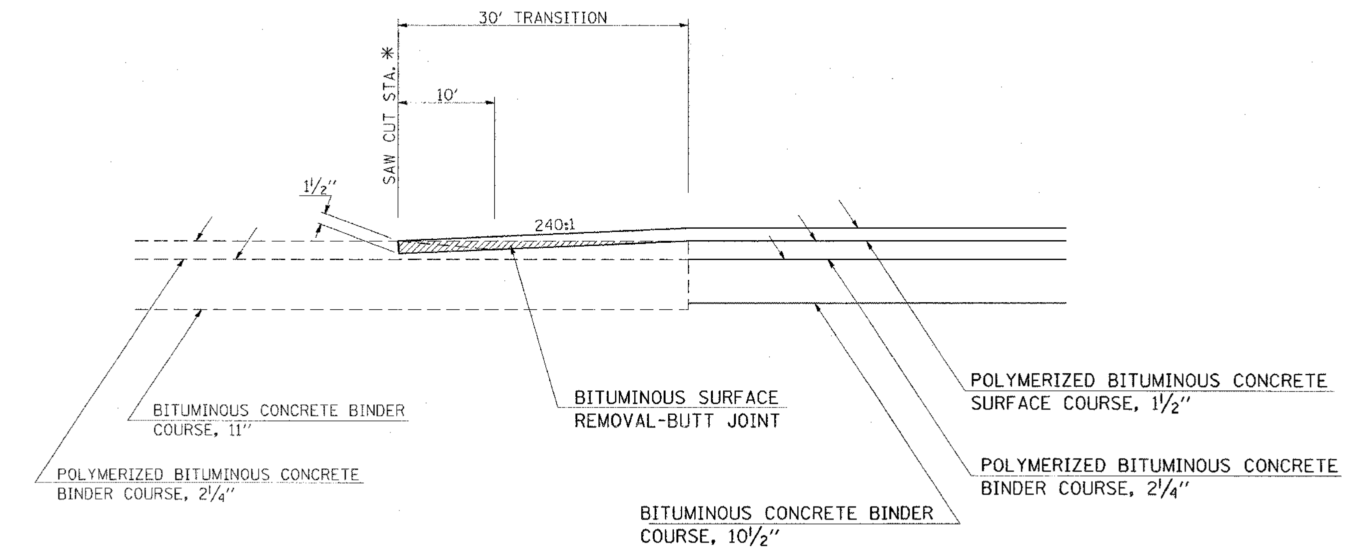


TO BE USED:

℄ OLD IL 13

COMFORT DRIVE STA. 764+65
COMMANDER DRIVE STA. 774+92
7TH STREET STA. 774+96
5TH STREET STA. 784+61

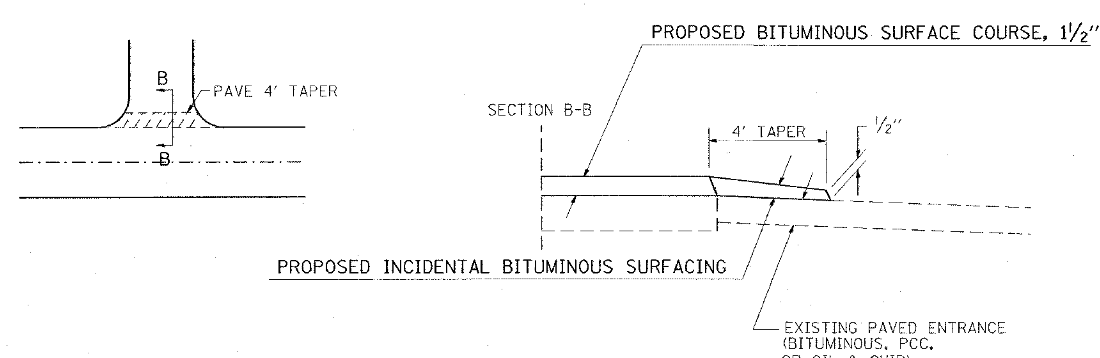
BUTT-JOINT



* TO BE USED:

STA. 4+70 RAMP F
STA. 8+67 RAMP EE

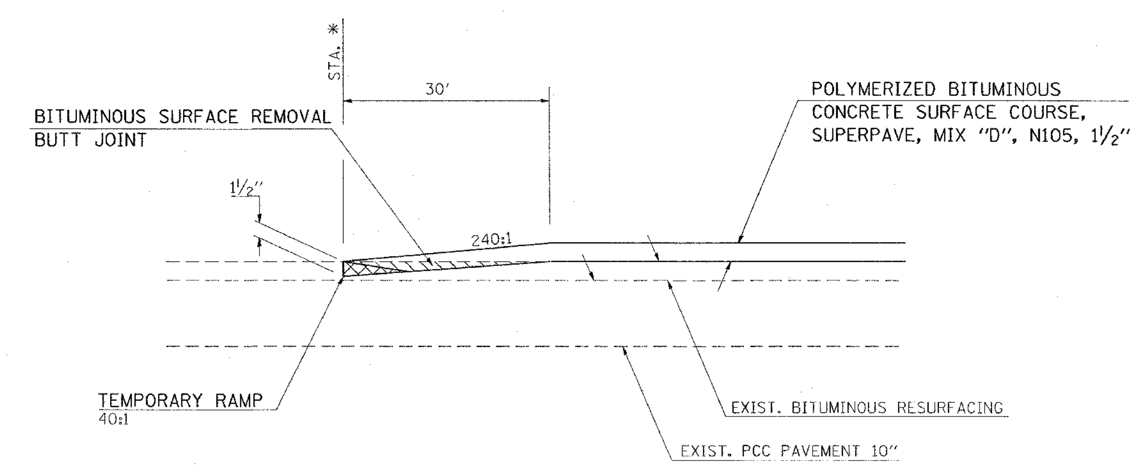
DETAIL OF BITUMINOUS, PCC, OR OIL AND CHIP PRIVATE OR COMMERCIAL ENTRANCE



TO BE USED:

PREPARATION OF EXISTING SURFACE AND ANY EXCAVATION FOR ENTRANCES SHALL BE IN ACCORDANCE WITH ARTICLE 406.19 OF THE STANDARD SPECIFICATIONS.

BUTT-JOINT



* TO BE USED:

STA. 753+20 (OLD IL 13)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
BUTT JOINTS

SCALE: VERT. HORIZ. NONE
DATE
DRAWN BY CNH
CHECKED BY

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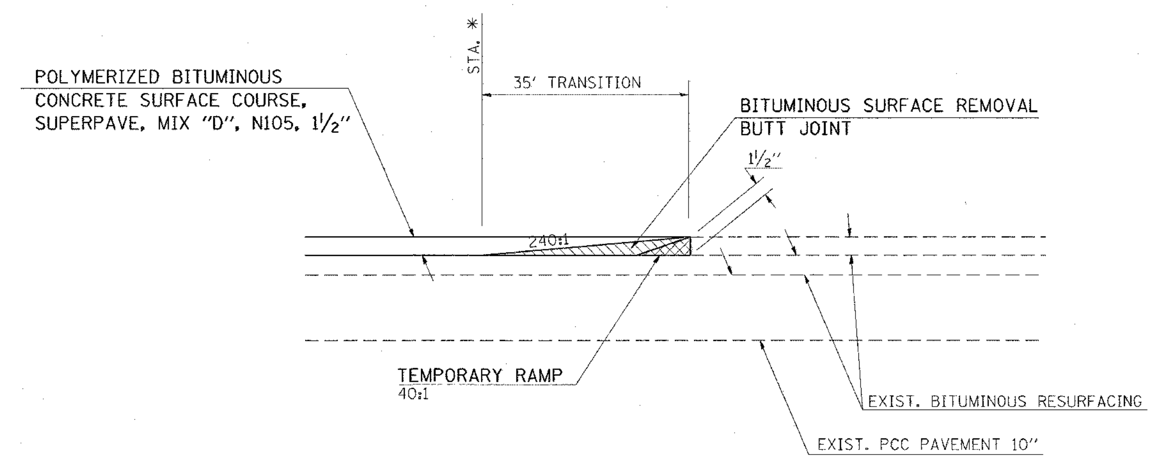
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	820A
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

BUTT-JOINT



* TO BE USED:
STA. 784+88 (OLD IL 13)

PLOT DATE = 11/20/2006
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

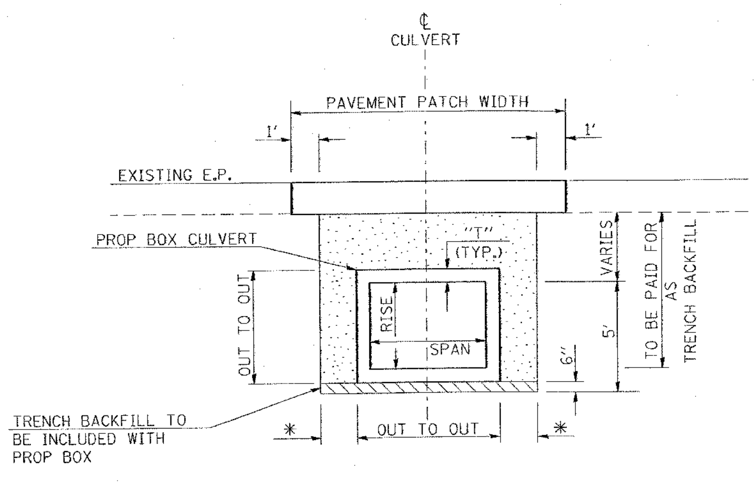
DETAIL:
BUTT JOINT

SCALE: VERT. HORIZ. NONE
DATE
DRAWN BY CNH
CHECKED BY

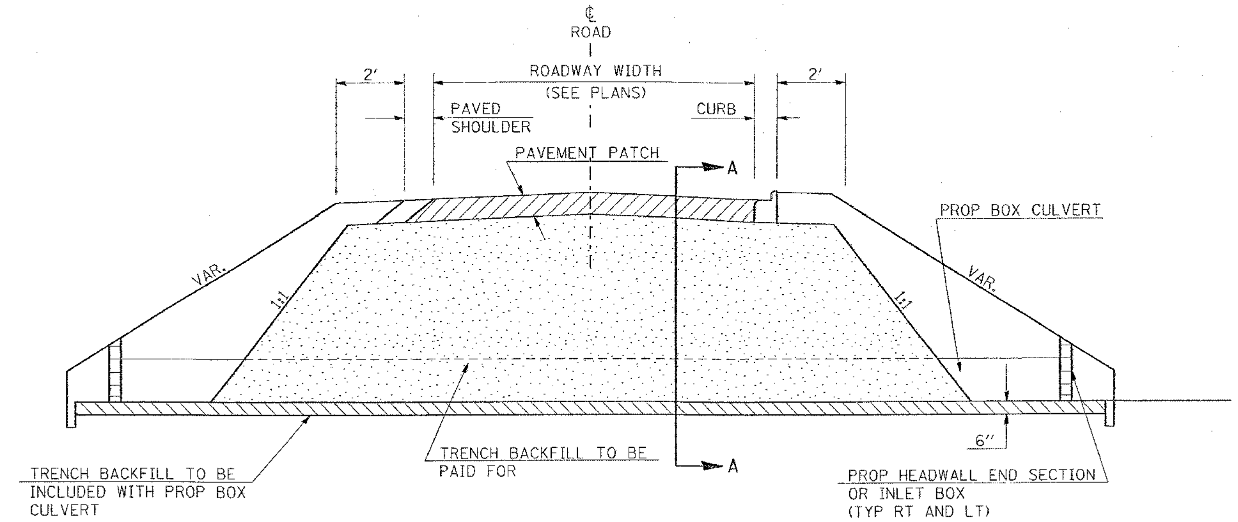
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	821
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

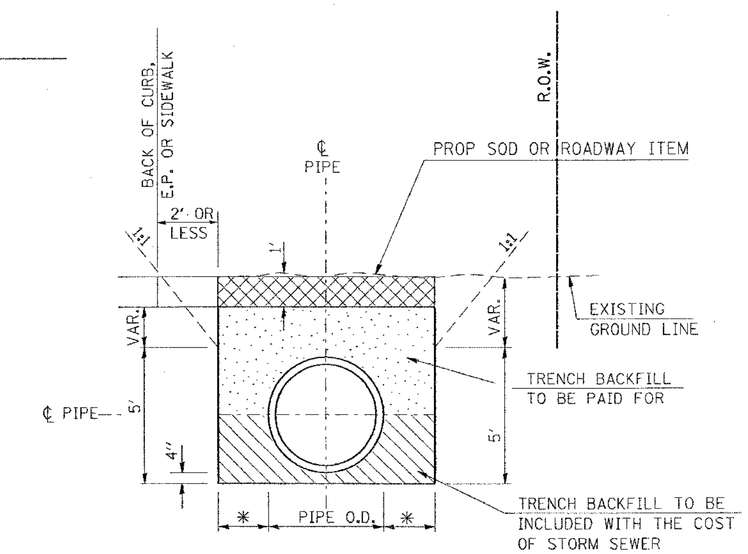
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



SECTION A-A: PROPOSED BOX CROSSING EXISTING ROAD
TRENCH DEPTH GREATER THAN 5′
SHORING REQUIRED

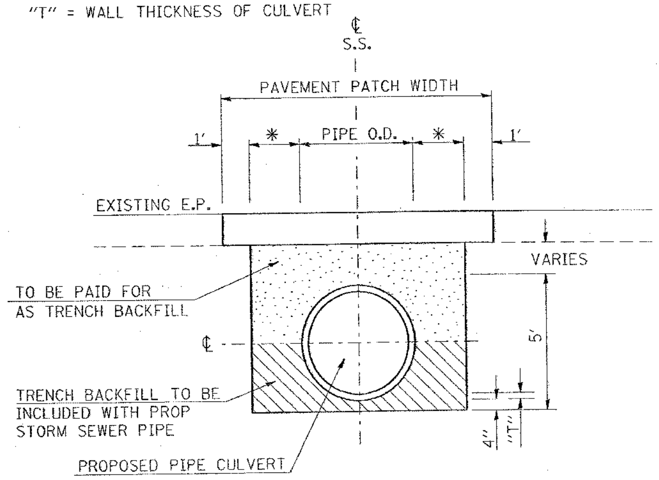


PROFILE SECTION THRU BOX CULVERT ACROSS ROADWAY

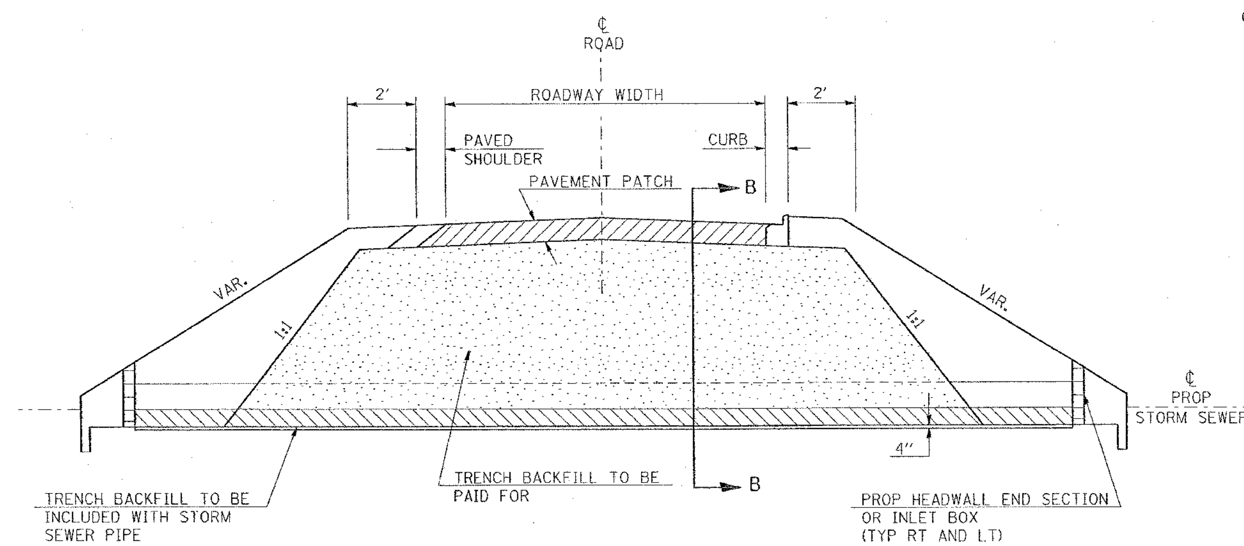


SECTION OF TRENCHES NEAR EDGE OF PAVEMENT

"T" = WALL THICKNESS OF CULVERT



SECTION B-B: PROPOSED STORM SEWER CROSSES EXISTING ROAD
TRENCH DEPTH GREATER THAN 5′
SHORING REQUIRED



PROFILE SECTION THRU STORM SEWER ACROSS ROADWAY

* 9″ + PIPE OD + 9″ WHEN TRENCH DEPTH ≤ 5′.
18″ + PIPE OD + 18″ WHEN TRENCH DEPTH > 5′.

NOTES:

THE CONSTRUCTION REQUIREMENTS OF THE TRENCHES FOR STORM SEWER SHALL BE IN ACCORDANCE WITH ARTICLE 550.04 AND 550.07 OF THE STANDARD SPECIFICATIONS.

TRENCH BACKFILL WILL BE MEASURED AND PAID FOR AS SPECIFIED IN ARTICLES 208.03 AND 208.04 OF THE STANDARD SPECIFICATIONS.

PLOT DATE = 10/14/2006
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USER NAME = hendon

REVISIONS	
NAME	DATE

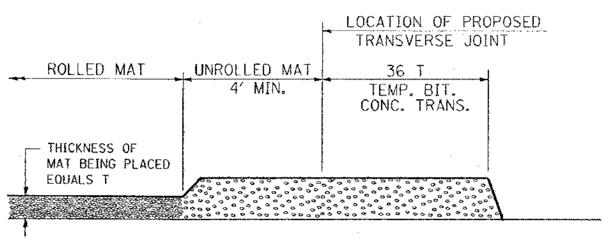
ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
TRENCH BACKFILL

SCALE: VERT. HORIZ. NO SCALE
DATE

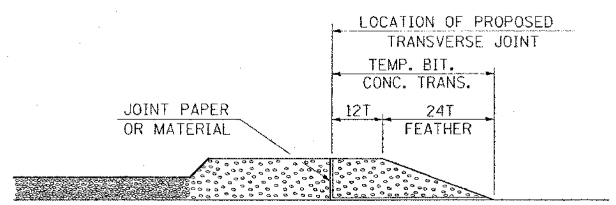
DRAWN BY CNH
CHECKED BY

TEMPORARY BITUMINOUS CONCRETE TRANSITIONS



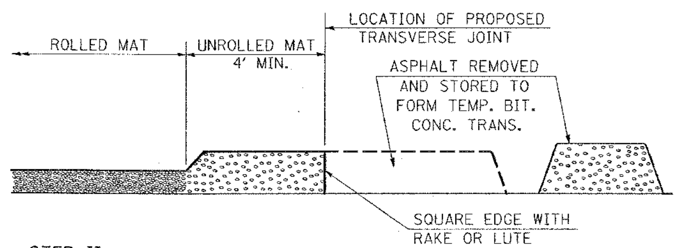
STEP I

1. PLACE BITUMINOUS MAT, LENGTH 36 TIMES THE THICKNESS OF THE MAT BEING PLACED PAST THE PROPOSED TRANSVERSE JOINT LOCATION USING NORMAL OPERATING PROCEDURES.
2. EXTREME CARE SHOULD BE TAKEN TO MAINTAIN ENOUGH MATERIAL IN FRONT OF THE SCREED TO MAINTAIN REQUIRED PAVING DEPTH.



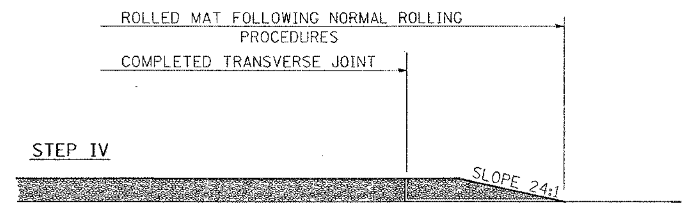
STEP III

1. JOINT PAPER OR OTHER PRESELECTED JOINT MATERIAL IS THEN PLACED IN THE CLEARED AREA AND THE EXCESS ASPHALT USED TO HAND FORM A TRANSITION TO THE DIMENSIONS SHOWN ABOVE.
2. NOTE THAT IN CONSTRUCTING THE TRANSITION, THE MAT DEPTH IS CONTINUED AS PART OF THE TRANSITION BEFORE FORMING THE FEATHER.



STEP II

1. MOVE THE PAVER OUT OF THE WAY AND REMOVE THE ASPHALT FROM THE AREA OF THE PROPOSED TEMPORARY BITUMINOUS CONCRETE TRANSITION.
2. SQUARE UP THE END OF THE MAT WITH A RAKE OR LUTE.
3. NOTE THAT THE MAT WITHIN 4' OF THE END OF JOINT IS NOT TO BE ROLLED AT THIS TIME.

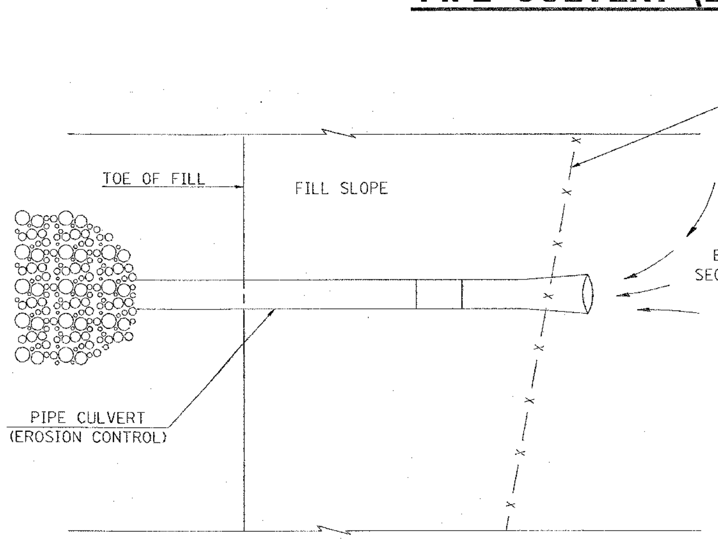


STEP IV

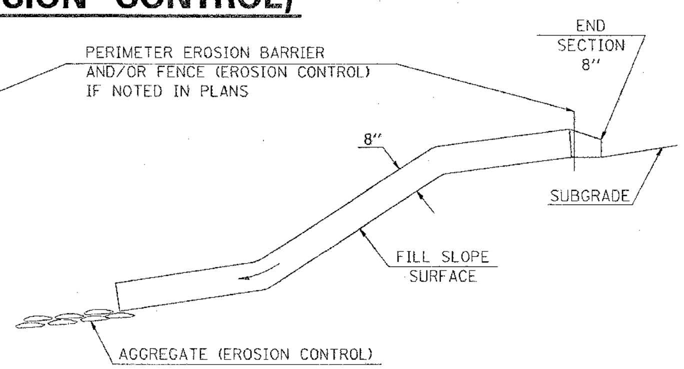
1. COMPLETE TEMPORARY TRANSITION BY ROLLING.
2. TO RESUME PAVING, AT THE JOINT, REMOVE TEMPORARY TRANSITION AND DISPOSE OF THE MATERIAL ACCORDING TO ART. 202.03 OF THE STD. SPECS. (COST INCLUDED IN THE CONTRACT).
3. CONSTRUCTING THE TEMPORARY TRANSITIONS WILL BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE BITUMINOUS MATERIAL BEING PLACED.

STD 9-26

PIPE CULVERT (EROSION CONTROL)



PLAN VIEW



END VIEW

PIPE FOR USE AS PIPE CULVERT (EROSION CONTROL) MAY BE EITHER A METAL OR PLASTIC CULVERT PIPE THAT CONFORMS TO SECTION 542.02 OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE CULVERT (EROSION CONTROL).
IN SOME CASES IT MAY BE NECESSARY TO SECURE PIPE TO THE FILL SLOPE TO OBTAIN PROPER ANCHORAGE. MATERIALS USED FOR THIS PURPOSE SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PIPE.

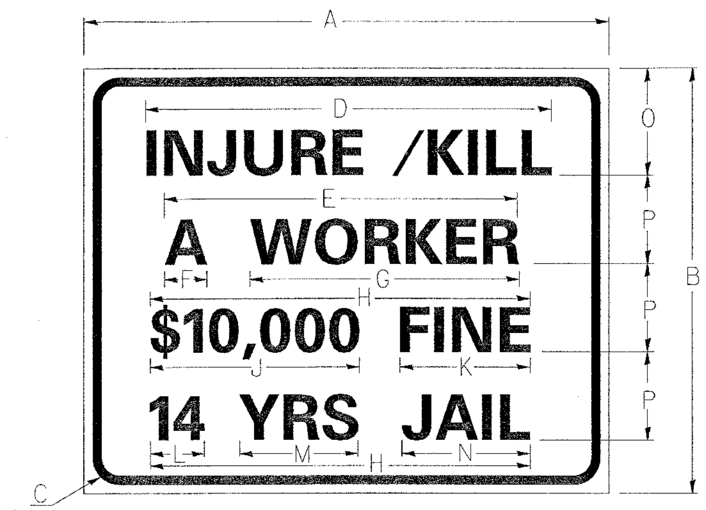
END SECTIONS SHALL BE INSTALLED AT THE INLET END. THIS ITEM SHALL BE PERFORMED AND PAID FOR AS SPECIFIED FOR END SECTIONS IN ARTICLES 542.07 AND 542.11 OF THE STANDARD SPECIFICATIONS: EXCEPT, ONLY METAL END SECTIONS AS SHOWN ON STANDARD 542401 WILL BE PERMITTED, AND THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR METAL END SECTIONS OF THE DIAMETER SPECIFIED IN THE PLANS.

TEMPORARY RIPRAP AT THE OUTLET END MAY BE END DUMPED AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR AGGREGATE (EROSION CONTROL).

NOTE: REMOVAL OF PIPE CULVERT (EROSION CONTROL), END SECTION, PERIMETER EROSION BARRIER, FENCE (EROSION CONTROL) IF NOTED IN PLANS, AND AGGREGATE (EROSION CONTROL), SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE FOR THE EROSION CONTROL ITEMS.

ILLINOIS STANDARD

W21-I116



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	ORANGE	REFLECTORIZED

SIGN SIZE	DIMENSIONS														
	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
60x48	60.00	48.00	3.00	48.80	42.60	5.10	31.50	50.00	28.90	15.80	6.90	15.20	16.80	12.00	10.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
60x48	6D	6D	6D	6D	0.75	1.25

ALL DIMENSIONS IN INCHES. SIGN NOT TO SCALE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
TEMPORARY BITUMINOUS CONCRETE TRANSITIONS; PIPE CULVERT (EROSION CONTROL); ILLINOIS STANDARD W21-I116

SCALE: VERT. HORIZ. NO SCALE
DATE
DRAWN BY CNH
CHECKED BY

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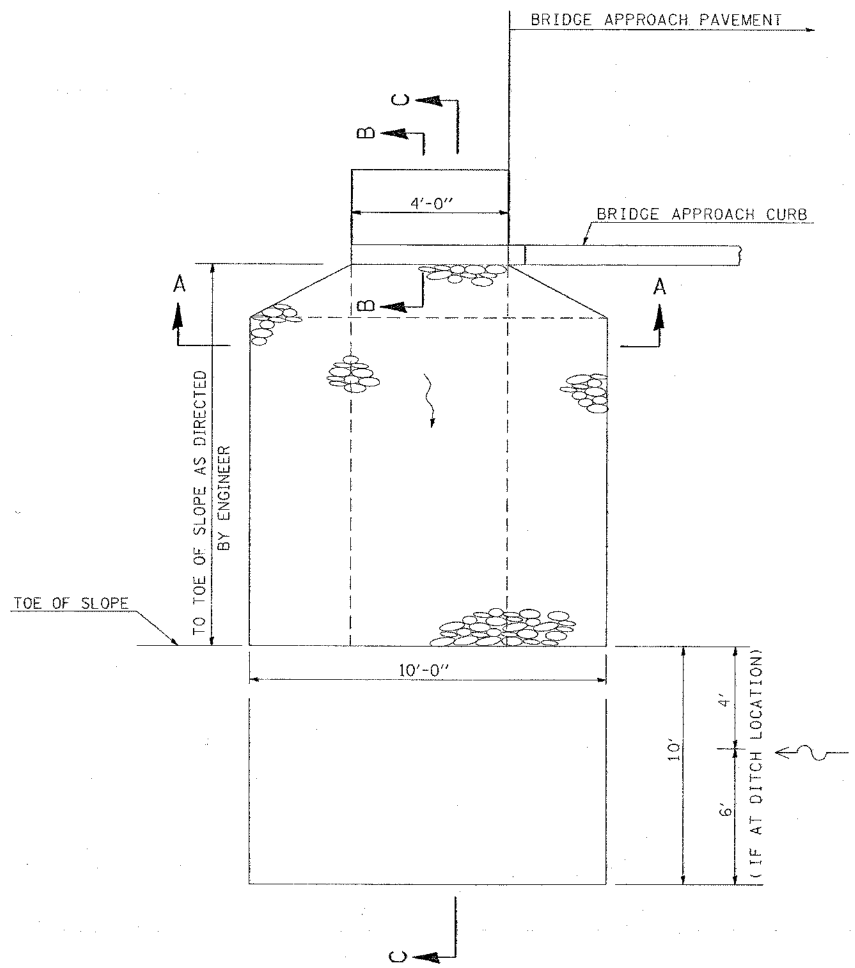
Page 823 NOT USED

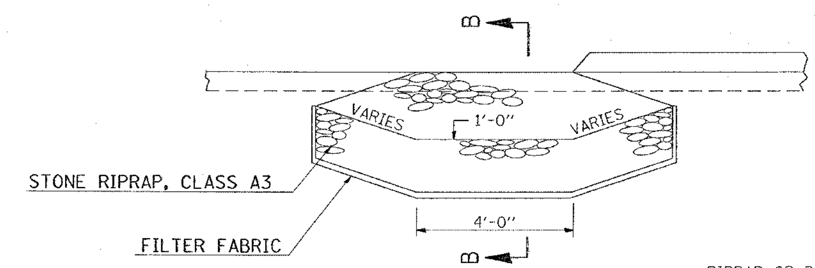
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	824
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (XI-6-2)VB-2,(XI-6)HBK-2

CURB OUTLET DETAIL





SECTION A-A

THE EXCESS EXCAVATION MAY BE USED AS EMBANKMENT OR AS DIRECTED BY THE ENGINEER.

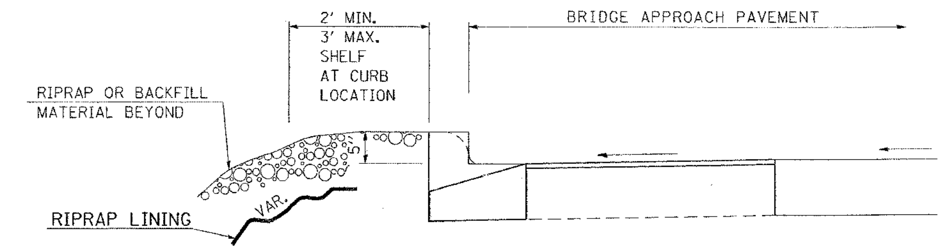
LOCATIONS

SEE RIPRAP SCHEDULE SHEETS

FINAL LOCATION AS DIRECTED BY THE ENGINEER.

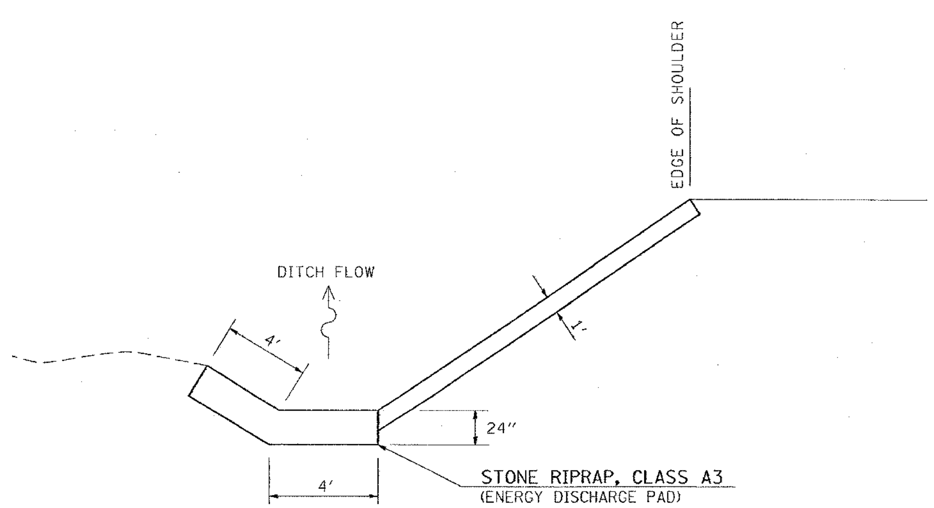
NOTE:

1. EARTH EXCAVATION IS INCLUDED IN THE COST OF STONE RIP RAP, CLASS A3.

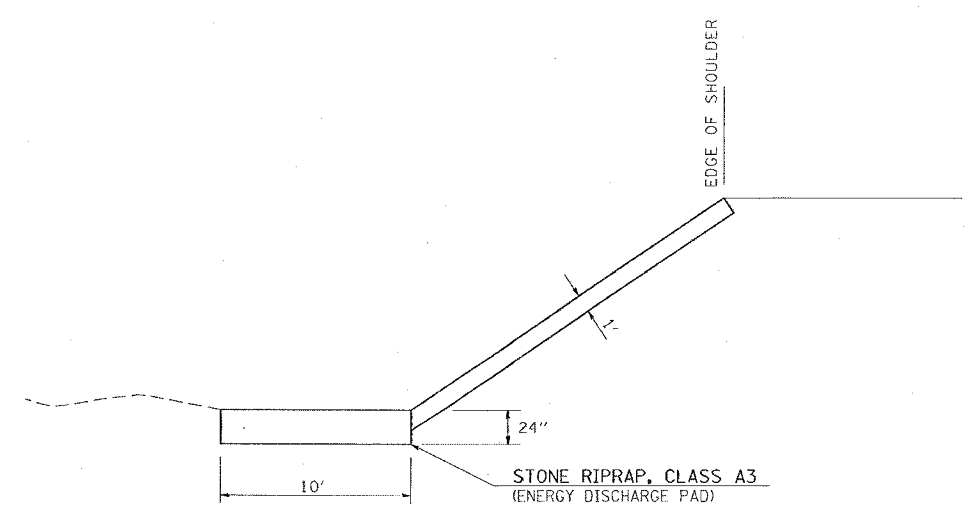


SECTION B-B
(NOT TO SCALE)

MODIFIED
STD. 9-95



SECTION C-C W/DITCH
(NOT TO SCALE)



SECTION C-C W/NO DITCH
(NOT TO SCALE)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL:
CURB OUTLET

SCALE: VERT. NONE HORIZ.
DATE

DRAWN BY CNH
CHECKED BY

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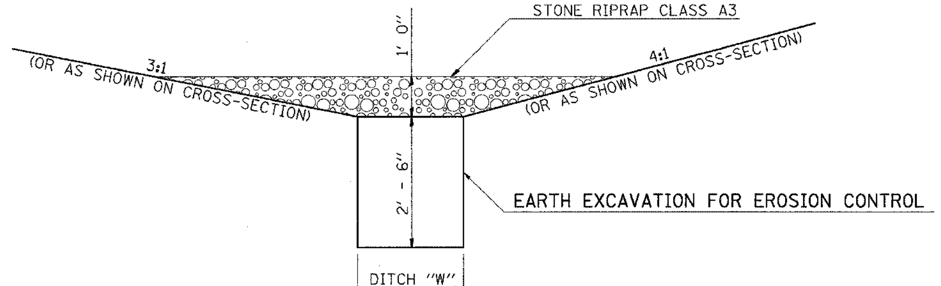
PLOT SCALE = 50.0000 '/ IN.
USER NAME = headon

CONTRACT NO. 98950

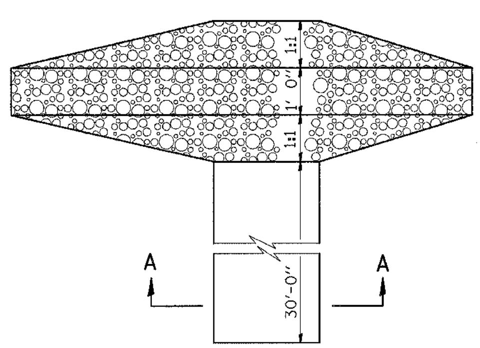
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	825
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

DETAIL OF TEMPORARY SEDIMENT BASIN



SECTION A-A



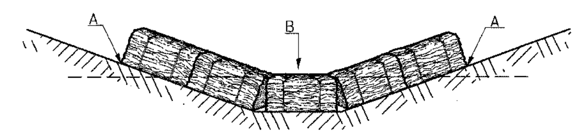
PLAN

NOTES

1. STONE RIPRAP CLASS A3 USED AS SHOWN WILL BE PAID FOR AS AGGREGATE (EROSION CONTROL), TON
2. THE AGGREGATE (EROSION CONTROL) MAY BE REUSED TO LINE DITCH AS DIRECTED BY THE ENGINEER AFTER ALL PERMANENT SEEDING IS IN PLACE.

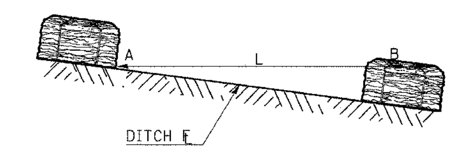
TEMPORARY DITCH CHECKS

PLACEMENT OF TEMPORARY STRAW BALE DITCH CHECK IN DRAINAGEWAY



POINTS A SHOULD BE HIGHER THAN POINT B

SPACING BETWEEN TEMPORARY DITCH CHECKS



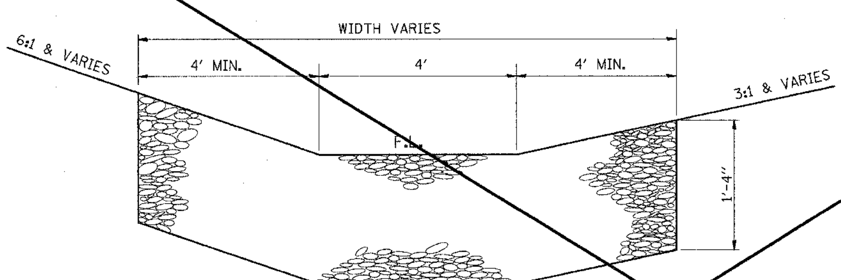
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

B = THE LOW POINT IN CENTER OF CHECK

REVISIONS	
DRAWN	9-01-99
REVISED	10-3-01
REVISED	
REVISED	

STD. 9-108

TYPICAL DETAIL OF STONE RIPRAP DITCH LINING



NOTES

THIS WORK INCLUDES THE EARTH EXCAVATION REQUIRED TO PLACE THE RIPRAP AS SHOWN. THE MATERIAL RESULTING FROM THE EARTH EXCAVATION SHALL BE PLACED IN THE ROADWAY EMBANKMENT, OR WASTED AS DIRECTED BY THE ENGINEER. THE EARTHWORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE DITCH.

THE RIPRAP DITCH SHALL BE CONSTRUCTED AT THE LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. CONSTRUCTION OF THE STONE RIPRAP DITCH SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A4 RIPRAP AS INDICATED IN SECTION 281 OF STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR **STONE RIPRAP, CLASS A4,** WHICH PRICE SHALL INCLUDE ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK IN PLACE AS SHOWN.

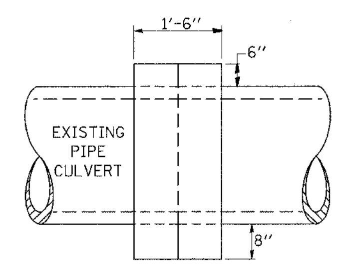
BEDDING MATERIAL AND FILTER FABRIC AS SPECIFIED IN SECTION 281 OF THE STANDARD SPECIFICATIONS WILL NOT BE REQUIRED.

THE WIDTH OF THE RIPRAP DITCH WILL BE AS SPECIFIED IN THE RIPRAP SCHEDULE OR AS DIRECTED BY THE ENGINEER.

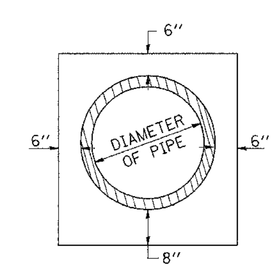
NOT NEEDED

DETAILS OF CONCRETE COLLAR

PIPE TO PIPE



SIDE VIEW



END VIEW

TABULATION

DIAMETER OF PIPE	CL SI CONC CU YDS EST
12"	0.24
15"	0.29
18"	0.32
24"	0.44
30"	0.56
36"	0.66
42"	0.80
48"	0.93
54"	1.07
60"	1.22
72"	1.55

THE CONCRETE COLLAR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **CONCRETE COLLAR,** AS SHOWN ON THE PLANS, WHICH PRICE SHALL INCLUDE THE REMOVAL OF SUCH PORTIONS THE EXISTING HEADWALLS AS MAY BE REQUIRED.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

REVISIONS	
DRAWN	7-15-90
REVISED	8-22-94
REVISED	
REVISED	

STD. 9-79

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:
TEMPORARY SEDIMENT BASIN; ~~TYPICAL OF STONE RIPRAP DITCH LINING;~~
TEMPORARY DITCH CHECKS;
CONCRETE COLLAR (PIPE TO PIPE)

SCALE: VERT. HORIZ. NO SCALE
DATE
DRAWN BY
CHECKED BY

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CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	826
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

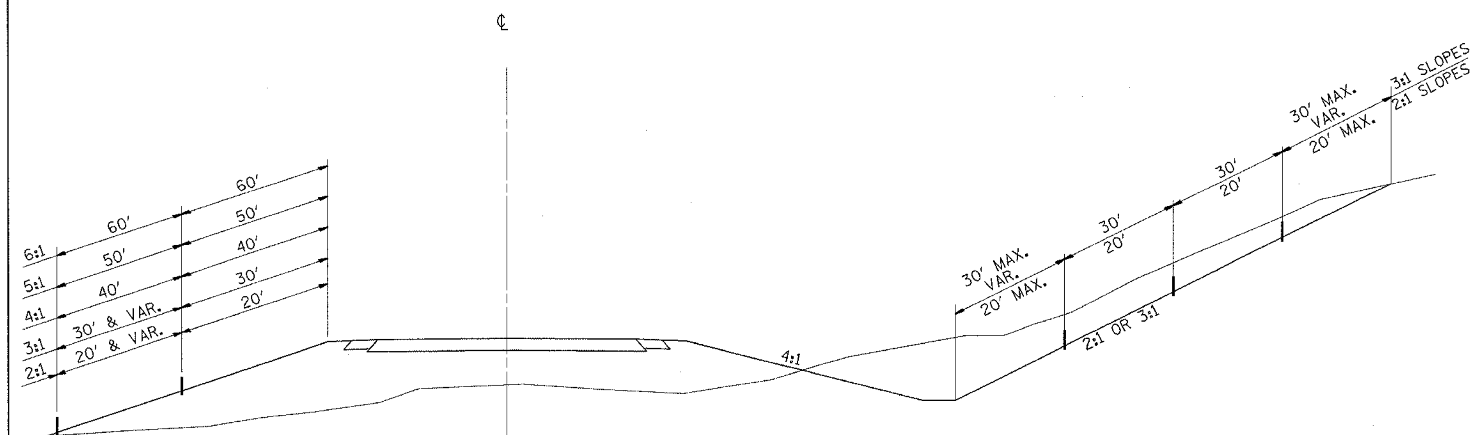
PERIMETER EROSION BARRIER

SEE SCHEDULE FOR LOCATION

&

FENCE (EROSION CONTROL)

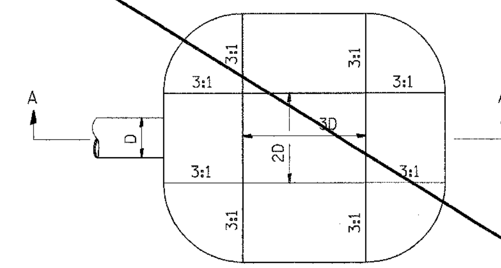
SEE PLAN SHEETS , AND SCHEDULE FOR LOCATION.



SECTIONAL VIEW OF INSTALLATION

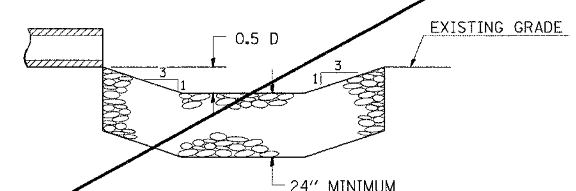
THIS WORK SHALL COMPLY WITH ALL REQUIREMENTS OF SECTION 280 OF THE STANDARD SPECIFICATION FOR TEMPORARY EROSION CONTROL.

ENERGY DISSIPATOR



D= INSIDE DIAMETER OF PIPE CULVERT OR CLEAR HEIGHT OF BOX CULVERT

PLAN



SECTION A-A

EARTH EXCAVATION FOR ENERGY DISSIPATOR

THIS WORK INVOLVES THE EXCAVATION OF EARTH AS SHOWN IN THE SKETCH TO THE LENGTH, WIDTH, AND DEPTH AS SPECIFIED. THE EARTH EXCAVATION WILL BE UTILIZED IN THE ROADWAY EMBANKMENT OR WASTED AS DIRECTED BY THE ENGINEER.

EARTHWORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE RIPRAP.

ENERGY DISSIPATOR IS TO BE CONSTRUCTED AT THE LOCATION INDICATED ON THE PLAN SHEETS.

RIPRAP FOR ENERGY DISSIPATOR

RIPRAP FOR ENERGY DISSIPATOR SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 281 OF THE STANDARD SPECIFICATIONS EXCEPT AS REVISED HEREIN.

THE LENGTH, WIDTH, AND DEPTH FOR RIPRAP PLACEMENT SHALL BE AS SPECIFIED IN THESE DETAILS, UNLESS OTHERWISE INDICATED IN THE PLANS.

THE RIPRAP FOR THE ENERGY DISSIPATOR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR **STONE DUMPED RIPRAP, CLASS A4**

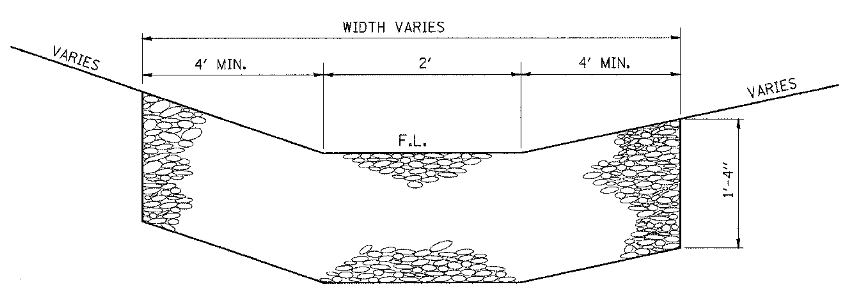
FILTER FABRIC AND BEDDING MATERIAL AS SPECIFIED IN SECTION 281 OF THE STANDARD SPECIFICATIONS WILL NOT BE REQUIRED.

REVISIONS	
REDRAWN	2-15-89
REVISED	11-3-93
REVISED	8-15-94

STD 9-6

NOT NEEDED

TYPICAL DETAIL OF STONE RIPRAP DITCH LINING



NOTES

THIS WORK INCLUDES THE EARTH EXCAVATION REQUIRED TO PLACE THE RIPRAP AS SHOWN. THE MATERIAL RESULTING FROM THE EARTH EXCAVATION SHALL BE PLACED IN THE ROADWAY EMBANKMENT, OR WASTED AS DIRECTED BY THE ENGINEER. THE EARTHWORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE DITCH.

THE RIPRAP DITCH SHALL BE CONSTRUCTED AT THE LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. CONSTRUCTION OF THE STONE RIPRAP DITCH SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A4 RIPRAP AS INDICATED IN SECTION 281 OF STANDARD SPECIFICATIONS.

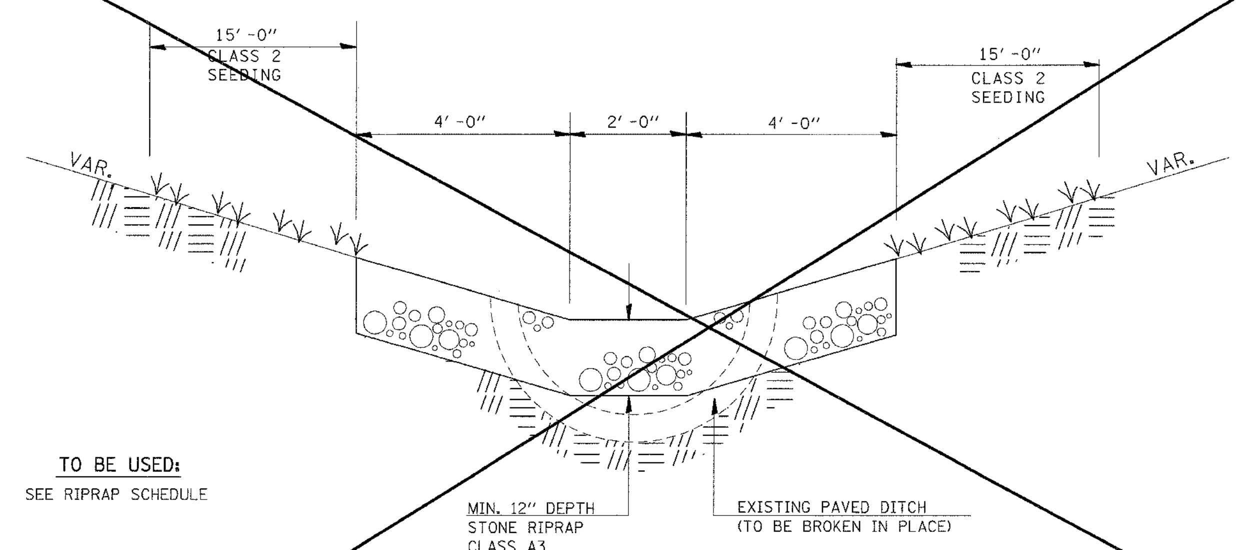
THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR **STONE RIPRAP, CLASS A4,** WHICH PRICE SHALL INCLUDE ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK IN PLACE AS SHOWN.

BEDDING MATERIAL AND FILTER FABRIC AS SPECIFIED IN SECTION 281 OF THE STANDARD SPECIFICATIONS WILL NOT BE REQUIRED.

THE WIDTH OF THE RIPRAP DITCH WILL BE AS SPECIFIED IN THE RIPRAP SCHEDULE OR AS DIRECTED BY THE ENGINEER.

DETAIL STONE RIPRAP DITCH

(ON EXISTING PAVED DITCH)



TO BE USED:

SEE RIPRAP SCHEDULE

NOTE: THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON, FOR **STONE RIPRAP DITCH**, WHICH PRICE SHALL INCLUDE ALL MATERIAL LABOR AND EQUIPMENT TO COMPLETE THE WORK IN PLACE AS SHOWN.

THE FINISHED SIDESLOPES OF THE STONE RIPRAP DITCH SHALL MATCH THE EXISTING GRADE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

PERIMETER EROSION BARRIER; STONE RIPRAP DITCH LINING;

~~**ENERGY DISSIPATOR; STONE RIPRAP DITCH**~~

SCALE: VERT. HORIZ. NONE

DATE

DRAWN BY CNH

CHECKED BY

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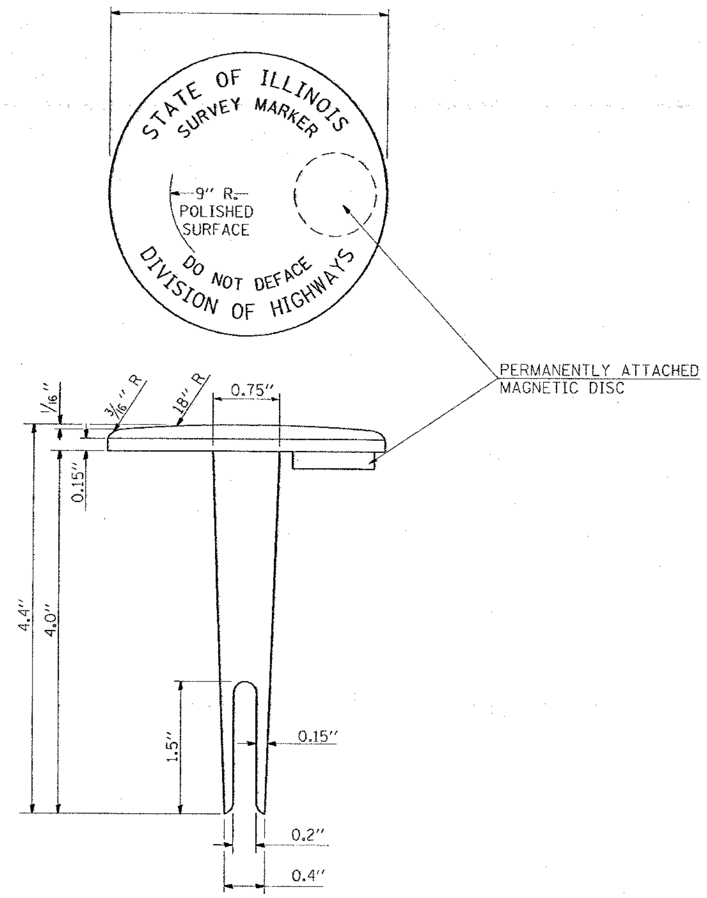
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	827
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

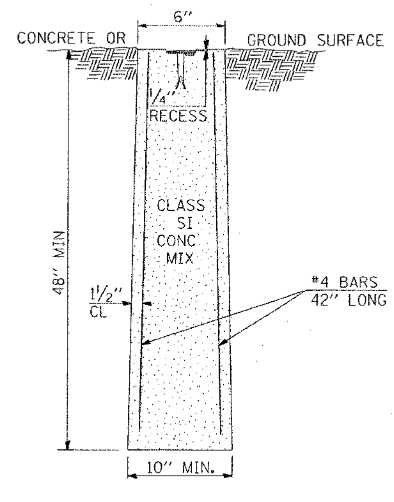
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

DETAILS OF PERMANENT SURVEY MARKERS

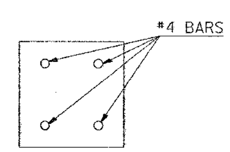


TABLET - BRONZE OR ALUMINUM

PRECAST MARKER



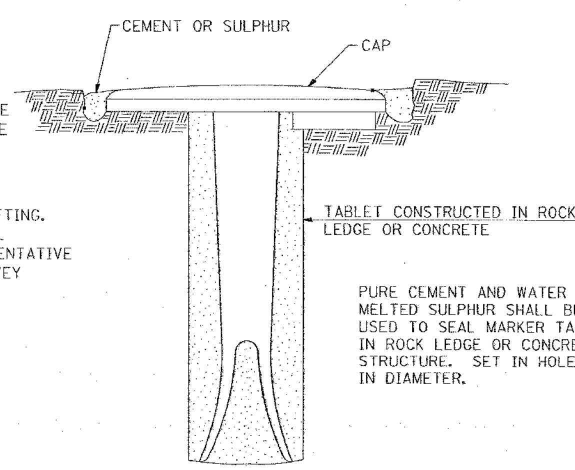
SECTION



PLAN

NOTES

1. ACTUAL LOCATIONS TO BE DETERMINED BY THE ENGINEER AND A REPRESENTATIVE FROM THE BUREAU OF DESIGN AFTER GRADING IS COMPLETE AND SIGHT DISTANCE CAN BE DETERMINED BETWEEN SURVEY MARKER LOCATIONS.
2. THE MARKERS SHALL BE PRECAST AND SHALL BE INSTALLED IN A WORKMANLIKE MANNER IN ORDER THAT THERE BE NO FUTURE SETTLEMENT OR HORIZONTAL SHIFTING. THE MONUMENT SHALL BE PLACED IN A WAY THAT THE SURVEY POINT WILL FALL WITHIN THE PORTION OF THE PLAQUE PROVIDED FOR THAT PURPOSE. A REPRESENTATIVE FROM THE BUREAU OF PROGRAM DEVELOPMENT WILL LOCATE AND ETCH THE SURVEY POINT ON THE TABLET.
3. THE CONTRACT UNIT PRICE FOR **PERMANENT SURVEY MARKERS** WILL BE PAYMENT IN FULL FOR FURNISHING AND INSTALLING THE MARKER.



TABLET CONSTRUCTED IN ROCK LEDGE OR CONCRETE

PURE CEMENT AND WATER OR MELTED SULPHUR SHALL BE USED TO SEAL MARKER TABLET IN ROCK LEDGE OR CONCRETE STRUCTURE. SET IN HOLE 1.5" IN DIAMETER.

TOTAL QUANTITY FOR PERMANENT SURVEY MARKERS=

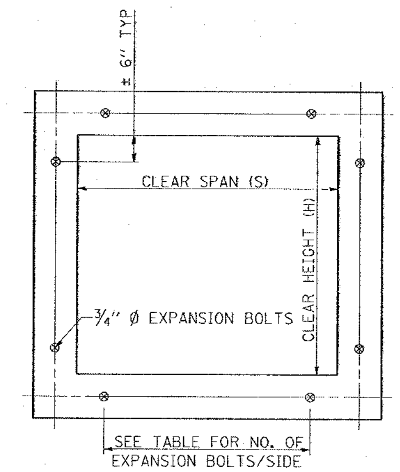
DESIGN NOTE: 2000' SPACING DESIRABLE FOR RURAL
1000' SPACING DESIRABLE FOR URBAN

STD. 9-10

REVISIONS

REDRAWN	2-15-89
REVISED	5-11-89
REVISED	8-18-94
REVISED	10-3-94

EXPANSION BOLTS REQUIRED FOR CULVERT EXTENSIONS



CROSS SECTION THRU BARREL

FOR ANCHOR BOLT REQUIREMENTS, SEE ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS.

EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" ∅ HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE.

MINIMUM CERTIFIED PROOF LOAD=7500 LBS.

BOLTS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR **EXPANSION BOLTS, 3/4 INCH.**

H OR S	NO. EXPANSION BOLTS REQ'D/SIDE			
	EXTENSION ≤ 15'		EXTENSION > 15'	
	NO.	SPACING	NO.	SPACING
2.0	*	*	*	*
2.5	2	18"	2	18"
3.0	2	24"	2	24"
4.0	3	18"	3	18"
5.0	4	16"	3	24"
6.0	5	15"	4	20"
7.0	5	18"	4	24"
8.0	6	17"	5	21"
9.0	6	19"	5	24"
10.0	7	18"	6	21"
11.0	8	17"	6	24"
12.0	8	19"	7	22"

* NOTE: USE MINIMUM OF 1 EXPANSION BOLT AT EACH CORNER.

EXAMPLE:

6' X 4' BOX CULVERT TO BE EXTENDED 18' AT ONE END ONLY.

FROM TABLE FIND:

6' SIDE REQUIRES (4)-3/4" ∅ EXPANSION BOLTS AT 20" CENTERS

4' SIDE REQUIRES (3)-3/4" ∅ EXPANSION BOLTS AT 18" CENTERS

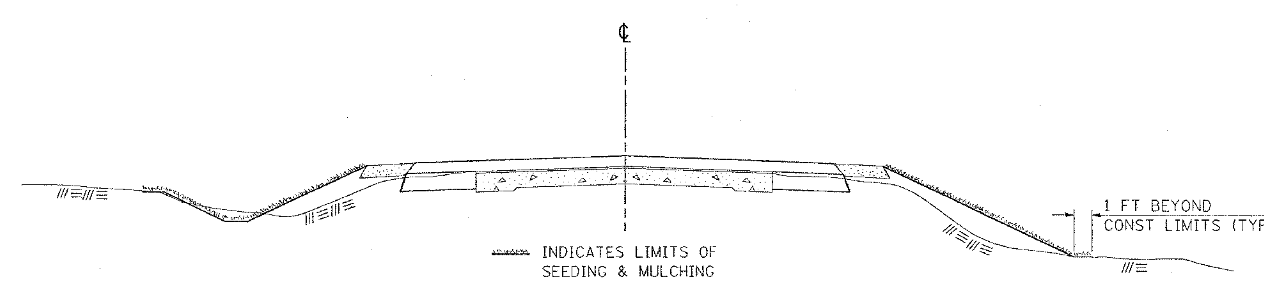
TOTAL NO. REQUIRED
(4+3)2 = (14)-3/4" ∅ EXPAN. BOLTS

STD. 9-9

REVISIONS

REDRAWN	2-15-89
REVISED	8-15-94
REVISED	12-14-01
REVISED	

SEEDING & MULCHING



GENERAL NOTES

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS.

FERTILIZER NUTRIENTS AND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.

THE RATES OF APPLICATION OF FERTILIZER, MULCH AND LIMESTONE SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL COVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

STD. 9-12

REVISIONS

REDRAWN	2-15-89
REVISED	8-15-94
REVISED	6-3-99
REVISED	

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

PERMANENT SURVEY MARKERS; EXPANSION BOLTS REQUIRED FOR CULVERT EXTENSIONS; SEEDING AND MULCHING

SCALE: VERT. HORIZ. NO SCALE
DATE

DRAWN BY
CHECKED BY

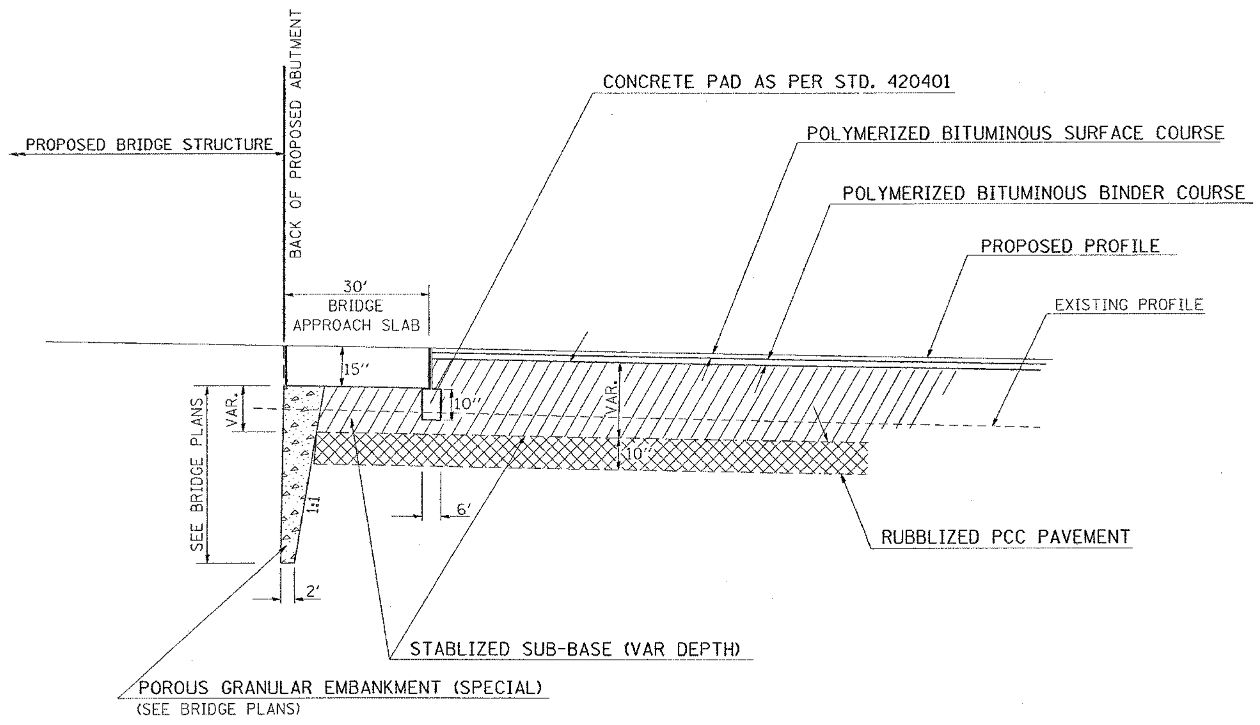
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	828
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

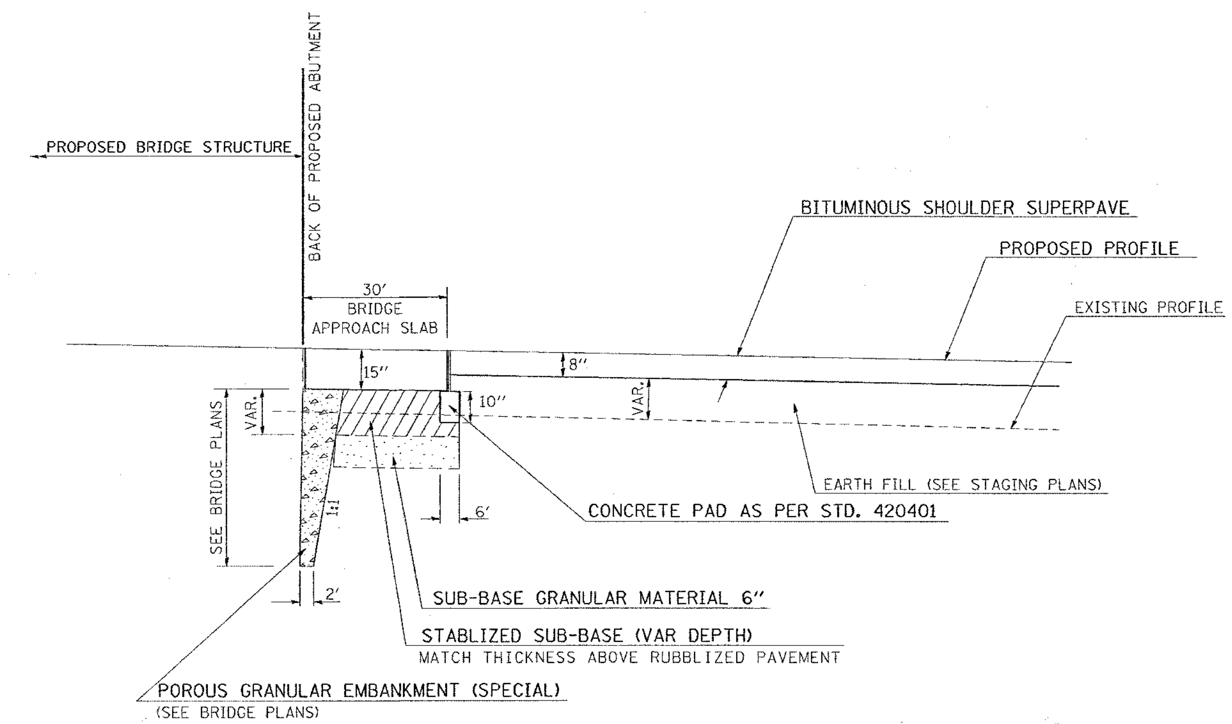
BRIDGE APPROACH SLAB ON RUBBLIZED PAVEMENT

FOR SN 100-0084 AND SN 100-0085 IN I-57 STAGE 7



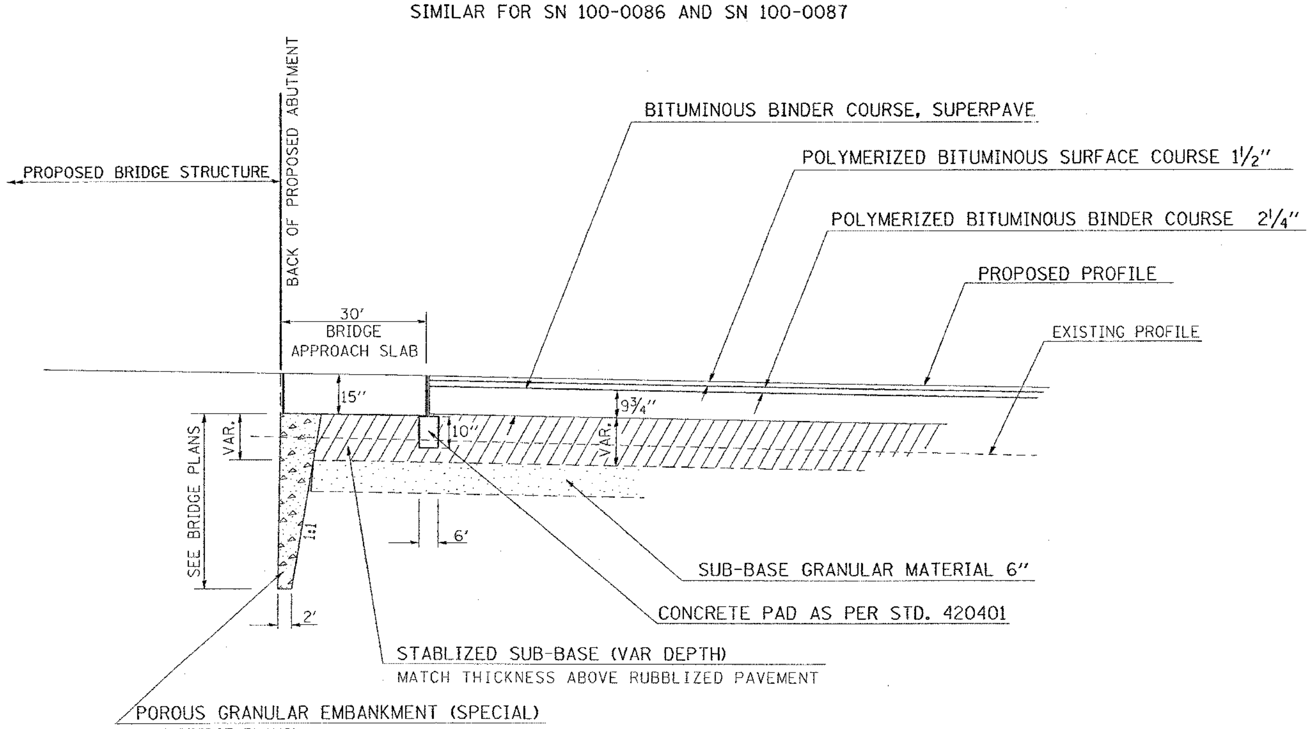
BRIDGE APPROACH SLAB (MEDIAN PAVED SHOULDER)

FOR SN 100-0084 AND SN 100-0085 IN I-57 STAGE 7



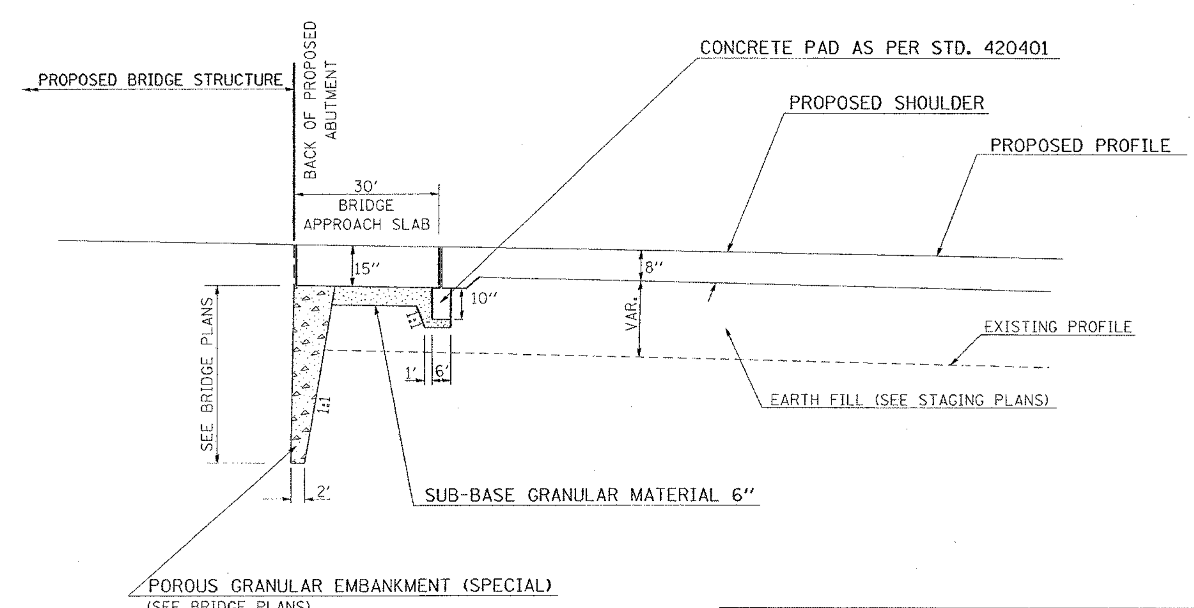
STAGE 4
BRIDGE APPROACH SLAB ON PROPOSED WIDENING

FOR SN 100-0084 AND SN 100-0085
SIMILAR FOR SN 100-0086 AND SN 100-0087



BRIDGE APPROACH SLAB (MEDIAN PAVED SHOULDER)

FOR SN 100-0086 AND SN 100-0087 IN I-57 STAGE 4 AND 7



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS:

BRIDGE APPROACH SLAB

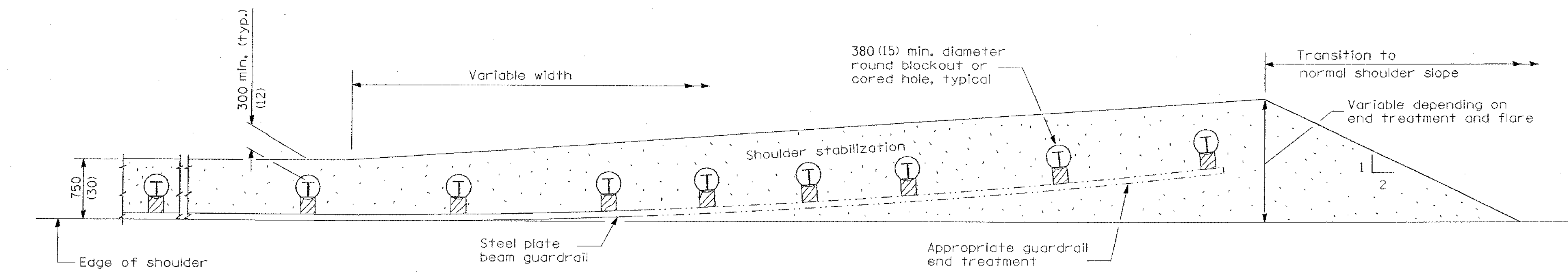
SCALE: VERT. HORIZ. NO SCALE
DRAWN BY CNH
DATE
CHECKED BY

PLOT DATE = 10/26/2006
FILE NAME = c:\projects\d902802\oldl3\oldl3p3.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = hesdon

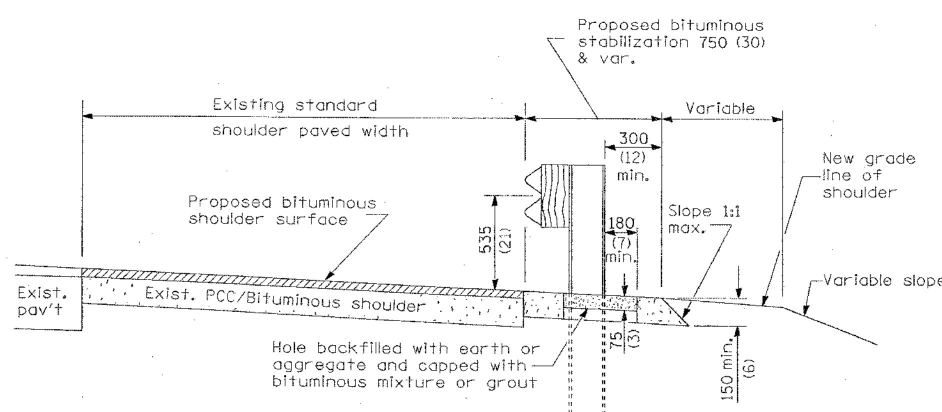
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	829
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

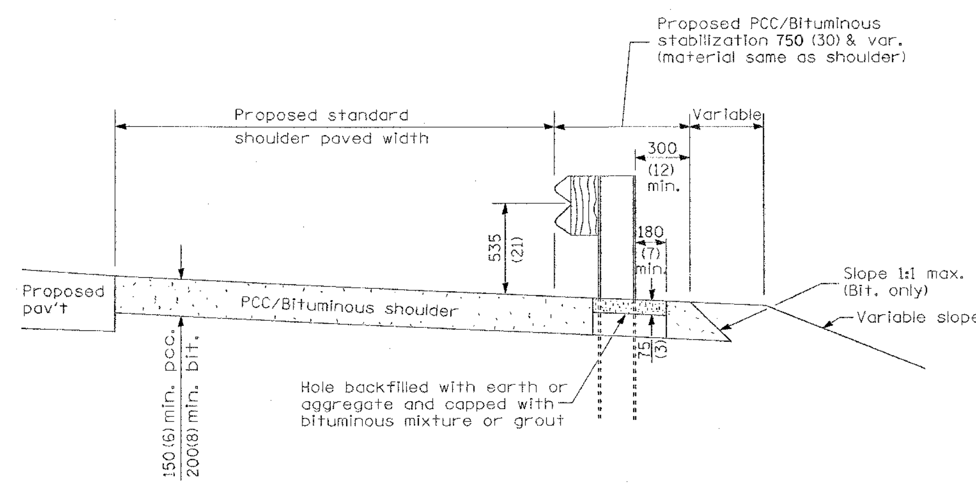
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2



PLAN



RESURFACING



NEW CONSTRUCTION

GENERAL NOTES

See Standard 482001, 482006 or 483001 for details not shown.

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PCC / BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL

STANDARD 630201-03

SCALE: VERT. HORIZ. NO SCALE

DRAWN BY CNH

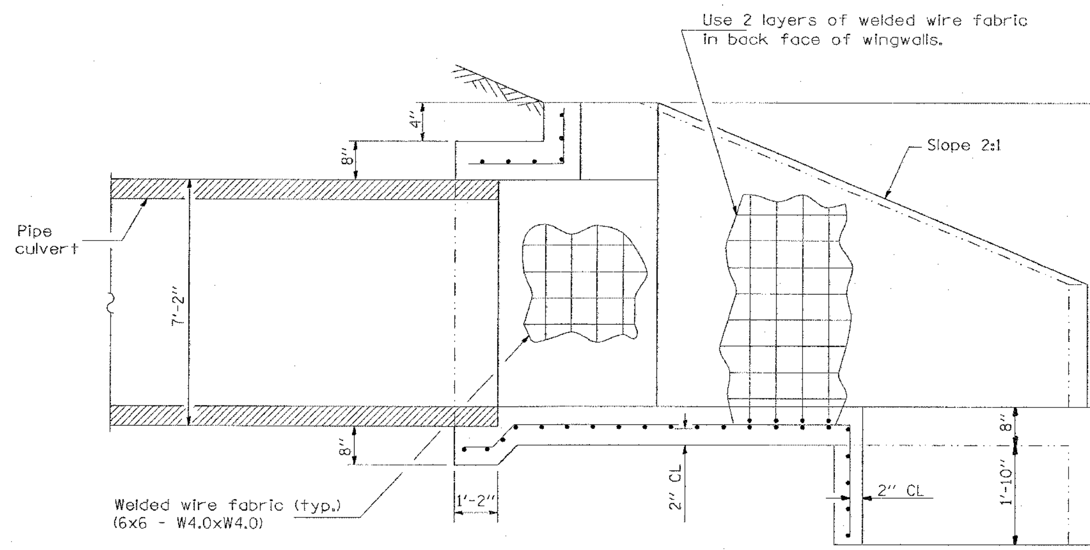
DATE

CHECKED BY

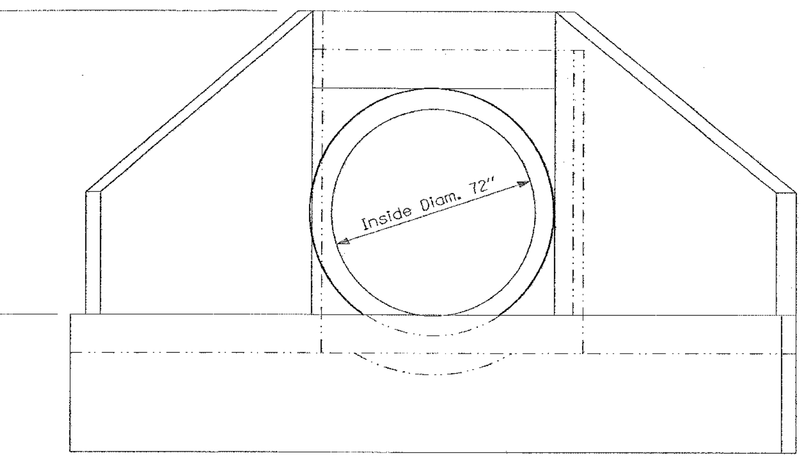
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	830
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

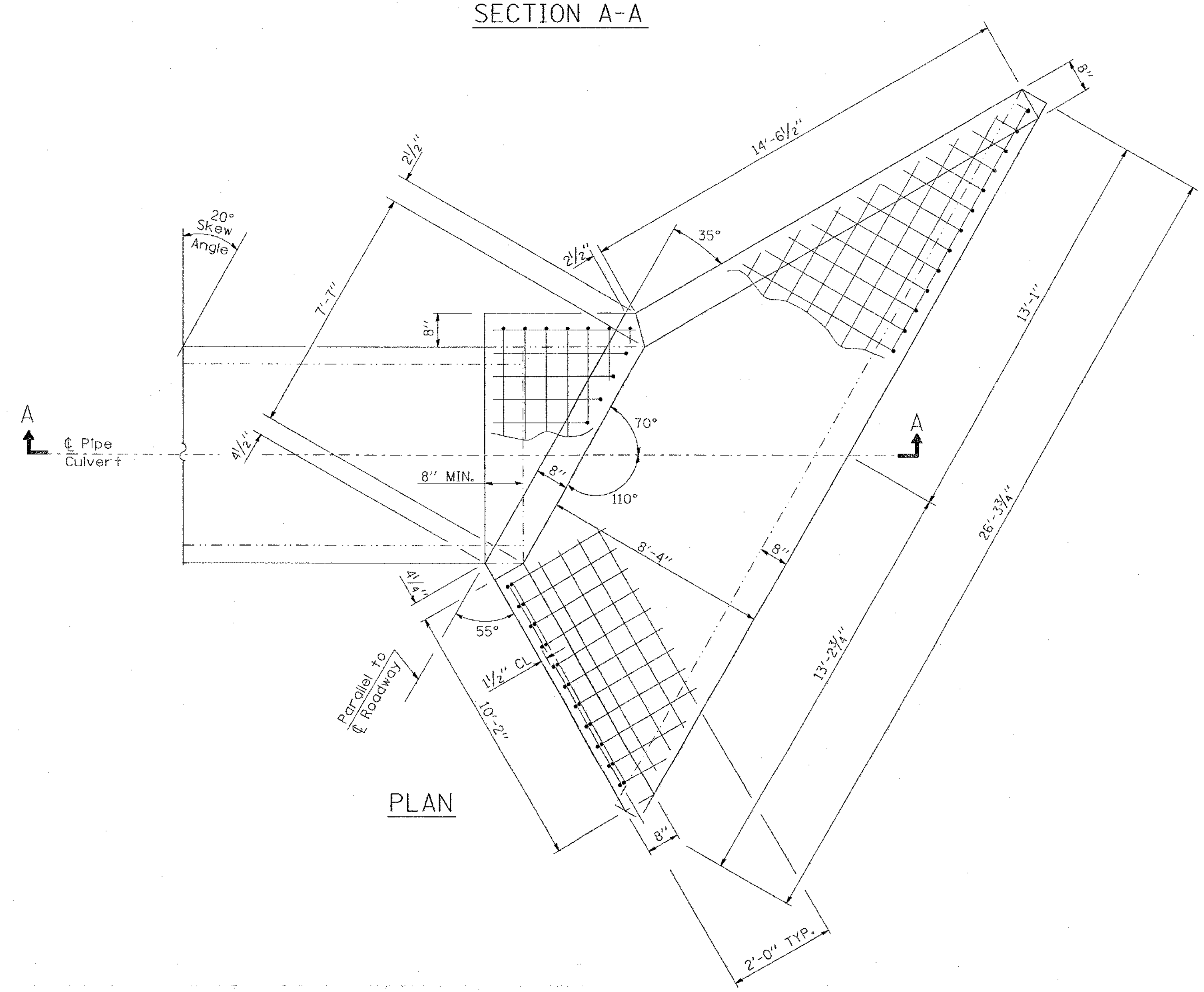
* I-57, & OLD IL 13 (FAU 9629)
** (XI-6-2)VB-2,(XI-6)HBK-2



SECTION A-A



END VIEW



PLAN

GENERAL NOTES

Build tops of headwalls parallel to grade line.

