1-18-13 LETTING ITEM 135

(57)

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	36	1
	ILLINOIS	CONTRACT NO. 89464		

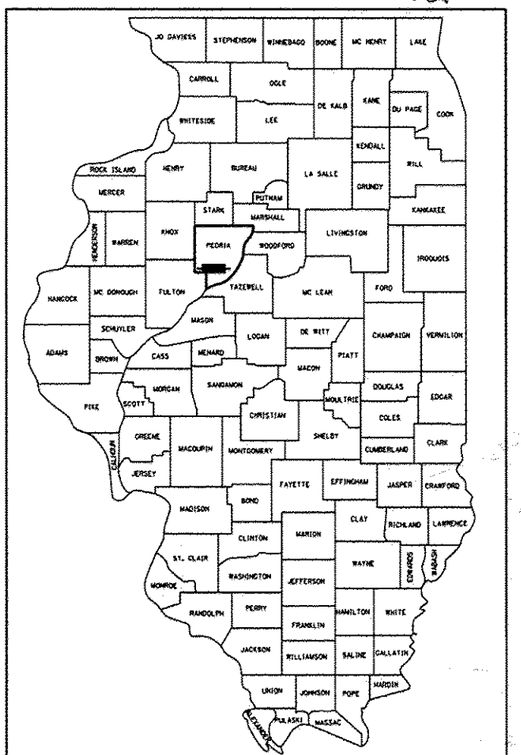
+2

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAS ROUTE 1381 (WEST SMITHVILLE ROAD OVER EAST BRANCH OF COPPERAS CREEK)
PROPOSED STRUCTURE NO. 072-3148
SECTION 10-00005-03-BR
PROJECT # RS-BRS1381 (106)
PEORIA COUNTY
JOB# C-94-043-07

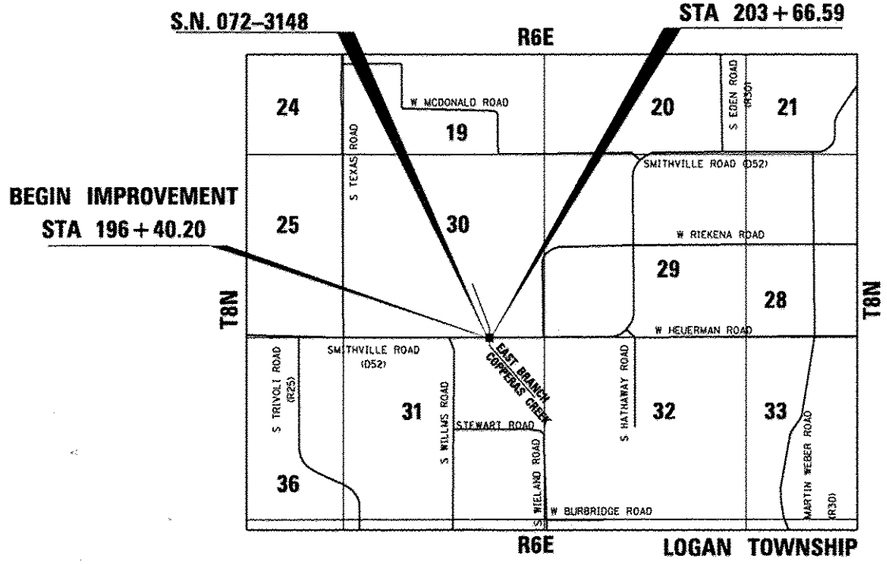


LOCATION OF SECTION INDICATED THUS: –

NEW BRIDGE STRUCTURE
S.N. 072-3148

END IMPROVEMENT
STA 203+66.59

BEGIN IMPROVEMENT
STA 196+40.20



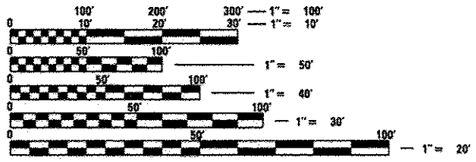
GROSS LENGTH = 726.39 FT = 0.138 MILE
NET LENGTH = 726.39 FT = 0.138 MILE

LOCATION MAP
NOT TO SCALE

FUNCTIONAL CLASSIFICATION
RURAL MAJOR COLLECTOR
2010 ADT = 750
2030 ADT = 924
P.U. = 94.7% S.U. = 4.0% M.U. = 1.3%

DESCRIPTION OF WORK:

THE WORK CONSISTS OF REMOVING AND REPLACING BRIDGE SUBSTRUCTURE AND SUPERSTRUCTURE, BRIDGE APPROACH SLABS, BRIDGE APPROACH HMA PAVEMENT, GUARDRAIL, HMA SHOULDERS, GRADING, SLOPE WALLS AND EROSION CONTROL.



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CONSULTANT NO. (312) 425-9560
PROJECT MANAGER: BENJAMIN REDDING, P.E.

TOWNSHIP(S): LOGAN
CONTRACT NO. 89464

LICENSED PROFESSIONAL ENGINEER
BENJAMIN A. REDDING
062.062219
STATE OF ILLINOIS

DATE: 10-26-2012
SEAL EXPIRES: 11-30-2013

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED 10-29-12
Amy Benecke Mathers
PEORIA COUNTY ENGINEER

PASSED 11/01/12
DISTRICT 4 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW 11-2-12
Joseph C Crumpp
DEPUTY DIRECTOR OF HIGHWAYS, REGION 3 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INFRASTRUCTURE ENGINEERING
455 Fulton Street | Suite 104 | Peoria, IL 61602
P 309.637.3200 | F 309.637.3210 | www.infrastructure-eng.com

INFRASTRUCTURE ENGINEERING

INDEX OF SHEETS

SHEET NUMBER	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
3-7	SUMMARY OF QUANTITIES
8-9	TYPICAL SECTIONS
10-11	SCHEDULE OF QUANTITIES
12	ALIGNMENT, TIES, AND BENCHMARKS
13	REMOVAL PLAN
14-15	PLAN AND PROFILE
16	DETOUR PLAN
17	EROSION & SEDIMENT CONTROL DETAILS
18-21	RIGHT-OF-WAY SHEETS
22	PAVEMENT MARKING PLAN
23-40	STRUCTURAL SHEETS (S.N. 072-3148)
41-46	CROSS SECTIONS
46A	PERMANENT BENCH MARK
47-55	DISTRICT DETAILS

LIST OF STATE STANDARDS

STANDARD NUMBER	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-09	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02 •	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 GUARDRAIL TERMINATORS
631032-08	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
665001-02	WOVEN WIRE FENCE
666001-01	RIGHT-OF-WAY MARKERS
701901-02	TRAFFIC CONTROL DEVICES
780001-03	TYPICAL PAVEMENT MARKINGS
BLR21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (2L, 2W RURAL TRAFFIC- ROAD CLOSED TO THRU TRAFFIC)

DISTRICT DETAILS

STANDARD NUMBER	DESCRIPTION
205001-D4	SLOPE STEPS DETAIL
280001-D4	TYPICAL APPLICATION OF SILT FILTER FENCE
281001-D4	RIPRAP DITCH FOR EROSION PROTECTION
630101-D4	GUARDRAIL EROSION CONTROL TREATMENTS
635101-D4	GUARDRAIL AND BARRIER WALL DELINEATION
780001-D4	PAVEMENT MARKINGS, TYPICAL

COMMITMENTS

1. THE COUNTY SHALL NOTIFY ALL EMERGENCY, SCHOOL, AND POSTAL SERVICES OF THE ROAD CLOSURE BEFORE CONSTRUCTION.

2. ALL TREE -CLEARING WILL OCCUR BETWEEN OCTOBER 1ST AND MARCH 30TH, OUTSIDE OF THE INDIANA BAT'S MATERNITY PERIOD.

3. THE DITCH IN THE SOUTHWEST QUADRANT WILL BE CLEARED OF TRESS AND BRUSH WINTHIN THE PROJECT LIMITS. IN ADDITION, A SMALL BERM WILL BE PROVIDED AT THE TOP OF THE PROPOSED DITCH BACKSLOPE TO PREVENT WATER FROM ENTERING THE ADJACENT PROPERTY OWNER'S FIELD DURING LARGE RAIN EVENTS.

GENERAL NOTES

1. MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

2. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

3. COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

4. ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT -TERM CLOSURES.

5. THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHALL SHOW THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE- CONSTRUCTION CONFERENCE.

6. AT LOCATIONS WHERE CLEARING IS INDICATED ON THE PLANS BEYOND THE LIMITS OF THE PROPOSED EXCAVATION OR EMBANKMENT, THE CONTRACTOR SHALL RESTORE THE DISTURBED EARTH BY BLADING AND SHAPING TO BLEND WITH THE ADJACENT GROUND. THE CLEARING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE EXCAVATION PAY ITEMS IN THE PLANS. PAYMENT FOR RESEEDING OR RESODDING WILL BE AS PROVIDED IN THE PLANS.

7. a) BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED FACILITIES. 48 HOURS NOTIFICATION IS REQUIRED.

   b) THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OR HER OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTLITIES AS MAY BE NECESSARY TO AVOID DAMAGE HERETO.

   c) THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOGAN TOWNSHIP, AND PEORIA COUNTY.

8. PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUNAROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

GENERAL NOTES CONT'D.

9. PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE, THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

   ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

   THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

   - BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
   - A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
   - SIGNED PROPERTY OWNER AGREEMENT FORM - D4 PI0101
   - COLOR PHOTOGRAPHS DEPICTING THE USE AREA
   - BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101.

   PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES

10. ALL SLOPES STEEPER THAN 3 TO 1 AND OVER 15 FT. (4.5 M) IN HEIGHT SHALL BE RIPPED. THIS SHALL CONSIST OF RIPPING BETWEEN 18 INCHES TO 24 INCHES (450 MM TO 600 MM) DEEP NORMAL TO THE SLOPE. THE INTERVAL OF RIPPING ALONG THE SLOPE SHALL BE 12 FT (3.6 M). THIS WORK SHALL BE DONE AFTER THE SEED BED HAS BEEN PREPARED BUT BEFORE ANY FERTILIZER OR SEED HAS BEEN APPLIED. THE FERTILIZER AND SEED SHALL BE APPLIED WITHIN A 24-HOUR PERIOD AFTER THE RIPPING HAS BEEN DONE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF SEEDING INVOLVED.

11. ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.01(I) AND 670.04(E): ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

12. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

13. THE BITUMINOUS MATERIAL PRIME COAT (USED ON AGGREGATE) QUANTITIES HAVE BEEN DETERMINED USING AN APPLICATION RATE OF 0.5 GAL/SY (2.0 L/M2). THE POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) (USED ON THE BINDER COURSE BETWEEN LIFTS) QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.05 GAL/SY (0.5 L/M2). SEE TABLE ON SHEET NO. 9.

14. FERTILIZER NUTRIENTS SHALL BE APPLIED AT A RATE OF 90 LBS/ACRE. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRE. MULCH SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE.

FILE NAME : #FILES#	DESIGNED - AJP	REVISED -
USER NAME : IEI	DRAWN - AJP	REVISED -
PLOT SCALE : 2.0000 '/ in.	CHECKED - BAR	REVISED -
PLOT DATE : 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS

SCALE : N/A | SHEET NO. 1 OF 1 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	2

CONTRACT NO. 89464

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	CONSTR. CODE / TOTAL QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	1.25
20200100	EARTH EXCAVATION	CU YD	2,820
20400800	FURNISHED EXCAVATION	CU YD	530
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4,725
25000300	SEEDING, CLASS 3	ACRE	1.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	114
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	114
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	114
25100115	MULCH, METHOD 2	ACRE	1.25
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	6,042
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	127
28000305	TEMPORARY DITCH CHECKS	FOOT	490
28000400	PERIMETER EROSION BARRIER	FOOT	3,902
28100109	STONE RIPRAP, CLASS A5	SQ YD	2,083

* SPECIALTY ITEM

INFRASTRUCTURE ENGINEERING

FILE NAME = *FILES*	DESIGNED - AJP	REVISED -
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PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

SCALE : N/A | SHEET NO. 1 OF 5 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	3
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJ.		

INFRASTRUCTURE ENGINEERING

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
28200200	FILTER FABRIC	SQ YD	2083	
31101810	SUBBASE GRANULAR MATERIAL, TYPE B 12"	SQ YD	412	
31102100	SUBBASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	870	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	627	
40600115	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	GALLON	127	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	64	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	43	
44000100	PAVEMENT REMOVAL	SQ YD	474	
44004000	PAVED DITCH REMOVAL	FOOT	201	
48203017	HOT-MIX ASPHALT SHOULDERS, 5"	SQ YD	870	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	
50200100	STRUCTURE EXCAVATION	CU YD	77	
50300225	CONCRETE STRUCTURES	CU YD	60.9	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	280.5	

* SPECIALTY ITEM

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -
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PLOT SCALE = 2.0000 '/ in.	CHECKED - BAR	REVISED -
PLOT DATE =	DATE - 11/02/2012	REVISED -

PEORIA COUNTY
HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

SCALE : N/A | SHEET NO. 2 OF 5 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	4

CONTRACT NO. 89464

ILLINOIS FED. AID PROJECT

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
	50300260	BRIDGE DECK GROOVING	SQ YD	677.	
	50300280	CONCRETE ENCASEMENT	CU YD	6.6	
	50300300	PROTECTIVE COAT	SQ YD	708	
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	
	50500505	STUD SHEAR CONNECTORS	EACH	1,212	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	73,060	
	50800515	BAR SPLICERS	EACH	86	
*	50901050	STEEL RAILING, TYPE SM	FOOT	245	
	51201900	FURNISHING STEEL PILES HP14X89	FOOT	366.5	
	51202305	DRIVING PILES	FOOT	366.5	
	51203900	TEST PILE STEEL HP14X89	EACH	2	
	51500100	NAME PLATES	EACH	1	
	52100520	ANCHOR BOLTS, 1"	EACH	24	
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	76	

* SPECIALTY ITEM

INFRASTRUCTURE ENGINEERING

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PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

SCALE : N/A | SHEET NO. 3 OF 5 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	5
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJ.		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	450.0	
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	
	63200310	GUARDRAIL REMOVAL	FOOT	718	
*	66500105	WOVEN WIRE FENCE, 4'	FOOT	449	
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	7	
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	4	
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	6	
	67100100	MOBILIZATION	L SUM	1	
*	78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	675	
*	78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	13	
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	
	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	165	

* SPECIALTY ITEM

INFRASTRUCTURE ENGINEERING

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PEORIA COUNTY HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

SCALE : N/A | SHEET NO. 4 OF 5 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	6
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	CONSTR. CODE TOTAL QUANTITY
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	10
	Z0013798	CONSTRUCTION LAYOUT	LSum	1
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	128
	X0322584	REVETMENT MAT REMOVAL	SQ YD	128
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	115
*	X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	25
	X6650202	WOVEN WIRE FENCE REMOVAL	FOOT	453
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

* SPECIALTY ITEM

INFRASTRUCTURE ENGINEERING
455 Fulton Street | Suite 104 | Peoria, IL 61602

FILE NAME = $FILES$	DESIGNED - AJP	REVISED -
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PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -

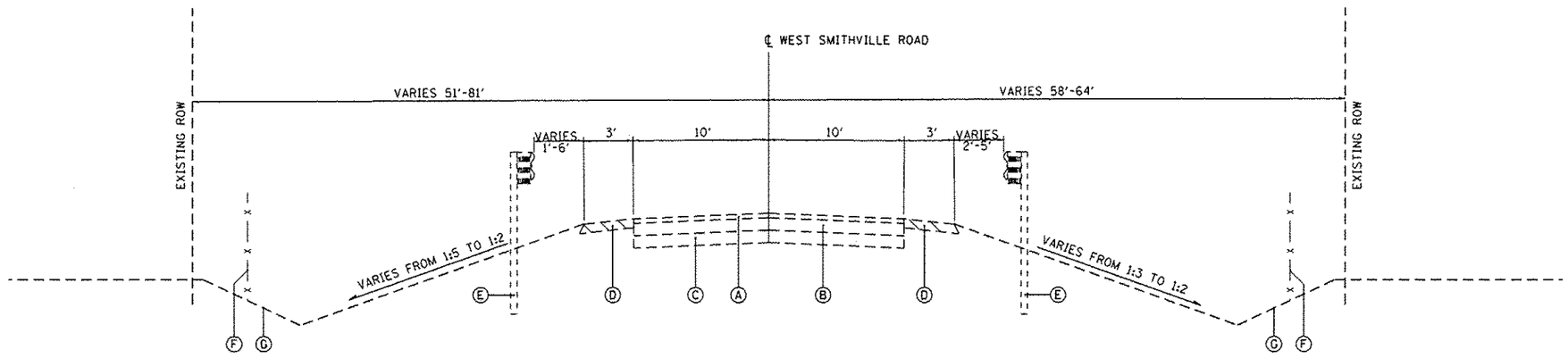
PEORIA COUNTY HIGHWAY DEPARTMENT

SUMMARY OF QUANTITIES

SCALE : N/A | SHEET NO. 5 OF 5 SHEETS | STA. N/A

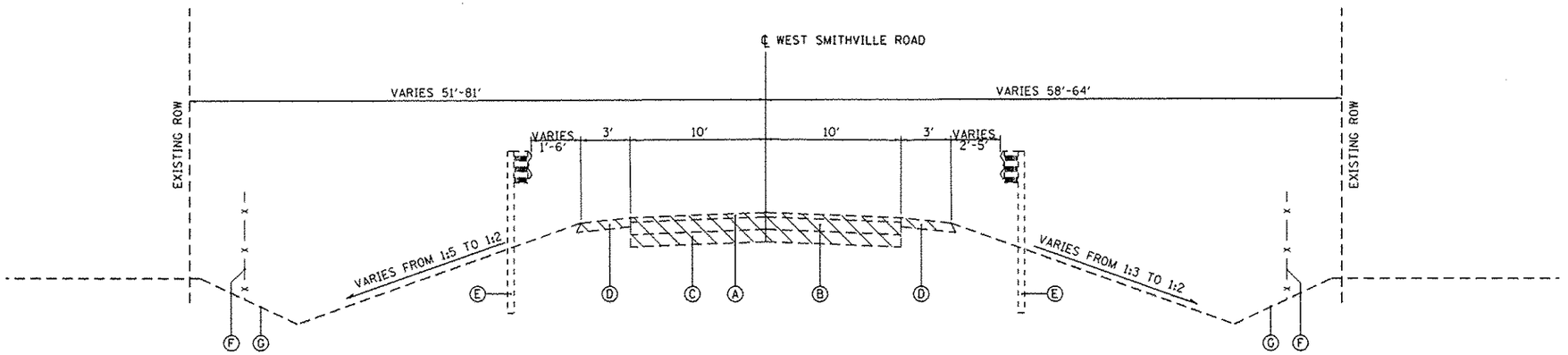
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	7
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

INFRASTRUCTURE ENGINEERING



EXISTING TYPICAL ROADWAY SECTION

STA 196+40.20 TO STA 198+50.00
STA 201+50.00 TO STA 203+66.59



EXISTING TYPICAL ROADWAY SECTION

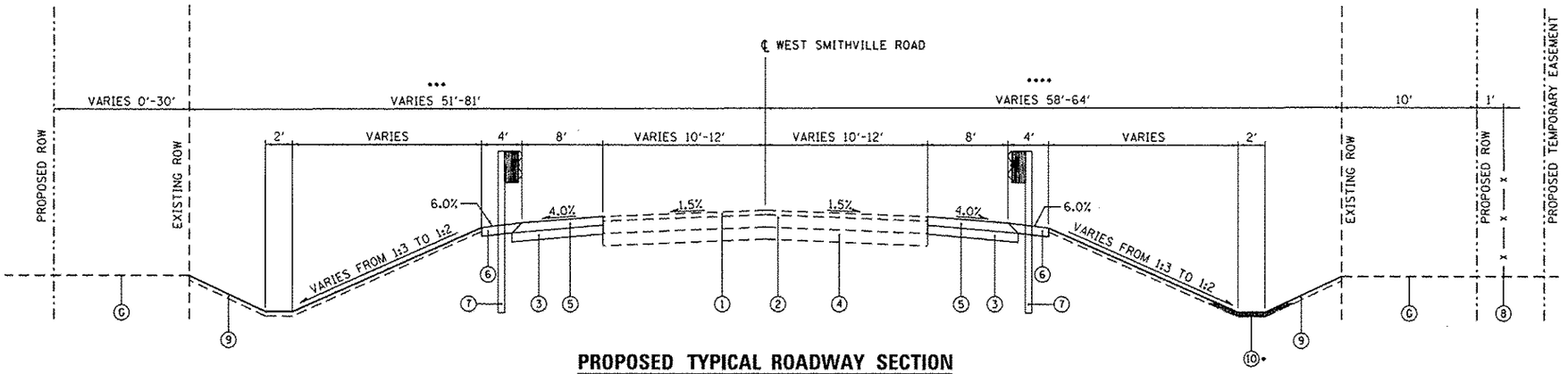
STA 198+50.00 TO STA 199+58.75
STA 200+59.25 TO STA 201+50.00
BRIDGE OMISSION STA 199+59.25 TO STA 200+58.75

LEGEND

- (A) EXISTING OIL AND CHIP PAVEMENT, VARIABLE DEPTH
- (B) EXISTING HMA PAVEMENT, VARIABLE DEPTH
- (C) EXISTING SUBGRADE, VARIABLE DEPTH
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING GUARDRAIL
- (F) EXISTING FENCE
- (G) EXISTING GROUND
- (1) PROPOSED HMA SURFACE COURSE, MIX "C", N50, 2"
- (2) PROPOSED HMA BINDER COURSE, IL-19.0, N50, 3"
- (3) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE C 4"
- (4) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 12"
- (5) PROPOSED HMA SHOULDERS, 5"
- (6) PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL, 5"
- (7) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- (8) PROPOSED WOVEN WIRE FENCE, 4"
- (9) PROPOSED SEEDING, CLASS 3 AND TOPSOIL FURNISH AND PLACE, 4"
- (10) STONE RIPRAP, CLASS A5
- REMOVAL ITEM

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -	PEORIA COUNTY HIGHWAY DEPARTMENT	TYPICAL SECTIONS	
USER NAME = IEI	DRAWN - AJP	REVISED -			
PLOT SCALE = 10.0000 ' / in.	CHECKED - BAR	REVISED -		SCALE: NTS	SHEET NO. 1 OF 2 SHEETS STA N/A
PLOT DATE = 10/20/2012	DATE - 11/02/2012	REVISED -			

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	8
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

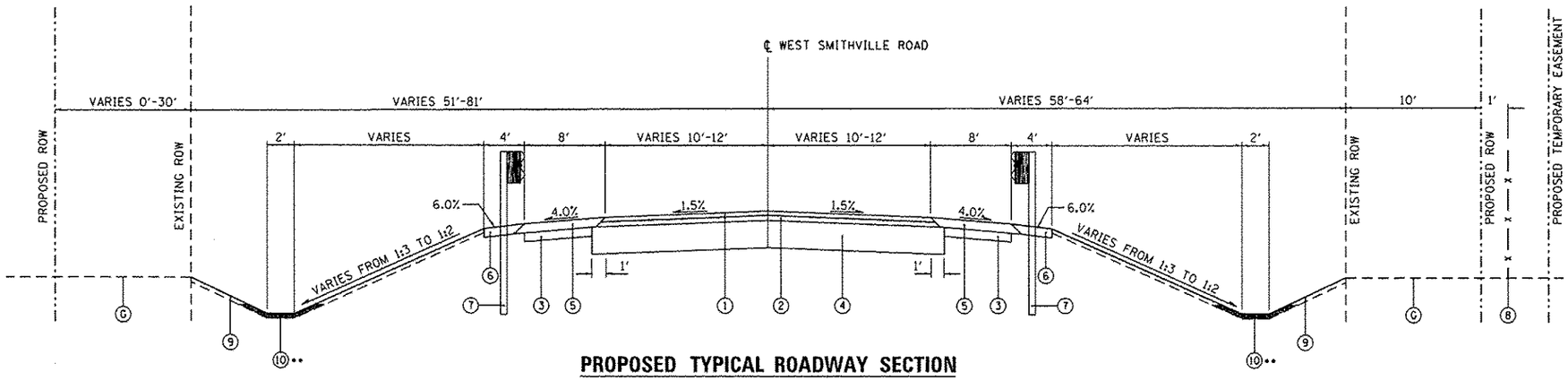


PROPOSED TYPICAL ROADWAY SECTION

STA 196+40.20 TO STA 198+50.00
STA 201+50.00 TO STA 203+66.59

LEGEND

- (A) EXISTING OIL AND CHIP PAVEMENT, VARIABLE DEPTH
- (B) EXISTING HMA PAVEMENT, VARIABLE DEPTH
- (C) EXISTING SUBGRADE, VARIABLE DEPTH
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING GUARDRAIL
- (F) EXISTING FENCE
- (G) EXISTING GROUND
- (1) PROPOSED HMA SURFACE COURSE, MIX "C", N50, 2"
- (2) PROPOSED HMA BINDER COURSE, IL-19.0, N50, 3"
- (3) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE C 4"
- (4) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B 12"
- (5) PROPOSED HMA SHOULDERS, 5"
- (6) PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL, 5"
- (7) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- (8) PROPOSED WOVEN WIRE FENCE, 4"
- (9) PROPOSED SEEDING, CLASS 3 AND TOPSOIL FURNISH AND PLACE, 4"
- (10) STONE RIPRAP, CLASS A5
- REMOVAL ITEM



PROPOSED TYPICAL ROADWAY SECTION

STA 198+50.00 TO STA 199+62.75
STA 200+55.25 TO STA 201+50.00
BRIDGE OMISSION STA 199+62.75 TO STA 200+55.25

HMA MIXTURE TABLE

	HMA BINDER AND SHOULDER LOWER LIFT	HMA SURFACE AND SHOULDER TOP LIFT
PG GRADE	PG 64-22	PG 64-22
MAX % RAP ALLOWABLE	25%	15%
DESIGN AIR VOIDS	4.0% @ N=50	4.0% @ N=50
MIXTURE COMPOSITION	IL-19.0	IL-9.5
FRICTION AGGREGATE	N/A	MIXTURE "C"
DENSITY TEST METHOD	CORES OR CORRELATION	CORES OR CORRELATION

POLYMERIZED PRIME COAT RATES

SURFACE TYPE	ESTIMATED TRUCK APPLICATION RATE	RESIDUAL RATE
MILLED (HMA OR PCC)	0.08 GAL/SY (0.00034 TON/SY)	0.04 GAL/SY
EXISTING PAVEMENT	0.05 GAL/SY (0.00022 TON/SY)	0.025 GAL/SY
FOG COAT (BETWEEN LIFTS)	0.05 GAL/SY (0.00022 TON/SY)	0.025 GAL/SY

NOTES

- • STONE RIPRAP, CLASS A5 FROM 196+40 TO 198+50 RT
- •• STONE RIPRAP, CLASS A5 FROM 198+50 TO 199+99
- ••• NORTHSIDE IMPROVEMENT FROM 201+50 TO STA. 203+67
- •••• SOUTHSIDE IMPROVEMENT FROM STA. 194+40 TO STA. 198+50 FROM STA. 201+50 TO STA. 203+29

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PEORIA COUNTY HIGHWAY DEPARTMENT

TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 2 OF 2 SHEETS | STA N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	9
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

INFRASTRUCTURE ENGINEERING
615 Abbot Street | Suite 104 | Peoria, IL 61532

INDEX OF SCHEDULES

		SEE SHEET
1	EARTHWORK	10
2	PAVEMENT	10
3	SEEDING	10
4	TREE REMOVAL AND RELATED ITEMS	10
5	EROSION CONTROL	11
6	GUARDRAIL	11
7	PAVEMENT MARKING	11
8	LUMP SUM ITEMS	11

1. SCHEDULE OF EARTHWORK

FROM	TO	20200100 EARTH EXCAVATION CU YD	EARTH EXCAVATION ADJUSTED FOR SHRIKAGE CU YD	EMBANKMENT CU YD	EARTHWORK BALANCE EXCESS (+) OR SHORTAGE(-) CU YD	20400800 FURNISHED EXCAVATION CU YD	21101615 TOPSOIL FURNISH AND PLACE, 4" SQ YD
SMITHVILLE ROAD							
196+40	199+48	1,936	1,452	629	822		1,570
BRIDGE CONES		18	14	313	-300		0
200+70	203+67	863	647	1,698	-1,052		3,155
TOTAL		2,820	2,112	2,641	-529	530	4,725

2. SCHEDULE OF PAVEMENT ITEMS

FROM	TO	31101810 SUBBASE GRANULAR MATERIAL, TYPE B 12" SQ YD	31102100 SUBBASE GRANULAR MATERIAL, TYPE C 4" SQ YD	40600100 BITUMINOUS MATERIALS (PRIME COAT) GALLON	40600115 POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) GALLON	40603080 HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 TON
SMITHVILLE ROAD						
196+40.20	199+52.75	232	416	316	64	36
200+55.25	203+66.59	180	454	311	63	28
TOTAL		412	870	627	127	64

2. SCHEDULE OF PAVEMENT ITEMS

FROM	TO	40603310 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 TON	44000100 PAVEMENT REMOVAL SQ YD	44004000 PAVED DITCH REMOVAL FOOT	48203017 HOT-MIX ASPHALT SHOULDERS, 5" SQ YD	X0322584 REVETMENT MAT REMOVAL SQ YD
SMITHVILLE ROAD						
196+40.20	199+52.75	24	258	201	416	128
200+55.25	203+66.59	19	216	0	454	0
TOTAL		43	474	201	870	128

3. SCHEDULE OF SEEDING ITEMS

FROM	TO	25000300 SEEDING, CLASS 3 ACRE	25000400 NITROGEN FERTILIZER NUTRIENT POUND	25000500 PHOSPHORUS FERTILIZER NUTRIENT POUND	25000600 POTASSIUM FERTILIZER NUTRIENT POUND	25100115 MULCH, METHOD 2 ACRE
SMITHVILLE ROAD						
196+40.20	199+52.75	0.53	49	49	49	0.53
200+55.25	203+66.59	0.72	65	65	65	0.72
TOTAL		1.25	114	114	114	1.25

4. SCHEDULE OF TREE REMOVAL

FROM	TO	20100500 TREE REMOVAL, ACRES ACRE
SMITHVILLE ROAD		
196+40.20	199+52.75	0.53
200+55.25	203+66.59	0.33
TOTAL		1.25

NOTES: SEE STRUCTURAL SHEETS 23 - 37 FOR STRUCTURAL QUANTITIES THAT ARE NOTT NOTED THE SCHEDULE OF QUANTITIES.

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459 Fulton Street | Suite 104 | Peoria, IL 61602
Professional Land Surveying Services

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PEORIA COUNTY HIGHWAY DEPARTMENT

SCHEDULE OF QUANTITIES

SCALE : N/A | SHEET NO. 1 OF 2 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	10
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

5. SCHEDULE OF EROSION CONTROL

FROM	TO	25100635 HEAVY DUTY EROSION CONTROL BLANKET SQ YD	28000250 TEMPORARY EROSION CONTROL SEEDING POUND	28000305 TEMPORARY DITCH CHECKS FOOT	28000400 PERIMETER EROSION BARRIER FOOT	28100109 STONE RIPRAP, CLASS A5 SQ YD	28200200 FILTER FABRIC SQ YD
SMITHVILLE ROAD							
196+40.20	199+52.75	2,553	54	380	1,594	589	589
200+55.25	203+66.59	3,489	73	110	2,308	111	111
TOTAL		6,042	127	490	3,902	700	700

6. SCHEDULE OF GUARDRAIL RELATED ITEMS

FROM	TO	63000001 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS FOOT	63100045 TRAFFIC BARRIER TERMINAL, TYPE 2 EACH	63100087 TRAFFIC BARRIER TERMINAL, TYPE 6A EACH	63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT EACH	63200310 GUARDRAIL REMOVAL FOOT
SMITHVILLE ROAD						
196+40.20	199+52.75	212.5	1	2	1	316
200+55.25	203+66.59	237.5	0	2	2	402
TOTAL		450.0	1	4	3	718

6. SCHEDULE OF GUARDRAIL RELATED ITEMS

FROM	TO	66500105 WOVEN WIRE FENCE, 4' FOOT	78200100 MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR EACH	78201000 TERMINAL MARKER - DIRECT APPLIED EACH	X6330725 STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS) FOOT	X6650202 WOVEN WIRE FENCE REMOVAL FOOT	Z0001002 GUARDRAIL AGGREGATE EROSION CONTROL TON
SMITHVILLE ROAD							
196+40.20	199+52.75	239	7	1	25	243	79
200+55.25	203+66.59	210	6	2	0	210	86
TOTAL		449	13	3	25	453	165

7. SCHEDULE OF PAVEMENT MARKING RELATED ITEMS

FROM	TO	66600105 FURNISHING AND ERECTING RIGHT OF WAY MARKERS EACH	66700205 PERMANENT SURVEY MARKERS, TYPE I EACH	78005110 EPOXY PAVEMENT MARKING - LINE 4" FOOT
SMITHVILLE ROAD				
196+40.20	200+00.00	2	1	337
200+00.00	203+66.59	5	3	337
TOTAL		7	4	675

8. SCHEDULE OF LUMP SUM ITEMS

FROM	TO	67000500 ENGINEER'S FIELD OFFICE, TYPE B CAL MO	67100100 MOBILIZATION L SUM	Z0013798 CONSTRUCTION LAYOUT L SUM	X7010216 TRAFFIC CONTROL AND PROTECTION, (SPECIAL) L SUM
SMITHVILLE ROAD					
196+40.20	203+66.59	6	1	1	1
TOTAL		6	1	1	1

NOTES: SEE STRUCTURAL SHEETS 23 - 37 FOR STRUCTURAL QUANTITIES THAT ARE NOTT NOTED THE SCHEDULE OF QUANTITIES.

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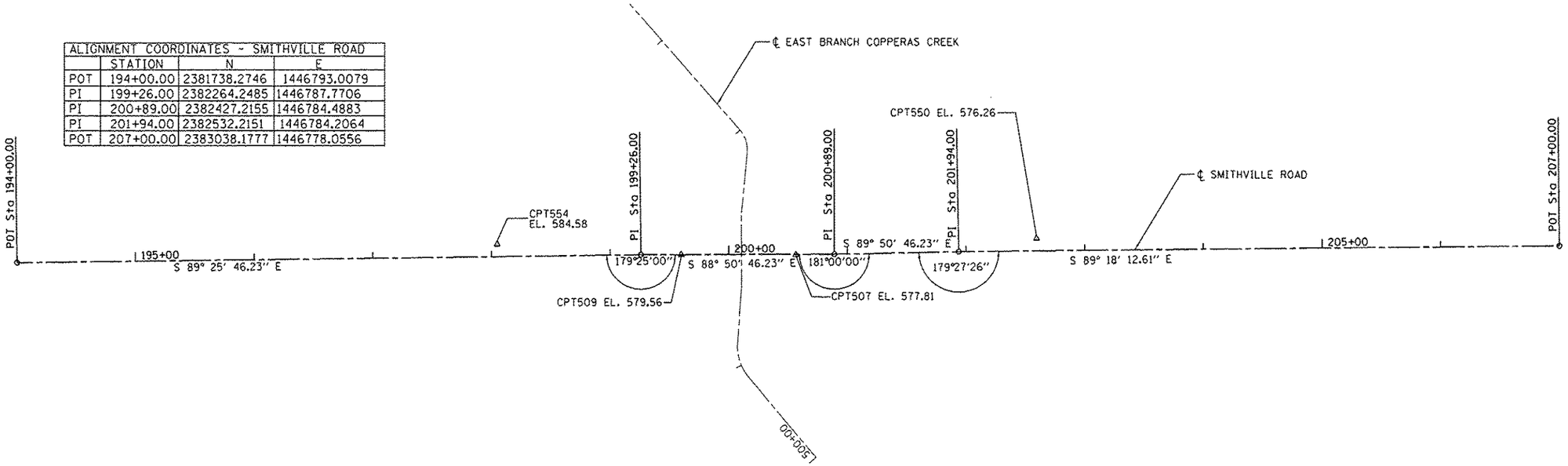
PEORIA COUNTY HIGHWAY DEPARTMENT

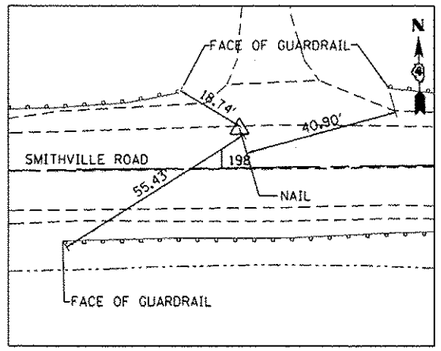
SCHEDULE OF QUANTITIES

SCALE : N/A | SHEET NO. 2 OF 2 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	11
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

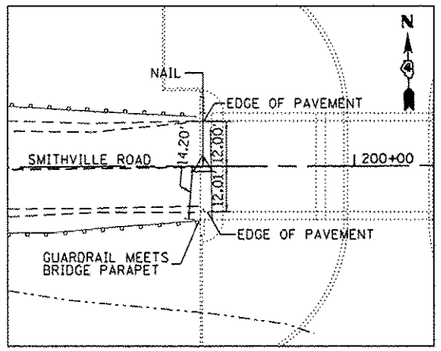
ALIGNMENT COORDINATES - SMITHVILLE ROAD			
	STATION	N	E
POT	194+00.00	2381738.2746	1446793.0079
PI	199+26.00	2382264.2485	1446787.7706
PI	200+89.00	2382427.2155	1446784.4883
PI	201+94.00	2382532.2151	1446784.2064
POT	207+00.00	2383038.1777	1446778.0556





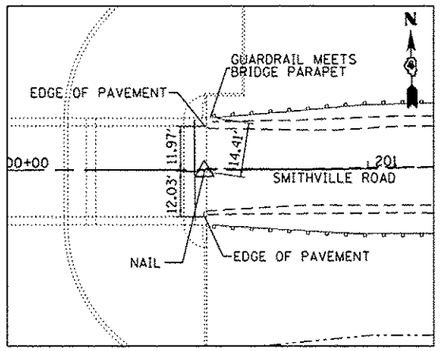
CONTROL POINT NO. 554

STA 198+05.21, 10.38' LT
N 1446799.2740
E 2382143.2480
ELEV 584.58



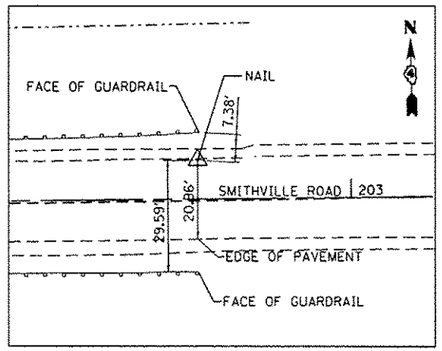
CONTROL POINT NO. 509

STA 199+60.27, 0.02 RT
N 1446787.0670
E 2382298.1500
ELEV 579.56



CONTROL POINT NO. 507

STA 200+57.11, 0.39 RT
N 1446784.7500
E 2382394.9580
ELEV 577.81



CONTROL POINT NO. 550

STA 202+59.89, 10.85' LT
N 1446793.7840
E 2382597.8910
ELEV 576.26

THE PROPOSED BENCHMARK SHALL BE INSTALLED AT THE NORTHWEST CORNER OF THE PROPOSED BRIDGE IN ACCORDANCE WITH THE PERMANENT BENCHMARK DETAIL SHOWN ON SHEET 54. IN GENERAL, THE BENCH MARK WILL BE PLACED IN A LEVEL AREA IN THE ABUTMENT OF THE BRIDGE SO AS TO BE READILY ACCESSIBLE.

THE BENCH MARK SHALL BE PLACED UNDER THE DIRECTION OF THE ENGINEER AND SHALL BE INSTALLED IN A WORKMANLIKE MANNER.

THE ELEVATION SHALL BE PERMANETLY MARKED BY THE USE OF METAL DIES AFTER THE BENCH MARK HAS BEEN INSTALLED. THE ELEVATION WILL BE BASED ON U.S.G.S. DATUM.

THE BRONZE TABLET, TO BE INSTALLED AS THE BENCH MARK, SHALL BE FURNISHED BY THE PEORIA COUNTY HIGHWAY DEPARTMENT.

THE EXISTING BENCHMARK IS A 2" x 2" SQUARE CUT IN THE SOUTHEAST CORNER OF THE SOUTH HEADWALL OF A CULVERT LOCATED TO THE WEST OF THE SECOND DRIVEWAY TO THE WEST OF THE BRIDGE, AND APPROXIMATELY 75 FEET WEST OF THE DRIVEWAY CENTERLINE AND 45 FEET SOUTH OF THE SMITHVILLE ROAD CENTERLINE, EL=590.85.

INFRASTRUCTURE ENGINEERING

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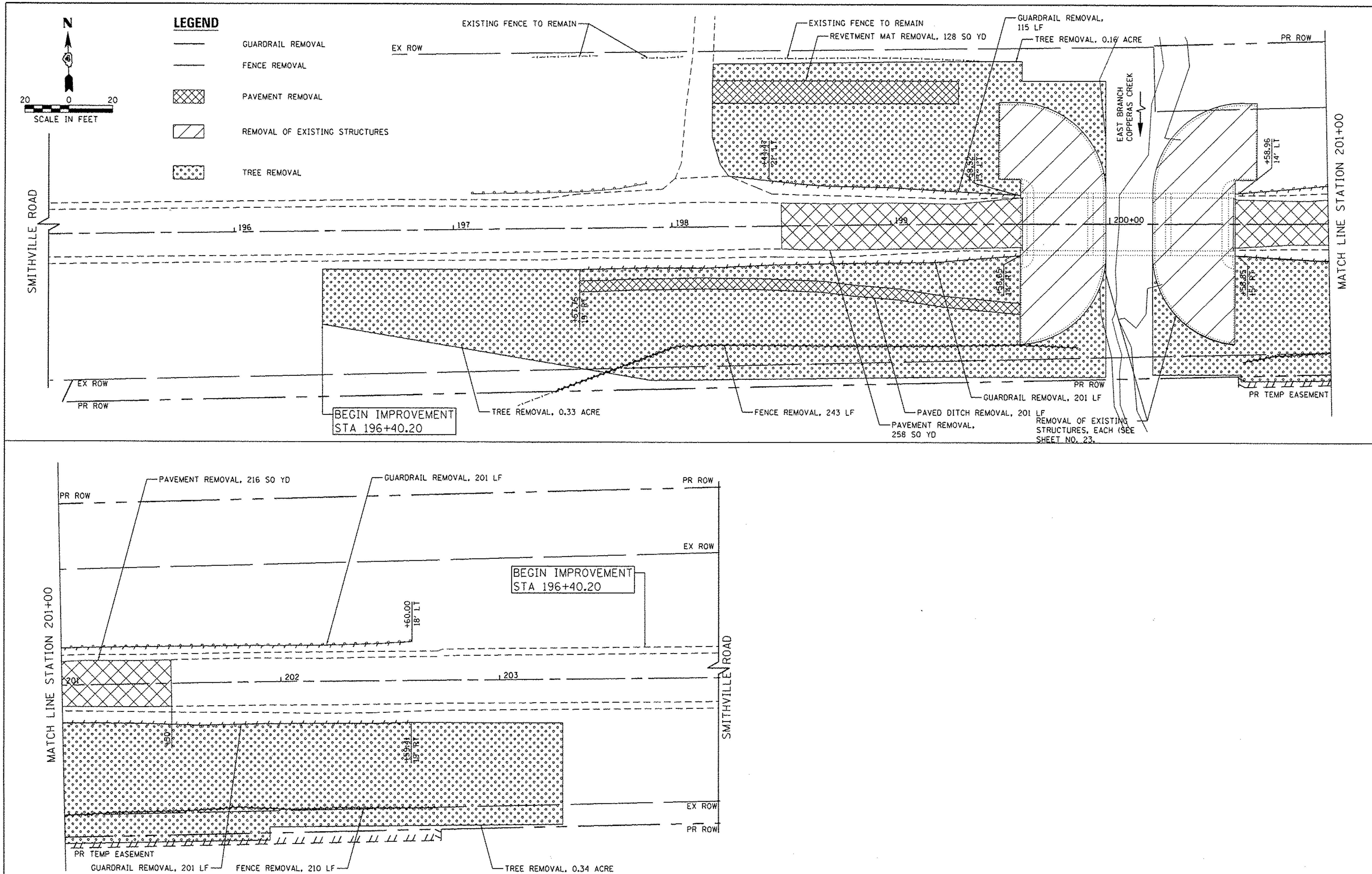
PEORIA COUNTY HIGHWAY DEPARTMENT

ALIGNMENT, TIES, AND BENCHMARKS

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA 194+00.00 TO STA 207+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	12
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			



INFRASTRUCTURE ENGINEERING

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PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -	

PEORIA COUNTY HIGHWAY DEPARTMENT

REMOVAL PLAN

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. 195+00.00 TO STA. 204+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	13
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

N

5 0 5
VERTICAL SCALE IN FEET
20 0 20
HORIZONTAL SCALE IN FEET

EX ROW
EX FENCE TO REMAIN (TYP)
T-L RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE
PR ROW 0.32 ACRES
PR ROW
FUR ERECT ROW MARKERS
TRAF BAR TERM T2
SPBGR (SHORT RADIUS), 25 FT
GDRL AGG EROS CONT
SPBGR TY A 6FT POSTS, 62.5 FT
PR PGL
TRAF BAR TERM T6A
BRIDGE APPROACH SLAB
BACK-TO-BACK ABUTMENTS
EAST BRANCH COPPERAS CREEK
PERM SURV MKRS T1
PI STA 199+26.00
PI STA 200+89.00
℄ WEST SMITHVILLE ROAD
SMITHVILLE ROAD
TR BAR TRM T1 SPL TAN
GDRL AGG EROS CONT
HMA SHOULDER, 5" (TYP)
BEGIN IMPROVEMENT STA 196+40.20
BEGIN RECONSTRUCTION STA 198+50.00
SPBGR TY A 6FT POSTS, 150 FT
WOV W FENCE 4", 239'
WOV W FENCE 4", 210'
HMA SC "C" N50, 2"
HMA BC IL-19.0 N50, 3"
SUB GRAN MAT B 12 (TYP)
STONE RIPRAP, CLASS A5
PR ROW 0.22 ACRES
PR TEMP EASEMENT 0.02 ACRES
MATCH LINE STATION 201+00

NOTE: DIMENSIONS ARE GIVEN TO THE FACE OF THE GUARDRAIL

℄ DRIVEWAY STA. 198+13
PGL ℄ BACK WEST ABUTMENT STA 199+62.75, EL. 579.64
℄ BRIDGE STA 200+09.00
PGL ℄ BACK EAST ABUTMENT STA 200+55.25, EL. 577.80
PROFILE GRADE LINE
RIGHT DITCH PROFILE
LEFT DITCH PROFILE
STONE RIPRAP, CLASS A5
D.H.W. El. 571.23 (20 year)
ELEVATION 577.84 VPI STA. 200+00.00
ex. = 0.97
K = 115
300.00' V.C.
-2.90%
-10.00%
+3.90%
-1.37%
-0.77%
+6.35%
-5.22%
+0.30%
-0.30%
+3.48%
+2.50%

595 590 585 580 575 570 565 560 555

600.84 597.74 594.78 592.13 589.54 587.13 584.97 582.89 582.89 581.20 581.31 579.80 579.95 578.82 578.81 577.91 577.88 577.18 577.17

195+00 195+50 196+00 196+50 197+00 197+50 198+00 198+50 199+00 199+50 200+00 200+50 201+00

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PEORIA COUNTY HIGHWAY DEPARTMENT

ROADWAY PLAN AND PROFILE

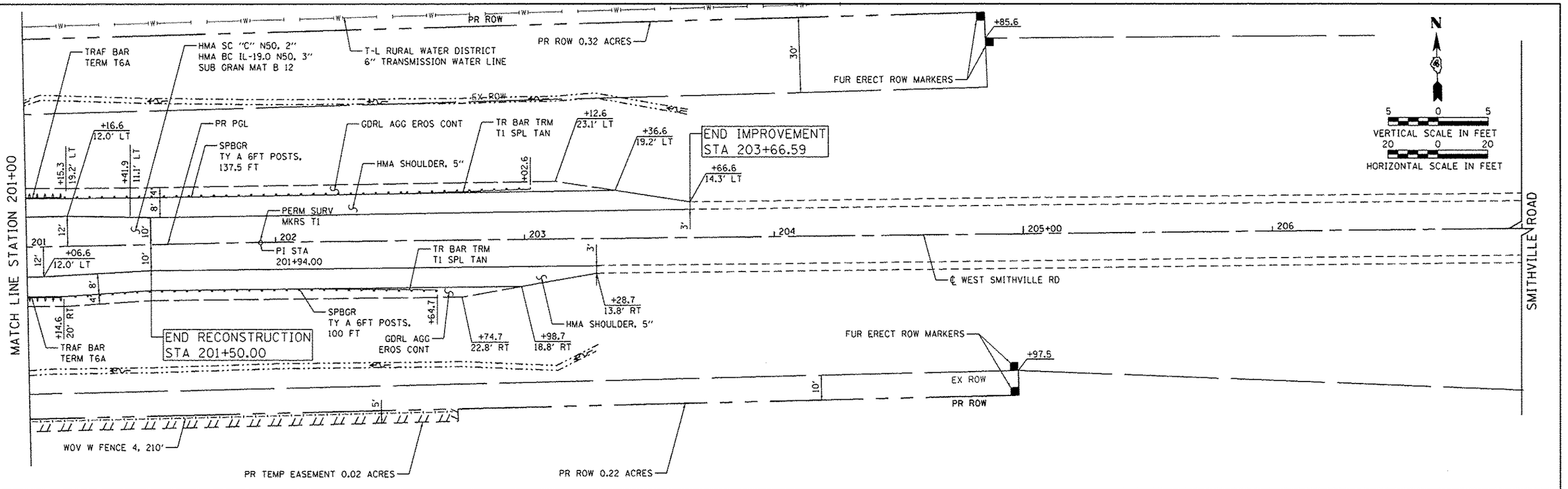
SCALE: 1" = 20' | SHEET NO. 1 OF 2 SHEETS | STA. 195+00.00 TO STA. 201+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	14
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

PLAN: SURVEYED, DESIGNED, ALIGNMENT CHECKED, BY, DATE, NOTE BOOK, NO., STAGE OF WAY CHECKED, FIELD BOOK, FIELD BOOK CHANGE

PROFILE: SURVEYED, DESIGNED, GRADES CHECKED, BY, DATE, NOTE BOOK, FINAL NOTED, STRUCTURE NOTATIONS CHKD

INFRASTRUCTURE ENGINEERING
455 Fulton Street | Suite 364 | Peoria, IL 61602



INFRASTRUCTURE ENGINEERING

PLAN: SURVEYED, PLOTTED, DRAWN, CHECKED, FINAL NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., ALIGNMENT CHECKED, RT. OF WAY CHECKED, CSD FILE NAME, BY, DATE