When lapping sheets of welded wire fabric, the overlap measured between the outermost cross wires of each fabric sheet shall not be less than 202 mm (8").

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

WELDED WIRE FABRIC	59 SQ. YDS.
CONCRETE SUPERSTRUCTURE	9.5 CU. YDS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 72"
20° SKEWED WITH ROADWAY
RT. & LT. STA. 1514+00

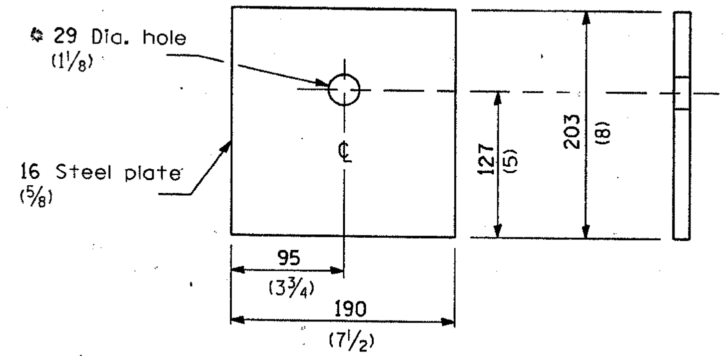
SCALE: VERT. HORIZ. NONE
DATE

DRAWN BY CNH
CHECKED BY

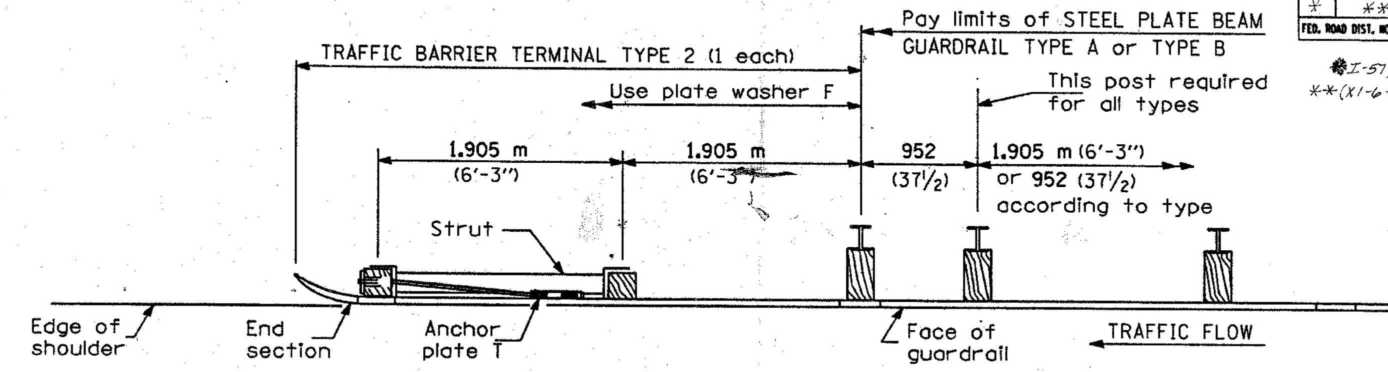
PLOT DATE = 10/14/2006
FILE NAME = c:\projects\d9\02002\old13\old13p3.dgn
PLOT SCALE = 50.0000 / IN.
USER NAME = headon

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	830A.
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

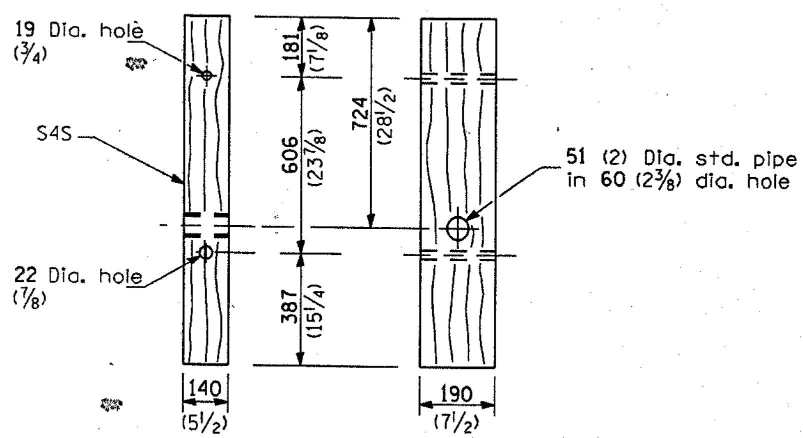
*I-57, OLD IL 13 (FAU 9629)
**(X1-6-2) VB-2, (X1-6) HBK-2



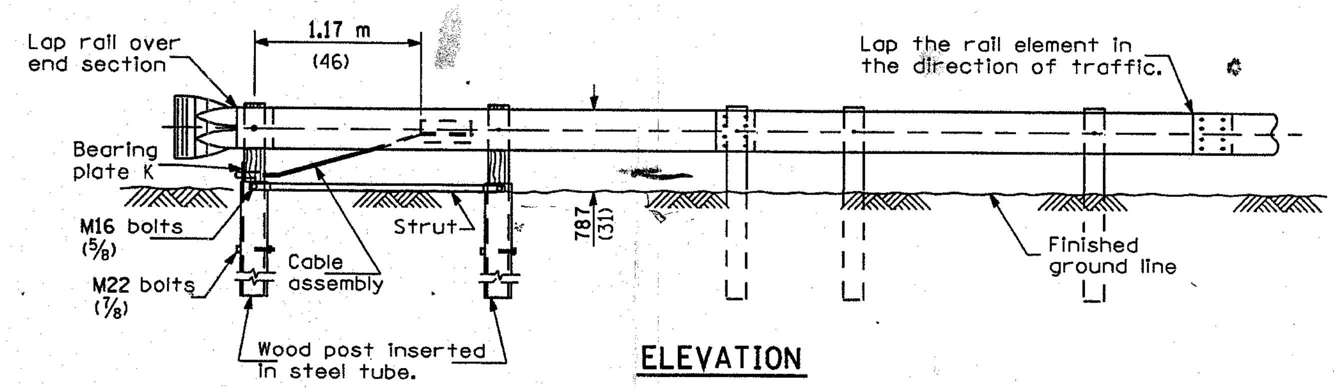
BEARING PLATE K



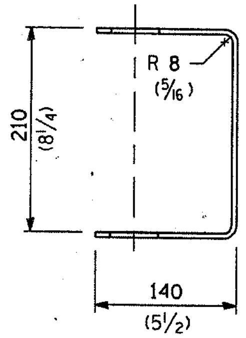
PLAN



WOOD POST

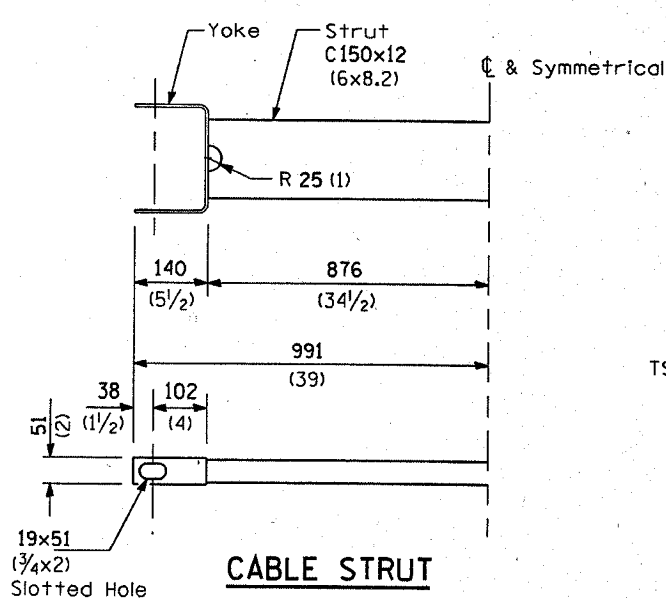


ELEVATION

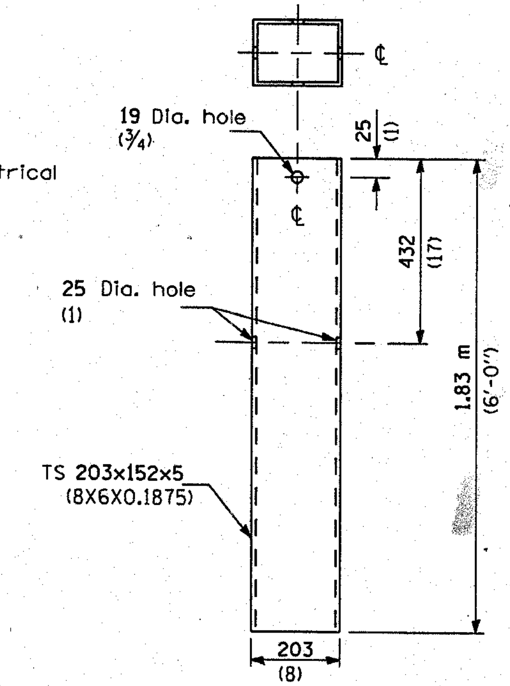


YOKE

5 (3/16) thick steel



CABLE STRUT



STEEL TUBE

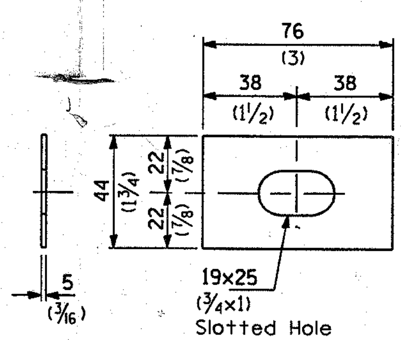


PLATE WASHER F

GENERAL NOTES

See Standard 630001 for details of guardrail not shown.

The bearing plate K shall be held in position by (2) two eight penny nails driven into the post and bent over the top of the plate.

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

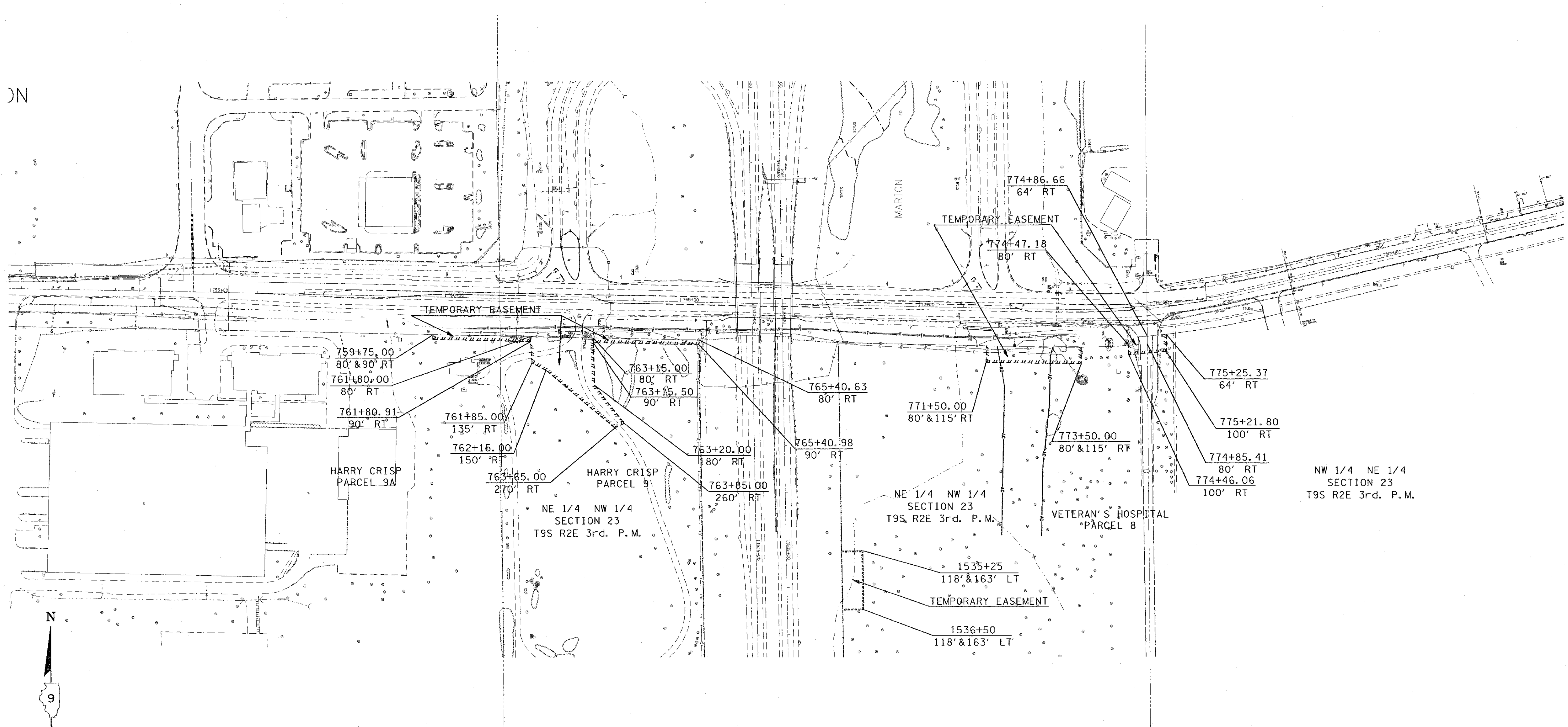
TRAFFIC BARRIER TERMINAL, TYPE 2

DETAIL

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	831
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

*I-57, & OLD IL 13 (FAU 9629)
**(X1-6-2)VB-2,(X1-6)HBK-2



100' 0 50' 100'

PARCEL NO.	NAME	ACREAGE: TE
8	VETERAN'S HOSPITAL	0.342±
9	HARRY CRISP	0.364±
9A	HARRY CRISP	0.099±

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

R.O.W.

SCALE: VERT. HORIZ. 100
DATE

DRAWN BY CNH
CHECKED BY LAND AC

PLOT DATE = 12/5/2006
FILE NAME = c:\projects\d9020002\old13\old13p6.dgn
PLOT SCALE = 100.0000 ' / IN.
USER NAME = headon

CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	832
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

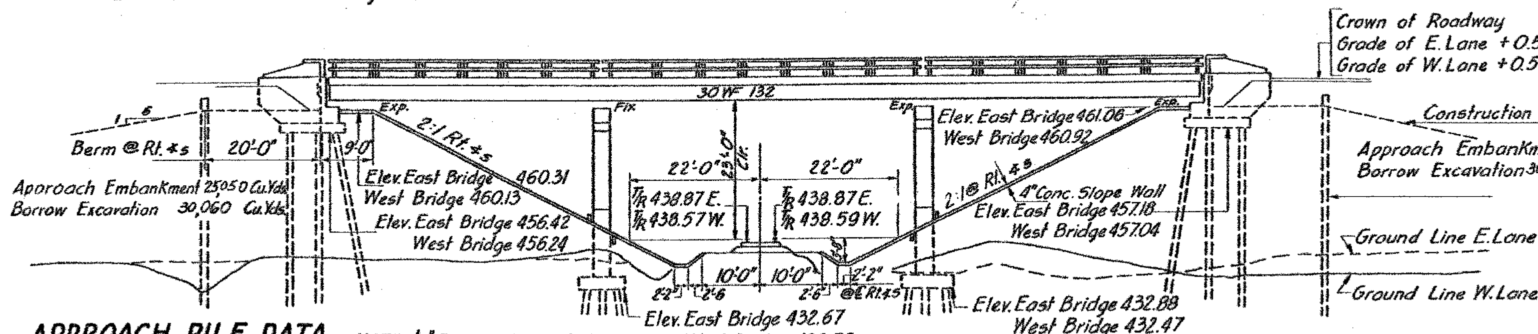
* I-57, & OLD IL 13 (FAU 9629)
** (X1-6-2)VB-2,(X1-6)HBK-2

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	XI-6VB	~~WILLIAMSON~~	31	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
16 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

BM : Bolt Top in R.R. Bridge 4'Rt. Sta. 1516+71 E
Elev. 438.17
No Existing Highway Structure. Culvert under R.R. at ℄ of E. Lane to be filled in by others.

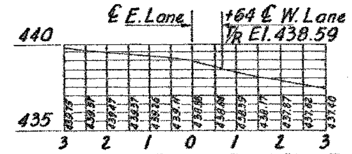


NOTE: 1/2" Prem. Jt. Filler shall be placed between Slope wall and Abutment caps.

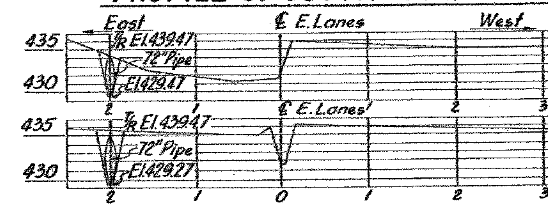
ELEVATION

APPROACH PILE DATA

Type : Creosoted
Capacity : 15 tons
Est. Length : 40'-0"
No. Required : 32



TOP OF RAIL PROFILE



PROFILE OF SOUTH R.R. DITCH

PROFILE OF NORTH R.R. DITCH

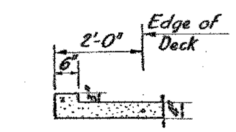
STATION 1516+58.58
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 57 SEC. XI - 6VB
F.A. PROJ. IG-57-1(32)
LOADING H 20-S16 & ALT.

NAME PLATE LETTERING
See Std. 2113

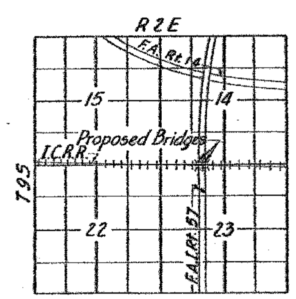
DESIGN STRESSES

f_c = 1400 psi Super.
v_c = 75 psi (Ftgs.)
f_s = 20,000 psi Reinf.
f_s = 18,000 psi Struct.
n = 10

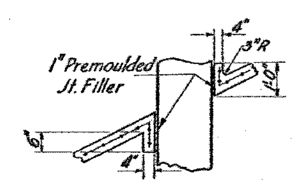
LOADING: H20-S16-44
And Alternate



SECTION A-A



LOCATION PLAN



SECTION B-B

GENERAL NOTES

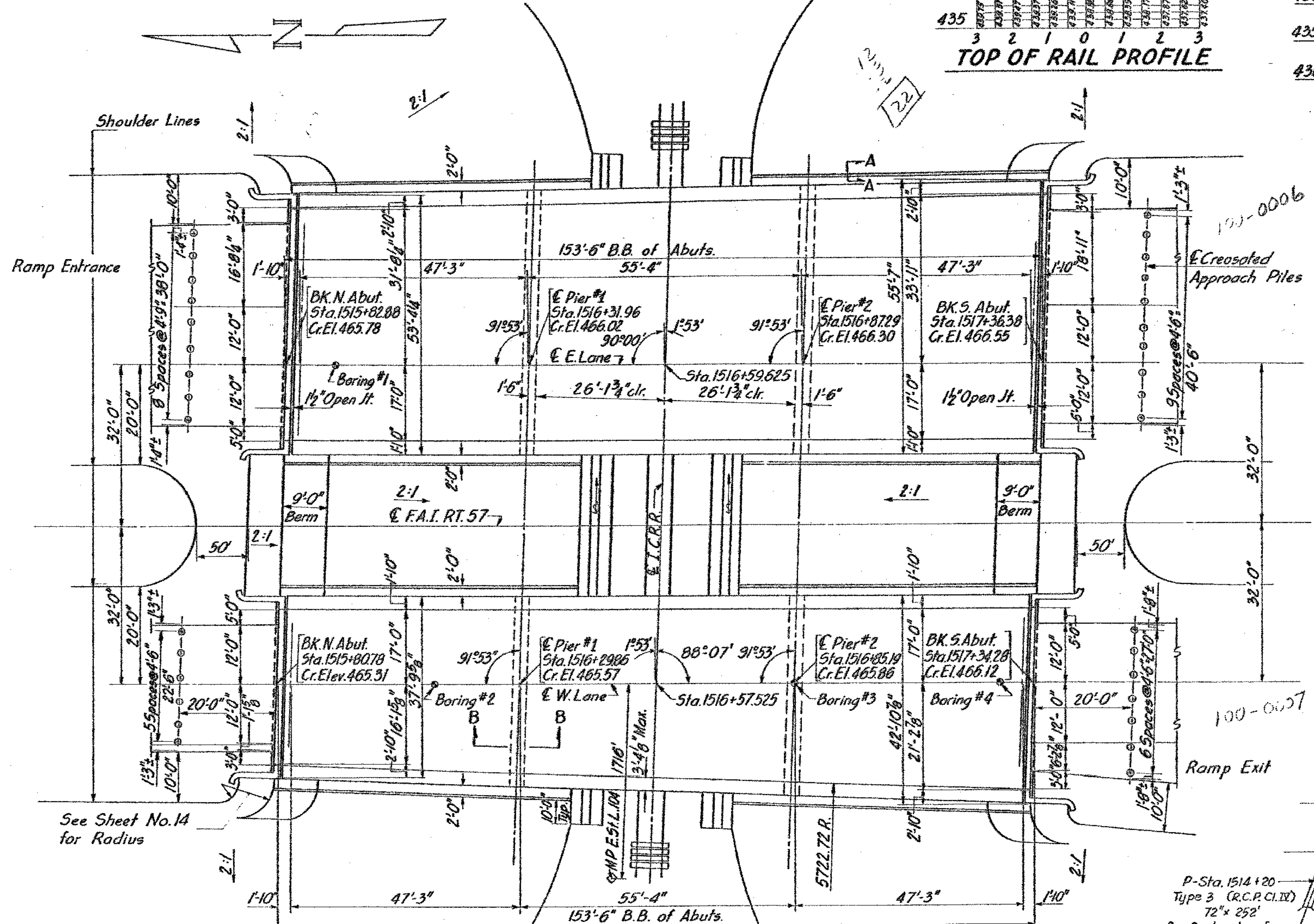
Class X Concrete shall be used throughout except in handrail end posts.
Handrail Concrete shall be used in handrail end posts.
The Concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wire, weighing 58# per 100 sq.ft.
Rivets 3/4"φ, Open holes 13/16"φ, unless noted.

Railings shall be adjusted to true alignment after curbs have been poured.
All rockers, bolsters bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of structural steel.
Anchor bolts shall be set before riveting diaphragms over supports.
All steel handrail posts shall be vertical.
Expansion guards shall be fabricated and erected in accordance with Article 51.13 (d) of the Standard Specifications.
Expansion guards are included in quantity of structural steel. Est. weight 4800 lbs.
The following surfaces of expansion guards shall be given two shop coats of red lead paint: Outside face of vertical legs and top face of horizontal legs of 4"x4"x1/2"∠s.
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.
All paint shall be furnished and applied by the Contractor.
Holes for Concrete piles of all abutments shall be precored in accordance with Article 60.9 (c) of the Standard Specifications.
The contractor shall drive one Timber test pile near pier #1 of the east bridge and one concrete test pile at the south abutment of the west bridge.

TOTAL BILL OF MATERIAL

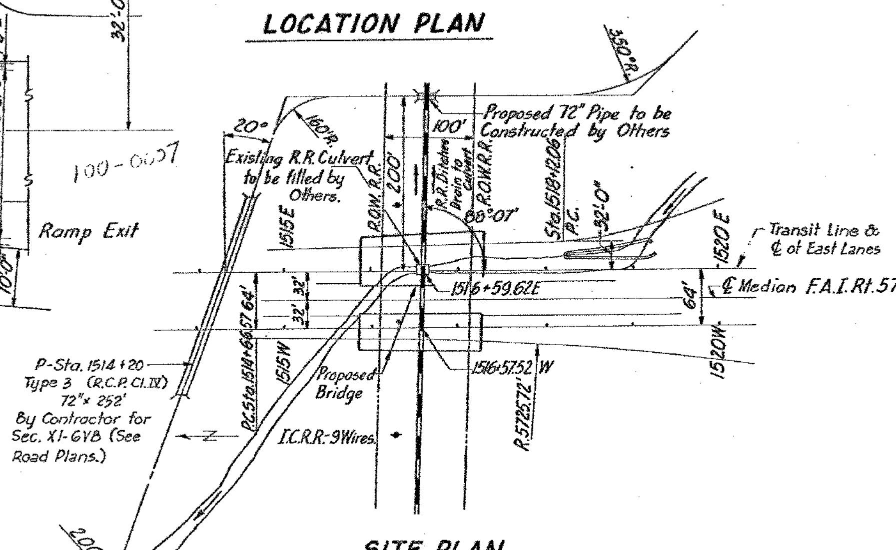
ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete	Cu.Yds.	378.2	616.0	994.2
Handrail Concrete	Cu.Yds.	5.8		5.8
Reinforcement Bars	Lbs.	73,300	49,240	122,540
Structural Steel	Lbs.	398,960		398,960
Borrow Excavation	Cu.Yds.		50,120	60,120
Class A Excavation for Str.	Cu.Yds.		240	240
Metal Handrail	Lin.Ft.	607		607
Slope wall (4")	Sq.Yds.	925		925
Name Plates	Each	2		2
Concrete Piles	Lin.Ft.		2,257	2,257
Test Piles (Concrete)	Each		1	1
Creosoted Piles	Lin.Ft.		3170	3170
Test Piles (Timber)	Each		1	1

FOR INFORMATION ONLY



PLAN

NOTE: All transverse deck dimensions taken at backs of abuts. on plan view @ rt.≠s to ℄ Rdwy.



SITE PLAN

DESIGNED	William R. Smith
CHECKED	T. Tanaka
DRAWN	Gabor Papp
CHECKED	T. Tanaka

JAN. 5 1960
EXAMINED — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

GENERAL PLAN
I.C.R.R. OVERHEAD-WEST OF MARION
PROJECT IG-57-1(32)52
F.A.I. RT. 57 - SEC. XI-6VB
WILLIAMSON COUNTY
STA. 1516+58.58

Revised - 1-14-60 - WJM - At north Abut. (in ELEVATION), changed Embankm't. from 16650 to 20880 Cu.Yds. & Borrow Exc. from 19980 to 25060 Cu.Yds.; at south Abut., changed Embankm't. from 18170 to 20880 Cu.Yds. & Borrow Exc. from 21800 to 25060 Cu.Yds. In APPROACH PILE DATA, changed estimated length from 20 to 40 Lin. Ft. In TOTAL BILL OF MATERIAL, changed quantity of Borrow Exc. from 41780 to 50120 Cu.Yds. & the quantity of Creosoted Piles from 2570 to 3170 Lin. Ft.

Revised - 11/2/60 R.D. Changed quantities of Class X Conc. on Bill of Material -

Quantity of Borrow Excavation Revised - 2/17/60 RSB

B.M.: 2 Spikes in p.p. 220'Rt. Sta. 1530+20E.
Elev. 453.92.
No Existing Structure.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

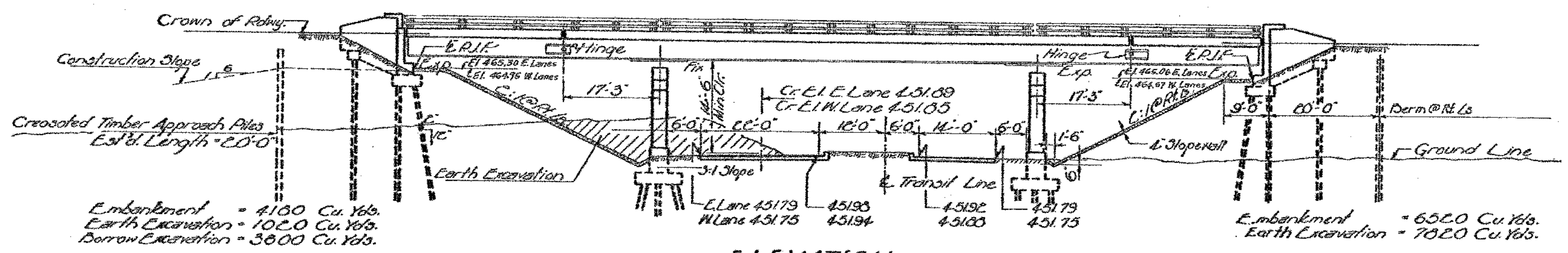
CONTRACT NO. 98950

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	WILLIAMSON	917	833
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 57	X1-6HB-1, 2	~~Williamson~~	45	25
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
11 SHEETS

* I-57, & OLD IL 13 (FAU 9629) ** (X1-6-2)VB-2,(X1-6)HBK-2



ELEVATION

GENERAL NOTES

Class X Concrete shall be used throughout except in End Posts.

Handrail Concrete shall be used in End Posts.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Slope Wall shall be reinforced with welded wire fabric 6x6 mesh, #4 wires, weighing 58# per 100 sq.ft.

Rivets ⅞"φ, Open holes 15/16"φ, unless noted.

All rollers, rockers, bearing plates, lead plates, pintles, and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel. Est'd. Weight 20110 lbs.

Anchor bolts shall be set before riveting diaphragms over supports.

The following surfaces of expansion guards shall be given two shop coats of red lead paint; All surfaces inaccessable after erection. The ⅞"φ welded studs shall not be painted.

Expansion guards and all Studs are included in quantity of Structural Steel. Est'd Weight 4990 lbs.

Except as otherwise provided all Structural Steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 incluse of the Standard Specifications.

All paint shall be furnished and applied by the Contractor.

The Contractor shall drive 4 Steel Test Piles in permanent locations as directed by the Engineer before ordering remainder of piles; test piles shall be driven in the following locations:

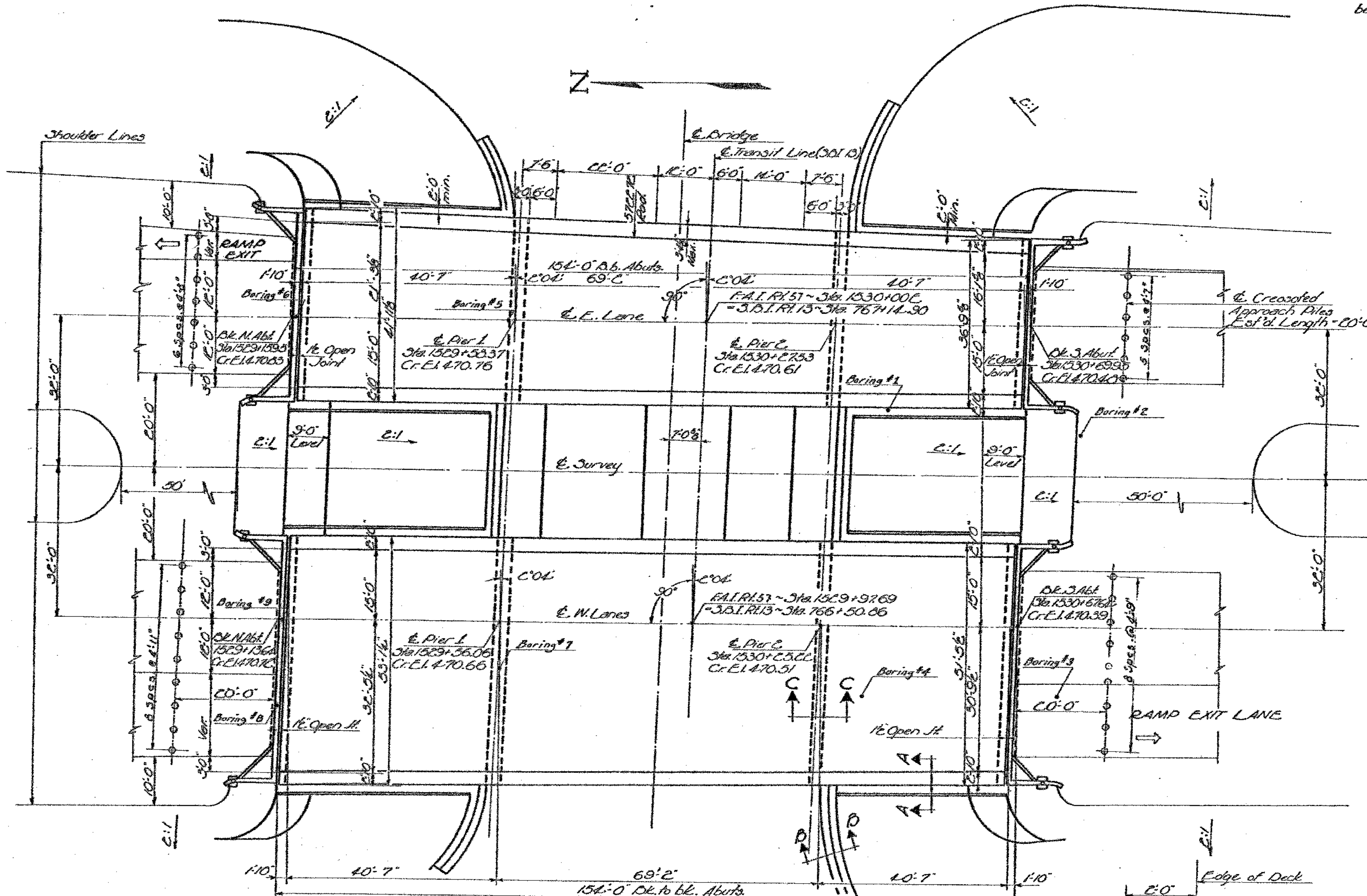
East Lanes - One at N. Abut. and one at Pier 2.
West Lanes - One at Pier 1 and one at S. Abut.

TOTAL BILL OF MATERIALS - SEC. XI-6HF-2.

Furnishing Structural Steel	Lbs.	427 160		427 160

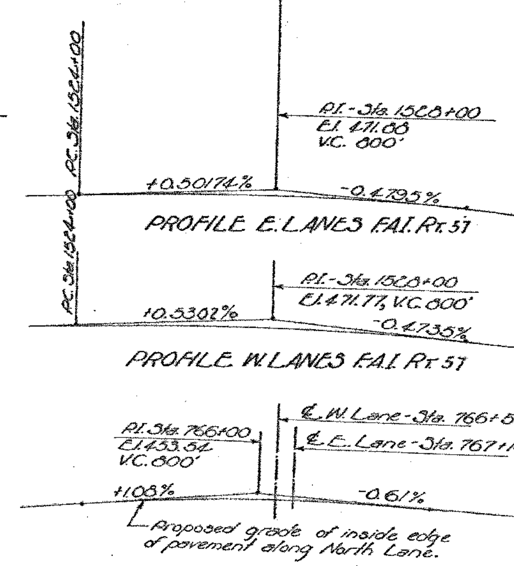
TOTAL BILL OF MATERIALS - SEC. XI-6HB-2.

Item		Super	Sub	Total
Class X Concrete	Cu. Yds.	365.8	417.4	783.2
Handrail Concrete	Cu. Yds.	5.8		5.8
Reinforcement Bars	Lbs.	71790	38210	110000
Erecting Structural Steel	Lbs.	427160		427160
Steel Piles	Lin. Ft.		2916	2916
Test Piles (Steel)	Each		4	4
Creosoted Timber Piles	Lin. Ft.		620	620
Furnishing & Erecting Metal Handrail	Lin. Ft.	607		607
Name Plates	Each	2		2
Borrow Excavation	Cu. Yds.		3800	3800
Earth Excavation	Cu. Yds.		8840	8840
Slope Wall	Sq. Yds.		820	820
Class A Excavation for Structures	Cu. Yds.		264	264



PLAN

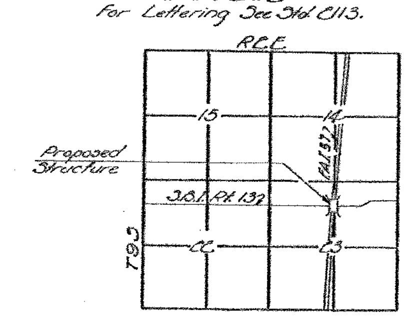
Note: All transverse deck dimensions taken at backs of abutments on plan view.



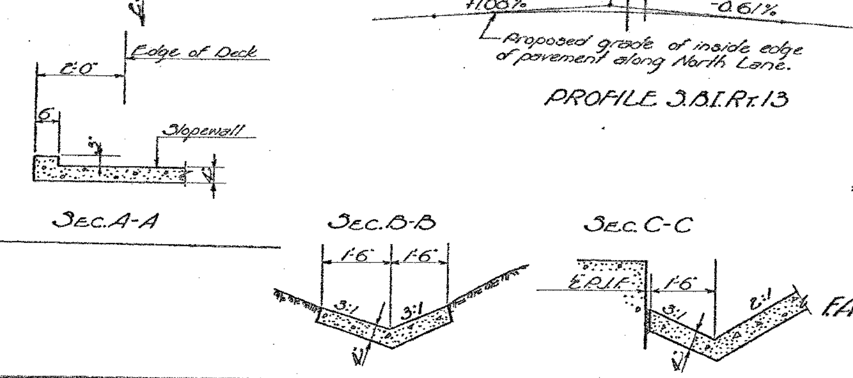
1530+00.00 (E. Lanes)
1529+97.69 (W. Lanes)

STATION (See Above)
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. Rt. 57 ~ Sec. XI-6HB-2
F.A. PROJECT I-57-1(18)
LOADING H20-S16-44 & ALT.

NAME PLATE
For Lettering See Std. 2113.



LOCATION PLAN



Sec. A-A

Sec. B-B

Sec. C-C

DESIGNED	W. Caldwell
CHECKED	Mario G. Revilla
DRAWN	W. W.L. Jacobs
CHECKED	M.R.

April 29 1959

EXAMINED [signature] ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED [signature] ENGINEER OF DESIGN

APPROVED R.R. Bartelsmeyer CHIEF HIGHWAY ENGINEER

DESIGN STRESSES
fc = 1400 p.s.i. Super
fs = 20,000 p.s.i. Reinf.
fs = 18,000 p.s.i. Struct.
vc = 75 p.s.i. Ftg.
n = 10
LOADING H20-S16-44 & ALT.

FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION
F.A.I. Rt. 57 OVER S.B.I. Rt. 13
PROJECT I-57-1(18)52
F.A.I. RT. 57 ~ SEC. XI-6HB-2
WILLIAMSON COUNTY
STA. 1529+91.80(2)

Revised: 1-8-60. Quantity of Class-X concrete from 772.4 to 783.2 Cu. Yds. due to change in curb height to 11" W.B.

K+E 155 IMPERIAL TRACING CLOTH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2)VB-2	WILLIAMSON	917	834
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
51 SHEETS

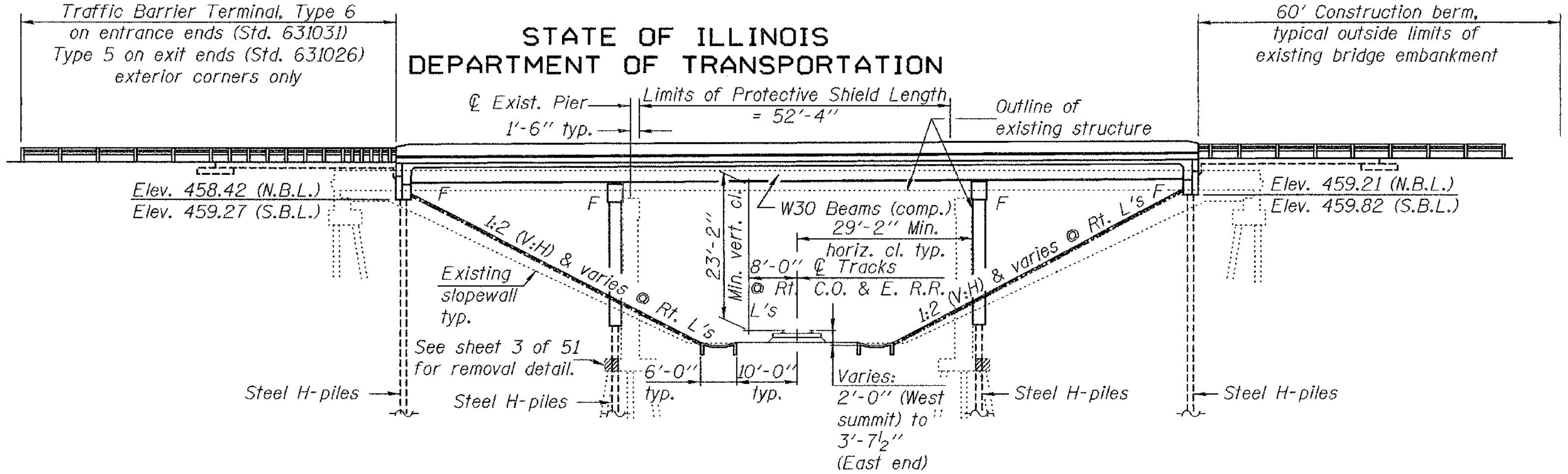
Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark: Painted mark on top of West corner of South Abutment, existing S.N. 100-0007 (S.B.) Sta. 1517+35.43, 55.5' Rt. ℄ F.A.I. 57, Elev. 469.42

Exist. Struct.: S.N. 100-0006 (N.B.) and S.N. 100-0007 (S.B.)
The existing structures were built in 1961 under F.A.I. Route 57 Section X1-6VB. Both structures consist of three continuous spans (47'-3", 55'-4", 47'-3") for a total length of 153'-6" measured back to back of abutments. The superstructures have a 7" reinforced concrete deck on non-composite wide flange beams. The superstructures are supported by hammerhead piers on pile supported footings and pile bent abutments. The out to out deck width of the Northbound structure varies from 53'-4¼" to 55'-7". The out to out deck width of the Southbound structure varies from 37'-9⅝" to 42'-10⅞".
The existing structures shall be removed and replaced using stage construction to maintain traffic.

Salvage: See Special Provisions for salvage information.



ELEVATION
(Looking East)

DESIGN SPECIFICATIONS
2004 AASHTO LRFD Bridge Design Specifications with 2005-2006 Interims

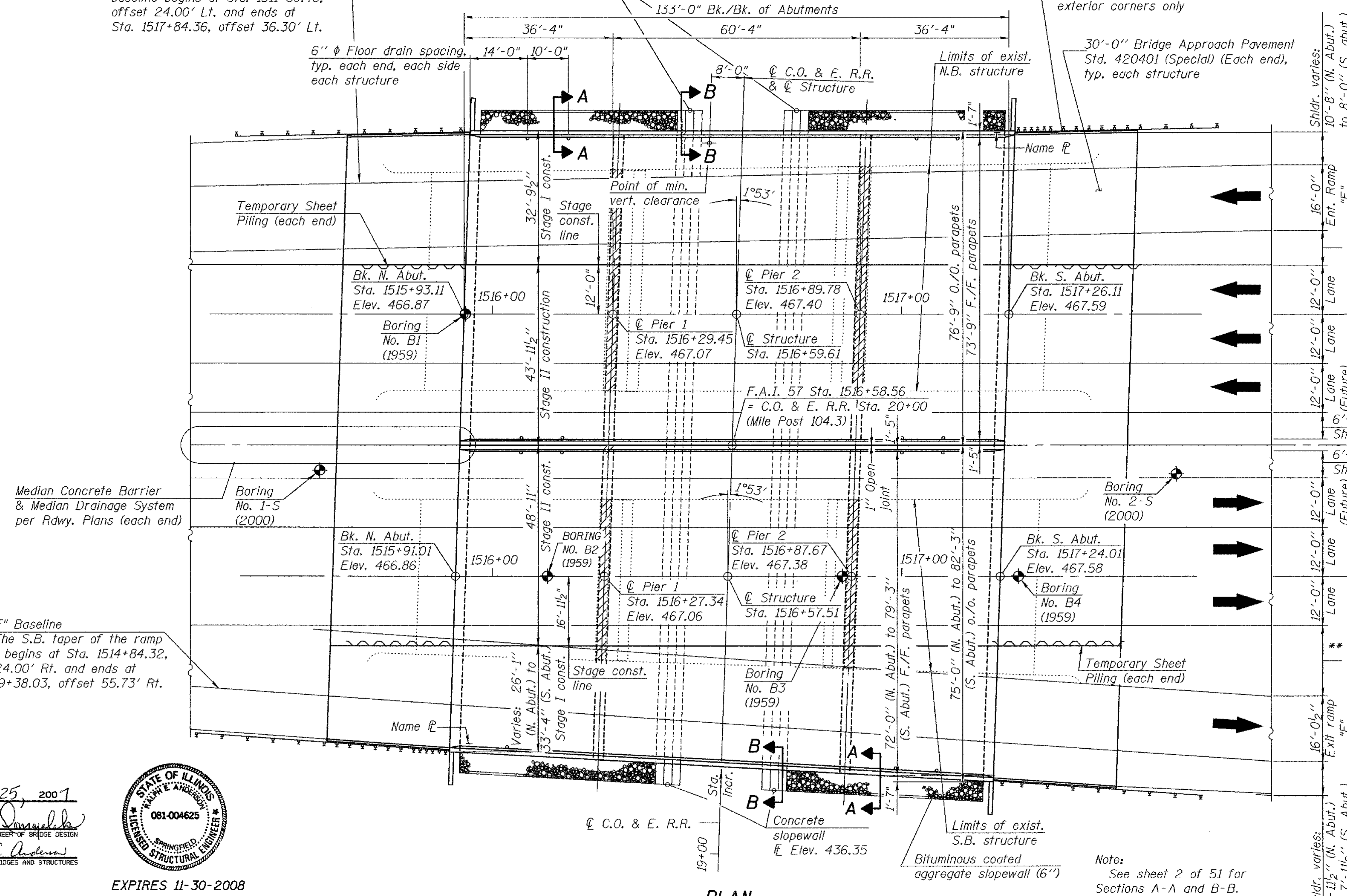
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

LOADING HL-93
Allow 50 psf for future wearing surface.

SEISMIC DATA
Seismic Performance Zone (SPZ): 2
Bedrock Acceleration Coefficient (A): 12.2%
Site Coefficient (S) = 1.5 (Type III)

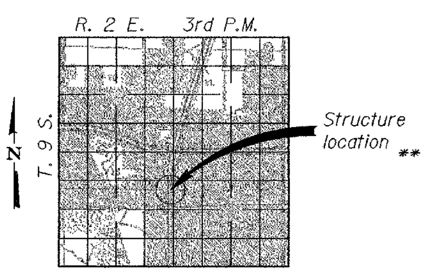
INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3.-4. Stage Construction Details
5. Temporary Concrete Barrier
6.-11. Top of Slab Elevations
12.-17. Superstructure
18. Parapet Elevation
19. Superstructure Details
20.-24. Diaphragm Details
25.-26. Framing Plan
27.-28. Structural Steel Details
29. Bearing Details
30. Anchor Bolt
31.-34. North Abutments
35.-38. South Abutments
39.-42. Pier 1
43.-46. Pier 2
47. Pier Details
48. Bar Splicer Assembly Details
49. Pile Layout at Piers
50.-51. Boring Logs



PLAN

Note: See sheet 2 of 51 for Sections A-A and B-B.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
INTERSTATE 57 OVER
C.O. & E. R.R.
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

DESIGNED	Michael D. Cin
CHECKED	Fessum Teklehaimanot
DRAWN	B.M.L.
CHECKED	MDC, FT

January 25, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS RALPH E. ANDERSON 081-004625 SPRINGFIELD LICENSED STRUCTURAL ENGINEER
EXPIRES 11-30-2008

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON		835
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$″ ϕ, holes $\frac{15}{16}$″ ϕ, unless otherwise noted.

Calculated weight of Structural Steel = AASHTO M270 Grade 50 = 326,560 lbs.
AASHTO M270 Grade 36 = 45,810 lbs.

No field welding is permitted except as specified in the contract documents.

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

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

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.

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

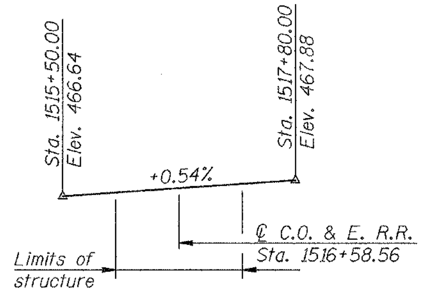
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

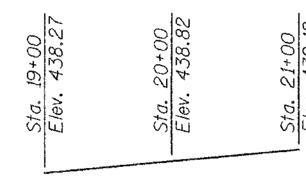
The Contractor shall remove portions of the existing pier footings to allow driving of the new pier piles. See sheet 3 of 51 for removal details. Cost included with Removal of Existing Structures No. 3 and No. 4.

Cost of removal of the existing slopewall for each structure is included in the pay item Removal of Existing Structures No. 3 or No. 4 respectively.

In addition to all other requirements of Section 512 of the Standard Specifications, splices for HP14x73 piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.



PROFILE GRADE - F.A.I. RT. 57
NORTHBOUND & SOUTHBOUND LANES



TOP OF RAIL ELEVATIONS
C.O. & E. R.R.
(North Rail)

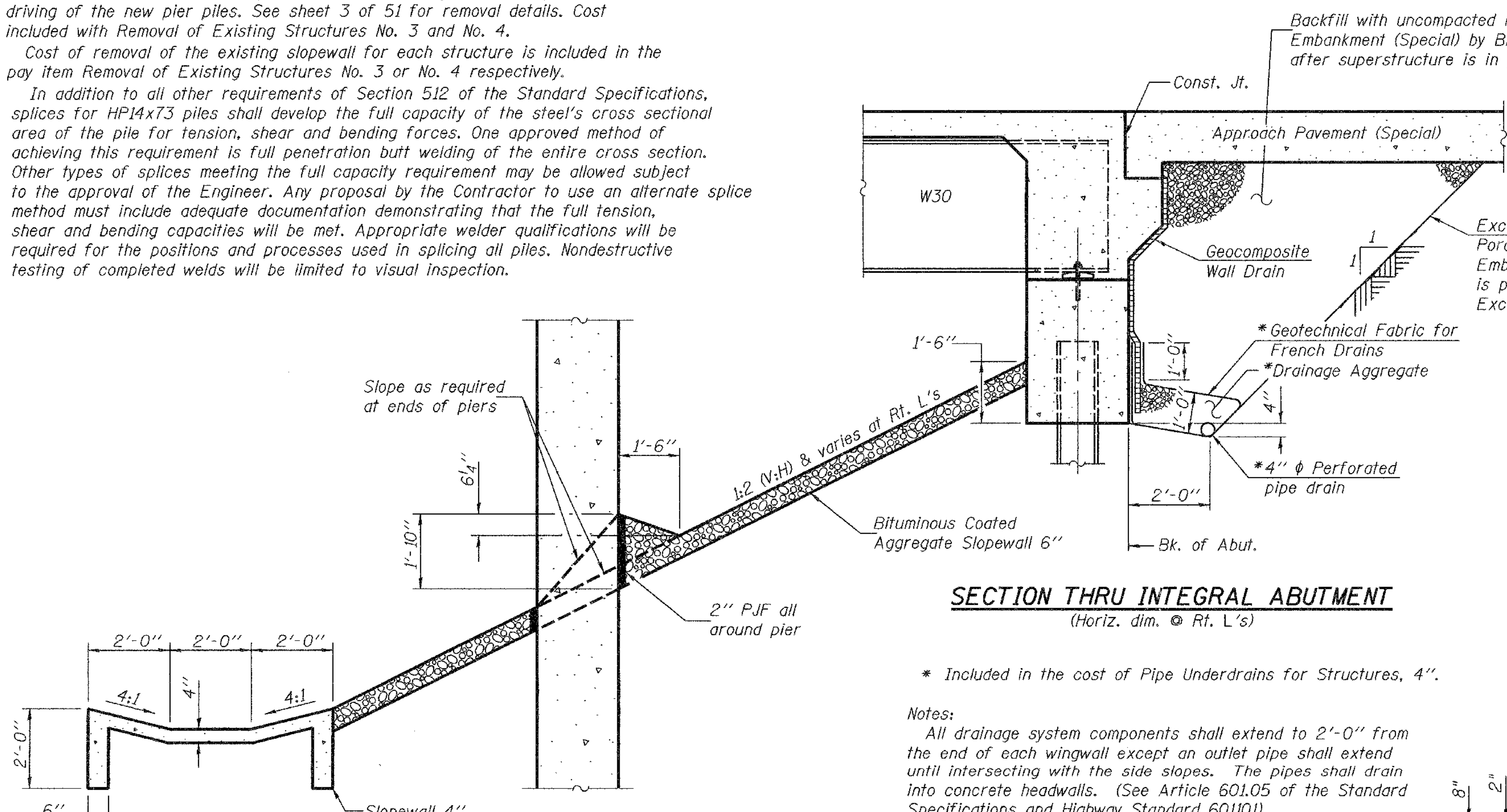
STATION 1516+58.56 BUILT 200 BY STATE OF ILLINOIS FAI ROUTE 57 - SEC (X1-6-2)VB-2 LOADING HL-93 STR. NO. 100-0086 (N.B.)	STATION 1516+58.56 BUILT 200 BY STATE OF ILLINOIS FAI ROUTE 57 - SEC (X1-6-2)VB-2 LOADING HL-93 STR. NO. 100-0087 (S.B.)

NAME PLATES
See Std. 515001

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Porous Granular Embankment (Special)	Cu. Yd.			398
**	Removal of Existing Structures No. 3	Each			1
**	Removal of Existing Structures No. 4	Each			1
	Structure Excavation	Cu. Yd.		1248	1248
	Concrete Structures	Cu. Yd.		735.5	735.5
	Concrete Superstructure	Cu. Yd.	645.6		645.6
	Bridge Deck Grooving	Sq. Yd.	2155		2155
	Protective Coat	Sq. Yd.	2450		2450
	Furnishing and Erecting Structural Steel	LS	0.3		0.3
	Stud Shear Connectors	Each	13,041		13,041
	Reinforcement Bars, Epoxy Coated	Pound	157,020	60,110	217,130
	Bituminous Coated Aggregate Slopewall, 6″	Sq. Yd.			2020
	Furnishing Steel Piles HP14x73	Foot		5340	5340
	Driving Piles	Foot		5340	5340
	Test Pile Steel HP14x73	Each		3	3
	Name Plates	Each	2		2
	Geocomposite Wall Drain	Sq. Yd.			241
	Pipe Underdrains for Structures, 4″	Foot		370	370
	Bar Splicers	Each	1180	292	1472
	Protective Shield	Sq. Yd.			565
	Floor Drains	Each	16		16
	Temporary Sheet Piling	Sq. Ft.		700	700
	Slopewall, 4″	Sq. Yd.			225.0
	Conduit Embedded in Structure, 2″ϕ PVC	Foot	133.0		133.0
	Anchor Bolt, 1″	Each		184	184
	Concrete Encasement	Cu. Yd.		20.4	20.4
	Preformed Joint Seal, $2\frac{1}{2}$″	Foot	133.0		133.0

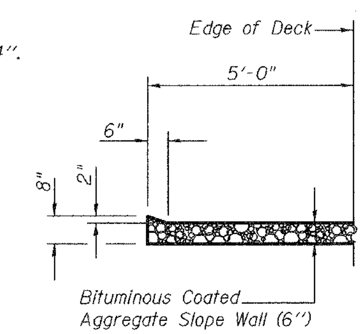
** Structure No. 3 is Northbound
** Structure No. 4 is Southbound



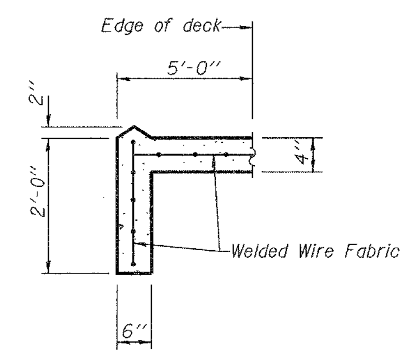
SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

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

Notes:
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).
Slope wall, 4″ shall be reinforced with welded wire fabric, 6″ x 6″ - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



SECTION A-A
(Edge of Slopewall Treatment)



SECTION B-B
(Edge of slopewall treatment)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

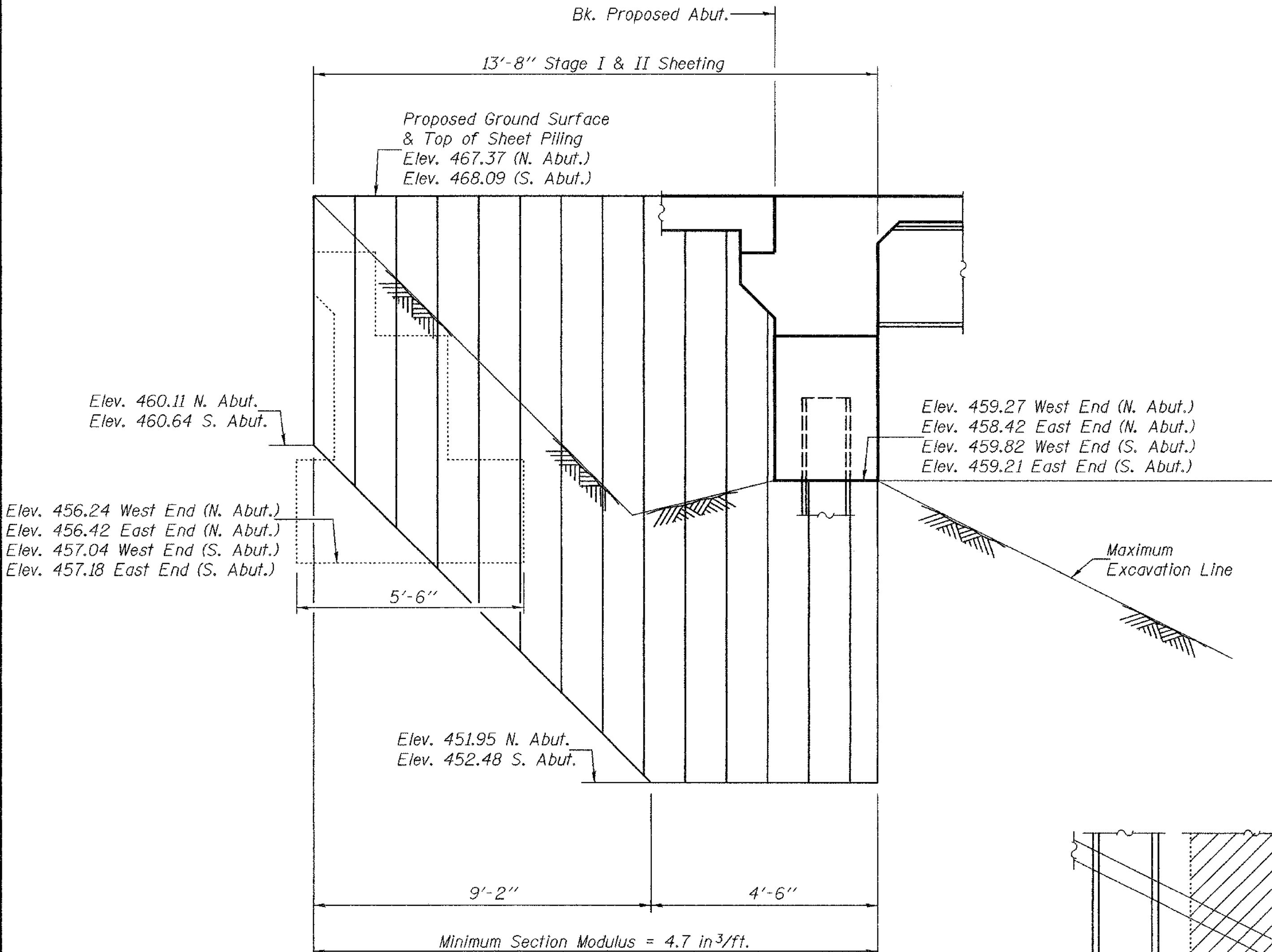
GENERAL DATA
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	336
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
51 SHEETS

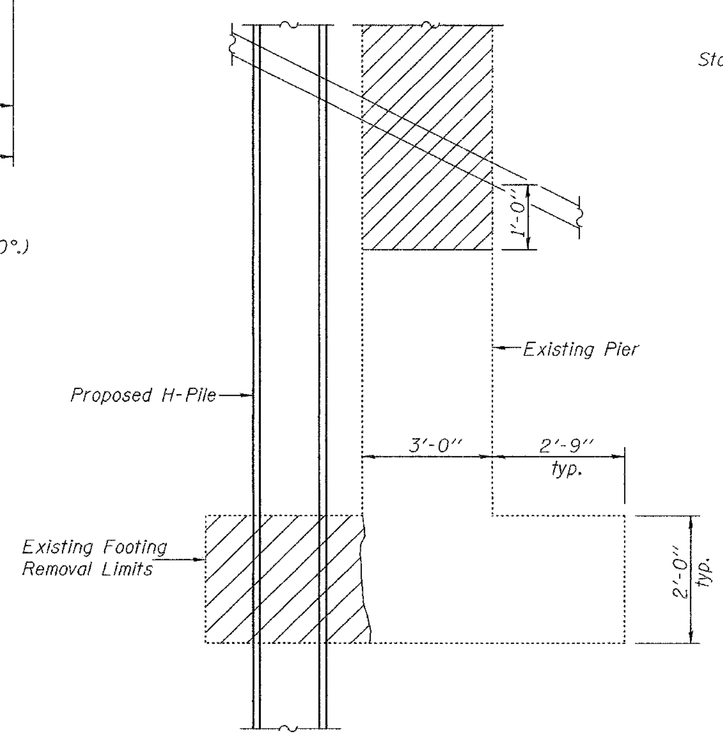
Contract #98950



TEMPORARY SHEET PILING

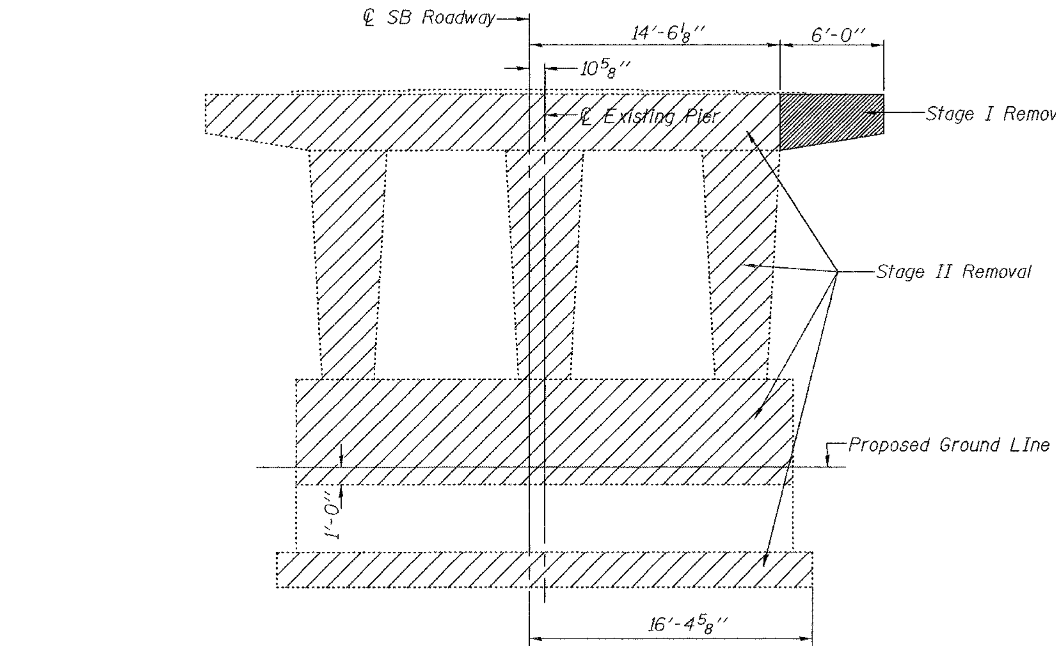
(N. Abutment locations shown, S. Abutment similar except rotated 180°.)

Note:
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.



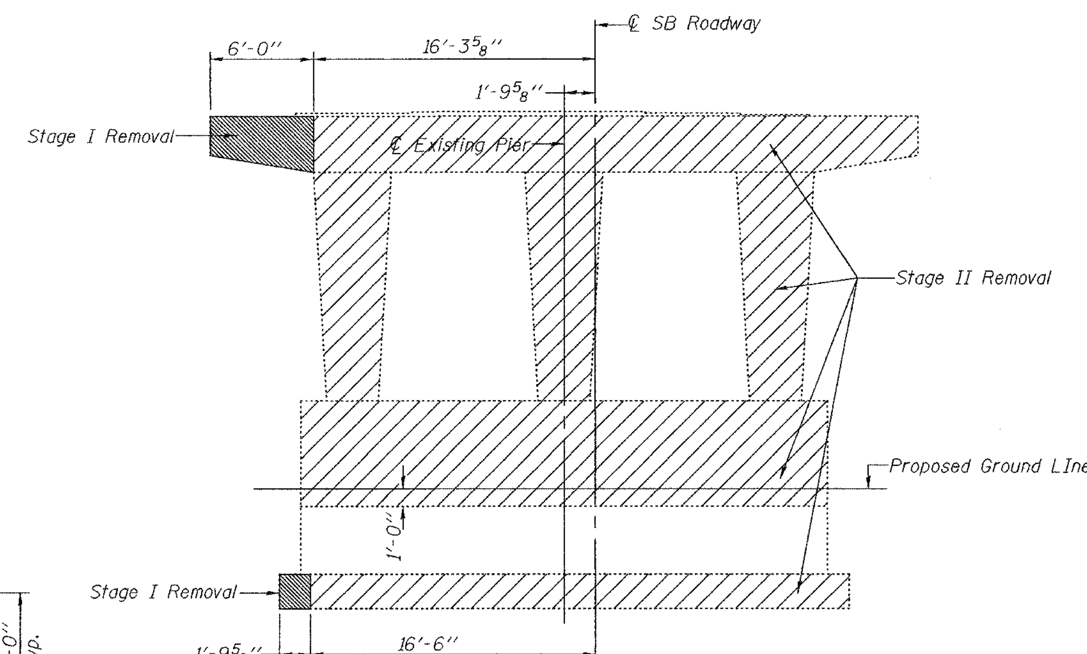
EXISTING PIER FOOTING REMOVAL DETAIL (NB & SB PIERS)

(Pier 1 locations shown, Pier 2 similar except rotated 180°.)



PIER 1

Looking South



PIER 2

Looking North

EXISTING SB PIER REMOVAL

Removal lines for Existing NB Piers at same location as NB Deck Removal lines.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

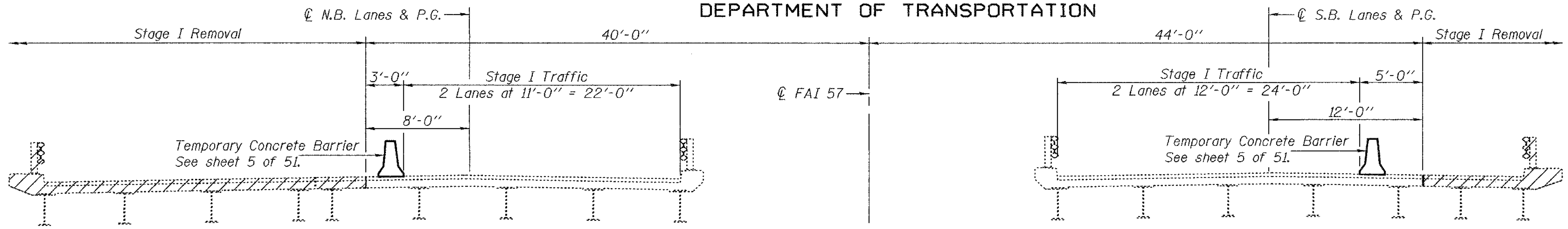
STAGE CONSTRUCTION DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

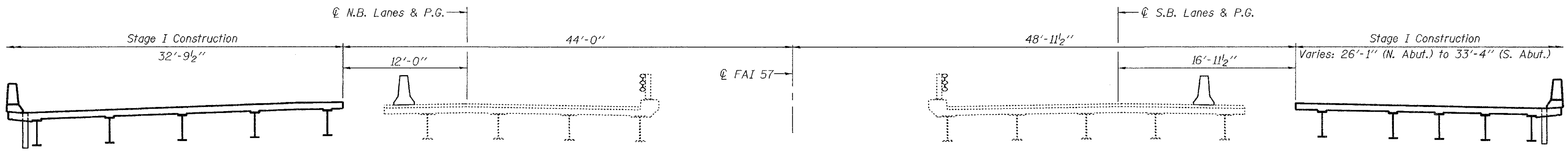
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	837
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
51 SHEETS

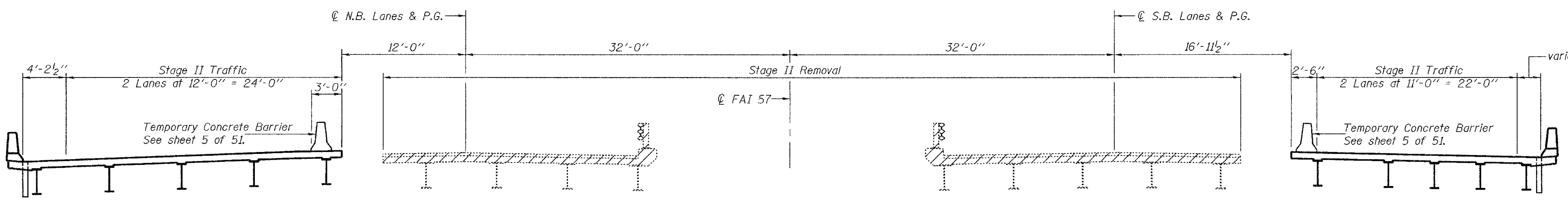
Contract #98950



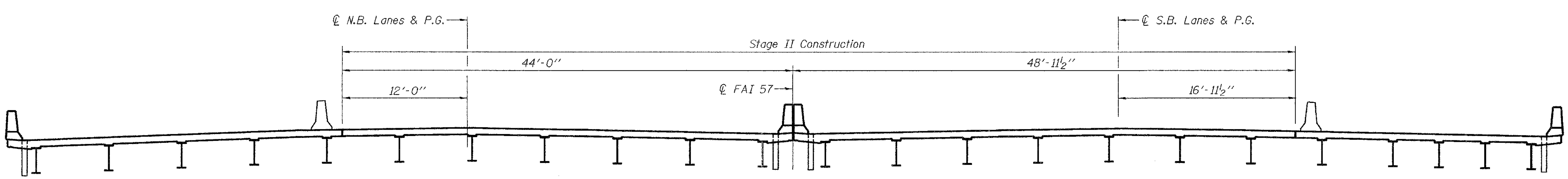
STAGE I REMOVAL



STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Notes:
All sections are looking South.
Hatched area indicates Removal of Existing Structures No. 3 or No. 4.

STAGE CONSTRUCTION DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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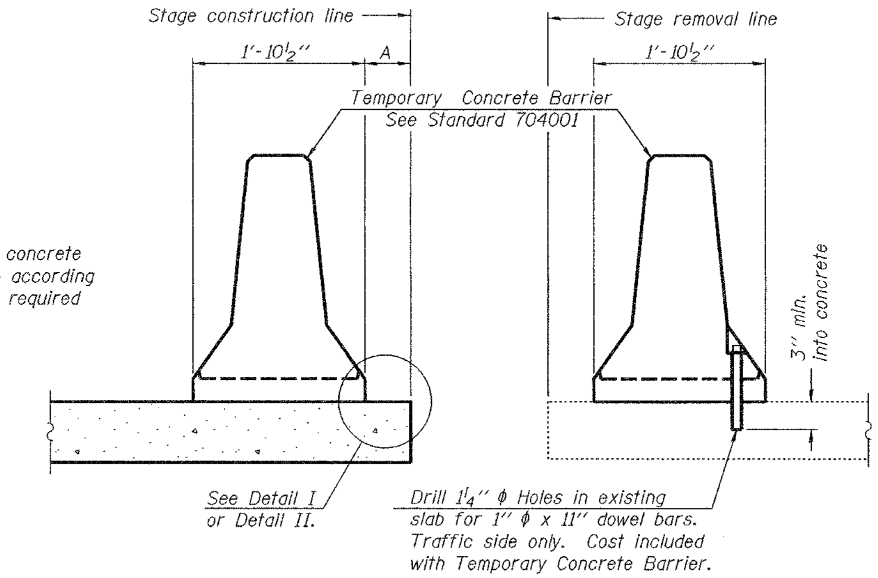
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	838
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB

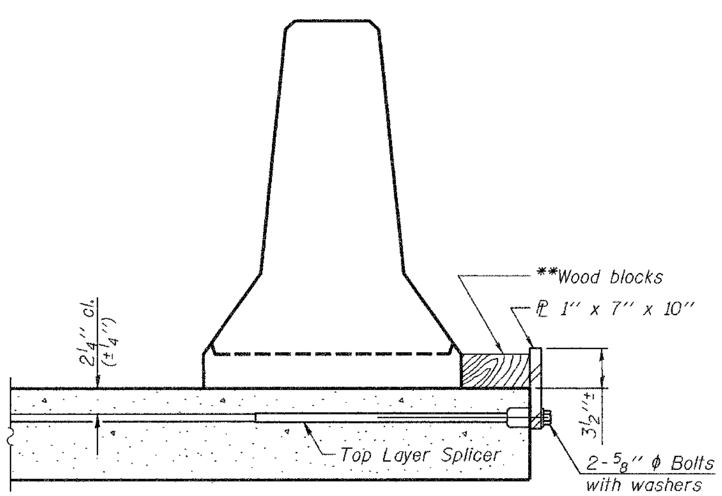
NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

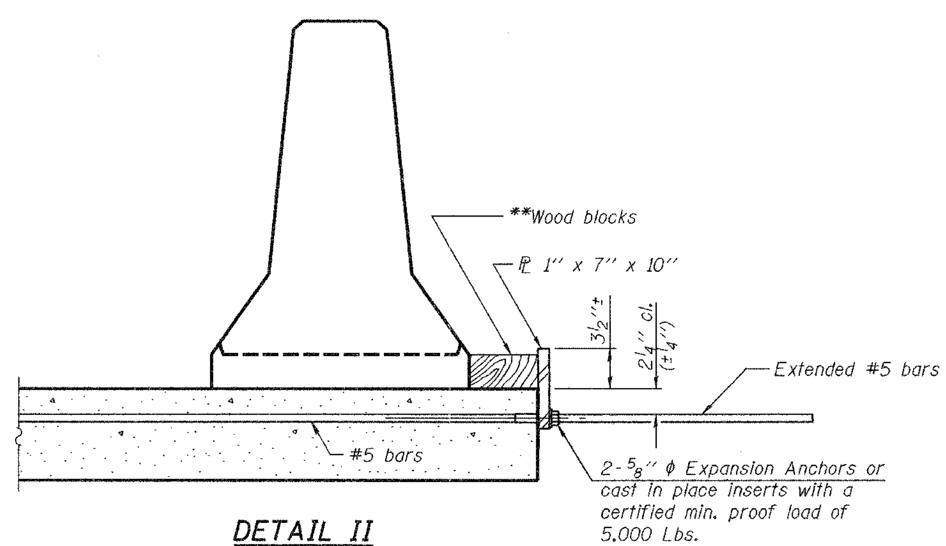
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel ℙ to the concrete slab with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

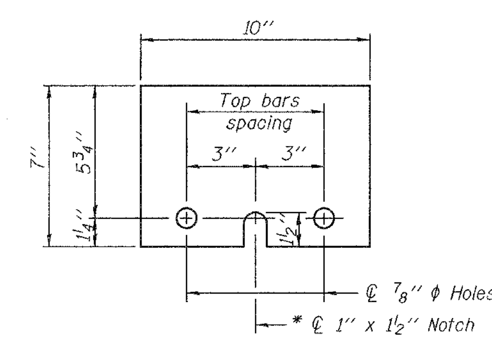
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x 10"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

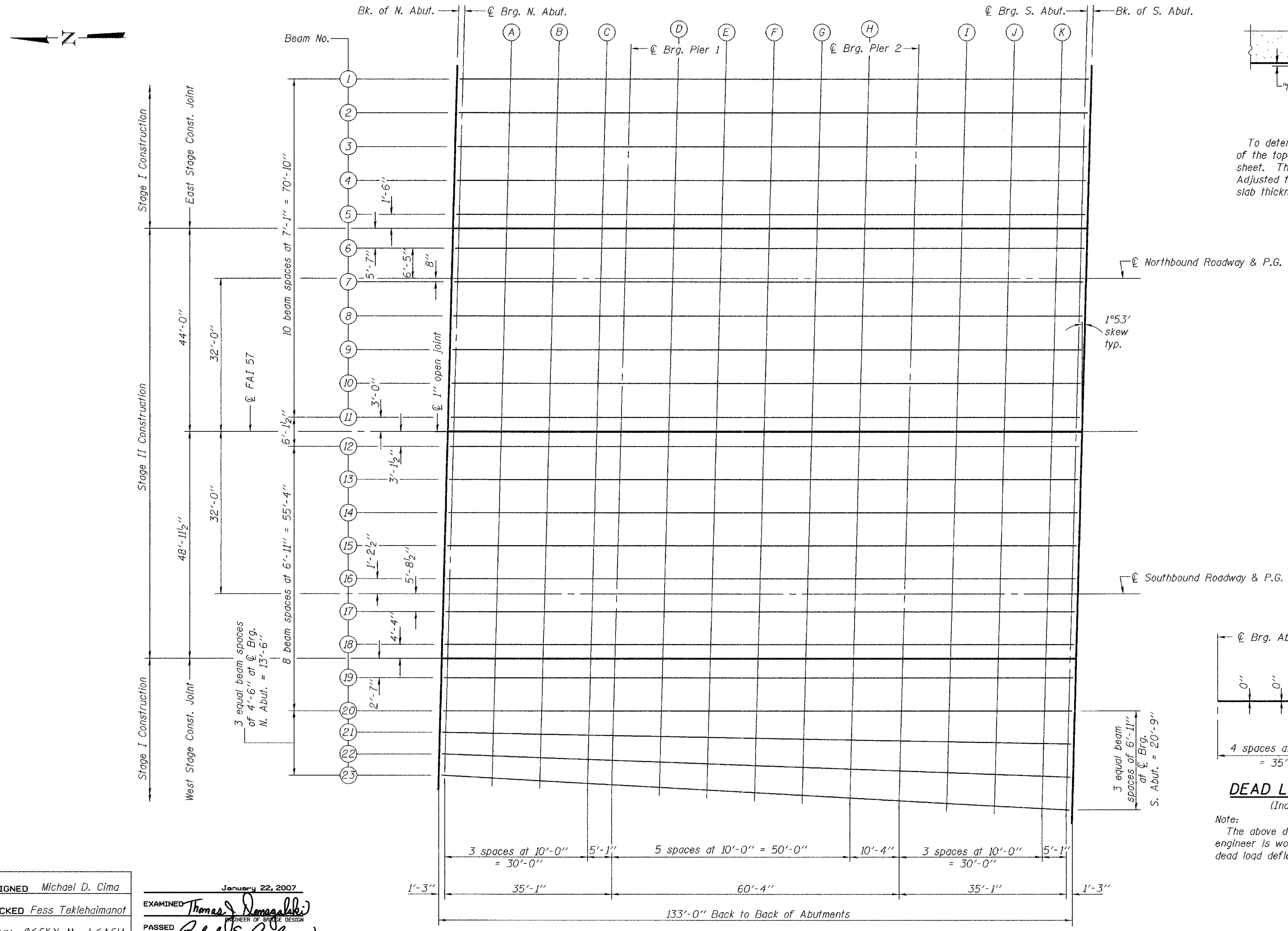
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

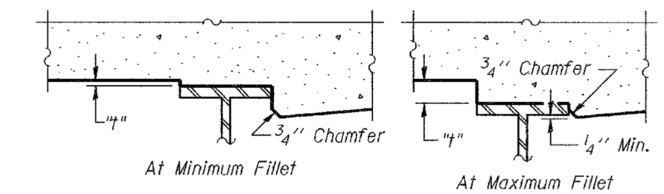
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	839
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 6
51 SHEETS

Contract #98950

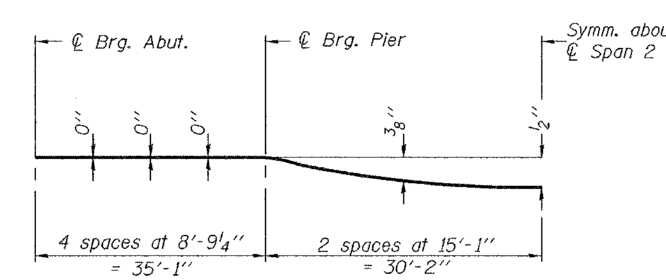


PLAN



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 11 of 51, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

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 sheets 7 thru 11 of 51.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	840
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 7
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151594.49	-41.833	465.23	465.23
℄ Brg. N. Abut.	151595.74	-41.833	465.24	465.24
A	151605.74	-41.833	465.30	465.30
B	151615.74	-41.833	465.36	465.36
C	151625.74	-41.833	465.42	465.42
℄ Brg. Pier 1	151630.82	-41.833	465.45	465.45
D	151640.82	-41.833	465.51	465.53
E	151650.82	-41.833	465.58	465.61
F	151660.82	-41.833	465.63	465.68
G	151670.82	-41.833	465.70	465.73
H	151680.82	-41.833	465.76	465.78
℄ Brg. Pier 2	151691.15	-41.833	465.82	465.82
I	151701.15	-41.833	465.88	465.88
J	151711.15	-41.833	465.94	465.94
K	151721.15	-41.833	466.00	466.00
℄ Brg. S. Abut.	151726.24	-41.833	466.03	466.03
Bk. S. Abut.	151727.49	-41.833	466.04	466.04

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151594.25	-34.75	465.61	465.61
℄ Brg. N. Abut.	151595.50	-34.75	465.62	465.62
A	151605.50	-34.75	465.68	465.68
B	151615.50	-34.75	465.75	465.75
C	151625.50	-34.75	465.80	465.80
℄ Brg. Pier 1	151630.59	-34.75	465.84	465.84
D	151640.59	-34.75	465.89	465.91
E	151650.59	-34.75	465.96	465.99
F	151660.59	-34.75	466.02	466.07
G	151670.59	-34.75	466.08	466.11
H	151680.59	-34.75	466.14	466.16
℄ Brg. Pier 2	151690.92	-34.75	466.21	466.21
I	151700.92	-34.75	466.26	466.26
J	151710.92	-34.75	466.32	466.32
K	151720.92	-34.75	466.39	466.39
℄ Brg. S. Abut.	151726.00	-34.75	466.41	466.41
Bk. S. Abut.	151727.25	-34.75	466.42	466.42

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151594.02	-27.67	465.99	465.99
℄ Brg. N. Abut.	151595.27	-27.67	466.00	466.00
A	151605.27	-27.67	466.06	466.06
B	151615.27	-27.67	466.13	466.13
C	151625.27	-27.67	466.18	466.18
℄ Brg. Pier 1	151630.35	-27.67	466.22	466.22
D	151640.35	-27.67	466.27	466.29
E	151650.35	-27.67	466.34	466.37
F	151660.35	-27.67	466.40	466.45
G	151670.35	-27.67	466.46	466.49
H	151680.35	-27.67	466.52	466.54
℄ Brg. Pier 2	151690.69	-27.67	466.59	466.59
I	151700.69	-27.67	466.64	466.64
J	151710.69	-27.67	466.70	466.70
K	151720.69	-27.67	466.77	466.77
℄ Brg. S. Abut.	151725.77	-27.67	466.79	466.79
Bk. S. Abut.	151727.02	-27.67	466.80	466.80