PROFILE: SURVEYED, PLOTTED, DRAWN, CHECKED, FINAL NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., BY, DATE

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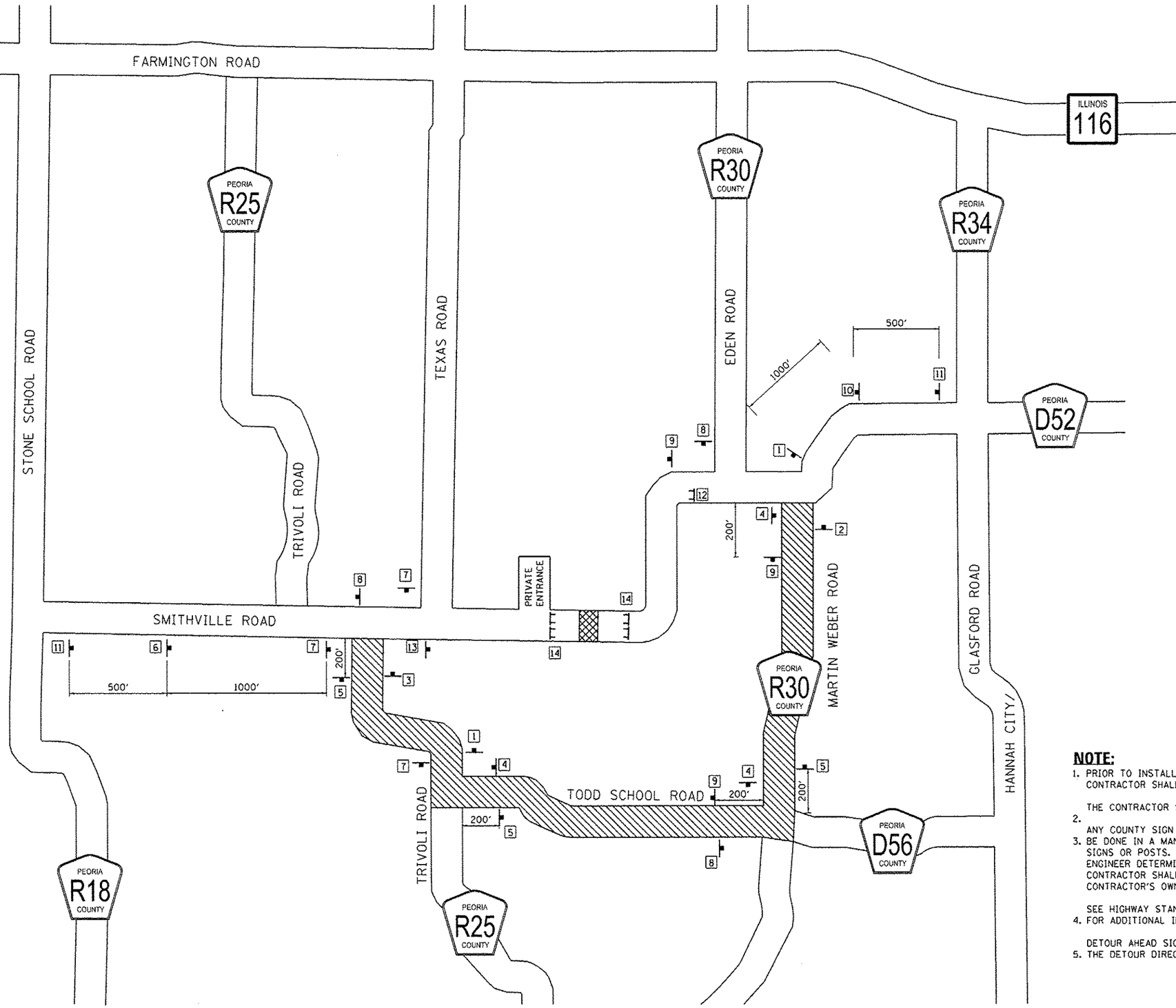
PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

ROADWAY PLAN AND PROFILE

SCALE: 1" = 20' | SHEET NO. 2 OF 2 SHEETS | STA. 201+00.00 TO STA. 207+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	15
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			



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DETOUR LEGEND:

- FLASHING LIGHT
- TYPE III BARRICADE
- SIGN ON POST
- DETOUR
- CONSTRUCTION WORK ZONE

1 — WEST / SMITHVILLE ROAD / DETOUR — M3-4 36" X 18", W17-1101 24"x12", M4-9L 30"x24"

2 — END DETOUR / EAST / SMITHVILLE ROAD — M4-8a 24"x18", M3-2 36" X 18", W17-1101 24"x12"

3 — END DETOUR / WEST / SMITHVILLE ROAD — M4-8a 24"x18", M3-4 36" X 18", W17-1101 24"x12"

4 — WEST / SMITHVILLE ROAD / DETOUR — M3-4 36" X 18", W17-1101 24"x12", M4-9R 30"x24"

5 — DETOUR / EAST / SMITHVILLE ROAD — M4-8 24" X 12", M3-2 36" X 18", W17-1101 24"x12"

6 — SMITHVILLE ROAD / DETOUR — W17-1101 24"x12", M4-9R 30"x24"

7 — EAST / SMITHVILLE ROAD / DETOUR — M3-2 36" X 18", W17-1101 24"x12", M4-9R 30"x24"

8 — EAST / SMITHVILLE ROAD / DETOUR — M3-2 36" X 18", W17-1101 24"x12", M4-9L 30"x24"

9 — DETOUR / WEST / SMITHVILLE ROAD — M4-8 24" X 12", M3-4 36" X 18", W17-1101 24"x12"

10 — SMITHVILLE ROAD / DETOUR — W17-1101 24"x12", M4-9L 30"x24"

11 — DETOUR 1500 FT — W20-2 48"x48"

12 — BRIDGE OUT 2 MILES AHEAD LOCAL TRAFFIC ONLY — R11-4 60"x30"

13 — BRIDGE OUT 1 MILE AHEAD LOCAL TRAFFIC ONLY — R11-4 60"x30"

14 — BRIDGE OUT — R11-2 48"x30"

NOTE:

1. PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT J.U.L.I.E.

   THE CONTRACTOR SHALL SUPPLY ALL SIGNAGE.

2. ANY COUNTY SIGN THAT IS COVERED OR CHANGED SHALL
3. BE DONE IN A MANNER WHICH DOES NOT DAMAGE ANY SIGNS OR POSTS. ANY SIGN OR POST WHICH THE ENGINEER DETERMINES HAS BEEN DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

   SEE HIGHWAY STANDARD 701901 AND DISTRICT DETAIL
4. FOR ADDITIONAL INFORMATION.

   DETOUR AHEAD SIGNS SHALL BE PLACED 200' AHEAD OF
5. THE DETOUR DIRECTION INDICATOR SIGNS.

INFRASTRUCTURE ENGINEERING
455 Fulton Street | Suite 154 | Peoria, IL 61602

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -
USER NAME = IEI	DRAWN - AJP	REVISED -
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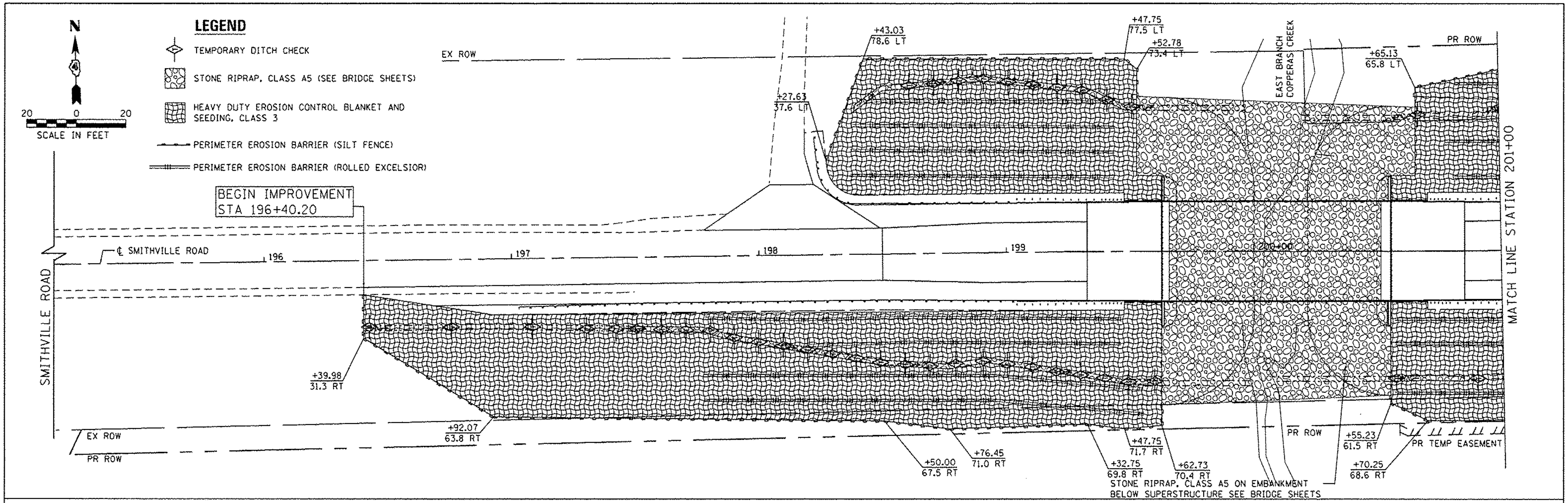
PLOT DATE = 10/26/2012	DATE - 11/02/2012	REVISED -

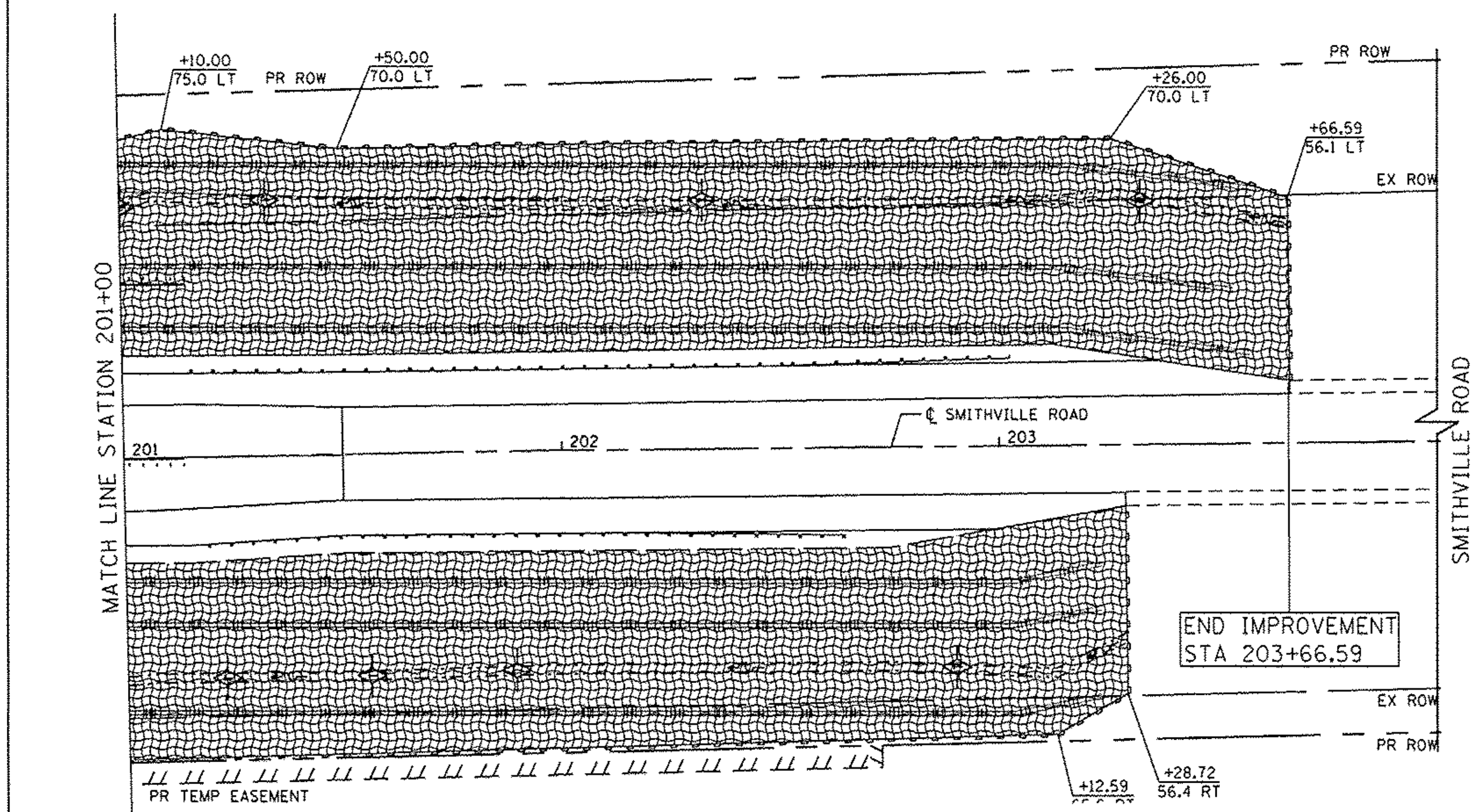
PEORIA COUNTY HIGHWAY DEPARTMENT

DETOUR PLAN

SCALE : N/A | SHEET NO. 1 OF 1 SHEETS | STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	16
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			





TEMPORARY EROSION CONTROL NOTES

1. THE CONTRACTOR IS TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES PRIOR TO START OF WORK.
2. EROSION CONTROL TO BE CONSTRUCTED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER AND TO BE INSPECTED AND DOCUMENTED BY THE CONTRACTOR 24 HOURS AFTER ANY RAIN EVENT EXCEEDING 0.5 INCHES OF PRECIPITATION AND ON A WEEKLY BASIS. THE CONTRACTOR SHALL IMMEDIATELY PLACE AND MAINTAIN TEMPORARY EROSION CONTROL SEEDING AT ALL ERODIBLE/BARE AREAS. THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 280 -TEMPORARY EROSION CONTROL OF THE STANDARD SPECIFICATIONS, HIGHWAY STANDARD 280001-05, AND AS DIRECTED BY THE ENGINEER.
3. NO RUNOFF FROM STRIPPED AREA IS TO LEAVE THE SITE OTHER THAN THROUGH EROSION CONTROL PROTECTIVE MEASURES. THE CONTRACTOR WILL ADJUST HIS OPERATIONS AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL CONFORM TO IEPA AND IDOT CONSTRUCTION MEMORANDUM NO. 06-60.
5. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SEQUENCE OF STAGE CONSTRUCTION.
6. ALL DISTURBED AREAS SHALL BE SEEDED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. AREAS THAT HAVE BEEN STRIPPED AND WILL NOT RECEIVE PERMANENT LANDSCAPING BEFORE THE END OF THE FALL SEEDING RESTRICTION SHALL RECEIVE TEMPORARY EROSION CONTROL SEEDING, MULCH, AND EROSION CONTROL BLANKET.
7. THIS PROJECT DISTURBS MORE THAN 1 ACRE. THEREFORE, ALL CONSTRUCTION ACTIVITIES WILL BE IN ACCORDANCE WITH THE SITE-SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AS PER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS. (SEE SPECIAL PROVISIONS)
8. THE PERIMETER EROSION BARRIER SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. AT THAT TIME, THE PERIMETER EROSION BARRIER SHALL BE REMOVED AND THE AREAS DAMAGED BY THE FENCE INSTALLATION SHALL BE RESTORED.
9. HEAVY DUTY EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL AREAS, IMMEDIATELY AFTER SEEDING.
10. LANDSCAPE SEEDING LIMITS ARE THE SAME LIMITS AS THE EROSION CONTROL SEEDING LIMITS.

INFRASTRUCTURE ENGINEERING

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PEORIA COUNTY HIGHWAY DEPARTMENT

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. 194+25.00 TO STA. 204+00.00

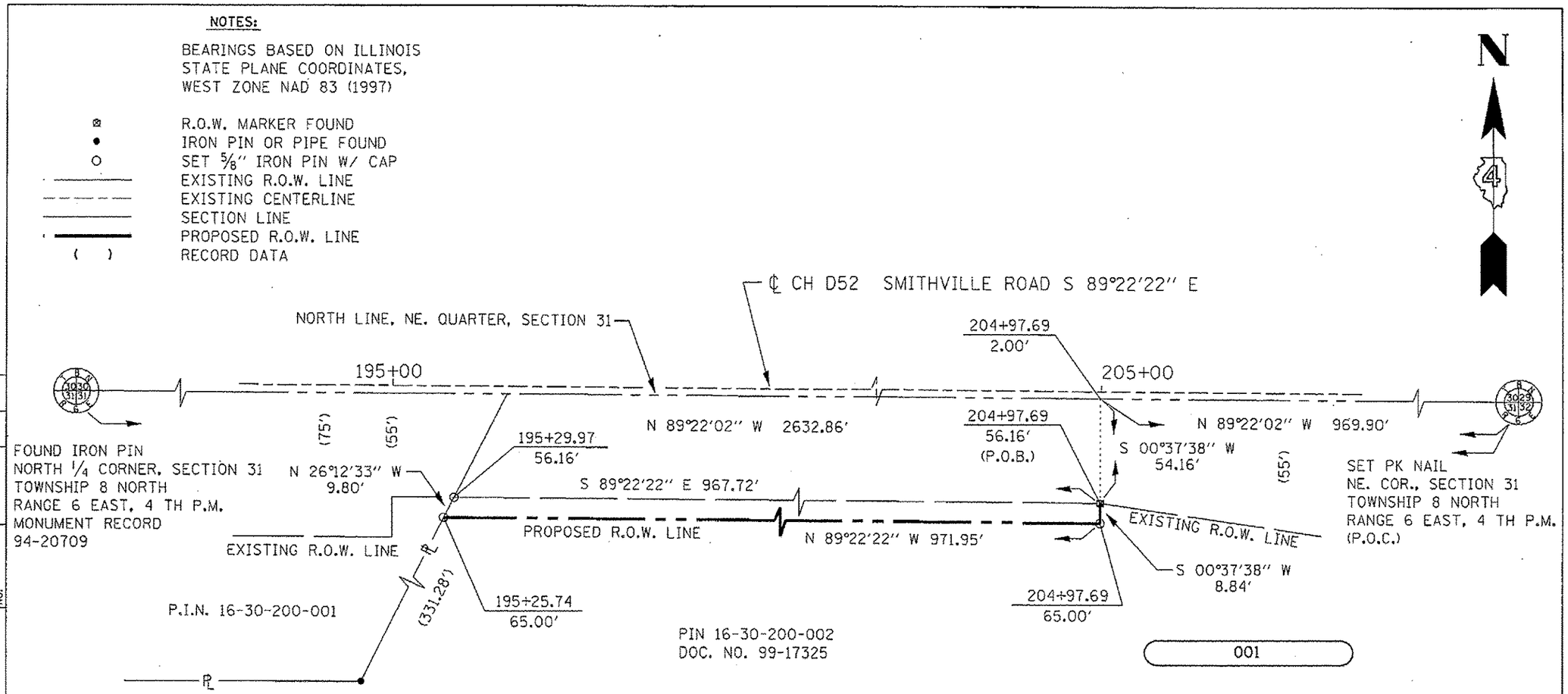
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	17
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

PEORIA COUNTY HIGHWAY DEPARTMENT

NOTES:

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES, WEST ZONE NAD 83 (1997)

- ⊠ R.O.W. MARKER FOUND
- ● IRON PIN OR PIPE FOUND
- ○ SET 5/8" IRON PIN W/ CAP
- EXISTING R.O.W. LINE
- EXISTING CENTERLINE
- SECTION LINE
- PROPOSED R.O.W. LINE
- ( ) RECORD DATA



ROBERT DEPPERMAN
LINDA L. DEPPERMAN

AREA = 8572 SQ. FT. +/-, 0.197 acres +/-

A PART OF THE NORTHEAST QUARTER OF

SECTION 31 TOWNSHIP 8 NORTH, RANGE 6 E, 4 TH PRINCIPAL MERIDIAN
PEORIA COUNTY

RIGHT OF WAY PLAT

ROUTE CH D52 SMITHVILLE ROAD CONSTRUCTION SECTION 10-00005-03-BR

SCALE: 1"= 50' DATE MAR. 2011 JOB NO. _____

THIS PLAT OF SURVEY WAS MADE UNDER MY DIRECTION FOR THE PEORIA COUNTY HIGHWAY DEPARTMENT, STATE OF ILLINOIS AND CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Michael D. Curtis March 07, 2011

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3071
LICENSE EXPIRES 11/30/12
FIELD WORK COMPLETED FEBRUARY OF 2011

MICHAEL D. CURTIS 3071 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS SPRINGFIELD, IL

PROPOSED ROW LIMITS ARE FROM STA 195+20 TO STA 204+98, ON THE SOUTH SIDE OF THE ROADWAY, AND FROM STA 200+20 TO STA 204+86, ON THE NORTH SIDE OF THE ROADWAY.

Signed Recorded BOOK PAGE DOCUMENT NO.

001

R.O.W. PLAT NO. | NOTE BOOK | CHECKED | INKED | INK CHECKED | COMPUTED | BY | DATE | CONTACT NO. | CATALOG NO.

INFRASTRUCTURE ENGINEERING

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -	
USER NAME = IEI	DRAWN - AJP	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - BAR	REVISED -	
PLOT DATE = 10/20/2012	DATE - 11/02/2012	REVISED -	

PEORIA COUNTY HIGHWAY DEPARTMENT

RIGHT-OF-WAY SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	18
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

PEORIA COUNTY HIGHWAY DEPARTMENT

NOTES:

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES, WEST ZONE NAD 83 (1997)

⊠ R.O.W. MARKER FOUND
● IRON PIN OR PIPE FOUND
○ SET 5/8" IRON PIN W/ CAP
——— EXISTING R.O.W. LINE
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——— SECTION LINE
——— PROPOSED R.O.W. LINE
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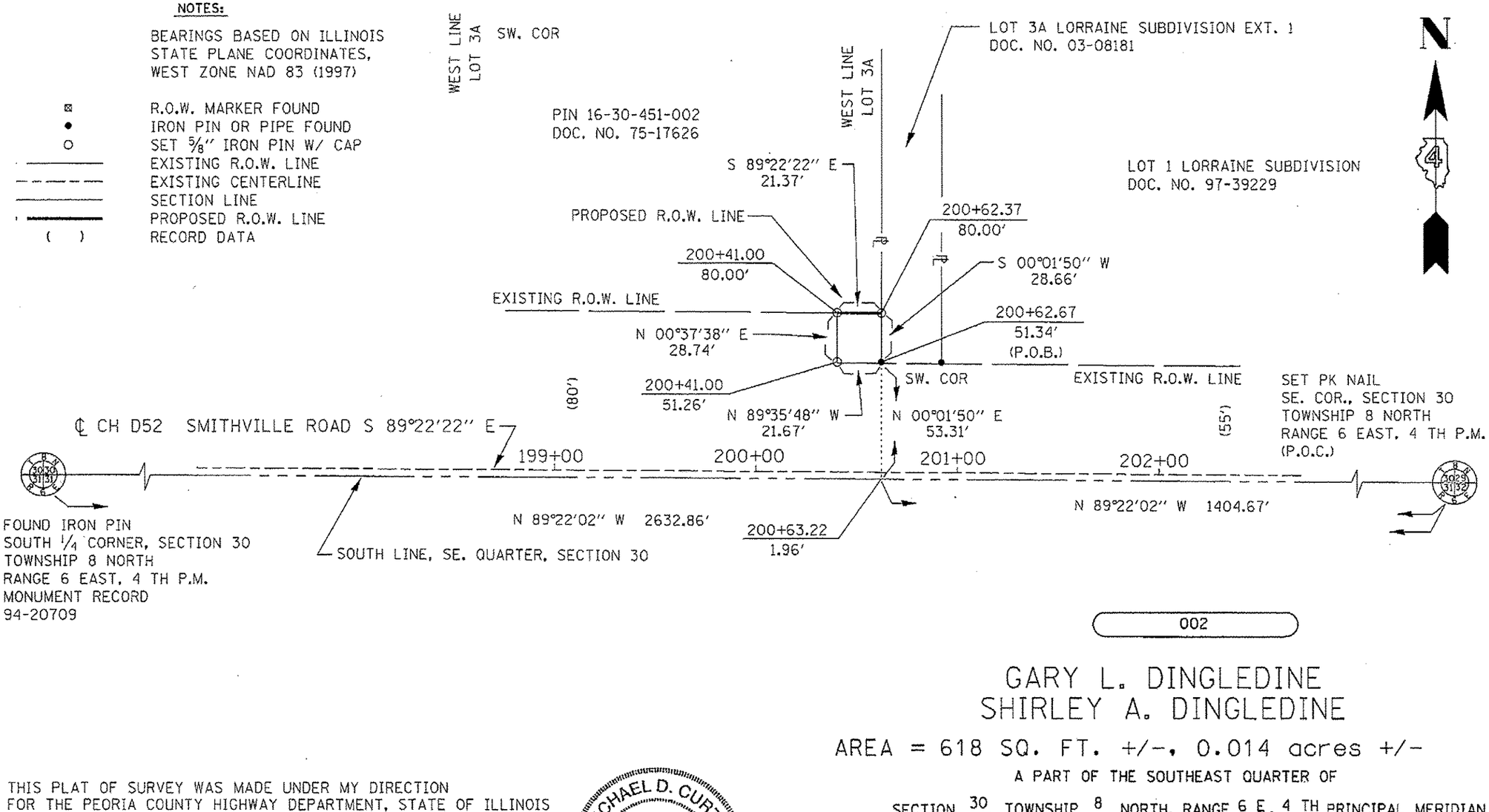

002

GARY L. DINGLEDINE
SHIRLEY A. DINGLEDINE

AREA = 618 SQ. FT. +/-, 0.014 acres +/-

A PART OF THE SOUTHEAST QUARTER OF

SECTION 30 TOWNSHIP 8 NORTH, RANGE 6 E, 4 TH PRINCIPAL MERIDIAN

PEORIA COUNTY

RIGHT OF WAY PLAT

ROUTE CH D52 SMITHVILLE ROAD CONSTRUCTION SECTION 10-00005-03-BR

SCALE: 1"= 50' DATE MAR. 2011 JOB NO. _____

THIS PLAT OF SURVEY WAS MADE UNDER MY DIRECTION FOR THE PEORIA COUNTY HIGHWAY DEPARTMENT, STATE OF ILLINOIS AND CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Michael D. Curtis March 07, 2011

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3071
LICENSE EXPIRES 11/30/12
FIELD WORK COMPLETED FEBRUARY OF 2011

MICHAEL D. CURTIS 3071 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS SPRINGFIELD, IL

PROPOSED ROW LIMITS ARE FROM STA 195+20 TO STA 204+98, ON THE SOUTH SIDE OF THE ROADWAY, AND FROM STA 200+20 TO STA 204+86, ON THE NORTH SIDE OF THE ROADWAY.

Signed Recorded BOOK PAGE DOCUMENT NO.

002

R.O.W. PLAT — NOTE BOOK — NO.
CATALOG NO. — CONTACT NO.
BY | DATE
COMPUTED | CHECKED | INKED | INK CHECKED

INFRASTRUCTURE ENGINEERING

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PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

RIGHT-OF-WAY SHEETS
SCALE: SHEET NO. OF SHEETS STA. TO STA.