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.79	-20.58	466.37	466.37
℄ Brg. N. Abut.	151595.04	-20.58	466.38	466.38
A	151605.04	-20.58	466.44	466.44
B	151615.04	-20.58	466.51	466.51
C	151625.04	-20.58	466.56	466.56
℄ Brg. Pier 1	151630.12	-20.58	466.60	466.60
D	151640.12	-20.58	466.65	466.67
E	151650.12	-20.58	466.72	466.75
F	151660.12	-20.58	466.78	466.83
G	151670.12	-20.58	466.84	466.87
H	151680.12	-20.58	466.90	466.92
℄ Brg. Pier 2	151690.45	-20.58	466.97	466.97
I	151700.45	-20.58	467.02	467.02
J	151710.45	-20.58	467.08	467.08
K	151720.45	-20.58	467.15	467.15
℄ Brg. S. Abut.	151725.54	-20.58	467.17	467.17
Bk. S. Abut.	151726.79	-20.58	467.18	467.18

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.55	-13.50	466.66	466.66
℄ Brg. N. Abut.	151594.80	-13.50	466.66	466.66
A	151604.80	-13.50	466.72	466.72
B	151614.80	-13.50	466.77	466.77
C	151624.80	-13.50	466.83	466.82
℄ Brg. Pier 1	151629.89	-13.50	466.85	466.85
D	151639.89	-13.50	466.91	466.93
E	151649.89	-13.50	466.96	467.00
F	151659.89	-13.50	467.02	467.06
G	151669.89	-13.50	467.07	467.10
H	151679.89	-13.50	467.12	467.14
℄ Brg. Pier 2	151690.22	-13.50	467.18	467.18
I	151700.22	-13.50	467.23	467.23
J	151710.22	-13.50	467.29	467.29
K	151720.22	-13.50	467.34	467.34
℄ Brg. S. Abut.	151725.30	-13.50	467.37	467.37
Bk. S. Abut.	151726.55	-13.50	467.38	467.38

EAST STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.50	-12.00	466.69	466.69
℄ Brg. N. Abut.	151594.75	-12.00	466.69	466.69
A	151604.75	-12.00	466.75	466.75
B	151614.75	-12.00	466.80	466.80
C	151624.75	-12.00	466.86	466.85
℄ Brg. Pier 1	151629.84	-12.00	466.88	466.88
D	151639.84	-12.00	466.94	466.96
E	151649.84	-12.00	466.99	467.03
F	151659.84	-12.00	467.05	467.09
G	151669.84	-12.00	467.10	467.14
H	151679.84	-12.00	467.15	467.17
℄ Brg. Pier 2	151690.17	-12.00	467.21	467.21
I	151700.17	-12.00	467.26	467.26
J	151710.17	-12.00	467.32	467.32
K	151720.17	-12.00	467.37	467.37
℄ Brg. S. Abut.	151725.25	-12.00	467.40	467.40
Bk. S. Abut.	151726.50	-12.00	467.41	467.41

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	841
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8
51 SHEETS

Contract #98950

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.32	-6.42	466.77	466.77
℄ Brg. N. Abut.	151594.57	-6.42	466.78	466.78
A	151604.57	-6.42	466.83	466.84
B	151614.57	-6.42	466.89	466.89
C	151624.57	-6.42	466.94	466.94
℄ Brg. Pier 1	151629.65	-6.42	466.97	466.97
D	151639.65	-6.42	467.02	467.04
E	151649.65	-6.42	467.08	467.11
F	151659.65	-6.42	467.13	467.18
G	151669.65	-6.42	467.19	467.22
H	151679.65	-6.42	467.24	467.26
℄ Brg. Pier 2	151689.99	-6.42	467.30	467.30
I	151699.99	-6.42	467.35	467.35
J	151709.99	-6.42	467.40	467.40
K	151719.99	-6.42	467.46	467.46
℄ Brg. S. Abut.	151725.07	-6.42	467.49	467.49
Bk. S. Abut.	151726.32	-6.42	467.49	467.49

℄ NORTHBOUND ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.11	0.00	466.87	466.87
℄ Brg. N. Abut.	151594.36	0.00	466.88	466.88
A	151604.36	0.00	466.93	466.93
B	151614.36	0.00	466.99	466.99
C	151624.36	0.00	467.04	467.04
℄ Brg. Pier 1	151629.44	0.00	467.07	467.07
D	151639.44	0.00	467.12	467.14
E	151649.44	0.00	467.18	467.21
F	151659.44	0.00	467.23	467.28
G	151669.44	0.00	467.29	467.32
H	151679.44	0.00	467.34	467.36
℄ Brg. Pier 2	151689.78	0.00	467.40	467.40
I	151699.78	0.00	467.45	467.45
J	151709.78	0.00	467.50	467.50
K	151719.78	0.00	467.56	467.56
℄ Brg. S. Abut.	151724.86	0.00	467.58	467.58
Bk. S. Abut.	151726.11	0.00	467.59	467.59

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151593.09	0.67	466.86	466.86
℄ Brg. N. Abut.	151594.34	0.67	466.87	466.87
A	151604.34	0.67	466.92	466.92
B	151614.34	0.67	466.98	466.98
C	151624.34	0.67	467.03	467.03
℄ Brg. Pier 1	151629.42	0.67	467.06	467.06
D	151639.42	0.67	467.11	467.13
E	151649.42	0.67	467.17	467.20
F	151659.42	0.67	467.22	467.27
G	151669.42	0.67	467.27	467.31
H	151679.42	0.67	467.33	467.35
℄ Brg. Pier 2	151689.75	0.67	467.38	467.38
I	151699.75	0.67	467.44	467.44
J	151709.75	0.67	467.49	467.49
K	151719.75	0.67	467.55	467.55
℄ Brg. S. Abut.	151724.84	0.67	467.57	467.57
Bk. S. Abut.	151726.09	0.67	467.58	467.58

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151592.86	7.75	466.75	466.75
℄ Brg. N. Abut.	151594.11	7.75	466.76	466.76
A	151604.11	7.75	466.81	466.81
B	151614.11	7.75	466.87	466.86
C	151624.11	7.75	466.92	466.92
℄ Brg. Pier 1	151629.19	7.75	466.95	466.95
D	151639.19	7.75	467.00	467.02
E	151649.19	7.75	467.05	467.09
F	151659.19	7.75	467.11	467.16
G	151669.19	7.75	467.16	467.20
H	151679.19	7.75	467.22	467.24
℄ Brg. Pier 2	151689.52	7.75	467.27	467.27
I	151699.52	7.75	467.33	467.32
J	151709.52	7.75	467.38	467.38
K	151719.52	7.75	467.43	467.44
℄ Brg. S. Abut.	151724.60	7.75	467.46	467.46
Bk. S. Abut.	151725.85	7.75	467.47	467.47

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151592.62	14.83	466.62	466.62
℄ Brg. N. Abut.	151593.87	14.83	466.63	466.63
A	151603.87	14.83	466.68	466.69
B	151613.87	14.83	466.74	466.74
C	151623.87	14.83	466.79	466.79
℄ Brg. Pier 1	151628.96	14.83	466.82	466.82
D	151638.96	14.83	466.87	466.89
E	151648.96	14.83	466.93	466.96
F	151658.96	14.83	466.98	467.03
G	151668.96	14.83	467.04	467.07
H	151678.96	14.83	467.09	467.11
℄ Brg. Pier 2	151689.29	14.83	467.15	467.15
I	151699.29	14.83	467.20	467.20
J	151709.29	14.83	467.25	467.25
K	151719.29	14.83	467.31	467.31
℄ Brg. S. Abut.	151724.37	14.83	467.34	467.34
Bk. S. Abut.	151725.62	14.83	467.34	467.34

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151592.39	21.92	466.48	466.48
℄ Brg. N. Abut.	151593.64	21.92	466.48	466.48
A	151603.64	21.92	466.54	466.54
B	151613.64	21.92	466.59	466.59
C	151623.64	21.92	466.64	466.64
℄ Brg. Pier 1	151628.72	21.92	466.67	466.67
D	151638.72	21.92	466.73	466.75
E	151648.72	21.92	466.78	466.82
F	151658.72	21.92	466.83	466.88
G	151668.72	21.92	466.89	466.92
H	151678.72	21.92	466.94	466.96
℄ Brg. Pier 2	151689.06	21.92	467.00	467.00
I	151699.06	21.92	467.05	467.05
J	151709.06	21.92	467.11	467.11
K	151719.06	21.92	467.16	467.16
℄ Brg. S. Abut.	151724.14	21.92	467.19	467.19
Bk. S. Abut.	151725.39	21.92	467.19	467.19

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	842
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 9
51 SHEETS

Contract #98950

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151592.16	29.00	466.33	466.33
℄ Brg. N. Abut.	151593.41	29.00	466.33	466.33
A	151603.41	29.00	466.39	466.39
B	151613.41	29.00	466.44	466.44
C	151623.41	29.00	466.50	466.49
℄ Brg. Pier 1	151628.49	29.00	466.52	466.52
D	151638.49	29.00	466.58	466.60
E	151648.49	29.00	466.63	466.67
F	151658.49	29.00	466.69	466.73
G	151668.49	29.00	466.74	466.77
H	151678.49	29.00	466.79	466.81
℄ Brg. Pier 2	151688.82	29.00	466.85	466.85
I	151698.82	29.00	466.90	466.90
J	151708.82	29.00	466.96	466.96
K	151718.82	29.00	467.01	467.01
℄ Brg. S. Abut.	151723.91	29.00	467.04	467.04
Bk. S. Abut.	151725.16	29.00	467.05	467.05

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.96	-28.88	466.33	466.33
℄ Brg. N. Abut.	151593.21	-28.88	466.34	466.34
A	151603.21	-28.88	466.39	466.39
B	151613.21	-28.88	466.44	466.44
C	151623.21	-28.88	466.50	466.50
℄ Brg. Pier 1	151628.29	-28.88	466.52	466.52
D	151638.29	-28.88	466.58	466.60
E	151648.29	-28.88	466.63	466.67
F	151658.29	-28.88	466.69	466.73
G	151668.29	-28.88	466.74	466.78
H	151678.29	-28.88	466.79	466.82
℄ Brg. Pier 2	151688.63	-28.88	466.85	466.85
I	151698.63	-28.88	466.90	466.90
J	151708.63	-28.88	466.96	466.96
K	151718.63	-28.88	467.01	467.01
℄ Brg. S. Abut.	151723.71	-28.88	467.04	467.04
Bk. S. Abut.	151724.96	-28.88	467.05	467.05

BEAM 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.73	-21.96	466.47	466.47
℄ Brg. N. Abut.	151592.98	-21.96	466.48	466.48
A	151602.98	-21.96	466.53	466.53
B	151612.98	-21.96	466.59	466.58
C	151622.98	-21.96	466.64	466.64
℄ Brg. Pier 1	151628.07	-21.96	466.67	466.67
D	151638.07	-21.96	466.72	466.74
E	151648.07	-21.96	466.78	466.81
F	151658.07	-21.96	466.83	466.88
G	151668.07	-21.96	466.88	466.92
H	151678.07	-21.96	466.94	466.96
℄ Brg. Pier 2	151688.40	-21.96	466.99	466.99
I	151698.40	-21.96	467.05	467.04
J	151708.40	-21.96	467.10	467.10
K	151718.40	-21.96	467.16	467.16
℄ Brg. S. Abut.	151723.48	-21.96	467.18	467.18
Bk. S. Abut.	151724.73	-21.96	467.19	467.19

BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.50	-15.04	466.61	466.61
℄ Brg. N. Abut.	151592.75	-15.04	466.62	466.62
A	151602.75	-15.04	466.67	466.68
B	151612.75	-15.04	466.73	466.73
C	151622.75	-15.04	466.78	466.78
℄ Brg. Pier 1	151627.84	-15.04	466.81	466.81
D	151637.84	-15.04	466.86	466.88
E	151647.84	-15.04	466.92	466.95
F	151657.84	-15.04	466.97	467.02
G	151667.84	-15.04	467.03	467.06
H	151677.84	-15.04	467.08	467.10
℄ Brg. Pier 2	151688.17	-15.04	467.14	467.14
I	151698.17	-15.04	467.19	467.19
J	151708.17	-15.04	467.24	467.24
K	151718.17	-15.04	467.30	467.30
℄ Brg. S. Abut.	151723.25	-15.04	467.33	467.33
Bk. S. Abut.	151724.50	-15.04	467.33	467.33

BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.28	-8.12	466.74	466.74
℄ Brg. N. Abut.	151592.53	-8.12	466.74	466.74
A	151602.53	-8.12	466.80	466.80
B	151612.53	-8.12	466.85	466.85
C	151622.53	-8.12	466.91	466.90
℄ Brg. Pier 1	151627.61	-8.12	466.93	466.93
D	151637.61	-8.12	466.99	467.01
E	151647.61	-8.12	467.04	467.08
F	151657.61	-8.12	467.09	467.14
G	151667.61	-8.12	467.15	467.18
H	151677.61	-8.12	467.20	467.22
℄ Brg. Pier 2	151687.94	-8.12	467.26	467.26
I	151697.94	-8.12	467.31	467.31
J	151707.94	-8.12	467.37	467.37
K	151717.94	-8.12	467.42	467.42
℄ Brg. S. Abut.	151723.03	-8.12	467.45	467.45
Bk. S. Abut.	151724.28	-8.12	467.45	467.45

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.05	-1.21	466.84	466.84
℄ Brg. N. Abut.	151592.30	-1.21	466.85	466.85
A	151602.30	-1.21	466.90	466.90
B	151612.30	-1.21	466.96	466.96
C	151622.30	-1.21	467.01	467.01
℄ Brg. Pier 1	151627.38	-1.21	467.04	467.04
D	151637.38	-1.21	467.09	467.11
E	151647.38	-1.21	467.15	467.18
F	151657.38	-1.21	467.20	467.25
G	151667.38	-1.21	467.26	467.29
H	151677.38	-1.21	467.31	467.33
℄ Brg. Pier 2	151687.72	-1.21	467.37	467.37
I	151697.72	-1.21	467.42	467.42
J	151707.72	-1.21	467.47	467.47
K	151717.72	-1.21	467.53	467.53
℄ Brg. S. Abut.	151722.80	-1.21	467.55	467.55
Bk. S. Abut.	151724.05	-1.21	467.56	467.56

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
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ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	843
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

℄ SOUTHBOUND ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151591.01	0.00	466.86	466.86
℄ Brg. N. Abut.	151592.26	0.00	466.87	466.87
A	151602.26	0.00	466.92	466.92
B	151612.26	0.00	466.98	466.98
C	151622.26	0.00	467.03	467.03
℄ Brg. Pier 1	151627.34	0.00	467.06	467.06
D	151637.34	0.00	467.11	467.13
E	151647.34	0.00	467.17	467.20
F	151657.34	0.00	467.22	467.27
G	151667.34	0.00	467.27	467.31
H	151677.34	0.00	467.33	467.35
℄ Brg. Pier 2	151687.68	0.00	467.38	467.38
I	151697.68	0.00	467.44	467.43
J	151707.68	0.00	467.49	467.49
K	151717.68	0.00	467.55	467.55
℄ Brg. S. Abut.	151722.76	0.00	467.57	467.57
Bk. S. Abut.	151724.01	0.00	467.58	467.58

BEAM 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151590.82	5.71	466.77	466.77
℄ Brg. N. Abut.	151592.07	5.71	466.78	466.78
A	151602.07	5.71	466.83	466.83
B	151612.07	5.71	466.89	466.89
C	151622.07	5.71	466.94	466.94
℄ Brg. Pier 1	151627.16	5.71	466.97	466.97
D	151637.16	5.71	467.02	467.04
E	151647.16	5.71	467.08	467.11
F	151657.16	5.71	467.13	467.18
G	151667.16	5.71	467.18	467.22
H	151677.16	5.71	467.24	467.26
℄ Brg. Pier 2	151687.49	5.71	467.29	467.29
I	151697.49	5.71	467.35	467.34
J	151707.49	5.71	467.40	467.40
K	151717.49	5.71	467.46	467.46
℄ Brg. S. Abut.	151722.57	5.71	467.48	467.48
Bk. S. Abut.	151723.82	5.71	467.49	467.49

BEAM 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151590.59	12.63	466.66	466.66
℄ Brg. N. Abut.	151591.84	12.63	466.67	466.67
A	151601.84	12.63	466.72	466.72
B	151611.84	12.63	466.77	466.77
C	151621.84	12.63	466.83	466.83
℄ Brg. Pier 1	151626.93	12.63	466.86	466.86
D	151636.93	12.63	466.91	466.93
E	151646.93	12.63	466.96	467.00
F	151656.93	12.63	467.02	467.06
G	151666.93	12.63	467.07	467.11
H	151676.93	12.63	467.13	467.15
℄ Brg. Pier 2	151687.26	12.63	467.18	467.18
I	151697.26	12.63	467.24	467.23
J	151707.26	12.63	467.29	467.29
K	151717.26	12.63	467.34	467.34
℄ Brg. S. Abut.	151722.34	12.63	467.37	467.37
Bk. S. Abut.	151723.59	12.63	467.38	467.38

WEST STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151590.45	16.96	466.57	466.57
℄ Brg. N. Abut.	151591.70	16.96	466.57	466.57
A	151601.70	16.96	466.63	466.63
B	151611.70	16.96	466.68	466.68
C	151621.70	16.96	466.74	466.74
℄ Brg. Pier 1	151626.79	16.96	466.76	466.76
D	151636.79	16.96	466.82	466.84
E	151646.79	16.96	466.87	466.91
F	151656.79	16.96	466.93	466.97
G	151666.79	16.96	466.98	467.02
H	151676.79	16.96	467.03	467.05
℄ Brg. Pier 2	151687.12	16.96	467.09	467.09
I	151697.12	16.96	467.14	467.14
J	151707.12	16.96	467.20	467.20
K	151717.12	16.96	467.25	467.25
℄ Brg. S. Abut.	151722.20	16.96	467.28	467.28
Bk. S. Abut.	151723.45	16.96	467.29	467.29

BEAM 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151590.37	19.54	466.51	466.51
℄ Brg. N. Abut.	151591.62	19.54	466.52	466.52
A	151601.62	19.54	466.57	466.58
B	151611.62	19.54	466.63	466.63
C	151621.62	19.54	466.68	466.68
℄ Brg. Pier 1	151626.70	19.54	466.71	466.71
D	151636.70	19.54	466.76	466.78
E	151646.70	19.54	466.82	466.85
F	151656.70	19.54	466.87	466.92
G	151666.70	19.54	466.93	466.96
H	151676.70	19.54	466.98	467.00
℄ Brg. Pier 2	151687.03	19.54	467.04	467.04
I	151697.03	19.54	467.09	467.09
J	151707.03	19.54	467.14	467.14
K	151717.03	19.54	467.20	467.20
℄ Brg. S. Abut.	151722.12	19.54	467.23	467.23
Bk. S. Abut.	151723.37	19.54	467.23	467.23

BEAM 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151590.14	26.46	466.37	466.37
℄ Brg. N. Abut.	151591.39	26.46	466.38	466.38
A	151601.39	26.46	466.43	466.43
B	151611.39	26.46	466.48	466.48
C	151621.39	26.46	466.54	466.54
℄ Brg. Pier 1	151626.47	26.46	466.57	466.57
D	151636.47	26.46	466.62	466.64
E	151646.47	26.46	466.67	466.71
F	151656.47	26.46	466.73	466.77
G	151666.47	26.46	466.78	466.82
H	151676.47	26.46	466.84	466.86
℄ Brg. Pier 2	151686.81	26.46	466.89	466.89
I	151696.81	26.46	466.94	466.94
J	151706.81	26.46	467.00	467.00
K	151716.81	26.46	467.05	467.05
℄ Brg. S. Abut.	151721.89	26.46	467.08	467.08
Bk. S. Abut.	151723.14	26.46	467.09	467.09

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(XI-6-2) VB-2	WILLIAMSON	917	844
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151589.99	30.94	466.27	466.27
℄ Brg. N. Abut.	151591.24	30.96	466.28	466.28
A	151601.24	31.14	466.33	466.33
B	151611.24	31.33	466.38	466.38
C	151621.24	31.51	466.43	466.43
℄ Brg. Pier 1	151626.30	31.61	466.46	466.46
D	151636.30	31.79	466.51	466.53
E	151646.30	31.98	466.56	466.59
F	151656.30	32.16	466.61	466.66
G	151666.30	32.35	466.65	466.68
H	151676.30	32.53	466.71	466.73
℄ Brg. Pier 2	151686.60	32.72	466.76	466.76
I	151696.60	32.91	466.81	466.81
J	151706.60	33.09	466.86	466.86
K	151716.60	33.28	466.91	466.91
℄ Brg. S. Abut.	151721.66	33.38	466.93	466.93
Bk. S. Abut.	151722.91	33.40	466.94	466.94

BEAM 22

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151589.85	35.41	466.18	466.18
℄ Brg. N. Abut.	151591.10	35.46	466.19	466.19
A	151601.10	35.83	466.23	466.23
B	151611.10	36.20	466.28	466.28
C	151621.10	36.57	466.32	466.32
℄ Brg. Pier 1	151626.13	36.76	466.35	466.35
D	151636.13	37.13	466.39	466.41
E	151646.13	37.50	466.45	466.48
F	151656.13	37.87	466.49	466.54
G	151666.13	38.24	466.53	466.56
H	151676.13	38.61	466.58	466.60
℄ Brg. Pier 2	151686.39	38.99	466.63	466.63
I	151696.39	39.36	466.68	466.67
J	151706.39	39.73	466.72	466.72
K	151716.39	40.10	466.77	466.77
℄ Brg. S. Abut.	151721.43	40.29	466.79	466.79
Bk. S. Abut.	151722.68	40.34	466.80	466.80

BEAM 23

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	151589.70	39.89	466.08	466.08
℄ Brg. N. Abut.	151590.95	39.96	466.09	466.09
A	151600.95	40.51	466.13	466.13
B	151610.95	41.07	466.18	466.18
C	151620.95	41.62	466.22	466.22
℄ Brg. Pier 1	151625.97	41.90	466.24	466.24
D	151635.97	42.46	466.28	466.30
E	151645.97	43.01	466.33	466.36
F	151655.97	43.57	466.37	466.42
G	151665.97	44.13	466.41	466.44
H	151675.97	44.68	466.46	466.48
℄ Brg. Pier 2	151686.19	45.25	466.49	466.49
I	151696.19	45.80	466.54	466.54
J	151706.19	46.36	466.58	466.58
K	151716.19	46.92	466.63	466.63
℄ Brg. S. Abut.	151721.21	47.21	466.64	466.64
Bk. S. Abut.	151722.45	47.28	466.65	466.65

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.I. RT. 57 SEC. (XI-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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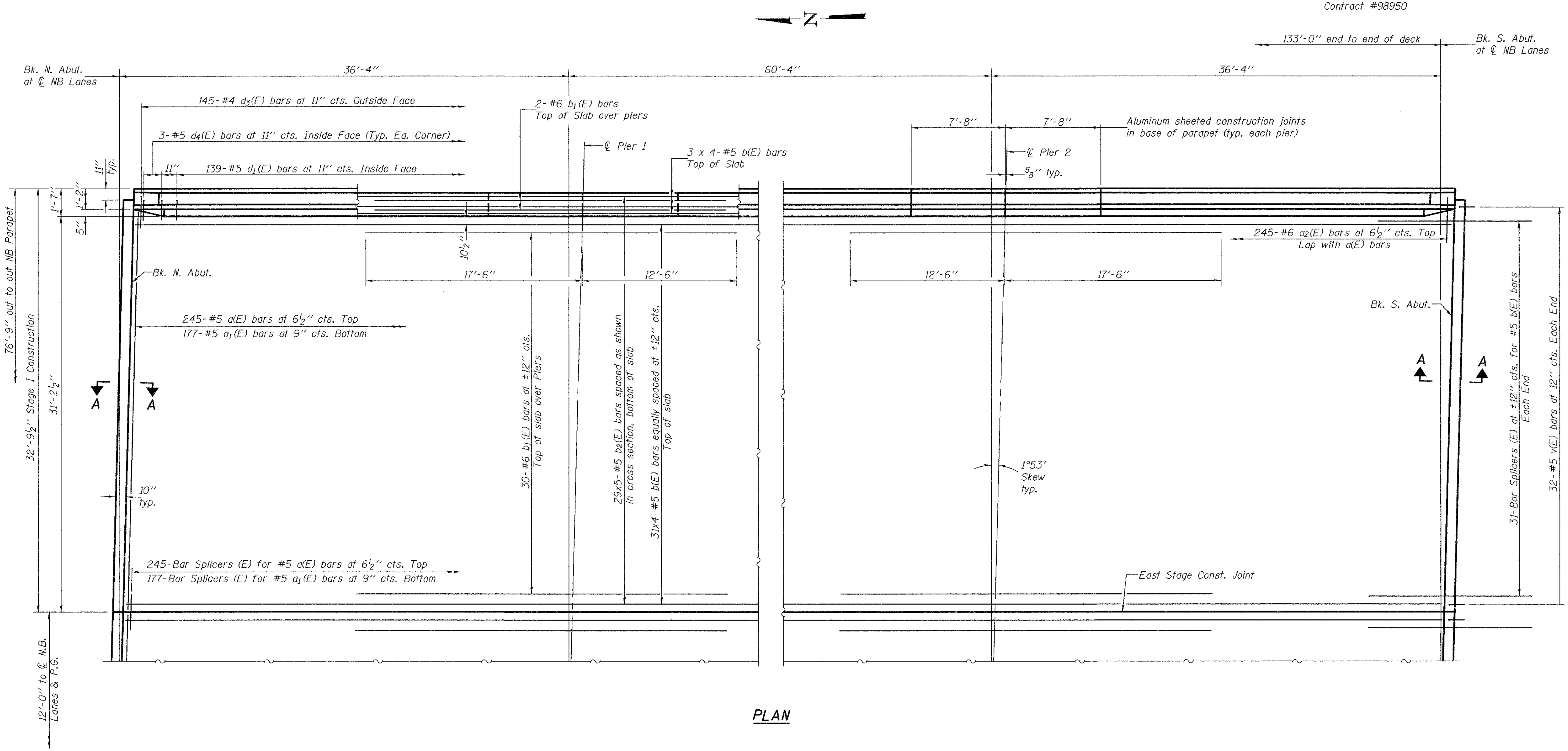
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	845

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

SHEET NO. 12
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

MIN. BAR LAP

#5 bars = 1'-8"

Notes:
See sheet 16, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 29 x 5-#5 etc. indicates 29 lines of bars with 5 lengths per line.
See sheet 18 of 51 for parapet reinforcement.
See sheet 24 of 51 for Section A-A.
See sheet 48 of 51 for Bar Splicers Details.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE (STAGE I-NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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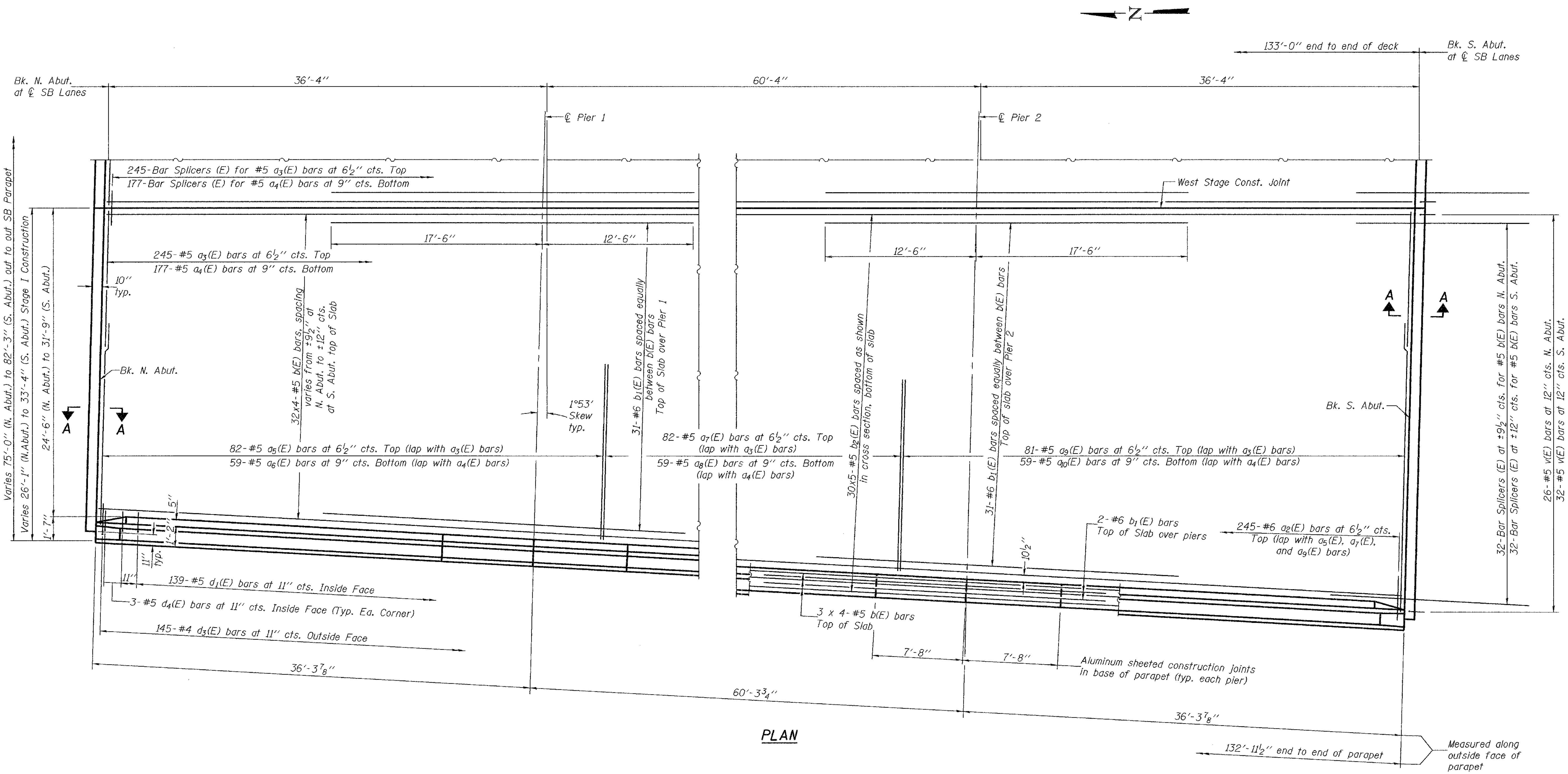
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	346
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 13
51 SHEETS

Contract #98950



PLAN

Notes:
See sheet 16, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 32 x 4-#5 etc. indicates 32 lines of bars with 4 lengths per line.
See sheet 18 of 51 for parapet reinforcement.
See sheet 24 of 51 for Section A-A.
See sheet 48 of 51 for Bar Splicers Details.

MIN. BAR LAP
#5 bars = 1'-8"

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE (STAGE I-SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

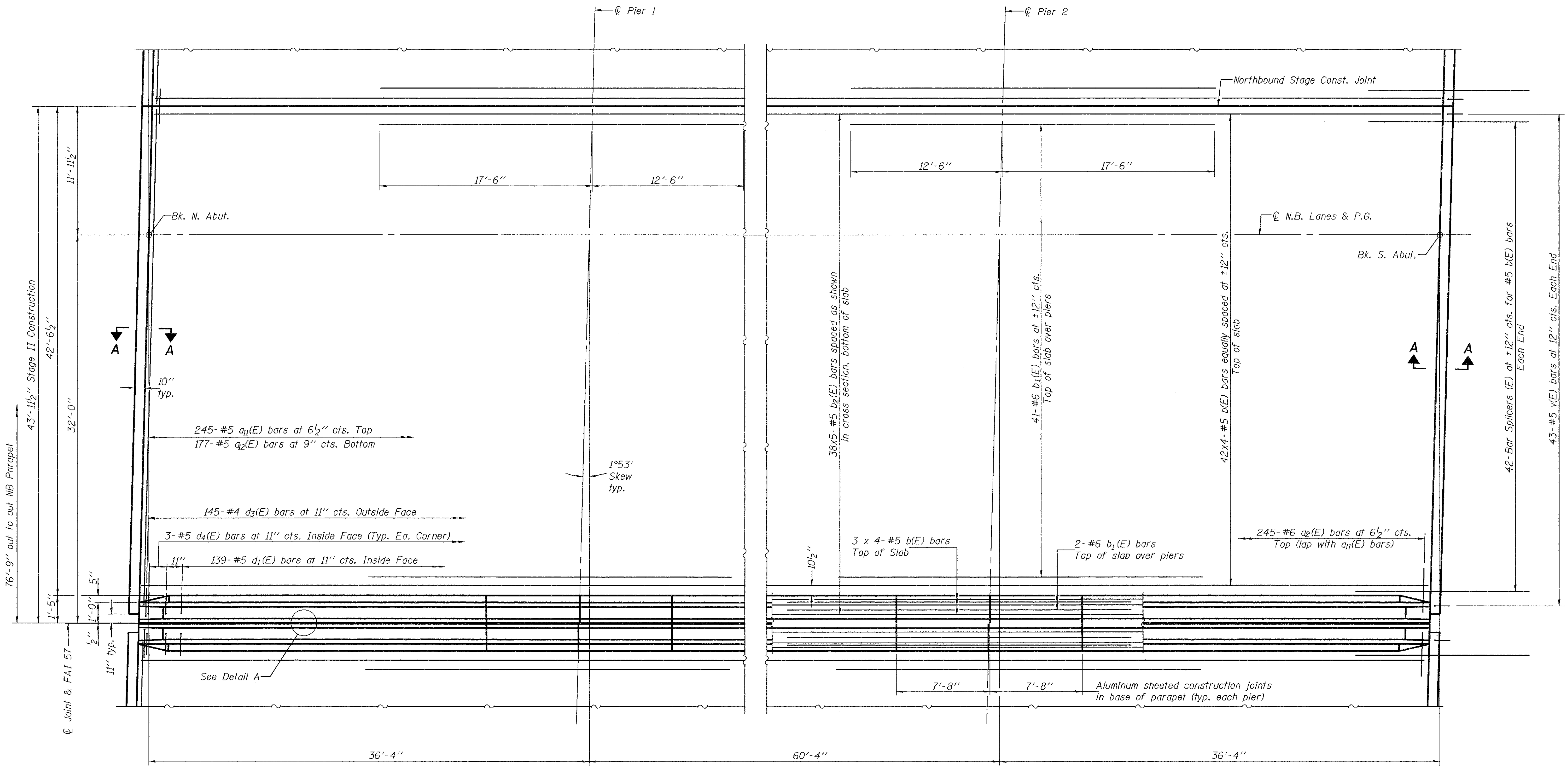
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	847
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 14
51 SHEETS

Contract #98950

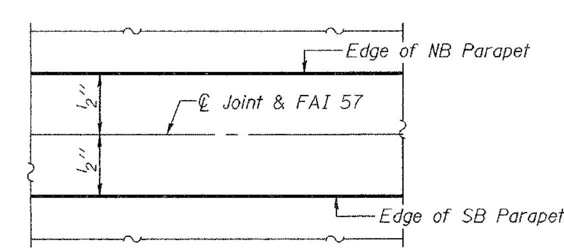
MIN. BAR LAPS

#5 bars = 1'-8"



PLAN

Notes:
See sheet 17, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 42 x 4-#5 etc. indicates 42 lines of bars with 4 lengths per line.
See sheet 18 of 51 for parapet reinforcement.
See sheet 24 of 51 for Section A-A.
See sheet 48 of 51 for Bar Splicers Details.



DETAIL A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE (STAGE II-NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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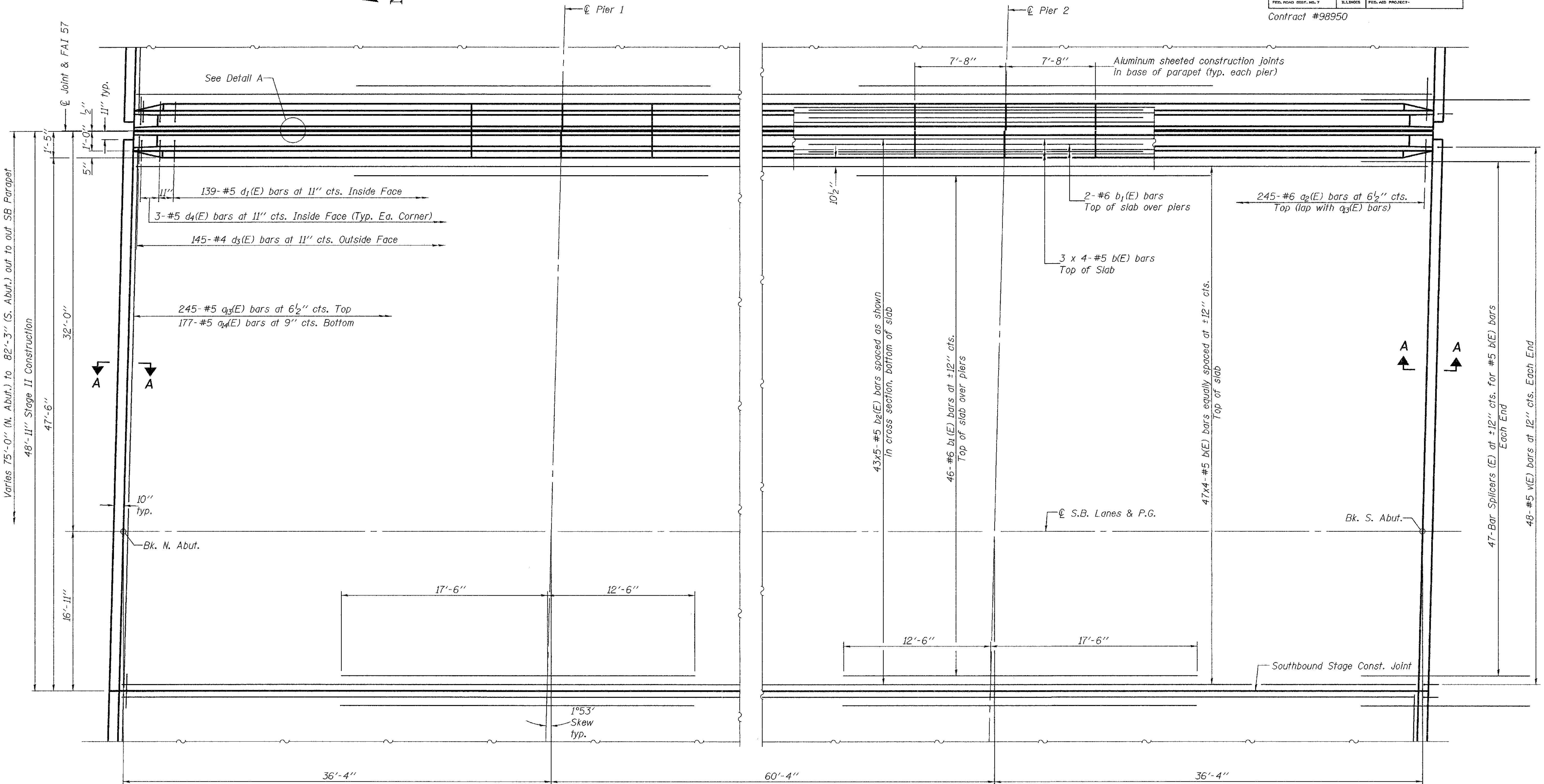
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2)VB-2	WILLIAMSON	917	848
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
51 SHEETS

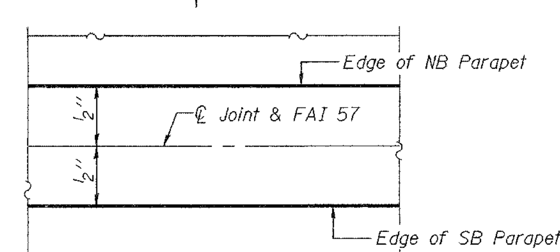
Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

MIN. BAR LAPS
#5 bars = 1'-8"



DETAIL A

Notes:
See sheet 17, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 47 x 4-#5 etc. indicates 47 lines of bars with 4 lengths per line.
See sheet 18 of 51 for parapet reinforcement.
See sheet 24 of 51 for Section A-A.
See sheet 48 of 51 for Bar Splicers Details.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

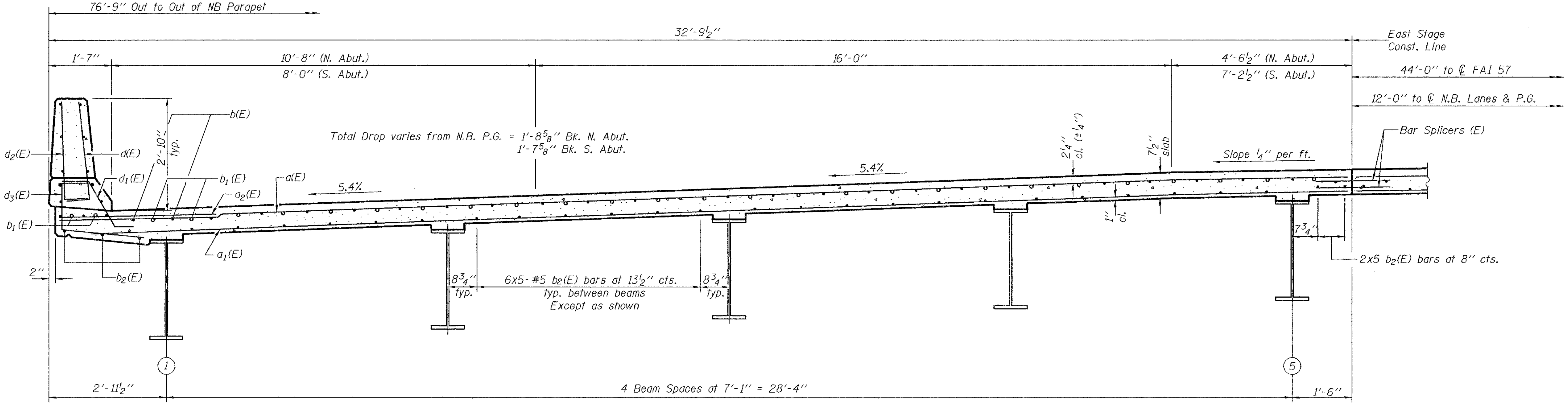
SUPERSTRUCTURE (STAGE II-SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	849
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 16
51 SHEETS

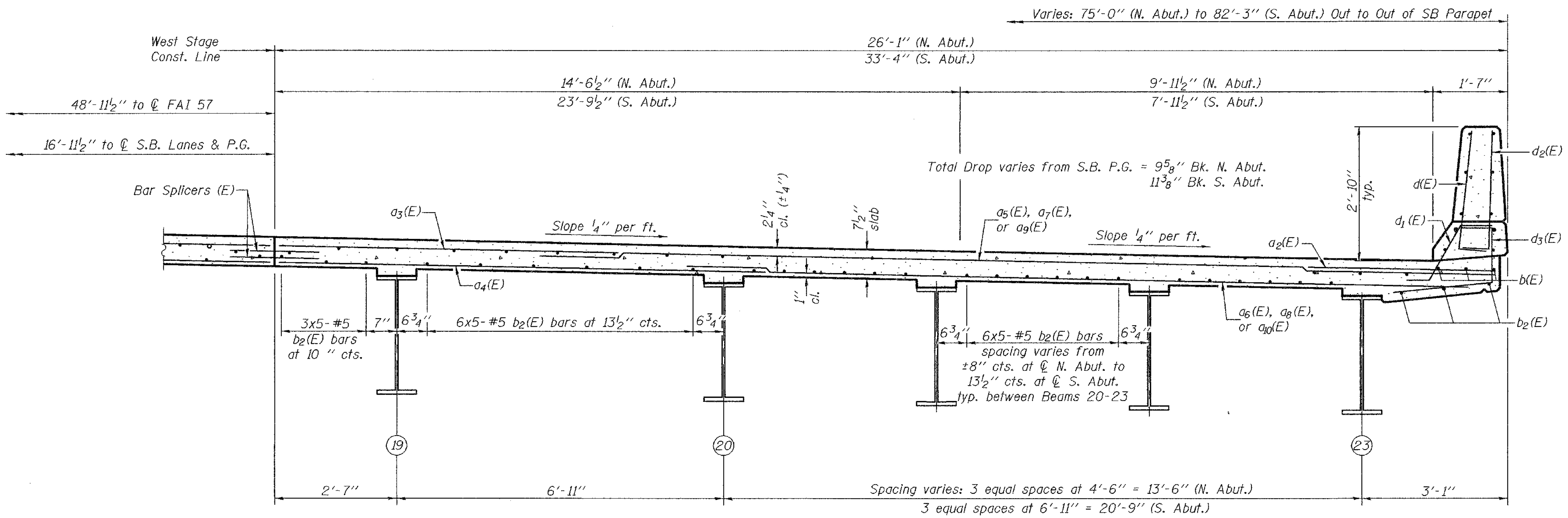
Contract #98950



CROSS SECTION - STAGE I NORTHBOUND

NEAR PIER

(Looking South)



NEAR MIDSPAN

CROSS SECTION - STAGE I SOUTHBOUND

(Looking South)

Notes:
See Sheet 12, 13, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 6 x 5-#5 etc. indicates 6 lines of bars with 5 lengths per line.
See Sheet 18 of 51 for parapet reinforcement.
See sheet 48 of 51 for Bar Splicer Details.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE (CROSS SECTIONS)
(STAGE I-NB & STAGE I SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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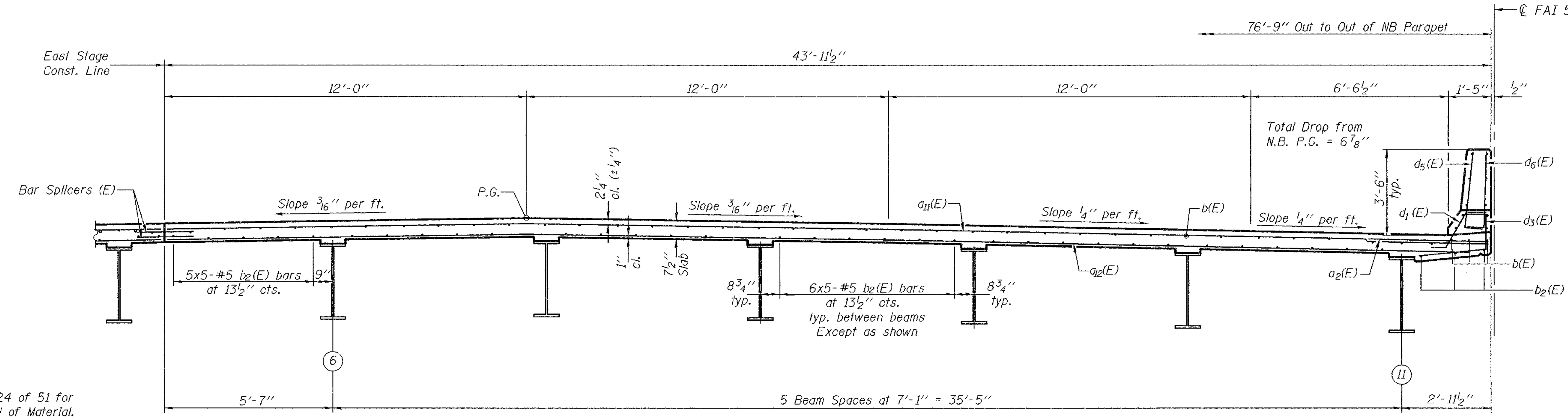
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	350
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 17
51 SHEETS

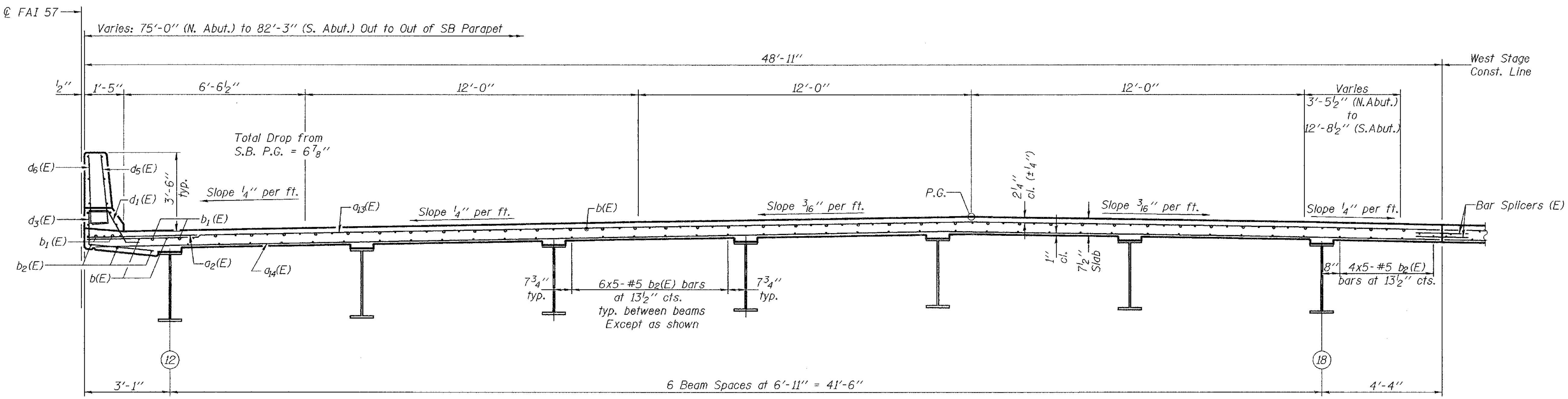
Contract #98950



Notes:
See Sheet 14, 15, 19, and 24 of 51 for superstructure details and Bill of Material.
Bars indicated thus 6 x 5-#5 etc. indicates 6 lines of bars with 5 lengths per line.
See Sheet 18 of 51 for parapet reinforcement.
See sheet 48 of 51 for Bar Splicer Details.

NEAR MIDSPAN

CROSS SECTION - STAGE II NORTHBOUND
(Looking South)



CROSS SECTION - STAGE II SOUTHBOUND
NEAR PIER
(Looking South)

SUPERSTRUCTURE (CROSS SECTIONS)
(STAGE II-NB & STAGE II SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

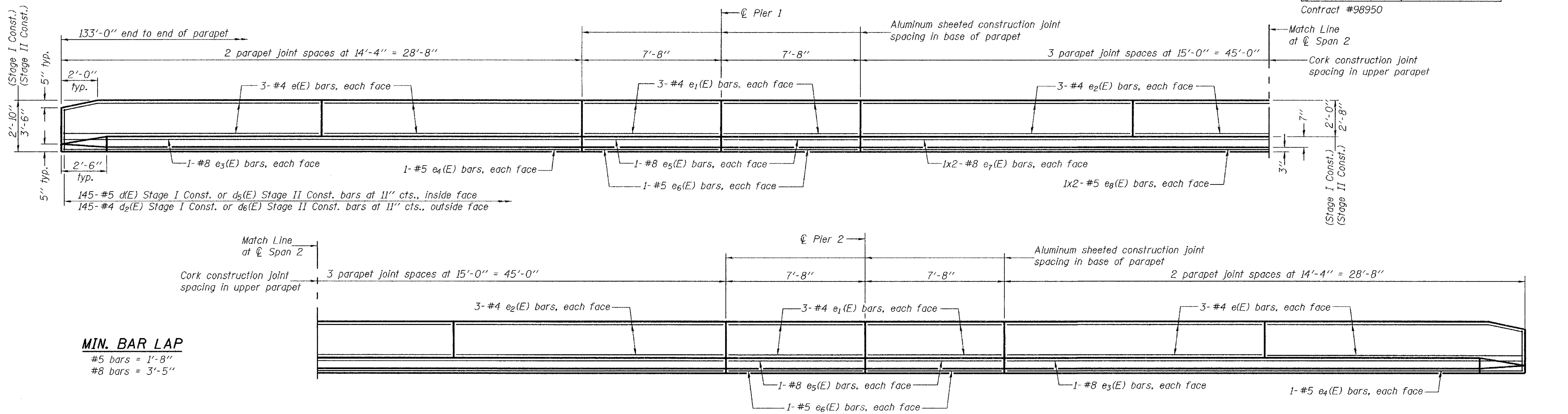
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	851

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT-

SHEET NO. 18
51 SHEETS

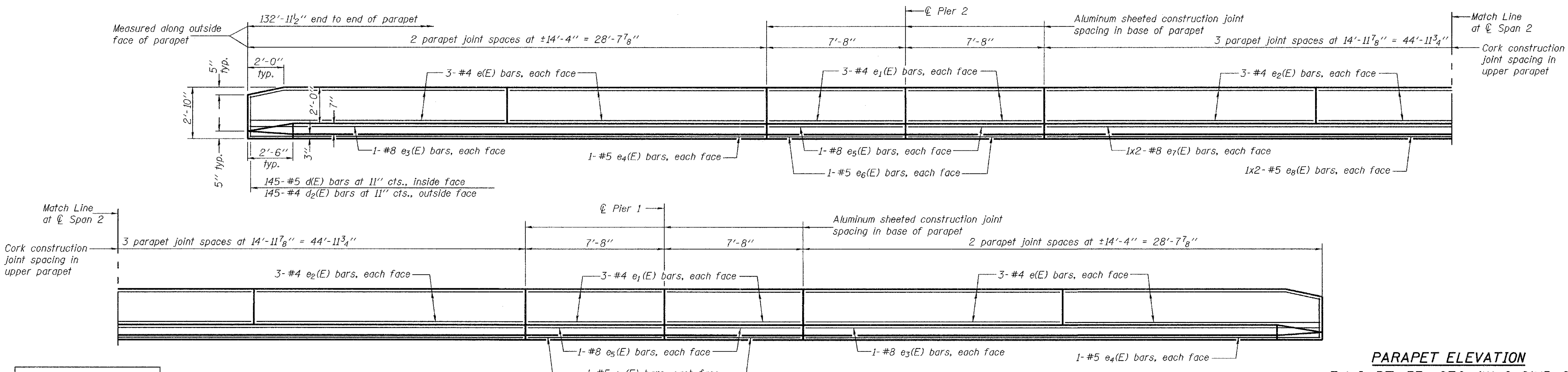
Contract #98950



MIN. BAR LAP
#5 bars = 1'-8"
#8 bars = 3'-5"

Notes:
See Sheet 19 of 51 for superstructure details and Bill of Material.
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

INSIDE ELEVATION OF PARAPET
(East Parapet of Northbound Structure shown)
(West Parapet of Northbound Structure and East Parapet of Southbound Structure both similar)



INSIDE ELEVATION OF PARAPET
(West Parapet of Southbound Structure shown)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PARAPET ELEVATION
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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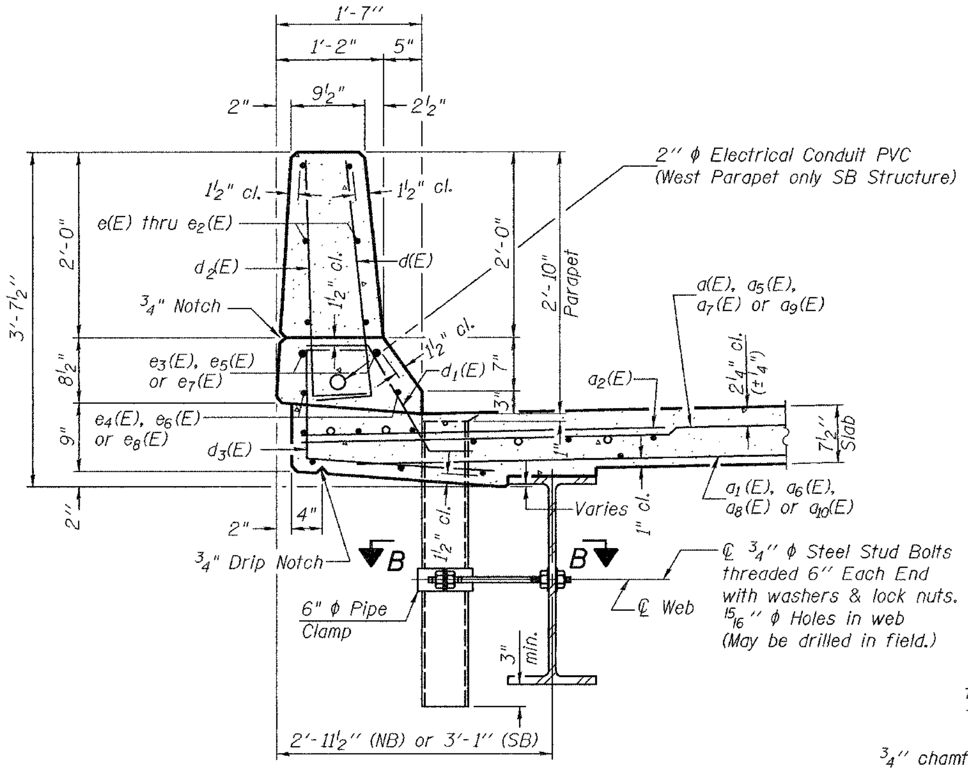
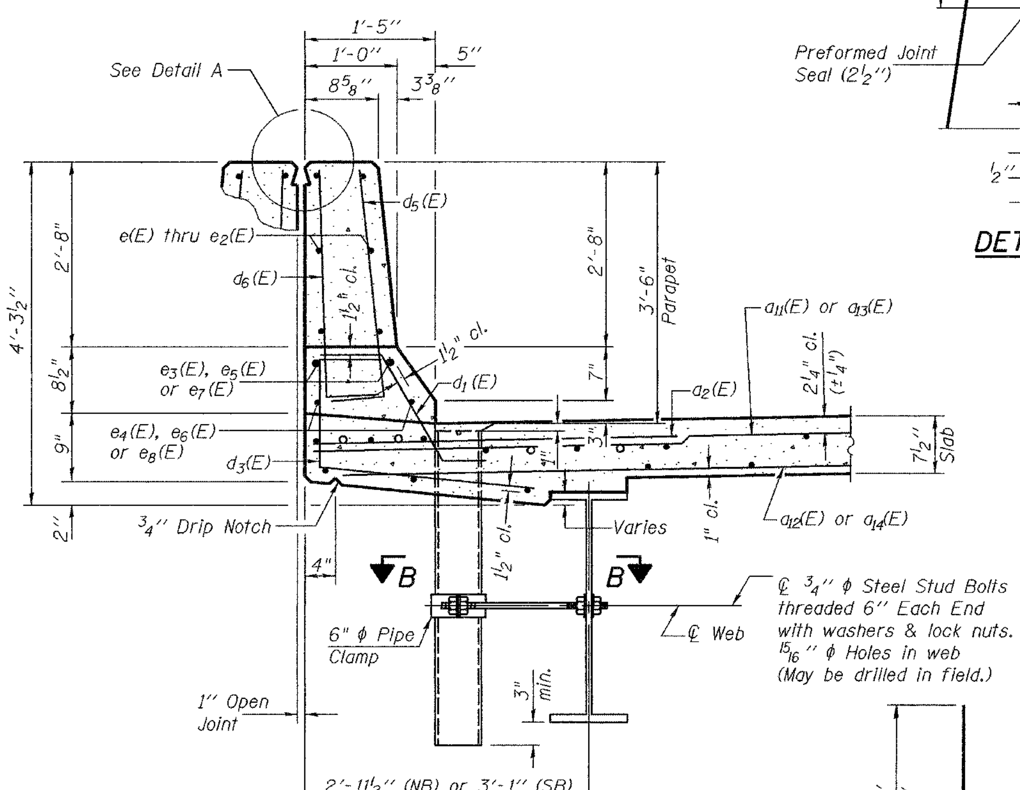
Contract #98950

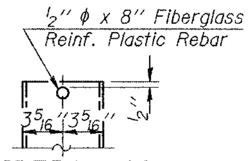
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



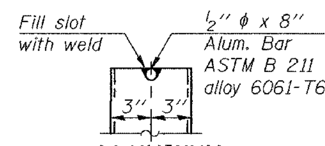
SECTION THRU PARAPETS (STAGE I CONSTRUCTION)



SECTION THRU PARAPETS (STAGE II CONSTRUCTION)

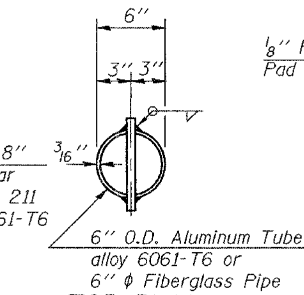


FIBERGLASS PIPE



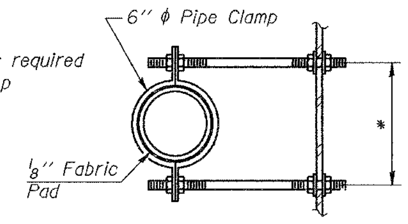
ALUMINUM TUBE

* Dimension as required by Pipe Clamp

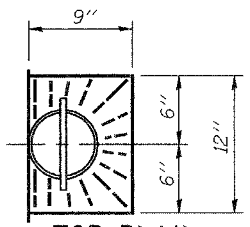


TOP PLAN

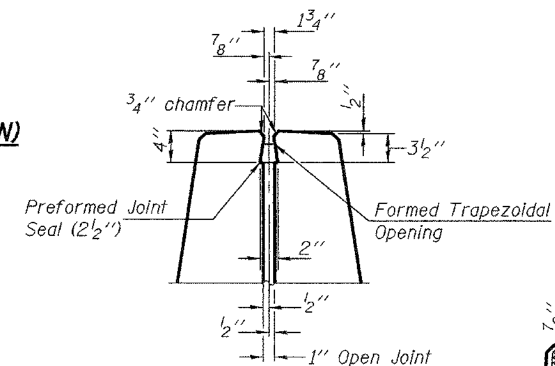
(Showing Aluminum Tube)



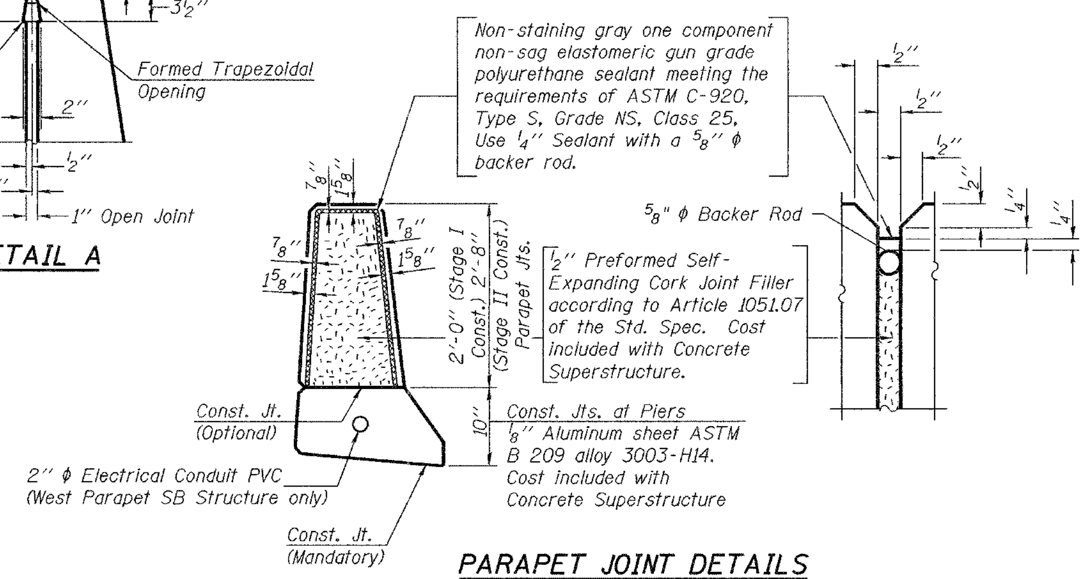
SECTION B-B



TOP PLAN



DETAIL A



PARAPET JOINT DETAILS

Notes:

The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

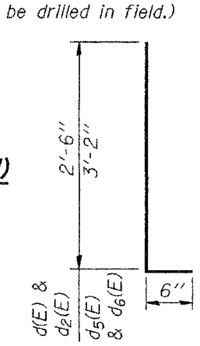
NORTHBOUND SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	245	#5	32'-3"	——
a1(E)	177	#5	31'-8"	——
a2(E)	490	#6	6'-0"	——
a11(E)	245	#5	43'-7"	——
a12(E)	177	#5	43'-0"	——
b(E)	316	#5	34'-5"	——
b1(E)	150	#6	30'-0"	——
b2(E)	335	#5	27'-11"	——
d(E)	145	#5	3'-0"	
d1(E)	278	#5	2'-5"	
d2(E)	145	#4	3'-0"	
d3(E)	290	#4	3'-8"	
d4(E)	12	#5	2'-4"	
d5(E)	145	#5	3'-8"	
d6(E)	145	#4	3'-8"	
e(E)	48	#4	14'-0"	——
e1(E)	48	#4	7'-4"	——
e2(E)	36	#4	14'-8"	——
e3(E)	8	#8	28'-4"	——
e4(E)	8	#5	28'-4"	——
e5(E)	16	#8	7'-4"	——
e6(E)	16	#5	7'-4"	——
e7(E)	8	#8	24'-1"	——
e8(E)	8	#5	23'-2"	——
m(E)	22	#6	6'-8"	——
m1(E)	8	#6	7'-9"	——
m3(E)	28	#6	9'-10"	——
m4(E)	4	#6	2'-9"	——
m8(E)	4	#6	10'-6"	——
m9(E)	2	#6	5'-4"	——
m10(E)	20	#6	23'-3"	——
m11(E)	6	#6	32'-5"	——
m12(E)	4	#6	31'-6"	——
s(E)	154	#5	6'-3"	
s1(E)	150	#4	8'-6"	
v(E)	150	#5	3'-4"	
Reinforcement Bars, Epoxy Coated			Pound	75,930
Concrete Superstructure			Cu. Yds.	318.0

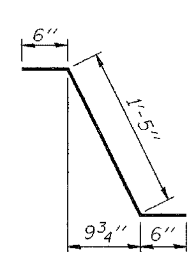
For Bar Splicers (E) see sheet 48 of 51.

SOUTHBOUND SUPERSTRUCTURE BILL OF MATERIAL

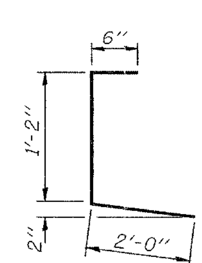
Bar	No.	Size	Length	Shape
a2(E)	490	#6	6'-0"	——
a3(E)	245	#5	6'-11"	——
a4(E)	177	#5	10'-4"	——
a5(E)	82	#5	22'-11"	——
a6(E)	59	#5	22'-4"	——
a7(E)	82	#5	25'-4"	——
a8(E)	59	#5	24'-9"	——
a9(E)	81	#5	27'-9"	——
a10(E)	59	#5	27'-2"	——
a13(E)	245	#5	48'-7"	——
a14(E)	177	#5	48'-0"	——
b(E)	340	#5	34'-5"	——
b1(E)	162	#6	30'-0"	——
b2(E)	365	#5	27'-11"	——
d(E)	145	#5	3'-0"	
d1(E)	278	#5	2'-5"	
d2(E)	145	#4	3'-0"	
d3(E)	290	#4	3'-8"	
d4(E)	12	#5	2'-4"	
d5(E)	145	#5	3'-8"	
d6(E)	145	#4	3'-8"	
e(E)	48	#4	14'-0"	——
e1(E)	48	#4	7'-4"	——
e2(E)	36	#4	14'-8"	——
e3(E)	8	#8	28'-4"	——
e4(E)	8	#5	28'-4"	——
e5(E)	16	#8	7'-4"	——
e6(E)	16	#5	7'-4"	——
e7(E)	8	#8	24'-1"	——
e8(E)	8	#5	23'-2"	——
m(E)	23	#6	6'-8"	——
m1(E)	10	#6	7'-9"	——
m2(E)	6	#6	9'-2"	——
m3(E)	26	#6	9'-10"	——
m4(E)	4	#6	2'-9"	——
m5(E)	5	#6	4'-2"	——
m6(E)	23	#6	25'-9"	——
m7(E)	2	#6	24'-10"	——
m13(E)	3	#6	33'-0"	——
m14(E)	2	#6	32'-1"	——
s(E)	160	#5	6'-3"	
s1(E)	138	#4	8'-6"	
v(E)	154	#5	3'-4"	
Reinforcement Bars, Epoxy Coated			Pound	81,090
Concrete Superstructure			Cu. Yds.	327.6
Conduit Embedded in Structure, 2"ϕ PVC			Foot	133.0



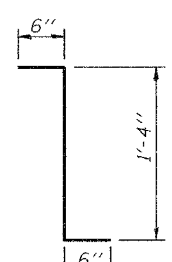
BARS d(E), d2(E), d5(E) & d6(E)



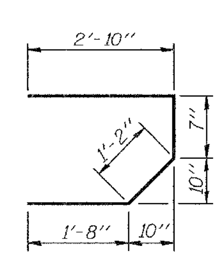
BAR d1(E)



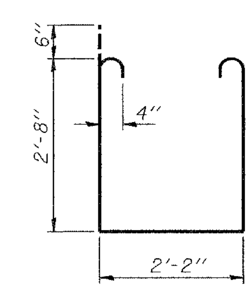
BAR d3(E)



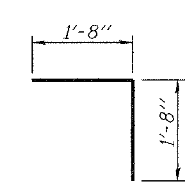
BAR d4(E)



BAR s(E)



BAR s1(E)



BAR v(E)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

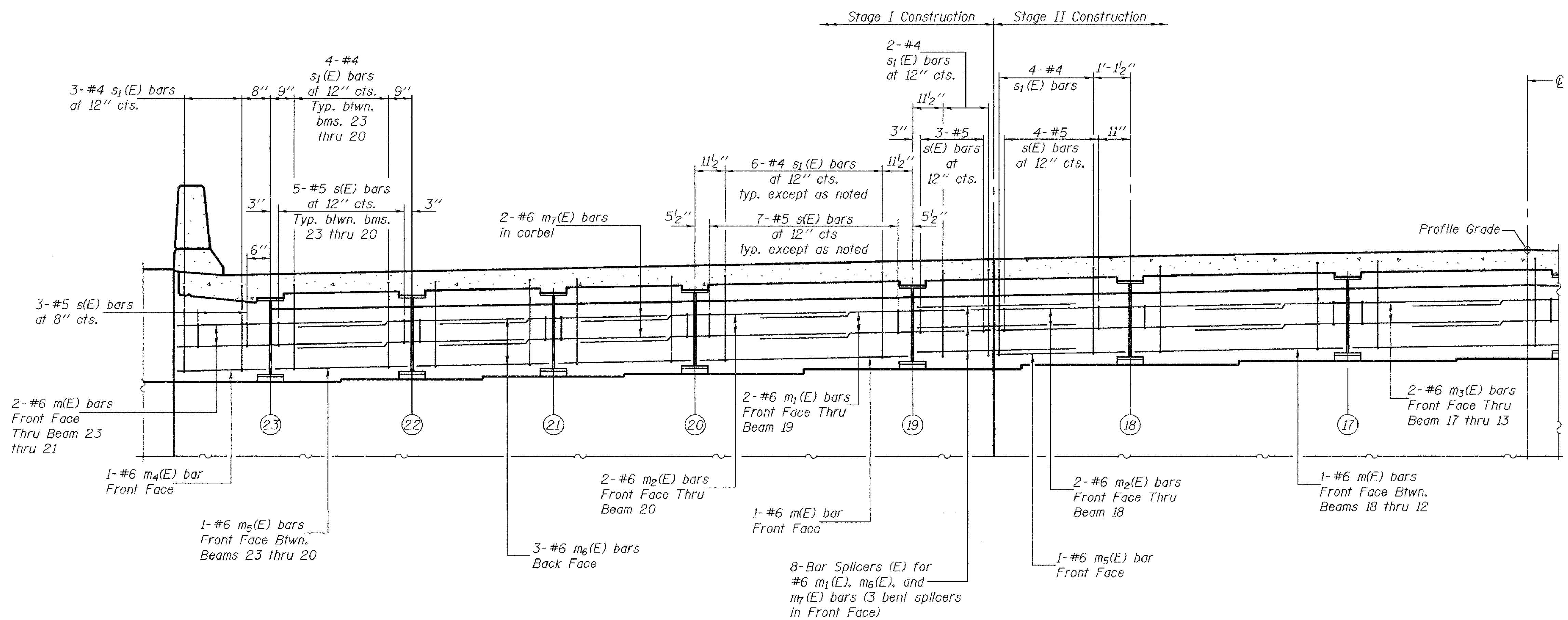
SUPERSTRUCTURE DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	853
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

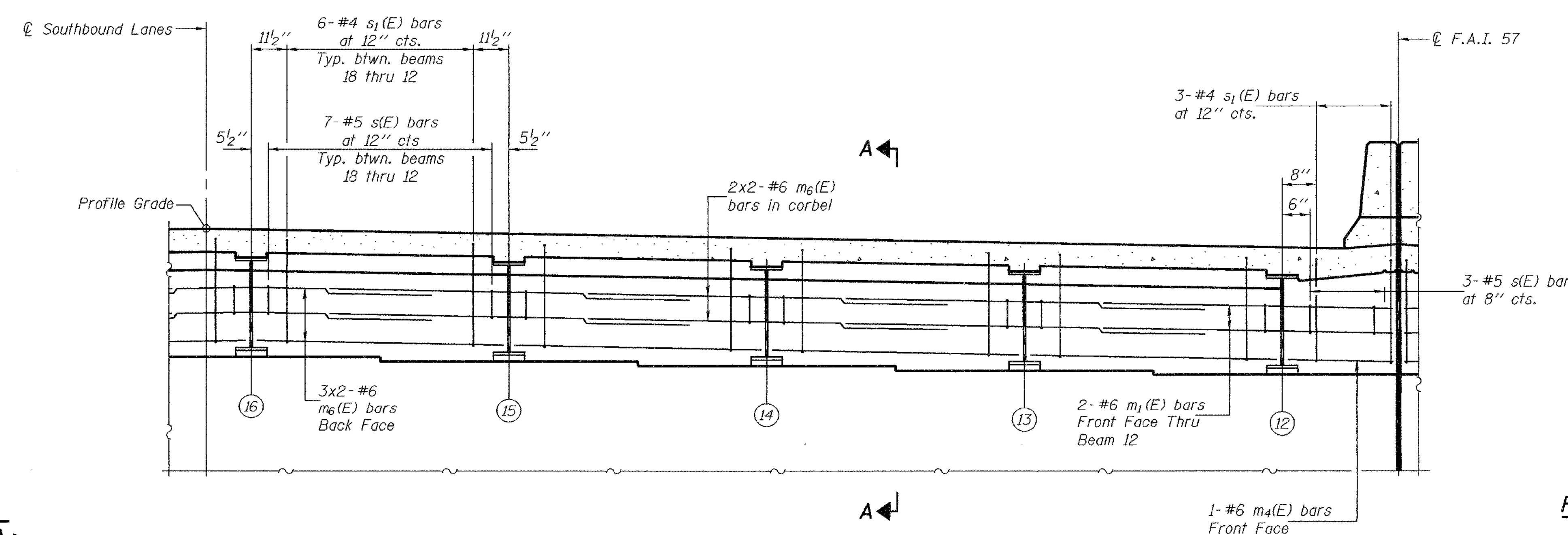
SHEET NO. 20
51 SHEETS

Contract #98950



MIN. BAR LAP
#6 bar = 2′-9″

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 19 of 51.
Concrete in diaphragm is included with Concrete Superstructure on sheet 19 of 51.
For details of bars s(E) & s_1(E) see sheet 19 of 51.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For Bar Splicer Details see sheet 48 of 51.
For Section A-A see sheet 24 of 51.
Bars indicated thus 3x2-#6 etc. indicates 3 lines of bars with 2 lengths per line.



ELEVATION
Looking North, at North Abutment, SN 100-0087 (S.B.)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	854
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

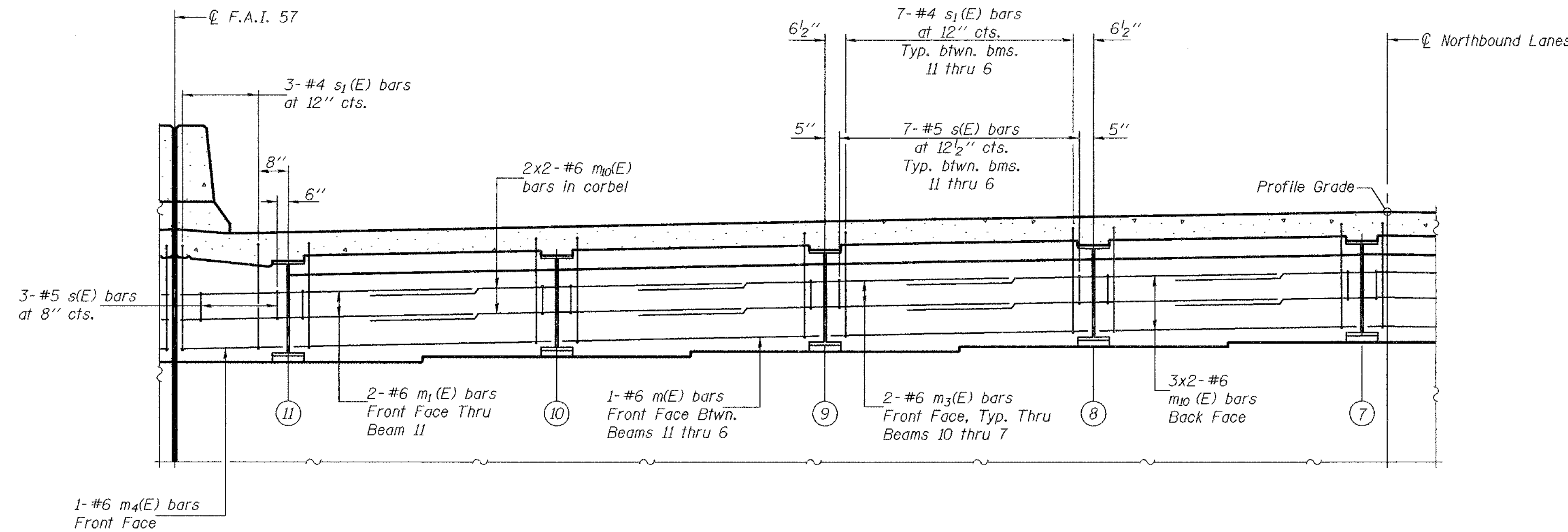
SHEET NO. 21
51 SHEETS

Contract #98950

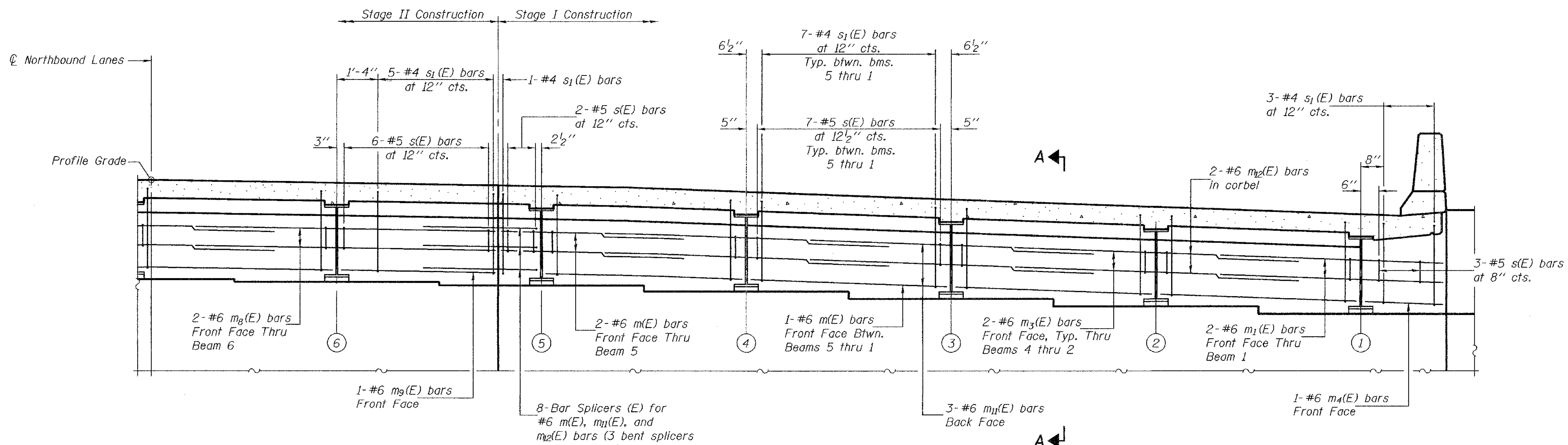
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MIN. BAR LAP

#6 bar = 2'-9"



Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 19 of 51.
Concrete in diaphragm is included with Concrete Superstructure on sheet 19 of 51.
For details of bars s(E) & s_1(E) see sheet 19 of 51.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For Bar Splicer Details see sheet 48 of 51.
For Section A-A see sheet 24 of 51.
Bars indicated thus 3x2-#6 etc. indicates 3 lines of bars with 2 lengths per line.



ELEVATION

Looking North, at North Abutment, SN 100-0086 (N.B.)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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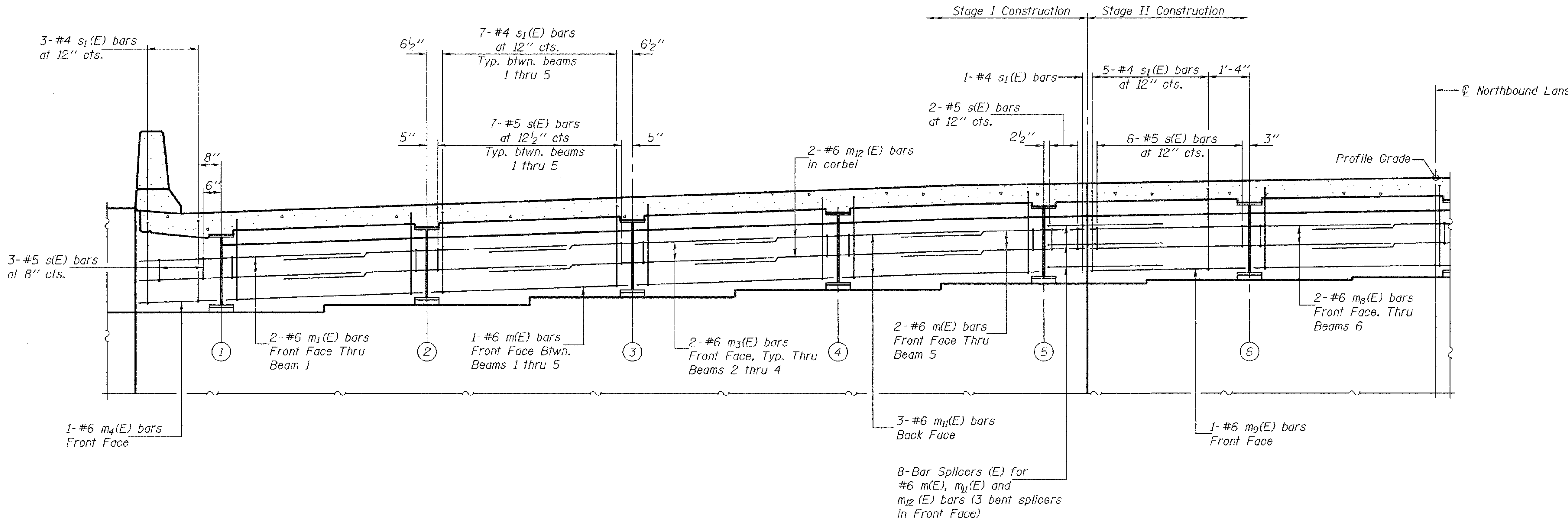
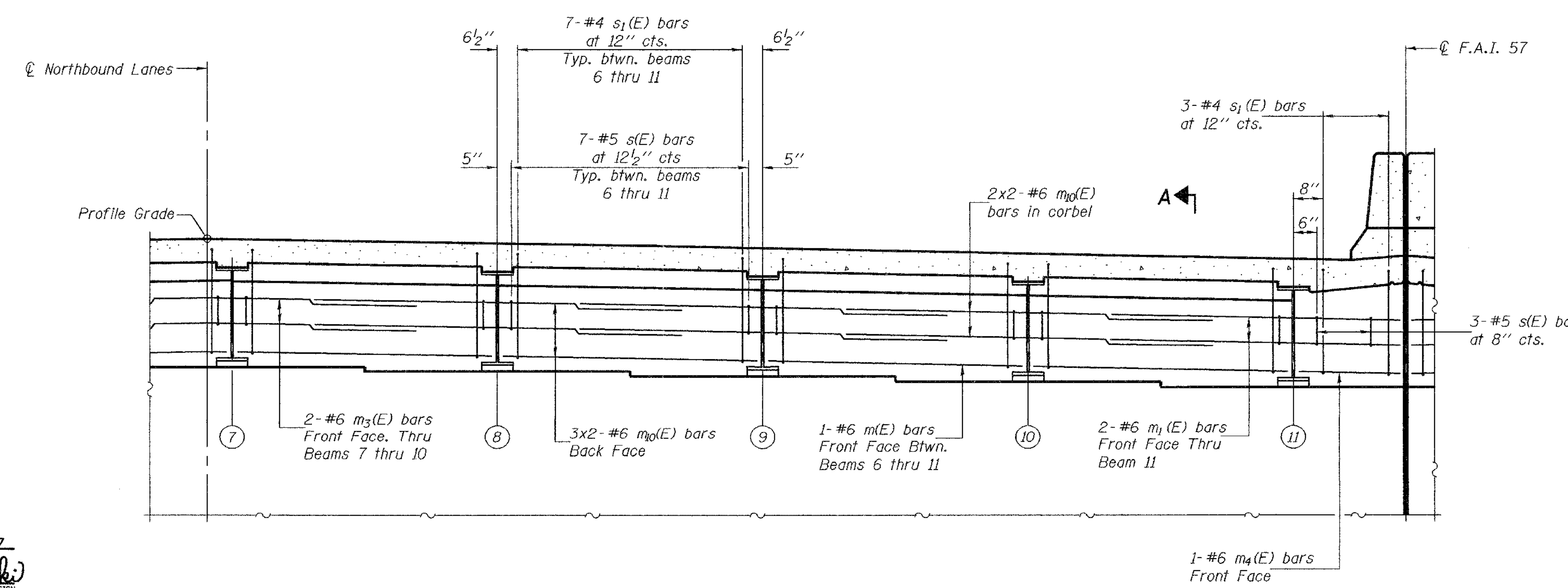
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	855
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 22
51 SHEETS

Contract #98950





ELEVATION

Looking South, at South Abutment, SN 100-0086 (N.B.)

MIN. BAR LAP

#6 bar = 2'-9"

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 19 of 51.
Concrete in diaphragm is included with Concrete Superstructure on sheet 19 of 51.
For details of bars s(E) & s_1 (E) see sheet 19 of 51.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For Bar Splicer Details see sheet 48 of 51.
For Section A-A see sheet 24 of 51.
Bars indicated thus 2x2-#6 etc. indicates 2 lines of bars with 2 lengths per line.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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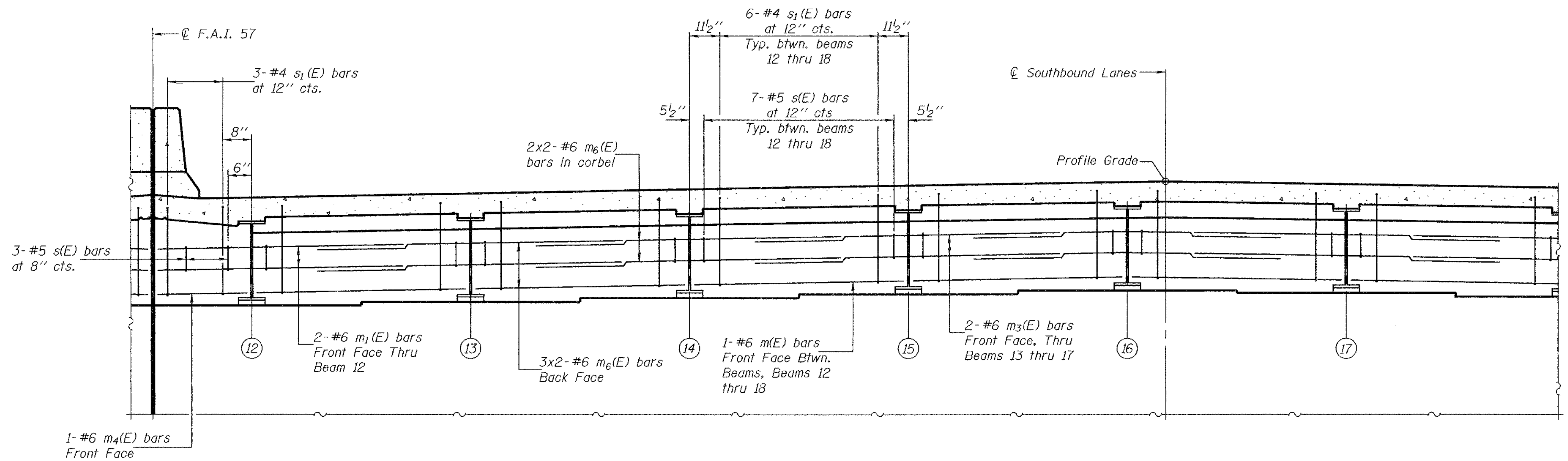
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	856
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

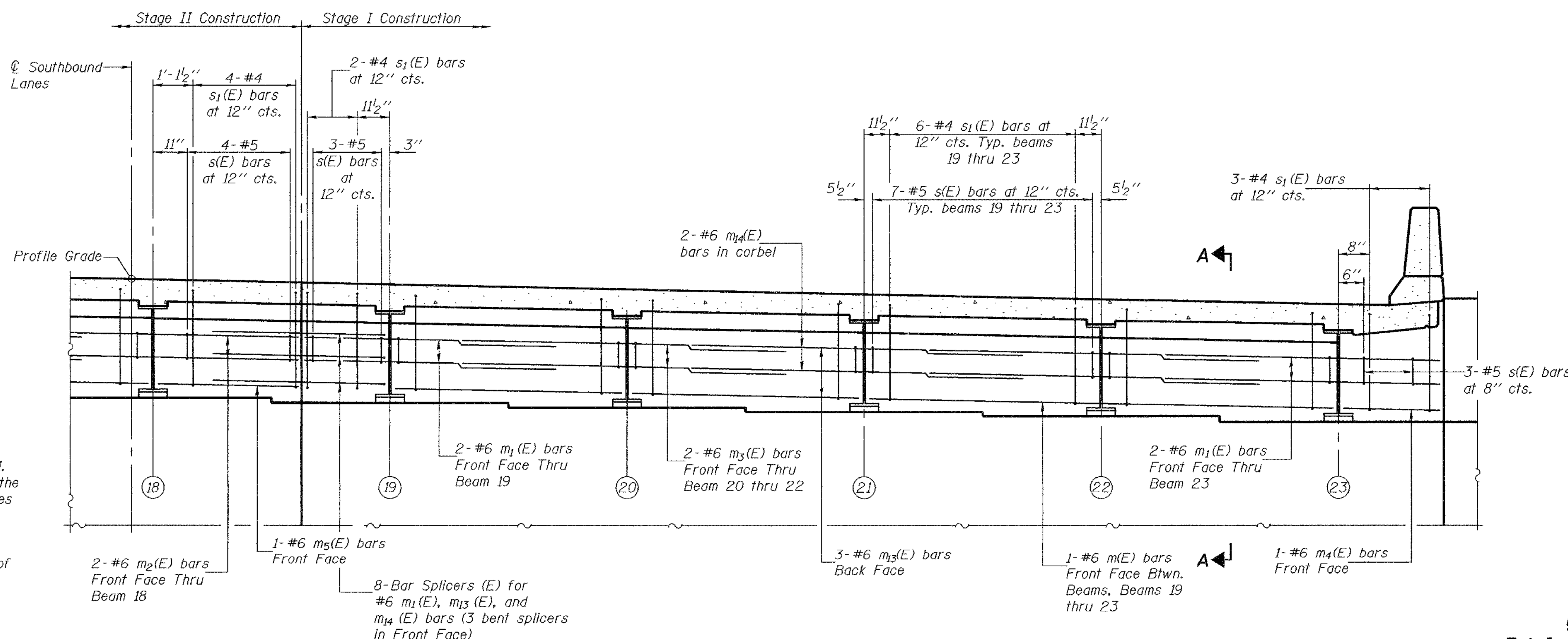
SHEET NO. 23
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MIN. BAR LAP
#6 bar = 2'-9"





Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 19 of 51.
Concrete in diaphragm is included with Concrete Superstructure on sheet 19 of 51.
For details of bars s(E) & s_1(E) see sheet 19 of 51.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For Bar Splicer Details see sheet 48 of 51.
For Section A-A see sheet 24 of 51.
Bars indicated thus 2x2-#6 etc. indicates 2 lines of bars with 2 lengths per line.

ELEVATION
Looking South, at South Abutment, SN 100-0087 (S.B.)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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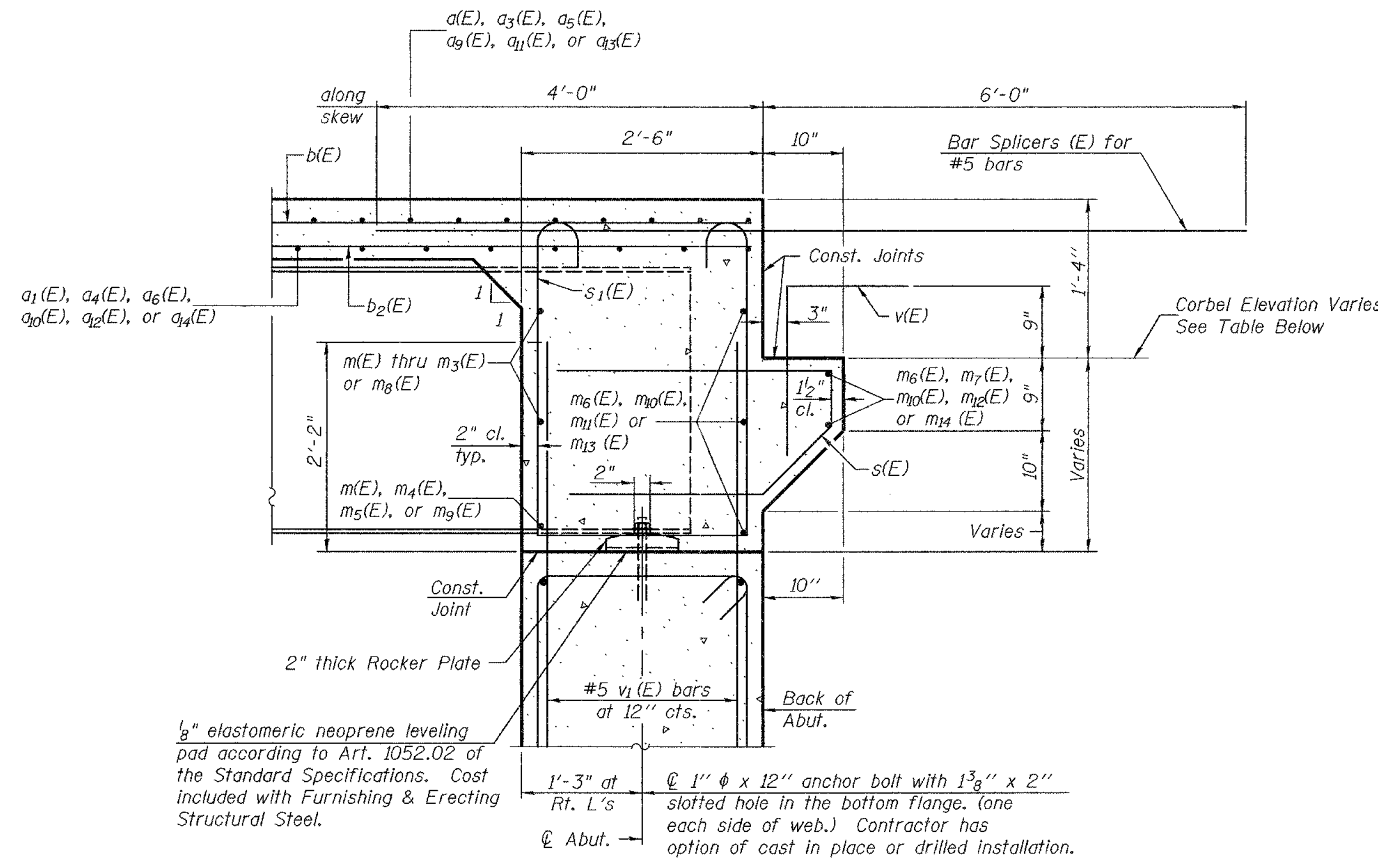
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	857
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 24
51 SHEETS

Contract #98950



SECTION A-A

Dimensions at right angles to abutment, except as shown.

TOP OF CORBEL ELEVATION AT BACK OF ABUTMENTS		
Location	N.B. Structure	S.B. Structure
Bk. North Abutment	-	-
East Edge of Parapet	463.83	464.96
℄ Roadway & P.G.	465.54	465.53
West Edge of Parapet	464.96	464.72
Bk. South Abutment	-	-
East Edge of Parapet	464.63	465.67
℄ Roadway & P.G.	466.26	466.25
West Edge of Parapet	465.68	465.28

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

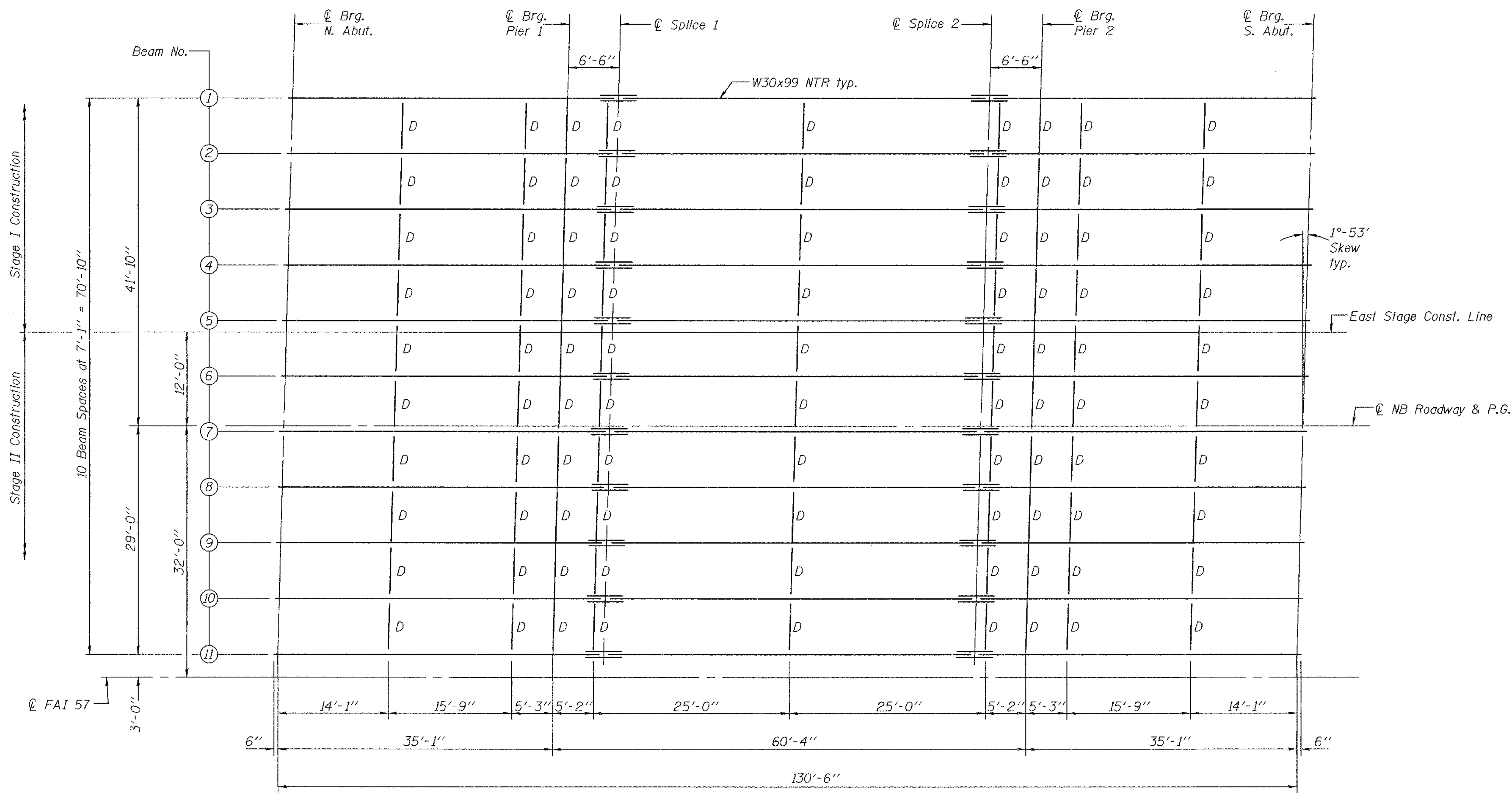
DIAPHRAGM DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	858
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 25
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FRAMING PLAN (NB)

(All beams are W30x99 AASHTO M270 Grade 50)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLAN (NORTHBOUND)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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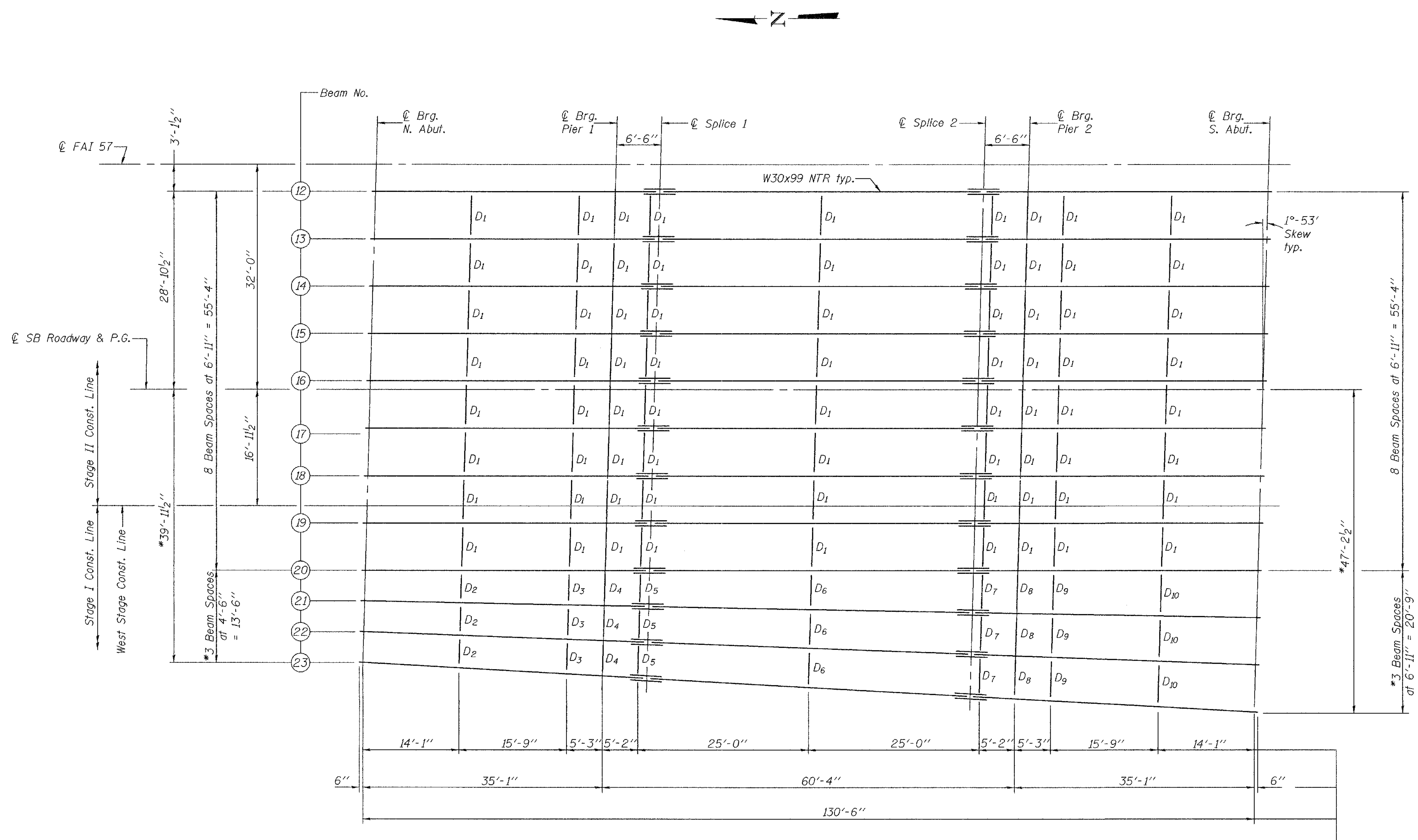
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	859
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 26
51 SHEETS

Contract #98950



For specific beam lengths see "Beam Dimension Table" on sheet 27 of 51.

FRAMING PLAN (SB)

(All beams are W30x99 AASHTO M270 Grade 50)

*Dimensions are at ℄ of bearing.

DESIGNED	Michael D. Cima
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DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

FRAMING PLAN (SOUTHBOUND)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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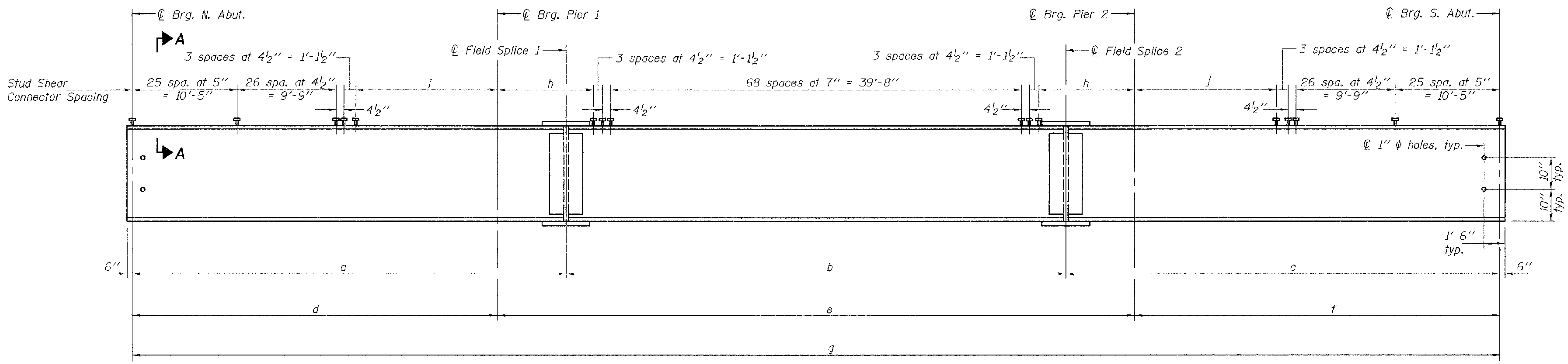
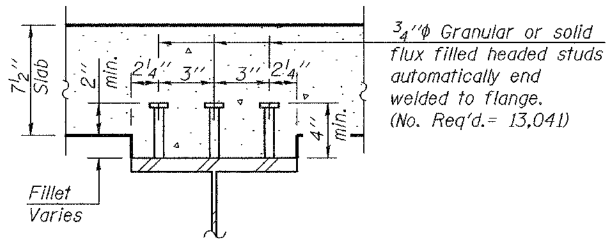
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



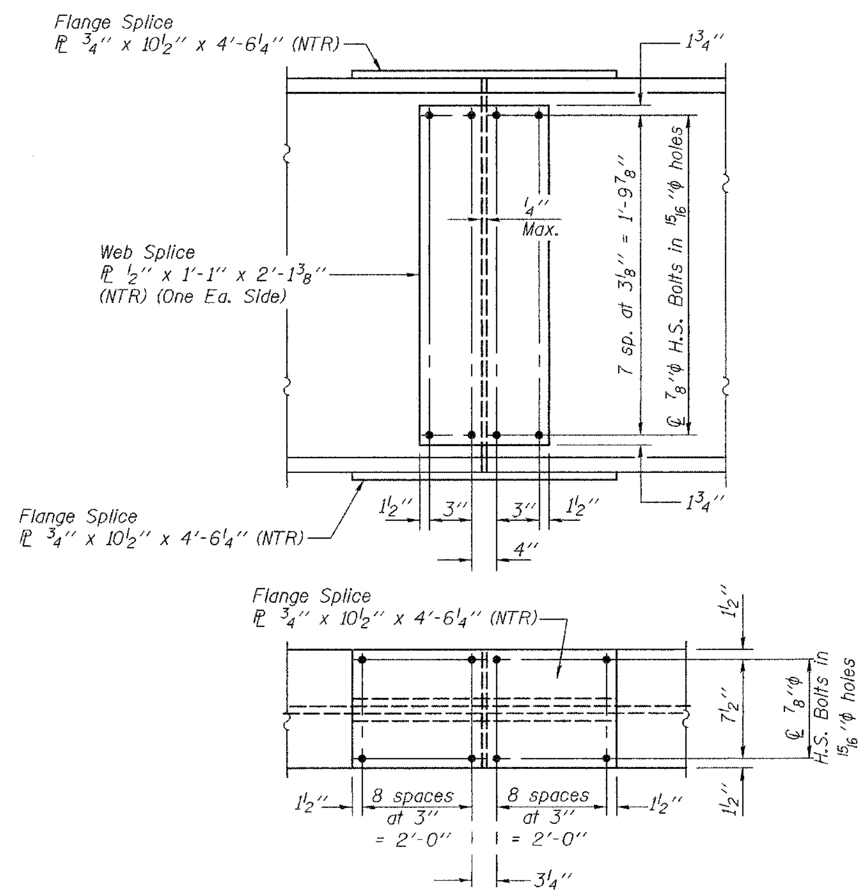
ELEVATION

All beams W30x99 and Splice plates shall be AASHTO M270 Grade 50 and shall meet Notch Toughness Requirements (NTR).

Beam Dimension Table										
Beam No.	a	b	c	d	e	f	g	h	i	j
1-20	41′-7″	47′-4″	41′-7″	35′-1″	60′-4″	35′-1″	130′-6″	8′-10″	13′-5″	13′-5″
21	41′-6¾″	47′-3⅞″	41′-6¾″	35′-0⅞″	60′-3⅝″	35′-0⅞″	130′-5⅜″	8′-10″	13′-4⅞″	13′-4⅞″
22	41′-6¾″	47′-3⅝″	41′-6¾″	35′-0¾″	60′-3⅝″	35′-0¾″	130′-5⅛″	8′-10″	13′-4¾″	13′-4¾″
23	41′-6⅞″	47′-3¾″	41′-6⅞″	35′-0⅞″	60′-3¾″	35′-0⅞″	130′-5½″	8′-10″	13′-4⅞″	13′-4⅞″

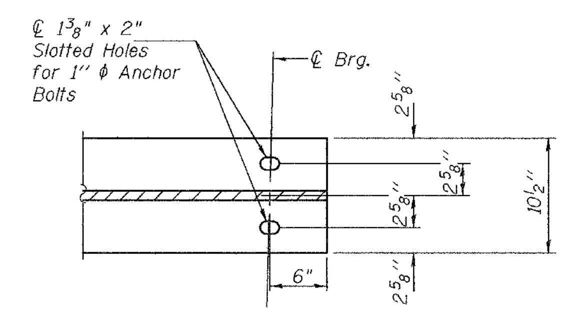


SECTION A-A



FIELD SPLICE DETAIL

(46 Required)
For Splice locations 1 & 2



END OF BEAM DETAIL

Note:
"NTR" denotes plates to which notch toughness requirements are applicable.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

DESIGNED	Michael D. Cima
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CHECKED	M.D.C. & F.T.

January 22, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STRUCTURAL STEEL DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	861
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 28

51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

*INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
Is	(in^4)	3990	3990	3990
Ic (n)	(in^4)	11789	-	11789
Ic (3n)	(in^4)	8801	-	8801
Ss	(in^3)	269	269	269
Sc (n)	(in^3)	417	-	417
Sc (3n)	(in^3)	377	-	377
Z	(in^3)	-	312	-
DC1	(k/')	0.788	0.788	0.788
M DC1	('k)	33.9	206.1	152.4
DC2	(k/')	0.082	0.082	0.082
M DC2	('k)	5.7	16.1	21.3
DW	(k/')	0.354	0.354	0.354
M DW	('k)	24.6	69.3	91.8
M ℄+Imp	('k)	368.3	307.0	611.0
Mu (Strength I)	('k)	730.9	919.0	1423.9
$\phi_f M_n$, $\phi_f M_{nc}$	('k)	2099.6	1300	2099.6
fs DC1	(ksi)	1.5	9.2	6.8
fs DC2	(ksi)	0.2	0.7	0.7
fs DW	(ksi)	0.8	3.1	2.9
fs 1.3(℄+I)	(ksi)	13.8	17.8	22.9
fs (Service II)	(ksi)	16.3	30.8	33.3
fs (Total)(Strength I)	(ksi)	-	-	-
Vsr	(k)	36.5	-	50.4

*INTERIOR GIRDER REACTION TABLE			
		Abutment	Pier
R DC1	(k)	7.9	43.5
R DC2+DW	(k)	5.2	23.3
R ℄	(k)	45.9	76.2
R Imp	(k)	12.6	16.6
R Total	(k)	71.6	159.6

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads ($in.^4$ and $in.^3$).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads ($in.^4$ and $in.^3$).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations ($in.^3$).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_{℄ + Imp}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{℄ + Imp}$

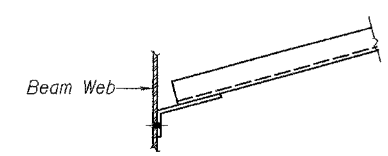
$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_f M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

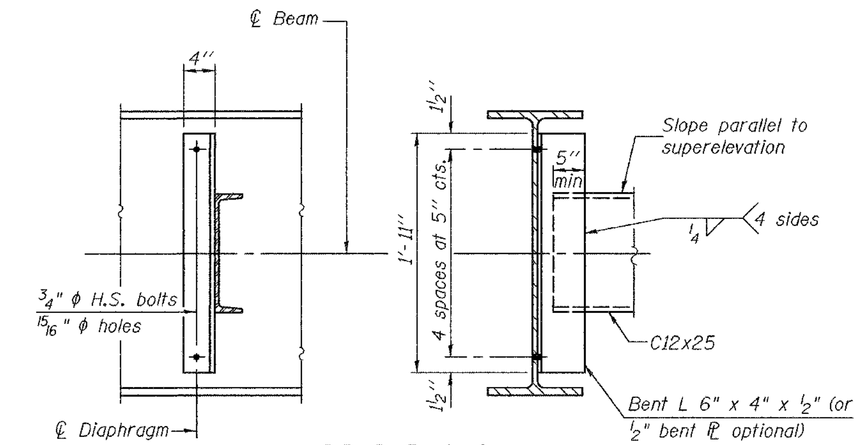
f_s (Service II): Sum of stresses as computed from the moments below (ksi).
$M_{DC1} + M_{DC2} + M_{DW} + 1.3\ M_{℄ + Imp}$

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{℄ + Imp}$

V_f: Factored shear range computed according to Article 6.10.10.



TOP VIEW



DIAPHRAGMS

Diaphragm	# Required
D	90
D_1	72
D_2	3
D_3	3
D_4	3
D_5	3
D_6	3
D_7	3
D_8	3
D_9	3
D_{10}	3

**TOP OF BEAM ELEVATIONS

Location	℄ Brg. N. Abut.	℄ Brg. Pier 1	℄ Splice 1	℄ Splice 2	℄ Brg. Pier 2	℄ Brg. S. Abut.
Beam 1	464.57	464.73	464.76	465.05	465.09	465.36
Beam 2	464.95	465.11	465.14	465.44	465.48	465.74
Beam 3	465.33	465.49	465.52	465.82	465.86	466.12
Beam 4	465.71	465.87	465.90	466.20	466.24	466.50
Beam 5	465.99	466.13	466.16	466.41	466.45	466.70
Beam 6	466.11	466.24	466.27	466.53	466.57	466.82
Beam 7	466.20	466.33	466.36	466.62	466.66	466.90
Beam 8	466.09	466.22	466.25	466.51	466.55	466.79
Beam 9	465.96	466.09	466.12	466.38	466.42	466.67
Beam 10	465.81	465.95	465.98	466.23	466.27	466.52
Beam 11	465.66	465.80	465.83	466.08	466.12	466.37
Beam 12	465.67	465.80	465.83	466.08	466.12	466.37
Beam 13	465.81	465.94	465.97	466.23	466.27	466.51
Beam 14	465.95	466.08	466.11	466.37	466.41	466.66
Beam 15	466.07	466.21	466.24	466.49	466.53	466.78
Beam 16	466.18	466.31	466.34	466.60	466.64	466.88
Beam 17	466.11	466.24	466.27	466.53	466.57	466.81
Beam 18	466.00	466.13	466.16	466.42	466.46	466.70
Beam 19	465.85	465.98	466.01	466.27	466.31	466.56
Beam 20	465.71	465.84	465.87	466.13	466.17	466.41
Beam 21	465.61	465.73	465.76	466.00	466.04	466.26
Beam 22	465.52	465.62	465.64	465.87	465.90	466.12
Beam 23	465.42	465.51	465.53	465.74	465.77	465.97

**For fabrication only

*Data shown is for SN 100-0086 (N.B.), data for SN 100-0087 (S.B.) similar.

Note:
Two hardened washers shall be required over all oversize holes for diaphragms.
Use 13/16 x 1½ vertical slotted holes in top and bottom connection angles, 6 x 4 x ½ (or bent ℘) for east side of Beam 6 and west side of Beam 18 only. Provide 5/16 plate washers for slotted holes. Bolts for slotted holes shall be finger tightened prior to the deck pour for Stage II Construction and then fully tightened after completion of the Stage II deck pour.
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

DESIGNED	Michael D. Cima
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DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007

EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STRUCTURAL STEEL DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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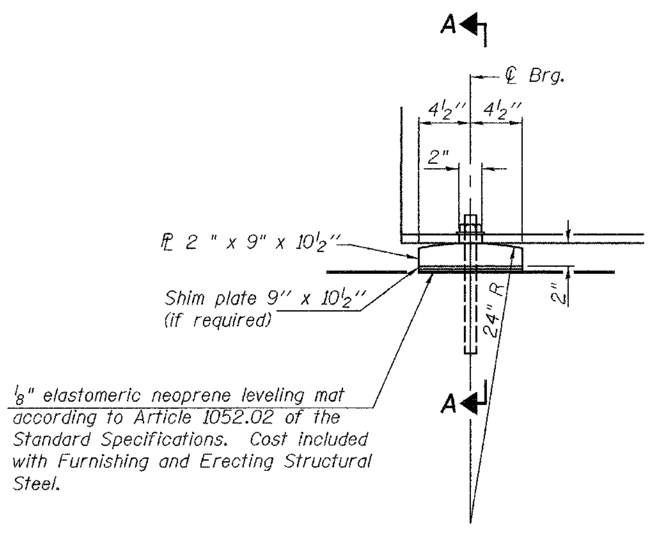
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

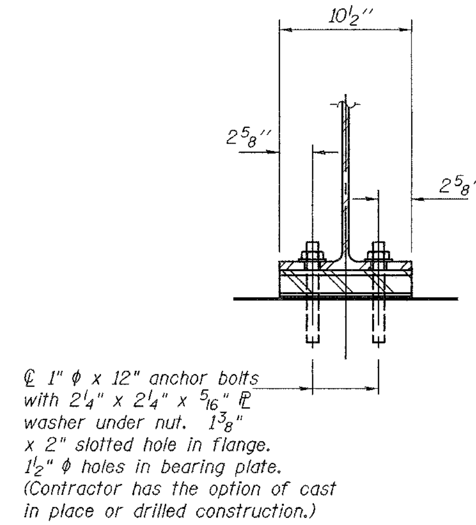
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	862

SHEET NO. 29
51 SHEETS

Contract #98950

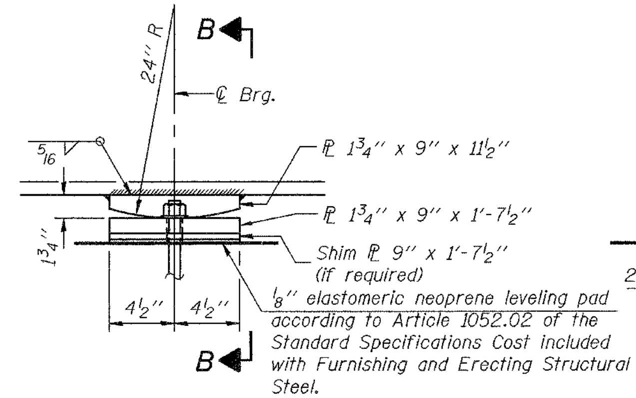


ELEVATION AT ABUTMENT

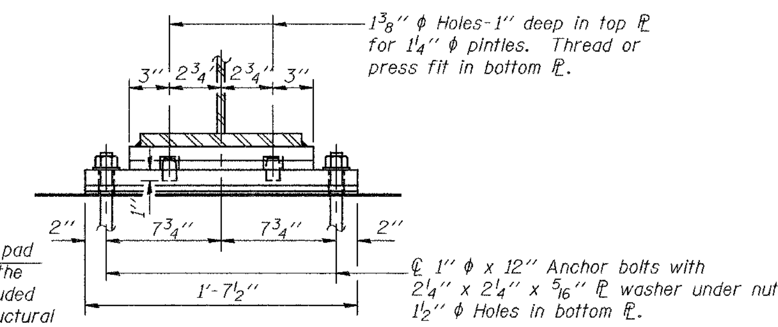


SECTION A-A

FIXED BEARINGS AT ABUTMENTS
(46 Required)



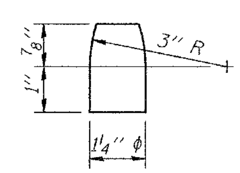
ELEVATION AT PIER



SECTION B-B

FIXED BEARING AT PIERS
(46 Required)

Notes:
Anchor bolts at fixed bearings may be built into the masonry. See sheet 30 of 51 for Anchor Bolt installation details.
All structural steel for the fixed bearings including plate materials and pintles shall be AASHTO M270 Grade 50, except shim plates.
Two $\frac{1}{8}$ adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



PINTLE

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

BEARING DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

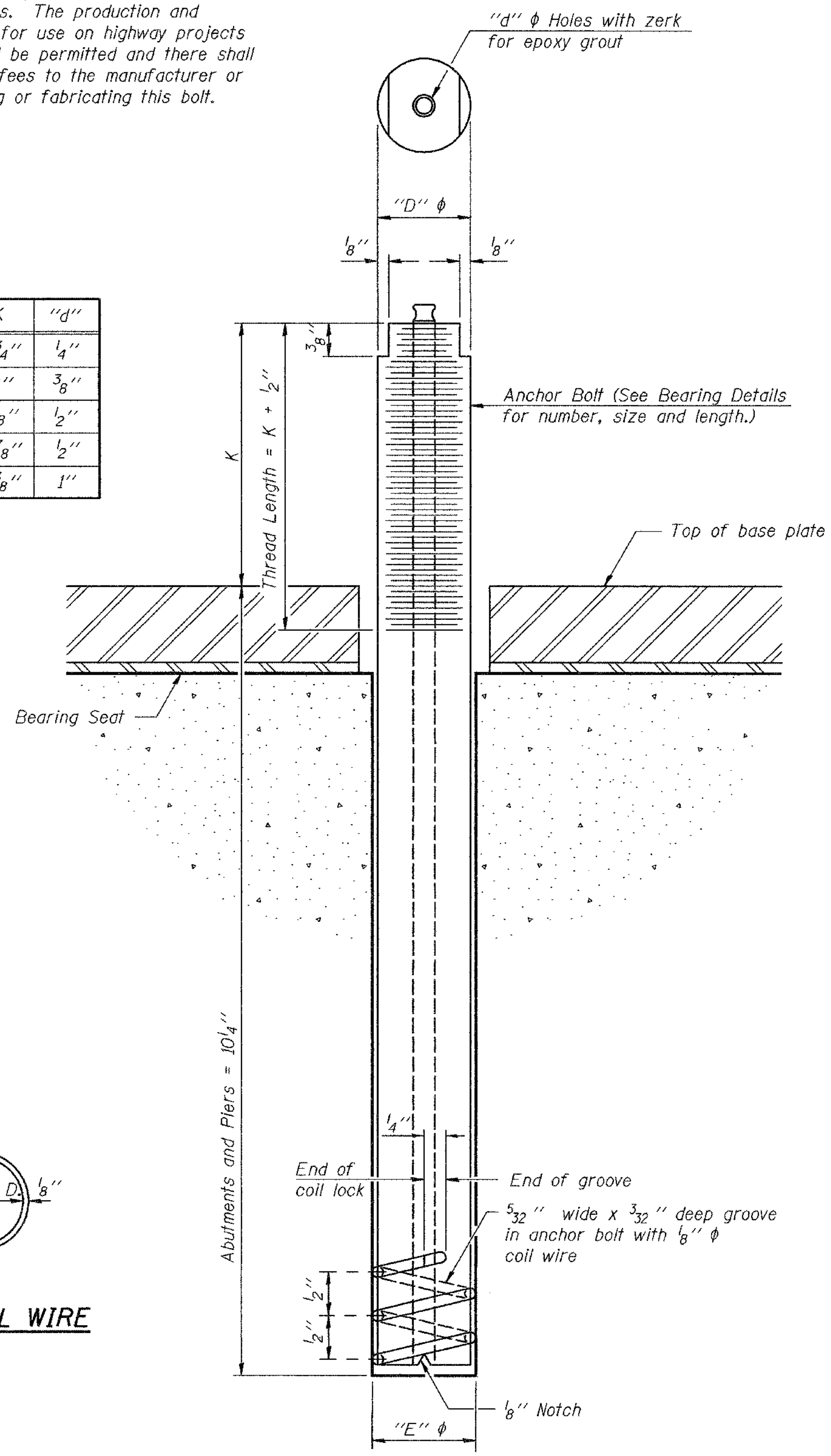
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	863

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT-

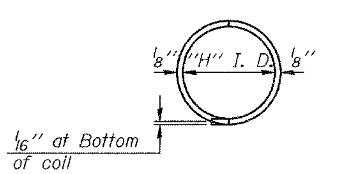
SHEET NO. 30
51 SHEETS

Contract #98950

D	E	H	K	"d"
1"	$1\frac{1}{8}$"	$\frac{13}{16}$"	$1\frac{3}{4}$"	$\frac{1}{4}$"
$1\frac{1}{4}$"	$1\frac{3}{8}$"	$1\frac{1}{16}$"	2"	$\frac{3}{8}$"
$1\frac{1}{2}$"	$1\frac{5}{8}$"	$1\frac{5}{16}$"	$2\frac{1}{8}$"	$\frac{1}{2}$"
2"	$2\frac{1}{8}$"	$1\frac{13}{16}$"	$2\frac{7}{8}$"	$\frac{1}{2}$"
$2\frac{1}{2}$"	$2\frac{5}{8}$"	$2\frac{5}{16}$"	$3\frac{3}{8}$"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT



PLAN-COIL WIRE

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.

The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
Abutments	A325
Piers	A325

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Anchor Bolts, 1".

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ABB-1

10-22-04

January 22, 2007

EXAMINED Thomas J. Domagalski
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PASSED Ralph E. Anderson
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ANCHOR BOLT DETAILS FOR BEARINGS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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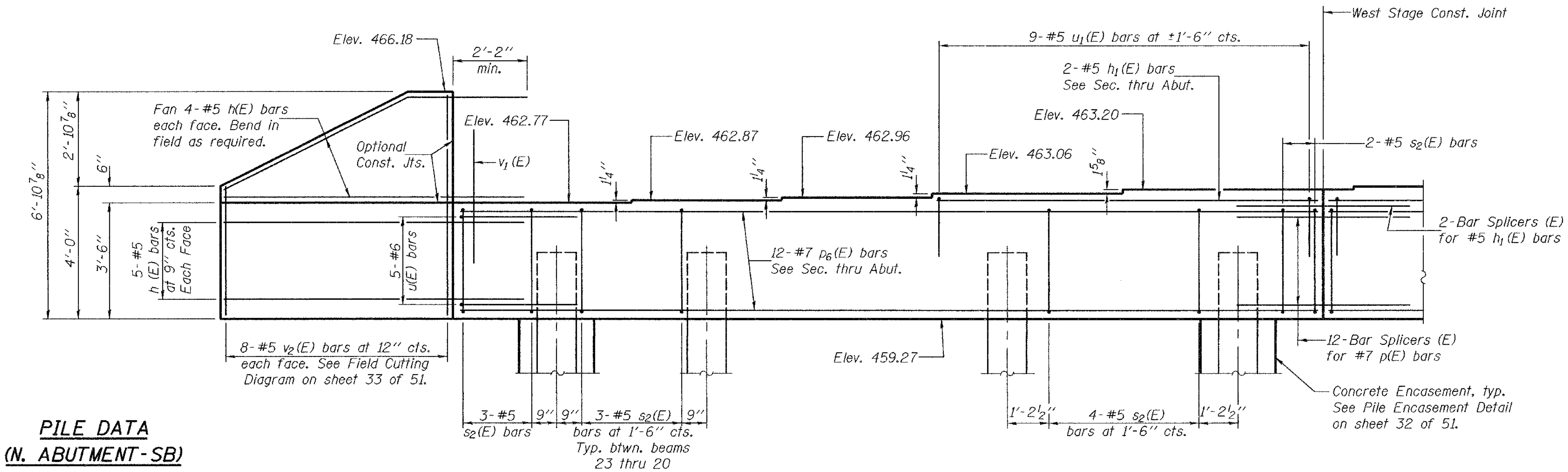
Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	864
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 31
51 SHEETS

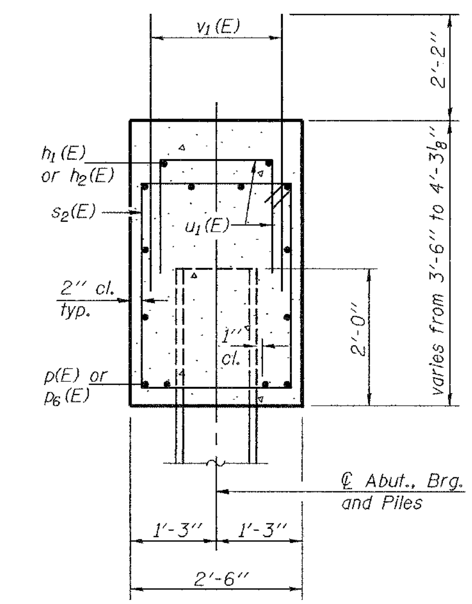
Contract #98950



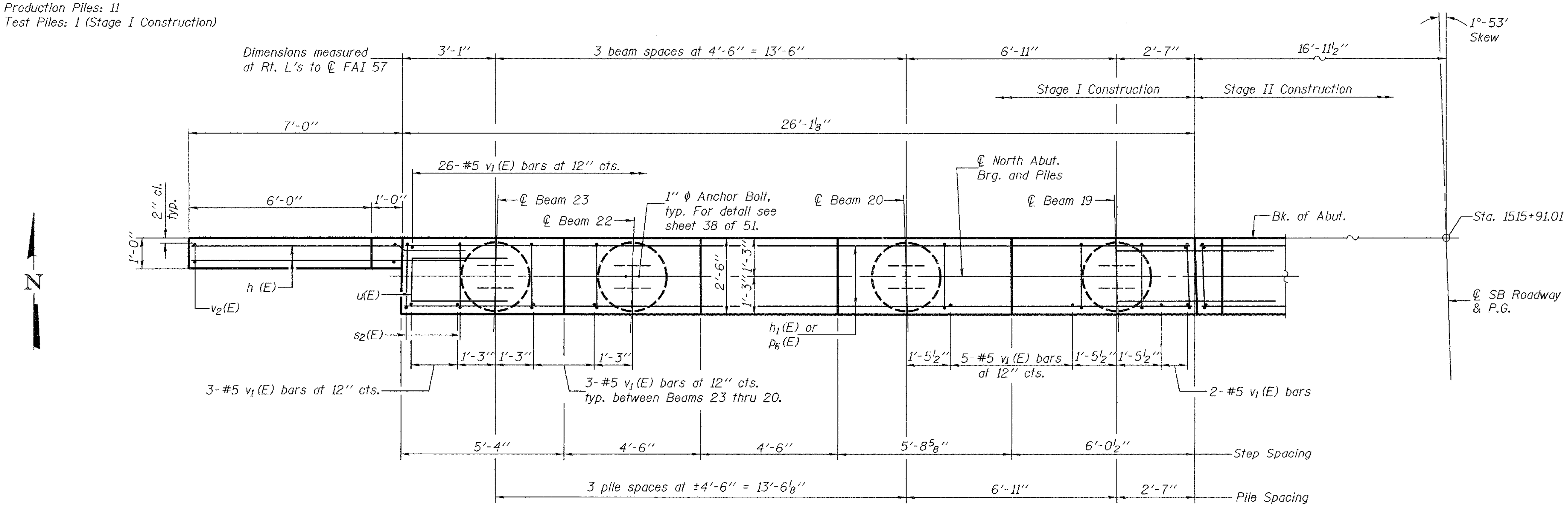
ELEVATION
(Looking North)

PILE DATA
(N. ABUTMENT-SB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 11
No. of Test Piles: 1 (Stage I Construction)



SECTION THRU
NORTH ABUTMENT (SB)



PLAN

BILL OF MATERIAL
NORTH ABUTMENT-SN 100-0087 (S.B)

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-5"	
h_1(E)	2	#5	11'-5"	
h_2(E)	2	#5	35'-2"	
p(E)	24	#7	26'-10"	
p_6(E)	12	#7	25'-9"	
s_2(E)	47	#5	11'-5"	
u(E)	10	#6	7'-2"	
u_1(E)	33	#5	6'-10"	
v_1(E)	130	#5	4'-4"	
v_2(E)	8	#5	10'-2"	
Concrete Structures			Cu. Yd.	28.7
Reinforcement Bars, Epoxy Coated			Pound	3800
Structure Excavation			Cu. Yd.	169
Furnishing Steel Piles HP14x73			Foot	660
Driving Piles			Foot	660
Test Pile Steel HP14x73			Each	1
Concrete Encasement			Cu. Yd.	5.3

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

NORTH ABUTMENT (STAGE I - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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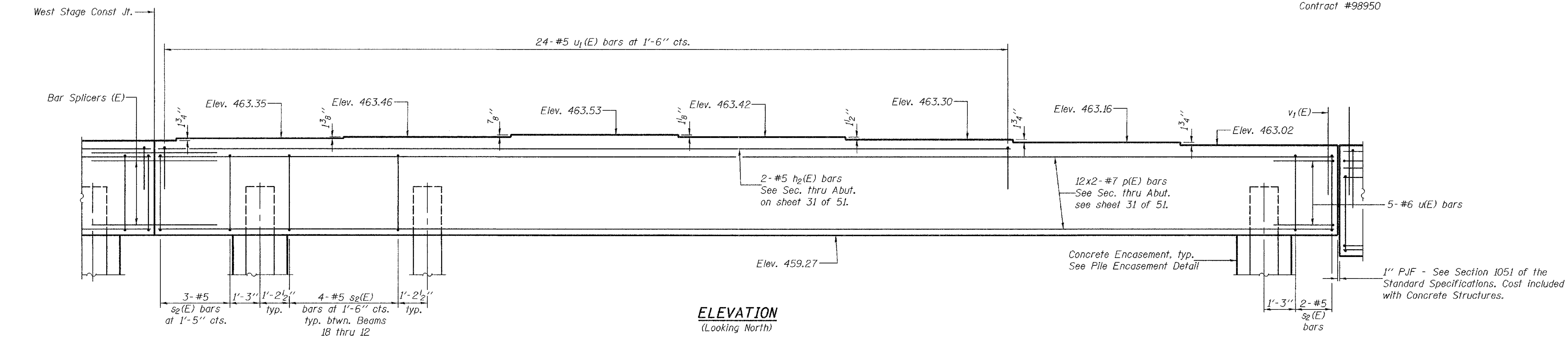
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

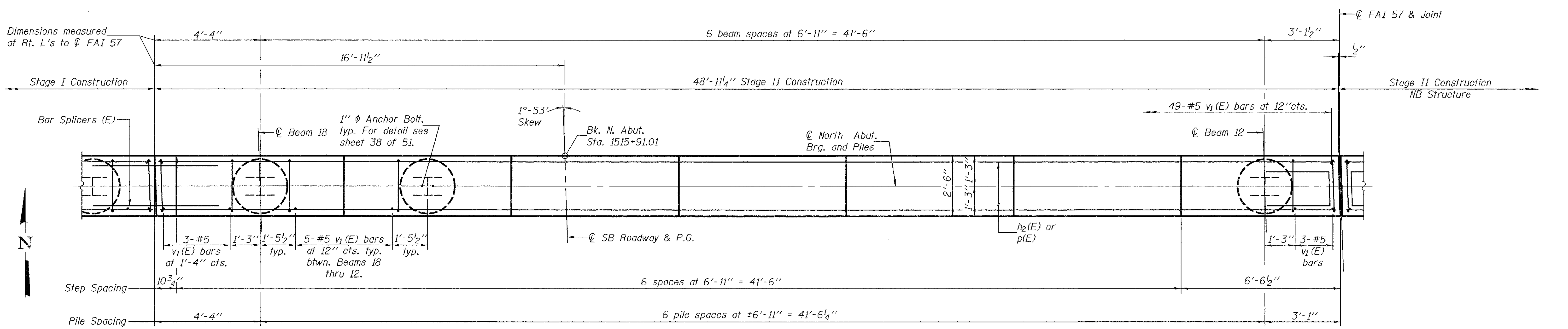
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	865
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 32
51 SHEETS

Contract #98950



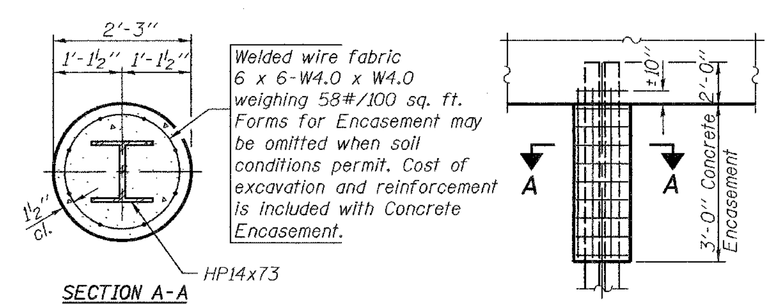
ELEVATION
(Looking North)



PLAN

MIN. BAR LAP
#7 bar = 4'-10"

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.
Bars indicated thus 12x2-#7 indicates 12 lines of bars with 2 lengths per line.
For Bill of Materials see sheet 31 of 51.



PILE ENCASEMENT DETAIL

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

NORTH ABUTMENT (STAGE II - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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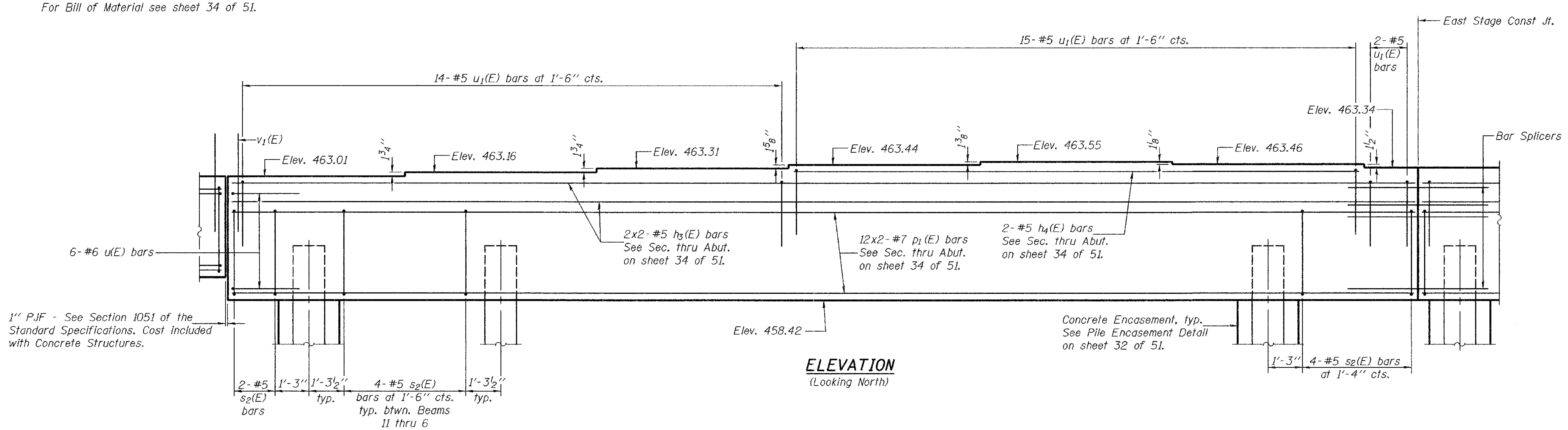
Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
Bars indicated thus 12x2-#7 indicates 12 lines of bars with 2 lengths per line.
For Bill of Material see sheet 34 of 51.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

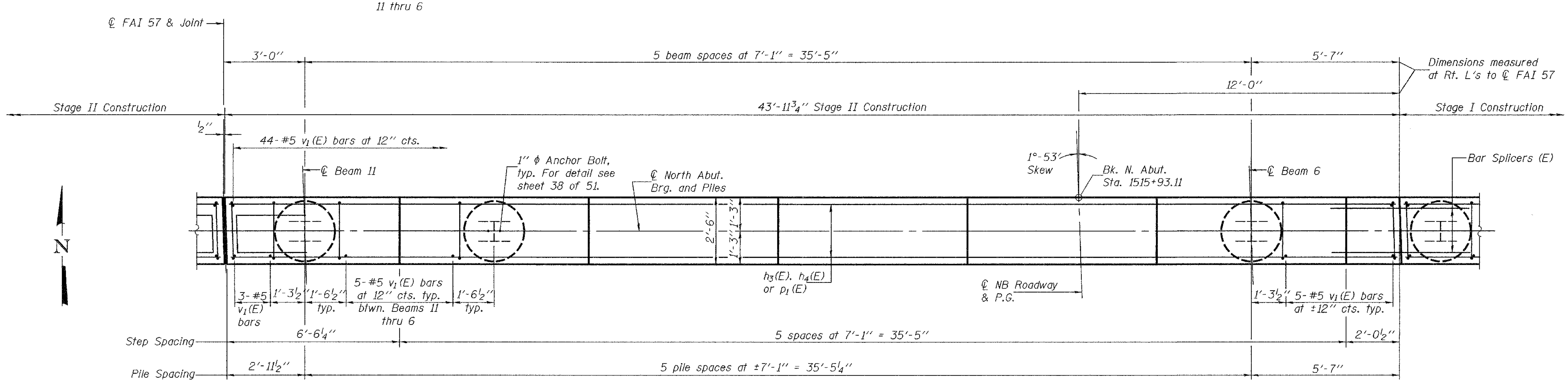
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	866
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 33
51 SHEETS

Contract #98950

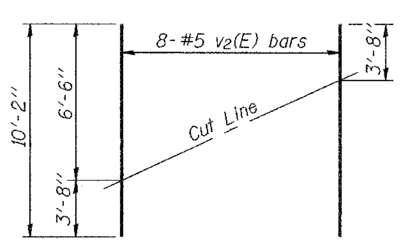


ELEVATION
(Looking North)

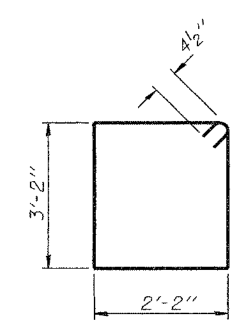


PLAN

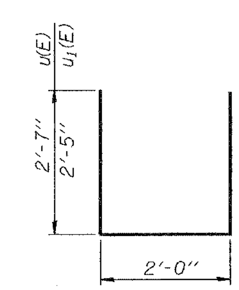
MIN. BAR LAPS
#5 bar = 1'-8"
#7 bar = 4'-10"



FIELD CUTTING DIAGRAM
Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s_2(E)



BAR u(E) & u_1(E)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

NORTH ABUTMENT (STAGE II - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

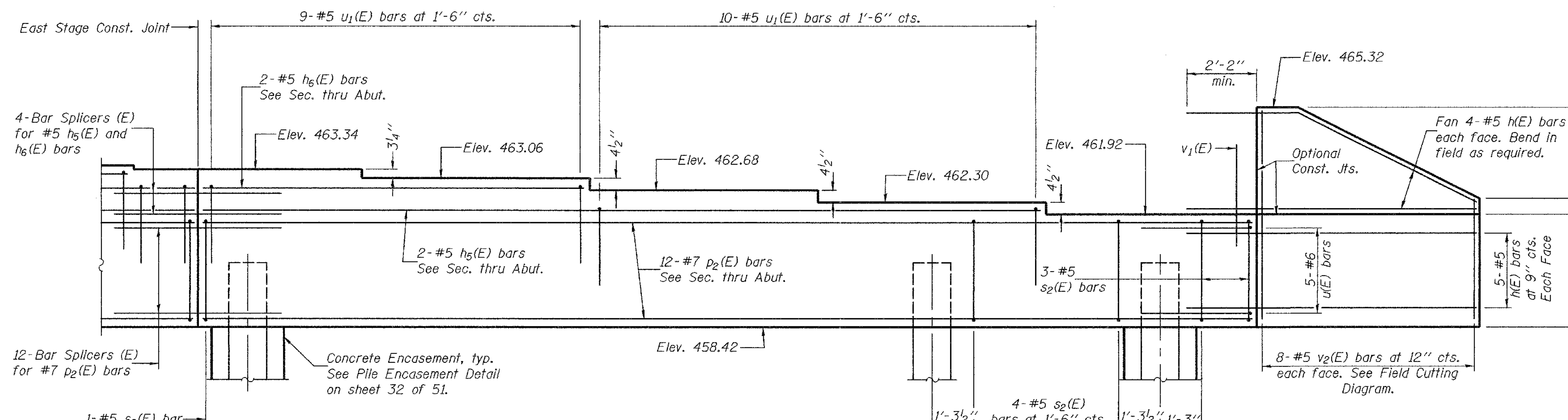
PILE DATA
(N. ABUMENT - NB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 11

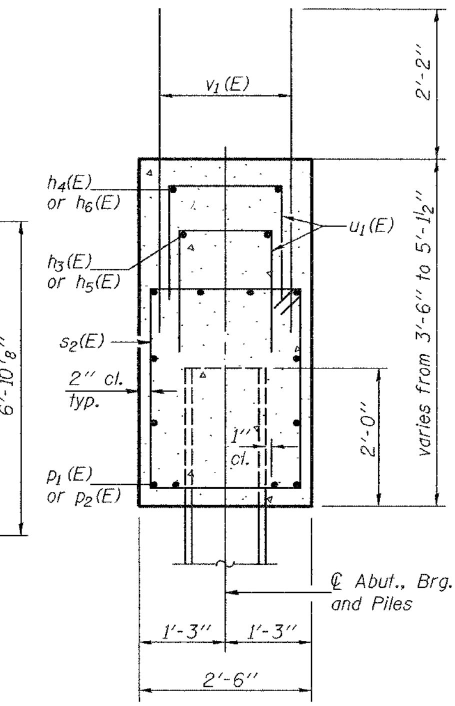
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	867
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 34
51 SHEETS

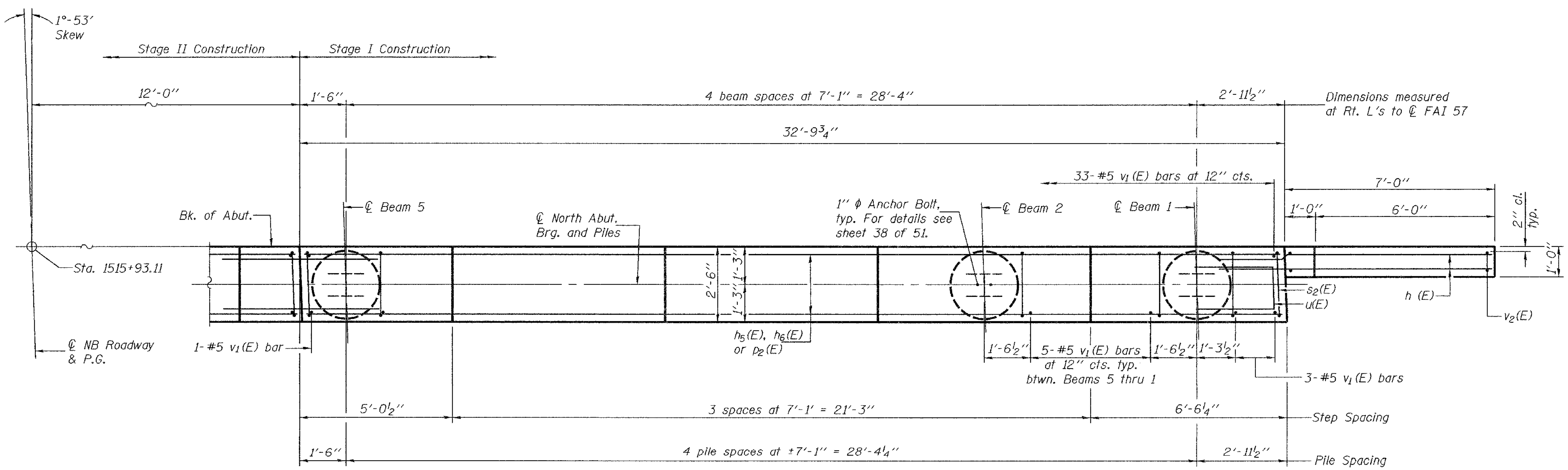
Contract #98950



ELEVATION
(Looking North)



SECTION THRU
NORTH ABUTMENT (NB)



PLAN

BILL OF MATERIAL
NORTH ABUTMENT-SN 100-0086 (N.B)

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-5"	
h_3(E)	8	#5	22'-8"	
h_4(E)	2	#5	21'-0"	
h_5(E)	2	#5	26'-0"	
h_6(E)	2	#5	11'-10"	
p_1(E)	24	#7	24'-4"	
p_2(E)	12	#7	32'-6"	
s_2(E)	46	#5	11'-5"	
u(E)	11	#6	7'-2"	
u_1(E)	50	#5	6'-10"	
v_1(E)	134	#5	4'-4"	
v_2(E)	8	#5	10'-2"	
Concrete Encasement		Cu. Yd.		4.9
Concrete Structures		Cu. Yd.		34.2
Reinforcement Bars, Epoxy Coated		Pound		4190
Structure Excavation		Cu. Yd.		192
Furnishing Steel Piles HP14x73		Foot		660
Driving Piles		Foot		660

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

NORTH ABUTMENT (STAGE I - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

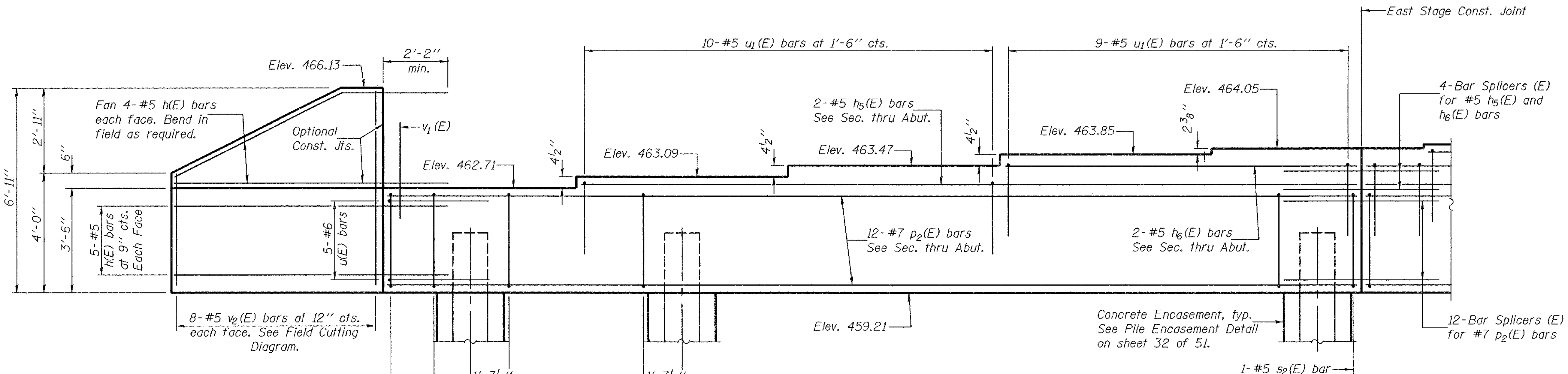
Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

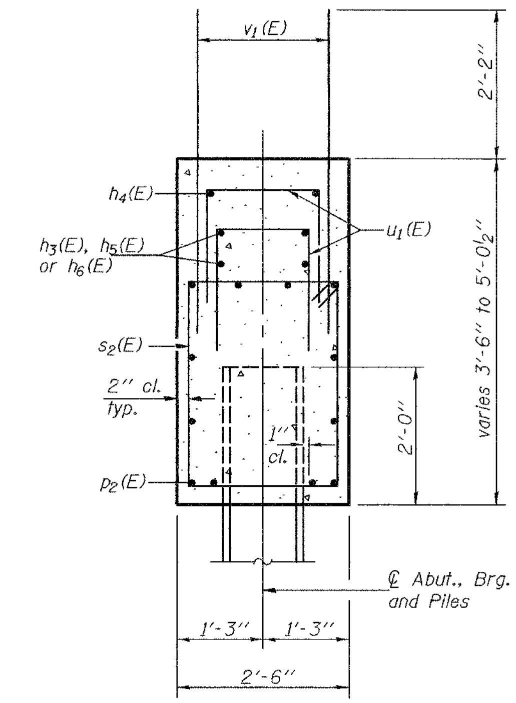
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	868
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 35
51 SHEETS

Contract #98950



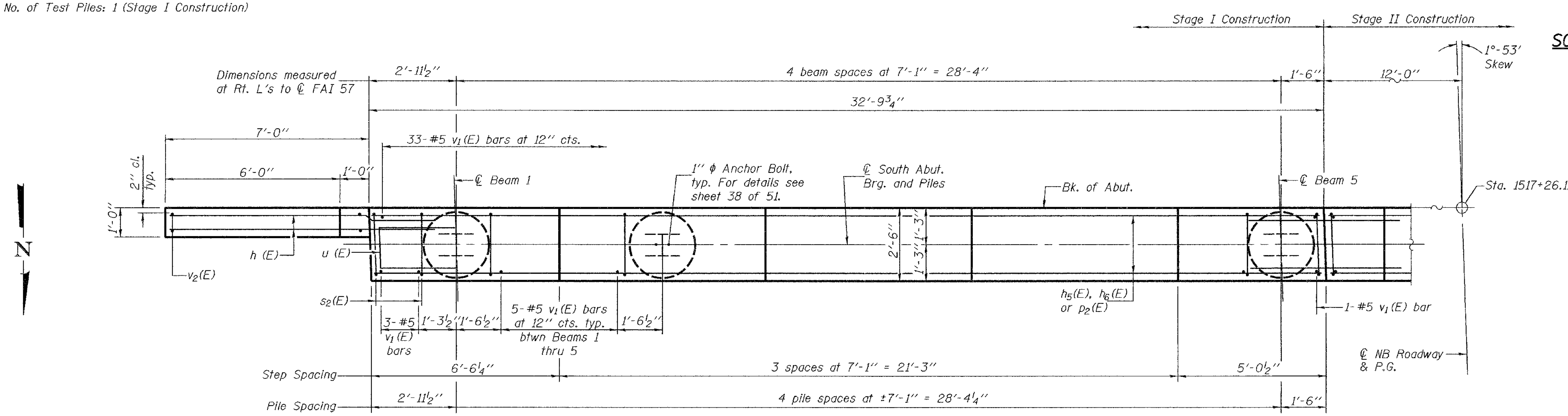
ELEVATION
(Looking South)



SECTION THRU SOUTH ABUTMENT (NB)

PILE DATA (S. ABUTMENT - NB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 10
No. of Test Piles: 1 (Stage I Construction)



PLAN

BILL OF MATERIAL
SOUTH ABUTMENT-SN 100-0086 (N.B)

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-5"	
h_3(E)	8	#5	22'-8"	
h_4(E)	2	#5	21'-0"	
h_5(E)	2	#5	26'-0"	
h_6(E)	2	#5	11'-10"	
p_1(E)	24	#7	24'-4"	
p_2(E)	12	#7	32'-6"	
s_2(E)	46	#5	11'-5"	
u(E)	11	#6	7'-2"	
u_1(E)	50	#5	6'-10"	
v_1(E)	134	#5	4'-4"	
v_2(E)	8	#5	10'-2"	
Concrete Structures			Cu. Yd.	33.8
Reinforcement Bars, Epoxy Coated			Pound	4190
Structure Excavation			Cu. Yd.	180
Furnishing Steel Piles HP14x73			Foot	600
Driving Piles			Foot	600
Test Pile Steel HP14x73			Each	1
Concrete Encasement			Cu. Yd.	4.9

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SOUTH ABUTMENT (STAGE I - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

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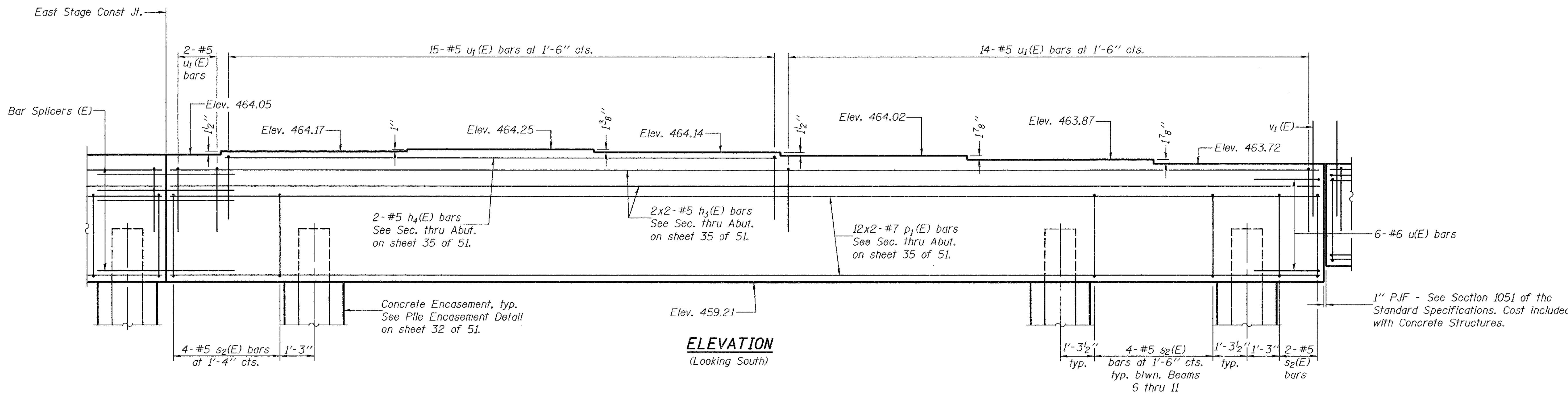
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

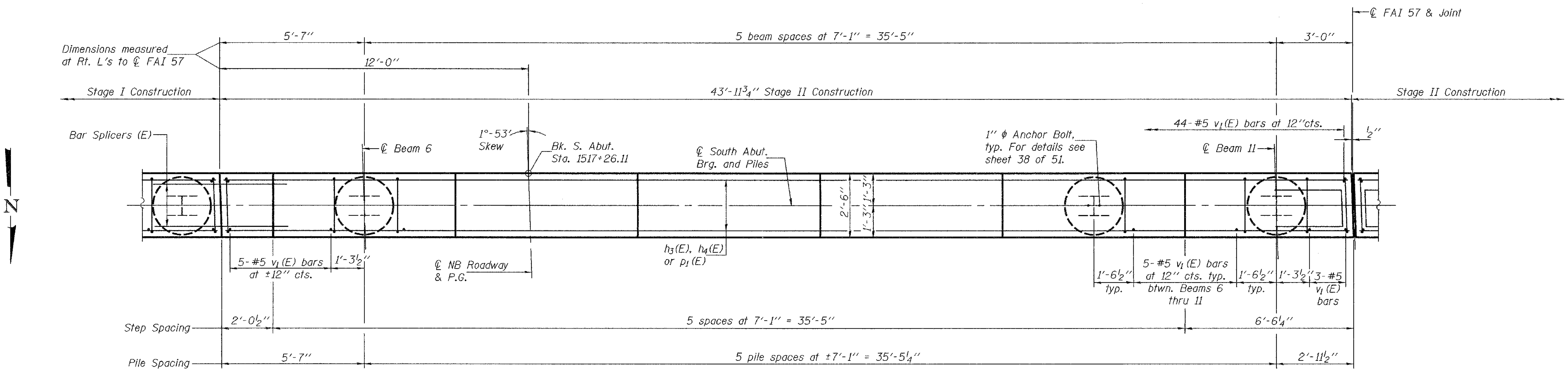
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	869
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 36
51 SHEETS

Contract #98950



ELEVATION
(Looking South)



PLAN

MIN. BAR LAPS
#5 bar = 1'-8"
#7 bar = 4'-10"

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.
Bars indicated thus 12x2-#7 indicates 12 lines of bars with 2 lengths per line.
For Bill of Material see sheet 35 of 51.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SOUTH ABUTMENT (STAGE II - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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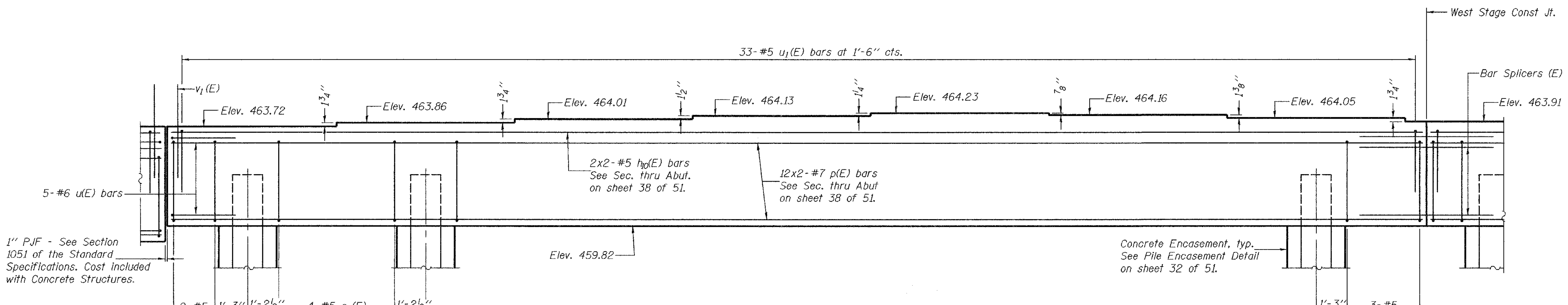
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	870
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

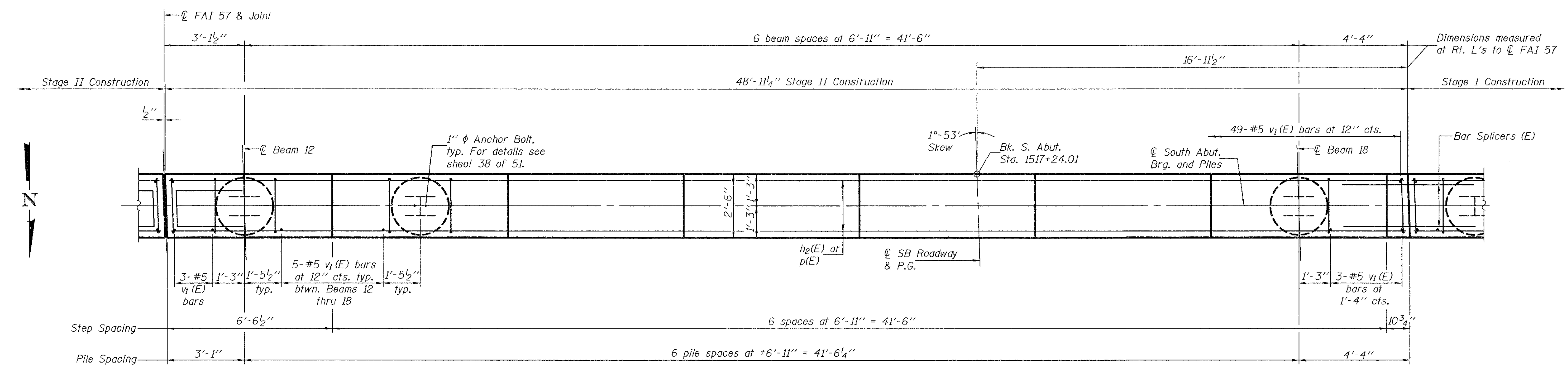
SHEET NO. 37
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking South)



PLAN

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.
Bars indicated thus 12x2- #7 indicates 12 lines of bars with 2 lengths per line.
For Bill of Material see sheet 38 of 51.

MIN. BAR LAPS

#5 bar = 1'-8"
#7 bar = 4'-10"

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

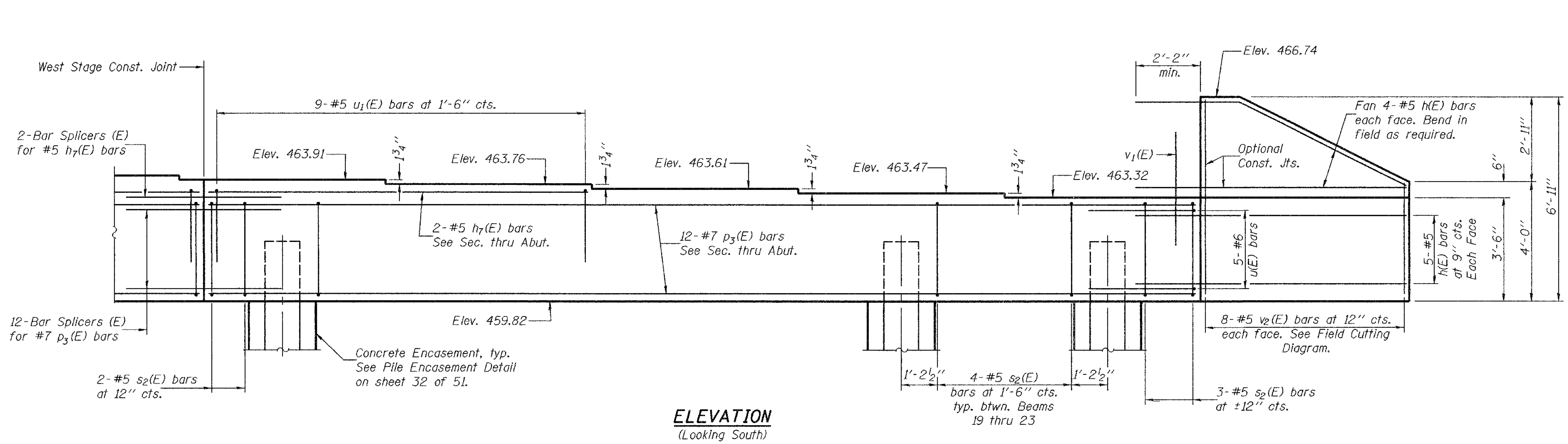
SOUTH ABUTMENT (STAGE II - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For bar bending details and Field Cutting Diagram see sheet 33 of 51.