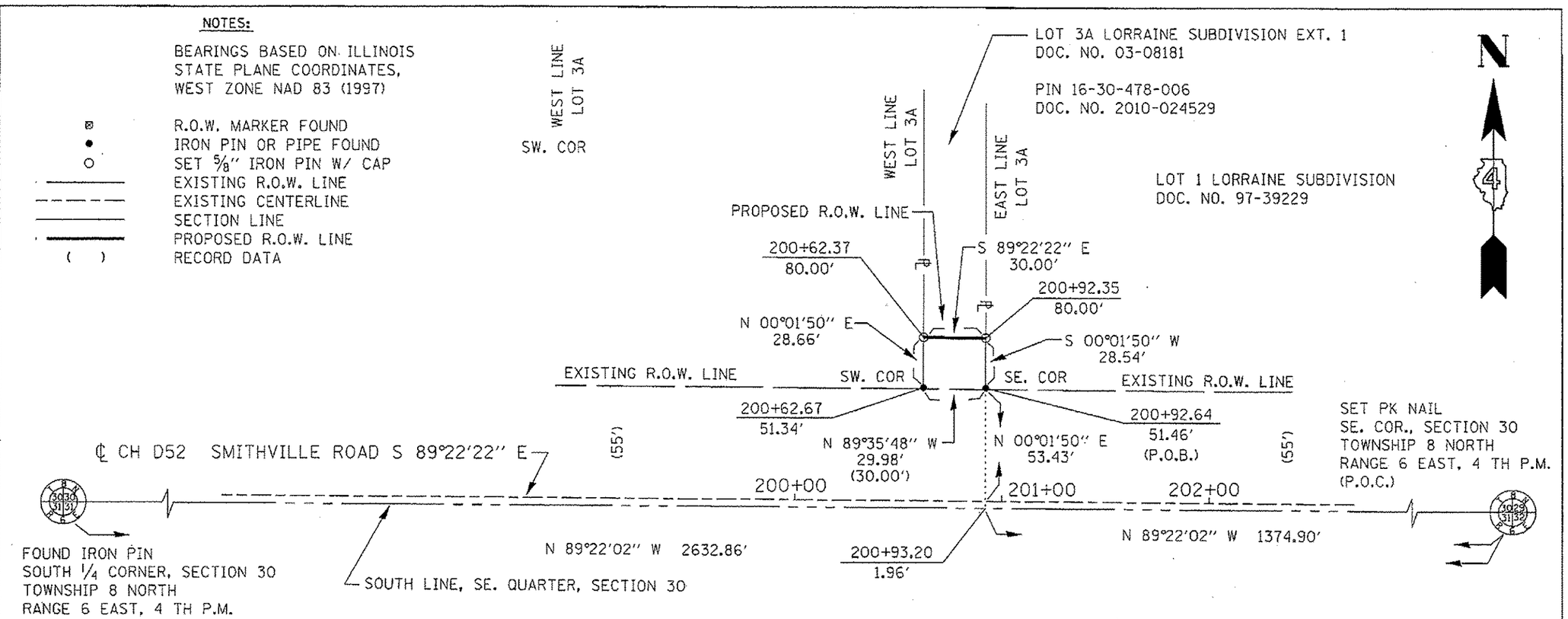
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	19
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

PEORIA COUNTY HIGHWAY DEPARTMENT

NOTES:

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES, WEST ZONE NAD 83 (1997)

R.O.W. MARKER FOUND
IRON PIN OR PIPE FOUND
SET 5/8" IRON PIN W/ CAP
EXISTING R.O.W. LINE
EXISTING CENTERLINE
SECTION LINE
PROPOSED R.O.W. LINE
( ) RECORD DATA



THIS PLAT OF SURVEY WAS MADE UNDER MY DIRECTION FOR THE PEORIA COUNTY HIGHWAY DEPARTMENT, STATE OF ILLINOIS AND CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Michael D Curtis March 07, 2011

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3071
LICENSE EXPIRES 11/30/12
FIELD WORK COMPLETED FEBRUARY OF 2011

MICHAEL D. CURTIS
3071
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
SPRINGFIELD, IL

003

STEFANIE T. EVANS
PHILLIP EVANS

AREA = 857 SQ. FT. +/-, 0.020 acres +/-

A PART OF THE SOUTHEAST QUARTER OF

SECTION 30 TOWNSHIP 8 NORTH, RANGE 6 E, 4 TH PRINCIPAL MERIDIAN
PEORIA COUNTY

RIGHT OF WAY PLAT

ROUTE CH D52 SMITHVILLE ROAD CONSTRUCTION SECTION 10-00005-03-BR

SCALE: 1"= 50' DATE MAR. 2011 JOB NO. _____

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Signed Recorded BOOK PAGE
DOCUMENT NO.

003

R.O.W. PLAT | NOTE BOOK | NO.
COMPUTED | CHECKED | INKED | INK CHECKED
BY | DATE
CATALOG NO.
CONTACT NO.

INFRASTRUCTURE ENGINEERING

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USER NAME = IEI	DRAWN - AJP	REVISED -	
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PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -	

PEORIA COUNTY HIGHWAY DEPARTMENT

RIGHT-OF-WAY SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	20
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

PEORIA COUNTY HIGHWAY DEPARTMENT

NOTES:

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES, WEST ZONE NAD 83 (1997)

⊠ R.O.W. MARKER FOUND
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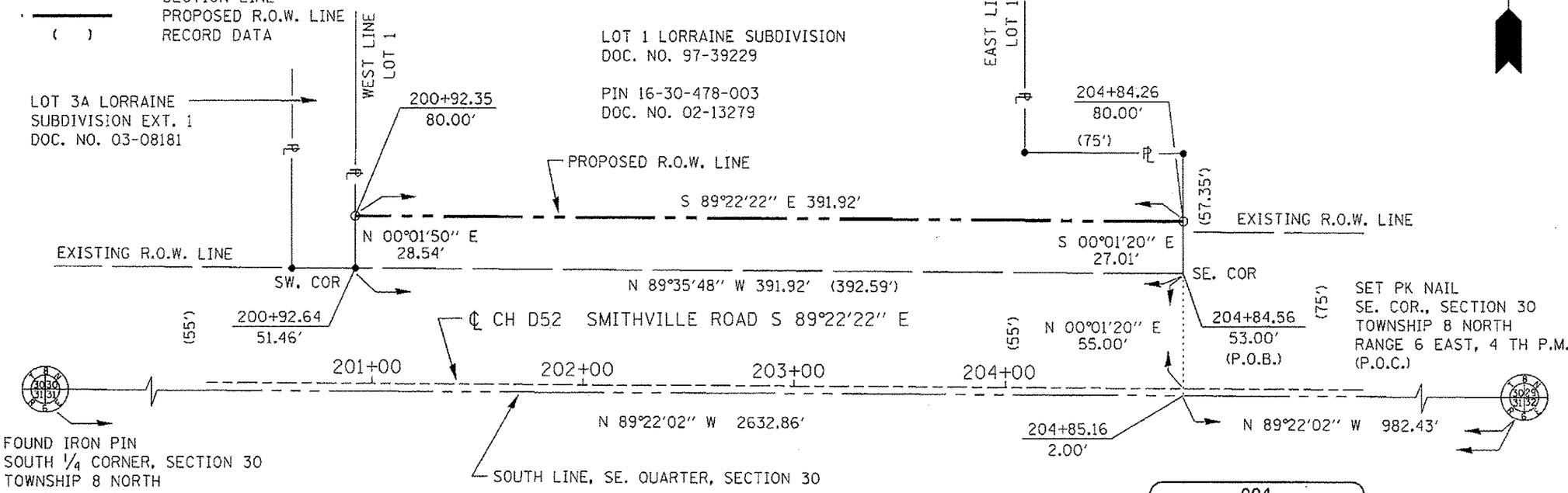

004

STEVEN J. ANDERSON

AREA = 10886 SQ. FT. +/-, 0.250 acres +/-

A PART OF THE SOUTHEAST QUARTER OF

SECTION 30 TOWNSHIP 8 NORTH, RANGE 6 E, 4 TH PRINCIPAL MERIDIAN

PEORIA COUNTY

RIGHT OF WAY PLAT

ROUTE CH D52 SMITHVILLE ROAD CONSTRUCTION SECTION 10-00005-03-BR

SCALE: 1"= 50' DATE MAR. 2011 JOB NO. _____

THIS PLAT OF SURVEY WAS MADE UNDER MY DIRECTION FOR THE PEORIA COUNTY HIGHWAY DEPARTMENT, STATE OF ILLINOIS AND CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Michael D. Curtis March 07, 2011

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3071
LICENSE EXPIRES 11/30/12
FIELD WORK COMPLETED FEBRUARY OF 2011

MICHAEL D. CURTIS 3071 PROFESSIONAL LAND SURVEYOR STATE OF ILLINOIS SPRINGFIELD, IL

PROPOSED ROW LIMITS ARE FROM STA 195+20 TO STA 204+98, ON THE SOUTH SIDE OF THE ROADWAY, AND FROM STA 200+20 TO STA 204+86, ON THE NORTH SIDE OF THE ROADWAY.

Signed Recorded BOOK PAGE DOCUMENT NO.

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R.O.W. PLAT NO. NOTE BOOK CATALOG NO. CONTACT NO.

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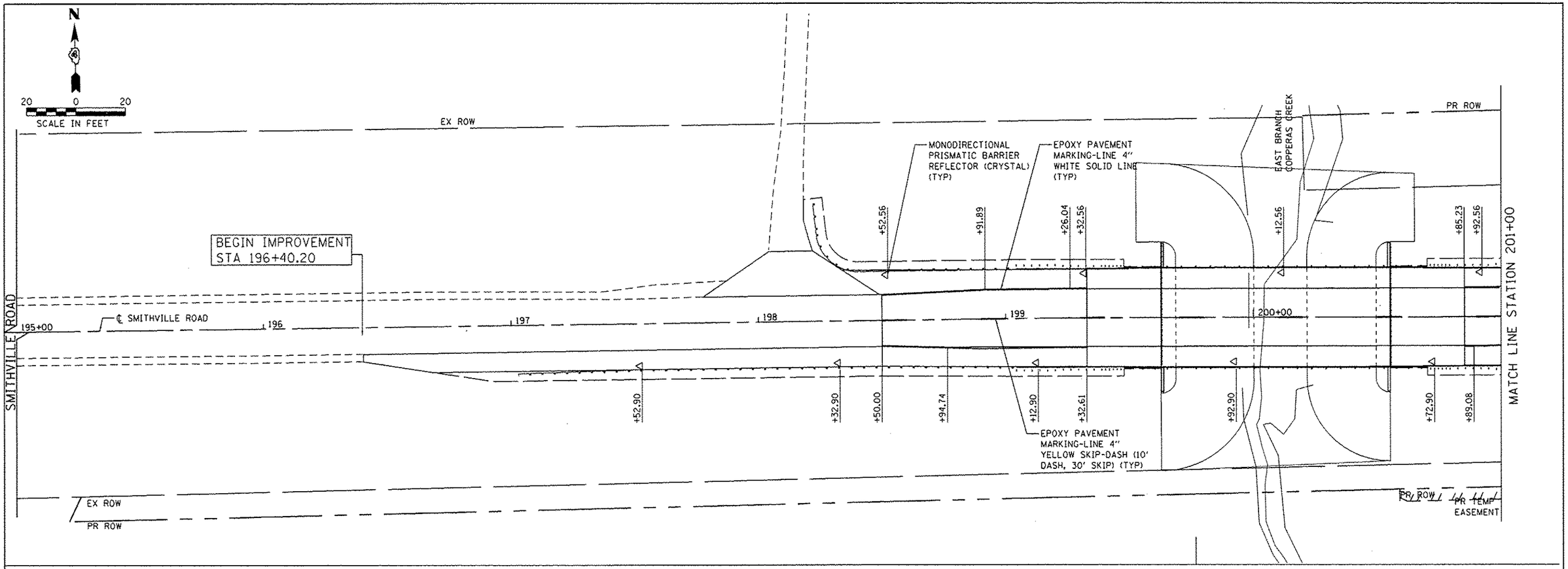
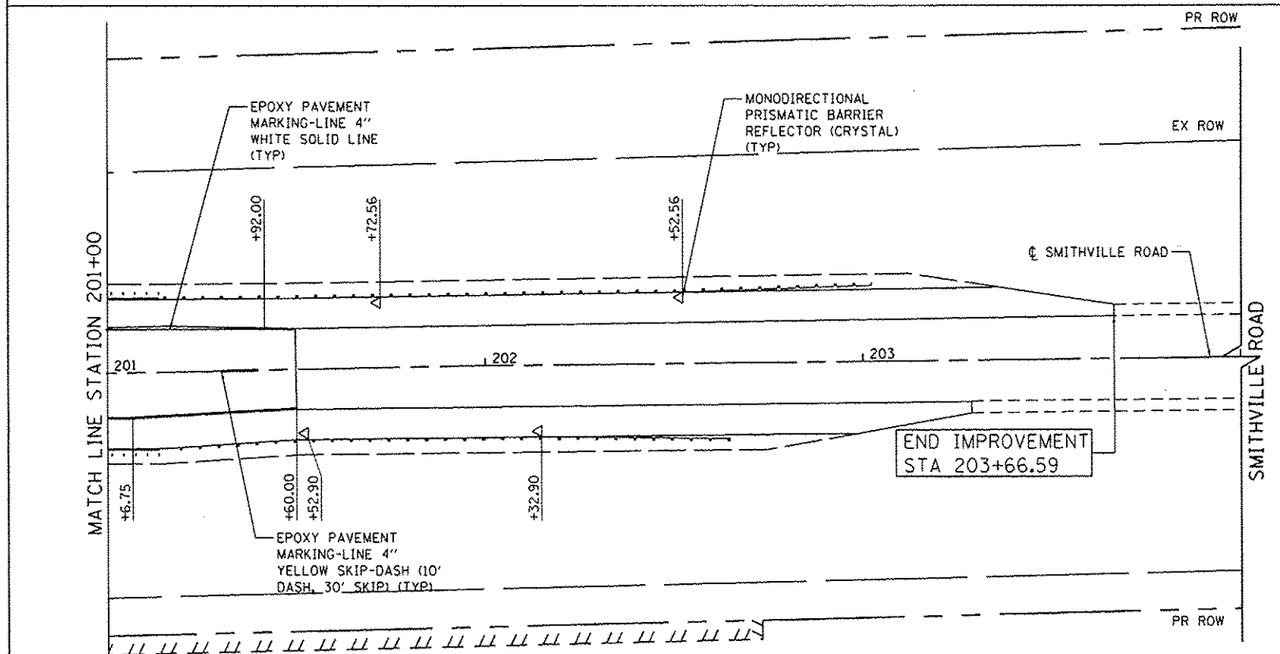
PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

RIGHT-OF-WAY SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	21
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		





INFRASTRUCTURE ENGINEERING

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PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

PAVEMENT MARKING PLAN

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. 197+00.00 TO STA. 203+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	22
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

Bench Mark: 2"x2" square cut in southeast corner of south head wall for box culvert under Smithville West Road.
44.36 feet south of Smithville West Road centerline at Station 194+58.99. Elevation = 590.85.

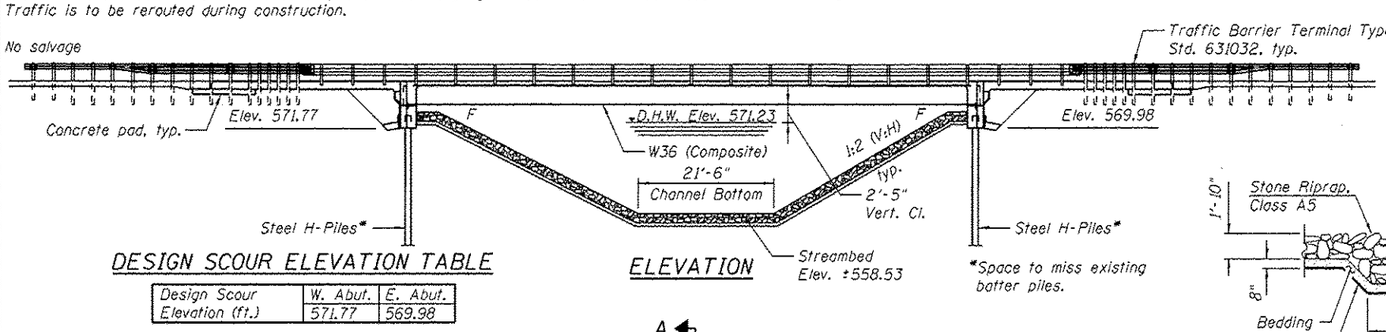
Existing Structure: S.N. 072-3047 built in 1964 as F.A.S. 1381, Section 5-2RG at Station 200+11.00.
The existing structure consists of a 3 span continuous cast-in-place concrete deck slab supported on pile bent abutments and 5 column concrete encased pile bent piers. Length = 99'-6" back to back abutments. Width = 28'-4" out to out deck.
Traffic is to be rerouted during construction.

I certify that to the best of 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.

STATE OF ILLINOIS
STEVEN P. KARLOWSKI
81-4663
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Steven P. Karlowski
EXP. 11/30/2012
DATE: 09/24/2012

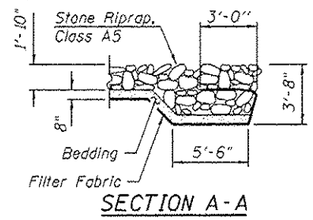
INDEX OF SHEETS



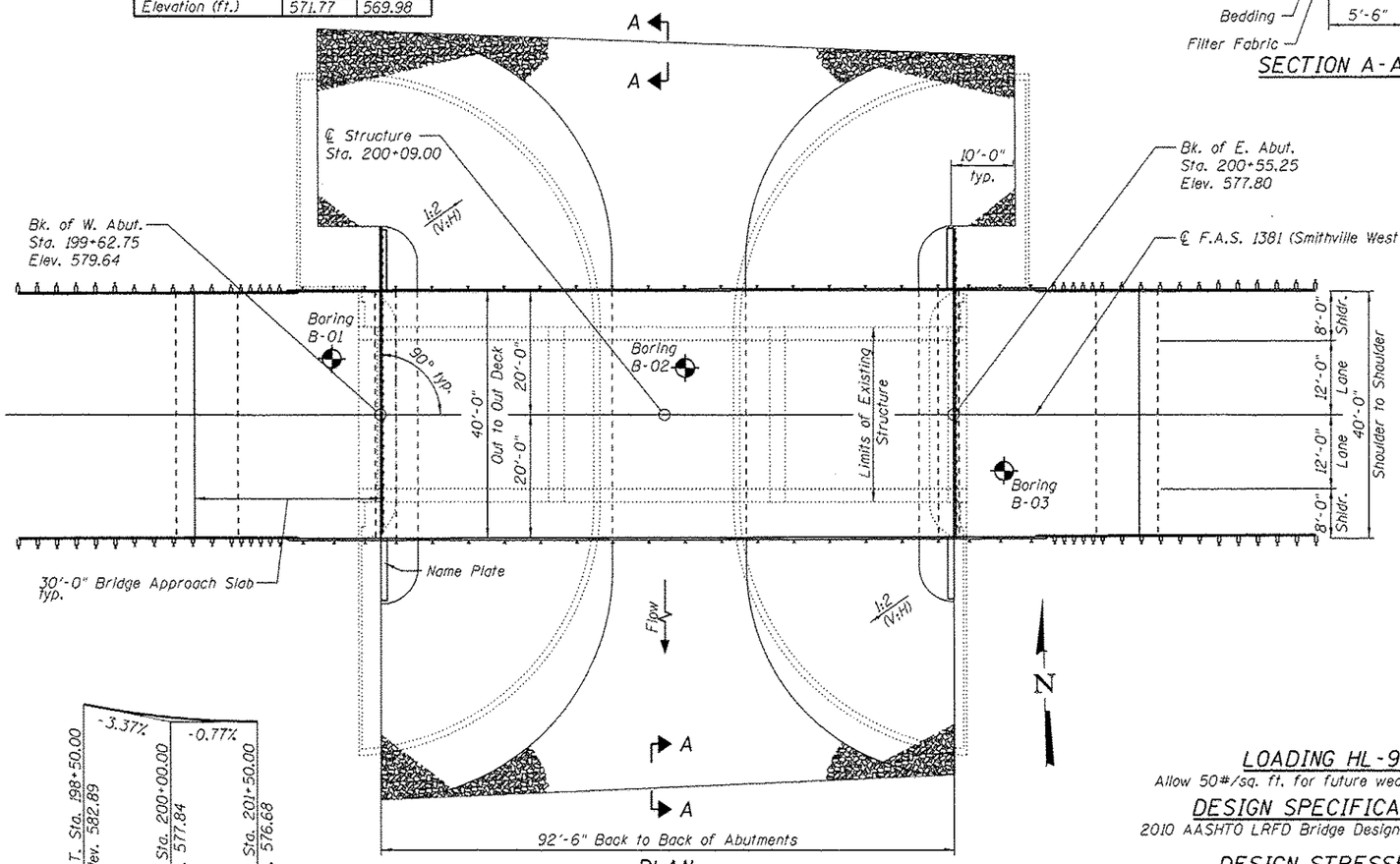
ELEVATION

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	571.77	569.98



SECTION A-A



PLAN

PROFILE GRADE
(along ℄ roadway)

WATERWAY INFORMATION

Drainage Area = 11.72 Sq. Mi. Low Grade Elev. 576.39 @ Sta. 202+18.52

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	20	3452	505	596	571.23	0.22	0.11	571.45	571.34
Base	100	5150	647	755	573.32	0.34	0.18	573.66	573.50
Overtopping									
Max. Calc.	500	7100	794	781	575.25	0.48	0.43	575.73	575.68

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.072g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.112g
Soil Site Class = D

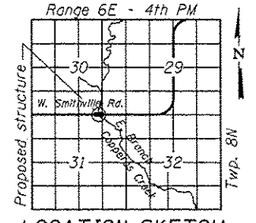
EAST BRANCH OF COPPERAS CREEK
BUILT 2013 BY
PEORIA COUNTY
SEC. 10-00005-03-BR
F.A.S. RT. 1381 STA. 200+09.00
STR. NO. 072-3148 LOADING HL-93

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		1.383	1.383
Filter Fabric	Sq. Yd.		1.383	1.383
Removal Of Existing Structures	Each	0.5	0.5	1
Structure Excavation	Cu. Yd.		77	77
Concrete Structures	Cu. Yd.		60.9	60.9
Concrete Superstructure	Cu. Yd.	280.5		280.5
Bridge Deck Grooving	Sq. Yd.	677		677
Concrete Encasement	Cu. Yd.		6.6	6.6
** Protective Coat	Sq. Yd.	708		708
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,212		1,212
Reinforcement Bars, Epoxy Coated	Pound	61,590	11,470	73,060
Bar Splicers	Each	86		86
Steel Railing, Type SM	Foot	245		245
Furnishing Steel Piles HP14x73	Foot		366.5	366.5
Driving Piles	Foot		366.5	366.5
Test Pile Steel HP14x73	Each		2	2
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		76	76
Granular Backfill for Structures	Cu. Yd.		115	115
Asbestos Bearing Pad Removal	Each	10		10
Pipe Underdrain for Structures, 4"	Foot		128	128

** Quantity is for Top of Deck, Outside Edges of Deck and Top of Approach Slabs.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
SMITHVILLE WEST ROAD OVER
E. BRANCH OF COPPERAS CREEK
F.A.S. 1381 SEC. 10-00005-03-BR
PEORIA COUNTY
STATION 200+09.00
STRUCTURE NO. 072-3148

PVP-18\2356 - Smithville Road Bridge\DGN\C400 Sheets\Structure1\072314B-2956-GB1-GPE.dgn
5:28:46 PM
10/29/2012

INFRASTRUCTURE ENGINEERING | INCORPORATED
456 Fulton Street | Suite 1041 Peoria, IL 61602
P 309.637.4999 | F 309.637.4220 | www.infrastructureeng.com

USER NAME =	DESIGNED - LAN	REVISED -
	CHECKED - SPK	REVISED -
PLOT SCALE =	DRAWN - LAN	REVISED -
PLOT DATE =	CHECKED - SPK	REVISED -

PEORIA COUNTY
HIGHWAY DEPARTMENT

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 072-3148
SHEET NO. 1 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	23
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 3 bolts. Bolts $^{3}/_{4}$ in. ϕ. holes $^{15}/_{16}$ in. ϕ. unless otherwise noted.

Calculated weight of Structural Steel = 112,170 pounds (AASHTO M 270 Grade 50W)

All structural steel shall be AASHTO M 270 Grade 50W. All structural steel shall be cleaned as specified in Article 506.07.

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

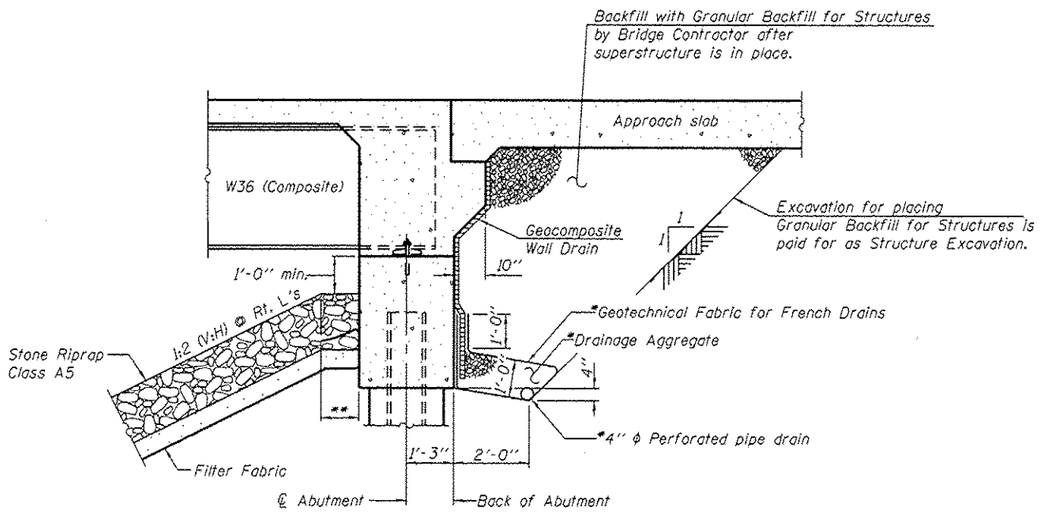
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

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

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



SECTION THRU ABUTMENT

*Included in the cost of Pipe Underdrains for Structures.