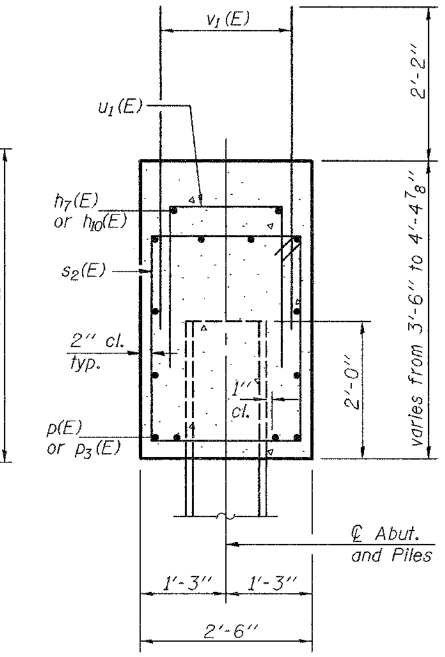
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	871

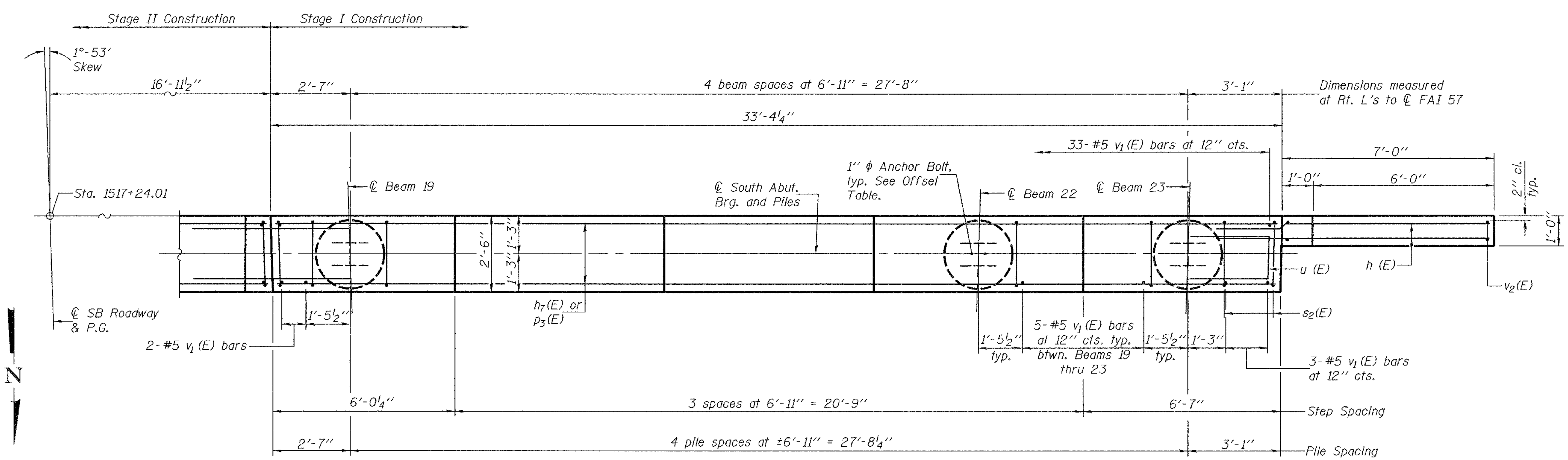
SHEET NO. 38
51 SHEETS
Contract #98950



ELEVATION
(Looking South)



SECTION THRU
SOUTH ABUTMENT (SB)



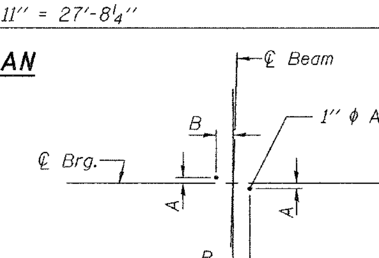
PLAN

BILL OF MATERIAL
SOUTH ABUTMENT-SN 100-0087 (S.B)

Bar	No.	Size	Length	Shape
h(E)	18	#5	9'-5"	
h_7(E)	2	#5	12'-7"	
h_{10}(E)	4	#5	25'-2"	
p(E)	24	#7	26'-10"	
p_3(E)	12	#7	33'-0"	
s_2(E)	50	#5	11'-5"	
u(E)	10	#6	7'-2"	
u_1(E)	42	#5	6'-10"	
v_1(E)	143	#5	4'-4"	
v_2(E)	8	#5	10'-2"	
Concrete Encasement		Cu. Yd.	5.3	
Concrete Structures		Cu. Yd.	32.2	
Reinforcement Bars, Epoxy Coated		Pound	4170	
Structure Excavation		Cu. Yd.	180	
Furnishing Steel Piles HP14x73		Foot	720	
Driving Piles		Foot	720	

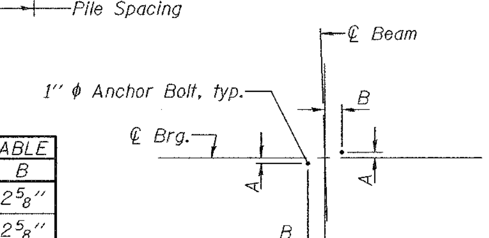
PILE DATA
(S. ABUTMENT - SB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 12



ANCHOR BOLT OFFSET
BEAMS 21-23

ANCHOR BOLT OFFSET TABLE		
Beam No.	A	B
Beams 1 thru 20	1/8"	2 5/8"
Beam 21	0	2 5/8"
Beam 22	1/8"	2 5/8"
Beam 23	1/8"	2 5/8"



ANCHOR BOLT OFFSET
BEAMS 1-20

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SOUTH ABUTMENT (STAGE I - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

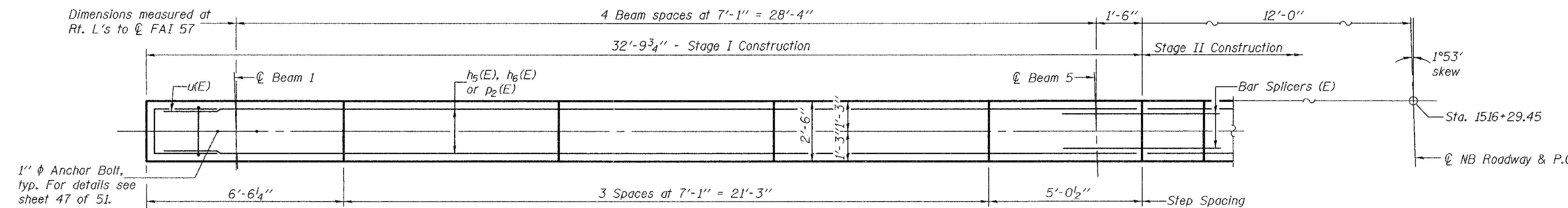
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	872

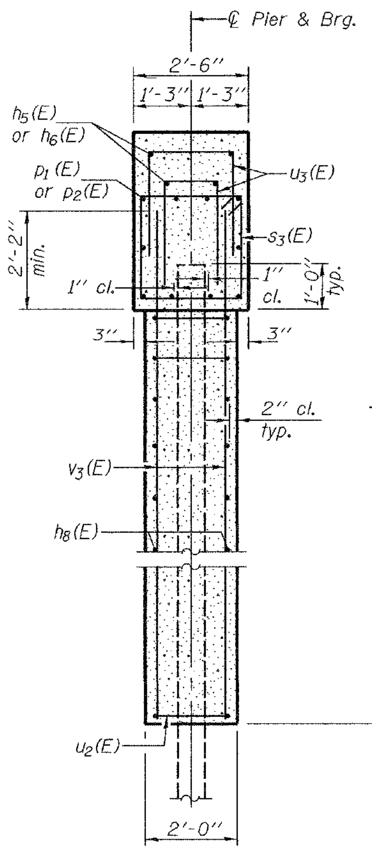
SHEET NO. 39
51 SHEETS
Contract #98950

PILE DATA
(PIER 1 - NB)

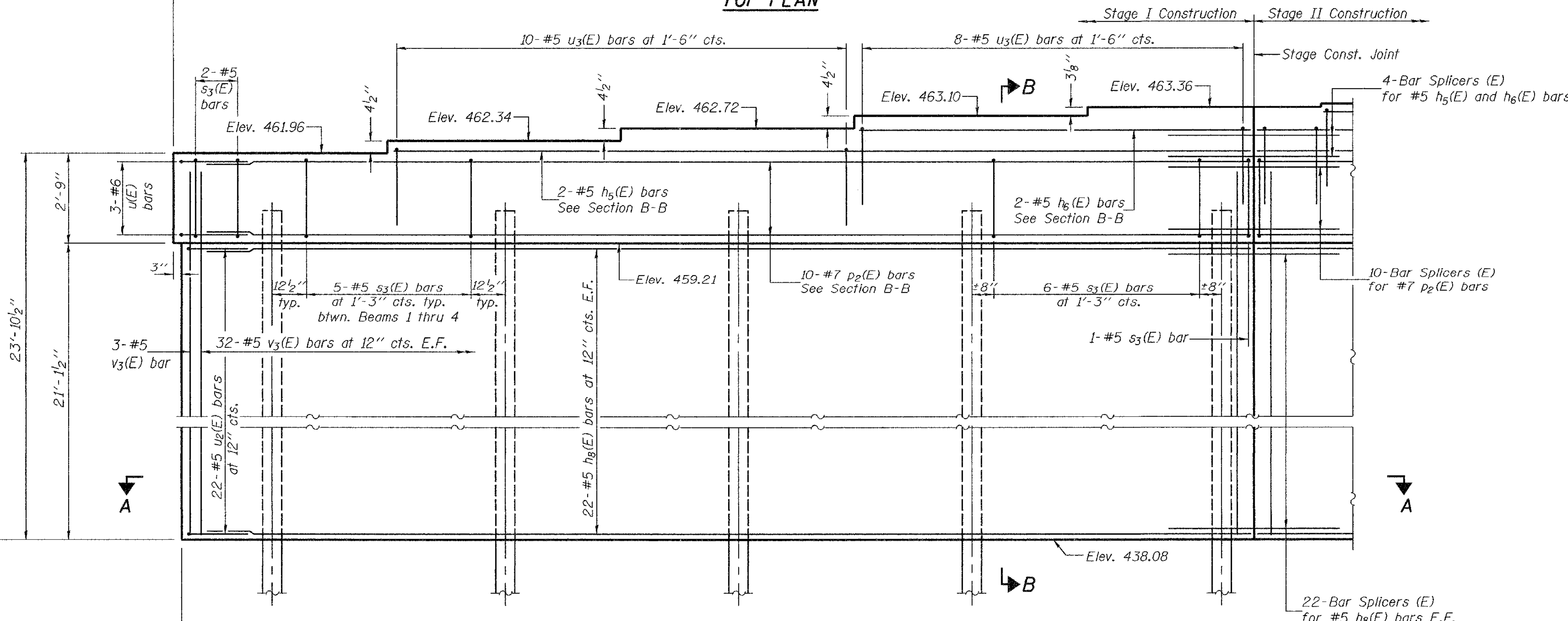
Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 10
No. of Test Piles: 1 (Stage I Construction)



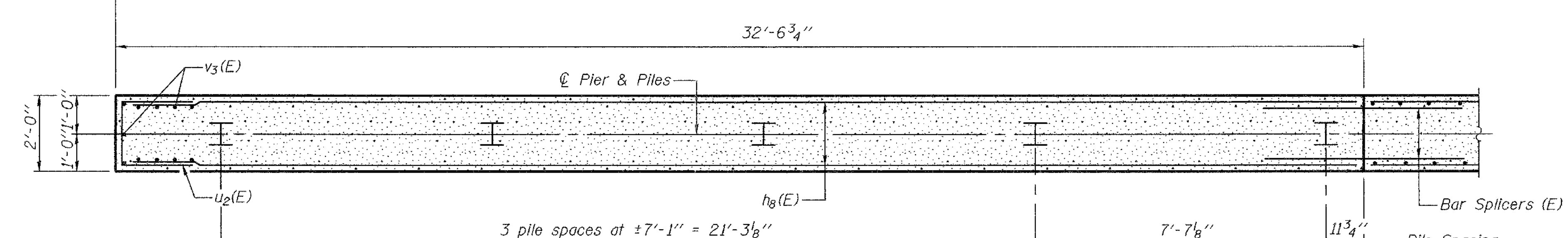
TOP PLAN



SECTION B-B



ELEVATION
(Looking South)



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PIER 1 (STAGE I - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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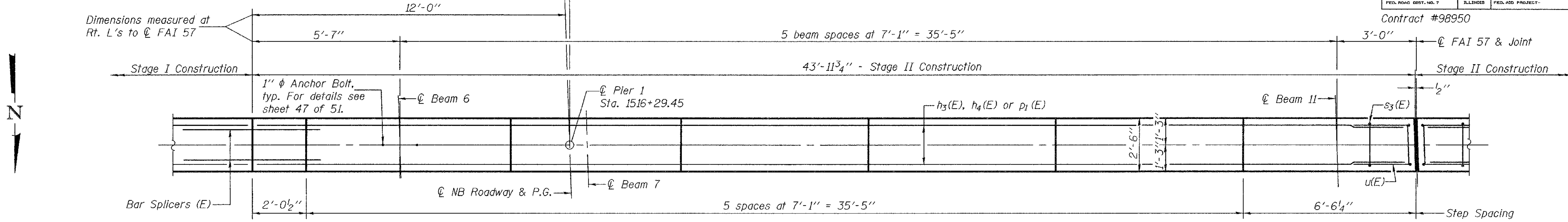
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	873
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

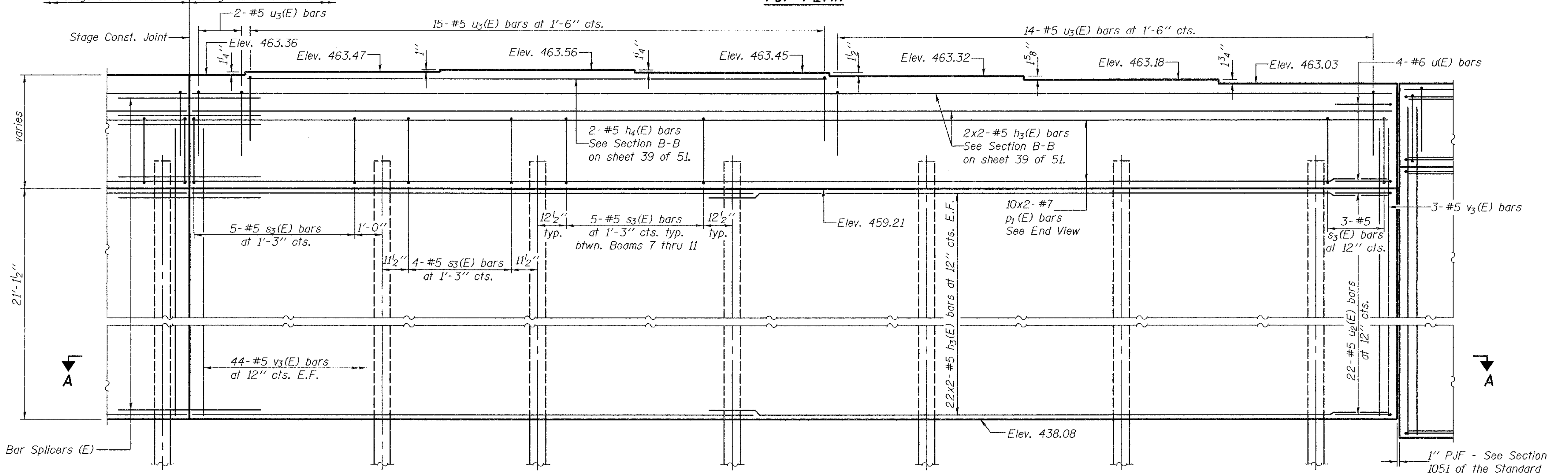
SHEET NO. 40
51 SHEETS

Contract #98950

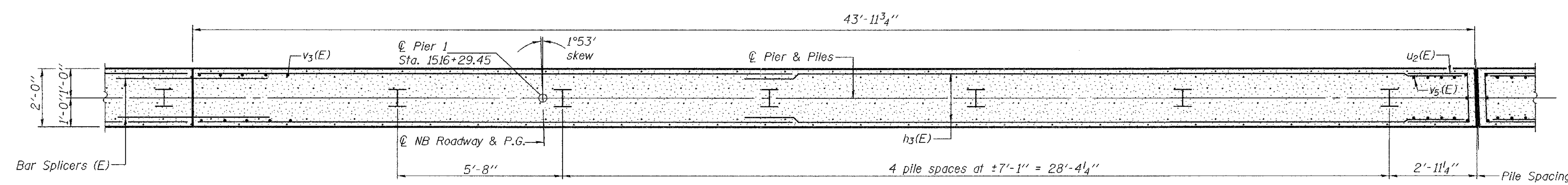
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP PLAN



ELEVATION
(Looking South)



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski — ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson — ENGINEER OF BRIDGES AND STRUCTURES

Notes:
- Pour steps monolithically with cap.
- Space reinforcement in cap to miss anchor bolts.
- For Anchor Bolt installation details see sheet 30 of 51.
- For Bar Splicer details see sheet 48 of 51.
- For Section B-B see sheet 39 of 51.
- For Bill of Material and bar bending details see sheet 47 of 51.

MIN. BAR LAP
#5 bars = 1'-8"
#7 bars = 4'-10"

PIER 1 (STAGE II - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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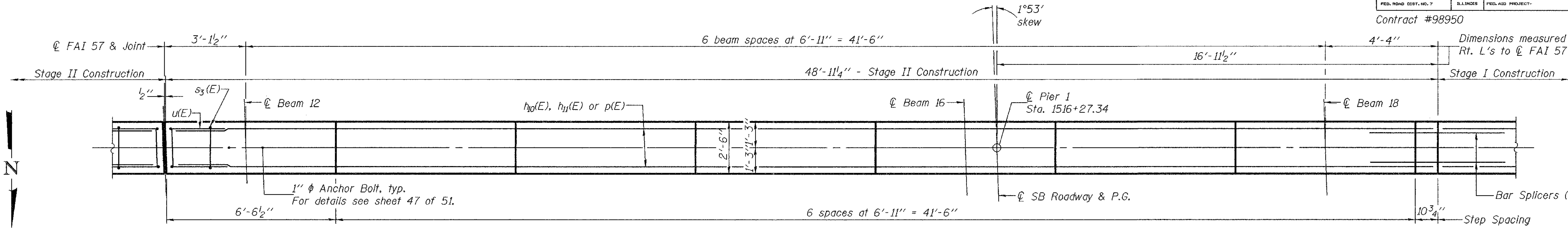
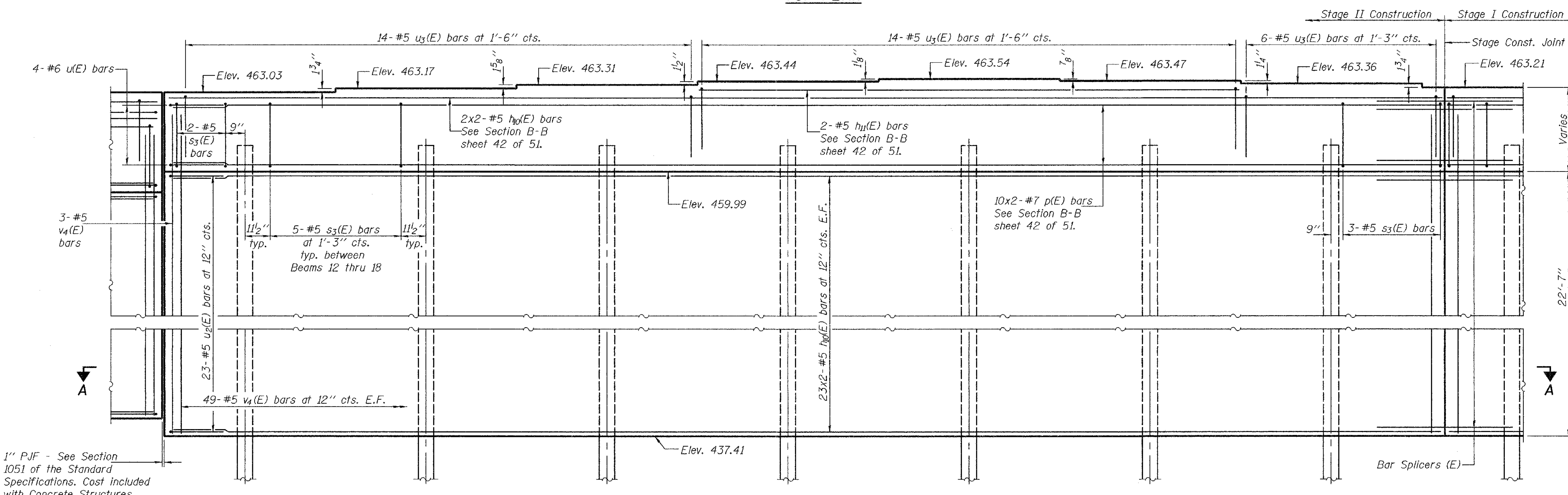
Contract #98950

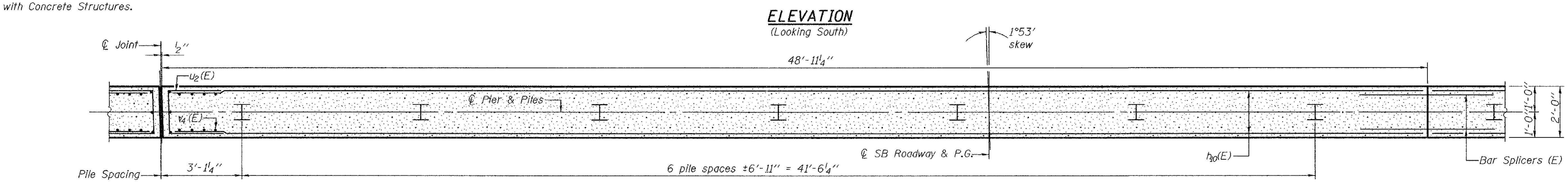
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP PLAN



ELEVATION
(Looking South)



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

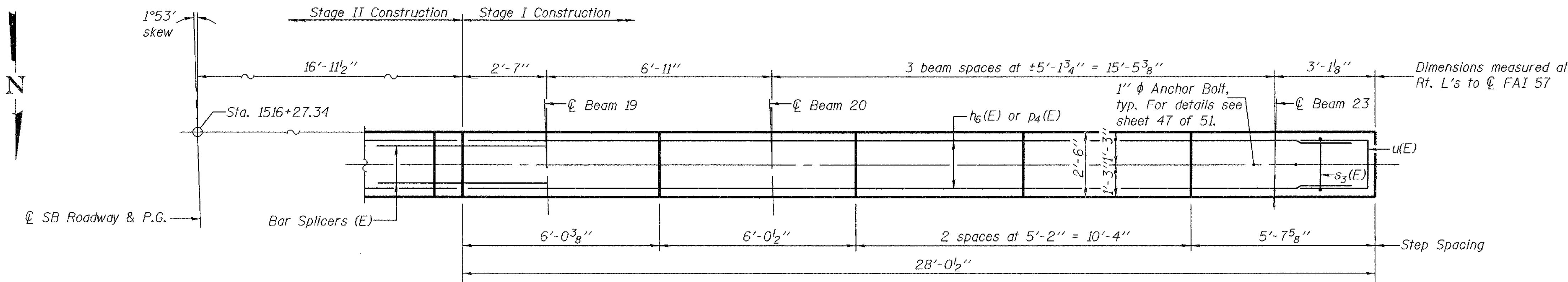
Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Section B-B see sheet 42 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

MIN. BAR LAPS
#5 bars = 1′-8″
#7 bars = 4′-10″

PIER 1 (STAGE II - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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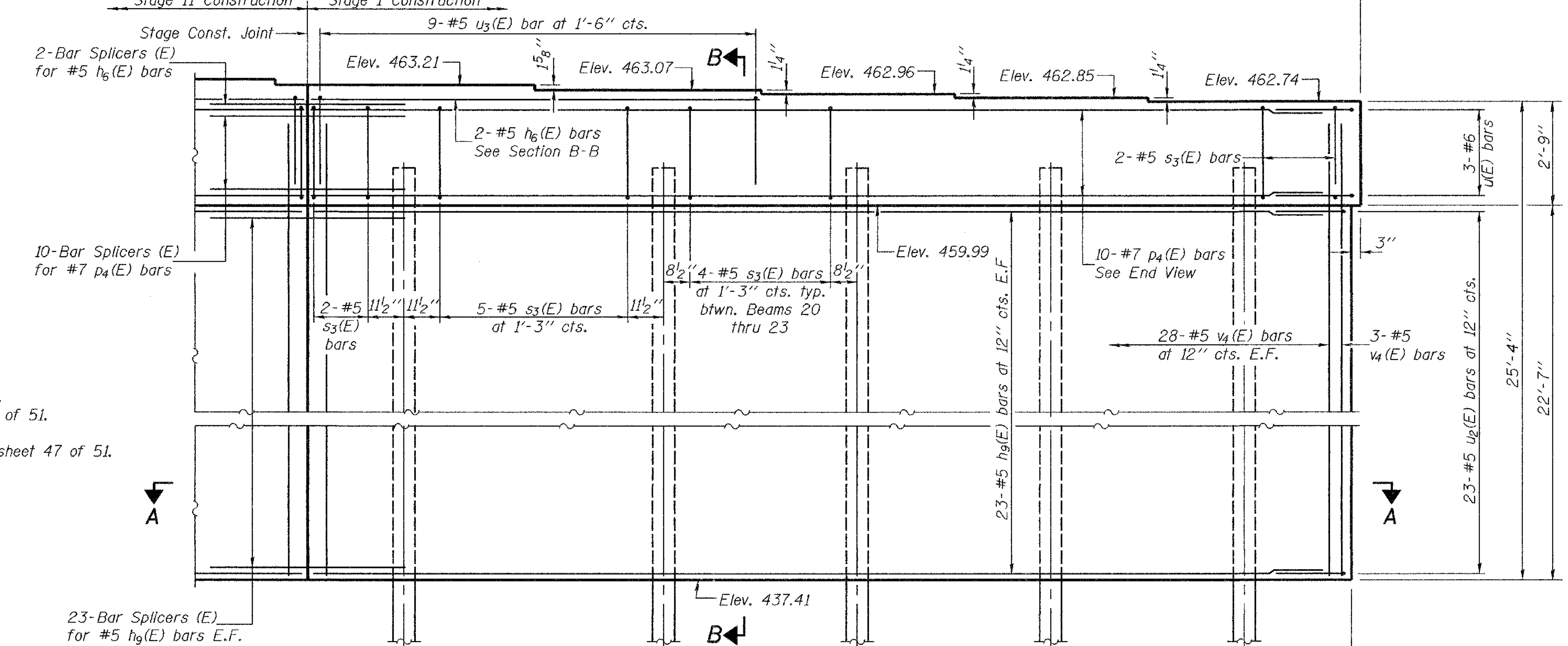
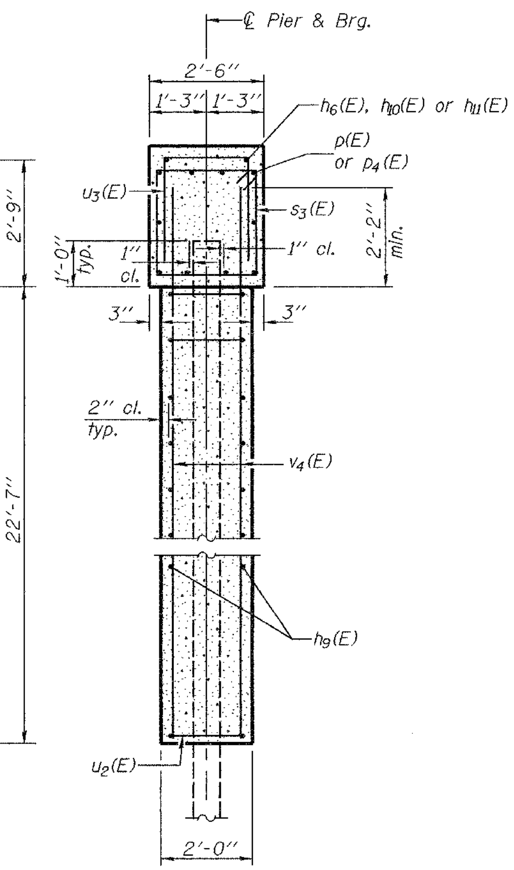


ELEVATION
(Looking South)

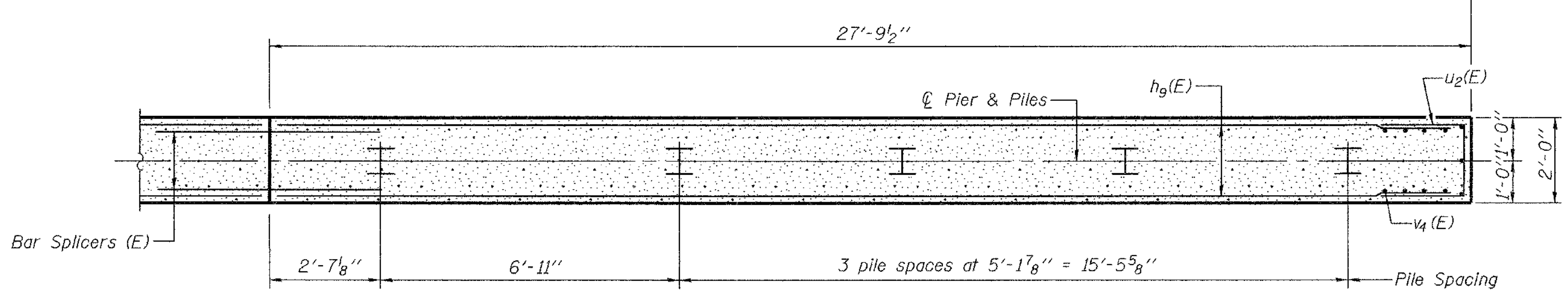


SECTION B-B

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
Fpr Bill of Material and bar bending details see sheet 47 of 51.

PILE DATA
(PIER 1 - SB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 12



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

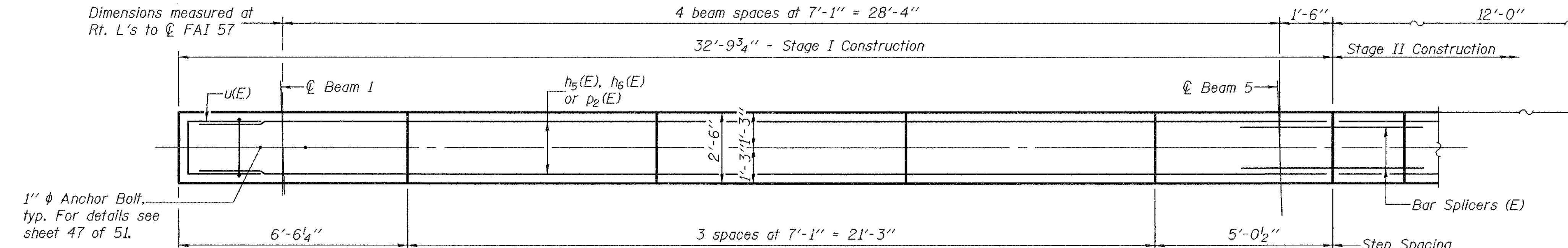
PIER 1 (STAGE I - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	876
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

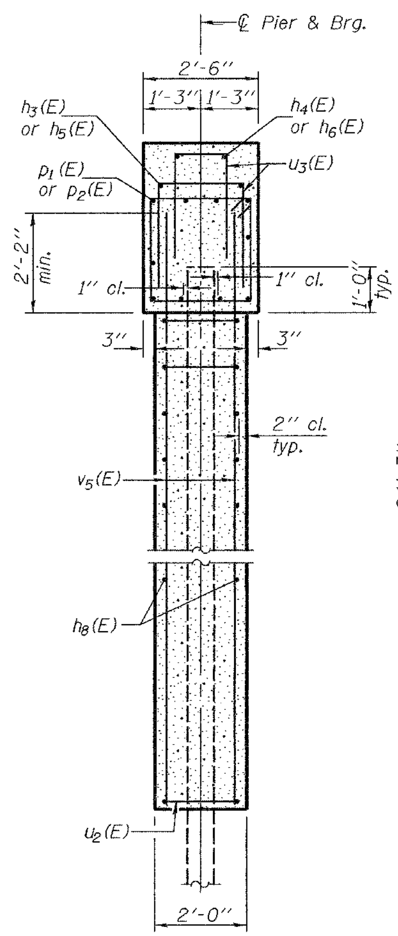
SHEET NO. 43
51 SHEETS

Contract #98950

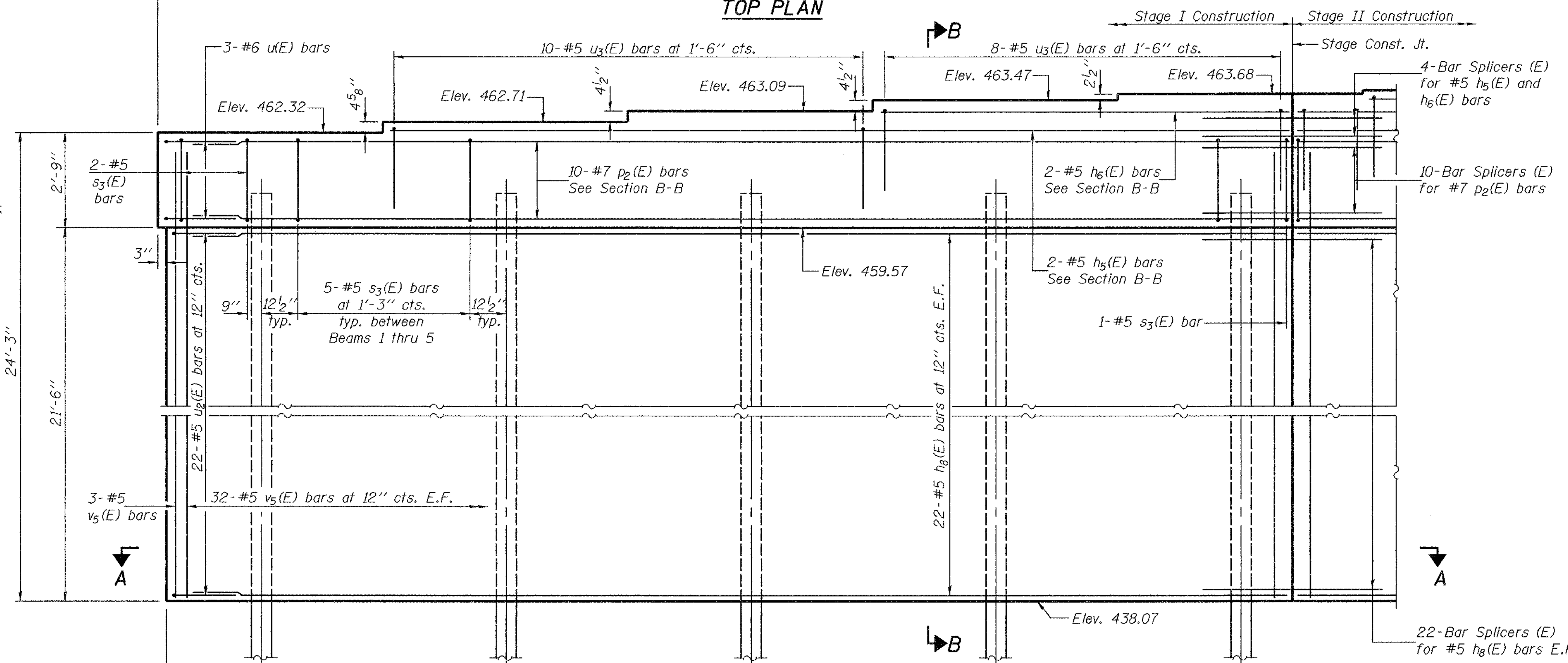
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP PLAN



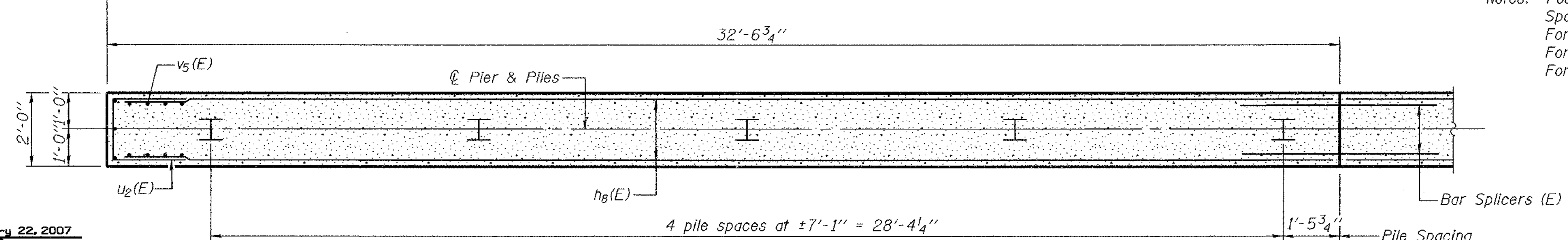
SECTION B-B



ELEVATION
(Looking South)

PILE DATA
PIER 2-NB

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 11



SECTION A-A

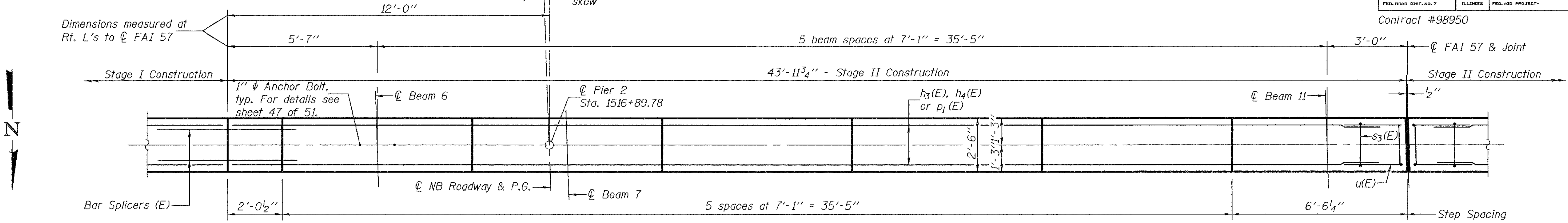
Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

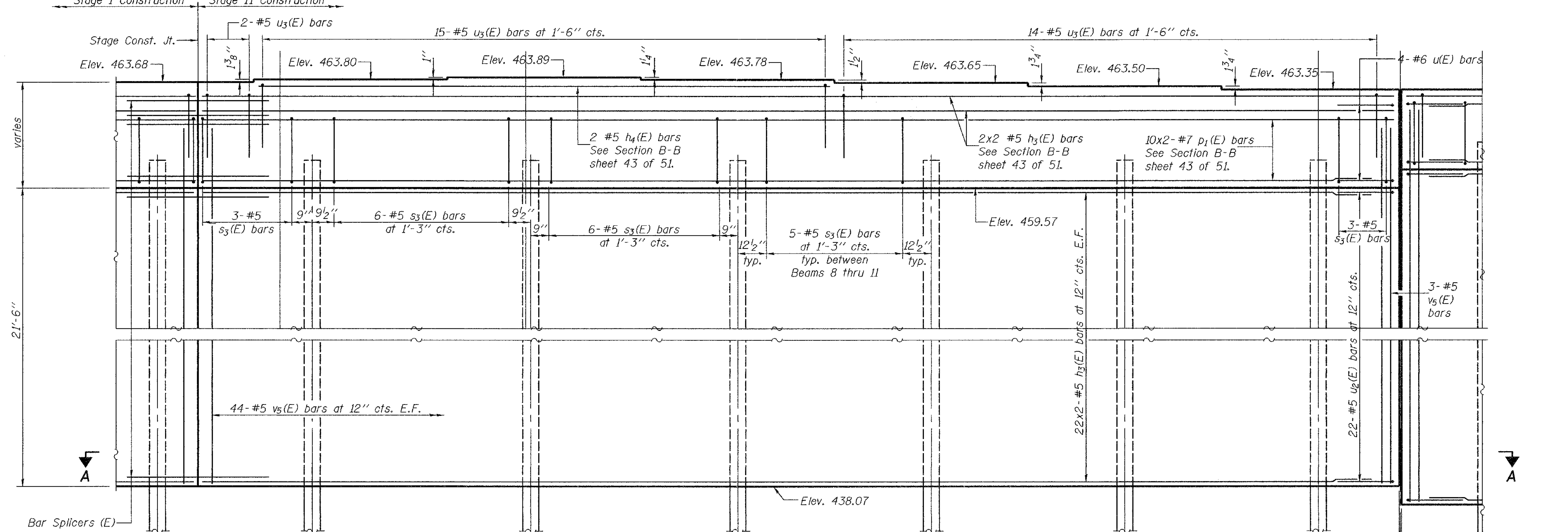
January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PIER 2 (STAGE I - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

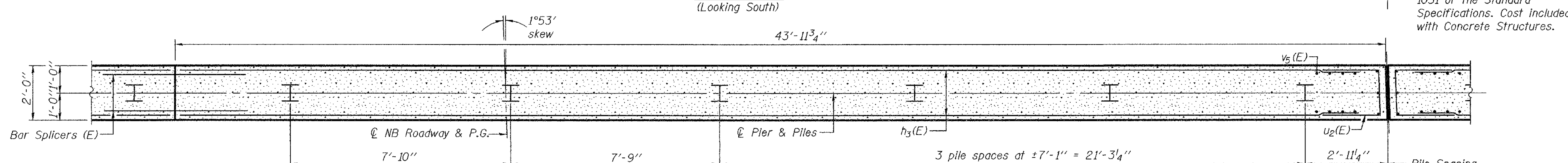
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP PLAN



ELEVATION
(Looking South)



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski — ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson — ENGINEER OF BRIDGES AND STRUCTURES

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Section B-B see sheet 43 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

MIN. BAR LAPS
#5 bars = 1′-8″
#7 bars = 4′-10″

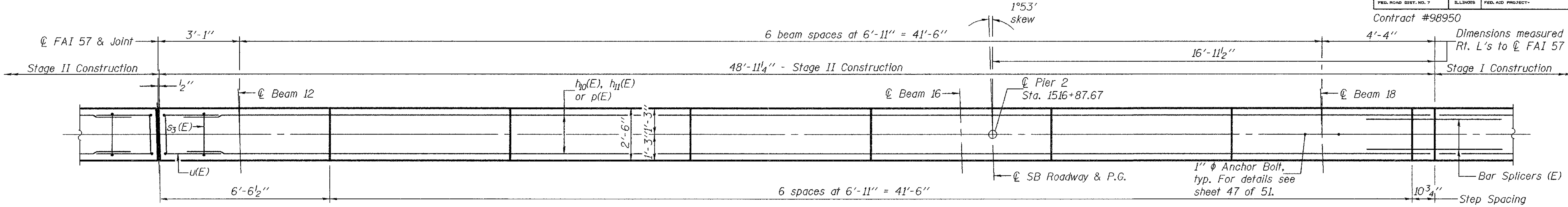
PIER 2 (STAGE II - NB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

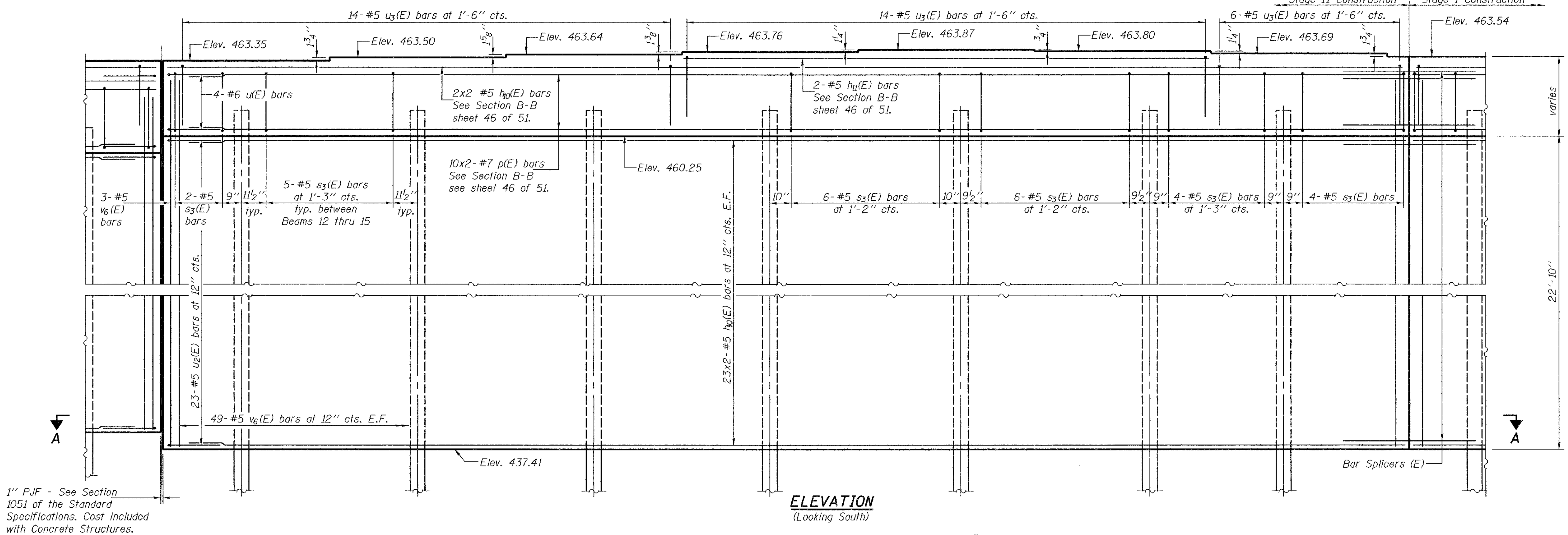
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	878
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 45
51 SHEETS

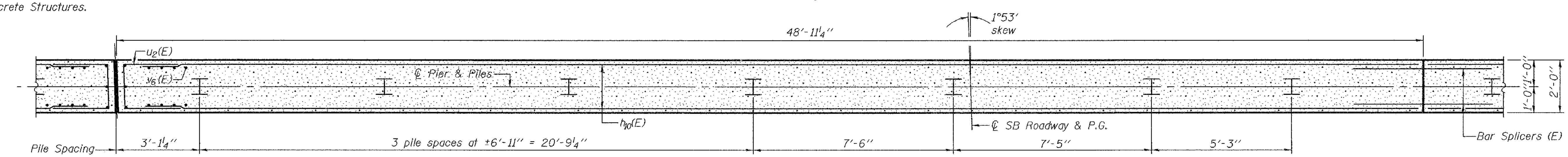
Contract #98950



TOP PLAN



ELEVATION
(Looking South)



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

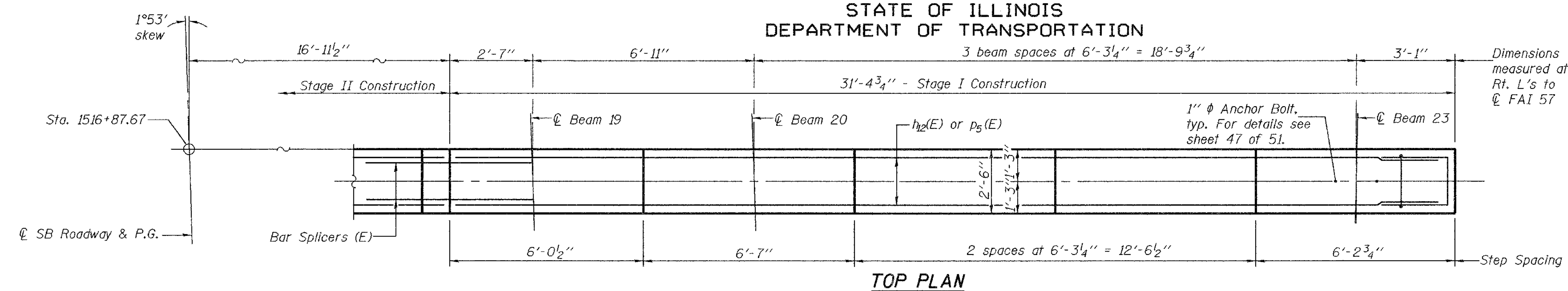
January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Section B-B see sheet 46 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

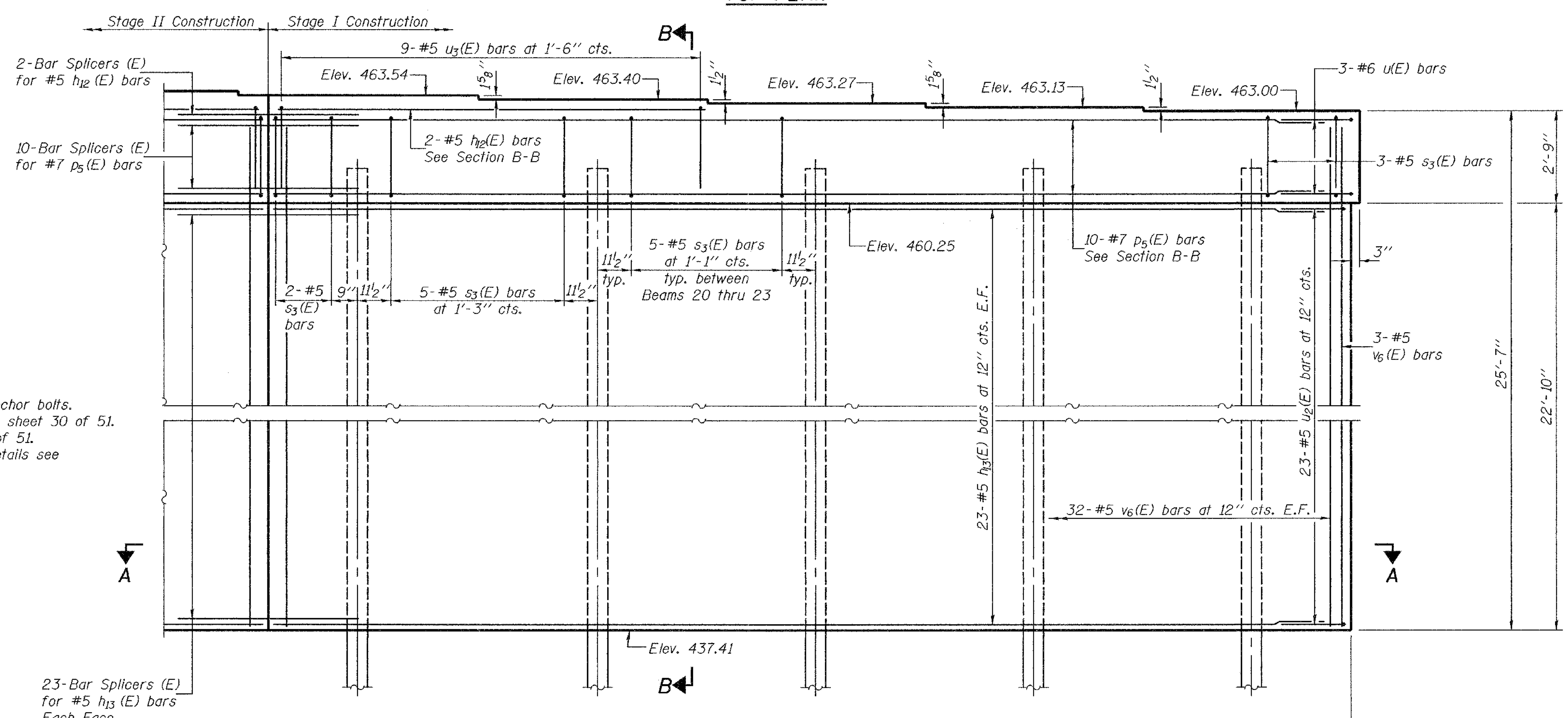
MIN. BAR LAPS
#5 bars = 1'-8"
#7 bars = 4'-10"

PIER 2 (STAGE II - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.) & S.N. 100-0087 (S.B.)

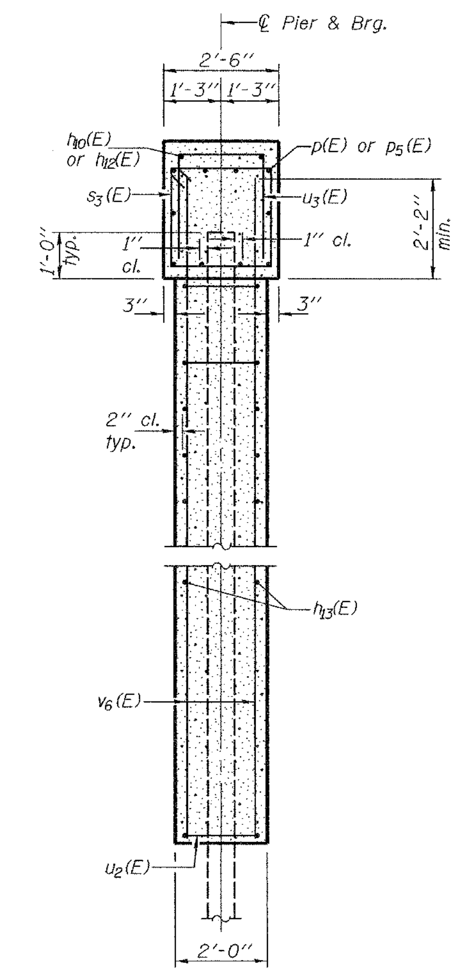
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP PLAN



ELEVATION
(Looking South)

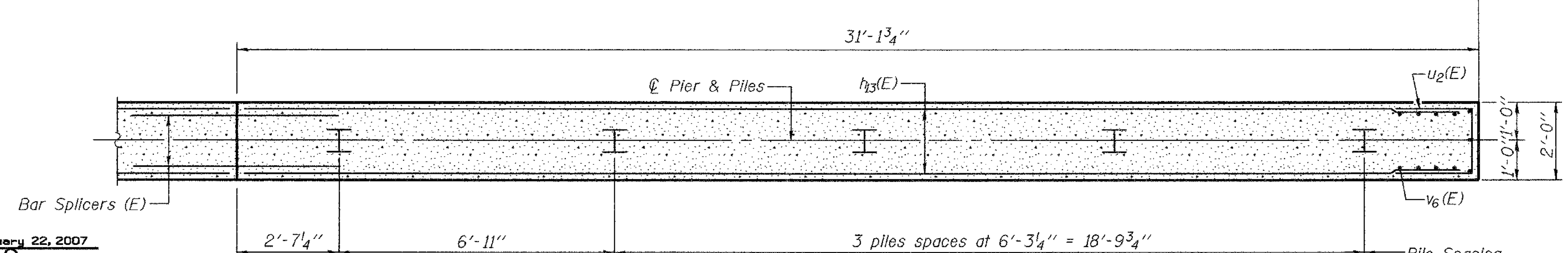


SECTION B-B

Notes: Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For Anchor Bolt installation details see sheet 30 of 51.
For Bar Splicer details see sheet 48 of 51.
For Bill of Material and bar bending details see sheet 47 of 51.

PILE DATA
(PIER 2-SB)

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 289 kips
Est. Length: 60 feet
No. of Production Piles: 12



SECTION A-A

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PIER 2 (STAGE I - SB)
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL
PIER 1 - SN 100-0086 (N.B)

Bar	No.	Size	Length	Shape
h_3(E)	96	#5	22'-8"	
h_4(E)	2	#5	21'-0"	
h_5(E)	2	#5	26'-0"	
h_6(E)	2	#5	11'-10"	
h_8(E)	44	#5	32'-3"	
p_1(E)	20	#7	24'-4"	
p_2(E)	10	#7	32'-6"	
s_3(E)	56	#5	9'-11"	
u(E)	7	#6	7'-2"	
u_2(E)	44	#5	6'-4"	
u_3(E)	49	#5	7'-2"	
v_3(E)	158	#5	23'-2"	
Concrete Structures			Cu. Yd.	147.0
Reinforcement Bars, Epoxy Coated			Pound	10,660
Structure Excavation			Cu. Yd.	111
Furnishing Steel Piles HP14x73			Foot	600
Driving Piles			Foot	600
Test Pile Steel HP14x73			Each	1

BILL OF MATERIAL
PIER 1 - SN 100-0087 (S.B)

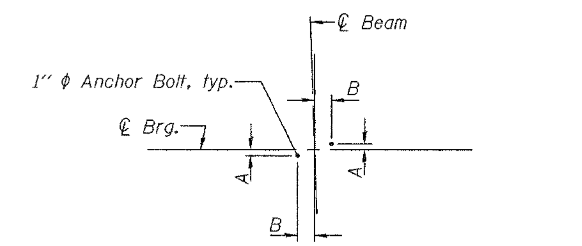
Bar	No.	Size	Length	Shape
h_6(E)	2	#5	11'-10"	
h_9(E)	46	#5	27'-5"	
h_{10}(E)	96	#5	25'-2"	
h_{11}(E)	2	#5	20'-6"	
p(E)	20	#7	26'-10"	
p_4(E)	10	#7	27'-9"	
s_3(E)	56	#5	9'-11"	
u(E)	7	#6	7'-2"	
u_2(E)	46	#5	6'-4"	
u_3(E)	43	#5	7'-2"	
v_4(E)	160	#5	24'-7"	
Concrete Structures			Cu. Yd.	150.9
Reinforcement Bars, Epoxy Coated			Pound	10,950
Structure Excavation			Cu. Yd.	138
Furnishing Steel Piles HP14x73			Foot	720
Driving Piles			Foot	720

BILL OF MATERIAL
PIER 2 - SN 100-0086 (N.B)

Bar	No.	Size	Length	Shape
h_3(E)	96	#5	22'-8"	
h_4(E)	2	#5	21'-0"	
h_5(E)	2	#5	26'-0"	
h_6(E)	2	#5	11'-10"	
h_8(E)	44	#5	32'-3"	
p_1(E)	20	#7	24'-4"	
p_2(E)	10	#7	32'-6"	
s_3(E)	56	#5	9'-11"	
u(E)	7	#6	7'-2"	
u_2(E)	44	#5	6'-4"	
u_3(E)	49	#5	7'-2"	
v_5(E)	158	#5	23'-6"	
Concrete Structures			Cu. Yd.	149.1
Reinforcement Bars, Epoxy Coated			Pound	10,660
Structure Excavation			Cu. Yd.	125
Furnishing Steel Piles HP14x73			Foot	660
Driving Piles			Foot	660

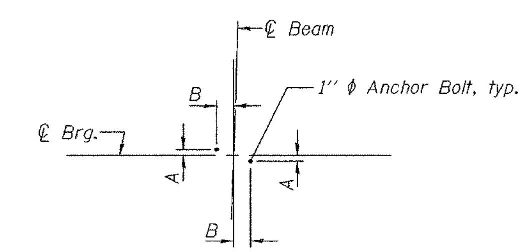
BILL OF MATERIAL
PIER 2 - SN 100-0087 (S.B)

Bar	No.	Size	Length	Shape
h_{10}(E)	96	#5	25'-2"	
h_{11}(E)	2	#5	20'-6"	
h_{12}(E)	2	#5	12'-3"	
h_{13}(E)	46	#5	30'-10"	
p(E)	20	#7	26'-10"	
p_5(E)	10	#7	31'-1"	
s_3(E)	62	#5	9'-11"	
u(E)	7	#6	7'-2"	
u_2(E)	46	#5	6'-4"	
u_3(E)	43	#5	7'-2"	
v_6(E)	168	#5	24'-10"	
Concrete Structures			Cu. Yd.	159.6
Reinforcement Bars, Epoxy Coated			Pound	11,490
Structure Excavation			Cu. Yd.	153
Furnishing Steel Piles HP14x73			Foot	720
Driving Piles			Foot	720

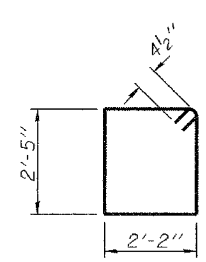


ANCHOR BOLT OFFSET
BEAMS 1-20

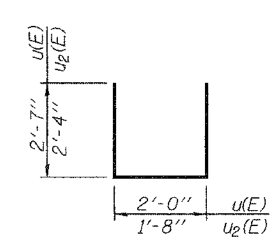
ANCHOR BOLT OFFSET TABLE		
Beam No.	A	B
Beams 1 thru 20	1/4"	7 3/4"
Beam 21	1/8"	7 3/4"
Beam 22	1/4"	7 3/4"
Beam 23	3/8"	7 3/4"



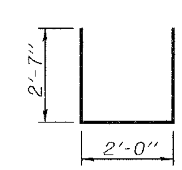
ANCHOR BOLT OFFSET
BEAMS 21-23



BAR s_3(E)



BAR u(E) & u_2(E)



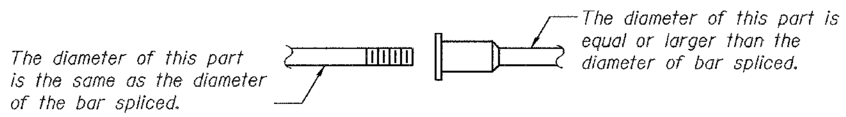
BAR u_3(E)

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

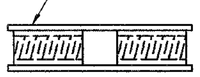
PIER DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ROLLED THREAD DOWEL BAR

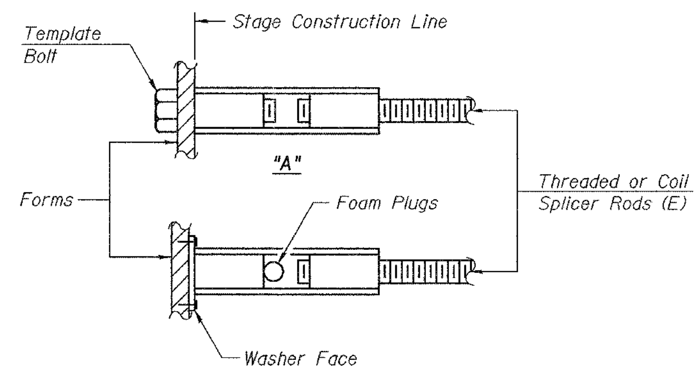
** ONE PIECE



WELDED SECTIONS

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) = $1.25 \times fy \times A_t$

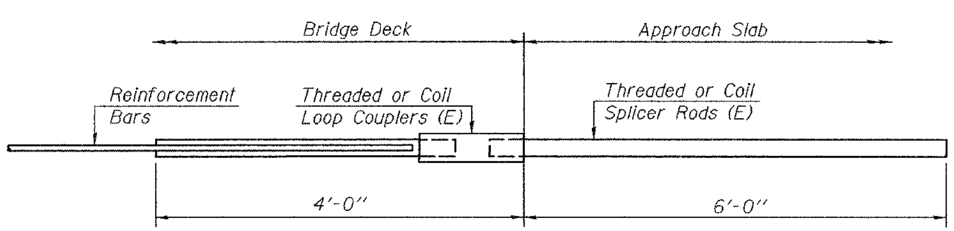
② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times fs_{allow} \times A_t$

Where fy = Yield strength of lapped reinforcement bars in ksi.
fs_{allow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES

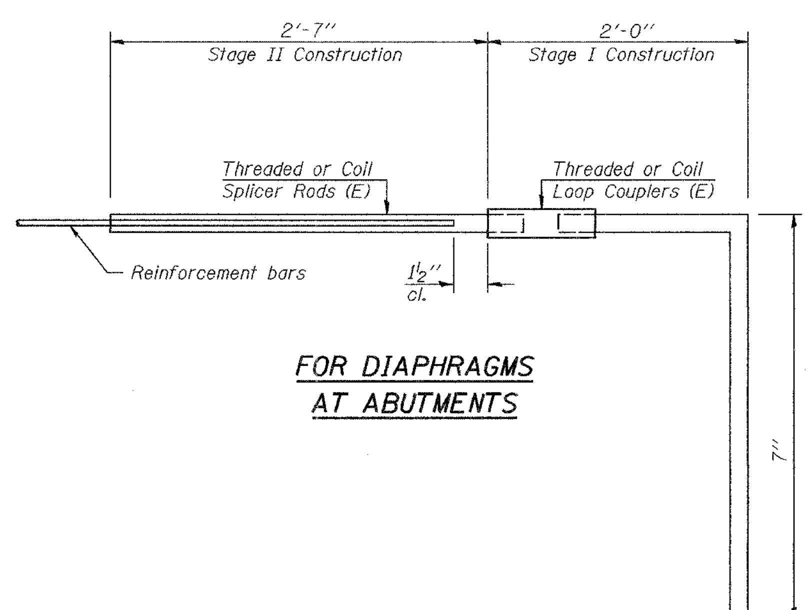
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements: Min. Capacity kips - tension	Strength Requirements: Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



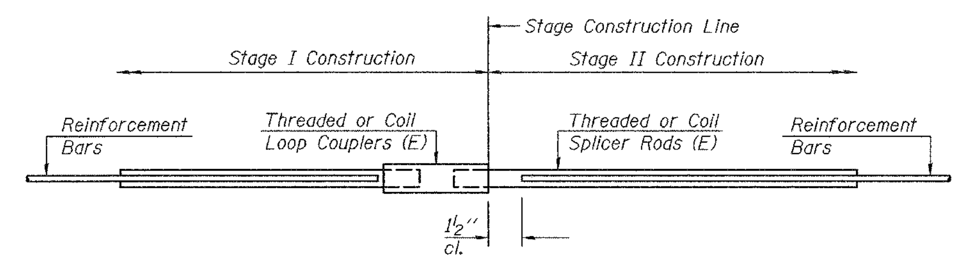
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 304



FOR DIAPHRAGMS AT ABUTMENTS

Bar Splicer for #6 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 12



STANDARD

Bar Size	No. Assemblies Required	Location
#5	12	Abutment
#5	844	Superstructure
#5	192	Pier
#6	20	Diaphragm
#7	40	Pier
#7	48	Abutment

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 10-22-04

BAR SPLICER ASSEMBLY DETAILS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

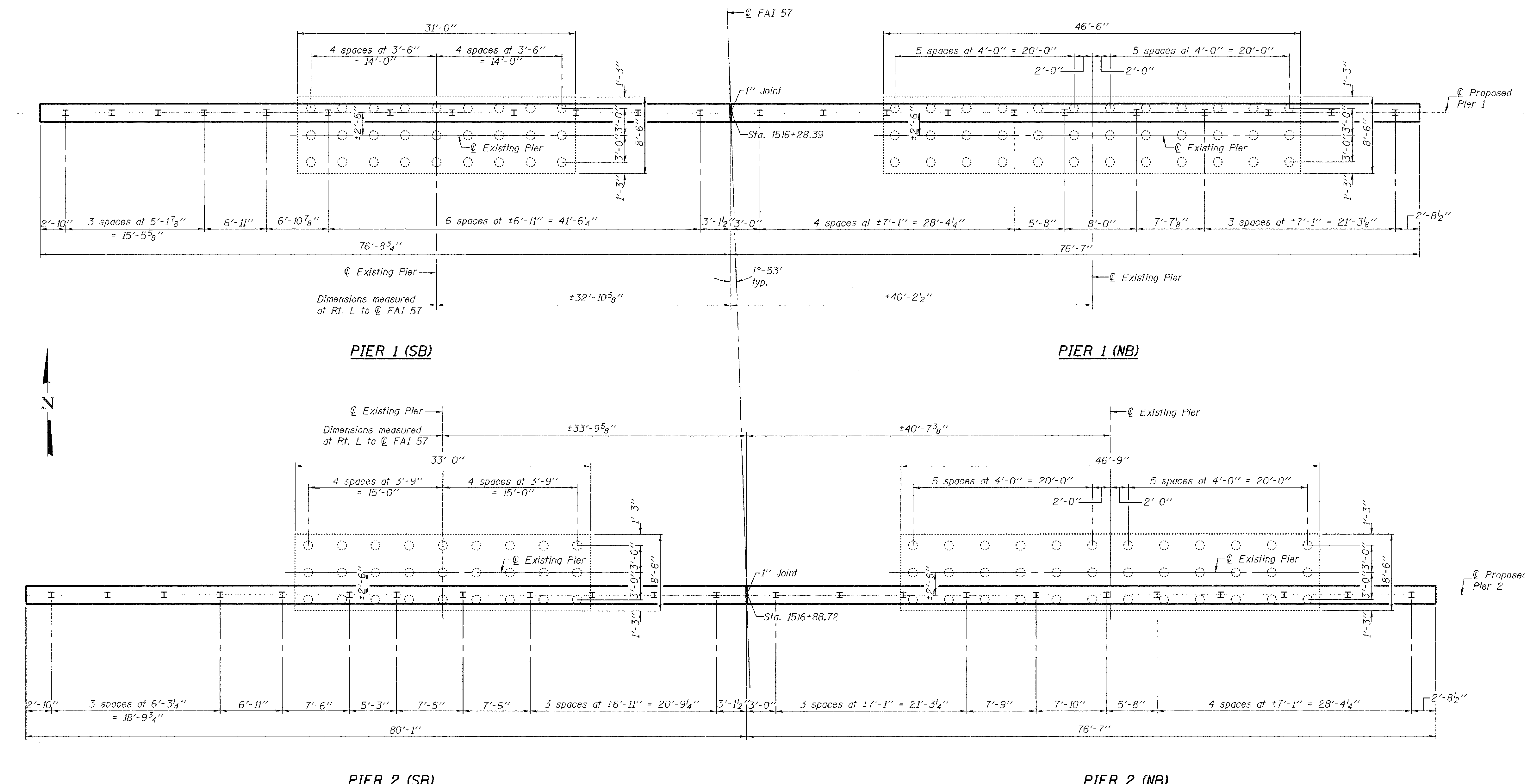
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	832

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT-

SHEET NO. 49
51 SHEETS

Contract #98950



EXISTING AND PROPOSED PILE LAYOUT

Note:
All dimensions are measured along skew angles unless otherwise indicated.

DESIGNED	Michael D. Cima
CHECKED	Fess Teklehaimanot
DRAWN	BECKY M. LEACH
CHECKED	M.D.C. & F.T.

January 22, 2007
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

EXISTING AND PROPOSED PILE LAYOUT
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	883
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 50
51 SHEETS

Contract #98950

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation — SOIL BORING LOG (Boring No. 1)

Division of Highways
Region 5 / District 9

Page 1 of 1
Date 1959

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY
SECTION X1-6VB LOCATION in Marion, SEC. , TWP. 9S, RNG. 2W, 3 PM
COUNTY Williamson DRILLING METHOD HAMMER TYPE

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 1
Station 1515+93
Offset 32.00ft Lt. ℄ Survey
Ground Surface Elev. 434.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

Description	Bottom Elev.	Blows (/6")	UCS Qu (tsf)	Moist (%)
Stiff mottled silty clay	428.00	3	1.64	
		4	1.96	
Very stiff mottled silty clay	423.50	7	3.42	
		8	3.84	
Hard mottled stony clay	421.00	10	4.25	
Very stiff mottled sandy clay	416.00	11	3.76	
		13	2.94	
Very stiff blue silty sandy clay; Very stiff blue silty sandy clay (continued)	411.00	12	2.78	
		12	2.66	
Hard blue silty sandy clay	406.10	18	4.09	
Gray shale	402.00			

Depth scale: -5, -10, -15, -20, -25, -30, -35, -40 (ft)

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG (Boring No. 2)

Division of Highways
Region 5 / District 9

Page 1 of 1
Date 1959

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY
SECTION X1-6VB LOCATION in Marion, SEC. , TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD HAMMER TYPE

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 2
Station 1516+13
Offset 32.00ft Rt. ℄ Survey
Ground Surface Elev. 435.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

Description	Bottom Elev.	Blows (/6")	UCS Qu (tsf)	Moist (%)
Stiff brown mottled silty clay	431.50	4	1.96	
Very stiff brown mottled silty clay	426.50	5	2.45	
		12	3.68	
Hard brown mottled silty clay	421.50	17	4.41	
		18	4.49	
Very stiff brown mottled stony clay; Very stiff brown mottled stony clay (continued)	406.50	13	3.92	
		10	3.10	
		14	3.42	
		17	3.92	
		14	3.51	
Gray shale	399.50			

Depth scale: -5, -10, -15, -20, -25, -30, -35, -40 (ft)

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG (Boring No. 3)

Division of Highways
Region 5 / District 9

Page 1 of 1
Date 1959

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY
SECTION X1-6VB LOCATION in Marion, SEC. , TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD HAMMER TYPE

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 3
Station 1516+85
Offset 32.00ft Rt. ℄ Survey
Ground Surface Elev. 436.3 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

Description	Bottom Elev.	Blows (/6")	UCS Qu (tsf)	Moist (%)
Very stiff brown mottled silty clay	425.00	5	2.78	
		6	3.19	
		6	2.94	
		5	2.70	
Very stiff brown mottled silty stony clay	417.50	6	3.27	
		7	3.60	
		10	3.27	
Hard brown mottled stony clay; Hard brown mottled stony clay (continued)	409.60	17	4.25	
		16	4.00	
		17	4.17	
Gray shale	403.00			

Depth scale: -5, -10, -15, -20, -25, -30, -35, -40 (ft)

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG (Boring No. 4)

Division of Highways
Region 5 / District 9

Page 1 of 1
Date 1959

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY
SECTION X1-6VB LOCATION in Marion, SEC. , TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD HAMMER TYPE

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 4
Station 1517+26
Offset 32.00ft Rt. ℄ Survey
Ground Surface Elev. 437.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

Description	Bottom Elev.	Blows (/6")	UCS Qu (tsf)	Moist (%)
Stiff yellow loessial silty clay	436.00			
Stiff mottled clay till	428.50	7	1.97	
		7	1.93	
Very stiff mottled clay till	423.50	16	2.94	
		12	2.36	
Very stiff mottled sandy clay till		9	2.41	
		10	3.23	
Lost sample		10		
Lost sample	411.00	10		
		14	3.23	
Hard gray mottled stony clay till	405.50	29	4.17	
		36	5.31	
Gray shale	399.50	140	10.22	
		140	10.22	
		100	10.22	

Note: No stability problem

Depth scale: -5, -10, -15, -20, -25, -30, -35, -40 (ft)

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, form 137 (Rev. 8-99)

BORING LOGS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(X1-6-2) VB-2	WILLIAMSON	917	834
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 51
51 SHEETS

Contract #98950

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Region 5 /District 9

Page 1 of 2 — Date 6/1/00

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY Bryan Keller
SECTION X1-6VB LOCATION in Marion, SEC., TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD ______ HAMMER TYPE ______

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 1-S
Station 1515+58
Offset 6.00ft Rt. ℄ Roadway
Ground Surface Elev. 465.3 ft

Surface Water Elev. ______ ft
Stream Bed Elev. ______ ft
Groundwater Elev.:
First Encounter 42.0 ft
Upon Completion ______ ft
After 425.3 Hrs. 461.3 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Soft, very moist, brown to grey Silty Clay A-6					
			2		
			1	0.3	24
			2	B	
	460.80				
Very stiff, moist, brown mottled grey, Clay A7-6		-5	1		
			2	2.2	19
			6	B	
	458.30				
Stiff, moist, brown mottled grey, Clay A7-6			2		
			2	1.4	20
			3	B	
		-10	2		
			2	1.4	18
			3	B	
	453.30				
Stiff, moist, brown mottled grey, Silty Clay Loam A-6			1		
			5	1.3	18
			4	B	
	450.80				
Medium, very moist, grey mottled brown, Clay A7-6		-15	2		
			2	0.9	21
			3	B	
	448.30				
Stiff to very stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6			1		
			3	1.7	19
			4	B	
		-20	2		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff to very stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6 (continued)			4	2.0	19
			6	B	
			1		
			3	1.5	19
			3	B	
		-25	2		
			5	1.6	20
			7	B	
			2		
			4	2.0	22
			7	B	
	435.80				
Stiff, moist, grey, Silt Loam to Silty Clay Loam A-4		-30	3		
			4	1.4	20
			4	B	
	433.30				
Medium, moist, grey, Silt Loam to Silty Clay Loam A-4			2		
			2	0.7	20
			2	S	
	430.80				
Medium, very moist, grey, Silty Clay to Silty Clay Loam A-6		-35	WH		
			1	0.4	25
			1	B	
	428.30				
Very stiff, moist, brown mottled grey, Clay A7-6			2		
			3	2.3	19
			5	B	
	425.80				
		-40	1		

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Region 5 /District 9

Page 2 of 2 — Date 6/1/00

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY Bryan Keller
SECTION X1-6VB LOCATION in Marion, SEC., TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD ______ HAMMER TYPE ______

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 1-S
Station 1515+58
Offset 6.00ft Rt. ℄ Roadway
Ground Surface Elev. 465.3 ft

Surface Water Elev. ______ ft
Stream Bed Elev. ______ ft
Groundwater Elev.:
First Encounter 42.0 ft
Upon Completion ______ ft
After 425.3 Hrs. 461.3 ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, very moist, brown mottled grey, Clay to Silty Clay A7-6 (continued)			2	0.9	21
			2	B	
	420.80				
Stiff, moist, brown, Silty Clay Loam A-6 with sand layers		-45	1		
			2	1.5	19
			2	P	
	415.80				
Stiff to very stiff, moist, brown mottled grey, Silty Clay Loam with some fine gravel		-50	3		
			5	2.0	14
			9	B	
			1		
			3	2.2	16
			5	B	
		-55	2		
			3	2.7	18
			6	B	
		-60	6		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	404.80		13	2.9	15
Hard, dry, grey, Weathered Clay Shale			22	S	
	402.80		34		
Hard, dry, grey Clay Shale			100/3"		
		-65	100/2"		
		-70	100/3"		
	392.80		100/1"		
Bottom of hole = 72.1 feet					
Free water observed at 42.0'					
Elevation referenced to 1960 plans		-75			
To convert "N" values to "N60" values, multiply by 1.25					
		-80			

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Region 5 /District 9

Page 1 of 2 — Date 6/1/00

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY Bryan Keller
SECTION X1-6VB LOCATION in Marion, SEC., TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD ______ HAMMER TYPE ______

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 2-S
Station 1517+67
Offset 6.00ft Rt. ℄ Roadway
Ground Surface Elev. 465.6 ft

Surface Water Elev. ______ ft
Stream Bed Elev. ______ ft
Groundwater Elev.:
First Encounter 49.5 ft
Upon Completion 58.0 ft
After ______ Hrs. ______ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, moist, brown mottled grey, Silty Clay A7-6					
			2		
			3	2.4	20
			5	B	
	461.10				
Stiff to very stiff, moist, brown mottled grey Silty Clay A-6		-5	2		
			3	2.0	19
			3	B	
			2		
			5	1.9	17
			5	B	
	456.10				
Stiff, moist to very moist, brown mottled grey, Clay A7-6 with some gravel		-10	1		
			2	1.5	21
			1	B	
			1		
			3	1.4	19
			3	B	
		-15	2		
			3	1.5	19
			3	B	
			2		
			2	1.5	21
			3	B	
	446.10				
		-20	1		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff, moist, brown mottled grey, Clay to Silty Clay A7-6 (continued)			3	1.7	23
			5	B	
			2		
			6	1.9	21
			5	S	
	441.10				
Stiff, moist, grey, Clay Loam A-4		-25	3		
			7	1.5	22
			6	B	
	438.60				
Stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6			2		
			4	1.5	21
			6	S	
		-30	1		
			4	1.8	21
			6	S	
	433.60				
Medium, very moist, grey, Silty Clay to Clay A7-6			1		
			1	0.6	25
			2	B	
	431.10				
Very stiff, moist, brown mottled grey, Clay A7-6		-35	1		
			2	2.2	20
			4	B	
	428.60				
Stiff, moist to very moist, brown mottled grey, Clay A7-6			2		
			2	1.5	21
			2	S	
	426.10				
		-40	1		

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, form 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways
Region 5 /District 9

Page 2 of 2 — Date 6/1/00

ROUTE FAI 57 DESCRIPTION bridge over railroad LOGGED BY Bryan Keller
SECTION X1-6VB LOCATION in Marion, SEC., TWP. 9S, RNG. 2E, 3 PM
COUNTY Williamson DRILLING METHOD ______ HAMMER TYPE ______

STRUCT. NO. 100-0086
Station 1516+58.56
BORING NO. 2-S
Station 1517+67
Offset 6.00ft Rt. ℄ Roadway
Ground Surface Elev. 465.6 ft

Surface Water Elev. ______ ft
Stream Bed Elev. ______ ft
Groundwater Elev.:
First Encounter 49.5 ft
Upon Completion 58.0 ft
After ______ Hrs. ______ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, very moist, brown mottled grey, Silty Clay A7-6 (continued)			1	0.9	20
			1	S	
	421.10				
Stiff, moist, brown, Silty Clay A-6		-45	1		
			3	1.7	20
			3	B	
	416.10				
Stiff, moist, brown, Silty Clay A7-6 with some fine gravel		-50	2		
			2	1.4	17
			4	B	
		-55	2		
			4	2.0	16
			5	B	
		-60	13		

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff, moist, brown, Silty Clay A7-6 with some fine gravel (continued)			39		
	404.60		90		
Hard, dry, brown Clay Shale					
	403.10		100/4"		
Bottom of hole = 62.3 feet					
Free water observed at 39.5 feet					
Elevation referenced to 1960 plans		-65			
To convert "N" values to "N60" values, multiply by 1.25					
		-70			
		-75			
		-80			

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, form 137 (Rev. 8-99)

BORING LOGS
F.A.I. RT. 57 SEC. (X1-6-2)VB-2
WILLIAMSON COUNTY
STA. 1516+58.56
S.N. 100-0086 (N.B.)
S.N. 100-0087 (S.B.)

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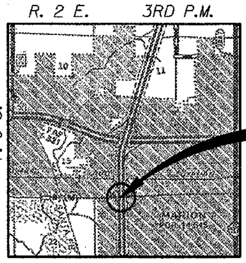
BENCHMARK: PAINTED MARK ON MOST NORTHEAST CORNER OF EXISTING BRIDGE DECK, S.N. 100-0004 (N.B.) STA. 1529+18.38, 56.12' LT. ℄ F.A.I. 57 EL. 471.53

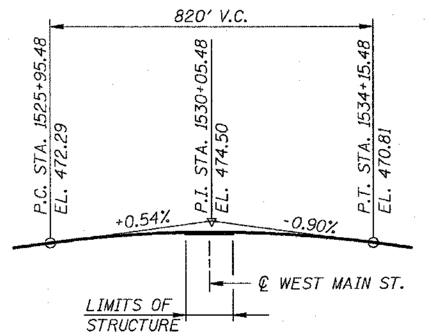
EXISTING STRUCTURE:

S.N. 100-0004 (N.B.) AND S.N. 100-0005 (S.B.) THE EXISTING STRUCTURES WERE BUILT IN 1960 UNDER F.A.I. ROUTE 57 SECTION X1-6HB-2. BOTH STRUCTURES CONSIST OF THREE CONTINUOUS SPANS (40'-7", 69'-2", 40'-7") FOR A TOTAL LENGTH OF 154'-0" MEASURED BACK TO BACK OF ABUTMENTS. THE SUPERSTRUCTURES CONSIST OF A 7" REINFORCED CONCRETE DECK ON WIDE FLANGE BEAMS. THE WIDE FLANGE BEAMS ARE COMPOSITE IN THE CENTER SPAN AND HINGED IN THE END SPANS. THE SUPERSTRUCTURES ARE SUPPORTED BY HAMMERHEAD TYPE PIERS ON PILE SUPPORTED FOOTINGS AND PILE BENT ABUTMENTS. THE OUT TO OUT DECK WIDTH OF THE NORTHBOUND STRUCTURE VARIES FROM 41'-1⅛" TO 36'-9⅝". THE OUT TO OUT DECK WIDTH OF THE SOUTHBOUND STRUCTURE VARIES FROM 53'-1¼" TO 51'-5½".
THE EXISTING STRUCTURES SHALL BE REMOVED IN STAGES AND DISPOSED OF ACCORDING TO SECTION 501 OF THE STANDARD SPECIFICATIONS.
THE ROADWAY SHALL REMAIN OPEN TO TRAFFIC, USING STAGE CONSTRUCTION, DURING THE CONSTRUCTION PERIOD.

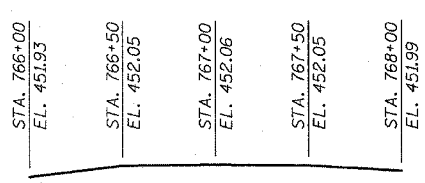
SALVAGE: SEE SPECIAL PROVISIONS FOR SALVAGE.