**3'-6¼" at West Abutment
3'-1¼" at East Abutment

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).

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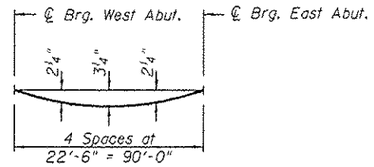
PEORIA COUNTY HIGHWAY DEPARTMENT

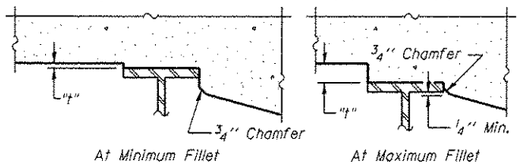
GENERAL NOTES AND ABUTMENT DRAINAGE DETAIL
STRUCTURE NO. 072-3148
SHEET NO. 2 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	24
		CONTRACT NO. 89464		
	ILLINOIS	FED. AID PROJECT		



DEAD LOAD DEFLECTION DIAGRAM

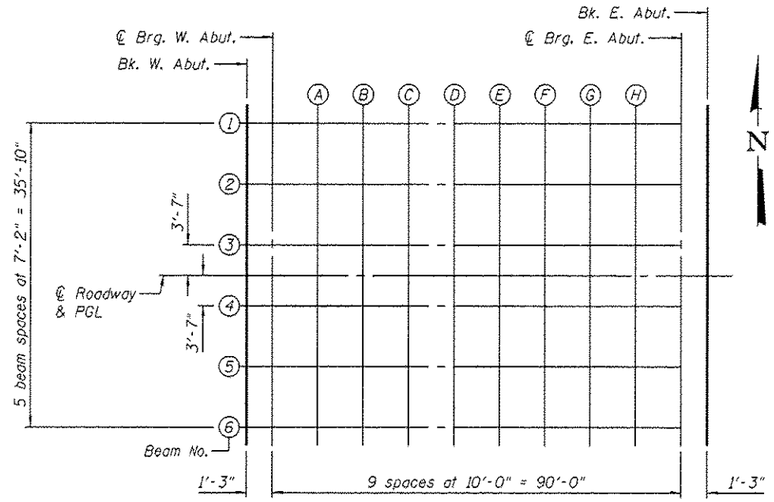
Note: (Includes weight of concrete only.)
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



At Minimum Fillet At Maximum Fillet

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 below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	-17.92	579.33	579.33
℄ Brg. W. Abut.	199+64.00	-17.92	579.30	579.30
A	199+74.00	-17.92	579.07	579.16
B	199+84.00	-17.92	578.84	579.02
C	199+94.00	-17.92	578.63	578.86
D	200+04.00	-17.92	578.42	578.68
E	200+14.00	-17.92	578.22	578.48
F	200+24.00	-17.92	578.03	578.26
G	200+34.00	-17.92	577.85	578.02
H	200+44.00	-17.92	577.67	577.77
℄ Brg. E. Abut.	200+54.00	-17.92	577.51	577.51
Bk. E. Abut.	200+55.25	-17.92	577.49	577.49

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	-10.75	579.47	579.47
℄ Brg. W. Abut.	199+64.00	-10.75	579.44	579.44
A	199+74.00	-10.75	579.21	579.30
B	199+84.00	-10.75	578.99	579.16
C	199+94.00	-10.75	578.77	579.00
D	200+04.00	-10.75	578.56	578.82
E	200+14.00	-10.75	578.36	578.63
F	200+24.00	-10.75	578.17	578.40
G	200+34.00	-10.75	577.99	578.16
H	200+44.00	-10.75	577.82	577.91
℄ Brg. E. Abut.	200+54.00	-10.75	577.65	577.65
Bk. E. Abut.	200+55.25	-10.75	577.63	577.63

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	-3.58	579.59	579.59
℄ Brg. W. Abut.	199+64.00	-3.58	579.56	579.56
A	199+74.00	-3.58	579.32	579.42
B	199+84.00	-3.58	579.10	579.27
C	199+94.00	-3.58	578.88	579.11
D	200+04.00	-3.58	578.67	578.94
E	200+14.00	-3.58	578.47	578.74
F	200+24.00	-3.58	578.28	578.52
G	200+34.00	-3.58	578.10	578.27
H	200+44.00	-3.58	577.93	578.02
℄ Brg. E. Abut.	200+54.00	-3.58	577.76	577.76
Bk. E. Abut.	200+55.25	-3.58	577.74	577.74

℄ ROADWAY AND PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	0.00	579.64	579.64
℄ Brg. W. Abut.	199+64.00	0.00	579.61	579.61
A	199+74.00	0.00	579.38	579.47
B	199+84.00	0.00	579.15	579.33
C	199+94.00	0.00	578.94	579.17
D	200+04.00	0.00	578.73	578.99
E	200+14.00	0.00	578.53	578.79
F	200+24.00	0.00	578.34	578.57
G	200+34.00	0.00	578.16	578.33
H	200+44.00	0.00	577.98	578.08
℄ Brg. E. Abut.	200+54.00	0.00	577.82	577.82
Bk. E. Abut.	200+55.25	0.00	577.80	577.80

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	3.58	579.59	579.59
℄ Brg. W. Abut.	199+64.00	3.58	579.56	579.56
A	199+74.00	3.58	579.32	579.42
B	199+84.00	3.58	579.10	579.27
C	199+94.00	3.58	578.88	579.11
D	200+04.00	3.58	578.67	578.94
E	200+14.00	3.58	578.47	578.74
F	200+24.00	3.58	578.28	578.52
G	200+34.00	3.58	578.10	578.27
H	200+44.00	3.58	577.93	578.02
℄ Brg. E. Abut.	200+54.00	3.58	577.76	577.76
Bk. E. Abut.	200+55.25	3.58	577.74	577.74

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	10.75	579.47	579.47
℄ Brg. W. Abut.	199+64.00	10.75	579.44	579.44
A	199+74.00	10.75	579.21	579.30
B	199+84.00	10.75	578.99	579.16
C	199+94.00	10.75	578.77	579.00
D	200+04.00	10.75	578.56	578.82
E	200+14.00	10.75	578.36	578.63
F	200+24.00	10.75	578.17	578.40
G	200+34.00	10.75	577.99	578.16
H	200+44.00	10.75	577.82	577.91
℄ Brg. E. Abut.	200+54.00	10.75	577.65	577.65
Bk. E. Abut.	200+55.25	10.75	577.63	577.63

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	199+62.75	17.92	579.33	579.33
℄ Brg. W. Abut.	199+64.00	17.92	579.30	579.30
A	199+74.00	17.92	579.07	579.16
B	199+84.00	17.92	578.84	579.02
C	199+94.00	17.92	578.63	578.86
D	200+04.00	17.92	578.42	578.68
E	200+14.00	17.92	578.22	578.48
F	200+24.00	17.92	578.03	578.26
G	200+34.00	17.92	577.85	578.02
H	200+44.00	17.92	577.67	577.77
℄ Brg. E. Abut.	200+54.00	17.92	577.51	577.51
Bk. E. Abut.	200+55.25	17.92	577.49	577.49

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PEORIA COUNTY HIGHWAY DEPARTMENT

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 072-3148
SHEET NO. 3 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	25
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF SHOULDER

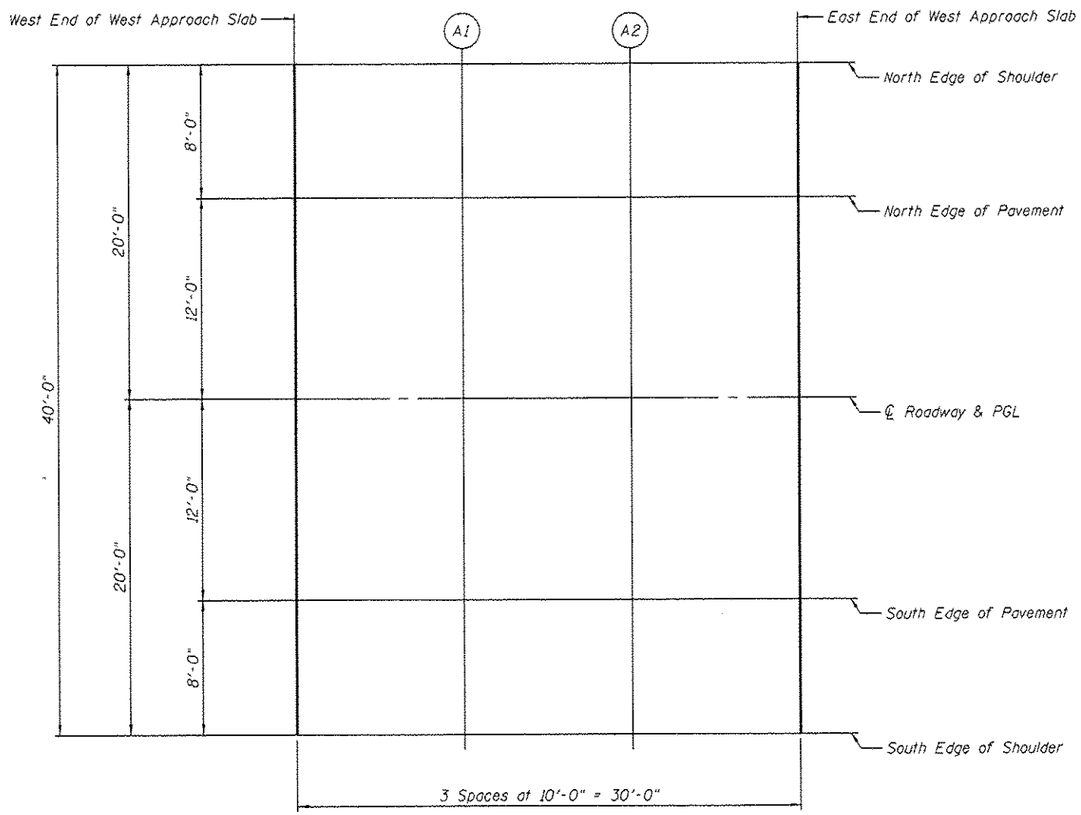
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	199+32.75	-20.00	580.05
A1	199+42.75	-20.00	579.78
A2	199+52.75	-20.00	579.53
E. End W. Appr. Slab	199+62.75	-20.00	579.29

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	199+32.75	-12.00	580.21
A1	199+42.75	-12.00	579.95
A2	199+52.75	-12.00	579.70
E. End W. Appr. Slab	199+62.75	-12.00	579.46

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	199+32.75	0.00	580.40
A1	199+42.75	0.00	580.14
A2	199+52.75	0.00	579.89
E. End W. Appr. Slab	199+62.75	0.00	579.64



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	199+32.75	12.00	580.21
A1	199+42.75	12.00	579.95
A2	199+52.75	12.00	579.70
E. End W. Appr. Slab	199+62.75	12.00	579.46

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	199+32.75	20.00	580.05
A1	199+42.75	20.00	579.78
A2	199+52.75	20.00	579.53
E. End W. Appr. Slab	199+62.75	20.00	579.29

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PEORIA COUNTY HIGHWAY DEPARTMENT

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-3148
SHEET NO. 4 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	26
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF SHOULDER

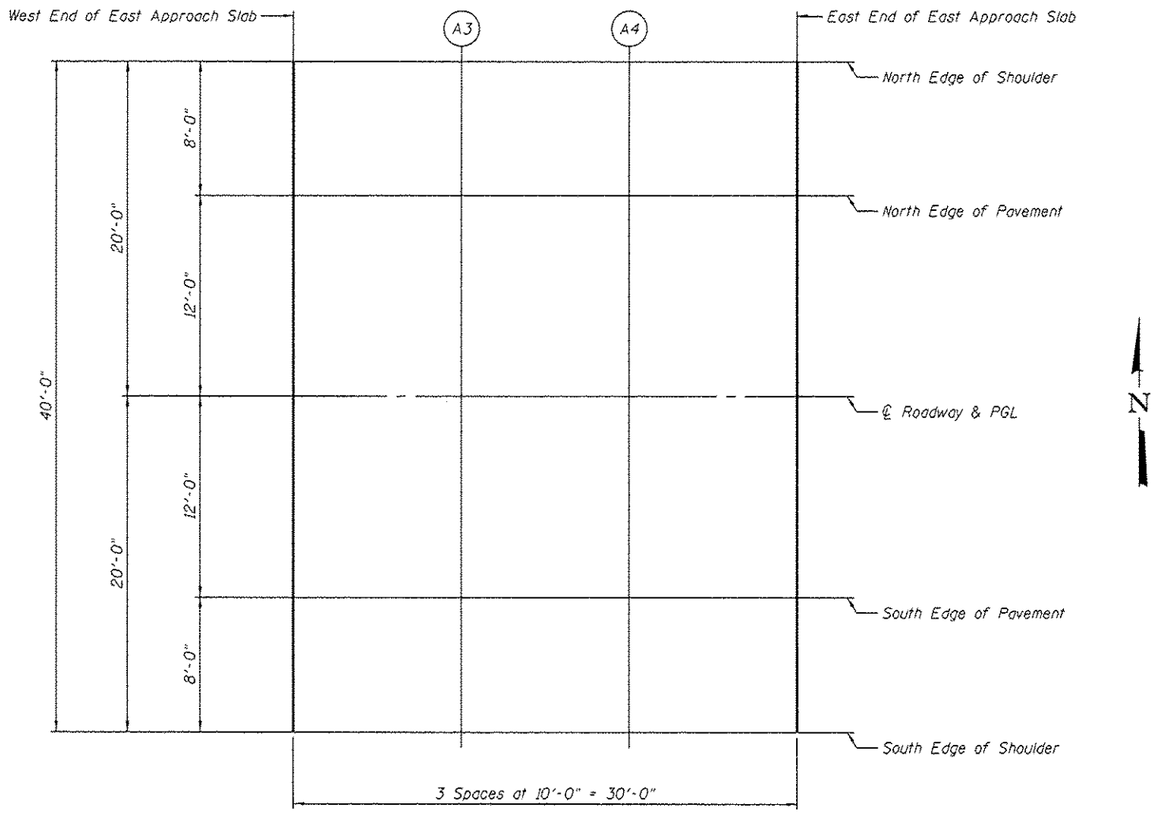
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+55.25	-20.00	577.45
A3	200+65.25	-20.00	577.29
A4	200+75.25	-20.00	577.14
E. End E. Appr. Slab	200+85.25	-20.00	577.01

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+55.25	-12.00	577.61
A3	200+65.25	-12.00	577.46
A4	200+75.25	-12.00	577.31
E. End E. Appr. Slab	200+85.25	-12.00	577.17

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+55.25	0.00	577.80
A3	200+65.25	0.00	577.65
A4	200+75.25	0.00	577.50
E. End E. Appr. Slab	200+85.25	0.00	577.36



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+55.25	12.00	577.61
A3	200+65.25	12.00	577.46
A4	200+75.25	12.00	577.31
E. End E. Appr. Slab	200+85.25	12.00	577.17

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+55.25	20.00	577.45
A3	200+65.25	20.00	577.29
A4	200+75.25	20.00	577.14
E. End E. Appr. Slab	200+85.25	20.00	577.01

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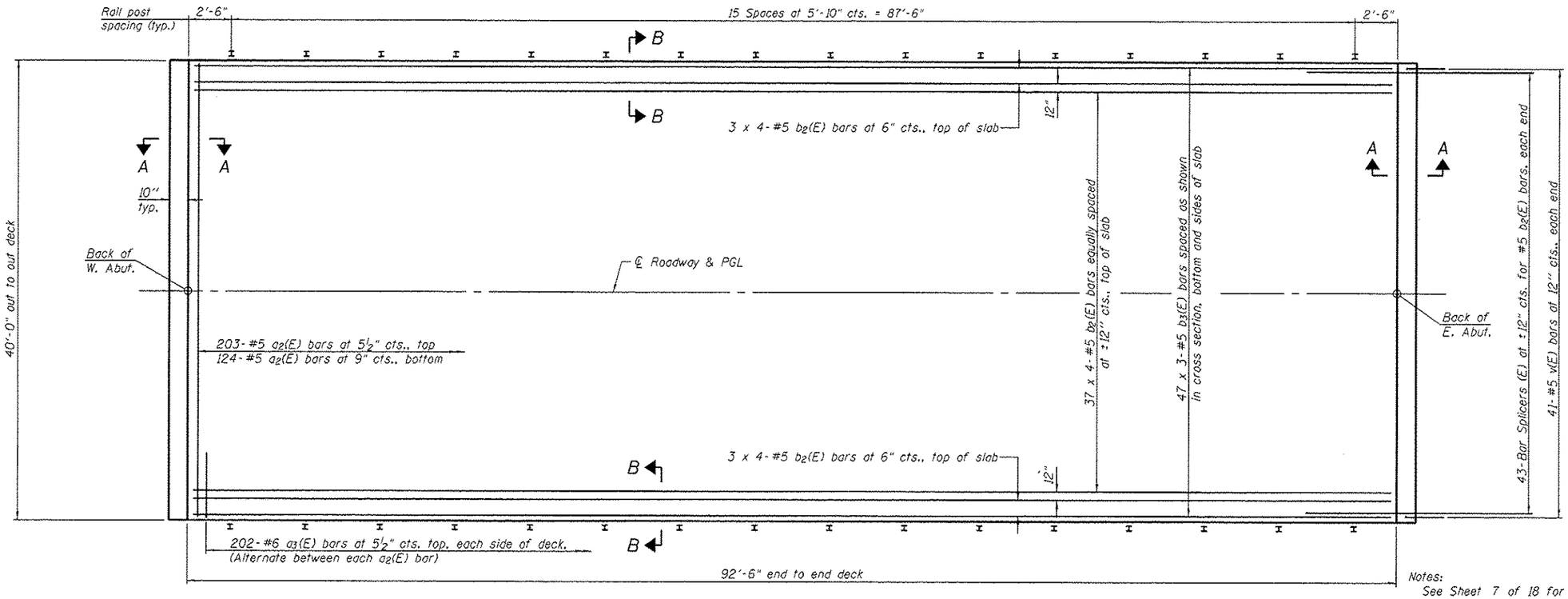
PEORIA COUNTY HIGHWAY DEPARTMENT

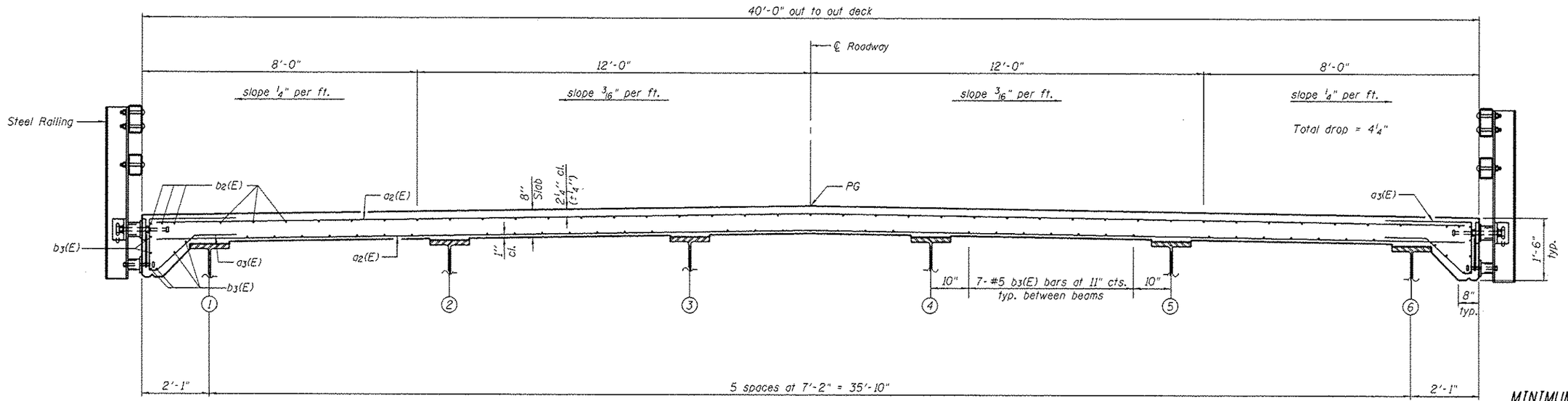
TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-3148
SHEET NO. 5 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1361	10-00005-03-BR	PEORIA	55	27
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			



PLAN

Notes:
See Sheet 7 of 18 for Section A-A, Section B-B, diaphragm details and Bill of Material.
Bars indicated thus 41 x 4-#5 etc. indicates 41 lines of bars with 4 lengths per line.
See Sheet 10 of 18 for railing details.



CROSS SECTION
(Looking East)

MINIMUM BAR LAP
#5 bar = 3'-3"

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			PLOT SCALE =	CHECKED - SPK	REVISED -		
			PLOT DATE =	DRAWN - LAN	REVISED -		SHEET NO. 6 OF 18 SHEETS
				CHECKED - SPK	REVISED -		

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	28
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

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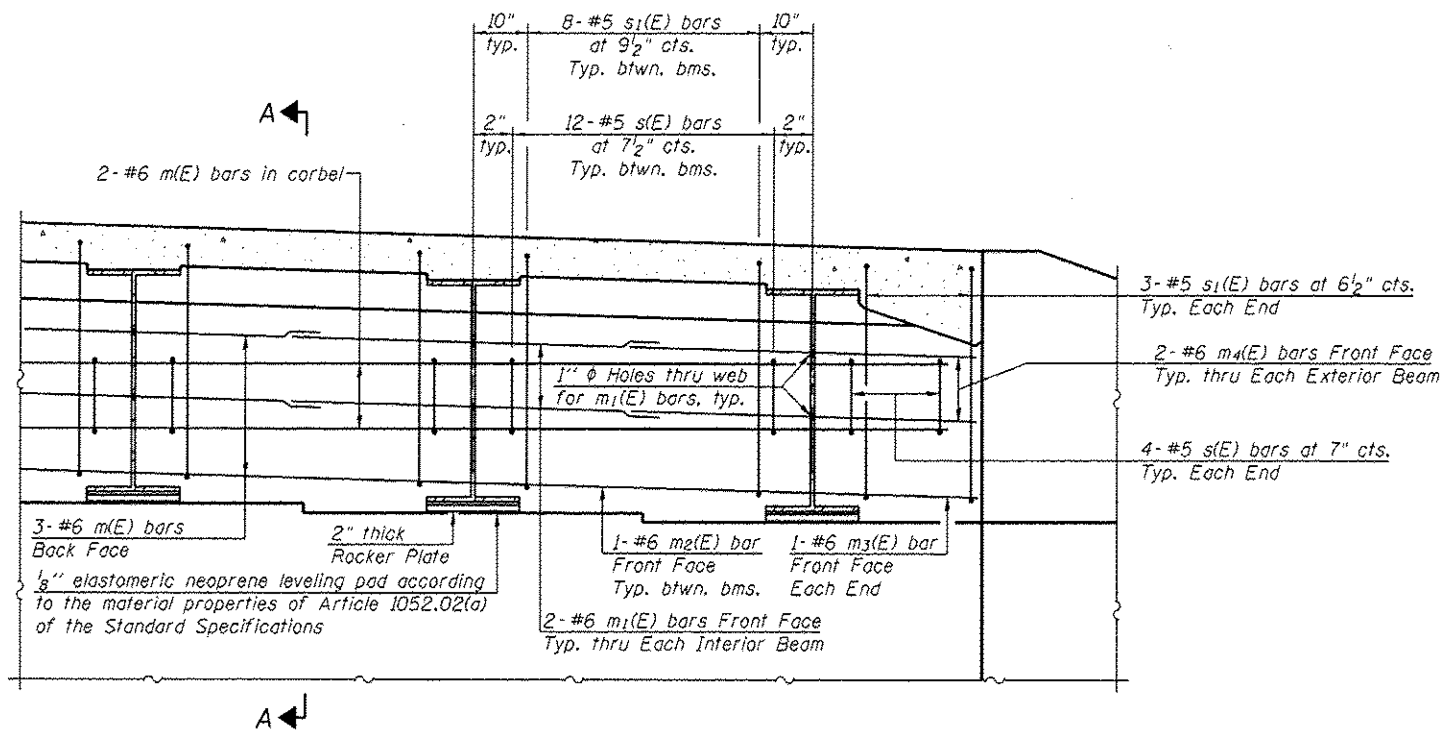
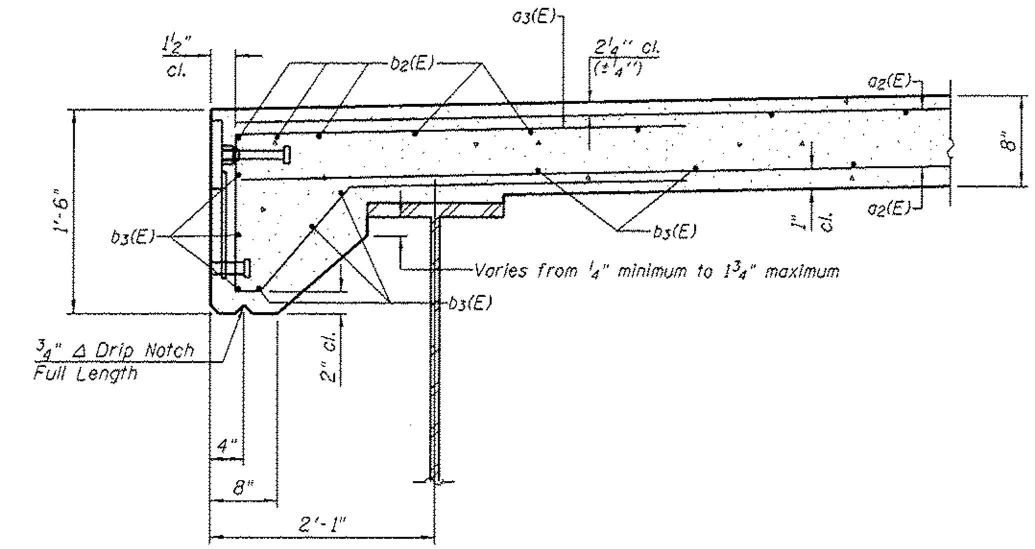