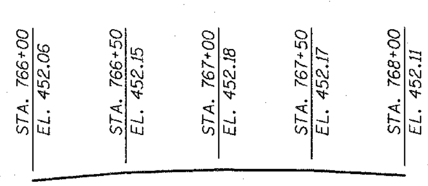
LOCATION SKETCH



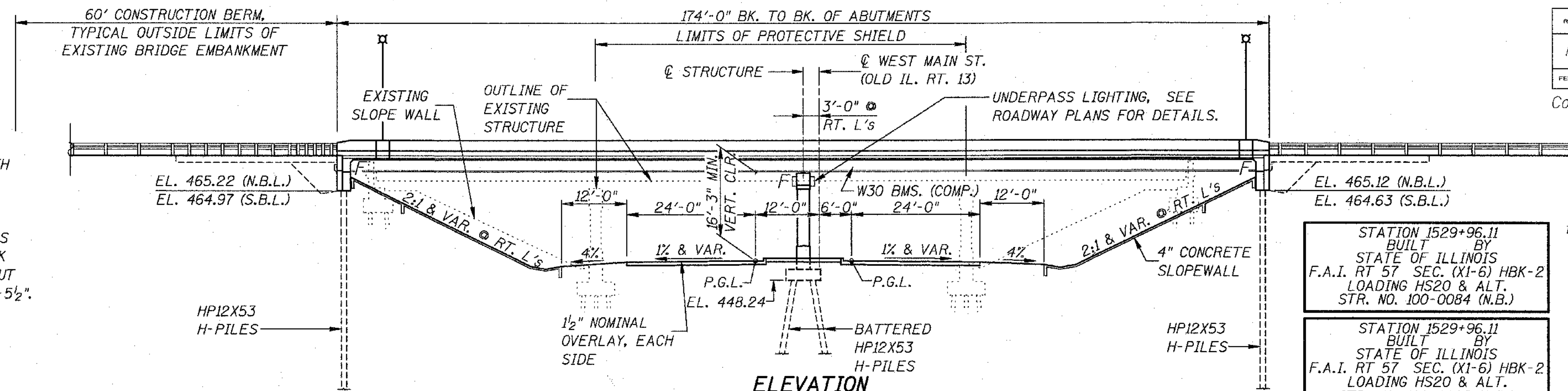
PROFILE GRADE - F.A.I. RT. 57 NORTHBOUND & SOUTHBOUND LANES



PROFILE GRADE - EASTBOUND WEST MAIN STREET
(MEDIAN EDGE OF LANE)



PROFILE GRADE - WESTBOUND WEST MAIN STREET
(MEDIAN EDGE OF LANE)



ELEVATION
(LOOKING EAST)
SEE ROADWAY PLANS FOR TYPICAL SECTION OF WEST MAIN STREET (OLD IL RTE. 13)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	885
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
32 SHEETS

Contract #98950

DESIGN SPECIFICATIONS

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION

DESIGN STRESSES

FIELD UNITS	STRUCTURAL STEEL
f'c = 3,500 psi	fy = 50,000 psi (M270, GRADE 50)
fy = 60,000 psi (REINF.)	fy = 36,000 psi (M270, GRADE 36)

LOADING HS20-44 & ALT. MILITARY LOADING

ALLOW 50 psf FOR FUTURE WEARING SURFACE.

SEISMIC DATA

SEISMIC PERFORMANCE CATEGORY (SPC): B
BEDROCK ACCELERATION COEFFICIENT (A): 12.2%
SITE COEFFICIENT (S) = 1.5 (TYPE III)

STATION 1529+96.11
BUILT BY
STATE OF ILLINOIS
F.A.I. RT 57 SEC. (X1-6) HBK-2
LOADING HS20 & ALT.
STR. NO. 100-0084 (N.B.)

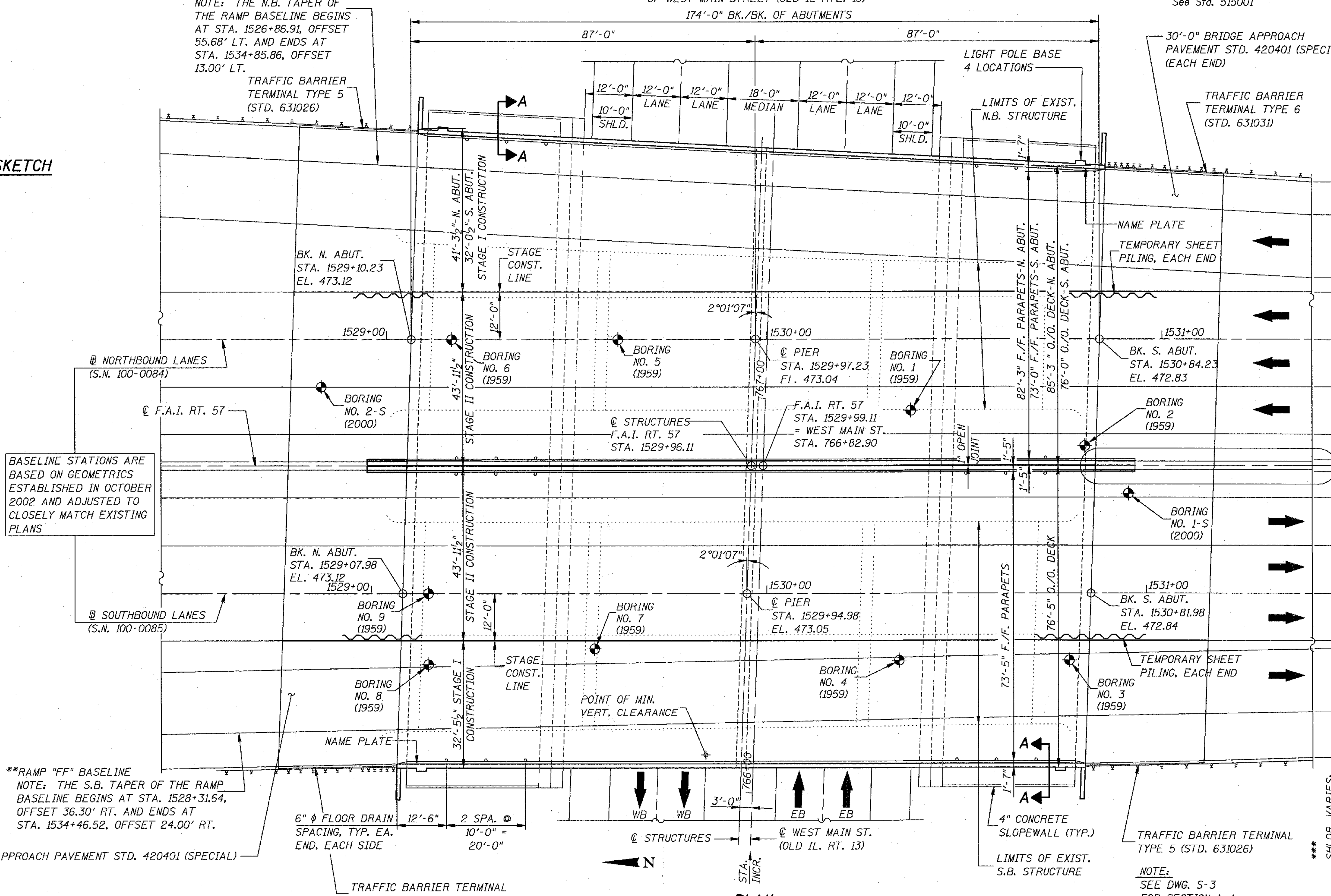
STATION 1529+96.11
BUILT BY
STATE OF ILLINOIS
F.A.I. RT 57 SEC. (X1-6) HBK-2
LOADING HS20 & ALT.
STR. NO. 100-0085 (S.B.)

NAME PLATES
See Std. 515001

STATE OF ILLINOIS
SEAN M. MARZANO
081-006321
CHAMPAIGN, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Structural Engineer
Clark Dietz, Inc.
DATE: 1/22/07
Expires 11-30-2008

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES'."



PLAN

NOTE:
SEE DWG. S-3 FOR SECTION A-A.

*RAMP GORE VARIES:
15'-8½" (N. ABUT.)
TO 6'-5½" (S. ABUT.)

*** SHOULDER AND RAMP DIMENSIONS MEASURED PERPENDICULAR TO RAMP BASELINE. ADJUST RAMP GORE DIMENSIONS ACCORDINGLY.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridges and Structures

MEDIAN CONCRETE BARRIER & MEDIAN DRAINAGE SYSTEM PER RDWY. PLANS (EACH END)

**RAMP GORE VARIES:
6'-10½" (N. ABUT.)
TO 3'-4¾" (S. ABUT.)

GENERAL PLAN & ELEVATION

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION NO. 184-000456
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE: 217.373.8900
FAX: 217.373.8923

DESIGNED BY: SMM
DRAWN BY: MEW
CHECKED BY: SLB
APPROVED BY: SMM
DATE: 05/2006

DRAWING NUMBER S-1

GPLOLD13.DGN SEPT. 15, 2005

Contract #98950

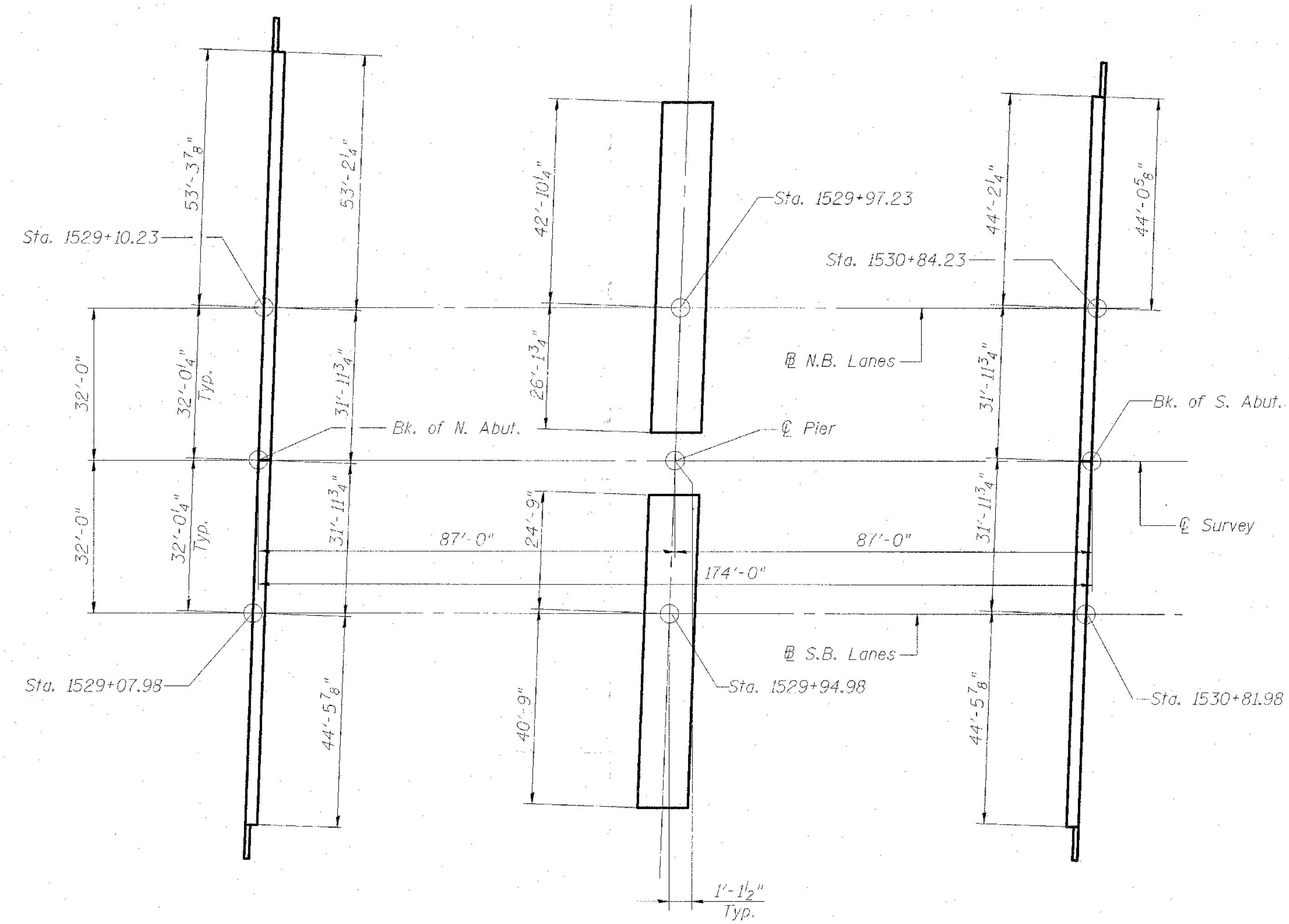
GENERAL NOTES

1. Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$"ϕ, open holes $\frac{15}{16}$"ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel = 828,440 lbs M270 Gr. 50
   22,200 lbs M270 Gr. 36
3. Field welding of construction accessories will not be permitted to beams.
4. Anchor bolts shall be set before bolting diaphragms over supports.
5. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material.
6. Reinforcement bars shall conform to the requirements of Illinois Modified ASTM A706.
7. Slope wall shall be reinforced with welded wire fabric, 6"x6"-W4.0xW4.0, weighing 58 lbs. per 100 sq. ft.
8. The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
9. The inorganic zinc rich primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for exterior and bottom flange of the fascia beams shall be blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures."
10. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$" adjusting shims, of the dimensions of the bottom bearing plates, shall be provided for each bearing in addition to all other plates or shims.
11. The Contractor shall drive 6 HP12x53 test piles in permanent locations: one at the South Abutment, one at the North Abutment, and the Pier for both Northbound and Southbound bridges as directed by the Engineer before ordering the remainder of piles.
12. In addition to all other requirements of section 512 of the Standard Specifications, splices for HP12x53 piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.
13. Reinforcing bars designated (E) shall be epoxy coated.
14. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		440	440
Slope wall 4 Inch	Sq. Yd.		1,620	1,620
Preformed Joint Seal $2\frac{1}{2}$"	Foot	174		174
* Removal of Existing Structures #1	Each			1
* Removal of Existing Structures #2	Each			1
Structure Excavation	Cu. Yd.		947	947
Floor Drains	Each	24		24
Concrete Structures	Cu. Yd.		388.5	388.5
Concrete Superstructure	Cu. Yd.	849.4		849.4
Protective Coat	Sq. Yd.	3,218		3,218
Furnishing and Erecting Structural Steel	L. Sum	0.7		0.7
Stud Shear Connectors	Each	17,526		17,526
Reinforcement Bars, Epoxy Coated	Pound	193,020	71,880	264,900
Furnishing Steel Piles HP12x53	Foot		2,739	2,739
Driving Piles	Foot		2,739	2,739
Test Pile Steel HP12x53	Each		6	6
Name Plates	Each	2		2
Geocomposite Wall Drain	Sq. Yd.		208	208
Pipe Underdrains for Structures 4"	Foot		374	374
Temporary Sheet Piling	Sq. Ft.		730	730
Bar Splicers	Each	1,462	162	1,624
Protective Shield	Sq. Yd.	711		711
Bridge Deck Grooving	Sq. Yd.	2,843		2,843
Formliner Textured Surface	Sq. Ft.		1,542	1,542
Temporary Support System	L. Sum	1		1
Anchor Bolts, 1" ϕ	Each	92		92
Anchor Bolts, $1\frac{1}{2}$" ϕ	Each	46		46
Concrete Encasement	Cu. Yd.		17.5	17.5

*Structure #1 is N.B., Structure #2 is S.B.



FOOTING LAYOUT

INDEX OF DRAWINGS

S-1 General Plan & Elevation
S-2 General Notes & Bill of Material
S-3 Temporary Sheet Piling
S-4 Stage Construction Details
S-5 Top of Deck Plan
S-6 Top of Deck Elevations
S-7 Top of Deck Elevations
S-8 Top of Deck Elevations
S-9 Top of Deck Elevations
S-10 Deck Plan & Cross Section, Northbound
S-11 Deck Plan & Cross Section, Southbound
S-12 Parapet Details
S-13 Diaphragm Elevations, Northbound
S-14 Diaphragm Elevations, Southbound
S-15 Superstructure Bill of Material & Light Pole Base
S-16 Framing Plan, Northbound
S-17 Framing Plan, Southbound
S-18 Structural Steel Details, Fixed Bearing Details & Moment Table
S-19 North Abutment, Northbound
S-20 North Abutment, Southbound
S-21 South Abutment, Northbound
S-22 South Abutment, Southbound
S-23 Pier, Northbound
S-24 Pier, Southbound
S-25 Pier Details, Northbound & Southbound
S-26 Pier Form Liner Details and Temporary Support System
S-27 Bar Splicer Assembly Details
S-28 Temporary Concrete Barrier For Stage Construction
S-29 Boring Logs
S-30 Boring Logs
S-31 Boring Logs
S-32 Boring Logs

GENERAL NOTES & BILL OF MATERIAL

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

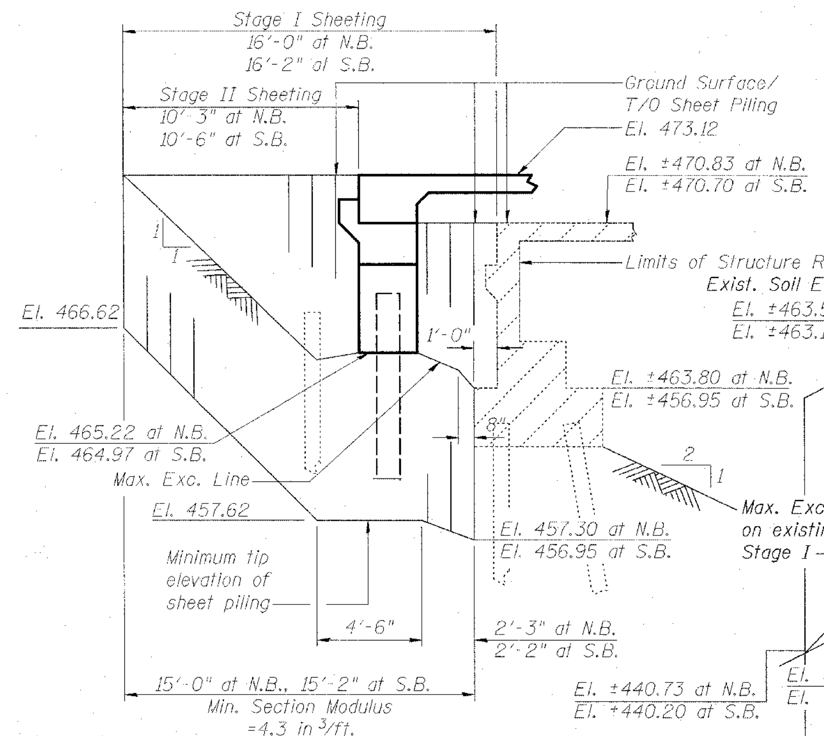
Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

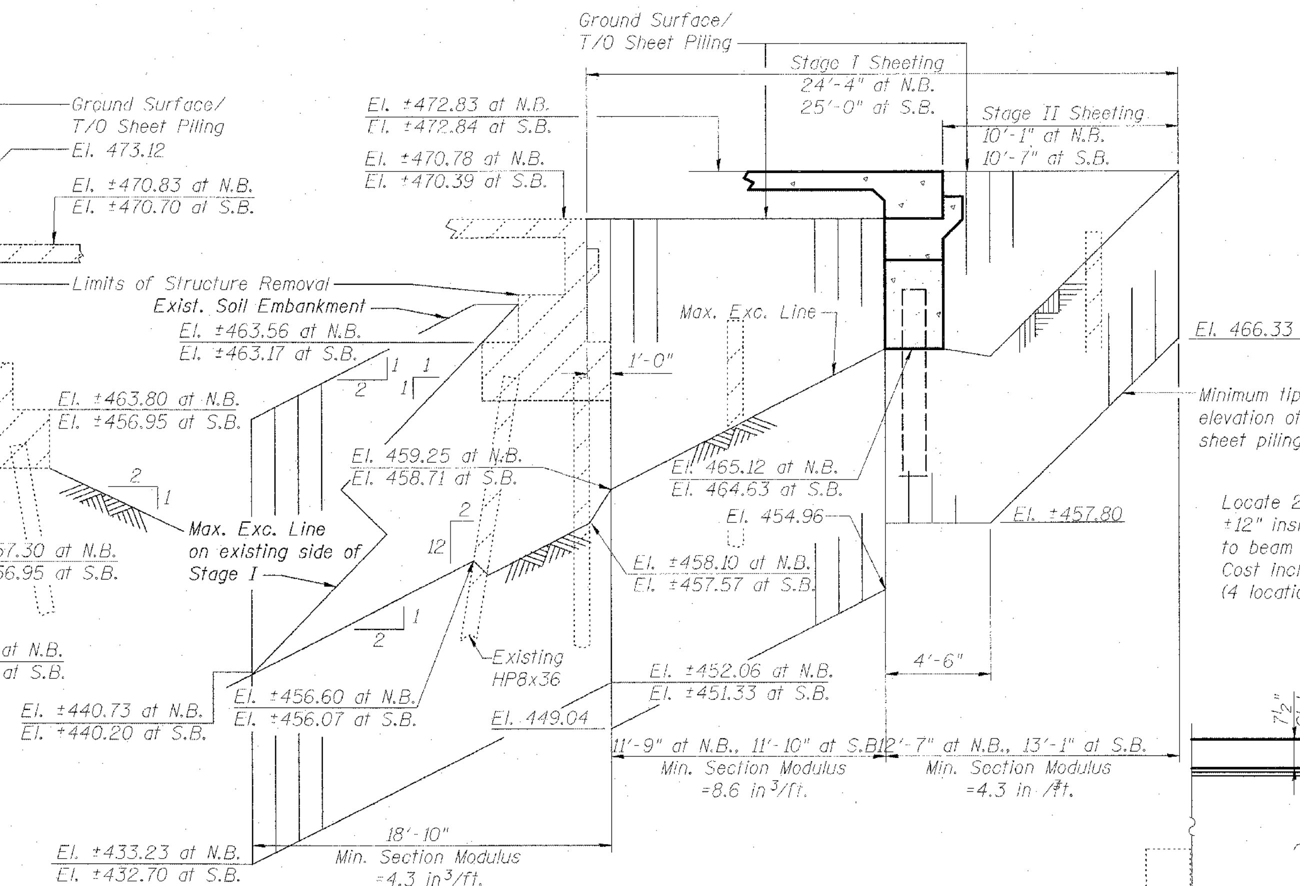
ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-2

Note:
Existing timber approach piles and steel HP8x36 wingwall piles shall be removed to 1' below excavation line. Cost included with "Removal of Existing Structures".



TEMPORARY SHEET PILING AND ABUTMENT REMOVAL DETAILS AT NORTH ABUTMENT

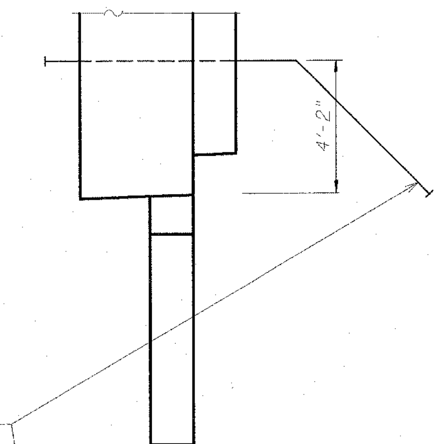


TEMPORARY SHEET PILING AND ABUTMENT REMOVAL DETAILS AT SOUTH ABUTMENT

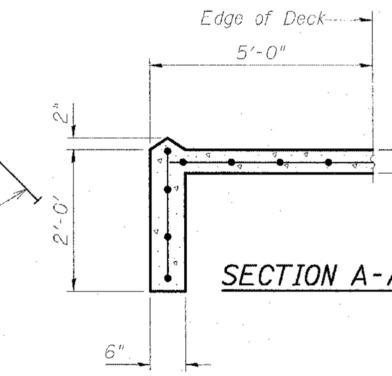
NOTES

1) If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

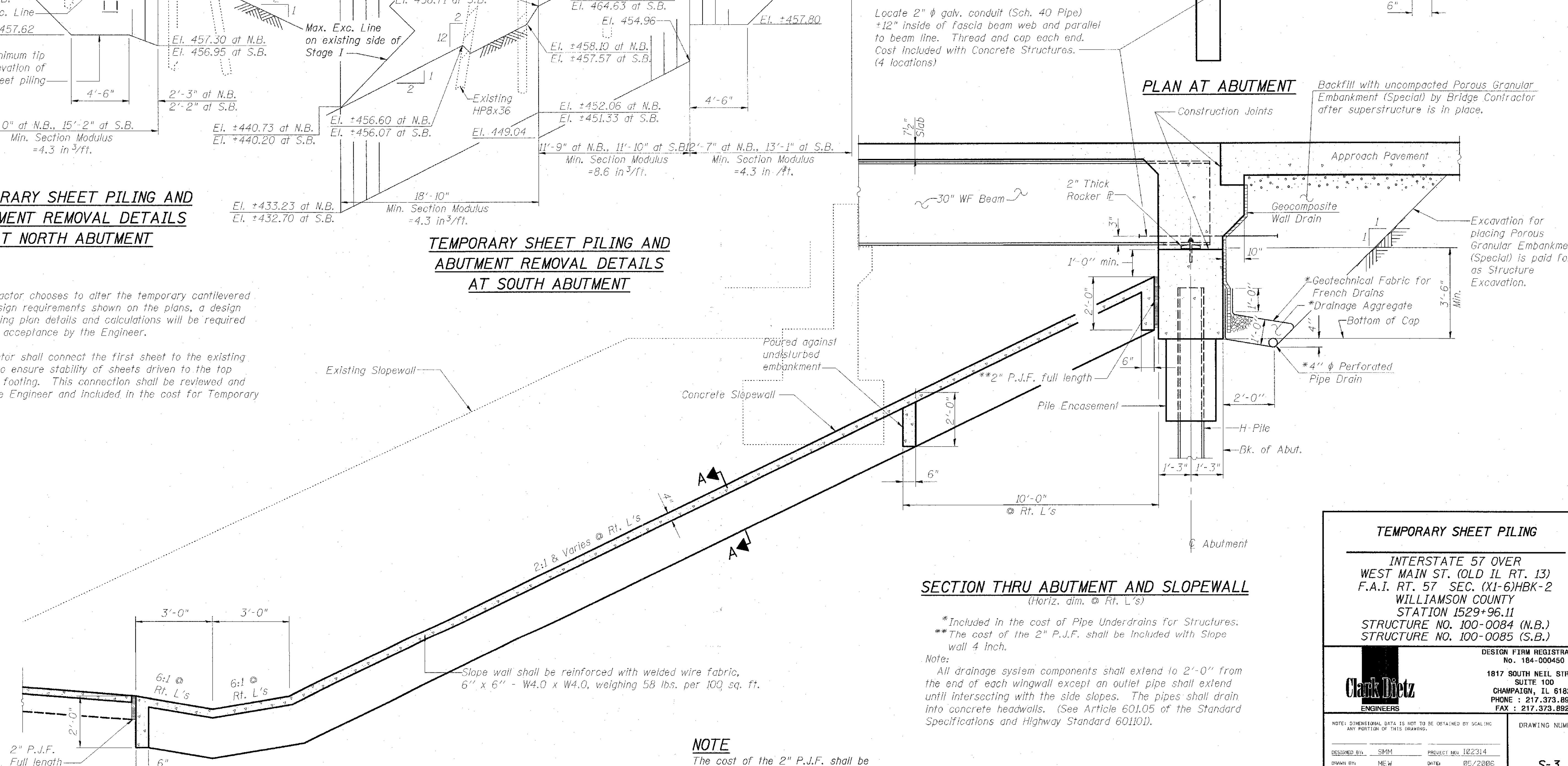
2) The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.



PLAN AT ABUTMENT



SECTION A-A



SECTION THRU ABUTMENT AND SLOPEWALL

(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.
** The cost of the 2" P.J.F. shall be included with Slope wall 4 inch.

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).

NOTE

The cost of the 2" P.J.F. shall be included with Slope wall 4 inch.

TEMPORARY SHEET PILING

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

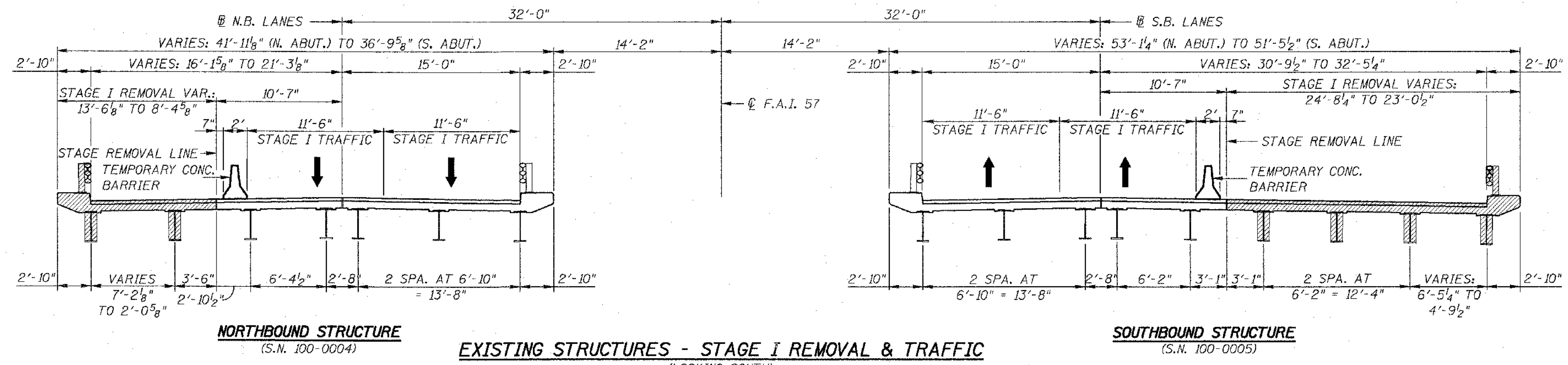
NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 122314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM

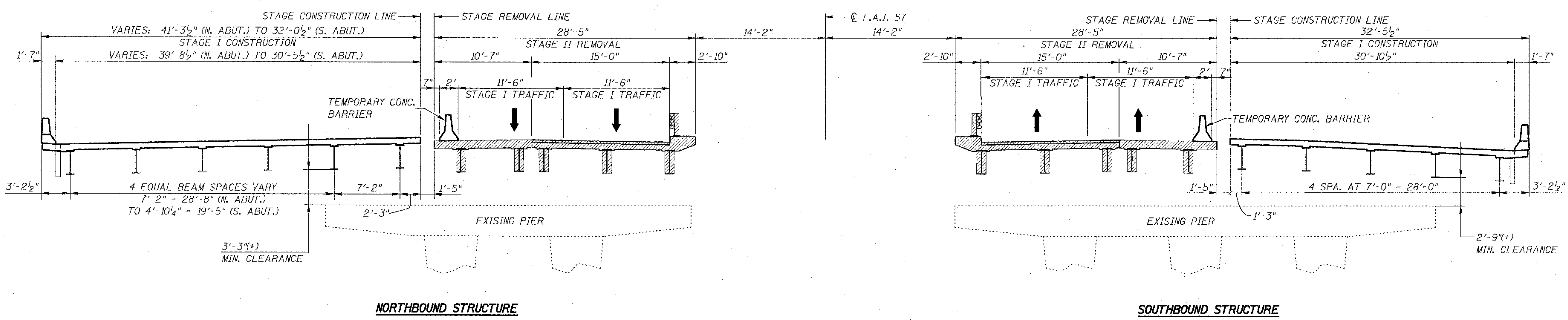
DRAWING NUMBER S-3

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	888

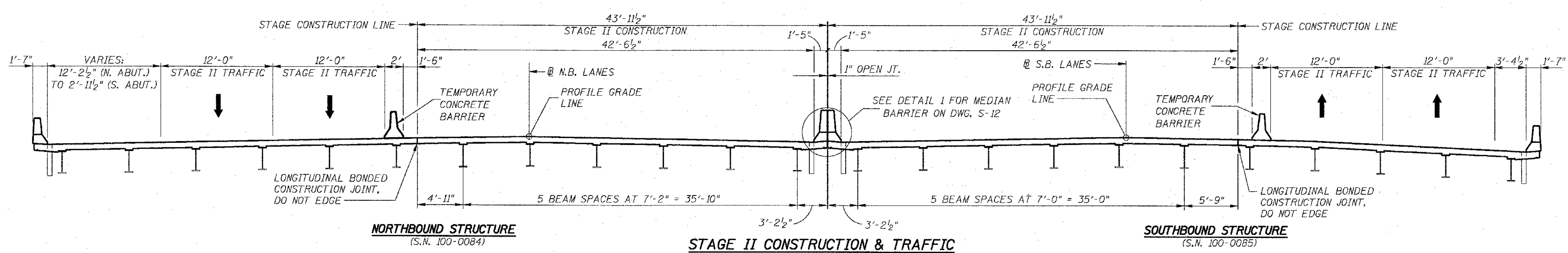
SHEET NO. 4
32 SHEETS
Contract #98950



EXISTING STRUCTURES - STAGE I REMOVAL & TRAFFIC
(LOOKING SOUTH)



STAGE I CONSTRUCTION & TRAFFIC & STAGE II REMOVAL
(LOOKING SOUTH)



STAGE II CONSTRUCTION & TRAFFIC
(LOOKING SOUTH)

NOTES:

1. HATCHED AREA INDICATES REMOVAL OF EXISTING STRUCTURES.
2. REMOVAL OF EXISTING BRIDGE RAILING AND BITUMINOUS WEARING SURFACE IS INCLUDED IN REMOVAL OF EXISTING STRUCTURES.
3. SEE DWG. S-28 FOR TEMPORARY CONCRETE BARRIER DETAILS.
4. FOR QUANTITIES OF TEMPORARY CONCRETE BARRIER SEE ROADWAY PLANS.
5. THE CONTRACTOR SHALL NOT REMOVE ANY PORTION OF THE EXISTING PIERS UNTIL AFTER STAGE I CONSTRUCTION IS COMPLETED AND TRAFFIC IS TRANSFERRED TO THE STAGE I TRAFFIC LANES. DURING THE REMOVAL OF THE EXISTING PIERS, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGING THE PROPOSED NEW STRUCTURAL STEEL.
6. THE EXISTING ABUTMENTS SHALL BE REMOVED IN STAGES ALONG THE SAME LINE AS FOR REMOVAL OF THE EXISTING SUPERSTRUCTURE. SEE DWG. S-3 FOR ADDITIONAL DETAILS.

DESIGNED:	B.G.H.
CHECKED:	L.D.G.
DRAWN:	K.H.L.
CHECKED:	B.G.H.

STAGE CONSTRUCTION DETAILS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

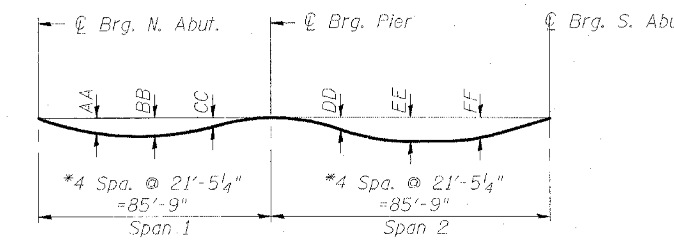
Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM — PROJECT NO: 102314
DRAWN BY: MEW — DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM

DRAWING NUMBER S-4

Contract #98950



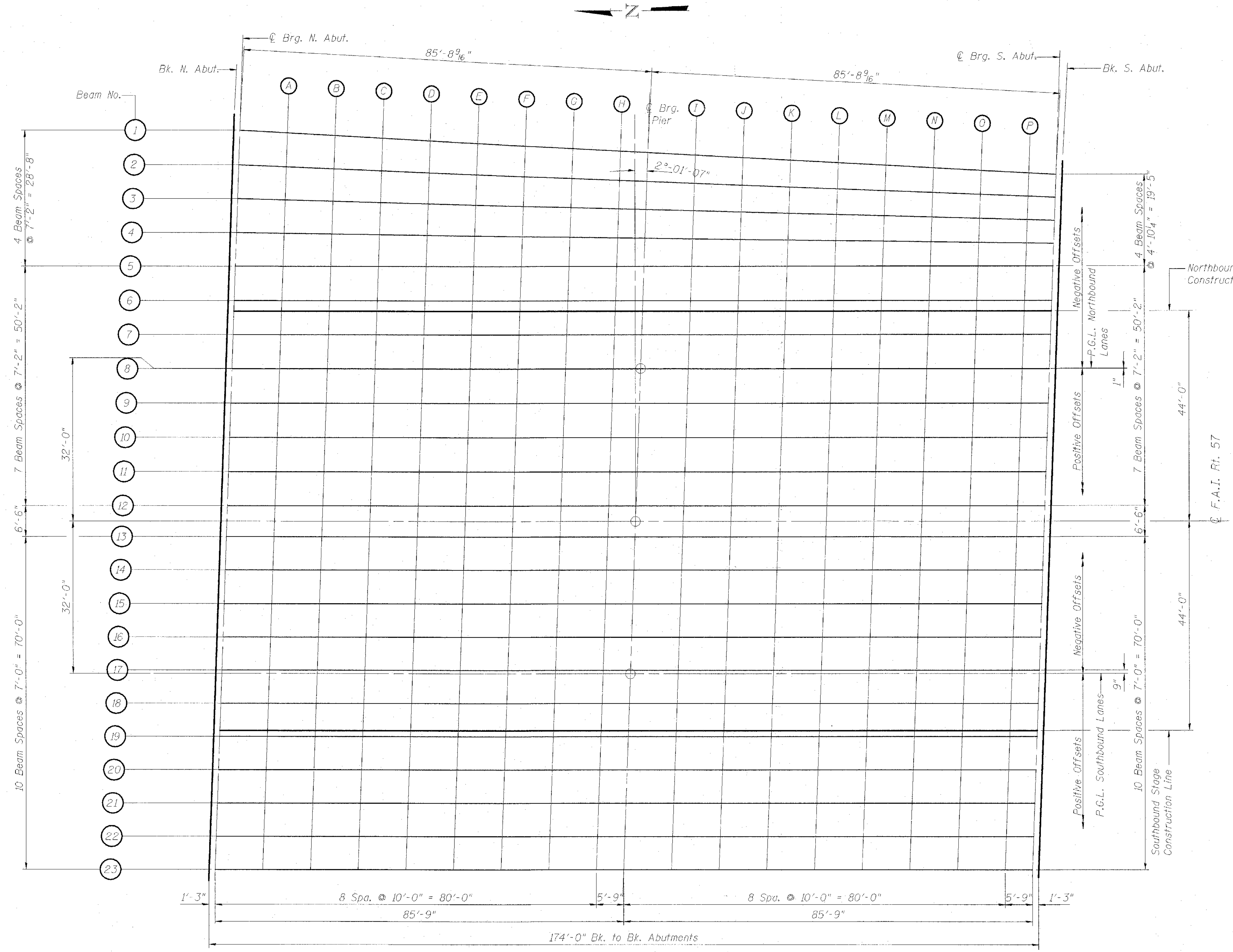
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)
*For Beams 5 to 23. Beams 1 to 4 similar.

TABLE OF DEFLECTIONS

BEAM NO.	AA	BB	CC	DD	EE	FF
Beam 1	$1\frac{9}{16}$"	$1\frac{7}{8}$"	$\frac{7}{8}$"	$\frac{3}{4}$"	$1\frac{5}{8}$"	$1\frac{3}{8}$"
Beams 2 to 4	$1\frac{7}{16}$"	$1\frac{13}{16}$"	$\frac{7}{8}$"	$\frac{9}{16}$"	$1\frac{5}{16}$"	$1\frac{1}{16}$"
Beam 5	$1\frac{7}{16}$"	$1\frac{3}{4}$"	$\frac{7}{8}$"	$\frac{11}{16}$"	$1\frac{1}{2}$"	$1\frac{1}{4}$"
Beams 6 to 11; 14 to 22	$1\frac{7}{16}$"	$1\frac{3}{4}$"	$\frac{13}{16}$"	$\frac{13}{16}$"	$1\frac{3}{4}$"	$1\frac{7}{16}$"
Beams 12, 13 & 23	$1\frac{9}{16}$"	$1\frac{7}{8}$"	$\frac{7}{8}$"	$\frac{7}{8}$"	$1\frac{7}{8}$"	$1\frac{9}{16}$"

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 Dwg. S-6 thru S-9.



PLAN

TOP OF DECK PLAN

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM | PROJECT NO: I02314
DRAWN BY: MEW | DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY | INITIALS

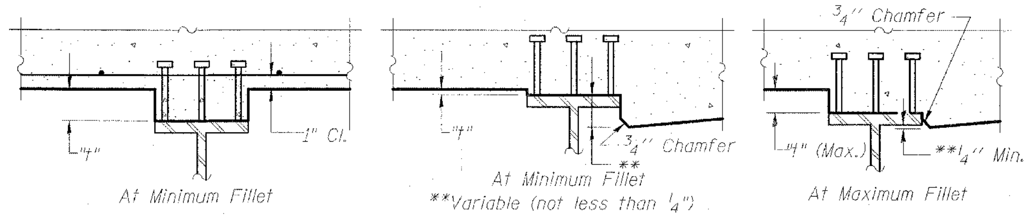
DRAWING NUMBER
S-5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(XI-6) HBK-2	WILLIAMSON	917	890
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6

32 SHEETS

Contract #98950



INTERIOR

EXTERIOR

To determine "t": After all structural steel has 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 Deflection" shown on Dwg. S-5 thru S-9, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM NO. 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+11.998	-50.151	472.137	472.137
℄ Brg. N. Abut.	1529+13.246	-50.083	472.138	472.138
A	1529+23.231	-49.544	472.147	472.215
B	1529+33.217	-49.004	472.154	472.276
C	1529+43.202	-48.465	472.159	472.312
D	1529+53.188	-47.925	472.162	472.319
E	1529+63.173	-47.385	472.164	472.300
F	1529+73.159	-46.846	472.164	472.259
G	1529+83.144	-46.306	472.162	472.209
H	1529+93.129	-45.767	472.158	472.169
℄ Brg. Pier	1529+98.832	-45.458	472.155	472.155
I	1530+08.818	-44.919	472.149	472.165
J	1530+18.803	-44.379	472.140	472.195
K	1530+28.789	-43.840	472.130	472.227
L	1530+38.774	-43.300	472.119	472.246
M	1530+48.759	-42.760	472.105	472.245
N	1530+58.745	-42.221	472.090	472.218
O	1530+68.730	-41.681	472.073	472.163
P	1530+78.716	-41.142	472.054	472.090
℄ Brg. S. Abut.	1530+84.418	-40.833	472.043	472.043
Bk. S. Abut.	1530+85.667	-40.766	472.040	472.040

BEAM NO. 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+11.744	-42.967	472.287	472.287
℄ Brg. N. Abut.	1529+12.993	-42.917	472.288	472.288
A	1529+22.985	-42.512	472.294	472.358
B	1529+32.977	-42.107	472.298	472.413
C	1529+42.969	-41.702	472.300	472.445
D	1529+52.961	-41.298	472.300	472.450
E	1529+62.952	-40.893	472.299	472.430
F	1529+72.944	-40.488	472.296	472.390
G	1529+82.936	-40.083	472.292	472.340
H	1529+92.928	-39.679	472.285	472.297
℄ Brg. Pier	1529+98.620	-39.448	472.281	472.281
I	1530+08.612	-39.043	472.271	472.282
J	1530+18.604	-38.638	472.260	472.301
K	1530+28.596	-38.234	472.248	472.323
L	1530+38.588	-37.829	472.233	472.335
M	1530+48.579	-37.424	472.217	472.329
N	1530+58.571	-37.019	472.199	472.302
O	1530+68.563	-36.615	472.179	472.252
P	1530+78.555	-36.210	472.158	472.186
℄ Brg. S. Abut.	1530+84.247	-35.979	472.145	472.145
Bk. S. Abut.	1530+85.496	-35.929	472.142	472.142

BEAM NO. 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+11.491	-35.784	472.437	472.437
℄ Brg. N. Abut.	1529+12.741	-35.750	472.437	472.437
A	1529+22.737	-35.480	472.440	472.505
B	1529+32.734	-35.210	472.441	472.557
C	1529+42.730	-34.940	472.441	472.586
D	1529+52.726	-34.671	472.439	472.589
E	1529+62.723	-34.401	472.435	472.566
F	1529+72.719	-34.131	472.429	472.522
G	1529+82.715	-33.861	472.421	472.470
H	1529+92.712	-33.591	472.412	472.425
℄ Brg. Pier	1529+98.409	-33.438	472.406	472.406
I	1530+08.405	-33.168	472.394	472.405
J	1530+18.401	-32.898	472.380	472.421
K	1530+28.398	-32.628	472.365	472.440
L	1530+38.394	-32.358	472.348	472.449
M	1530+48.390	-32.088	472.329	472.441
N	1530+58.387	-31.818	472.308	472.411
O	1530+68.383	-31.549	472.285	472.358
P	1530+78.379	-31.279	472.261	472.289
℄ Brg. S. Abut.	1530+84.076	-31.125	472.246	472.246
Bk. S. Abut.	1530+85.326	-31.091	472.243	472.243

BEAM NO. 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+11.238	-28.600	472.586	472.586
℄ Brg. N. Abut.	1529+12.488	-28.583	472.586	472.586
A	1529+22.487	-28.448	472.587	472.651
B	1529+32.486	-28.314	472.585	472.701
C	1529+42.485	-28.179	472.582	472.727
D	1529+52.485	-28.044	472.577	472.727
E	1529+62.484	-27.909	472.570	472.701
F	1529+72.483	-27.774	472.562	472.655
G	1529+82.482	-27.639	472.551	472.599
H	1529+92.481	-27.504	472.539	472.552
℄ Brg. Pier	1529+98.197	-27.427	472.532	472.532
I	1530+08.196	-27.292	472.517	472.528
J	1530+18.195	-27.157	472.500	472.541
K	1530+28.194	-27.022	472.482	472.557
L	1530+38.193	-26.888	472.462	472.563
M	1530+48.192	-26.753	472.440	472.552
N	1530+58.191	-26.618	472.417	472.520
O	1530+68.190	-26.483	472.391	472.464
P	1530+78.189	-26.348	472.364	472.393
℄ Brg. S. Abut.	1530+83.905	-26.271	472.348	472.348
Bk. S. Abut.	1530+85.155	-26.254	472.344	472.344

BEAM NO. 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.985	-21.417	472.736	472.736
℄ Brg. N. Abut.	1529+12.236	-21.417	472.736	472.736
A	1529+22.236	-21.417	472.733	472.798
B	1529+32.236	-21.417	472.729	472.844
C	1529+42.236	-21.417	472.723	472.867
D	1529+52.236	-21.417	472.715	472.864
E	1529+62.236	-21.417	472.706	472.834
F	1529+72.236	-21.417	472.694	472.785
G	1529+82.236	-21.417	472.681	472.727
H	1529+92.236	-21.417	472.667	472.678
℄ Brg. Pier	1529+97.985	-21.417	472.657	472.657
I	1530+07.985	-21.417	472.640	472.655
J	1530+17.985	-21.417	472.620	472.671
K	1530+27.985	-21.417	472.599	472.689
L	1530+37.985	-21.417	472.577	472.696
M	1530+47.985	-21.417	472.552	472.682
N	1530+57.985	-21.417	472.526	472.645
O	1530+67.985	-21.417	472.498	472.582
P	1530+77.985	-21.417	472.468	472.501
℄ Brg. S. Abut.	1530+83.734	-21.417	472.450	472.450
Bk. S. Abut.	1530+84.985	-21.417	472.446	472.446

BEAM NO. 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.732	-14.250	472.885	472.885
℄ Brg. N. Abut.	1529+11.983	-14.250	472.885	472.885
A	1529+21.983	-14.250	472.883	472.947
B	1529+31.983	-14.250	472.878	472.994
C	1529+41.983	-14.250	472.873	473.017
D	1529+51.983	-14.250	472.865	473.013
E	1529+61.983	-14.250	472.855	472.983
F	1529+71.983	-14.250	472.844	472.933
G	1529+81.983	-14.250	472.831	472.874
H	1529+91.983	-14.250	472.816	472.826
℄ Brg. Pier	1529+97.732	-14.250	472.807	472.807
I	1530+07.732	-14.250	472.790	472.810
J	1530+17.732	-14.250	472.770	472.832
K	1530+27.732	-14.250	472.749	472.855
L	1530+37.732	-14.250	472.726	472.865
M	1530+47.732	-14.250	472.702	472.852
N	1530+57.732	-14.250	472.676	472.813
O	1530+67.732	-14.250	472.648	472.744
P	1530+77.732	-14.250	472.618	472.656
℄ Brg. S. Abut.	1530+83.481	-14.250	472.600	472.600
Bk. S. Abut.	1530+84.732	-14.250	472.596	472.596

NORTHBOUND STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.653	-12.000	472.932	472.932
℄ Brg. N. Abut.	1529+11.904	-12.000	472.932	472.932
A	1529+21.904	-12.000	472.930	472.994
B	1529+31.904	-12.000	472.925	473.041
C	1529+41.904	-12.000	472.919	473.064
D	1529+51.904	-12.000	472.912	473.059
E	1529+61.904	-12.000	472.902	473.030
F	1529+71.904	-12.000	472.891	472.980
G	1529+81.904	-12.000	472.878	472.921
H	1529+91.904	-12.000	472.863	472.873
℄ Brg. Pier	1529+97.653	-12.000	472.854	472.854
I	1530+07.653	-12.000	472.837	472.857
J	1530+17.653	-12.000	472.817	472.879
K	1530+27.653	-12.000	472.796	472.902
L	1530+37.653	-12.000	472.774	472.912
M	1530+47.653	-12.000	472.749	472.899
N	1530+57.653	-12.000	472.723	472.860
O	1530+67.653	-12.000	472.695	472.791
P	1530+77.653	-12.000	472.665	472.703
℄ Brg. S. Abut.	1530+83.402	-12.000	472.647	472.647
Bk. S. Abut.	1530+84.653	-12.000	472.643	472.643

TOP OF DECK ELEVATIONS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (XI-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450

1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM — PROJECT NO: 102314
DRAWN BY: MEW — DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY — INITIALS

DRAWING NUMBER

S-6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	891

SHEET NO. 7
32 SHEETS

Contract #98950

BEAM NO. 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.480	-7.083	473.009	473.009
℄ Brg. N. Abut.	1529+11.730	-7.083	473.009	473.009
A	1529+21.730	-7.083	473.006	473.071
B	1529+31.730	-7.083	473.002	473.118
C	1529+41.730	-7.083	472.996	473.141
D	1529+51.730	-7.083	472.989	473.136
E	1529+61.730	-7.083	472.979	473.107
F	1529+71.730	-7.083	472.968	473.057
G	1529+81.730	-7.083	472.955	472.998
H	1529+91.730	-7.083	472.940	472.950
℄ Brg. Pier	1529+97.480	-7.083	472.931	472.931
I	1530+07.480	-7.083	472.914	472.934
J	1530+17.480	-7.083	472.894	472.957
K	1530+27.480	-7.083	472.873	472.979
L	1530+37.480	-7.083	472.851	472.989
M	1530+47.480	-7.083	472.826	472.977
N	1530+57.480	-7.083	472.800	472.937
O	1530+67.480	-7.083	472.772	472.869
P	1530+77.480	-7.083	472.742	472.780
℄ Brg. S. Abut.	1530+83.229	-7.083	472.724	472.724
Bk. S. Abut.	1530+84.480	-7.083	472.720	472.720

NORTHBOUND PROFILE GRADE LINE & BASELINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.230	0.000	473.120	473.120
℄ Brg. N. Abut.	1529+11.481	0.000	473.120	473.120
A	1529+21.481	0.000	473.117	473.182
B	1529+31.481	0.000	473.113	473.228
C	1529+41.481	0.000	473.107	473.251
D	1529+51.481	0.000	473.100	473.247
E	1529+61.481	0.000	473.090	473.218
F	1529+71.481	0.000	473.079	473.168
G	1529+81.481	0.000	473.066	473.109
H	1529+91.481	0.000	473.051	473.061
℄ Brg. Pier	1529+97.230	0.000	473.042	473.042
I	1530+07.230	0.000	473.025	473.045
J	1530+17.230	0.000	473.006	473.068
K	1530+27.230	0.000	472.985	473.091
L	1530+37.230	0.000	472.962	473.100
M	1530+47.230	0.000	472.938	473.088
N	1530+57.230	0.000	472.911	473.049
O	1530+67.230	0.000	472.883	472.980
P	1530+77.230	0.000	472.854	472.892
℄ Brg. S. Abut.	1530+82.979	0.000	472.836	472.836
Bk. S. Abut.	1530+84.230	0.000	472.832	472.832

BEAM NO. 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+10.227	0.083	473.118	473.118
℄ Brg. N. Abut.	1529+11.478	0.083	473.118	473.118
A	1529+21.478	0.083	473.116	473.181
B	1529+31.478	0.083	473.112	473.227
C	1529+41.478	0.083	473.106	473.250
D	1529+51.478	0.083	473.098	473.246
E	1529+61.478	0.083	473.089	473.216
F	1529+71.478	0.083	473.078	473.166
G	1529+81.478	0.083	473.065	473.108
H	1529+91.478	0.083	473.050	473.060
℄ Brg. Pier	1529+97.227	0.083	473.041	473.041
I	1530+07.227	0.083	473.024	473.044
J	1530+17.227	0.083	473.004	473.066
K	1530+27.227	0.083	472.983	473.089
L	1530+37.227	0.083	472.961	473.099
M	1530+47.227	0.083	472.936	473.087
N	1530+57.227	0.083	472.910	473.047
O	1530+67.227	0.083	472.882	472.979
P	1530+77.227	0.083	472.852	472.890
℄ Brg. S. Abut.	1530+82.976	0.083	472.834	472.834
Bk. S. Abut.	1530+84.227	0.083	472.831	472.831

BEAM NO. 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+09.974	7.250	473.007	473.007
℄ Brg. N. Abut.	1529+11.225	7.250	473.006	473.006
A	1529+21.225	7.250	473.004	473.069
B	1529+31.225	7.250	473.000	473.115
C	1529+41.225	7.250	472.994	473.138
D	1529+51.225	7.250	472.987	473.134
E	1529+61.225	7.250	472.977	473.105
F	1529+71.225	7.250	472.966	473.055
G	1529+81.225	7.250	472.953	472.997
H	1529+91.225	7.250	472.939	472.949
℄ Brg. Pier	1529+96.974	7.250	472.929	472.929
I	1530+06.974	7.250	472.912	472.933
J	1530+16.974	7.250	472.893	472.955
K	1530+26.974	7.250	472.872	472.978
L	1530+36.974	7.250	472.849	472.988
M	1530+46.974	7.250	472.825	472.975
N	1530+56.974	7.250	472.799	472.936
O	1530+66.974	7.250	472.771	472.867
P	1530+76.974	7.250	472.741	472.779
℄ Brg. S. Abut.	1530+82.724	7.250	472.723	472.723
Bk. S. Abut.	1530+83.974	7.250	472.719	472.719

BEAM NO. 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+09.722	14.417	472.882	472.882
℄ Brg. N. Abut.	1529+10.973	14.417	472.882	472.882
A	1529+20.973	14.417	472.880	472.944
B	1529+30.973	14.417	472.876	472.991
C	1529+40.973	14.417	472.870	473.014
D	1529+50.973	14.417	472.862	473.010
E	1529+60.973	14.417	472.853	472.980
F	1529+70.973	14.417	472.842	472.931
G	1529+80.973	14.417	472.829	472.872
H	1529+90.973	14.417	472.814	472.824
℄ Brg. Pier	1529+96.722	14.417	472.805	472.805
I	1530+06.722	14.417	472.788	472.808
J	1530+16.722	14.417	472.769	472.831
K	1530+26.722	14.417	472.748	472.854
L	1530+36.722	14.417	472.725	472.864
M	1530+46.722	14.417	472.701	472.851
N	1530+56.722	14.417	472.675	472.812
O	1530+66.722	14.417	472.647	472.744
P	1530+76.722	14.417	472.617	472.655
℄ Brg. S. Abut.	1530+82.471	14.417	472.600	472.600
Bk. S. Abut.	1530+83.722	14.417	472.596	472.596

BEAM NO. 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+09.469	21.583	472.733	472.733
℄ Brg. N. Abut.	1529+10.720	21.583	472.733	472.733
A	1529+20.720	21.583	472.730	472.795
B	1529+30.720	21.583	472.726	472.842
C	1529+40.720	21.583	472.721	472.865
D	1529+50.720	21.583	472.713	472.861
E	1529+60.720	21.583	472.704	472.831
F	1529+70.720	21.583	472.693	472.782
G	1529+80.720	21.583	472.680	472.723
H	1529+90.720	21.583	472.666	472.675
℄ Brg. Pier	1529+96.469	21.583	472.656	472.656
I	1530+06.469	21.583	472.639	472.660
J	1530+16.469	21.583	472.620	472.682
K	1530+26.469	21.583	472.599	472.705
L	1530+36.469	21.583	472.577	472.715
M	1530+46.469	21.583	472.552	472.703
N	1530+56.469	21.583	472.526	472.663
O	1530+66.469	21.583	472.498	472.595
P	1530+76.469	21.583	472.469	472.507
℄ Brg. S. Abut.	1530+82.218	21.583	472.451	472.451
Bk. S. Abut.	1530+83.469	21.583	472.447	472.447

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+09.217	28.750	472.583	472.583
℄ Brg. N. Abut.	1529+10.467	28.750	472.583	472.583
A	1529+20.467	28.750	472.581	472.650
B	1529+30.467	28.750	472.577	472.700
C	1529+40.467	28.750	472.571	472.725
D	1529+50.467	28.750	472.564	472.722
E	1529+60.467	28.750	472.555	472.691
F	1529+70.467	28.750	472.544	472.638
G	1529+80.467	28.750	472.531	472.577
H	1529+90.467	28.750	472.517	472.527
℄ Brg. Pier	1529+96.217	28.750	472.507	472.507
I	1530+06.217	28.750	472.490	472.512
J	1530+16.217	28.750	472.471	472.537
K	1530+26.217	28.750	472.450	472.564
L	1530+36.217	28.750	472.428	472.576
M	1530+46.217	28.750	472.404	472.564
N	1530+56.217	28.750	472.378	472.524
O	1530+66.217	28.750	472.350	472.453
P	1530+76.217	28.750	472.320	472.361
℄ Brg. S. Abut.	1530+81.966	28.750	472.303	472.303
Bk. S. Abut.	1530+83.217	28.750	472.299	472.299

TOP OF DECK ELEVATIONS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER

S-7

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(XI-6) HBK-2	WILLIAMSON	917	892
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 8
32 SHEETS

Contract #98950

BEAM NO. 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+08.993	-28.750	472.583	472.583
℄ Brg. N. Abut.	1529+10.244	-28.750	472.583	472.583
A	1529+20.244	-28.750	472.581	472.650
B	1529+30.244	-28.750	472.577	472.700
C	1529+40.244	-28.750	472.572	472.725
D	1529+50.244	-28.750	472.564	472.722
E	1529+60.244	-28.750	472.555	472.691
F	1529+70.244	-28.750	472.544	472.639
G	1529+80.244	-28.750	472.531	472.578
H	1529+90.244	-28.750	472.517	472.528
℄ Brg. Pier	1529+95.993	-28.750	472.508	472.508
I	1530+05.993	-28.750	472.491	472.512
J	1530+15.993	-28.750	472.472	472.538
K	1530+25.993	-28.750	472.451	472.564
L	1530+35.993	-28.750	472.428	472.576
M	1530+45.993	-28.750	472.404	472.565
N	1530+55.993	-28.750	472.378	472.525
O	1530+65.993	-28.750	472.350	472.454
P	1530+75.993	-28.750	472.321	472.361
℄ Brg. S. Abut.	1530+81.743	-28.750	472.303	472.303
Bk. S. Abut.	1530+82.993	-28.750	472.299	472.299

BEAM NO. 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+08.747	-21.750	472.729	472.729
℄ Brg. N. Abut.	1529+09.997	-21.750	472.729	472.729
A	1529+19.997	-21.750	472.727	472.792
B	1529+29.997	-21.750	472.723	472.839
C	1529+39.997	-21.750	472.718	472.862
D	1529+49.997	-21.750	472.710	472.858
E	1529+59.997	-21.750	472.701	472.828
F	1529+69.997	-21.750	472.690	472.779
G	1529+79.997	-21.750	472.678	472.721
H	1529+89.997	-21.750	472.663	472.673
℄ Brg. Pier	1529+95.747	-21.750	472.654	472.654
I	1530+05.747	-21.750	472.637	472.657
J	1530+15.747	-21.750	472.618	472.680
K	1530+25.747	-21.750	472.597	472.703
L	1530+35.747	-21.750	472.575	472.713
M	1530+45.747	-21.750	472.551	472.701
N	1530+55.747	-21.750	472.525	472.662
O	1530+65.747	-21.750	472.497	472.594
P	1530+75.747	-21.750	472.468	472.506
℄ Brg. S. Abut.	1530+81.496	-21.750	472.450	472.450
Bk. S. Abut.	1530+82.747	-21.750	472.446	472.446

BEAM NO. 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+08.500	-14.750	472.875	472.875
℄ Brg. N. Abut.	1529+09.751	-14.750	472.875	472.875
A	1529+19.751	-14.750	472.873	472.938
B	1529+29.751	-14.750	472.869	472.984
C	1529+39.751	-14.750	472.864	473.008
D	1529+49.751	-14.750	472.856	473.004
E	1529+59.751	-14.750	472.847	472.974
F	1529+69.751	-14.750	472.836	472.925
G	1529+79.751	-14.750	472.824	472.867
H	1529+89.751	-14.750	472.809	472.819
℄ Brg. Pier	1529+95.500	-14.750	472.800	472.800
I	1530+05.500	-14.750	472.783	472.804
J	1530+15.500	-14.750	472.764	472.826
K	1530+25.500	-14.750	472.744	472.850
L	1530+35.500	-14.750	472.721	472.860
M	1530+45.500	-14.750	472.697	472.847
N	1530+55.500	-14.750	472.671	472.808
O	1530+65.500	-14.750	472.644	472.740
P	1530+75.500	-14.750	472.614	472.652
℄ Brg. S. Abut.	1530+81.249	-14.750	472.596	472.596
Bk. S. Abut.	1530+82.500	-14.750	472.592	472.592

BEAM NO. 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+08.253	-7.750	472.999	472.999
℄ Brg. N. Abut.	1529+09.504	-7.750	472.999	472.999
A	1529+19.504	-7.750	472.997	473.061
B	1529+29.504	-7.750	472.993	473.108
C	1529+39.504	-7.750	472.987	473.132
D	1529+49.504	-7.750	472.980	473.128
E	1529+59.504	-7.750	472.971	473.098
F	1529+69.504	-7.750	472.960	473.049
G	1529+79.504	-7.750	472.948	472.991
H	1529+89.504	-7.750	472.933	472.943
℄ Brg. Pier	1529+95.253	-7.750	472.924	472.924
I	1530+05.253	-7.750	472.907	472.928
J	1530+15.253	-7.750	472.888	472.951
K	1530+25.253	-7.750	472.868	472.974
L	1530+35.253	-7.750	472.846	472.984
M	1530+45.253	-7.750	472.821	472.972
N	1530+55.253	-7.750	472.796	472.933
O	1530+65.253	-7.750	472.768	472.865
P	1530+75.253	-7.750	472.739	472.777
℄ Brg. S. Abut.	1530+81.002	-7.750	472.721	472.721
Bk. S. Abut.	1530+82.253	-7.750	472.717	472.717

BEAM NO. 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+08.006	-0.750	473.108	473.108
℄ Brg. N. Abut.	1529+09.257	-0.750	473.108	473.108
A	1529+19.257	-0.750	473.106	473.171
B	1529+29.257	-0.750	473.102	473.218
C	1529+39.257	-0.750	473.097	473.241
D	1529+49.257	-0.750	473.090	473.237
E	1529+59.257	-0.750	473.081	473.208
F	1529+69.257	-0.750	473.070	473.159
G	1529+79.257	-0.750	473.057	473.101
H	1529+89.257	-0.750	473.043	473.053
℄ Brg. Pier	1529+95.006	-0.750	473.034	473.034
I	1530+05.006	-0.750	473.017	473.038
J	1530+15.006	-0.750	472.998	473.060
K	1530+25.006	-0.750	472.978	473.084
L	1530+35.006	-0.750	472.955	473.094
M	1530+45.006	-0.750	472.931	473.082
N	1530+55.006	-0.750	472.906	473.043
O	1530+65.006	-0.750	472.878	472.975
P	1530+75.006	-0.750	472.849	472.887
℄ Brg. S. Abut.	1530+80.756	-0.750	472.831	472.831
Bk. S. Abut.	1530+82.006	-0.750	472.827	472.827

SOUTHBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.980	0.000	473.120	473.120
℄ Brg. N. Abut.	1529+09.231	0.000	473.120	473.120
A	1529+19.231	0.000	473.118	473.183
B	1529+29.231	0.000	473.114	473.230
C	1529+39.231	0.000	473.109	473.253
D	1529+49.231	0.000	473.101	473.249
E	1529+59.231	0.000	473.092	473.220
F	1529+69.231	0.000	473.082	473.170
G	1529+79.231	0.000	473.069	473.113
H	1529+89.231	0.000	473.055	473.065
℄ Brg. Pier	1529+94.980	0.000	473.046	473.046
I	1530+04.980	0.000	473.029	473.049
J	1530+14.980	0.000	473.010	473.072
K	1530+24.980	0.000	472.990	473.096
L	1530+34.980	0.000	472.967	473.106
M	1530+44.980	0.000	472.943	473.094
N	1530+54.980	0.000	472.917	473.055
O	1530+64.980	0.000	472.890	472.986
P	1530+74.980	0.000	472.860	472.898
℄ Brg. S. Abut.	1530+80.729	0.000	472.843	472.843
Bk. S. Abut.	1530+81.980	0.000	472.839	472.839

BEAM 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.760	6.250	473.022	473.022
℄ Brg. N. Abut.	1529+09.010	6.250	473.022	473.022
A	1529+19.010	6.250	473.020	473.085
B	1529+29.010	6.250	473.017	473.132
C	1529+39.010	6.250	473.011	473.155
D	1529+49.010	6.250	473.004	473.152
E	1529+59.010	6.250	472.995	473.122
F	1529+69.010	6.250	472.984	473.073
G	1529+79.010	6.250	472.972	473.015
H	1529+89.010	6.250	472.958	472.968
℄ Brg. Pier	1529+94.760	6.250	472.949	472.949
I	1530+04.760	6.250	472.932	472.952
J	1530+14.760	6.250	472.913	472.975
K	1530+24.760	6.250	472.892	472.998
L	1530+34.760	6.250	472.870	473.009
M	1530+44.760	6.250	472.846	472.996
N	1530+54.760	6.250	472.820	472.957
O	1530+64.760	6.250	472.793	472.889
P	1530+74.760	6.250	472.763	472.801
℄ Brg. S. Abut.	1530+80.509	6.250	472.746	472.746
Bk. S. Abut.	1530+81.760	6.250	472.742	472.742

TOP OF DECK ELEVATIONS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (XI-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS

DRAWING NUMBER S-8

SOUTHBOUND STAGE CONSTRUCTION LINE & BASELINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.557	12.000	472.933	472.933
℄ Brg. N. Abut.	1529+08.808	12.000	472.932	472.932
A	1529+18.808	12.000	472.931	472.995
B	1529+28.808	12.000	472.927	473.042
C	1529+38.808	12.000	472.921	473.066
D	1529+48.808	12.000	472.914	473.062
E	1529+58.808	12.000	472.905	473.033
F	1529+68.808	12.000	472.895	472.983
G	1529+78.808	12.000	472.882	472.926
H	1529+88.808	12.000	472.868	472.878
℄ Brg. Pier	1529+94.557	12.000	472.859	472.859
I	1530+04.557	12.000	472.842	472.863
J	1530+14.557	12.000	472.823	472.886
K	1530+24.557	12.000	472.803	472.909
L	1530+34.557	12.000	472.781	472.919
M	1530+44.557	12.000	472.757	472.907
N	1530+54.557	12.000	472.731	472.868
O	1530+64.557	12.000	472.704	472.800
P	1530+74.557	12.000	472.674	472.712
℄ Brg. S. Abut.	1530+80.306	12.000	472.657	472.657
Bk. S. Abut.	1530+81.557	12.000	472.653	472.653

BEAM NO. 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.513	13.250	472.907	472.907
℄ Brg. N. Abut.	1529+08.764	13.250	472.906	472.906
A	1529+18.764	13.250	472.905	472.969
B	1529+28.764	13.250	472.901	473.016
C	1529+38.764	13.250	472.895	473.040
D	1529+48.764	13.250	472.888	473.036
E	1529+58.764	13.250	472.879	473.007
F	1529+68.764	13.250	472.869	472.957
G	1529+78.764	13.250	472.856	472.900
H	1529+88.764	13.250	472.842	472.852
℄ Brg. Pier	1529+94.513	13.250	472.833	472.833
I	1530+04.513	13.250	472.816	472.837
J	1530+14.513	13.250	472.797	472.860
K	1530+24.513	13.250	472.777	472.883
L	1530+34.513	13.250	472.755	472.893
M	1530+44.513	13.250	472.731	472.881
N	1530+54.513	13.250	472.705	472.842
O	1530+64.513	13.250	472.678	472.774
P	1530+74.513	13.250	472.648	472.686
℄ Brg. S. Abut.	1530+80.262	13.250	472.631	472.631
Bk. S. Abut.	1530+81.513	13.250	472.627	472.627

BEAM NO. 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.266	20.250	472.735	472.735
℄ Brg. N. Abut.	1529+08.517	20.250	472.734	472.734
A	1529+18.517	20.250	472.729	472.793
B	1529+28.517	20.250	472.721	472.836
C	1529+38.517	20.250	472.712	472.856
D	1529+48.517	20.250	472.701	472.849
E	1529+58.517	20.250	472.688	472.815
F	1529+68.517	20.250	472.673	472.762
G	1529+78.517	20.250	472.657	472.701
H	1529+88.517	20.250	472.639	472.649
℄ Brg. Pier	1529+94.266	20.250	472.628	472.628
I	1530+04.266	20.250	472.607	472.628
J	1530+14.266	20.250	472.585	472.647
K	1530+24.266	20.250	472.560	472.666
L	1530+34.266	20.250	472.534	472.673
M	1530+44.266	20.250	472.506	472.657
N	1530+54.266	20.250	472.477	472.614
O	1530+64.266	20.250	472.446	472.542
P	1530+74.266	20.250	472.412	472.450
℄ Brg. S. Abut.	1530+80.015	20.250	472.393	472.393
Bk. S. Abut.	1530+81.266	20.250	472.388	472.388

BEAM NO. 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+07.020	27.250	472.455	472.455
℄ Brg. N. Abut.	1529+08.270	27.250	472.454	472.454
A	1529+18.270	27.250	472.449	472.513
B	1529+28.270	27.250	472.441	472.556
C	1529+38.270	27.250	472.432	472.576
D	1529+48.270	27.250	472.421	472.569
E	1529+58.270	27.250	472.408	472.536
F	1529+68.270	27.250	472.394	472.482
G	1529+78.270	27.250	472.378	472.421
H	1529+88.270	27.250	472.360	472.369
℄ Brg. Pier	1529+94.020	27.250	472.348	472.348
I	1530+04.020	27.250	472.328	472.348
J	1530+14.020	27.250	472.305	472.367
K	1530+24.020	27.250	472.281	472.387
L	1530+34.020	27.250	472.255	472.393
M	1530+44.020	27.250	472.227	472.377
N	1530+54.020	27.250	472.198	472.335
O	1530+64.020	27.250	472.166	472.263
P	1530+74.020	27.250	472.133	472.171
℄ Brg. S. Abut.	1530+79.769	27.250	472.113	472.113
Bk. S. Abut.	1530+81.020	27.250	472.109	472.109

BEAM NO. 22

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+06.773	34.250	472.175	472.175
℄ Brg. N. Abut.	1529+08.024	34.250	472.174	472.174
A	1529+18.024	34.250	472.169	472.233
B	1529+28.024	34.250	472.161	472.277
C	1529+38.024	34.250	472.152	472.296
D	1529+48.024	34.250	472.141	472.289
E	1529+58.024	34.250	472.128	472.256
F	1529+68.024	34.250	472.114	472.203
G	1529+78.024	34.250	472.098	472.141
H	1529+88.024	34.250	472.080	472.090
℄ Brg. Pier	1529+93.773	34.250	472.069	472.069
I	1530+03.773	34.250	472.048	472.069
J	1530+13.773	34.250	472.026	472.088
K	1530+23.773	34.250	472.001	472.107
L	1530+33.773	34.250	471.975	472.114
M	1530+43.773	34.250	471.948	472.098
N	1530+53.773	34.250	471.918	472.055
O	1530+63.773	34.250	471.887	471.984
P	1530+73.773	34.250	471.854	471.892
℄ Brg. S. Abut.	1530+79.522	34.250	471.834	471.834
Bk. S. Abut.	1530+80.773	34.250	471.830	471.830

BEAM 23

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1529+06.526	41.250	471.895	471.895
℄ Brg. N. Abut.	1529+07.777	41.250	471.894	471.894
A	1529+17.777	41.250	471.889	471.958
B	1529+27.777	41.250	471.881	472.004
C	1529+37.777	41.250	471.872	472.026
D	1529+47.777	41.250	471.861	472.019
E	1529+57.777	41.250	471.849	471.985
F	1529+67.777	41.250	471.834	471.929
G	1529+77.777	41.250	471.818	471.864
H	1529+87.777	41.250	471.800	471.811
℄ Brg. Pier	1529+93.526	41.250	471.789	471.789
I	1530+03.526	41.250	471.769	471.790
J	1530+13.526	41.250	471.746	471.812
K	1530+23.526	41.250	471.722	471.835
L	1530+33.526	41.250	471.696	471.844
M	1530+43.526	41.250	471.668	471.829
N	1530+53.526	41.250	471.639	471.785
O	1530+63.526	41.250	471.608	471.711
P	1530+73.526	41.250	471.575	471.615
℄ Brg. S. Abut.	1530+79.275	41.250	471.555	471.555
Bk. S. Abut.	1530+80.526	41.250	471.551	471.551

TOP OF DECK ELEVATIONS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

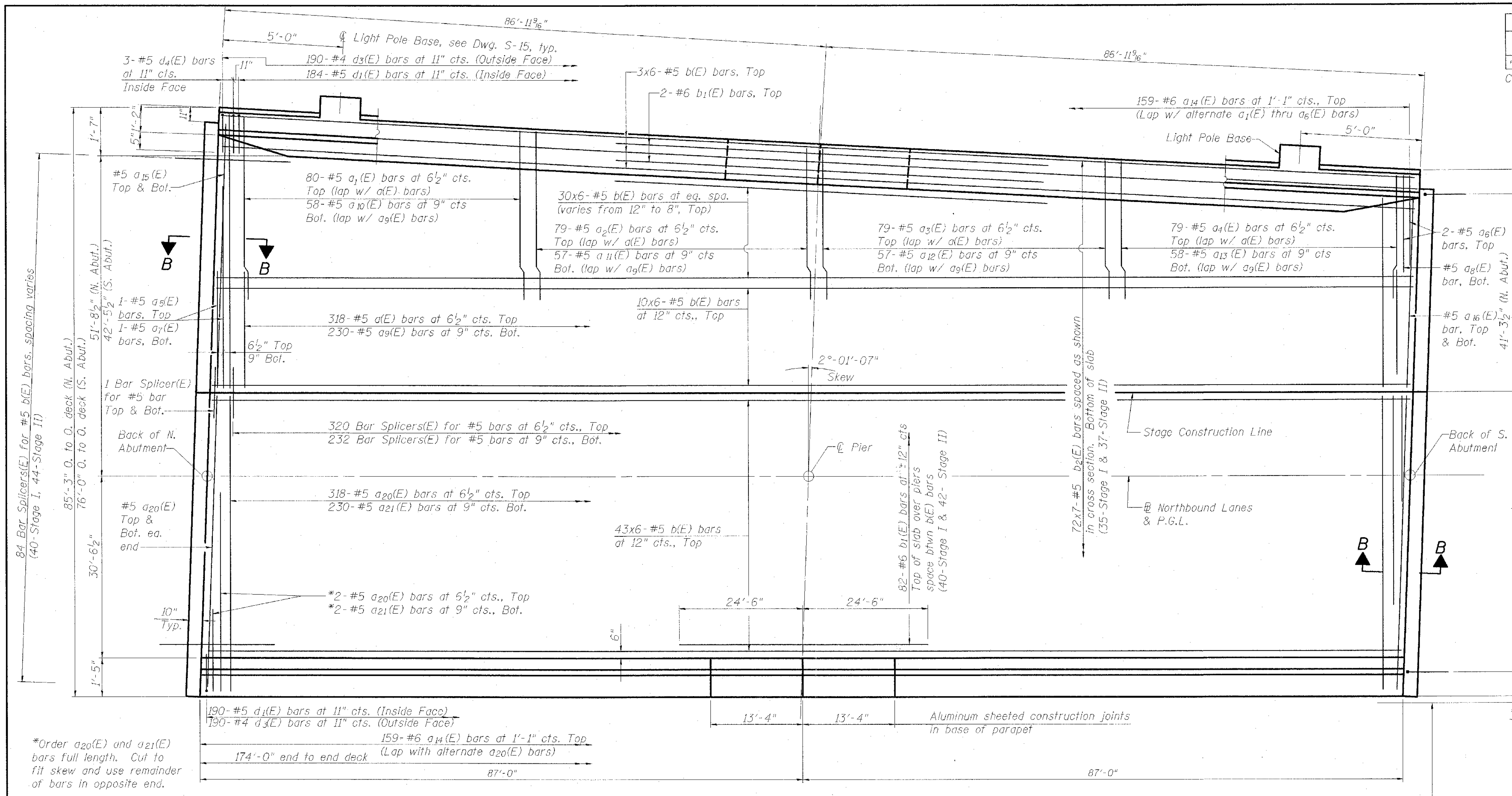
NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM
DRAWN BY: MEW
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS
PROJECT NO: 102314
DATE: 05/2006

DRAWING NUMBER S-9

NOTES

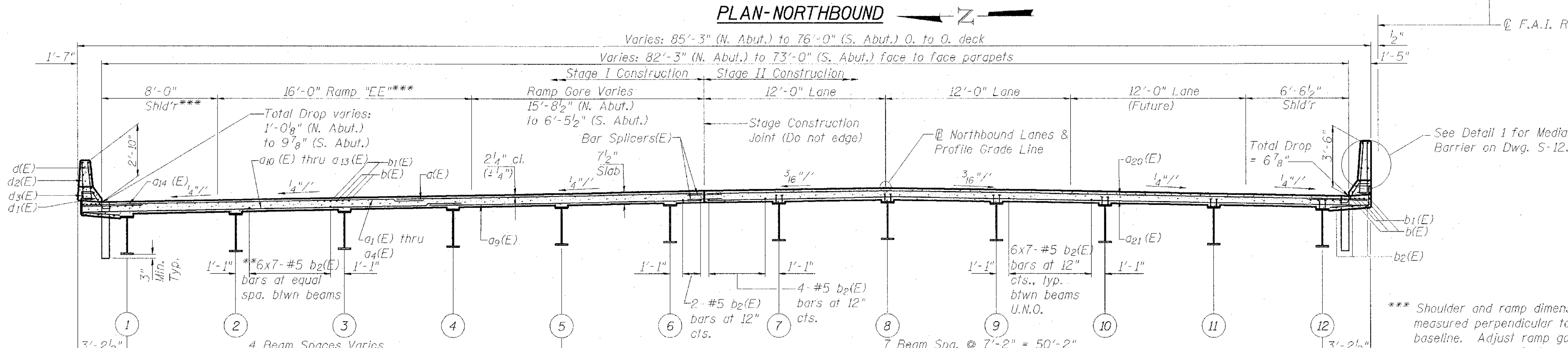
1. See Dwg. S-15 for Superstructure Details and Bill of Material.
2. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Dwg. S-12 for parapet reinforcement.
4. See Dwg. S-27 for Bar Splicer Details.
5. See Dwg. S-1 for Floor Drain locations.
6. For Section B-B see Dwg. S-13.



PLAN-NORTHBOUND

MIN. BAR LAP

#5	2'-2"
#6	2'-7"



**Spacing of #5 b2(E) bars vary between beams 1 and 5.

*** Shoulder and ramp dimensions measured perpendicular to ramp baseline. Adjust ramp gore dimensions accordingly.

CROSS SECTION
(Looking South)

NEAR PIER

NEAR MIDSPAN

DECK PLAN & CROSS SECTION, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
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NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MLW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER

S-10

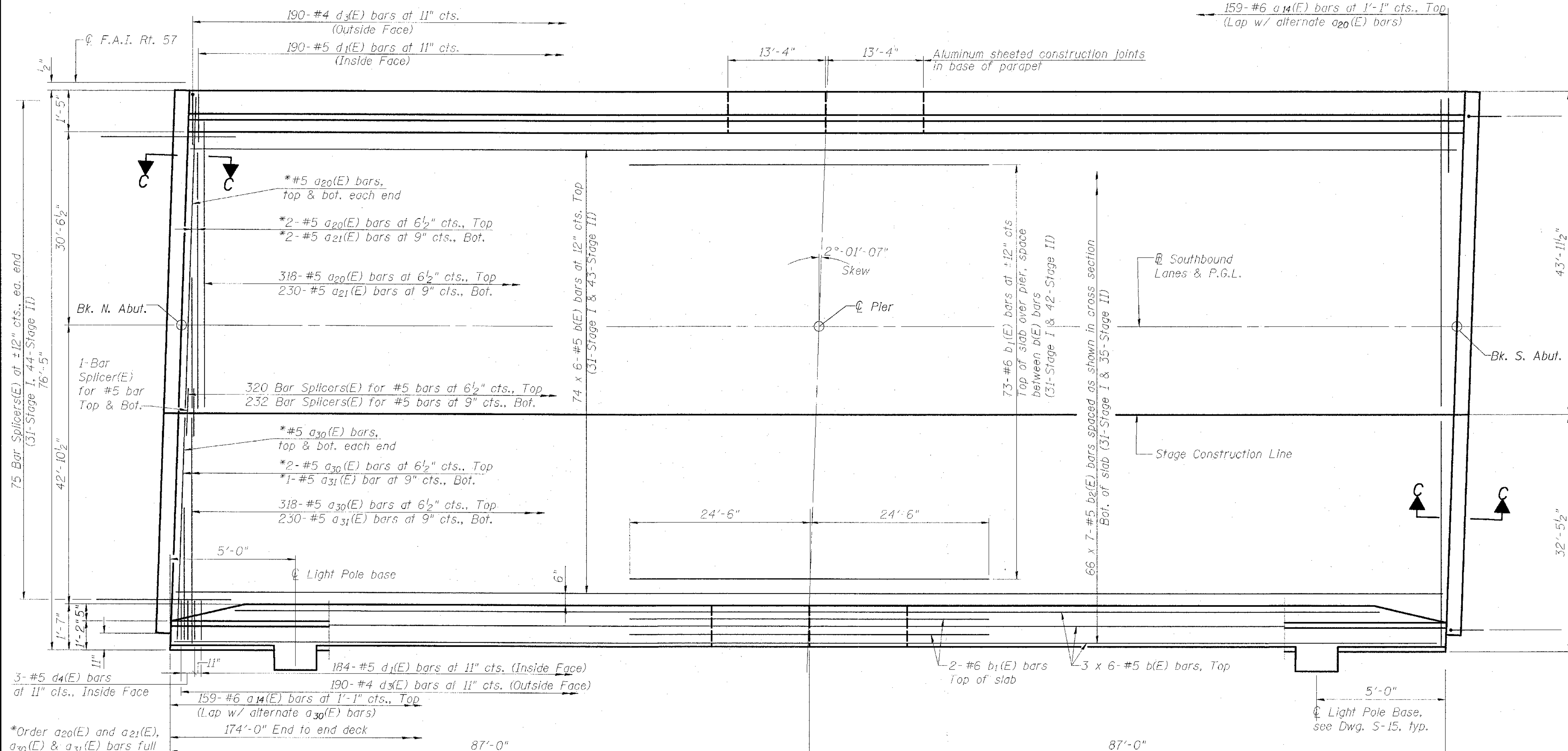
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	895
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
32 SHEETS

Contract #98950

NOTES

1. See Dwg. S-15 for Superstructure Details and Bill of Material.
2. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
3. See Dwg. S-12 for parapet reinforcement.
4. See Dwg. S-27 for Bar Splicer Details.
5. See Dwg. S-1 for Floor Drain locations.
6. For Section C-C see Dwg. S-14.

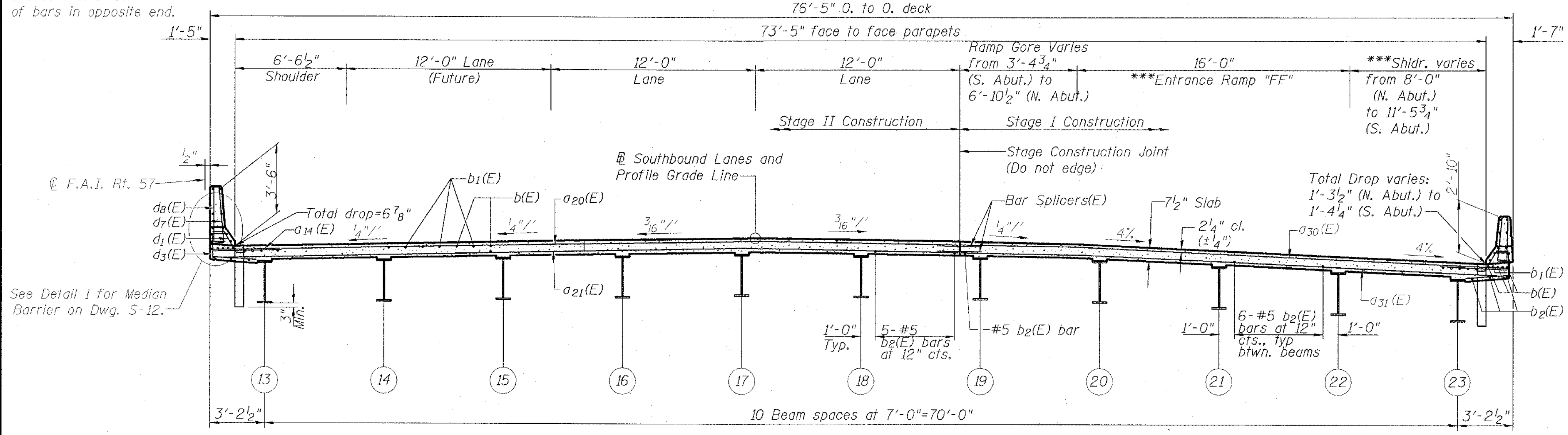


PLAN-SOUTHBOUND

N

MIN. BAR LAP

#5	2'-2"
#6	2'-7"



NEAR PIER — CROSS SECTION (Looking South) — NEAR MIDSPAN

*** Shoulder and ramp dimensions measured perpendicular to ramp baseline. Adjust ramp gore dimensions accordingly.

DECK PLAN & CROSS SECTION, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2008
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

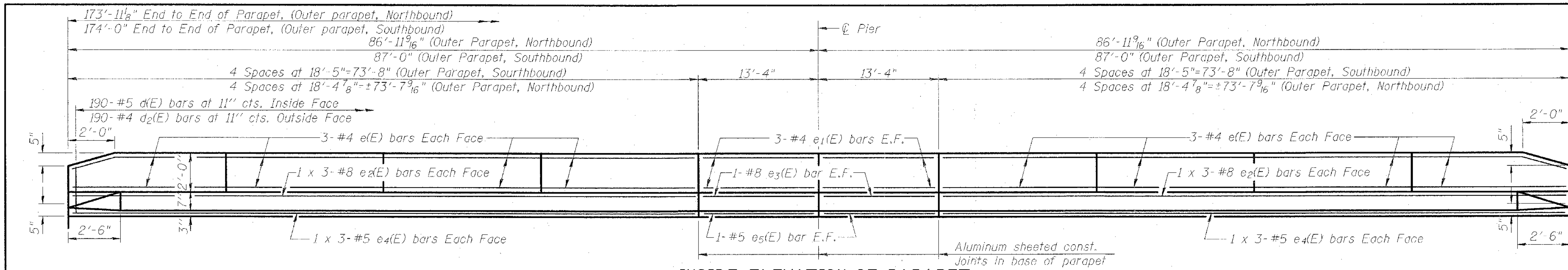
DRAWING NUMBER

S-11

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	896
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 12
32 SHEETS

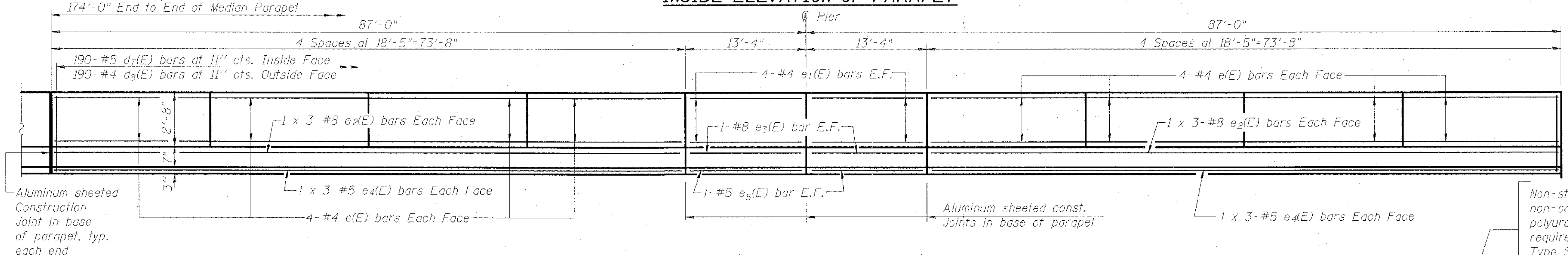
Contract #98950



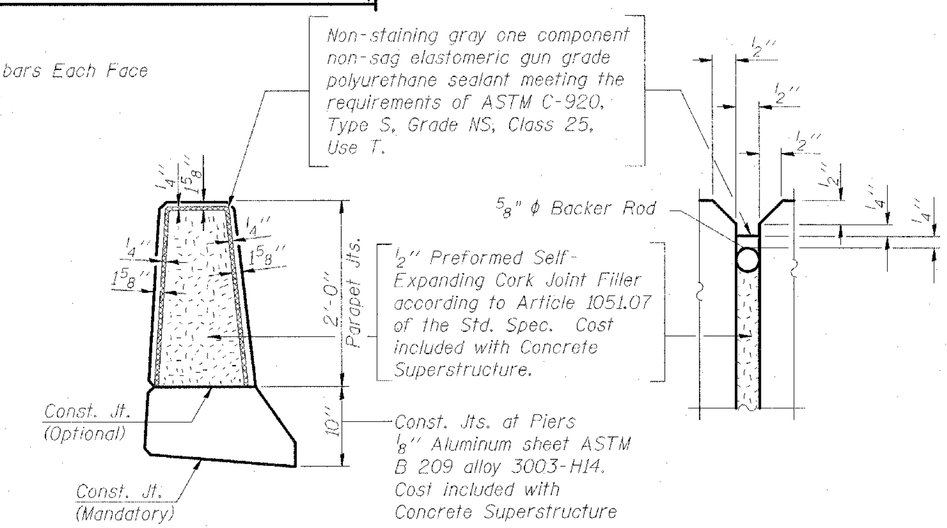
INSIDE ELEVATION OF PARAPET

MIN. BAR LAP

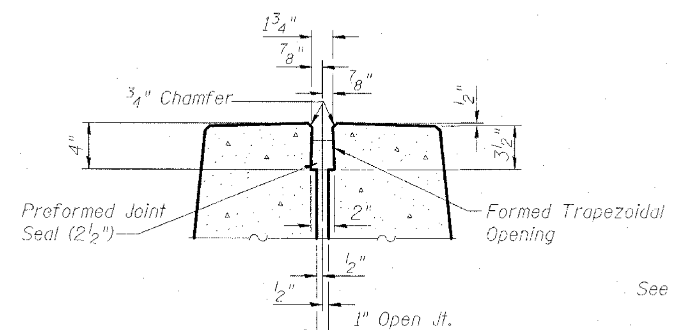
#5	1'-8"
#8	3'-8"



INSIDE ELEVATION OF MEDIAN BARRIER

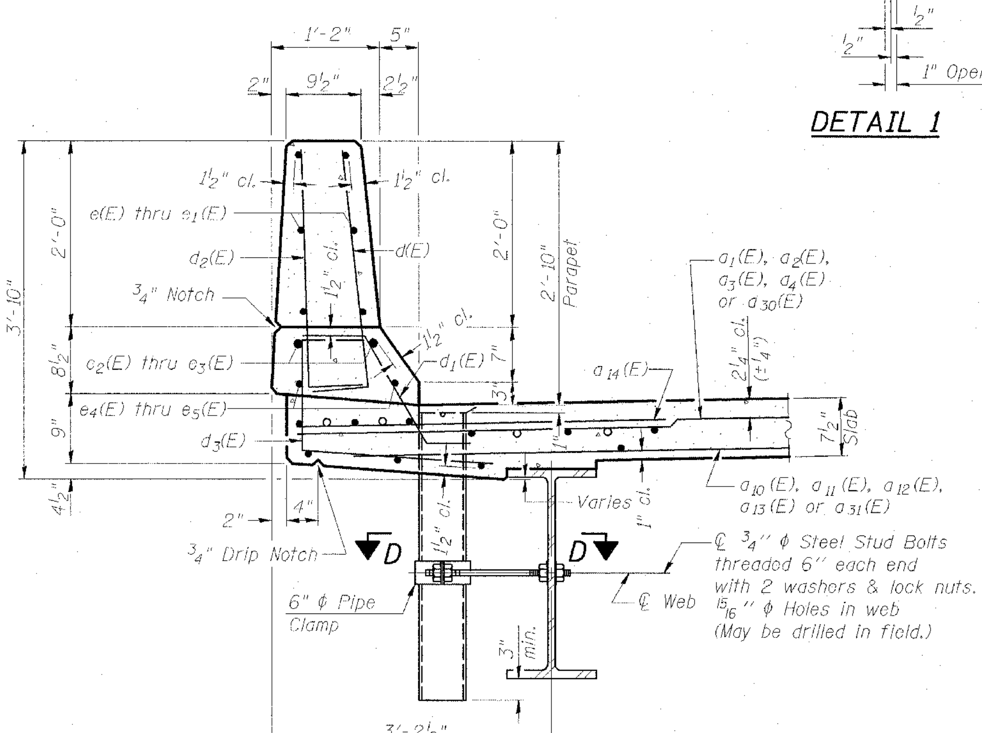


PARAPET JOINT DETAILS



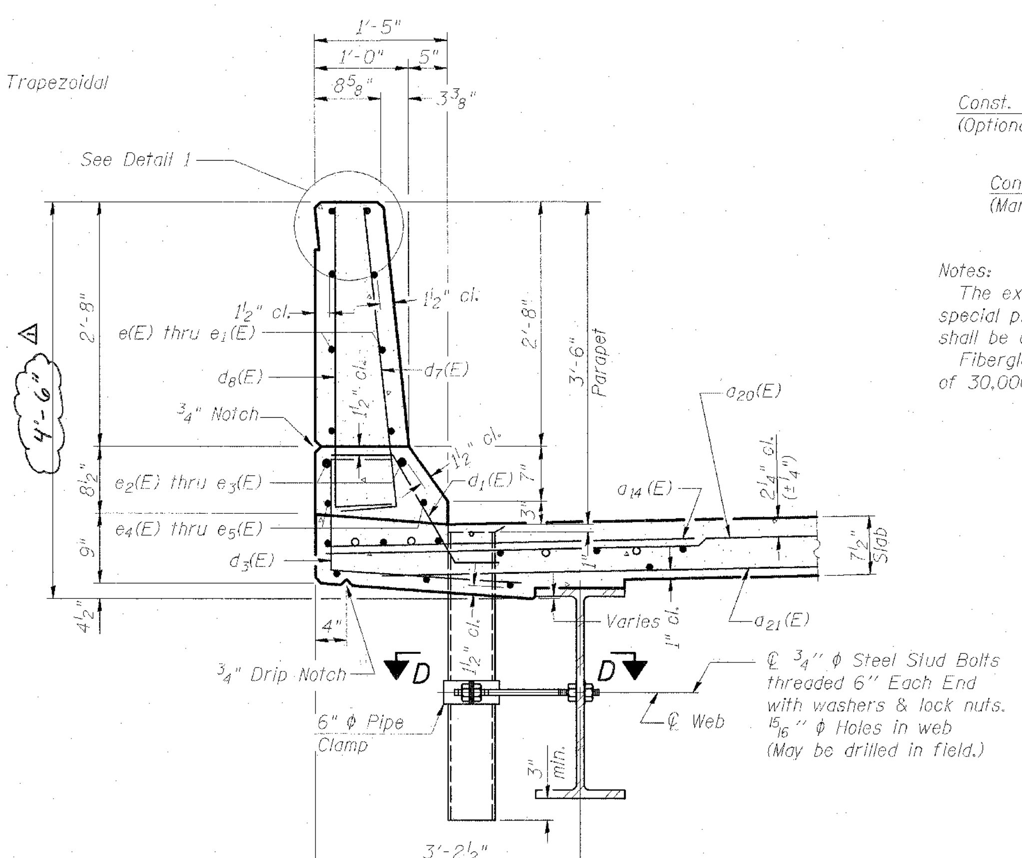
DETAIL 1

Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



SECTION THRU OUTER PARAPET

See Dwg. S-14 for Section D-D.



SECTION THRU MEDIAN PARAPET

Rev. 2-20-07

PARAPET DETAILS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

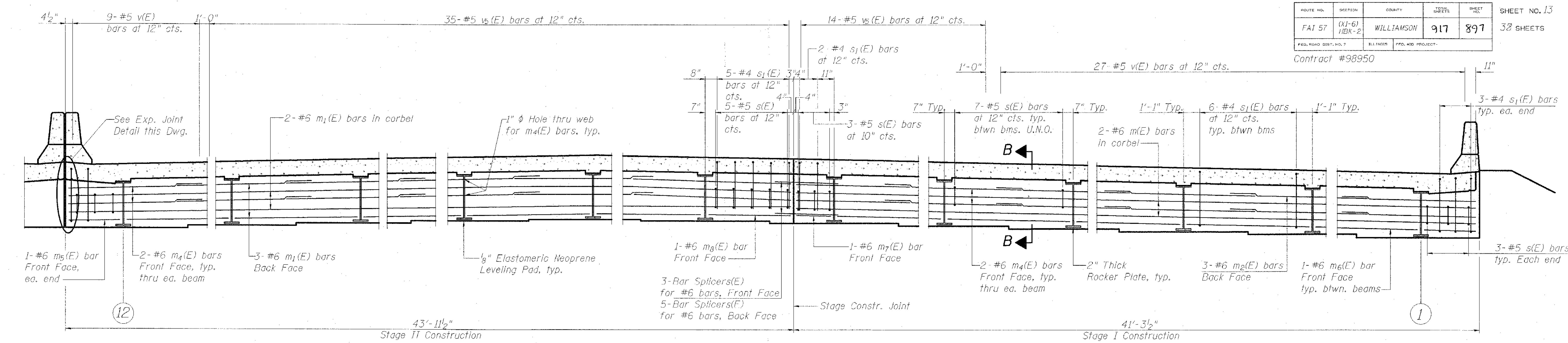
DRAWING NUMBER
S-12

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	897

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-

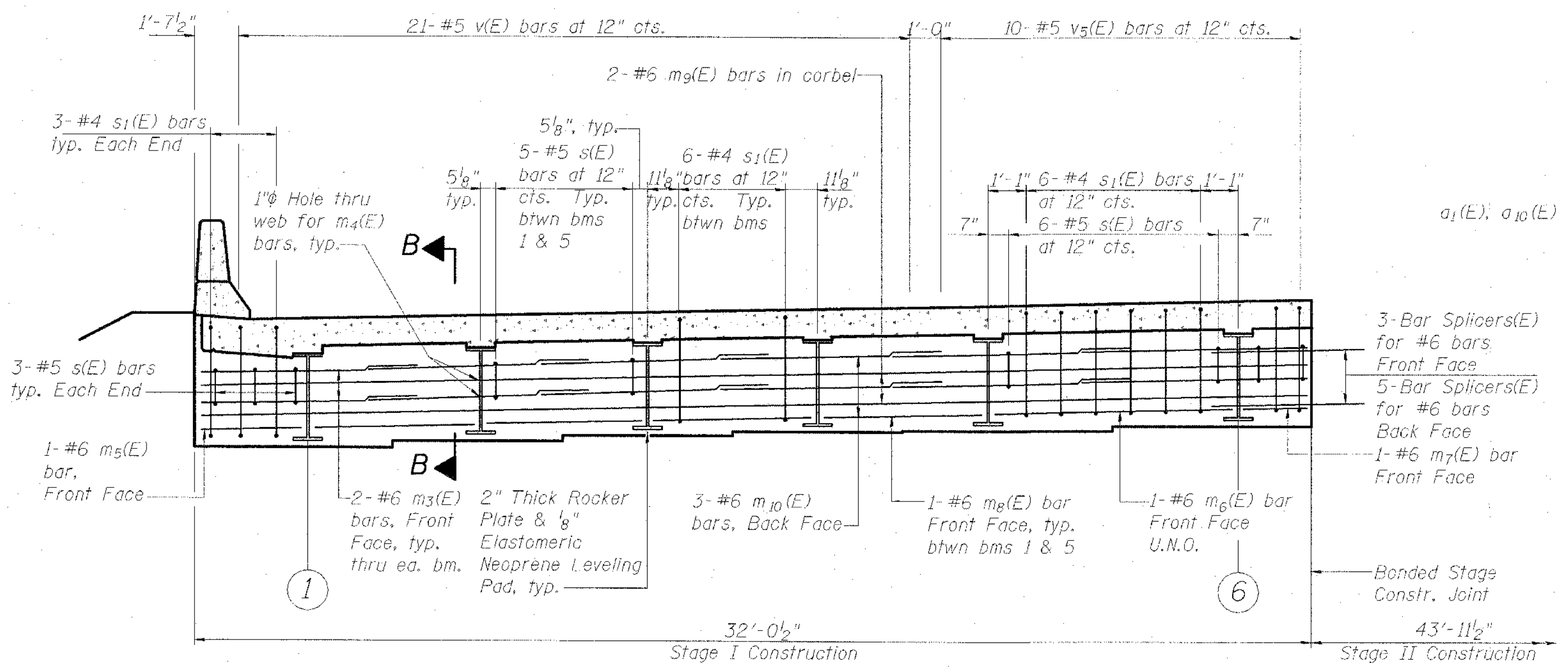
SHEET NO. 13
32 SHEETS

Contract #98950



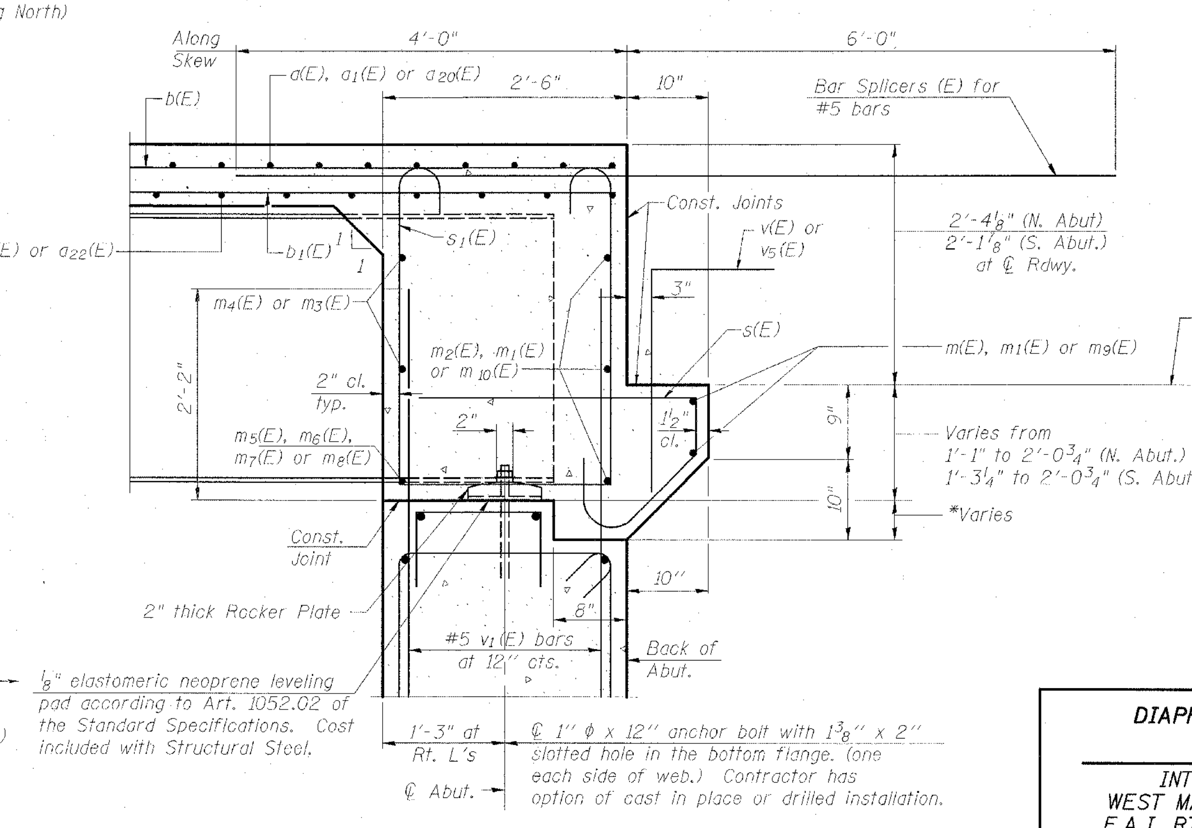
NORTHBOUND DIAPHRAGM ELEVATION AT NORTH ABUTMENT

(Looking North)



NORTHBOUND DIAPHRAGM ELEVATION AT SOUTH ABUTMENT

(Looking South)



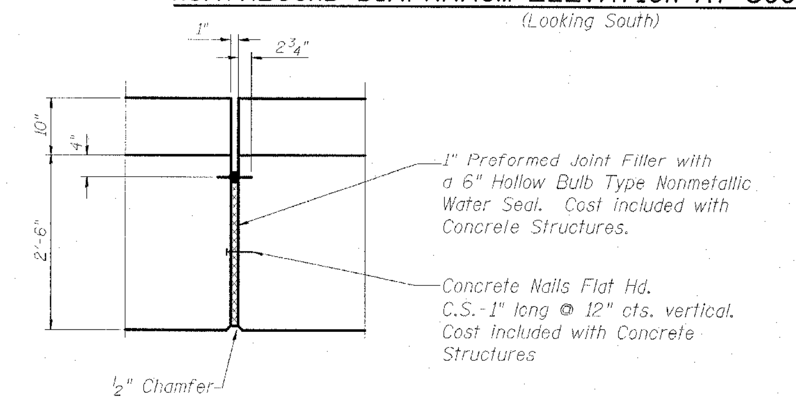
SECTION B-B

Dimensions at right angles to abutment, except as shown.

* Where bottom of corbel is above bearing seat, build level across full width of abutment cap.

MIN. BAR LAP

#6	2'-9"



PLAN-EXPANSION JOINT DETAIL

NOTES

1. Reinforcement bars in diaphragm are billed with superstructure on Dwg. S-15.
2. Concrete in diaphragm is included with Concrete Superstructure on Dwg. S-15.
3. For details of bars s(E) & s1(E) see Dwg. S-15.
4. The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

DIAPHRAGM ELEVATIONS, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

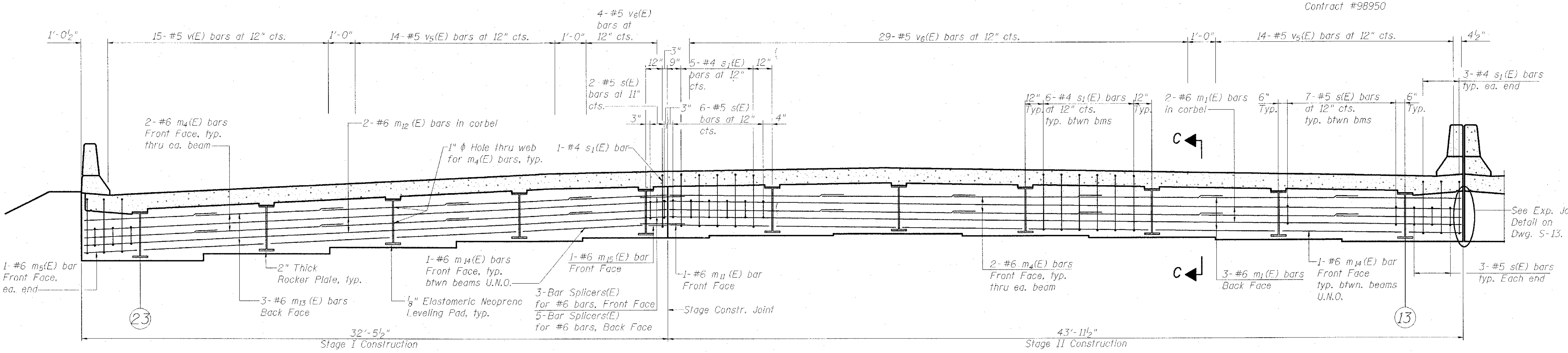
DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER

S-13

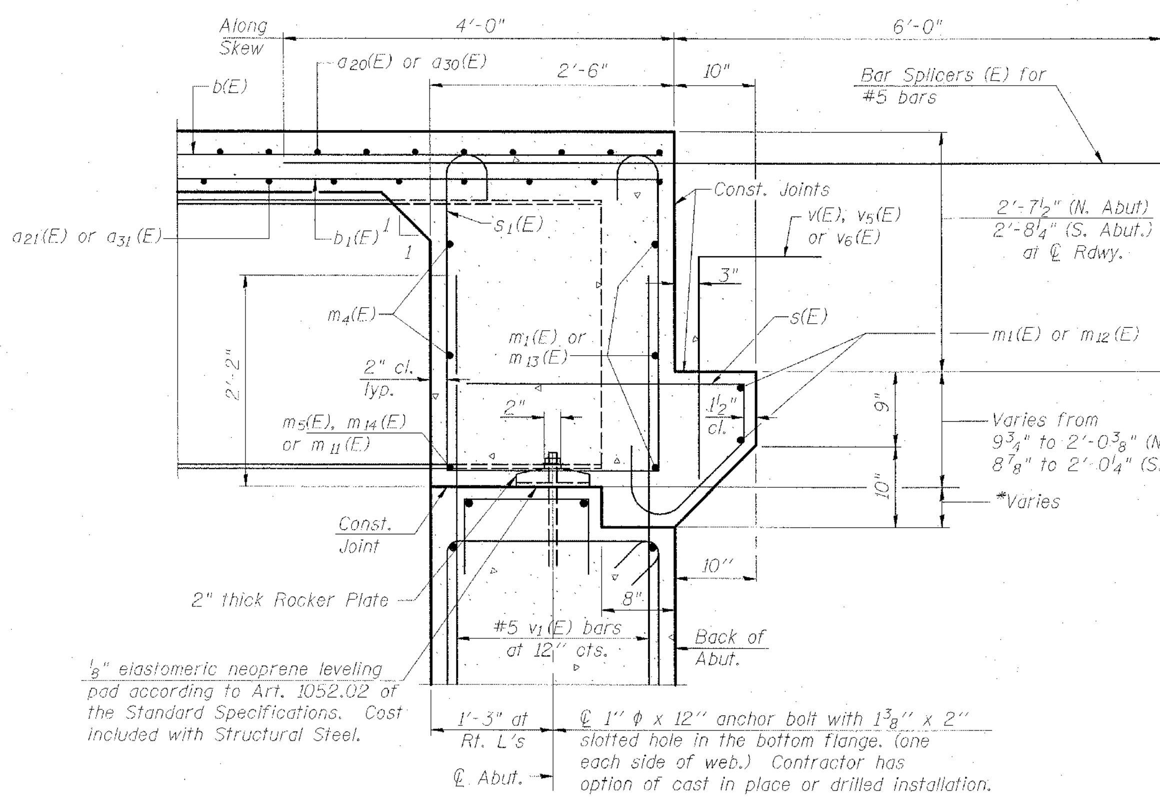
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	898

SHEET NO. 14
32 SHEETS
Contract #98950



SOUTHBOUND DIAPHRAGM ELEVATION AT NORTH ABUTMENT

(Looking North)
(Diaphragm Elevation at South Abutment similar, mirror image)



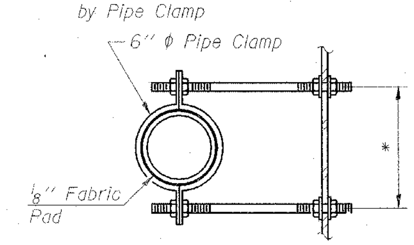
SECTION C-C

Dimensions at right angles to abutment, except as shown.
* Where bottom of corbel is above bearing seat, build level across full width of abutment cap.

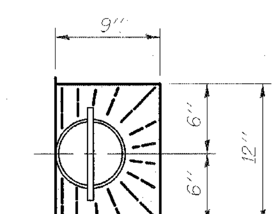
MIN. BAR LAP

#6	2'-9"

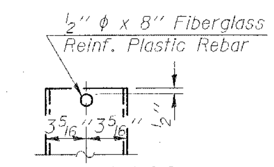
* Dimension as required by Pipe Clamp



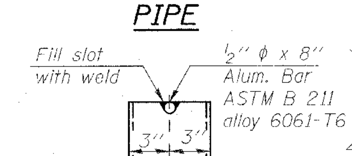
SECTION D-D



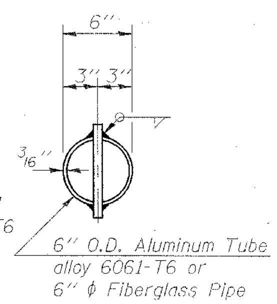
TOP PLAN



FIBERGLASS PIPE



ALUMINUM TUBE



TOP PLAN

(Showing Aluminum Tube)

NOTES

1. Reinforcement bars in diaphragm are billed with superstructure on Dwg. S-15.
2. Concrete in diaphragm is included with Concrete Superstructure on Dwg. S-15.
3. For details of bars s(E) & s1(E) see Dwg. S-15.
4. The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

DIAPHRAGM ELEVATIONS, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM — PROJECT NO: 102314
DRAWN BY: MCW — DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY — INITIALS

DRAWING NUMBER
S-14

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	899
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
32 SHEETS

Contract #98950

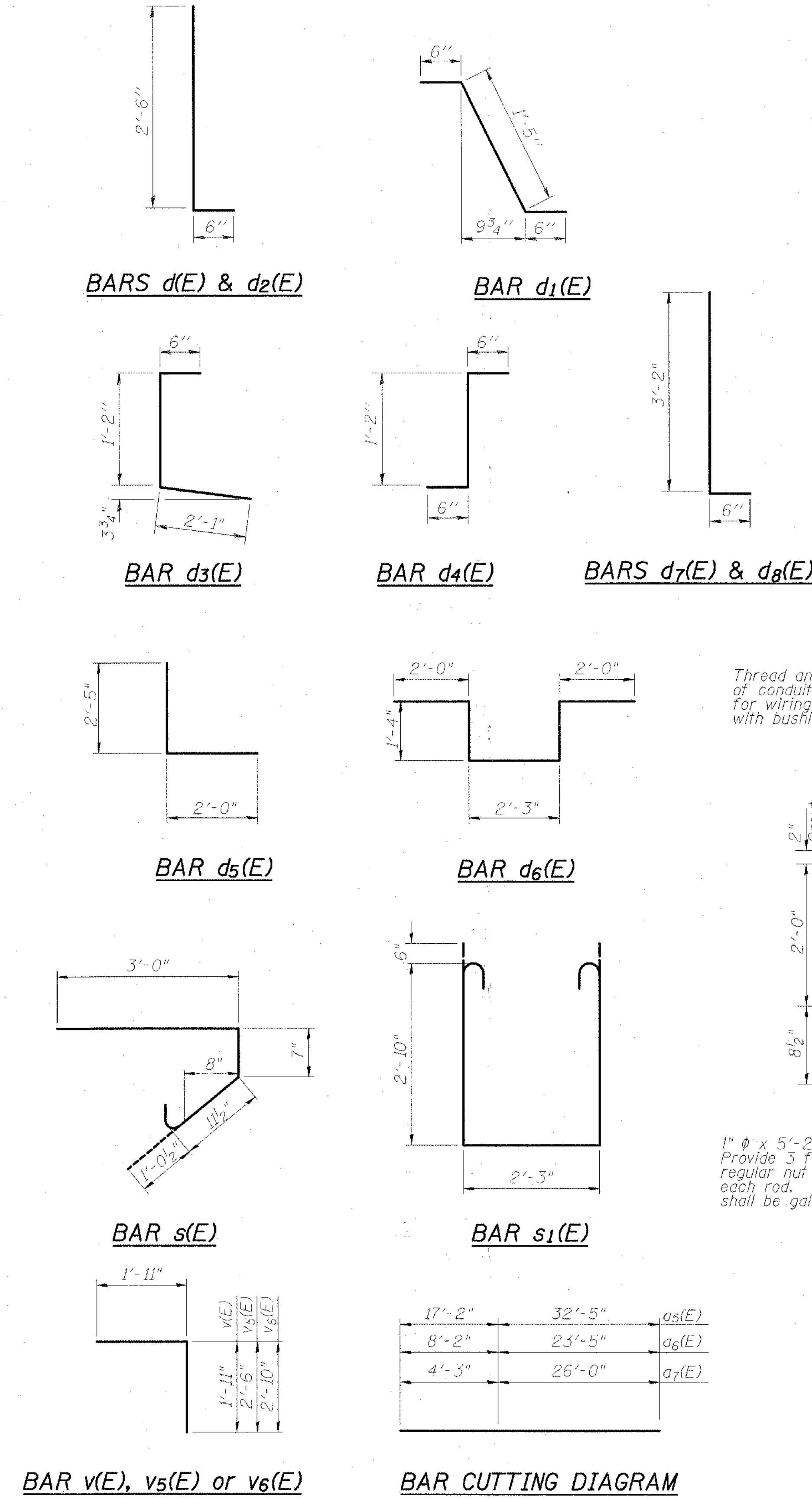
NORTHBOUND BILL OF MATERIAL

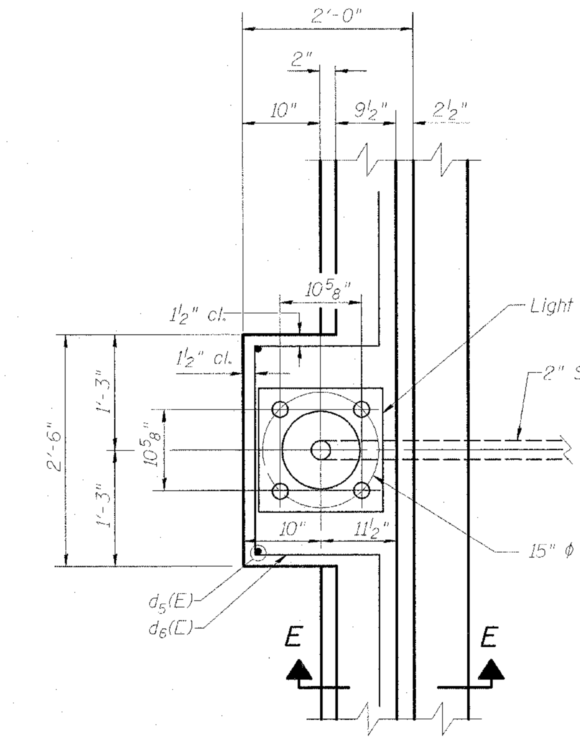
Bar	No.	Size	Length	Shape
a(E)	318	#5	17'-6"	
a_1(E)	80	#5	25'-6"	
a_2(E)	79	#5	23'-2"	
a_3(E)	79	#5	20'-10"	
a_4(E)	79	#5	18'-6"	
a_5(E)	1	#5	49'-7"	
a_6(E)	1	#5	31'-7"	
a_7(E)	1	#5	30'-3"	
a_8(E)	1	#5	16'-3"	
a_9(E)	230	#5	22'-4"	
a_{10}(E)	58	#5	20'-0"	
a_{11}(E)	57	#5	17'-8"	
a_{12}(E)	57	#5	15'-5"	
a_{13}(E)	58	#5	13'-1"	
a_{14}(E)	318	#6	4'-6"	
a_{15}(E)	2	#5	40'-10"	
a_{16}(E)	2	#5	31'-6"	
a_{20}(E)	324	#5	43'-7"	
a_{21}(E)	232	#5	42'-11"	
b(E)	534	#5	30'-9"	
b_1(E)	86	#6	49'-0"	
b_2(E)	504	#5	26'-8"	
d(E)	190	#5	3'-0"	
d_1(E)	374	#5	2'-5"	
d_2(E)	190	#4	3'-0"	
d_3(E)	380	#4	3'-9"	
d_4(E)	6	#5	2'-2"	
d_5(E)	6	#6	4'-5"	
d_6(E)	10	#6	8'-11"	
d_7(E)	190	#5	3'-8"	
d_8(E)	190	#4	3'-8"	
e(E)	112	#4	18'-1"	
e_1(E)	24	#4	13'-0"	
e_2(E)	24	#8	27'-0"	
e_3(E)	8	#8	13'-0"	
e_4(E)	24	#5	25'-8"	
e_5(E)	8	#5	13'-0"	
m(E)	2	#6	40'-3"	
m_1(E)	10	#6	43'-7"	
m_2(E)	3	#6	41'-0"	
m_3(E)	12	#6	7'-8"	
m_4(E)	36	#6	9'-7"	
m_5(E)	4	#6	2'-11"	
m_6(E)	16	#6	6'-10"	
m_7(E)	2	#6	2'-0"	
m_8(E)	5	#6	4'-8"	
m_9(E)	2	#6	31'-0"	
m_{10}(E)	3	#6	31'-9"	
s(E)	160	#5	5'-7"	
s_1(E)	138	#4	8'-11"	
v(E)	66	#5	3'-10"	
v_5(E)	94	#5	4'-5"	
Reinforcement Bars, Epoxy Coated			Pound	100,520
Concrete Superstructure			Cu. Yds.	435.0
Bar Splicers			Each	740

Bars indicated thus 1 x 3-#5 etc. indicates 1 line of bars with 3 lengths per line.

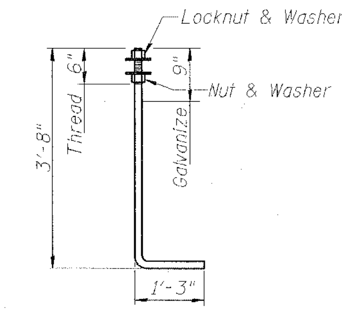
SOUTHBOUND BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{14}(E)	318	#6	4'-6"	
a_{20}(E)	324	#5	43'-7"	
a_{21}(E)	232	#5	42'-11"	
a_{30}(E)	324	#5	32'-1"	
a_{31}(E)	232	#5	31'-5"	
b(E)	480	#5	30'-9"	
b_1(E)	77	#6	49'-0"	
b_2(E)	462	#5	26'-8"	
d(E)	190	⚠ #5	3'-0"	
d_1(E)	374	⚠ #5	2'-5"	
d_2(E)	190	#4	3'-0"	
d_3(E)	380	#4	3'-9"	
d_4(E)	6	#5	2'-2"	
d_5(E)	6	#6	4'-5"	
d_6(E)	10	#6	8'-11"	
d_7(E)	190	#5	3'-8"	
d_8(E)	190	#4	3'-8"	
e(E)	112	#4	18'-1"	
e_1(E)	24	#4	13'-0"	
e_2(E)	24	#8	27'-0"	
e_3(E)	8	#8	13'-0"	
e_4(E)	24	#5	25'-8"	
e_5(E)	8	#5	13'-0"	
m_1(E)	10	#6	43'-7"	
m_4(E)	40	#6	9'-7"	
m_5(E)	4	#6	2'-11"	
m_{11}(E)	2	#6	5'-6"	
m_{12}(E)	4	#6	31'-5"	
m_{13}(E)	6	#6	32'-2"	
m_{14}(E)	18	#6	6'-9"	
m_{15}(E)	2	#6	1'-0"	
s(E)	154	#5	5'-7"	
s_1(E)	132	#4	8'-11"	
v(E)	30	#5	3'-10"	
v_5(E)	56	#5	4'-5"	
v_6(E)	66	#5	4'-9"	
Reinforcement Bars, Epoxy Coated			Pound	92,500
Concrete Superstructure			Cu. Yds.	414.4
Bar Splicers			Each	722

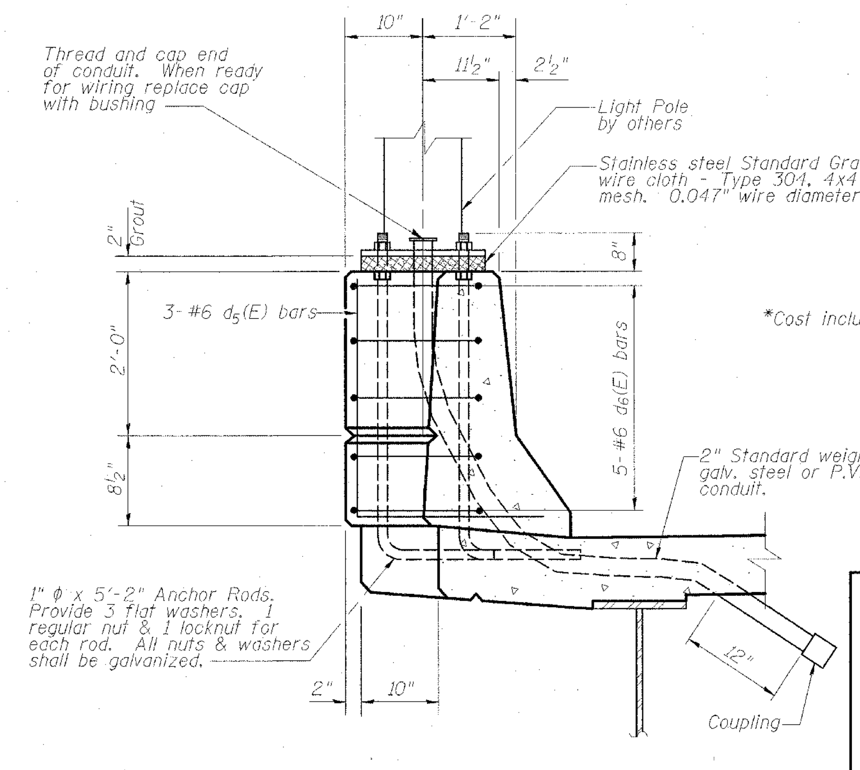




PLAN



1" ϕ ANCHOR BOLT
(ASTM F 1554 Grade 105)



SECTION E-E

Note: Cost of anchor bolts and conduit included with Concrete Superstructure.

*Cost included with Concrete Structures.

⚠ Rev. 2-20-07

SUPERSTRUCTURE BILL OF MATERIAL & LIGHT POLE BASE

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

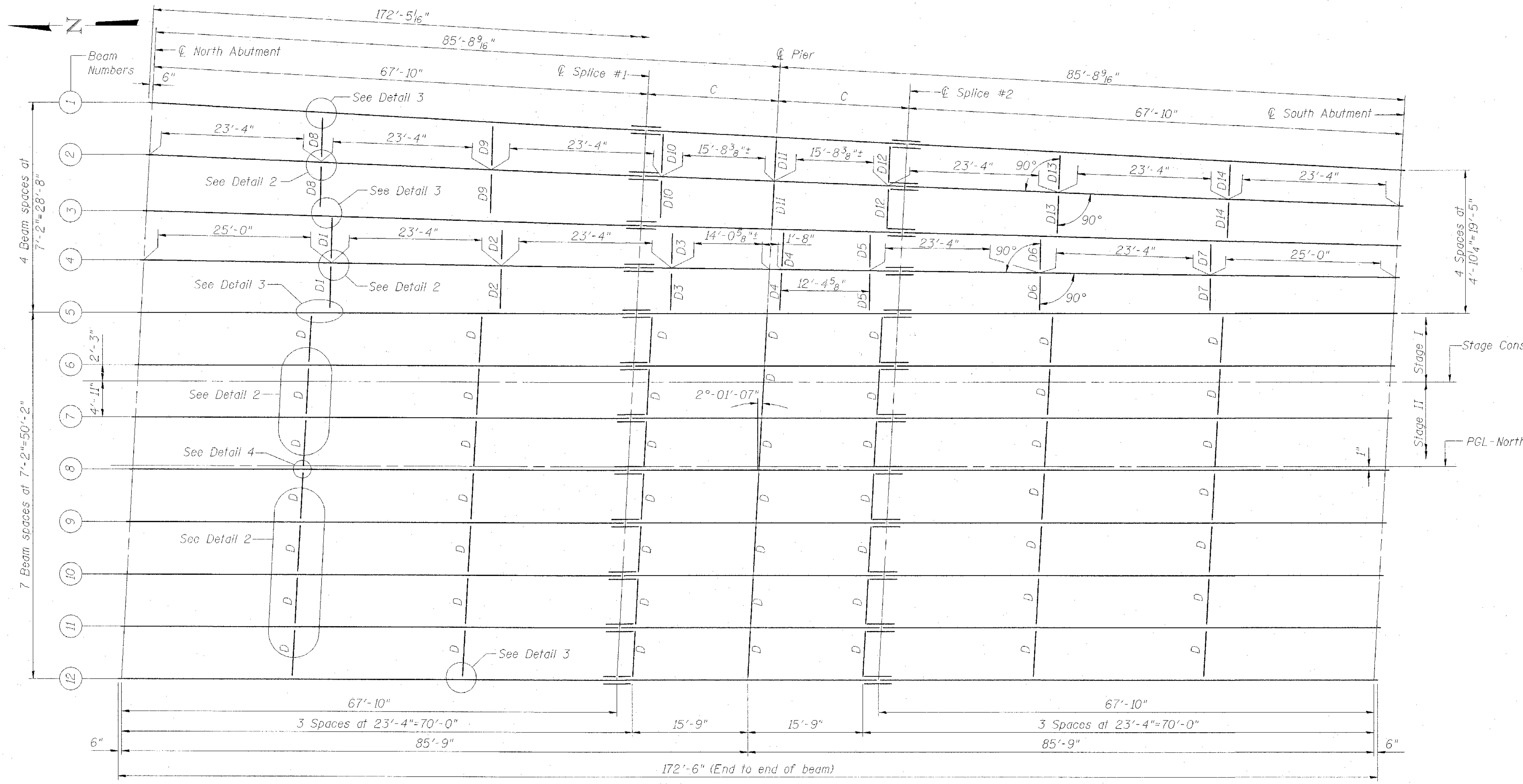
ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	I02314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-15

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	900
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 16
32 SHEETS

Contract #98950



NORTHBOUND FRAMING PLAN

NOTES

1. N.T.R. designates members subject to the supplemental requirements for notch toughness (Zone 2).
2. All structural steel for beams and splice plates shall be AASHTO M270 Grade 50.
3. Fasteners shall be high strength bolts conforming to AASHTO M-164 specification (ASTM A325). Bolts 7/8" ϕ, open holes 15/16" ϕ, unless noted otherwise.
4. Number of shear studs req'd = 9,144 Northbound
5. For Section F-F see Dwg. S-17.

TABLE OF DIMENSIONS FOR DIAPHRAGMS

DIAPHRAGM	LENGTH
D	7'-2"
D1	6'-10"
D2	6'-6 1/4"
D3	6'-2 3/8"
D4	5'-11 7/8"
D5	5'-9 7/8"
D6	5'-6 1/8"
D7	5'-2 1/4"
D8	6'-10 1/4"
D9	6'-6 1/2"
D10	6'-2 5/8"
D11	6'-0 1/8"
D12	5'-9 5/8"
D13	5'-5 7/8"
D14	5'-2"

NORTHBOUND TOP OF BEAM ELEVATIONS

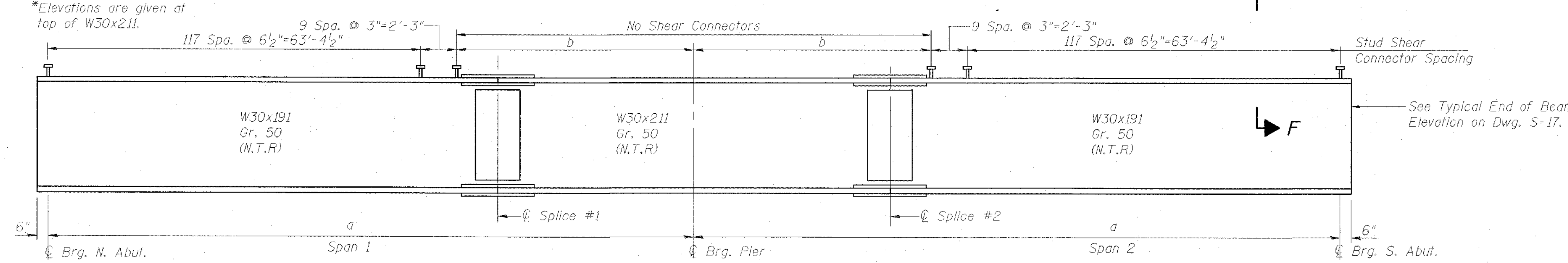
(For fabrication only)

LOCATION	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6	BEAM 7	BEAM 8	BEAM 9	BEAM 10	BEAM 11	BEAM 12
℄ Brg., N. Abut.	471.451	471.600	471.750	471.899	472.048	472.198	472.321	472.431	472.319	472.194	472.045	471.896
* Splice #1	471.470	471.600	471.731	471.861	471.989	472.136	472.261	472.370	472.259	472.134	471.985	471.840
℄ Pier	471.454	471.573	471.699	471.824	471.953	472.107	472.231	472.341	472.229	472.105	471.956	471.811
* Splice #2	471.438	471.546	471.667	471.788	471.917	472.077	472.201	472.311	472.199	472.075	471.927	471.781
℄ Brg., S. Abut.	471.356	471.457	471.559	471.661	471.762	471.912	472.037	472.147	472.036	471.912	471.764	471.615

*Elevations are given at top of W30x211.

TABLE OF DIMENSIONS

GIRDER	a	b	c
1 & 4	85'-8 9/16"	20'-1 1/16"	17'-10 9/16"
2 & 3	85'-8 3/8"	20'-0 7/8"	17'-10 3/8"
5-12	85'-9"	20'-1 1/2"	17'-11"



BEAM ELEVATION

FRAMING PLAN, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	I02314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER

S-16

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	901
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 17

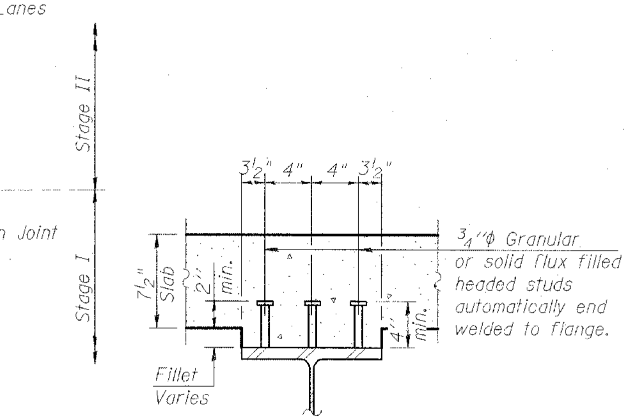
32 SHEETS

Contract #98950

NOTES

1. N.T.R. designates members subject to the supplemental requirements for notch toughness (Zone 2).
2. All structural steel for beams and splice plates shall be AASHTO M270 Grade 50.
3. Fasteners shall be high strength bolts conforming to AASHTO M-164 specification (ASTM A325). Bolts $\frac{7}{8}$"ϕ. open holes $\frac{15}{16}$"ϕ. unless noted otherwise.
4. Number of shear studs req'd = 8,382 Southbound

SOUTHBOUND FRAMING PLAN



SECTION F-F

SOUTHBOUND TOP OF BEAM ELEVATIONS

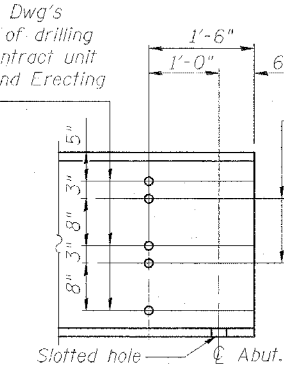
(For fabrication only)

LOCATION	BEAM 13	BEAM 14	BEAM 15	BEAM 16	BEAM 17	BEAM 18	BEAM 19	BEAM 20	BEAM 21	BEAM 22	BEAM 23
℄ Brg., N. Abut.	471.896	472.042	472.188	472.311	472.421	472.335	472.219	472.047	471.767	471.487	471.207
* Splice #1	471.840	471.983	472.129	472.253	472.363	472.277	472.162	471.963	471.684	471.404	471.128
℄ Pier	471.811	471.954	472.100	472.224	472.334	472.248	472.133	471.928	471.648	471.368	471.092
* Splice #2	471.782	471.925	472.071	472.195	472.305	472.219	472.104	471.892	471.612	471.333	471.057
℄ Brg., S. Abut.	471.616	471.762	471.909	472.033	472.144	472.058	471.943	471.705	471.426	471.147	470.867

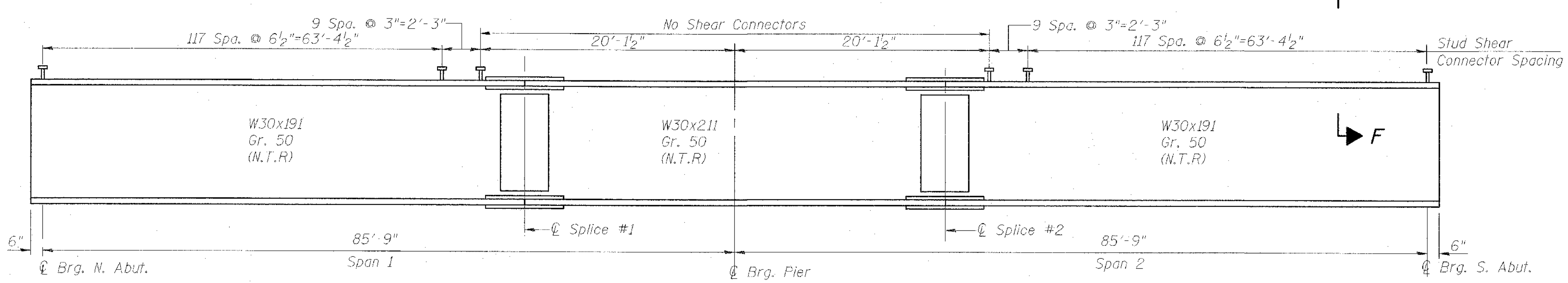
*Elevations are given at top of W30x211.

℄ 1" φ Holes in beams 6 and 17 for bar splicers. See Dwg's S-13 and S-14. Cost of drilling holes is included in contract unit price for Furnishing and Erecting Structural Steel.

℄ 1" φ Holes in beams for m_3(E) and m_4 (E) bars. See Dwg S-13 & S-14. Cost of drilling holes is included in contract unit price for Furnishing and Erecting Structural Steel.



TYPICAL END OF BEAM ELEVATION



BEAM ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

FRAMING PLAN, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

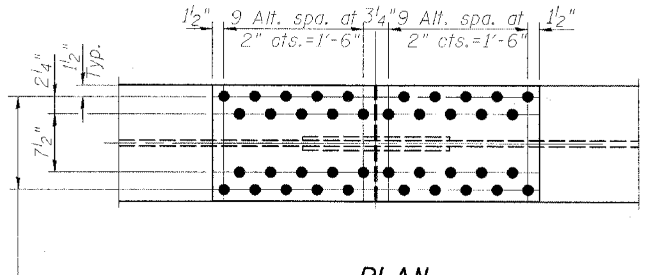
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

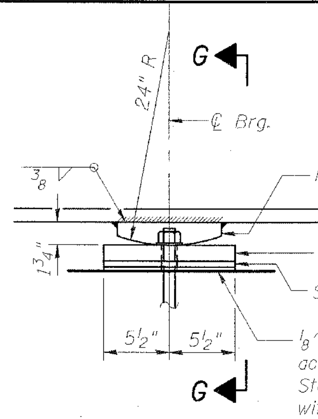
DRAWING NUMBER

S-17



PLAN

⅞" ϕ H.S. Bolts w/ 15/16" ϕ holes

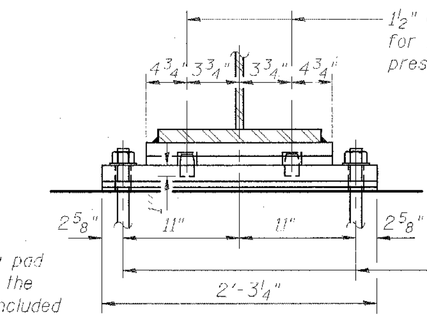


⅛" elastomeric neoprene leveling pad according to Article 1052.02 of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

ELEVATION AT PIER

FIXED BEARING

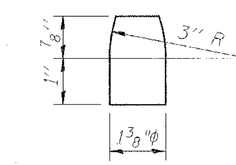
(23 Required)



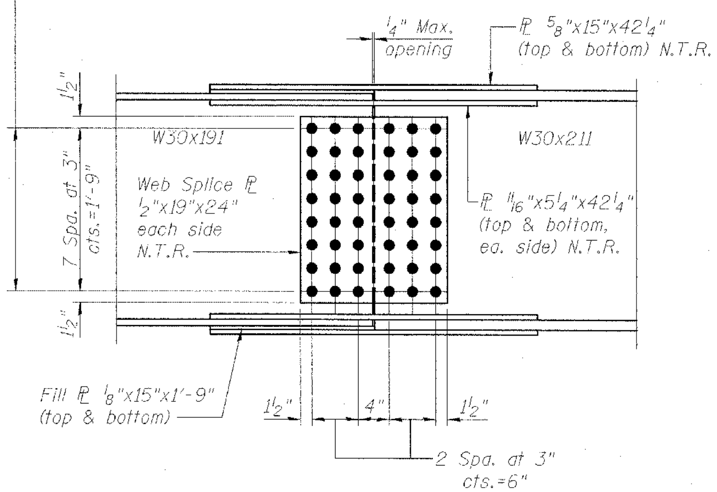
1½" ϕ Holes-1" deep in top ℄ for 1⅜" ϕ pintles. Thread or press fit in bottom ℄.

℄ 1½" ϕ x 1'-6" Anchor bolts, Grade A325 with 3" x 3" x 5/16" ℄ washer under nut 2"ϕ Holes in bottom ℄.

SECTION G-G



PINTLE

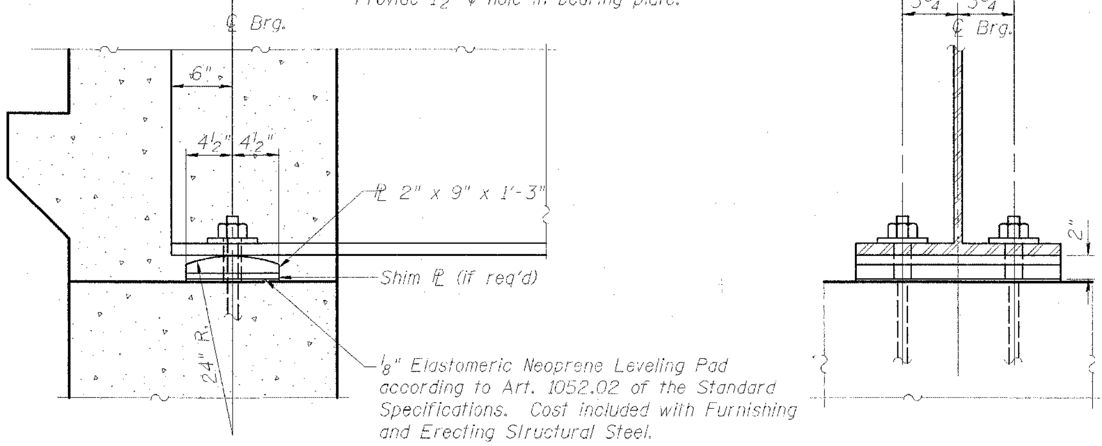


ELEVATION

FIELD SPLICE DETAIL

Note:
All beams and splice material except fill plates shall be AASHTO M270 Gr. 50 and shall meet Notch Toughness Requirements (N.T.R.).
All bearings and pintles shall be AASHTO M270 Gr. 50.

℄ 1" ϕ x 12" Anchor bolts, Grade A307 with 2¼" x 2¼" x 5/16" ℄ washer under nut and 1⅜" x 2" slotted hole in the bottom flange. Provide 1½" ϕ hole in bearing plate.



⅛" Elastomeric Neoprene Leveling Pad according to Art. 1052.02 of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

FIXED BEARING AT NORTH & SOUTH ABUTMENT

(46 Required)

NOTES:

1. Bolts for slotted holes in diaphragm connection shall be finger tightened prior to deck slab pour and then fully tightened after completion of Stage II pouring.
2. ASTM F1554 Grade 105, ASTM A449, and AASHTO M314 Grade 105 anchor bolts may be substituted for the anchor bolts shown.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	902
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 18
38 SHEETS

Contract #98950

INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp. 2	Pier
Is	(in4)	9170	10300
Ic (n)	(in4)	20947	
Ic (3n)	(in4)	15337	
Ss	(in3)	598	665
Sc (n)	(in3)	806	
Sc (3n)	(in3)	731	
Z	(in3)		751
ψ	(K/ft.)	0.903	1.369
MDL	('K)	456	1225
sDL	(K/ft.)	0.444	
MsDL	('K)	248	
MLL	('K)	701	460
M (Imp)	('K)	165	108
5/3[MLL+M(Imp)]	('K)	1443	947
Ma	('K)	2791	2824
* Mu	('K)	3668	3111
fsDL non-comp	(k.s.i.)	9.2	22.1
fsDL (comp)	(k.s.i.)	4.1	
fs5/3[MLL+M(Imp)]	(k.s.i.)	21.5	17.1
fs (Overload)	(k.s.i.)	34.8	39.2
fs (Total)	(k.s.i.)		51.0
VR	(K)	46	

* Compact Section

INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
RDL	(K)	43.7	144.7
RLL	(K)	45.7	59.8
Imp.	(K)	10.9	14.2
R (Total)	(K)	100.3	218.7

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic(3n) and Sc(3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)

VR is the maximum Live Load + Impact shear range within the composite portion of the span.

Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.

Ma (Applied Moment)=1.3[MDL + MsDL + 5/3(MLL + M(Imp))].

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

MDL Moment due to dead loads on non-composite section.

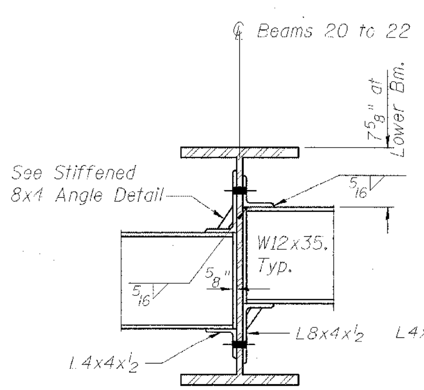
MsDL Moment due to dead loads on composite section.

MLL Moment due to live load on non-composite or composite section.

M (Imp) Moment due to live load impact on non-composite or composite section

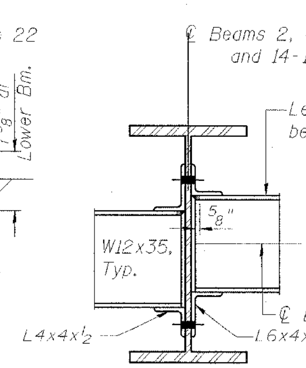
fs (Overload) is the sum of the stresses due to MDL + MsDL + 5/3(MLL + M(Imp)).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[MDL + MsDL + 5/3(MLL + M(Imp))].



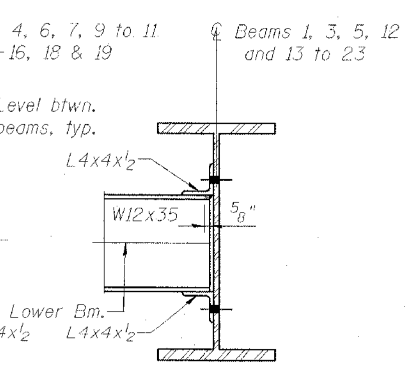
DETAIL 1

TYP.



DETAIL 2

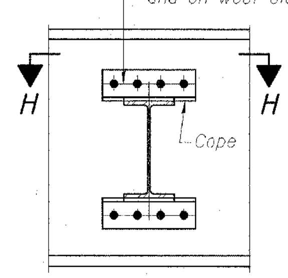
TYP.



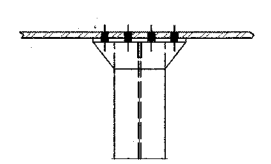
DETAIL 3

TYP.

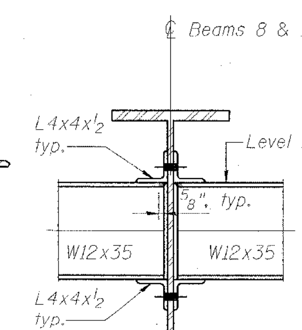
¾" ϕ H.S. Bolts w/15/16" ϕ holes. Provide 1½"x13/16" ϕ vertical slotted holes with 5/16" structural plate washers in connecting angles on east side of beam 7 and on west side of beam 18.



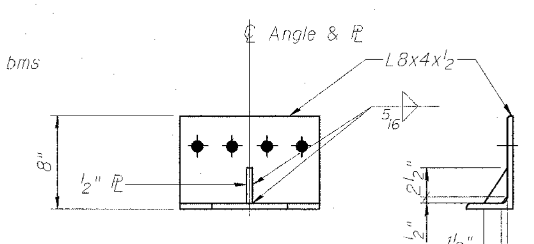
ELEVATION



SECTION H-H



DETAIL 4



STIFFENED ANGLE DETAIL

DIAPHRAGM CONNECTION

(D: 49 Req'd at Northbound, D1 thru D14: 2 Req'd at Northbound, D15: 70 Req'd at Southbound)

Note:
Two hardened washers shall be required over all oversized holes for diaphragms.

STRUCTURAL STEEL DETAILS, FIXED BEARING DETAILS & MOMENT TABLE

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz
ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

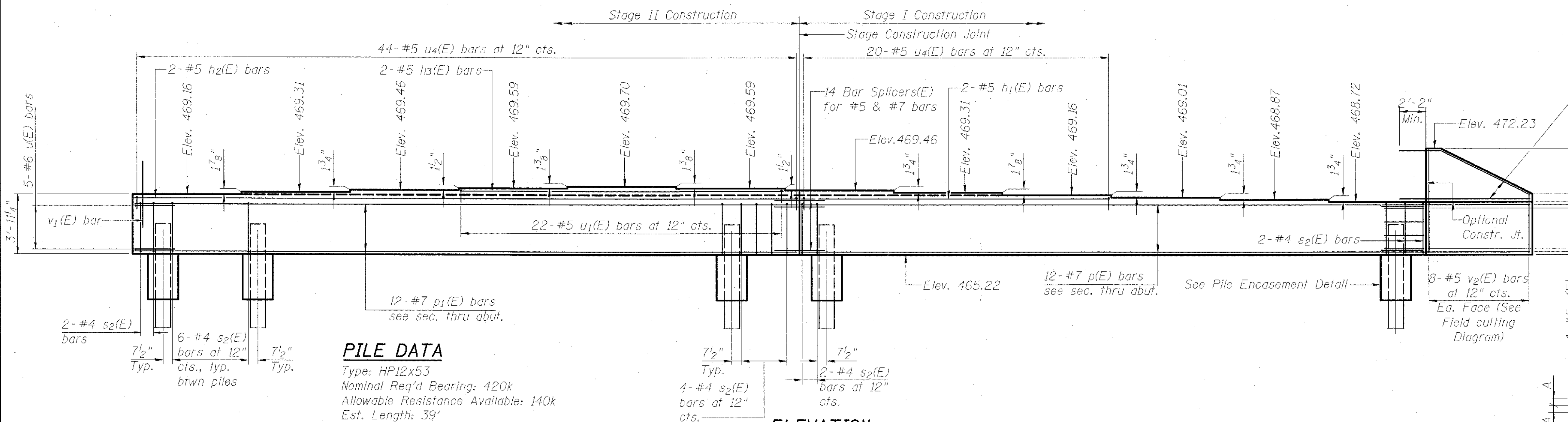
DRAWING NUMBER

S-18

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	903
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 19
33 SHEETS

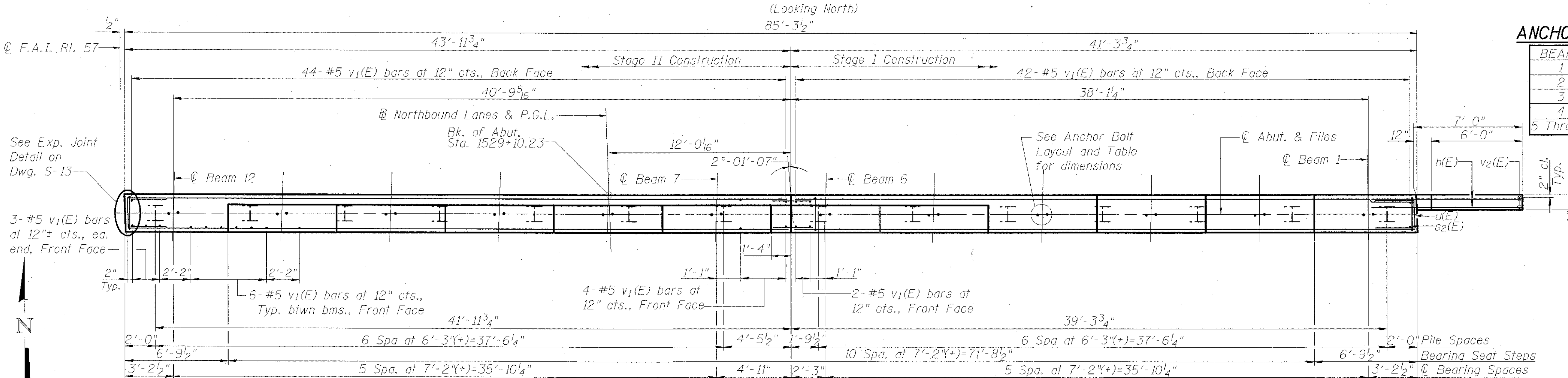
Contract #98950



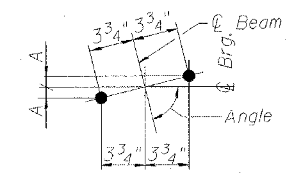
PILE DATA

Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 39'
No. Req'd: 13 + 1 Test Pile

ELEVATION
(Looking North)



PLAN



ANCHOR BOLT LAYOUT

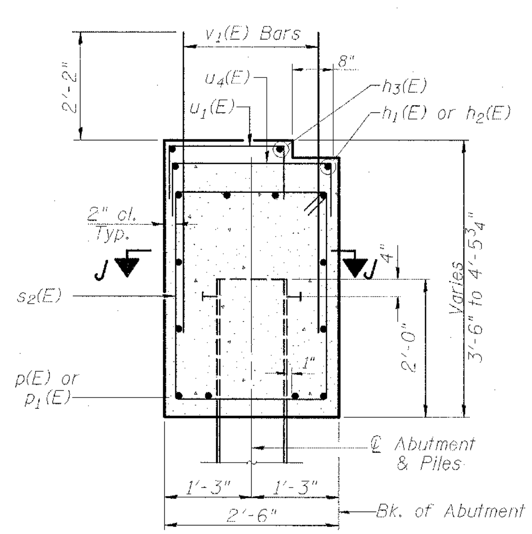
BEAMS	ANGLE	A
1	91°-04'-28"	¹⁄₁₆"
2	90°-18'-04"	0"
3	89°-31'-39"	0"
4	88°-45'-15"	¹⁄₁₆"
5 Thru 12	87°-58'-53"	⅛"

NOTES

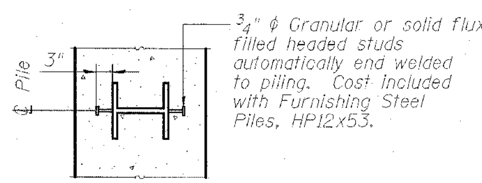
1. Pour steps monolithically with cap.
2. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
3. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

NORTHBOUND NORTH ABUTMENT BILL OF MATERIAL

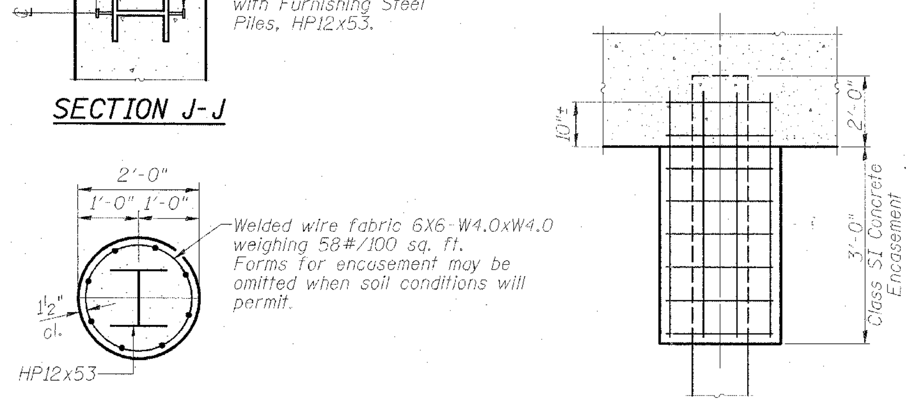
Bar	No.	Size	Length	Shape
h(E)	16	#5	9'-8"	
h_1(E)	2	#5	19'-10"	
h_2(E)	2	#5	43'-7"	
h_3(E)	2	#5	21'-2"	
p(E)	12	#7	40'-11"	
p_1(E)	12	#7	43'-7"	
s_2(E)	82	#4	11'-5"	
u(E)	9	#6	7'-2"	
u_1(E)	22	#5	3'-0"	
u_4(E)	64	#5	3'-8"	
v_1(E)	158	#5	4'-4"	
v_2(E)	8	#5	10'-4"	
Concrete Structures			Cu. Yds.	33.5
Reinforcement Bars, Epoxy Coated			Pound	4,250
Structure Excavation			Cu. Yds.	170
Furnishing Steel Piles, HP12x53			Foot	507
Driving Piles			Foot	507
Test Pile Steel HP12x53			Each	1
Bar Splicers			Each	14
Concrete Encasement			Cu. Yds.	4.9



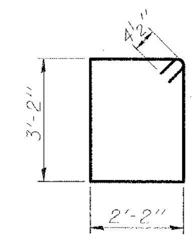
SECTION THRU ABUTMENT



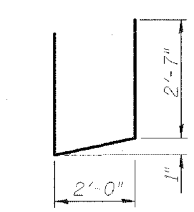
SECTION J-J



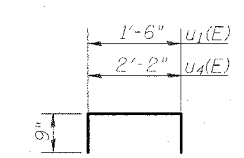
PILE ENCASEMENT DETAIL



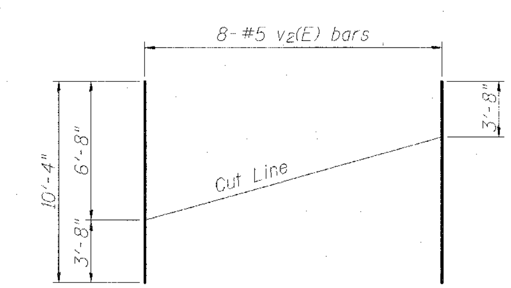
BAR s_2(E)



BAR u(E)



BAR u_1(E) or u_4(E)



FIELD CUTTING DIAGRAM

Order v_2(E) bars full length. Cut as shown and use remainder of bars in opposite side.

NORTH ABUTMENT, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

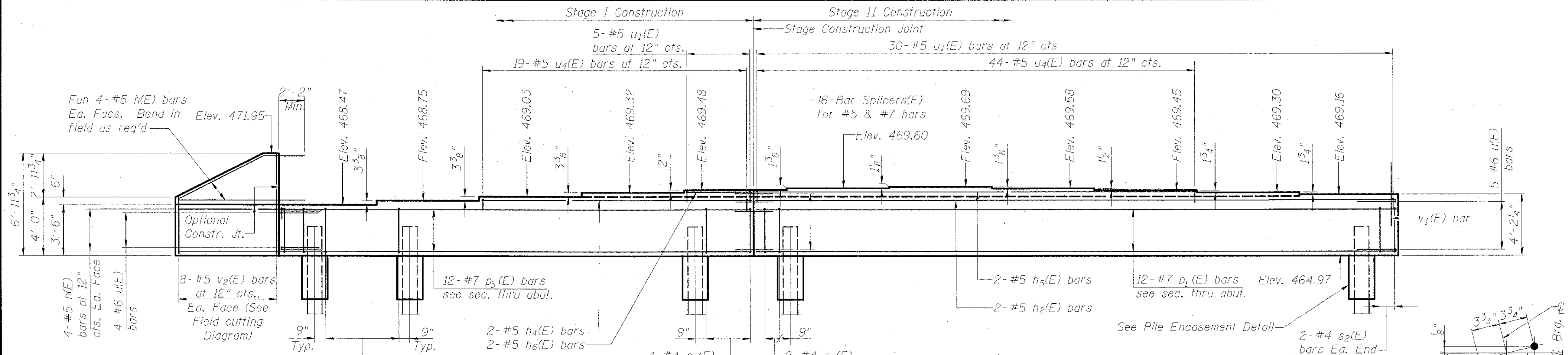
ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-19

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	904
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 20
33 SHEETS

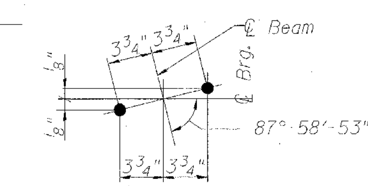
Contract #98950



ELEVATION
(Looking North)

PILE DATA

Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 39'
No. Req'd: 11 + 1 Test Pile



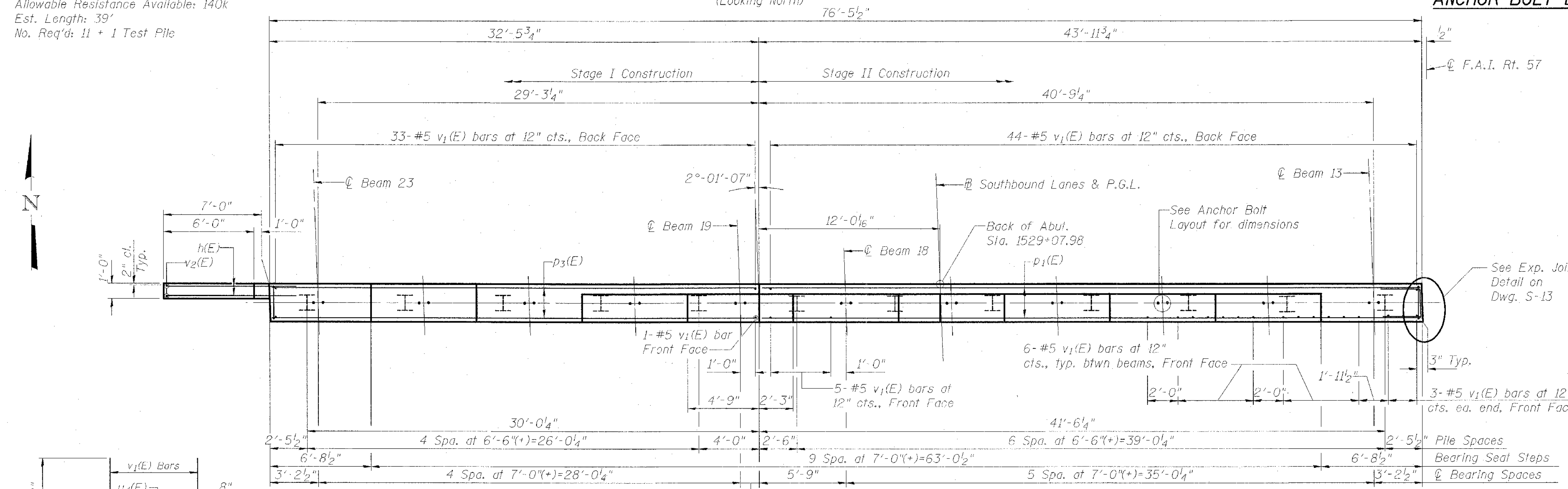
ANCHOR BOLT LAYOUT

NOTES

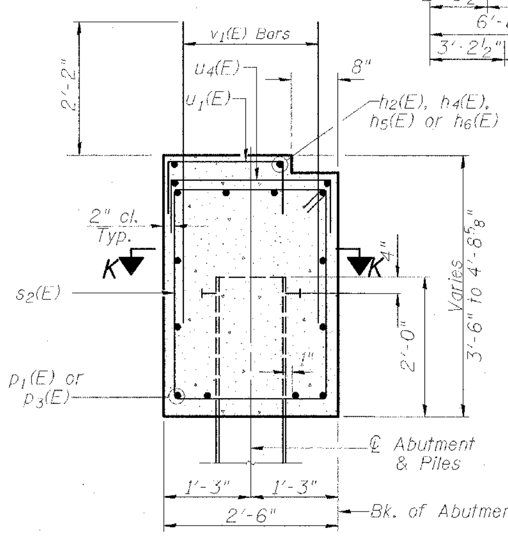
1. Pour steps monolithically with cap.
2. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
3. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

SOUTHBOUND NORTH ABUTMENT BILL OF MATERIAL

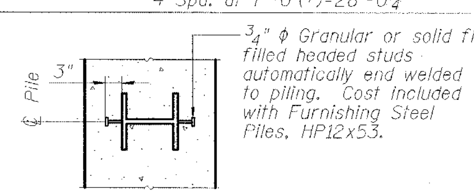
Bar	No.	Size	Length	Shape
h(E)	16	#5	9'-8"	
h_2(E)	2	#5	43'-7"	
h_4(E)	2	#5	18'-5"	
h_5(E)	2	#5	29'-11"	
h_6(E)	2	#5	4'-5"	
p_1(E)	12	#7	43'-7"	
p_3(E)	12	#7	32'-1"	
s_2(E)	70	#4	11'-5"	
u(E)	9	#6	7'-2"	
u_1(E)	35	#5	3'-0"	
u_4(E)	63	#5	3'-8"	
v_1(E)	143	#5	4'-4"	
v_2(E)	8	#5	10'-4"	
Concrete Structures			Cu. Yds.	31.8
Reinforcement Bars, Epoxy Coated			Pound	3,930
Structure Excavation			Cu. Yds.	159
Furnishing Steel Piles, HP12x53			Foot	429
Driving Piles			Foot	429
Test Pile Steel HP12x53			Each	1
Bar Splicers			Each	16
Concrete Encasement			Cu. Yds.	4.2



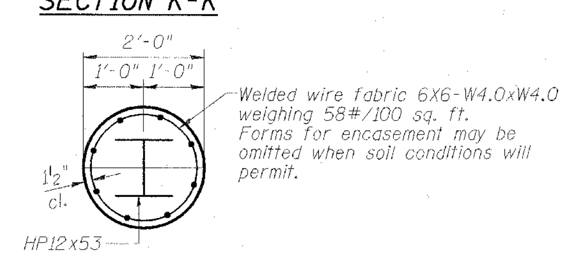
PLAN

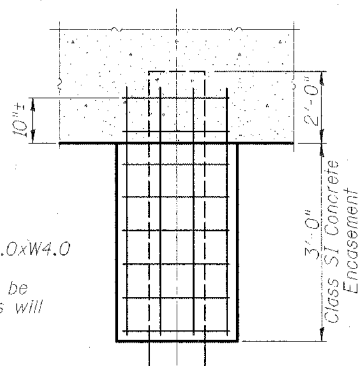


SECTION THRU ABUTMENT

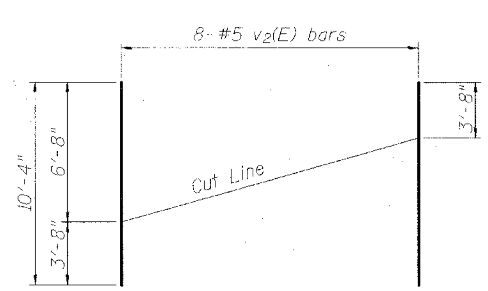


SECTION K-K



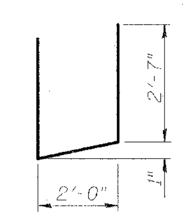


PILE ENCASEMENT DETAIL

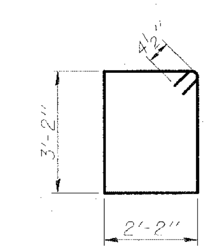


FIELD CUTTING DIAGRAM

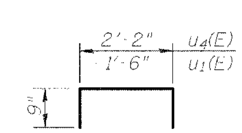
Order v_2(E) bars full length. Cut as shown and use remainder of bars in opposite side.