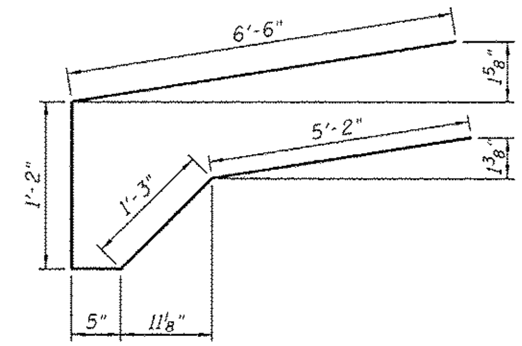
DIAPHRAGM ELEVATION AT ABUTMENT

MIN. BAR LAP

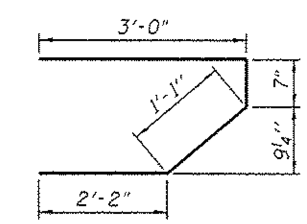
#6 bar = 3'-4"



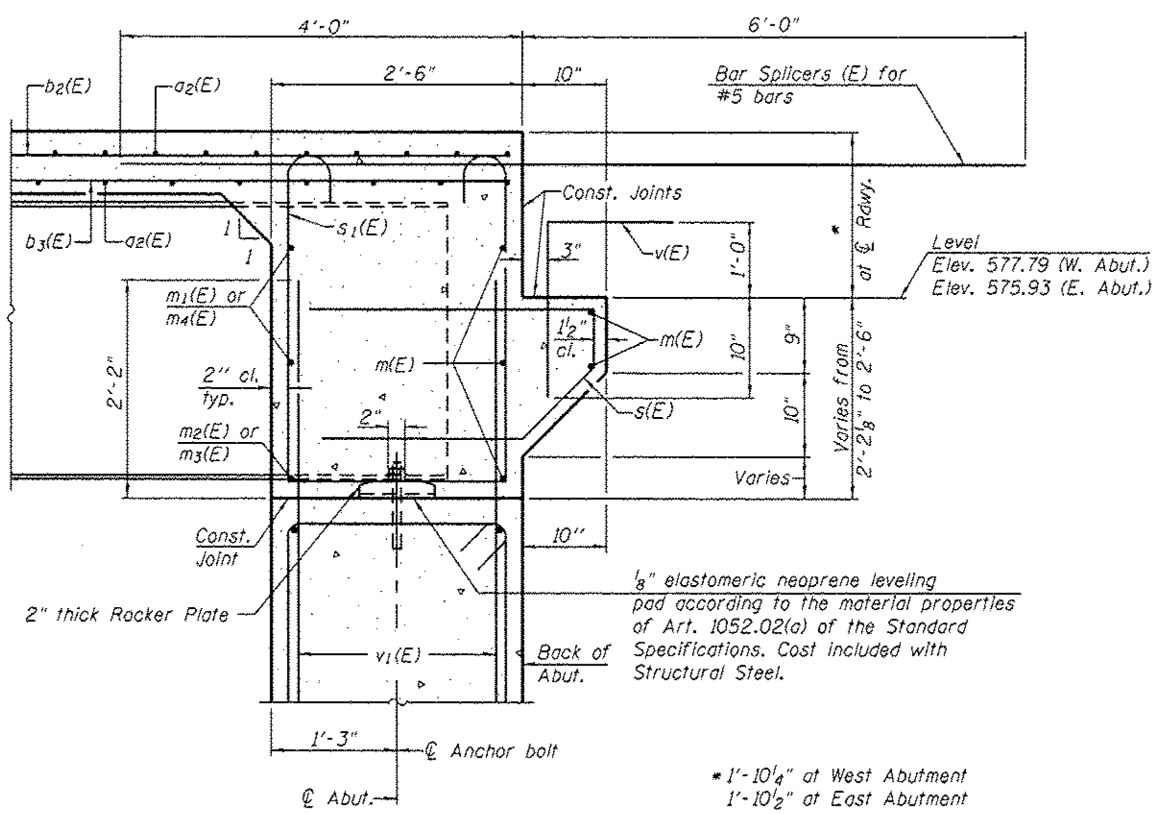
SECTION B-B



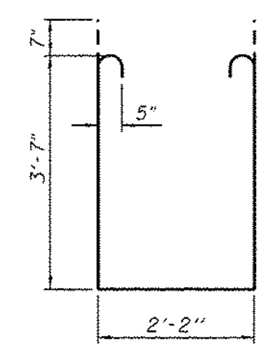
BAR a_3(E)



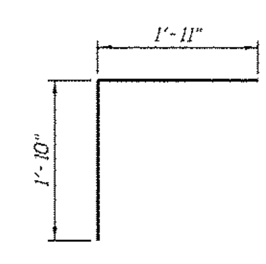
BAR s(E)



SECTION A-A



BAR s_1(E)



BAR v(E)

SUPERSTRUCTURE

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	327	#5	39'-8"	—
a_3(E)	404	#6	14'-6"	
b_2(E)	172	#5	25'-6"	—
b_3(E)	141	#5	33'-0"	—
m(E)	10	#6	39'-8"	—
m_1(E)	16	#6	10'-6"	—
m_2(E)	10	#6	6'-10"	—
m_3(E)	4	#6	1'-9"	—
m_4(E)	8	#6	7'-2"	—
s(E)	136	#5	6'-10"	
s_1(E)	92	#5	10'-6"	
v(E)	82	#5	3'-9"	
Concrete Superstructure			Cu. Yd.	143.2
Bridge Deck Grooving			Sq. Yd.	411
Protective Coat			Sq. Yd.	442
Reinforcement Bars, Epoxy Coated			Pound	35,100
Bar Splicers			Each	86

Notes:

Concrete in diaphragm is included with Concrete Superstructure.

For details of v_1(E) bar see sheets 12 and 13 of 18.

For bar splicer detail see sheet 15 of 18.

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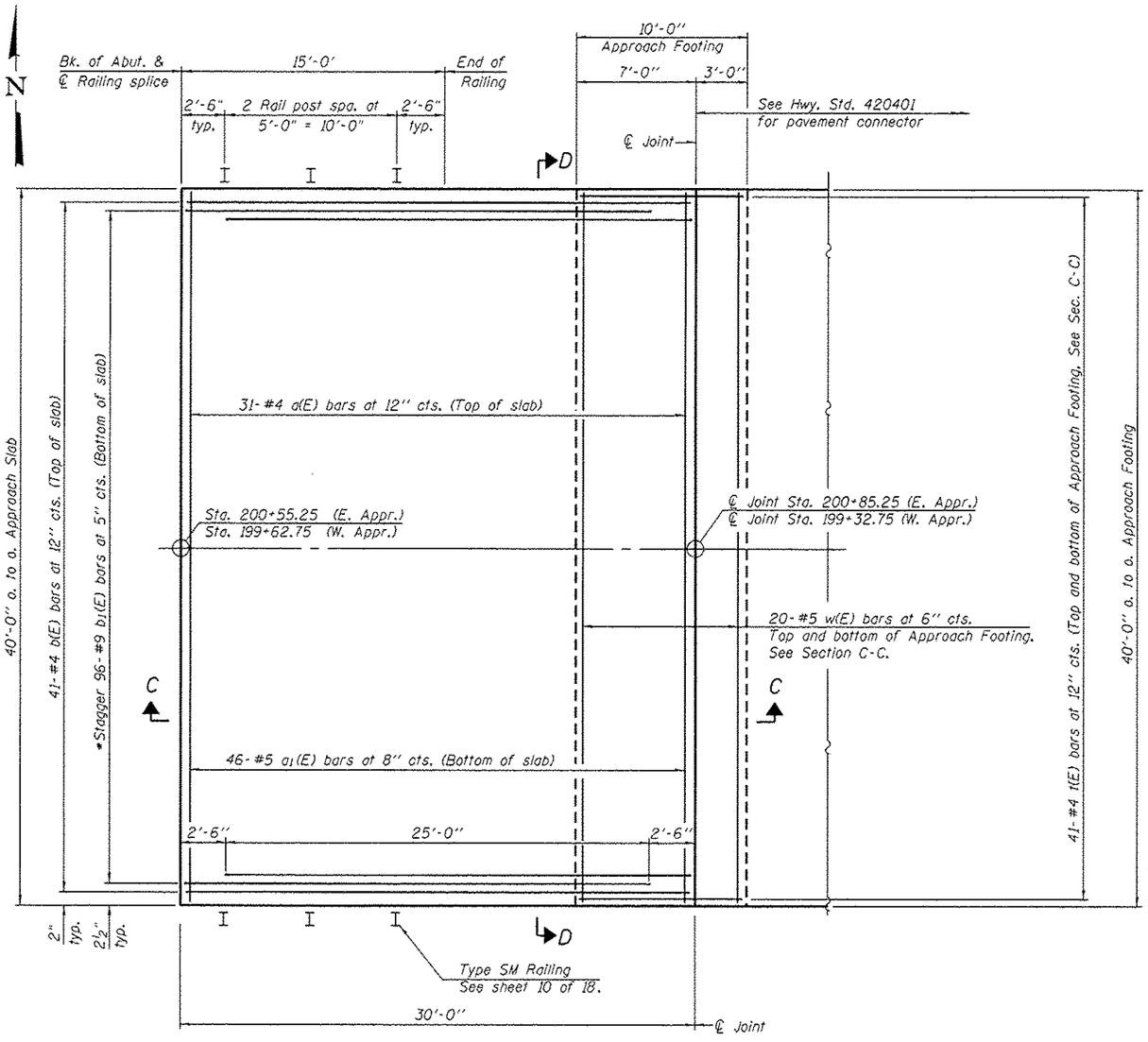
PEORIA COUNTY HIGHWAY DEPARTMENT

SUPERSTRUCTURE DETAILS STRUCTURE NO. 072-3148

SHEET NO. 7 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	29
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

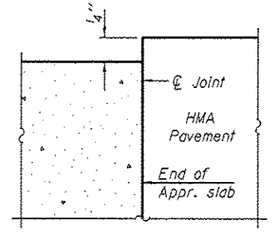
Notes:
See sheet 9 of 18 for Sections C-C & D-D.
See sheet 10 of 18 for Railing Connection.
a(E) and a_1(E) bar spacings measured along ℄ Rdwy.



PLAN

(Shown for East Approach Slab)

* Tilt #9 b_1(E) bars as required to maintain clearance.



FLEXIBLE PAVEMENT

DETAIL A

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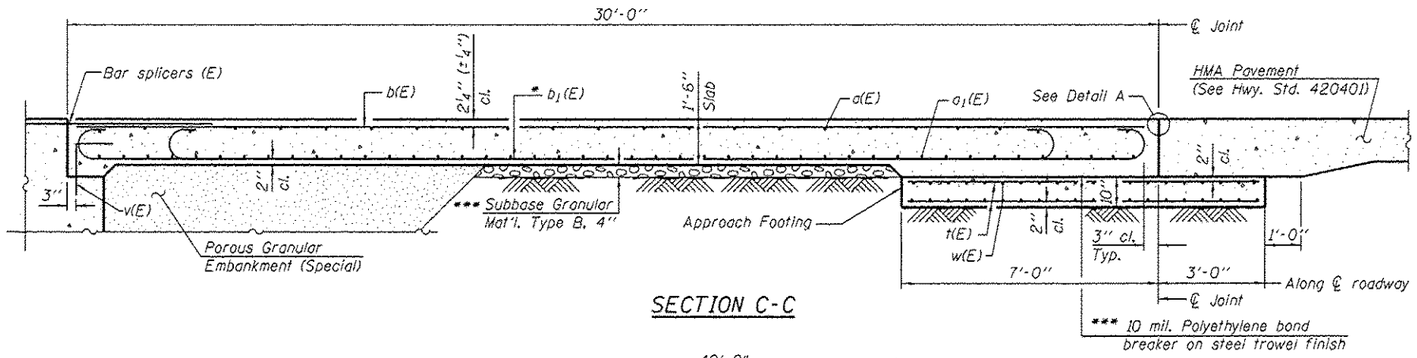
PLOT DATE =	CHECKED - SPK	REVISED -

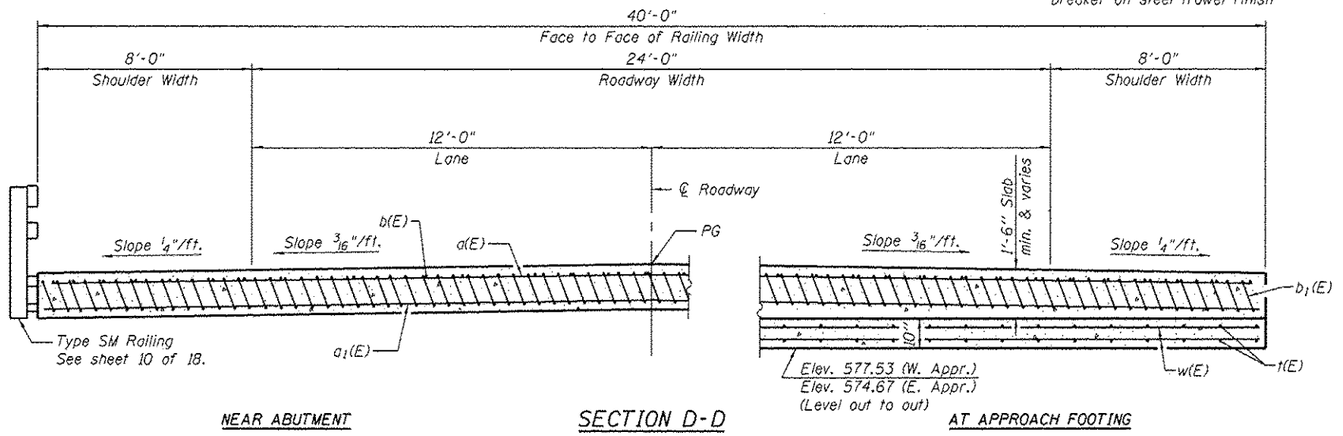
PEORIA COUNTY HIGHWAY DEPARTMENT

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 072-3148
SHEET NO. 8 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	30
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		



SECTION C-C



NEAR ABUTMENT

SECTION D-D

(See Plan for dimensions not shown)

AT APPROACH FOOTING

Notes:

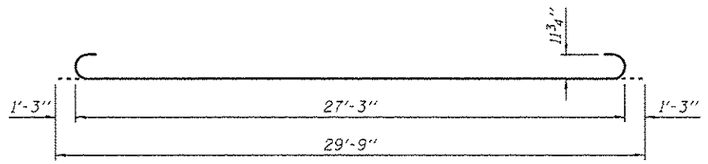
See sheet 8 of 18 for Detail A.
Approach Slab concrete shall be paid for as Concrete Superstructure.
Approach Footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 7 of 18.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 15 of 18.
Cost of excavation for Approach Footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 18.

* Tilt #9 $b_1(E)$ bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	62	#4	39'-8"	———
$a_1(E)$	92	#5	39'-8"	———
b(E)	82	#4	29'-8"	———
$b_1(E)$	192	#9	29'-9"	⌐——¬
t(E)	164	#4	9'-8"	———
w(E)	80	#5	39'-8"	———
Concrete Structures			Cu. Yd.	24.7
Concrete Superstructure			Cu. Yd.	137.8
Bridge Deck Grooving			Sq. Yd.	266
Protective Coat			Sq. Yd.	266
Reinforcement Bars, Epoxy Coated			Pound	30,860



BAR $b_1(E)$

PLOT SCALE = 1
PLOT DATE = 10/29/2012
USER NAME =
DESIGNED - LAN
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DRAWN - LAN
CHECKED - SPK
REVISED -
REVISED -
REVISED -
INFRASTRUCTURE ENGINEERING INCORPORATED
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PEORIA COUNTY HIGHWAY DEPARTMENT
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 072-3148
SHEET NO. 9 OF 18 SHEETS
F.A.S. RTE. 1381 | SECTION 10-00005-03-BR | COUNTY PEORIA | TOTAL SHEETS 55 | SHEET NO. 31
CONTRACT NO. 89464
ILLINOIS FED. AID PROJECT
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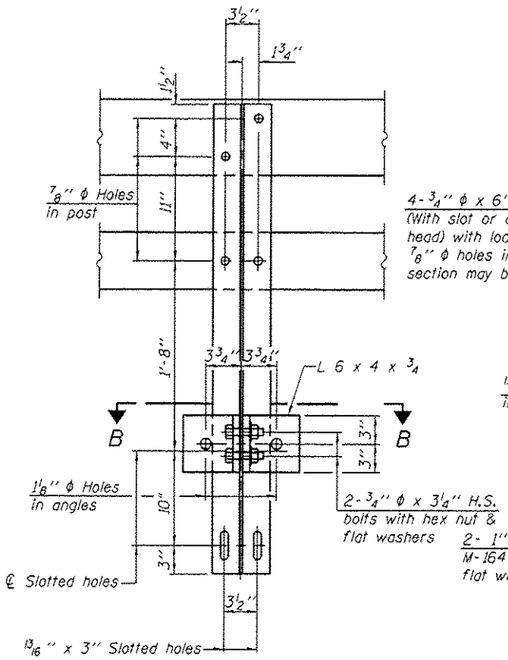
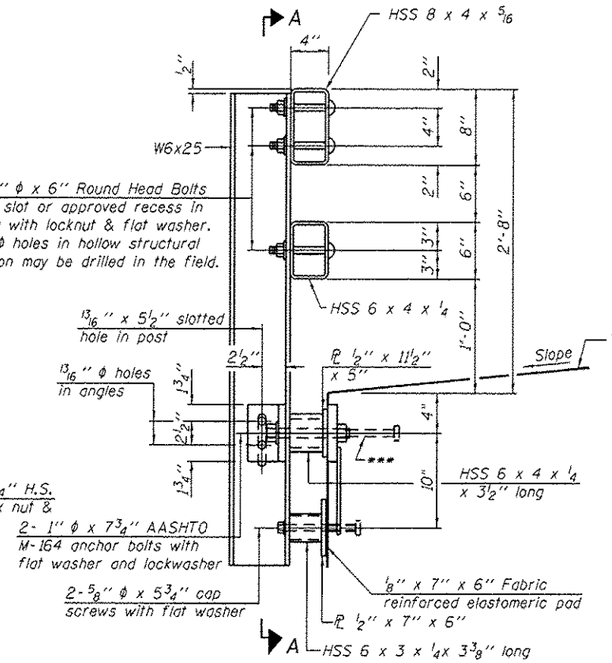
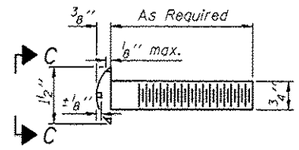


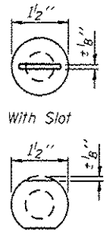
SECTION A-A



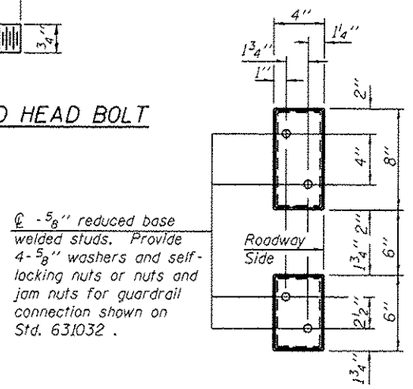
SECTION AT RAIL POST



DETAIL OF ¾" ϕ ROUND HEAD BOLT

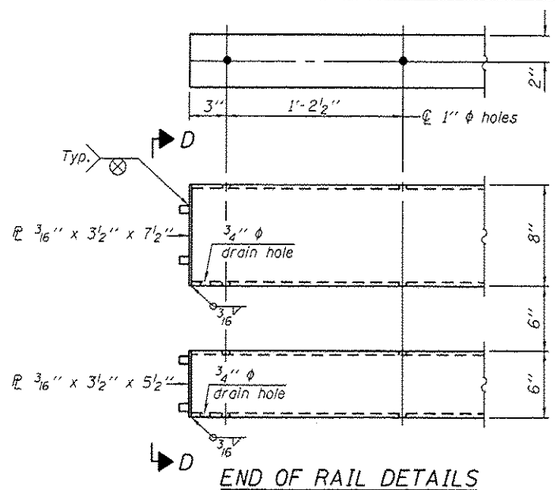


VIEW C-C

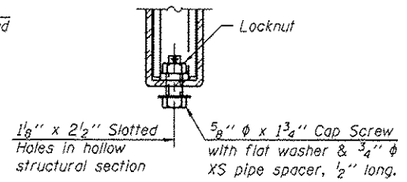


℄ - ⅝" reduced base welded studs. Provide 4-⅝" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032 .

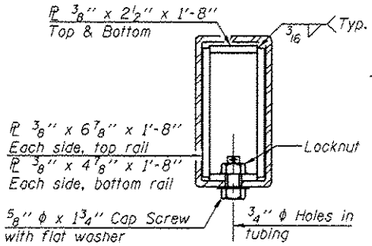
VIEW D-D



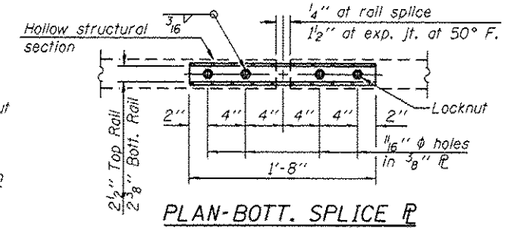
END OF RAIL DETAILS



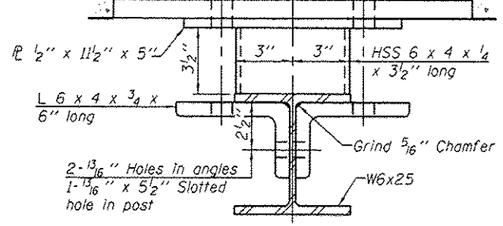
RAIL SPLICE CONNECTION AT EXPANSION JT.



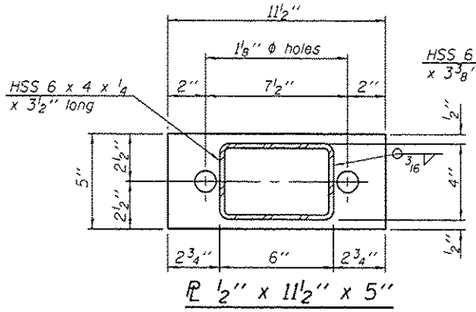
SECTION AT RAIL SPLICE



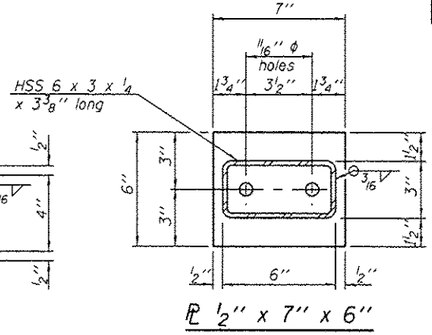
PLAN-BOTT. SPLICE ℄ TYPICAL



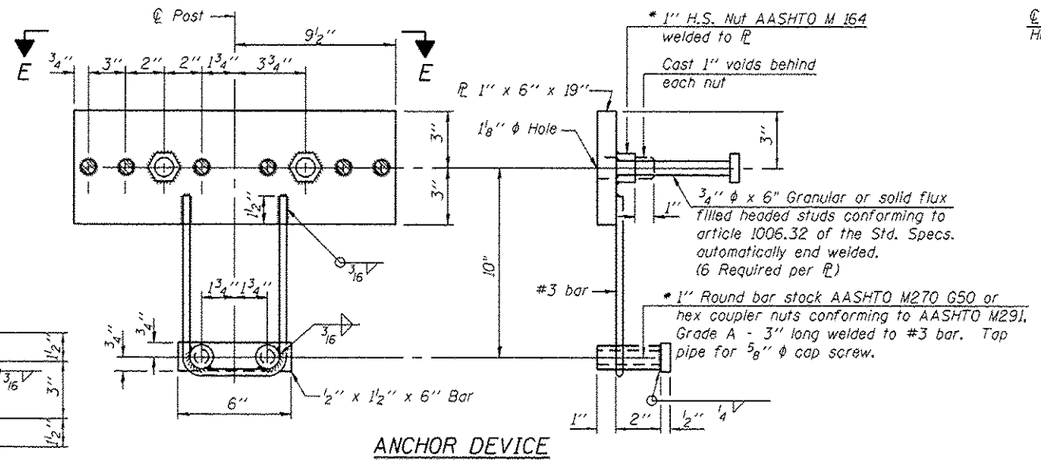
SECTION B-B



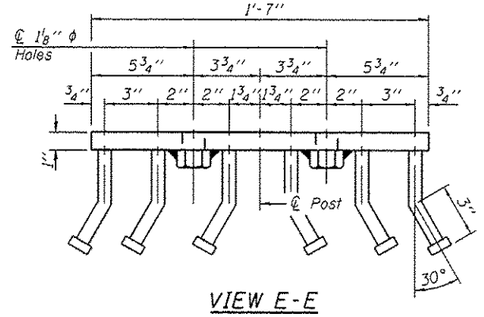
℄ ½" x 11½" x 5"



℄ ½" x 7" x 6"



ANCHOR DEVICE



VIEW E-E

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.