BAR u(E)



BAR s_2(E)



BAR u_1(E) or u_4(E)

NORTH ABUTMENT, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

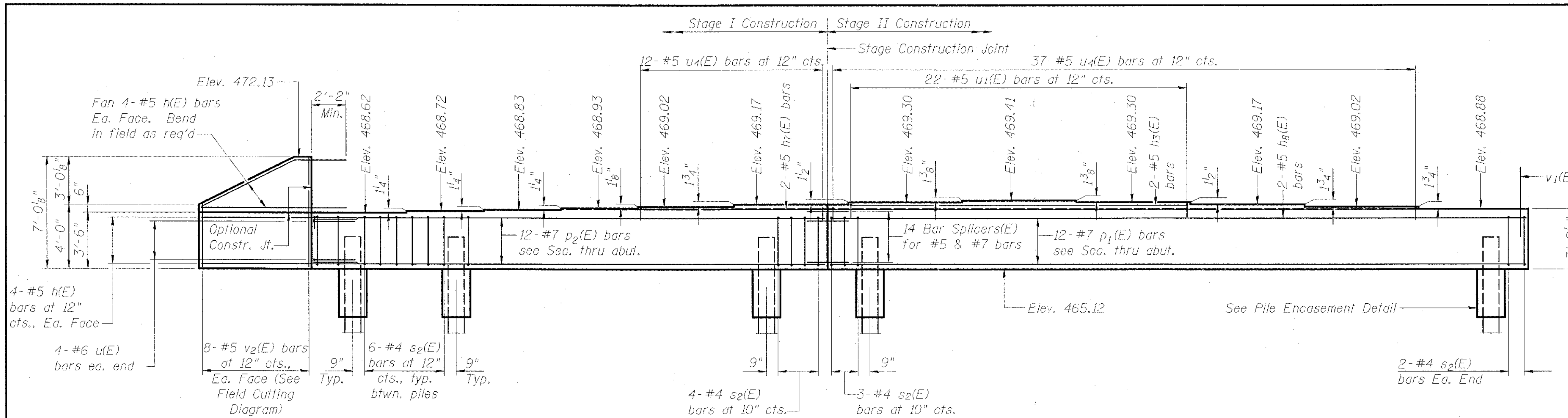
Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

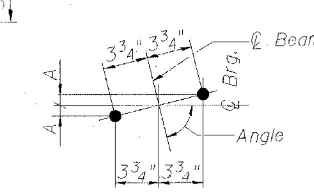
ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	I02314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-20



ELEVATION

(Looking South)

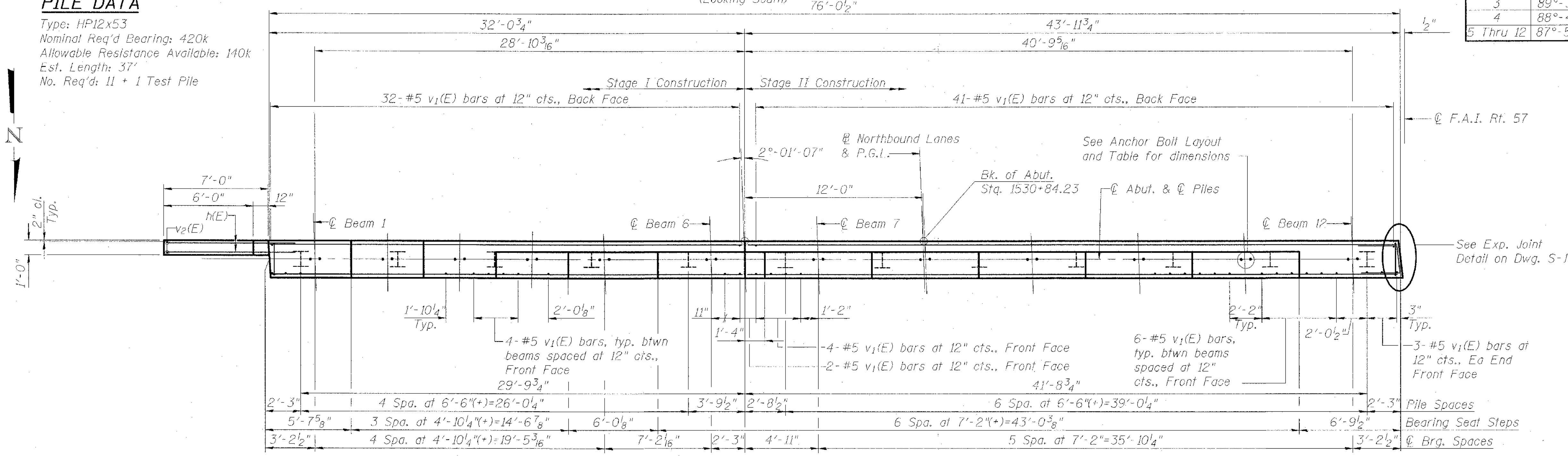


ANCHOR BOLT LAYOUT

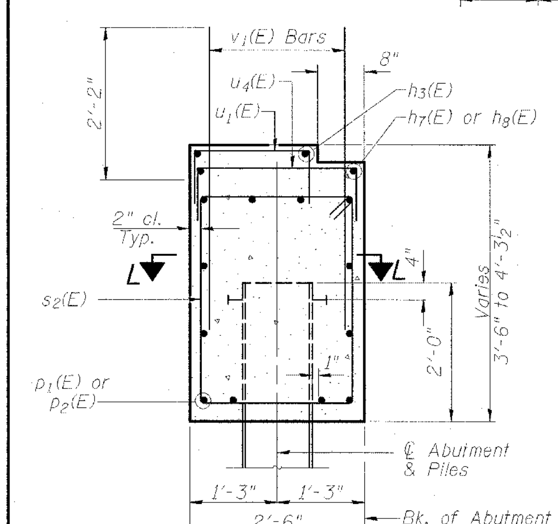
BEAMS	ANGLE	A
1	91°-04'-28"	1/16"
2	90°-18'-04"	0"
3	89°-31'-39"	0"
4	88°-45'-15"	1/16"
5 Thru 12	87°-58'-53"	1/8"

PILE DATA

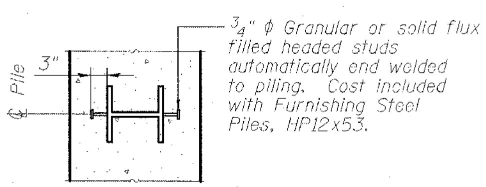
Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 37'
No. Req'd: 11 + 1 Test Pile



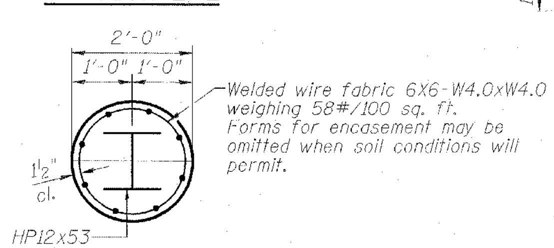
PLAN

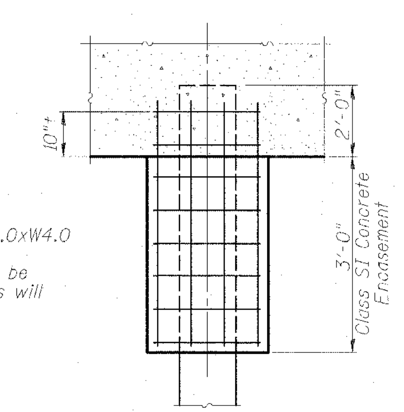


SECTION THRU ABUTMENT

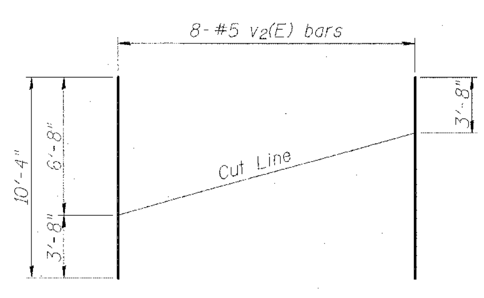


SECTION L-L



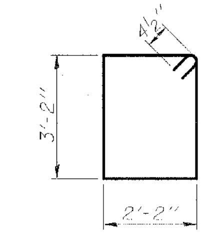


PILE ENCASEMENT DETAIL

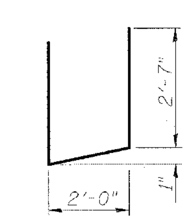


FIELD CUTTING DIAGRAM

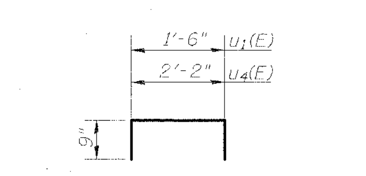
Order v2(E) bars full length. Cut as shown and use remainder of bars in opposite end.



BAR s2(E)



BAR u(E)



BAR u1(E) and u4(E)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	905
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 21
32 SHEETS

Contract #98950

NOTES

1. Pour steps monolithically with cap.
2. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
3. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

NORTHBOUND SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	9'-8"	
h_3(E)	2	#5	21'-2"	
h_7(E)	2	#5	11'-6"	
h_8(E)	2	#5	36'-10"	
p_1(E)	12	#7	43'-7"	
p_2(E)	12	#7	31'-8"	
s_2(E)	71	#4	11'-5"	
u(E)	8	#6	7'-2"	
u_1(E)	22	#5	3'-0"	
u_4(E)	49	#5	3'-8"	
v_1(E)	137	#5	4'-4"	
v_2(E)	8	#5	10'-4"	
Concrete Structures			Cu. Yds.	29.2
Reinforcement Bars, Epoxy Coated			Pound	3,740
Structure Excavation			Cu. Yds.	144
Furnishing Steel Piles, HP12x53			Foot	407
Driving Piles			Foot	407
Test Pile Steel HP12x53			Each	1
Bar Splicers			Each	14
Concrete Encasement			Cu. Yds.	4.2

SOUTH ABUTMENT, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	I02314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLO		
APPROVED BY:	SMM		

DRAWING NUMBER

S-21

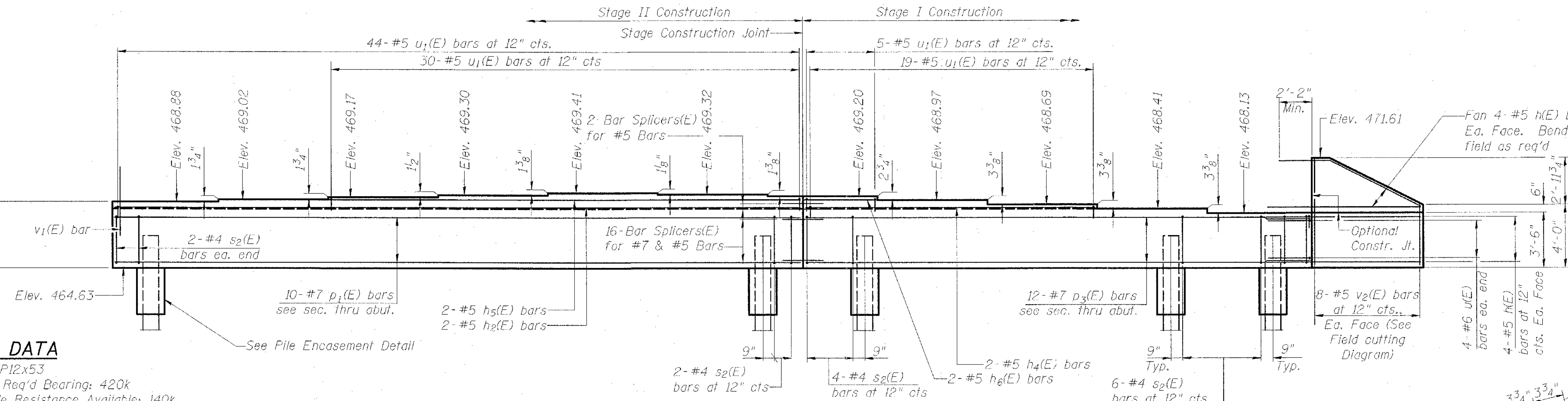
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	906
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 22
32 SHEETS

Contract #98950

NOTES

1. Pour steps monolithically with cap.
2. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
3. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

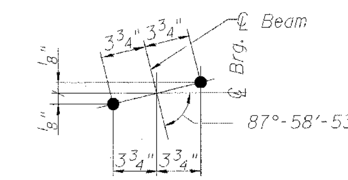


PILE DATA

Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 36'
No. Req'd: 11 + 1 Test Pile

ELEVATION

(Looking South)

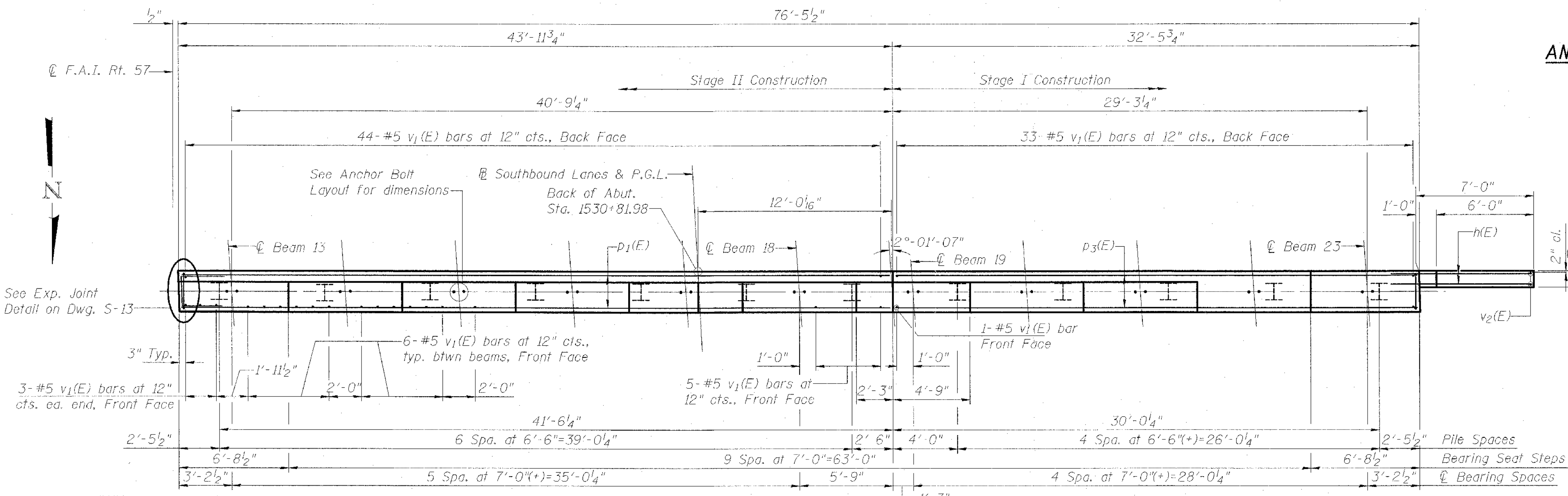


ANCHOR BOLT LAYOUT

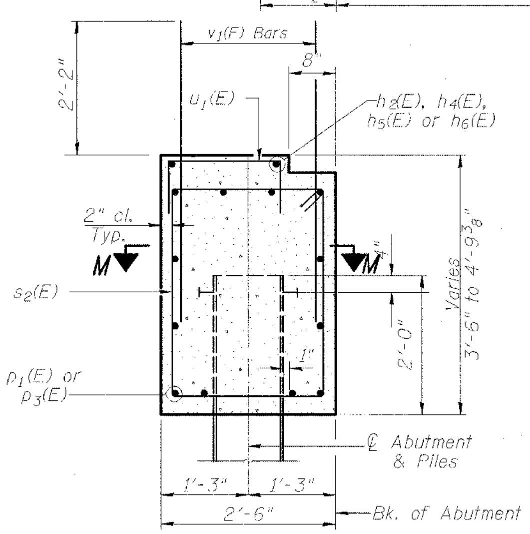
SOUTHBOUND SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	9'-8"	
h_2(E)	2	#5	43'-7"	
h_4(E)	2	#5	18'-5"	
h_5(E)	2	#5	29'-11"	
h_6(E)	2	#5	4'-5"	
p_1(E)	12	#7	43'-7"	
p_3(E)	12	#7	32'-1"	
s_2(E)	70	#4	11'-5"	
u(E)	8	#6	7'-2"	
u_1(E)	98	#5	3'-0"	
v_1(E)	143	#5	4'-4"	
v_2(E)	8	#5	10'-4"	

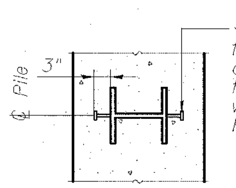
Item	Unit	Quantity
Concrete Structures	Cu. Yds.	32.1
Reinforcement Bars, Epoxy Coated	Pound	3,880
Structure Excavation	Cu. Yds.	161
Furnishing Steel Piles, HP12x53	Foot	396
Driving Piles	Foot	396
Test Pile Steel HP12x53	Each	1
Bar Splicers	Each	16
Concrete Encasement	Cu. Yds.	4.2



PLAN

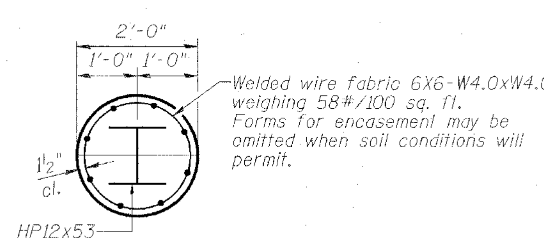


SECTION THRU ABUTMENT

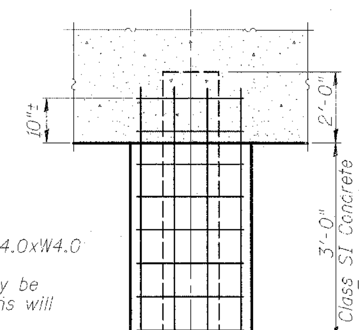


¾" ϕ Granular or solid flux filled headed studs automatically end welded to piling. Cost included with Furnishing Steel Piles, HP12x53.

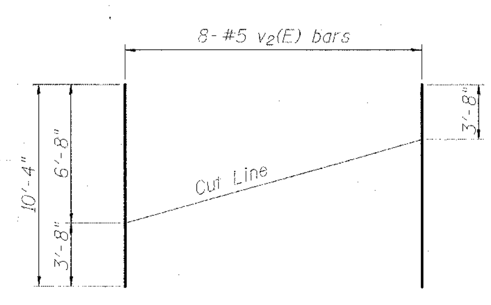
SECTION M-M



Welded wire fabric 6X6-W4.0xW4.0 weighing 58#/100 sq. ft. Forms for encasement may be omitted when soil conditions will permit.

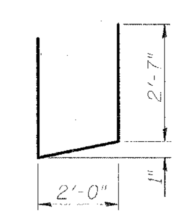


PILE ENCASEMENT DETAIL

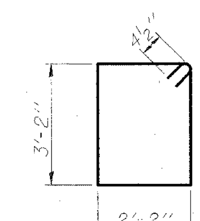


FIELD CUTTING DIAGRAM

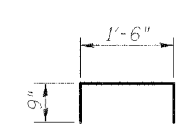
Order v_2(E) bars full length. Cut as shown and use remainder of bars in opposite end.



BAR u(E)



BAR s_2(E)



BAR u_1(E)

REVISIONS NAME	DATE

SOUTH ABUTMENT, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM

DRAWING NUMBER

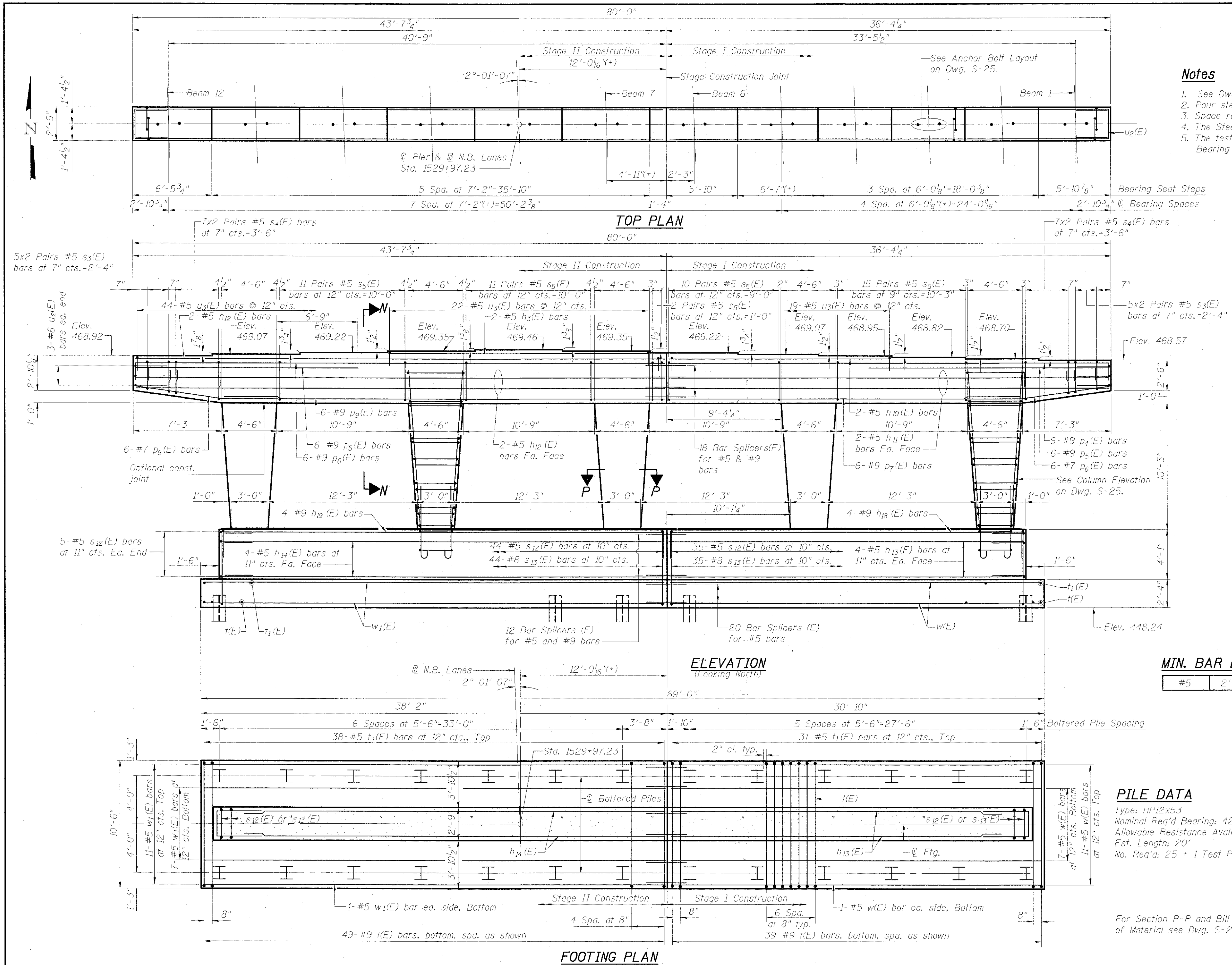
S-22

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	907

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT-

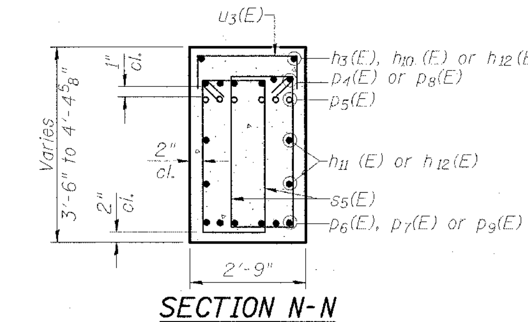
SHEET NO. 23
33 SHEETS

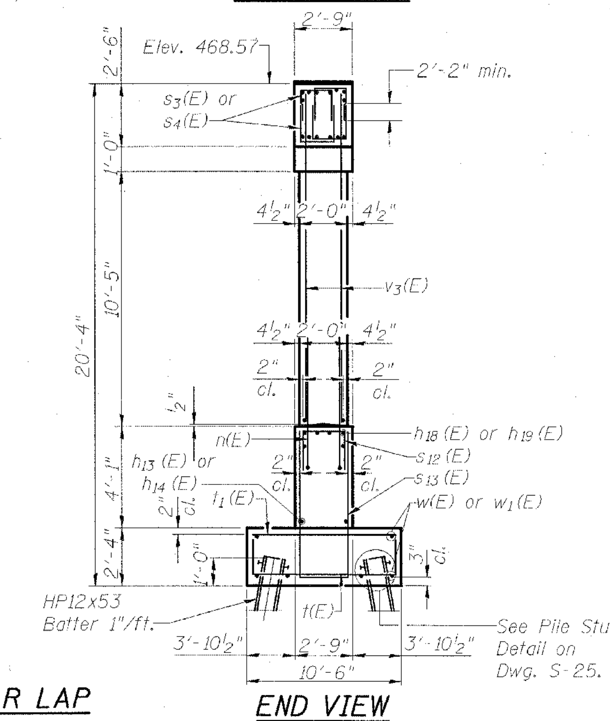
Contract #98950



Notes

1. See Dwg. S-26 for Fluted Rope Texture Details.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
5. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.





MIN. BAR LAP

#5	2' 2"

PILE DATA

Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 20'
No. Req'd: 25 + 1 Test Pile

For Section P-P and Bill of Material see Dwg. S-25

PIER, NORTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER

S-23

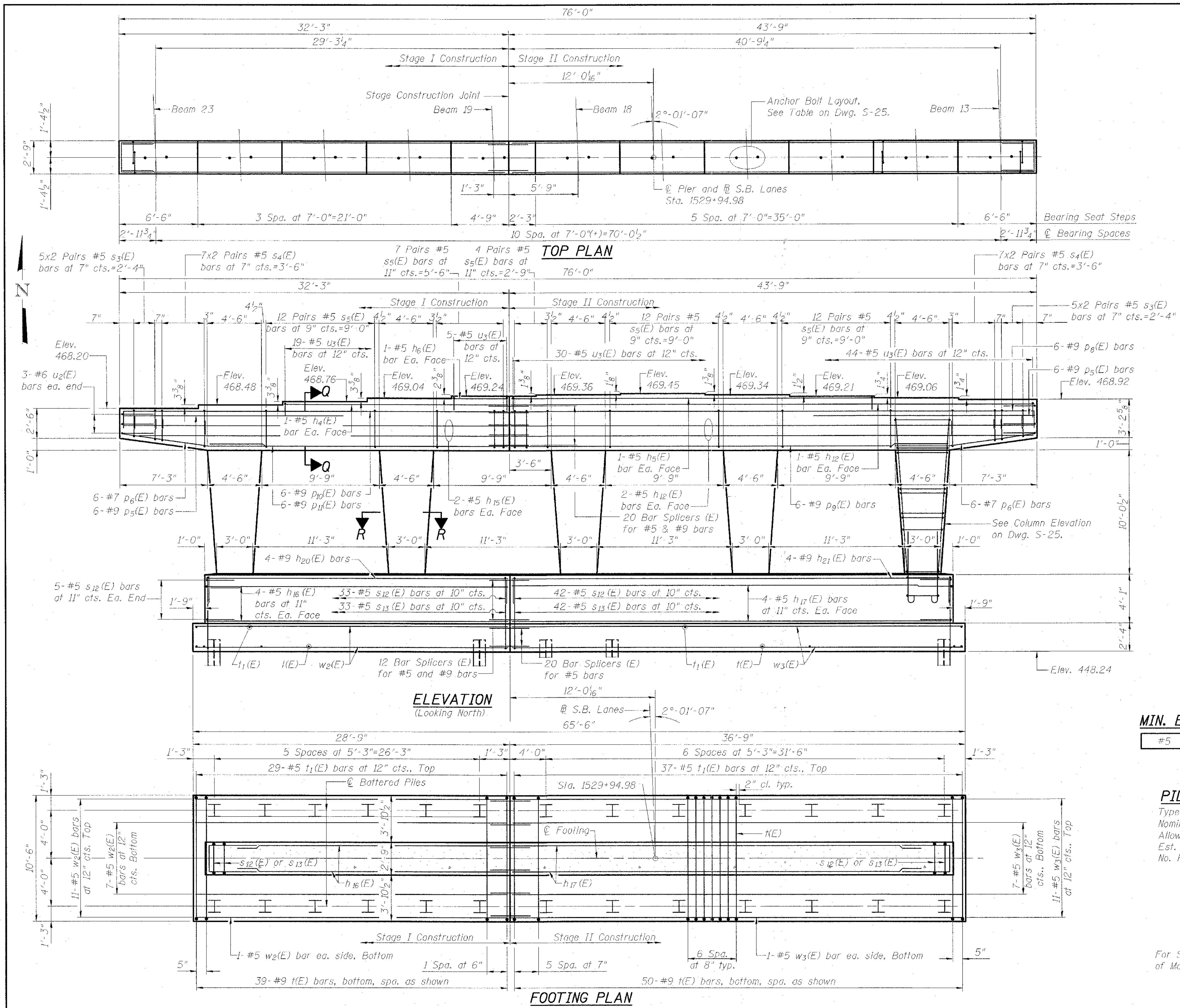
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(XI-6) HBK-2	WILLIAMSON	917	908

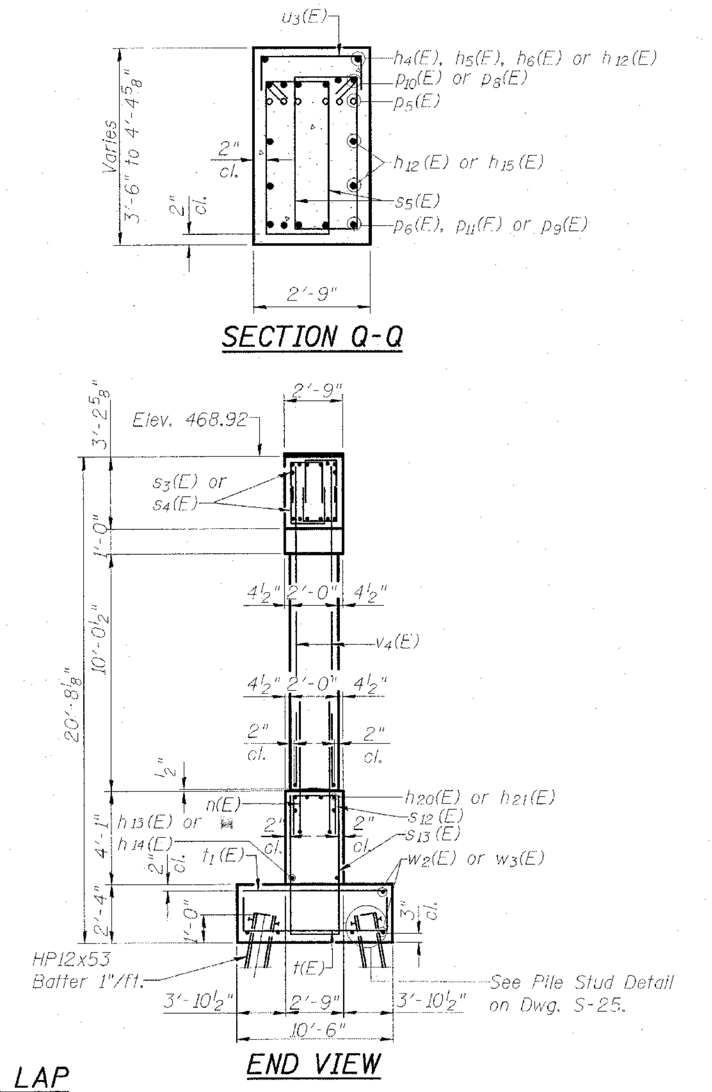
SHEET NO. 24
38 SHEETS

Contract #98950

Notes

1. See Dwg. S-26 for Fluted Rope Texture Details.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. The Steel H-Piles shall be according to AASHTO M270 Grade 50.
5. The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.





MIN. BAR LAP

#5	2'-2"

PILE DATA

Type: HP12x53
Nominal Req'd Bearing: 420k
Allowable Resistance Available: 140k
Est. Length: 20'
No. Req'd: 25 + 1 Test Pile

For Section R-R and Bill of Material see Dwg. S-25

PIER, SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (XI-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

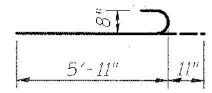
NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM — PROJECT NO: 102314
DRAWN BY: MEW — DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM

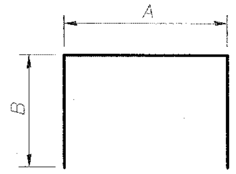
DRAWING NUMBER S-24

BILL OF MATERIAL NORTHBOUND PIER

Bar	No.	Size	Length	Shape
h_3(E)	2	#5	21'-2"	
h_{10}(E)	2	#5	18'-1"	
h_{11}(E)	4	#5	36'-0"	
h_{12}(E)	6	#5	43'-3"	
h_{13}(E)	8	#5	29'-0"	
h_{14}(L)	8	#5	36'-4"	
h_{18}(E)	4	#9	29'-0"	
h_{19}(E)	4	#9	36'-4"	
n(E)	100	#8	6'-10"	
p_4(E)	6	#9	37'-7"	
p_5(E)	12	#9	17'-4"	
p_6(E)	12	#7	11'-8"	
p_7(E)	6	#9	28'-11"	
p_8(E)	6	#9	44'-10"	
p_9(E)	6	#9	36'-2"	
s_3(E)	40	#5	6'-3"	
s_4(E)	56	#5	6'-11"	
s_5(E)	98	#5	10'-5"	
s_6(E)	60	#6	10'-11"	
s_7(E)	90	#6	10'-4"	
s_8(E)	50	#6	9'-10"	
s_9(E)	40	#6	9'-5"	
s_{10}(E)	40	#6	8'-11"	
s_{11}(E)	70	#6	8'-7"	
s_{12}(E)	89	#5	6'-9"	
s_{13}(E)	79	#8	14'-5"	
s_{14}(E)	120	#4	3'-9"	
s_{15}(E)	120	#4	3'-9"	
s_{16}(E)	55	#4	3'-2"	
s_{17}(E)	55	#4	3'-2"	
t(E)	88	#9	13'-2"	
t_1(E)	69	#5	10'-0"	
u_2(E)	6	#6	7'-7"	
u_3(E)	85	#5	3'-9"	
v_3(E)	100	#7	13'-1"	
w(E)	20	#5	30'-4"	
w_1(E)	20	#5	37'-7"	
Concrete Structures		Cu. Yds.	131.3	
Structure Excavation		Cu. Yds.	160	
Reinforcement Bars, Epoxy Coated		Pound	28,270	
Furnishing Steel Piles, HP12X53		Foot	500	
Driving Piles		Foot	500	
Test Pile Steel HP12x53		Each	1	
Bar Splicers		Each	50	



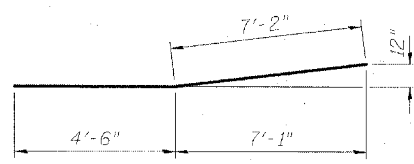
BAR n(E)



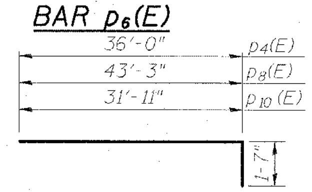
BARS s_3(E), s_4(E), s_{12}(E), s_{13}(E), u_2(E), u_3(E) or t(E)

A & B DIMENSIONS

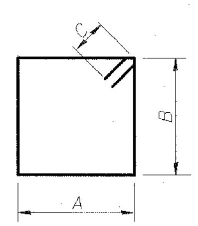
Bar	A	B
s_3(E)	1'-7"	2'-4"
s_4(E)	1'-7"	2'-8"
s_{12}(E)	2'-5"	2'-2"
s_{13}(E)	2'-5"	6'-0"
t(E)	10'-0"	1'-7"
u_2(E)	2'-5"	2'-7"
u_3(E)	2'-5"	9"



BAR p_6(E)



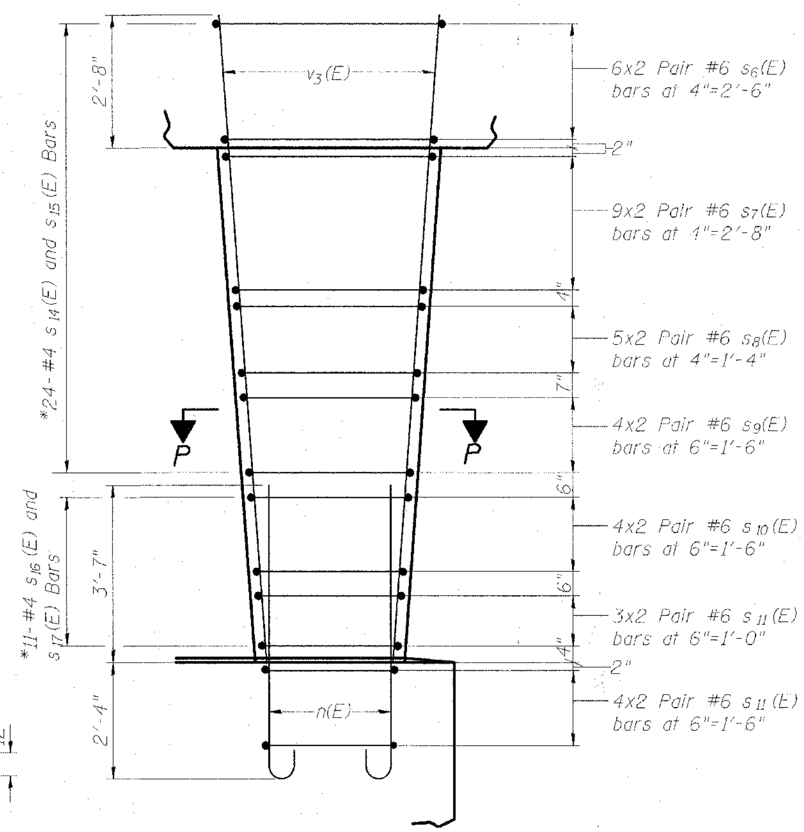
BARS p_4(E), p_8(E) or p_{10}(E)



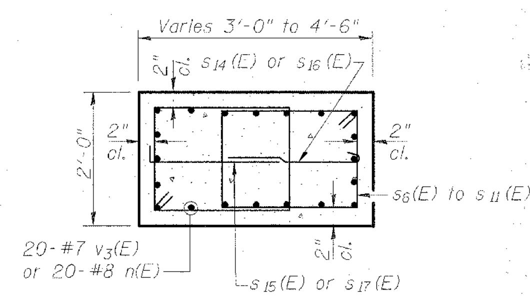
BAR s_5(E), s_6(E), s_7(E), s_8(E), s_9(E), s_{10}(E) or s_{11}(E)

A, B & C DIMENSIONS

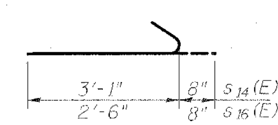
Bar	A	B	C
s_5(E)	1'-7"	3'-2"	5½"
s_6(E)	1'-8"	3'-1½"	8"
s_7(E)	1'-8"	2'-10"	8"
s_8(E)	1'-8"	2'-7"	8"
s_9(E)	1'-8"	2'-4½"	8"
s_{10}(E)	1'-8"	2'-1½"	8"
s_{11}(E)	1'-8"	1'-11½"	8"



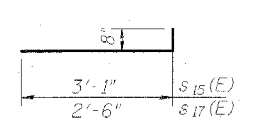
NORTHBOUND PIER COLUMN ELEVATION



SECTION P-P

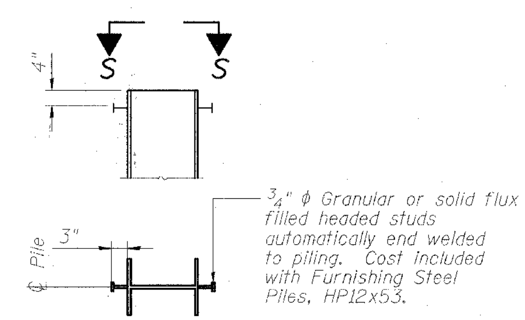


BAR s_{14}(E) or s_{16}(E)

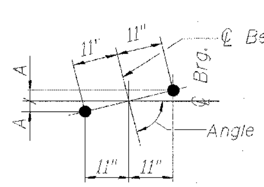


BAR s_{15}(E) or s_{17}(E)

*Note:
Space cross ties with closed stirrup ties.



SECTION S-S PILE STUD DETAIL

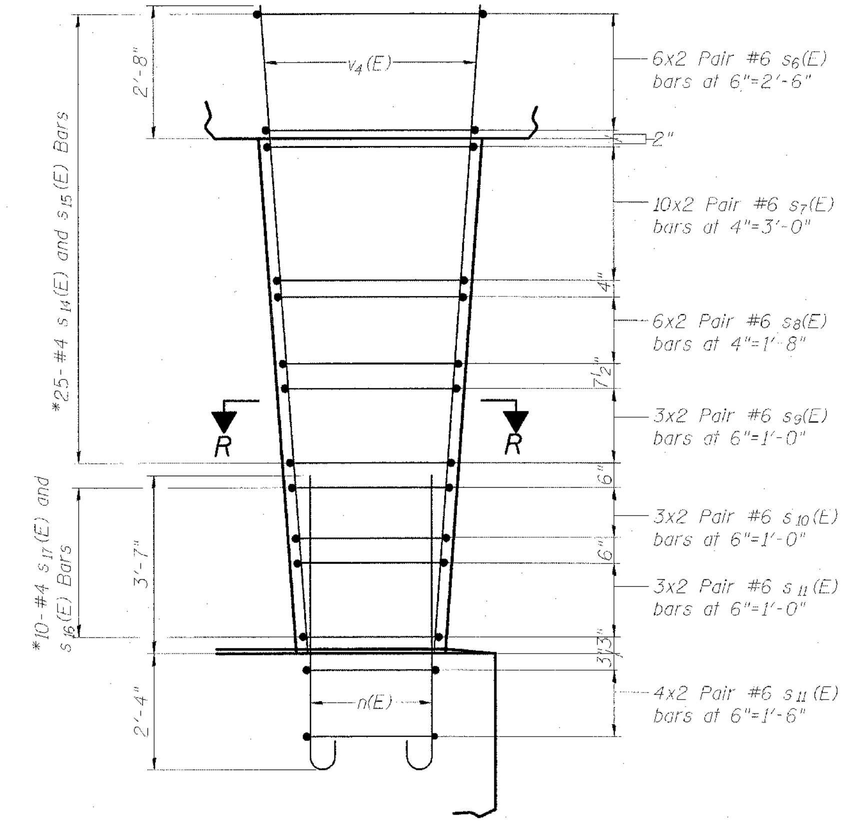


ANCHOR BOLT LAYOUT NORTH PIER

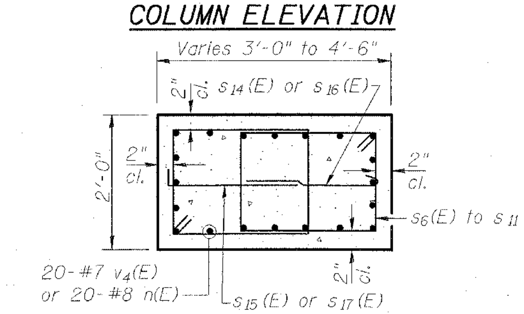
BEAMS	ANGLE	A
1	91°-04'-28"	3/16"
2	90°-18'-04"	1/16"
3	89°-31'-39"	1/16"
4	88°-45'-15"	1/4"
5 Thru 12	87°-58'-53"	3/8"

BILL OF MATERIAL SOUTHBOUND PIER

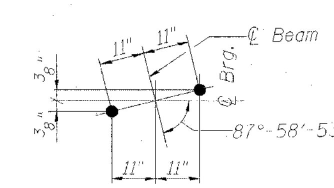
Bar	No.	Size	Length	Shape
h_4(E)	2	#5	18'-5"	
h_5(E)	2	#5	29'-11"	
h_6(E)	2	#5	4'-5"	
h_{12}(E)	6	#5	43'-4"	
h_{15}(E)	4	#5	31'-11"	
h_{16}(E)	8	#5	26'-8"	
h_{17}(E)	8	#5	34'-8"	
h_{20}(E)	4	#9	26'-8"	
h_{21}(E)	4	#9	34'-8"	
n(E)	100	#8	6'-10"	
p_5(E)	12	#9	17'-4"	
p_6(E)	12	#7	11'-8"	
p_8(E)	6	#9	44'-10"	
p_9(E)	6	#9	36'-2"	
p_{10}(E)	6	#9	33'-6"	
p_{11}(E)	6	#9	24'-10"	
s_3(E)	40	#5	6'-3"	
s_4(E)	56	#5	6'-11"	
s_5(E)	94	#5	10'-5"	
s_6(E)	60	#6	10'-11"	
s_7(E)	100	#6	10'-4"	
s_8(E)	60	#6	9'-10"	
s_9(E)	30	#6	9'-5"	
s_{10}(E)	30	#6	8'-11"	
s_{11}(E)	70	#6	8'-7"	
s_{12}(E)	85	#5	6'-9"	
s_{13}(E)	75	#8	14'-5"	
s_{14}(E)	125	#4	3'-9"	
s_{15}(E)	125	#4	3'-9"	
s_{16}(E)	50	#4	3'-2"	
s_{17}(E)	50	#4	3'-2"	
t(E)	89	#9	13'-2"	
t_1(E)	66	#5	10'-0"	
u_2(E)	6	#6	7'-7"	
u_3(E)	98	#5	3'-9"	
v_4(E)	100	#7	12'-10"	
w_2(E)	20	#5	28'-5"	
w_3(E)	20	#5	36'-5"	
Concrete Structures		Cu. Yd.	130.6	
Structure Excavation		Cu. Yd.	153	
Reinforcement Bars, Epoxy Coated		Pound	27,810	
Furnishing Steel Piles, HP12X53		Foot	500	
Driving Piles		Foot	500	
Test Pile Steel HP12x53		Each	1	
Bar Splicers		Each	52	



SOUTHBOUND PIER COLUMN ELEVATION



SECTION R-R



ANCHOR BOLT LAYOUT SOUTH PIER

PIER DETAILS, NORTHBOUND & SOUTHBOUND

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS

DESIGN FIRM REGISTRATION
No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS	
NAME	DATE

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

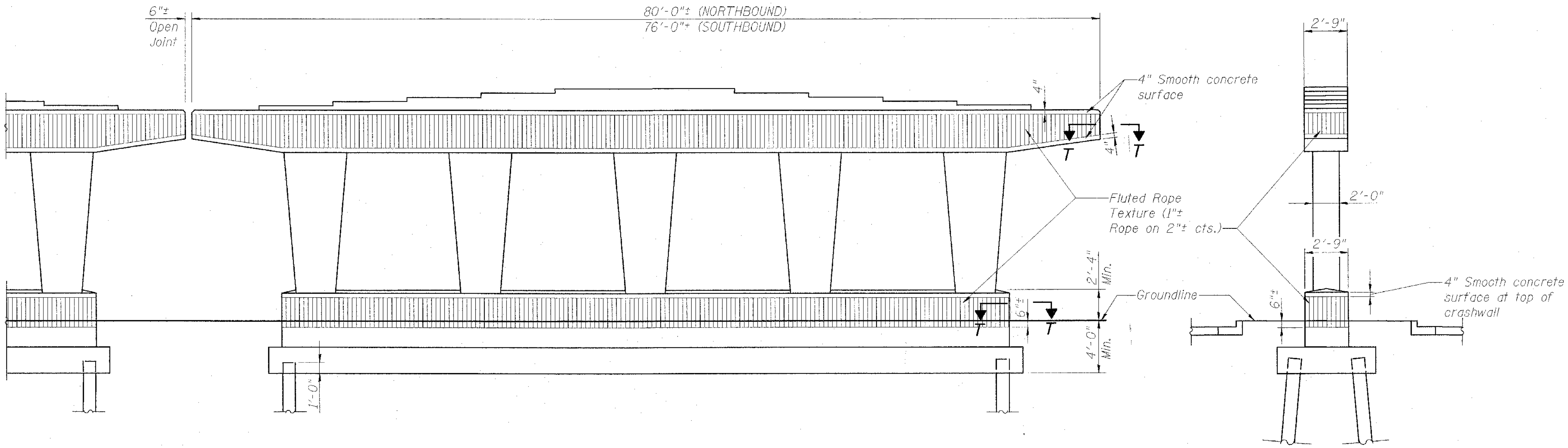
ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-25

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(XI-6) HBK-2	WILLIAMSON	917	910
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 26
32 SHEETS

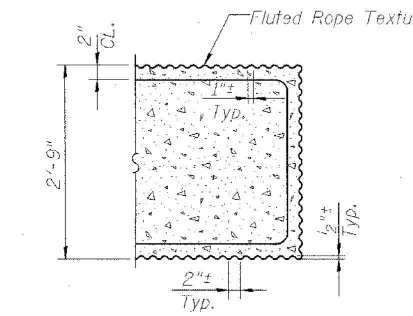
Contract #98950



ELEVATION

PIER SKETCH

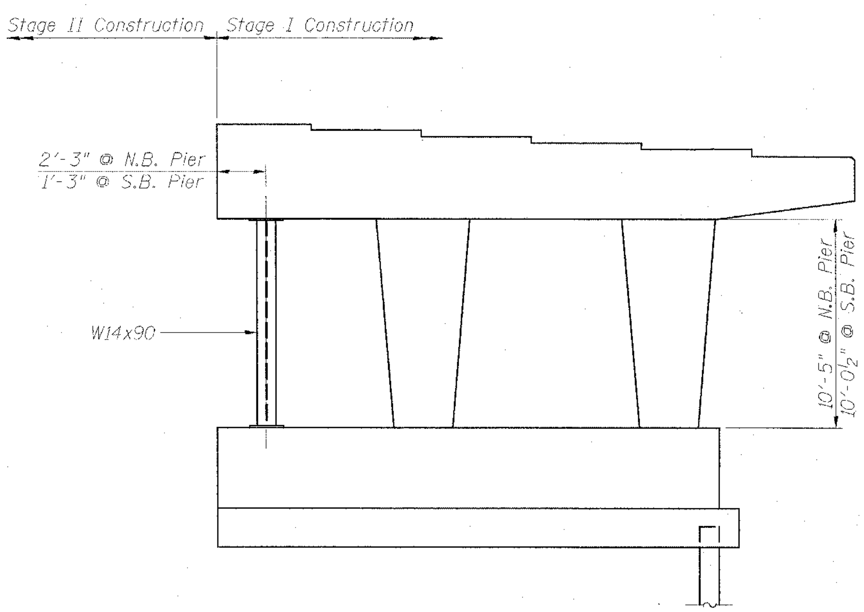
END VIEW



SECTION T-T

(THRU CAP BEAM AND CRASHWALL)

NOTE: Some reinforcement omitted for clarity.



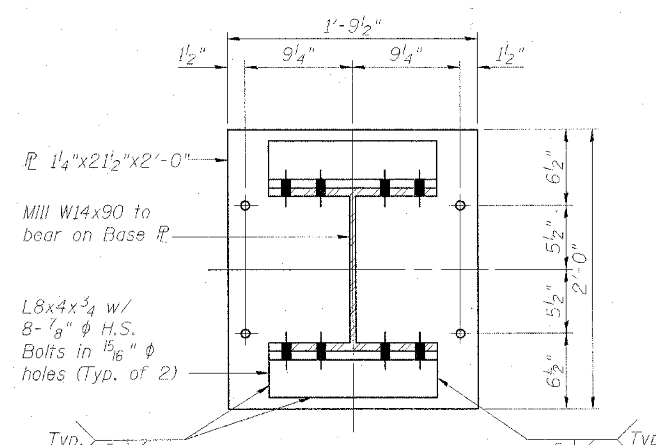
ELEVATION

NORTHBOUND PIER

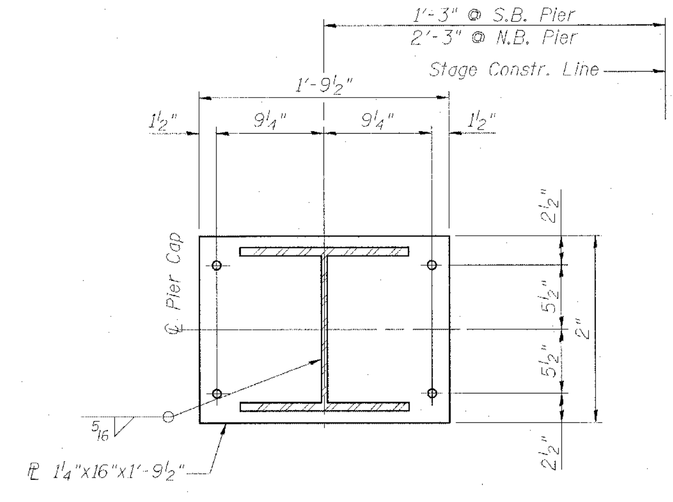
(Looking North)

SOUTHBOUND PIER

(Looking South)



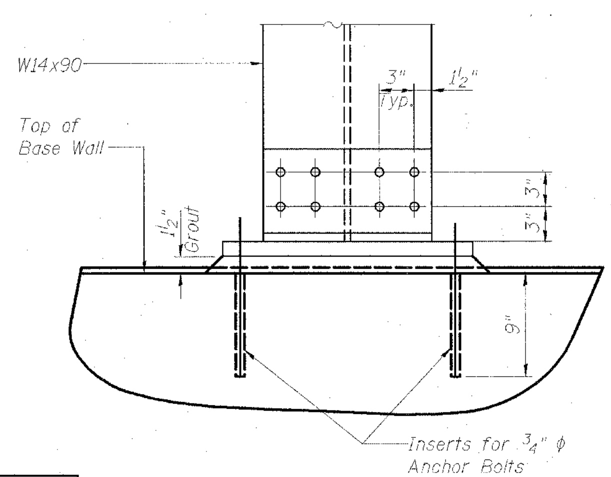
PLAN



PLAN

NOTES:

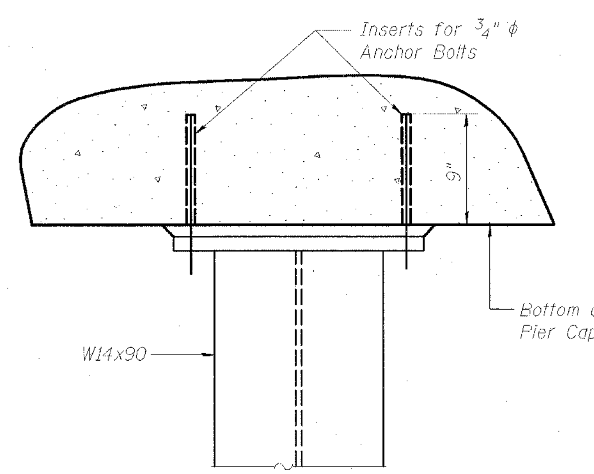
1. Temporary Support System shall be installed prior to setting beams on new pier cap.
2. After removal of Temporary Support System patch concrete surface of base wall and cap to match surrounding areas.



ELEVATION

BOTTOM BASE PLATE

Note: Grout shall be non-shrink.



ELEVATION

TOP BASE PLATE

BILL OF MATERIAL		
ITEM	UNIT	TOTAL
Temporary Support System	L.S.	1

PIER FORM LINER DETAILS AND TEMPORARY SUPPORT SYSTEM

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (XI-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MFW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

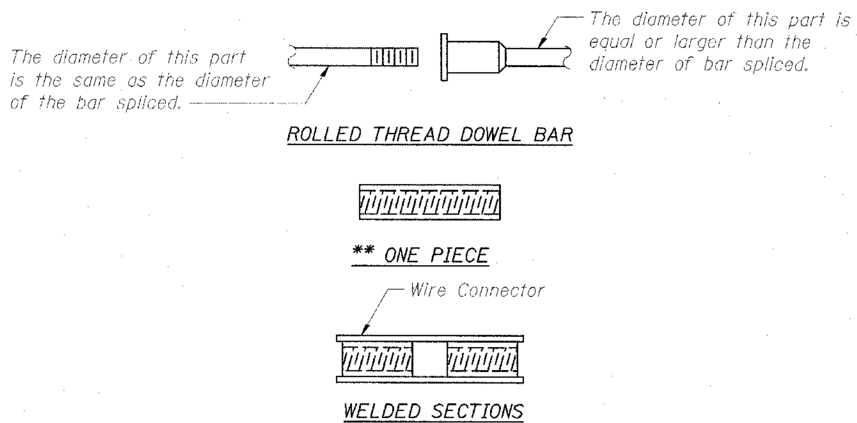
DRAWING NUMBER

S-26

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	911
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

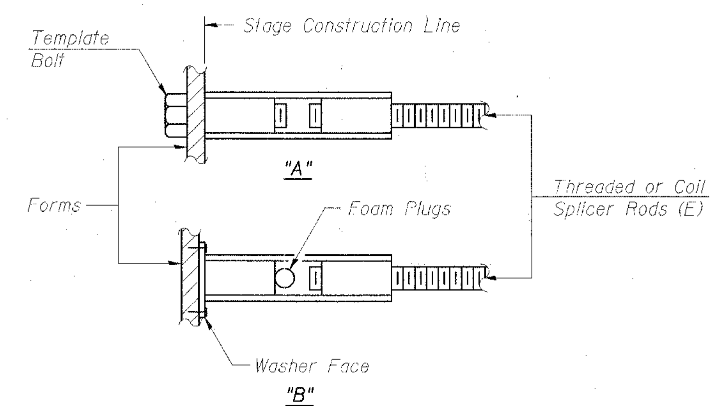
SHEET NO. 27
32 SHEETS

Contract #98950



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:

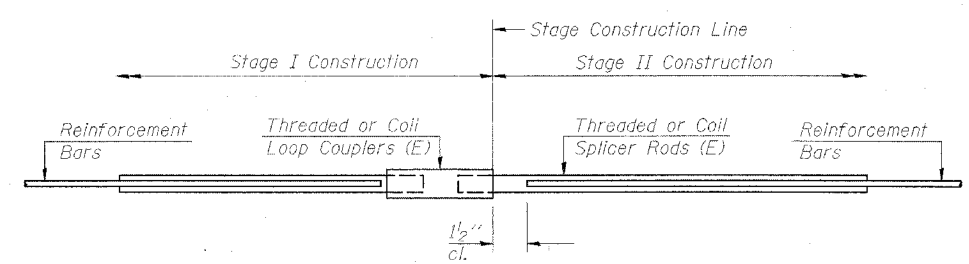
① Minimum Capacity (Tension in kips) $= 1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) $= 1.25 \times fs_{allow} \times A_t$

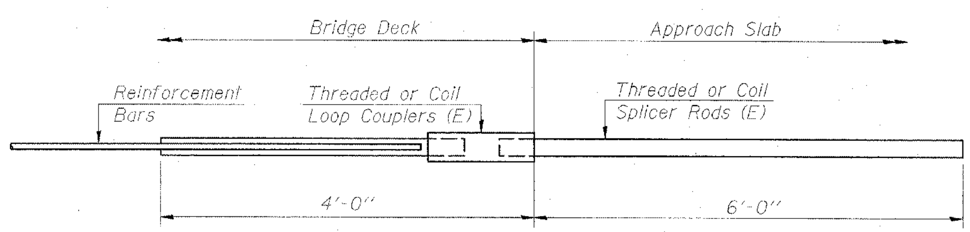
Where fy = Yield strength of lapped reinforcement bars in ksi.
fs_{allow} = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements: Min. Capacity kips - tension	Strength Requirements: Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

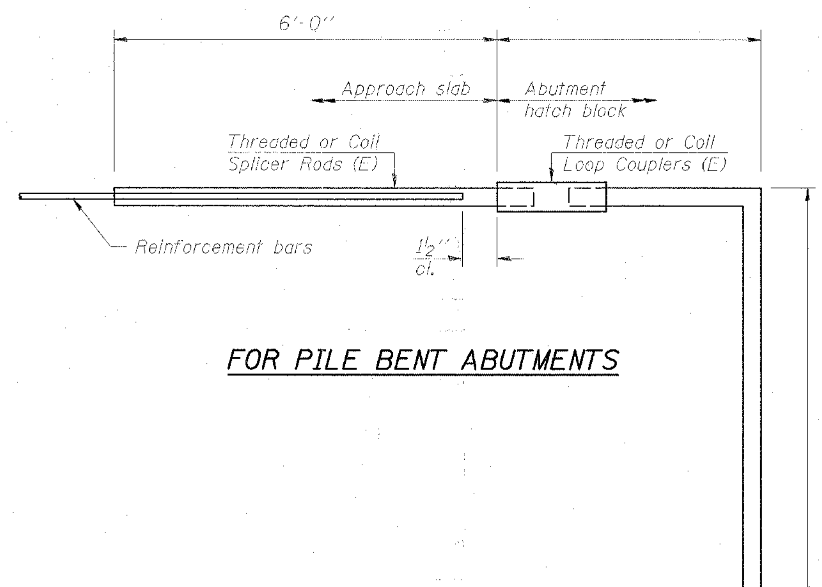


STANDARD



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 318



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

Bar Size	No. Assemblies Required	Location
7	12	N. Abut.-N.B.
5	2	N. Abut.-N.B.
7	12	N. Abut.-S.B.
5	4	N. Abut.-S.B.
7	12	S. Abut.-N.B.
5	2	S. Abut.-N.B.
7	12	S. Abut.-S.B.
5	4	S. Abut.-S.B.
5	556	Deck.-N.B.
5	556	Deck.-S.B.
5	34	Pier-N.B.
5	36	Pier-S.B.
9	16	Pier-N.B.
9	16	Pier-S.B.
6	8	Dia. N. Abut.-N.B.
6	8	Dia. N. Abut.-S.B.
6	8	Dia. S. Abut.-N.B.
6	8	Dia. S. Abut.-S.B.

BSD-1 10-22-04

BAR SPLICER ASSEMBLY DETAILS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS

DRAWING NUMBER
S-27

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	912
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 28
32 SHEETS

Contract #98950

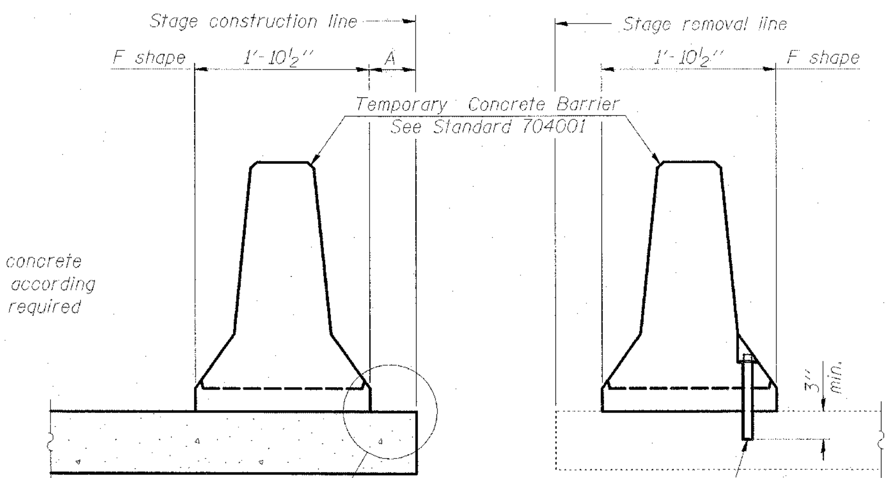
NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1″x7″x10″ steel ℙ to the top layer of couplers with 2-⅝″ ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1″x7″x10″ steel ℙ to the concrete slab with 2-⅝″ ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

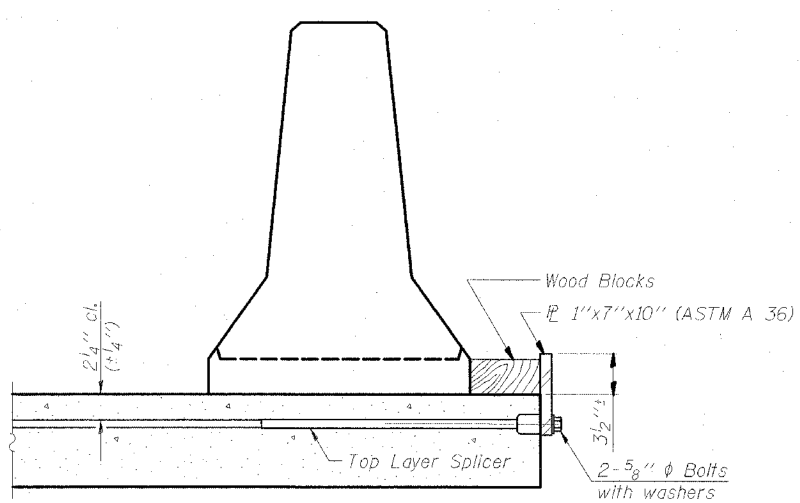
When "A" is 3′-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3′-6".



NEW SLAB

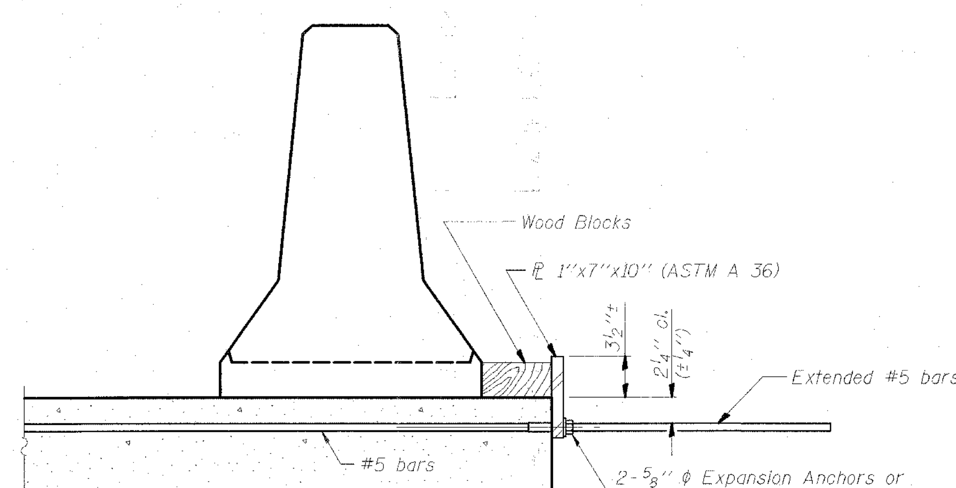
EXISTING SLAB

SECTIONS THRU SLAB



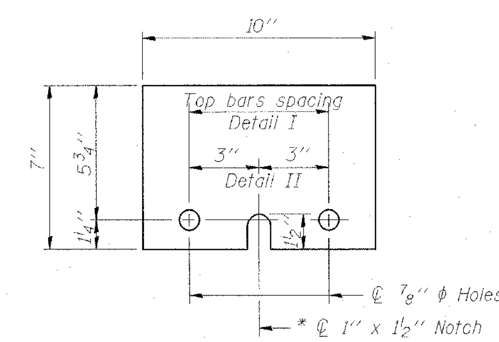
DETAIL I

The 1″x7″x10″ Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1″x7″x10″ Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



ℙ 1″x7″x10″

* Required only with Detail II

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER

S-28

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log
Sheet 1 of 2

FAI 57 Over Old Route 13
Route: FAI 57 Structure Number: 100-0004, 100-0005 Date: 5/30/2000
Section XI-6HB-2 Bored By: Bryan Keller
County: Williamson Location: In Marion Checked By: R Moberly

Boring No 1-S
Station 1530+86
Offset 7' Rt CL Median
Ground Surface 469.7 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling
At Completion 424.7
At: Hrs:

Description	DEPTH	BLOW	Qu tsf	W%
Stiff, moist, brown to grey, Silty Clay A7-6				
		1		
		2	1.9B	23
		3		
	5.0	2		
		1	1.4S	20
		2		
		2		
		2	1.1S	21
		4		
460.2				
Stiff, moist to very moist, grey mottled brown, Clay A7-6	10.0	2		
		2	1.4S	22
		3		
		1		
		3	1.4S	22
		3		
455.2				
Medium, very moist, grey, Silty Clay to Clay A7-6	15.0	1		
		3	0.7B	22
		2		
		1		
		2	0.8B	25
		3		
450.2				
Stiff, moist, grey mottled brown, Silty Clay to Silty Clay Loam A-6	20.0	1		
		2	1.1B	22
		3		
		2		
		5	1.2S	20
		6		
445.2				
	25.0	2		

Description	DEPTH	BLOW	Qu tsf	W%
Very stiff, moist, brown mottled grey, Silty Clay A-6		3	2.5B	16
		6		
442.7				
Stiff, moist, brown mottled grey, Silty Clay A7-6		2		
		2	1.9B	20
		2		
	30.0	2		
		3	1.5B	19
		4		
437.7				
Medium, very moist, grey mottled brown, Clay A7-6		1		
		3	0.7S	26
		3		
435.2				
Stiff, moist, brown, Clay A7-6 with fine gravel	35.0	2		
		2	1.8B	17
		2		
		2		
		2	1.7B	20
		3		
430.7				
Hard, dry, brown, Sandstone	40.0	100/2"		
	45.0	100/1"		
No free water observed.				
Elevation referenced to 1959 plans				
To convert "N" values to "N60" values multiply by 1.25				
Bottom of hole = 49.6 feet. 419.7	50.0	100/1"		

N-Std Pentr Test: 2" OD Sampler,

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log
Sheet 1 of 2

FAI 57 Over Old Route 13
Route: FAI 57 Structure Number: 100-0004, 100-0005 Date: 5/31/2000
Section XI-6HB-2 Bored By: Bryan Keller
County: Williamson Location: In Marion Checked By: R Moberly

Boring No 2-S
Station 1528+82
Offset 20' Lt CL Median
Ground Surface 471.0 Ft

Surf Wat Elev:
Ground Water Elevation
when Drilling
At Completion 429
At: Hrs:

Description	DEPTH	BLOW	Qu tsf	W%
Bituminous Pavement over Concrete				
469.5				
Very stiff, moist, grey mottled brown, Silty Clay A7-6		1		
		2	2.4B	23
		2		
466.5				
Soft to medium, very moist, grey mottled brown, Clay A7-6	5.0	1		
		1	0.5B	26
		2		
464.0				
Stiff, moist, grey mottled brown, Clay A7-6		1		
		1	1.5S	21
		2		
	10.0	1		
		2	1.1B	22
		1		
459.0				
Medium, very moist, brown mottled grey, Clay A7-6		1		
		2	0.6B	24
		2		
	15.0	2		
		3	0.7B	26
		3		
454.0				
Stiff, moist, brown, Silty Clay A-6		1		
		2	1.2B	25
		4		
	20.0	2		
		4	1.5B	22
		4		
		1		
		3	1.4B	19
		2		
	25.0	2		

Description	DEPTH	BLOW	Qu tsf	W%
Stiff, moist, brown, Silty Clay A-6		3	1.9S	17
		5		
444.0				
Very stiff, moist, brown, Clay to Silty Clay A7-6		2		
		4	2.3B	19
		4		
441.5				
Stiff, moist, brown mottled grey, Silty Clay Loam A-6	30.0	2		
		4	1.2S	23
		4		
439.0				
Stiff, moist, brown, Clay A7-6		1		
		2	1.8B	17
		3		
436.5				
Stiff, very moist, brown, Clay A7-6 with Sand seams	35.0	1		
		2	1.9B	19
		2		
434.0				
Soft to medium, very moist, brown, Clay A7-6		1		
		1	0.5B	21
		1		
431.5				
Stiff, moist, brown, Clay to Silty Clay A7-6	40.0	1		
		5	1.7B	26
		12		
429.0				
Hard, dry, brown, Sandstone 428.5		100/2"		
Bottom of hole = 42.1 feet.	45.0			
No free water observed				
Elevation referenced to 1959 plans				
To convert "N" values to "N60" multiply by 1.25				
	50.0			

N-Std Pentr Test: 2" OD Sampler,

BORING LOGS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz
ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS	
NAME	DATE

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS

DRAWING NUMBER
S-29

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	914
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 30
32 SHEETS

Contract #98950

100-0004
100-0005

Boring No. 1

Sheet 1 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson

Bridge FAI 04 Over SBI 13
Station 1529+95.80
Date Aug. 58
Boring made by Francis Piefer

Boring located at Station 1530+36, 18 Ft Rt Centerline East Lane.

Description	Elevation	Blows per Foot	Qu.
Surface of Ground.	451.9		
Very stiff mottled clay.	449.5 – 448.5	5	2.44
	447.0 – 446.0	5	2.78
	444.5 – 443.5	5	2.70
	443.0		
Very stiff yellow clay.	442.0 – 441.0	5	2.62
	440.5		
Stiff mottled sandy clay.	439.5 – 438.5	4	1.06
	437.0 – 436.0	5	1.56
	435.5		
Stiff mottled clay.	434.5 – 433.5	6	1.88
	432.5		
Hard mottled clay.	432.5		
	432.0 – 431.0	26	4.65
	429.5		
Brown sandstone	418.5		

Boring No. 2

Sheet 2 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson

Bridge FAI 04 Over SBI 13
Station 1529+95.80
Date Aug. 58
Boring made by Francis Piefer

Boring located at Station 1530+80, 27 Ft Rt Centerline East Lane.

Description	Elevation	Blows per Foot	Qu.
Surface of Ground.	451.9		
Stiff mottled clay.	449.5 – 448.5	4	1.96
	448.0		
Very stiff mottled clay.	447.0 – 446.0	5	2.36
	444.5 – 443.5	5	2.20
	442.0 – 441.0	4	2.08
	439.5 – 438.5	6	3.19
	437.0 – 436.0	7	3.35
	434.5 – 433.5	16	2.30
	432.5		
Brown sandstone.	432.5 – 432.0	Refusal	
	431.0		
	423.5		

Boring No. 3

Sheet 3 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson

Bridge FAI 04 Over SBI 13
Station 1529+95.80
Date Aug. 58
Boring made by Gordon L. Benson

Boring located at Station 1530+76, 17 Ft Rt Centerline of West Lane.

Description	Elevation	Blows per Foot	Qu.
Surface of Ground.	453.0		
Stiff mottled silty clay.	448.0 – 447.0	4	1.30
	445.5 – 444.5	4	1.06
	443.5		
Very stiff mottled silty clay.	443.0 – 442.0	6	2.36
	441.5		
Stiff yellow sandy clay.	440.5 – 439.5	5	1.18
	439.0		
Medium yellow sandy clay.	438.0 – 437.0	3	0.90
	435.5 – 434.5	6	0.61
	433.5		
Hard brown mottled till.	433.0 – 432.0	24	5.31
	431.4		
Brown sandstone.	424.0		

BORING LOGS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

DESIGN FIRM REGISTRATION
No. 184-000450

Clark Dietz
ENGINEERS

1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS	
NAME	DATE

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

ACTIVITY	INITIALS		
DESIGNED BY:	SMM	PROJECT NO:	I02314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		

DRAWING NUMBER
S-30

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	915

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

SHEET NO. 31
32 SHEETS

Contract #98950

Sheet 4 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Gordon R. Benson
Date Aug. 58

Boring No. 4
...ing located at Station ...0+33, 17 Ft Rt Centerline ...t Lane

Description	Elevation	Blows per Foot	Qu.
...urface of Ground.	452.7		
	450.0		
	449.0	4	2.45
...y stiff mottled silty ...y.	447.5		
	446.5	5	2.74
	445.0		
	444.0	7	2.36
	443.5		
...ium yellow mottled ...lty clay, locally ...ndy.	442.5		
	441.5	4	0.85
	440.5		
...iff yellow mottled ...lty clay.	440.0		
	439.0	6	1.88
	438.0		
	437.5		
...ry stiff mottled ...ll.	436.5	11	2.90
	435.0		
	434.0	15	2.75
	433.2		
Brown sandstone.	422.5		

Sheet 5 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Gordon R. Benson
Date Aug. 58

Boring No. 5
Boring located at Station 1529+58, on centerline of East Lane

Description	Elevation	Blows per Foot	Qu.
	455.2		
Medium mottled dry silty clay.	450.0		
	449.0	12	0.82
	448.0		
	447.5		
Stiff mottled silty clay.	446.5	11	1.10
	445.0		
	444.0	11	1.22
	443.0		
	442.5		
Medium brown sandy clay.	441.5	13	0.86
	440.0		
	439.0	4	0.65
	438.5		
	437.5		
Medium mottled silty clay.	436.5	1	0.57
Medium mottled silty clay.	435.0		
	434.5	8	2.86
Very stiff mottled silty clay.	434.0		
	432.5		
	432.0	Refusal	
Brown sandstone.	424.0		

Sheet 6 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Francis Piefer
Date Aug. 58

Boring No. 6
...ing located at Station ...9+16 on centerline of ...t lane.

Description	Elevation	Blows per Foot	Qu.
...urface of Ground.	455.3		
...ium mottled clay.	453.0		
	452.0	6	0.90
	451.0		
...ff mottled silty clay.	450.5		
	449.5	8	1.15
	449.0		
	448.0		
...y stiff mottled silty ...y.	447.0	9	2.78
	445.5		
	444.5	11	3.02
	443.5		
...y stiff mottled stoney ...dy clay.	443.0		
	442.0	7	2.64
	441.0		
	440.3		
	439.5	4	1.15
...ff brown sandy clay.	438.0		
	437.0	4	1.22
	435.5		
	434.5	4	1.30
Stiff brown sandy clay.	433.0		
	432.0	3	1.15
	431.5		
Brown sandstone.	425.5		

BORING LOGS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

DESIGN FIRM REGISTRATION No. 184-000450
Clark Dietz ENGINEERS
1817 SOUTH NEIL STREET
SUITE 100
CHAMPAIGN, IL 61820
PHONE : 217.373.8900
FAX : 217.373.8923

REVISIONS

NAME	DATE

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY:	SMM	PROJECT NO:	102314
DRAWN BY:	MEW	DATE:	05/2006
CHECKED BY:	SLD		
APPROVED BY:	SMM		
ACTIVITY	INITIALS		

DRAWING NUMBER
S-31

* PAGE 917 IS DELETED *

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	(X1-6) HBK-2	WILLIAMSON	917	916

SHEET NO. 32
32 SHEETS

Contract #98950

Boring No. 7

Sheet 7 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Francis Piefer
Date August 1958

Boring located at Station 1529+56, 14 Ft Rt Centerline of West Lane.

Description	Elevation	Blows per Foot	Qu.
Surface of Ground.	456.8		
	454.5		
Medium mottled very silty dry clay.	453.5	6	0.74
	452.0		
	351.0	11	0.90
	450.0		
	449.5		
Stiff brown silty sandy clay.	448.5	10	1.64
	447.0		
	446.0	10	2.36
	445.5		
Stiff brown very sandy stoney clay.	444.5		
	443.5	8	1.38
	443.0		
	442.0		
Medium brown very sandy stoney clay.	441.0	4	0.57
	439.5		
	438.5	4	0.82
	437.5		

Description	Elevation	Blows per Foot	Qu.
Stiff brown very sandy stoney clay.	437.5		
	437.0	5	1.38
	436.0		
	435.5		
	434.5		
	433.5	7	2.45
Very stiff brown sandy stoney clay.	432.0		
	431.0	12	3.35
	429.5		
	428.5	14	3.60
	428.1		
Brown sandstone.			
	422.0		

Boring No. 8

Sheet 8 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Francis Piefer
Date Aug. 58

...ng located at Station ...+14, 18 Ft Rt Centerline ...est Lnae.

Description	Elevation	Blows per Foot	Qu.
...rface of Ground.	457.6		
	455.0		
... stiff brown mottled ...y.	454.0	14	2.78
	452.5		
	451.5	22	3.74
	450.5		
	450.0		
...y stiff mottled stoney ...dy clay.	449.0	16	2.70
	447.5		
	446.5	14	2.36
	445.5		
...ff mottled sandy ...y.	445.0		
	444.0	6	1.56
	443.5		
	442.5		
...ium mottled very sandy ...y.	441.5	4	0.90
	440.0		
	439.0	4	0.98
	438.0		

Description	Elevation	Blows per Foot	Qu.
Stiff brown sandy silty clay.	437.5		
	436.5	12	1.80
	436.0		
	435.0		
	434.0	12	2.45
Very stiff brown sandy silty clay.	432.5		
	431.5	12	3.19
	430.0		
	429.0	16	3.57
	428.5		
Brown sandstone.			
	420.0		

Boring No. 9

Sheet 9 of 9 Sheets

Project
Route FAI 04
Section X1-6HB-2
County Williamson
Bridge FAI 04 Over SBI 13
Station 1529+95.80
Boring made by Francis Piefer
Date Aug. 58

Boring located at Station 1529+14 on Centerline of West Lane.

Description	Elevation	Blows per Foot	Qu.
Surface of Ground.	457.1		
	454.5		
Stiff mottled silty clay.	453.5	6	1.38
	452.0		
	451.0	8	1.56
	450.0		
	449.5		
Very stiff mottled silty clay.	448.5	8	2.12
	447.0		
	446.0	10	3.42
	445.5		
	444.5		
	443.5	8	1.96
Stiff mottled silty sandy clay.	442.0		
	441.0	5	1.72
	439.5		
	438.5	4	1.38
	437.5		

Description	Elevation	Blows per Foot	Qu.
Very stiff mottled sandy stoney clay.	437.5		
	437.0		
	436.0	10	2.36
	435.5		
Very stiff mottled gravelly. clay.	434.5		
	433.5	16	2.94
	432.0		
	431.2	60	3.27
Brown sandstone.			
	424.5		

BORING LOGS

INTERSTATE 57 OVER
WEST MAIN ST. (OLD IL RT. 13)
F.A.I. RT. 57 SEC. (X1-6)HBK-2
WILLIAMSON COUNTY
STATION 1529+96.11
STRUCTURE NO. 100-0084 (N.B.)
STRUCTURE NO. 100-0085 (S.B.)

Clark Dietz ENGINEERS
DESIGN FIRM REGISTRATION No. 184-000450
1817 SOUTH NEIL STREET
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CHAMPAIGN, IL 61820
PHONE : 217.373.8900
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REVISIONS

NAME	DATE

NOTE: DIMENSIONAL DATA IS NOT TO BE OBTAINED BY SCALING ANY PORTION OF THIS DRAWING.

DESIGNED BY: SMM PROJECT NO: 102314
DRAWN BY: MEW DATE: 05/2006
CHECKED BY: SLD
APPROVED BY: SMM
ACTIVITY INITIALS

DRAWING NUMBER S-32