*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

*Threaded areas shall be plugged or blocked off during concrete placement. Galvanized after fabrication.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	245

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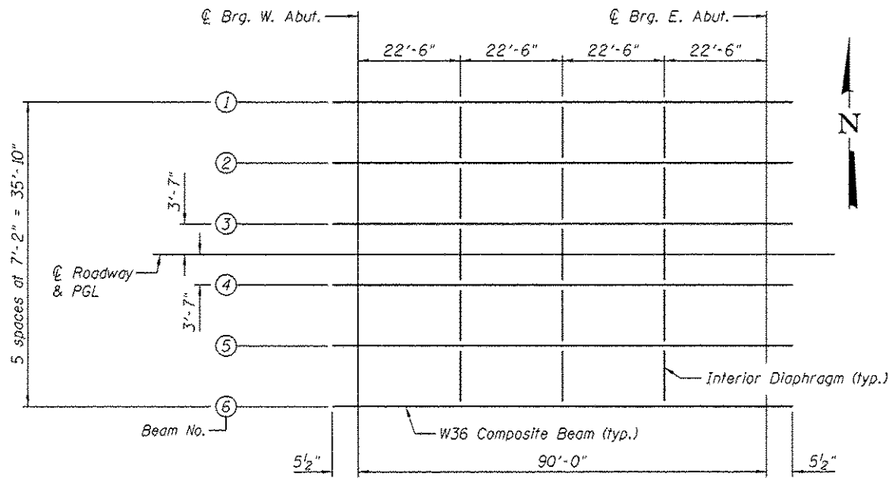
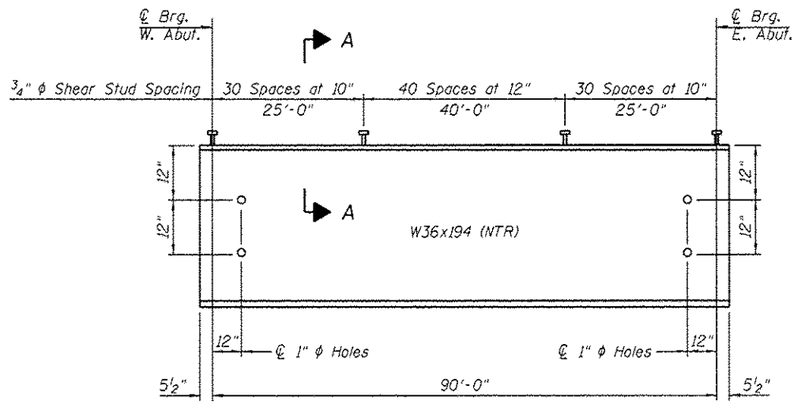
PEORIA COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE SM
STRUCTURE NO. 072-3148
SHEET NO. 10 OF 18 SHEETS

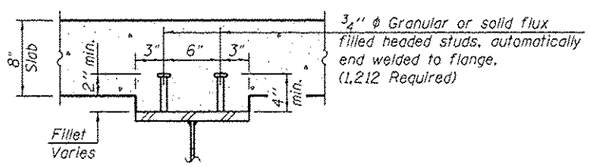
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	32
		CONTRACT NO. 89464		
	ILLINOIS	FED. AID PROJECT		



FRAMING PLAN



BEAM ELEVATION



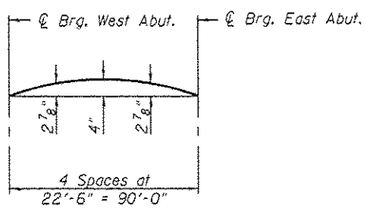
¾" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (1,212 Required)

SECTION A-A

TOP OF BEAM ELEVATIONS

(For Fabrication Use Only)

Beam	℄ Brg. W. Abut.	℄ Brg. E. Abut.
1	578.49	576.70
2	578.64	576.84
3	578.75	576.96
4	578.75	576.96
5	578.64	576.84
6	578.49	576.70

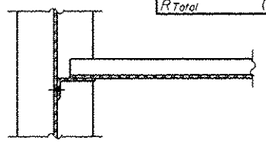


CAMBER DIAGRAM

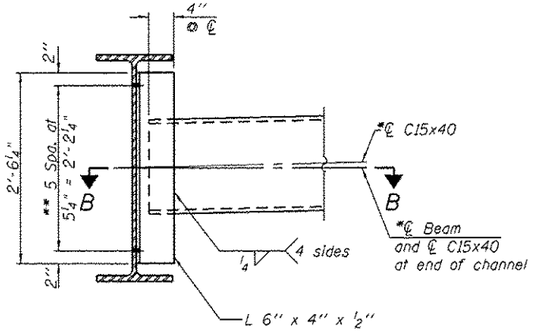
INTERIOR BEAM MOMENT TABLE		
		0.5 Span
I_s	(in^4)	12,100
$I_c(n)$	(in^4)	29,075
$I_c(3n)$	(in^4)	21,297
S_s	(in^3)	663
$S_c(n)$	(in^3)	929
$S_c(3n)$	(in^3)	839
DC1	(k/')	0.957
M_{DC1}	('k)	969
DC2	(k/')	0.025
M_{DC2}	('k)	25
DW	(k/')	0.330
M_{DW}	('k)	334
M_{L+IM}	('k)	1,362
M_u (Strength I)	('k)	4,127
* $\phi_r M_n$	('k)	4,630
f_s DC1	(ksi)	17.5
f_s DC2	(ksi)	0.4
f_s DW	(ksi)	4.8
f_s 1.3(L+IM)	(ksi)	22.9
f_s (Service II)	(ksi)	45.6
$0.95R_hF_{yf}$	(ksi)	47.5
** f_s (Total)(Strength I)	(ksi)	-
V_f	(k)	26.1

* Compact sections
** Non-Compact and slender sections

INTERIOR BEAM REACTION TABLE		
		Abutment
R_{DC1}	(k)	44.0
R_{DC2}	(k)	1.1
R_{DW}	(k)	14.9
R_{L+IM}	(k)	86.6
R_{Total}	(k)	146.6



SECTION B-B



INTERIOR DIAPHRAGM

Notes:

Two hardened washers required for each set of oversized holes.

*Alternate channel C15x50 permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

The alternate, if utilized, shall be provided at no additional cost to the Department.

**¾" ϕ HS bolts. 15/16" ϕ holes.

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.

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 $in.^3$).

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_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

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

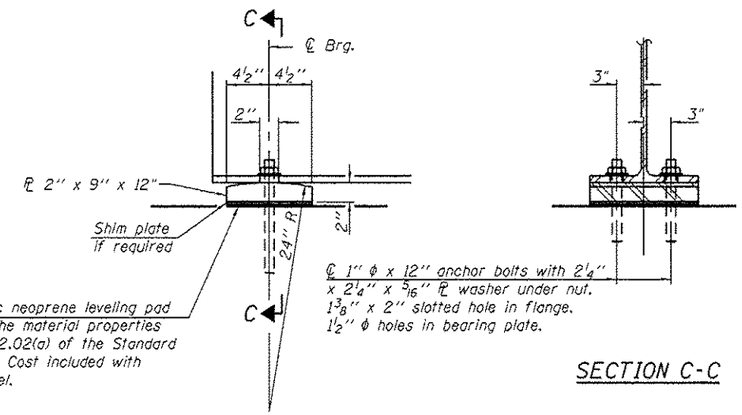
$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

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

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

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

V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



SECTION C-C

ELEVATION AT ABUTMENT

FIXED BEARING

Notes:

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

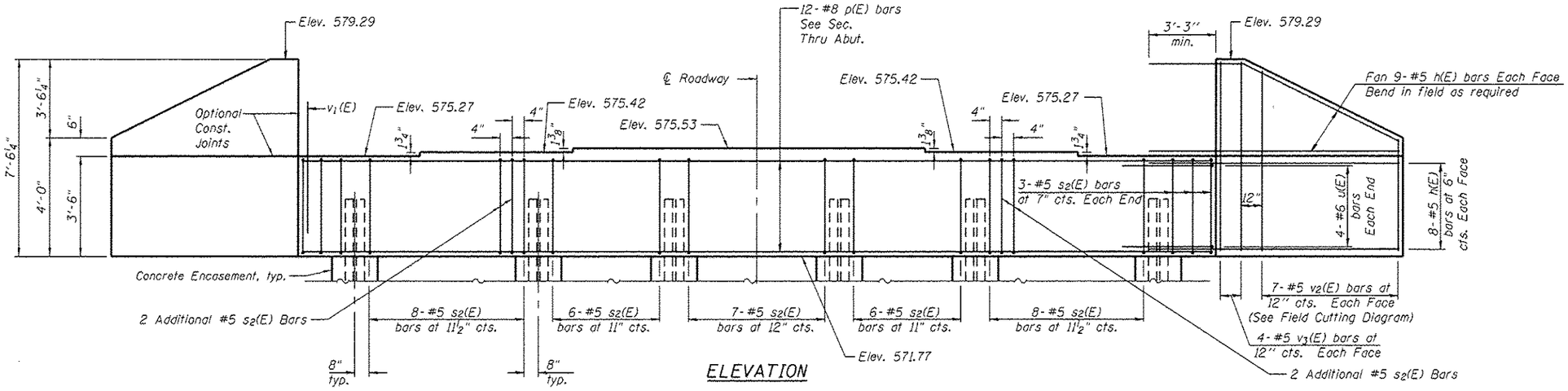
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

Load carrying components designated "NTR" shall conform to the supplemental Requirements for Notch Toughness, Zone 2.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	24



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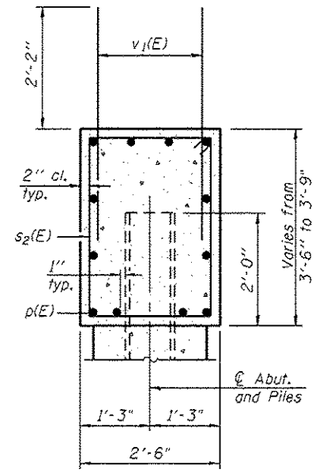
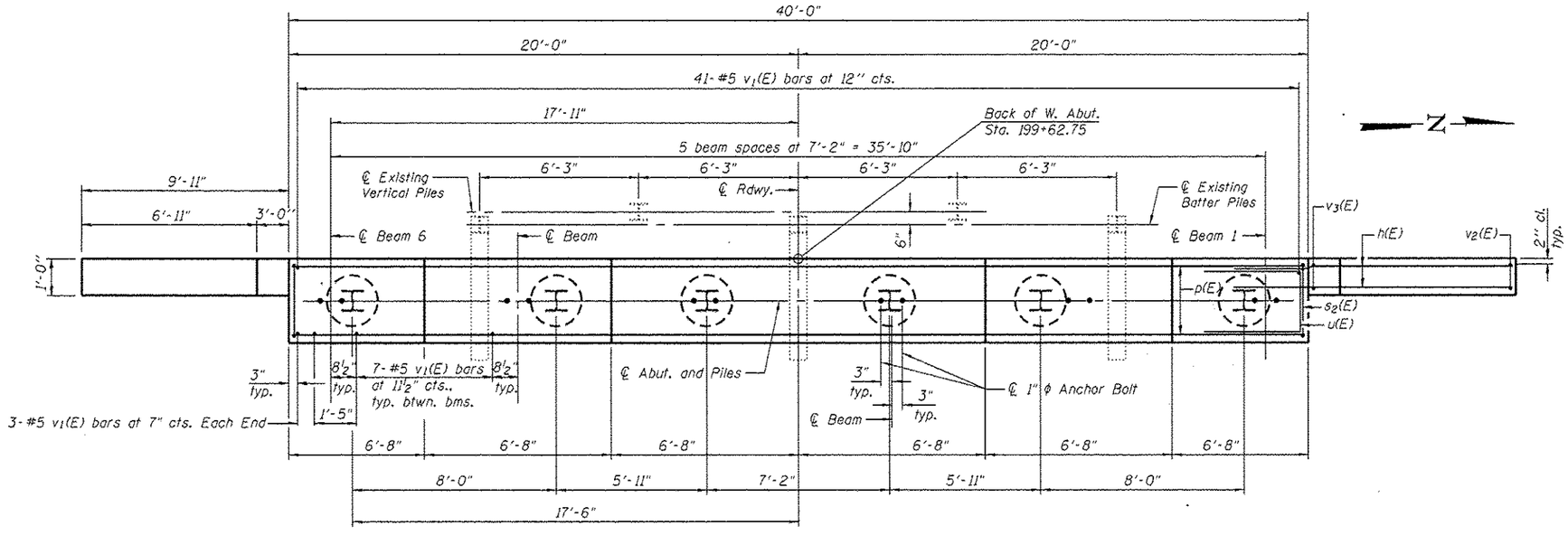


SEC. THRU ABUT.



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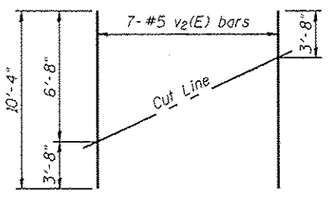
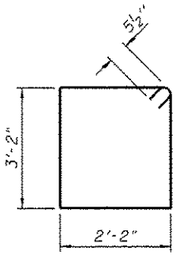
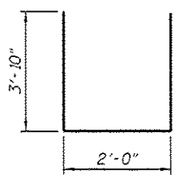


FIELD CUTTING DIAGRAM

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



BAR $s_2(E)$



BAR $u(E)$

PILE DATA

Type: Steel HP 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 35.0'
No. Production Piles: 5
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	68	#5	13'-9"	
p(E)	12	#8	39'-8"	
s2(E)	45	#5	11'-7"	
u(E)	8	#6	9'-8"	
v1(E)	82	#5	4'-4"	
v2(E)	14	#5	10'-4"	
v3(E)	16	#5	7'-2"	
Structure Excavation		Cu. Yd.	39	
Concrete Structures		Cu. Yd.	18.1	
Concrete Encasement		Cu. Yd.	3.3	
Reinforcement Bars, Epoxy Coated		Pound	3,550	
Furnishing Steel Piles HP14x73		Foot	175.0	
Driving Piles		Foot	175.0	
Test Pile Steel HP14x73		Each	1	

Notes:
Pour steps monolithically with cap.
For details of piles and Concrete Encasement, see sheet 14 of 18.

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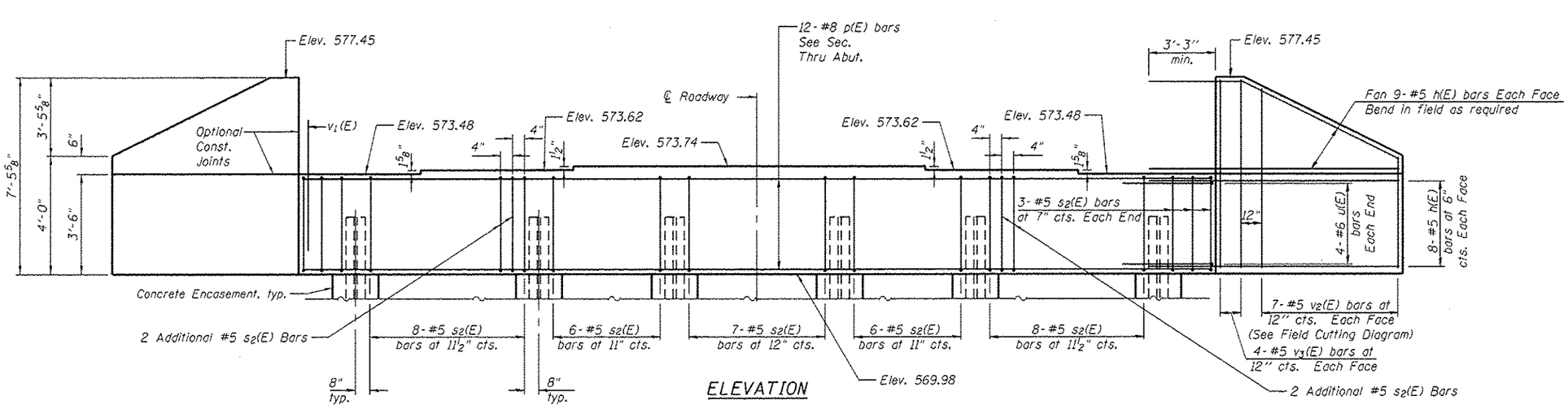
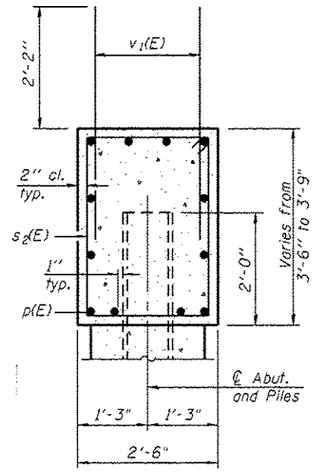
PEORIA COUNTY HIGHWAY DEPARTMENT

WEST ABUTMENT
STRUCTURE NO. 072-3148
SHEET NO. 12 OF 18 SHEETS

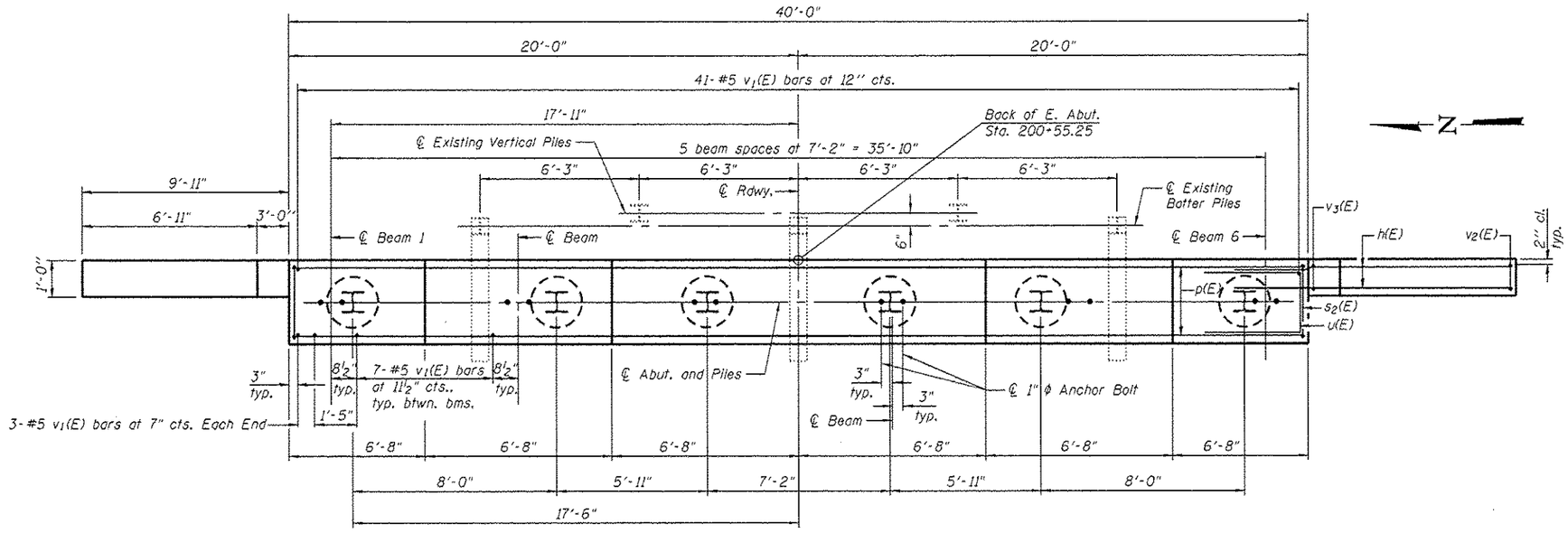
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	34
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		



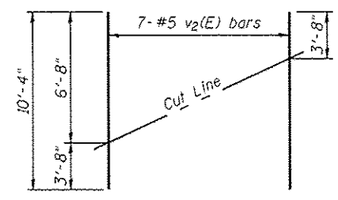
ELEVATION



SEC. THRU ABUT.

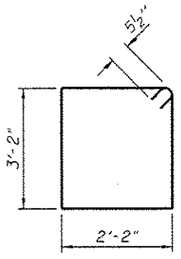


PLAN

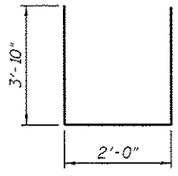


FIELD CUTTING DIAGRAM

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



BAR $s_2(E)$



BAR $u(E)$

PILE DATA

Type: Steel HP 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 38.3'
No. Production Piles: 5
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	68	#5	13'-9"	
p(E)	12	#8	39'-8"	
s2(E)	45	#5	11'-7"	
u(E)	8	#6	9'-8"	
v1(E)	82	#5	4'-4"	
v2(E)	14	#5	10'-4"	
v3(E)	16	#5	7'-2"	
Structure Excavation		Cu. Yd.	38	
Concrete Structures		Cu. Yd.	18.1	
Concrete Encasement		Cu. Yd.	3.3	
Reinforcement Bars, Epoxy Coated		Pound	3,550	
Furnishing Steel Piles HP14x73		Foot	191.5	
Driving Piles		Foot	191.5	
Test Pile Steel HP14x73		Each	1	

Notes:
Pour steps monolithically with cap.
For details of piles and Concrete Encasement, see sheet 14 of 18.

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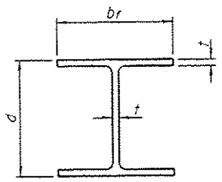
PEORIA COUNTY HIGHWAY DEPARTMENT

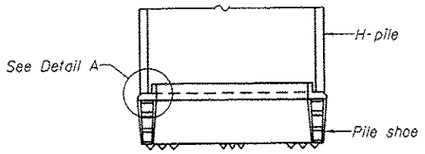
EAST ABUTMENT
STRUCTURE NO. 072-3148
SHEET NO. 13 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	35
		CONTRACT NO. 89464		
		ILLINOIS FED. AID PROJECT		

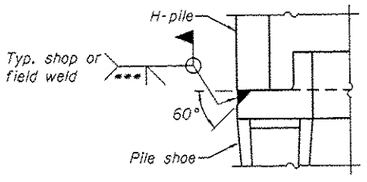


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30''
x102	14''	$14\frac{3}{4}''$	$\frac{11}{16}''$	30''
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30''
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30''
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24''
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24''
x63	12''	$12\frac{1}{8}''$	$\frac{1}{2}''$	24''
x53	$11\frac{3}{4}''$	12''	$\frac{7}{16}''$	24''
HP 10x57	10''	$10\frac{1}{4}''$	$\frac{9}{16}''$	24''
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24''
HP 8x36	8''	$8\frac{1}{8}''$	$\frac{7}{16}''$	18''

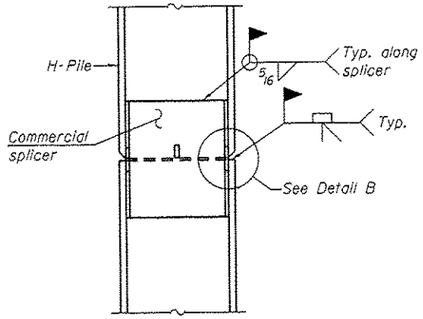


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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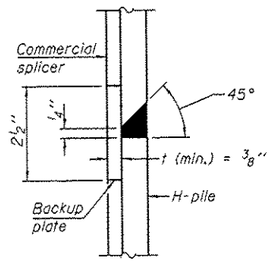
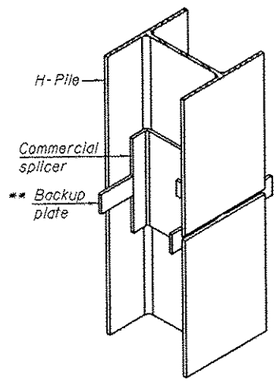
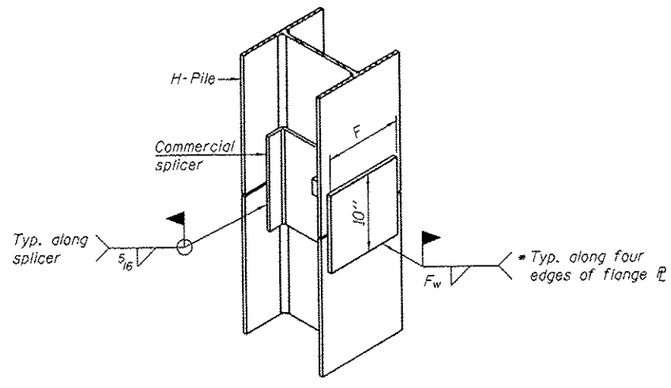


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



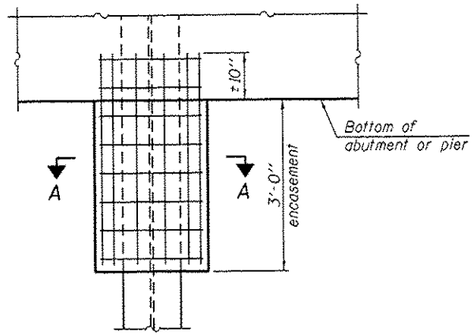
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

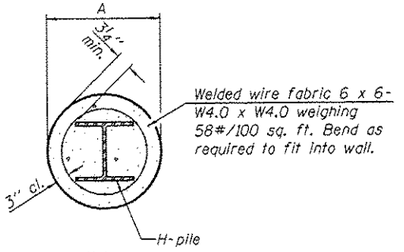
* Interrupt welds ¼'' from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}''$ min.).



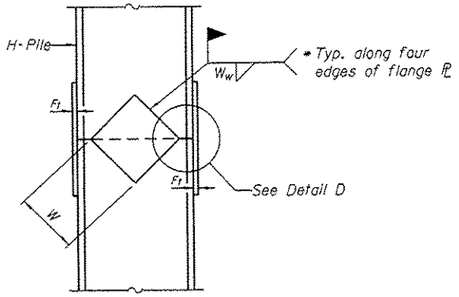
ELEVATION



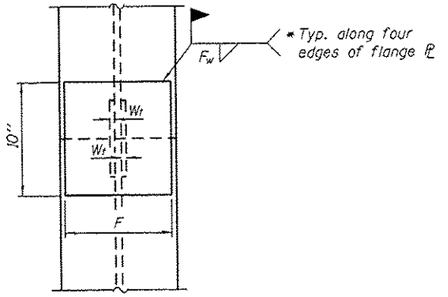
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

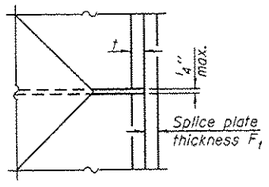
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_f	W_w
HP 14x117	$12\frac{1}{2}''$	1''	$\frac{7}{8}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x102	$12\frac{1}{2}''$	$\frac{7}{8}''$	$\frac{3}{4}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x89	$12\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{11}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x73	$12\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{9}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
HP 12x84	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x74	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x63	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x53	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 10x57	8''	$\frac{3}{4}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x42	8''	$\frac{5}{8}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 8x36	7''	$\frac{5}{8}''$	$\frac{7}{16}''$	$4\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$

WELDED PLATE FIELD SPLICE

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

F-HP 7-1-10

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HP PILE DETAILS
STRUCTURE NO. 072-3148
SHEET NO. 14 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	36
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

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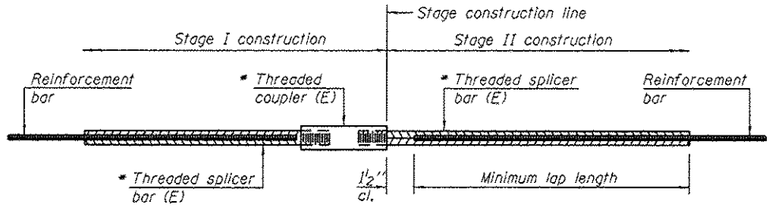


STANDARD BAR SPLICER ASSEMBLY

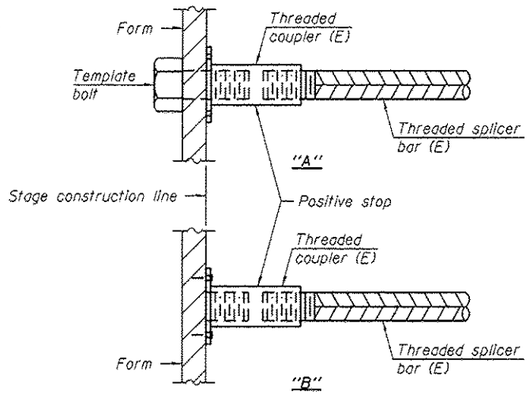
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

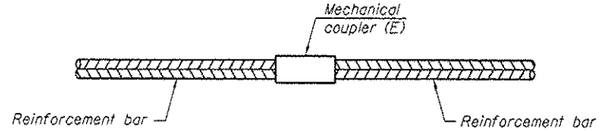
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



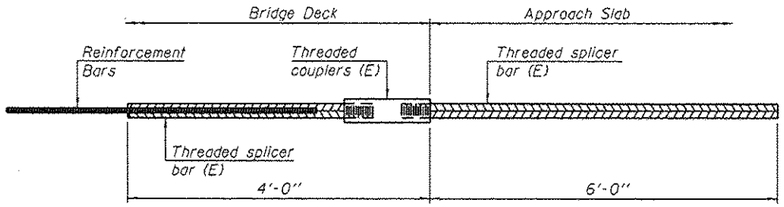
INSTALLATION AND SETTING METHODS

"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.



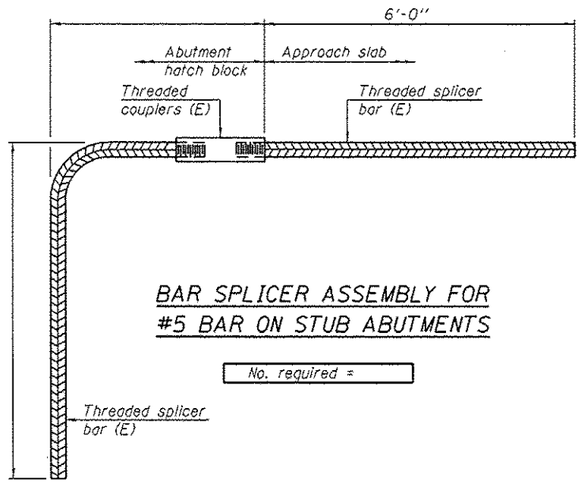
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 86



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 072-3148
SHEET NO. 15 OF 18 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	37
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

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WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

BORING NO. B-01
DATE 09-08-10
W. & A. FILE NO. 5427
SHEET 1 OF 6

PROJECT: SMITHVILLE ROAD BRIDGE OVER COOPERAS CREEK
LOCATION: Peoria County, Illinois
BORING LOCATION: 4' West of West Abutment, 5' South of North Parapet
DRILLED BY: Fehl
BORING TYPE: Hollow Stem Auger
WEATHER CONDITIONS: Partly Cloudy & Mild
SOIL CLASSIFICATION SYSTEM: U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION: (-)33.5 Ft.
GROUND SURFACE ELEVATION: 579.6
GROUND WATER ELEVATION AT _ HRS: -
BORING DISCONTINUED AT ELEVATION: 532.1
GROUND WATER ELEVATION AT COMPLETION: (-)20.2 Ft.

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
BITUMINOUS CONCRETE	11.5"						
Brown, CA-6 SAND And GRAVEL	23"						
Loose, Brown, Fine- To Coarse-Grained SAND And Fine-Grained GRAVEL With Some Silty Clay (Fill) 575.6	04	SS	3 3 4(7)	-	-	-	3
Medium, Gray-Brown And Light Brown SILTY CLAY (Fill) 572.6		SS	2 2 2(4)	0.9	0.8	92	28
Stiff, Light Brown And Gray SILT (Fill) 570.1	08	SS	2 3 4(7)	1.7	1.5	-	20
Stiff, Gray-Brown, Light Brown And Dark Brown SILTY CLAY LOAM With Some Wood (Fill) 568.1		SS	3 3 4(7)	1.4	1.2	101	16
Medium, Gray-Brown And Dark Brown CLAY LOAM (Possible Fill) 565.6	12	SS	2 2 2(4)	0.8	0.6	-	25
Soft, Gray-Brown CLAY LOAM With Some Coarse-Grained Sand (Possible Fill) 562.6	16	SS	2 1 1(2)	0.7	0.5	96	24
Medium, Light Brown And Gray CLAY LOAM 560.1		SS	1 2 2(4)	1.1	0.8	-	22
Medium, Light Brown And Gray CLAY 557.6	20	SS	1 2 2(4)	0.7	0.7	93	26
Stiff, Dark Gray CLAY (Glacial Till)		SS	4 4 5(9)	2.0	1.6	-	19
	24	SS	4 5 6(11)	2.2	1.9	115	17

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE
Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-01
DATE 09-08-10
PROJECT: Smithville Road Bridge Over Cooperas Creek
SHEET 2 OF 6
LOCATION: Peoria County, Illinois
W. & A. FILE NO. 5427

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 1 of 6 552.6							
Stiff, Dark Gray SILTY CLAY (Glacial Till)		SS	4 4 5(9)	1.8	1.6	-	17
546.1	30	SS	4 4 6(10)	1.5	1.3	113	18
Very Dense, Dark Gray, Medium- To Coarse-Grained SAND And Fine-Grained GRAVEL With Considerable Silty Clay 541.6	34	SS	65/9"	-	-	-	-
	38						
Medium, Dark Gray And Gray SANDY CLAY And Near CLAY SHALE 537.6	42	SS	8 14 16(30)	2.0	1.4	111	17
CAP ROCK 536.1							
Hard, Gray SANDSTONE	46	SS	99/6"	4.5+	-	-	11
AUGER REFUSAL AT (-)47.5 FEET 532.1							
EXPLORATORY BORING DISCONTINUED							
	50						
	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE
Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

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PEORIA, ILLINOIS

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2405 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

BORING NO. B-02
DATE 09-08-10
W & A FILE NO. 6427
SHEET 3 OF 6
PROJECT SMITHVILLE ROAD BRIDGE OVER COOPERAS CREEK
LOCATION Peoria County, Illinois
BORING LOCATION 53' East of West Abutment; 7' South of North Parapet
DRILLED BY Fehl
BORING TYPE Hollow Stem Auger
WEATHER CONDITIONS Partly Cloudy & Mild
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION (-)20.0 Ft. (Sheet)
GROUND SURFACE ELEVATION 578.6
GROUND WATER ELEVATION AT ___ HRS.
BORING TERMINATED AT ELEVATION 531.1
GROUND WATER ELEVATION AT COMPLETION (-)20.0 Ft. (Sheet)

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Q_p	Q_u	D_d	M_c
BITUMINOUS CONCRETE	9.5"						
CONCRETE (BRIDGE DECK)	19"						
	04						
	08						
	12						
	16						
CREEK BED (21.5 FEET) 557.1	20						
Medium, Dark Gray SILTY CLAY		SS	2 2 3(5)	0.9	0.8	-	27
554.6	24		2				
Stiff, Dark Gray SILTY CLAY		SS	3 4(7)	1.2	1.1	96	25

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE
Q_p - CALIBRATED POCKET PENETROMETER READING - T.S.F.
Q_u - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
D_d - NATURAL DRY DENSITY - P.C.F.
M_c - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-02
DATE 09-08-10
PROJECT Smithville Road Bridge Over Cooperas Creek
SHEET 4 OF 6
LOCATION Peoria County, Illinois
W & A FILE NO. 6427

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Q_p	Q_u	D_d	M_c
See Sheet 3 of 6							
551.6			2				
Medium, Dark Gray SILTY CLAY (Glacial Till)		SS	2 2(4)	1.1	0.9	-	18
547.1	30		2				
Stiff, Dark Gray SANDY CLAY (Glacial Till)		SS	2 3(5)	1.3	1.0	111	19
			9				
		SS	10 15(25)	1.5	1.2	-	19
544.8	34						
Dense, Dark Gray, Medium-Grained SAND And SILTY CLAY With Trace Of Coal			15				
		SS	16 16(32)	-	-	-	21
540.1	38						
Medium-Density, Dark Gray, Medium-Grained SAND With Considerable Silty Clay And Trace Of Coal			8				
		SS	9 16(25)	-	-	-	19
536.6	42						
Hard, Gray CAP ROCK		SS	125/3"	-	-	-	7
AUGER REFUSAL AT (-)47.5 FEET 531.1	46						
EXPLORATORY BORING DISCONTINUED							
	50						
	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE
Q_p - CALIBRATED POCKET PENETROMETER READING - T.S.F.
Q_u - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
D_d - NATURAL DRY DENSITY - P.C.F.
M_c - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -		PEORIA COUNTY HIGHWAY DEPARTMENT	SOIL BORING LOGS			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME = IEI	DRAWN - AJP	REVISED -						1381	10-00005-03-BR	PEORIA	55	39
PLOT SCALE = 2.0000 ' / in.	CHECKED - MDC	REVISED -								CONTRACT NO. 89464		
PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -			SCALE: NTS	SHEET NO. 17 OF 18 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

INFRASTRUCTURE ENGINEERING

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

BORING NO. B-03
DATE 09-08-10
W.&A. FILE NO. 5427
SHEET 5 OF 6

PROJECT SMITHVILLE ROAD BRIDGE OVER COOPERAS CREEK
LOCATION Peoria County, Illinois
BORING LOCATION 5' East of East Abutment; 5' North of South Parapet
DRILLED BY Fehl
BORING TYPE Hollow Stem Auger
WEATHER CONDITIONS Partly Cloudy & Mild
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION (-)19.0 Ft.
GROUND SURFACE ELEVATION 577.7
GROUND WATER ELEVATION AT " HRS. "
BORING DISCONTINUED AT ELEVATION 530.7
GROUND WATER ELEVATION AT COMPLETION (-)14.5 Ft.

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
Oil And CHIPS	2"						
BITUMINOUS CONCRETE	11"						
Brown CA-6 GRAVEL	21"						
Loose, Brown And Dark Brown, Fine- To Coarse-Grained SAND And Fine-Grained GRAVEL (Fill) 573.7	04	SS	3 3 3(6)	-	-	-	3
Stiff, Light Brown SILTY CLAY (Fill) 570.7		SS	3 3 4(7)	2.3	1.8	101	18
Medium, Dark Brown SILTY CLAY LOAM (Fill) 568.2	08	SS	2 2 2(4)	0.9	0.8	-	26
Medium, Brown And Dark Brown SILTY CLAY (Fill) 666.7	12	SS	2 2 3(5)	1.1	0.9	96	25
Medium, Brown And Gray-Brown SANDY CLAY With Trace Of Fine-Grained Gravel (Fill) 563.2		SS	2 2 2(4)	0.7	0.6	-	17
Loose, Light Brown, Fine- To Medium-Grained SAND 560.7	16	SS	2 2 2(4)	-	-	-	9
Loose, Gray Brown, Medium- To Coarse-Grained SAND And Fine-Grained GRAVEL With Trace Of Silty Clay 558.2		SS	2 2 3(5)	-			14
Stiff, Brown And Gray-Brown CLAY (Glacial Till)	20	SS	2 3 4(7)	1.3	1.1	112	21
		SS	3 4 5(9)	1.4	1.2	-	20
	24	SS	3 4 6(10)	1.2	1.1	113	20

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG

(CONTINUATION)

BORING NO. B-03
DATE 09-08-10
PROJECT Smithville Road Bridge Over Cooperas Creek
SHEET 6 OF 6
LOCATION Peoria County, Illinois
W.S.A. FILE NO. 5427

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 5 of 6 660.7							
Medium, Dark Gray SILTY CLAY (Glacial Till) 548.2		SS	3 3 4(7)	1.0	0.9	-	19
Stiff, Dark Gray SILTY CLAY (Glacial Till) 544.7	30	SS	4 5 6(11)	1.3	1.2	116	17
Dense, Dark Gray, Fine- To Coarse-Grained SAND With Considerable Silty Clay And Some Fine-Grained Gravel 540.2	34	SS	12 17 24(41)	-	-	-	16
Dense, Dark Gray, Medium- To Coarse-Grained SAND And Fine-Grained GRAVEL With Considerable Silty Clay 534.7	38 42	SS	15 18 25(43)	-	-	-	18
Hard, Gray SHALE	46	SS	71/3"	4.5+	-	-	9
AUGER REFUSAL AT (-)47.0 FEET 530.7							
EXPLORATORY BORING DISCONTINUED	50 54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

FILE NAME = #FILES#	DESIGNED - AJP	REVISED -
USER NAME = IEI	DRAWN - AJP	REVISED -
PLOT SCALE = 2.0000 ' / in.	CHECKED - MDC	REVISED -
PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

SOIL BORING LOGS

SCALE: NTS | SHEET NO. 18 OF 18 SHEETS | STA. | TO STA.

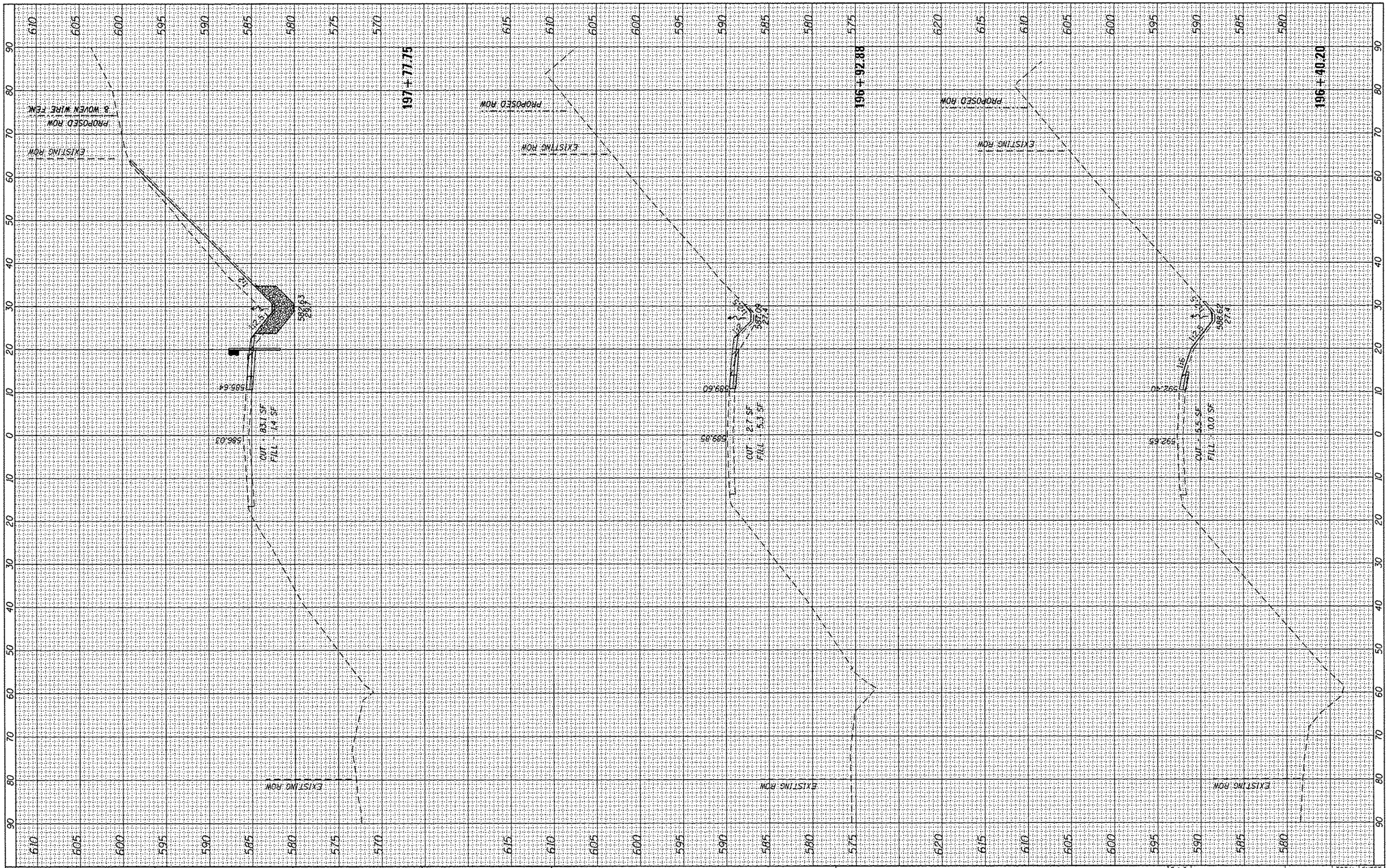
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	40

CONTRACT NO. 89464

ILLINOIS FED. AID PROJECT

INFRASTRUCTURE ENGINEERING
VELTRI INFRASTRUCTURE ENGINEERING

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FILE NAME =	USER NAME = JEI	DESIGNED - AJP	REVISED -
$FILE$		DRAWN - AJP	REVISED -
Default	PLOT SCALE = 20.0000 ' / in.	CHECKED - BAR	REVISED -
	PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS

SCALE: 10H : 5V | SHEET 1 OF 6 SHEETS | STA. 196+40.20 TO STA. 197+77.75

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	41
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

INFRASTRUCTURE ENGINEERING

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

198+50.00

PROPOSED ROW
EXISTING ROW
3:1
575.32
44.0
582.73
582.89
CUT 291.6 SF
FILL 44.8 SF
568.24
66.56
1-1" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE
EXISTING ROW

198+39.03

PROPOSED ROW
EXISTING ROW
3:1
576.43
42.0
583.18
583.33
CUT 303.5 SF
FILL 9.2 SF
569.08
58.3
1-1" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE
42" PIPE
EXISTING ROW

198+20.45

PROPOSED ROW
EXISTING ROW
3:1
578.31
38.6
583.89
584.14
CUT 202.4 SF
FILL 6.8 SF
583.90
4.0%
9.5%
565.70
59.2
42" PIPE
EXISTING ROW

197+86.77

PROPOSED ROW
EXISTING ROW
3:1
581.12
32.5
585.26
585.70
CUT 44.1 SF
FILL 33 SF
585.22
4.0%
570.63
59.6
42" PIPE
EXISTING ROW

FILE NAME =	USER NAME = IEI	DESIGNED - AJP	REVISED -
$FILE1$		DRAWN - AJP	REVISED -
Default	PLOT SCALE = 20.0000 ' / in.	CHECKED - BAR	REVISED -
	PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS

SCALE: 10H : 5V | SHEET 2 OF 6 SHEETS | STA. 197+86.77 TO STA. 198+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	42
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

INFRASTRUCTURE ENGINEERING

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

199 + 47.75

579.71
CUT 229.0 SF
FILL 337.2 SF
565.14
52.7
PROPOSED ROW
EXISTING ROW

199 + 32.75

580.01
CUT 245.4 SF
FILL 163.5 SF
562.84
56.0
PROPOSED ROW
EXISTING ROW
1-1/2" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE

198 + 91.91

580.22
CUT 284.1 SF
FILL 133.9 SF
556.93
60.0
PROPOSED ROW
EXISTING ROW
1-1/2" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE

198 + 76.45

581.36
CUT 324.0 SF
FILL 76.7 SF
571.08
45.4
PROPOSED ROW
EXISTING ROW
1-1/2" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE

582.86
572.65
45.7
PROPOSED ROW
EXISTING ROW
1-1/2" RURAL WATER DISTRICT 6" TRANSMISSION WATER LINE

FILE NAME =	USER NAME = IEI	DESIGNED - AJP	REVISED -
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Default	PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS

SCALE: 10H : 5V | SHEET 3 OF 6 SHEETS | STA. 198+76.45 TO STA. 199+47.75

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	43
		CONTRACT NO. 89464		
	ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

INFRASTRUCTURE ENGINEERING
496 Fulton Street | Suite 104 | Peoria, IL 61602

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FILE NAME = #FILE1#
USER NAME = TEI
PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 10/30/2012
DESIGNED - AJP
DRAWN - AJP
CHECKED - BAR
DATE - 11/02/2012
REVISED -
REVISED -
REVISED -
REVISED -

PEORIA COUNTY
HIGHWAY DEPARTMENT

CROSS SECTIONS

SCALE: 1ON : 5V | SHEET 4 OF 6 SHEETS | STA. 199+62.75 TO STA. 200+85.25

F.A.S. RTE. 138 | SECTION 10-00005-03-BR | COUNTY PEORIA | TOTAL SHEETS 55 | SHEET NO. 44

ILLINOIS FED. AID PROJECT | CONTRACT NO. 89464

BRIDGE OMMISION
STA. 199+62.75 TO STA. 200+55.25

200+85.25

PROPOSED ROW
EXISTING ROW
PR TEMP EASEMENT
577.18
577.16
577.18
CUT - 100.3 SF
FILL - 139.9 SF
562.41
53.2
563.59
50.7
T-L RURAL WATER DISTRICT
6" TRANSMISSION WATER LINE

200+70.25

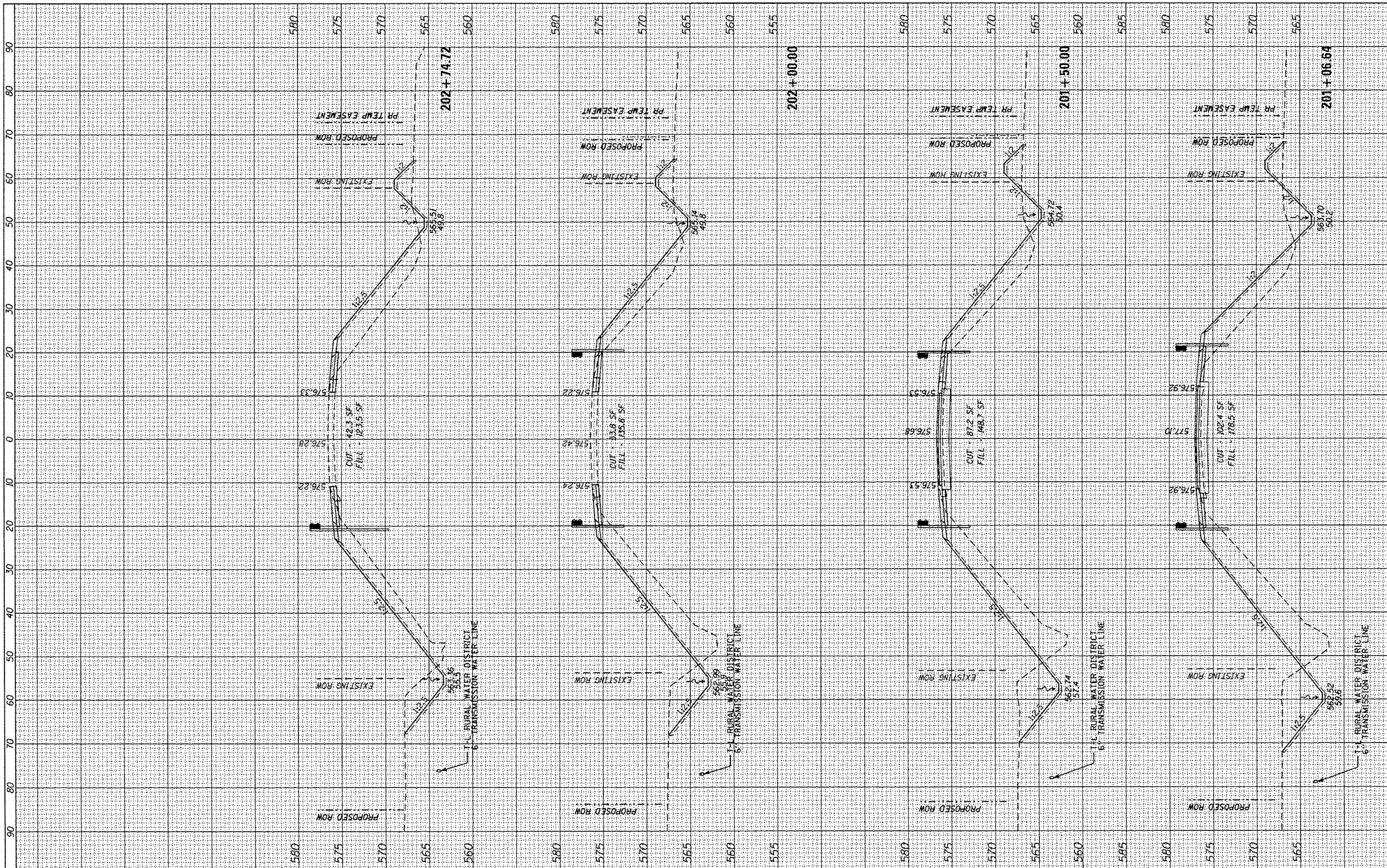
PROPOSED ROW
EXISTING ROW
PR TEMP EASEMENT
577.22
577.57
577.21
CUT - 112.4 SF
FILL - 181.8 SF
562.09
54.7
562.72
51.3
T-L RURAL WATER DISTRICT
6" TRANSMISSION WATER LINE

200+55.25

PROPOSED ROW
EXISTING ROW
577.50
577.80
577.55
CUT - 96.1 SF
FILL - 204.1 SF
561.64
53.6
562.35
52.5
T-L RURAL WATER DISTRICT
6" TRANSMISSION WATER LINE

199+62.75

PROPOSED ROW
EXISTING ROW
579.34
579.64
579.34
CUT - 184.3 SF
FILL - 142.9 SF
561.34
57.7
563.92
54.1
T-L RURAL WATER DISTRICT
6" TRANSMISSION WATER LINE



INFRASTRUCTURE ENGINEERING

FILE NAME =	USER NAME = IEI	DESIGNED - AJP	REVISED -
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	PLOT SCALE = 20.0000 ' / in.	CHECKED - BAR	REVISED -
Default	PLOT DATE = 10/28/2012	DATE - 11/02/2012	REVISED -

PEORIA COUNTY HIGHWAY DEPARTMENT

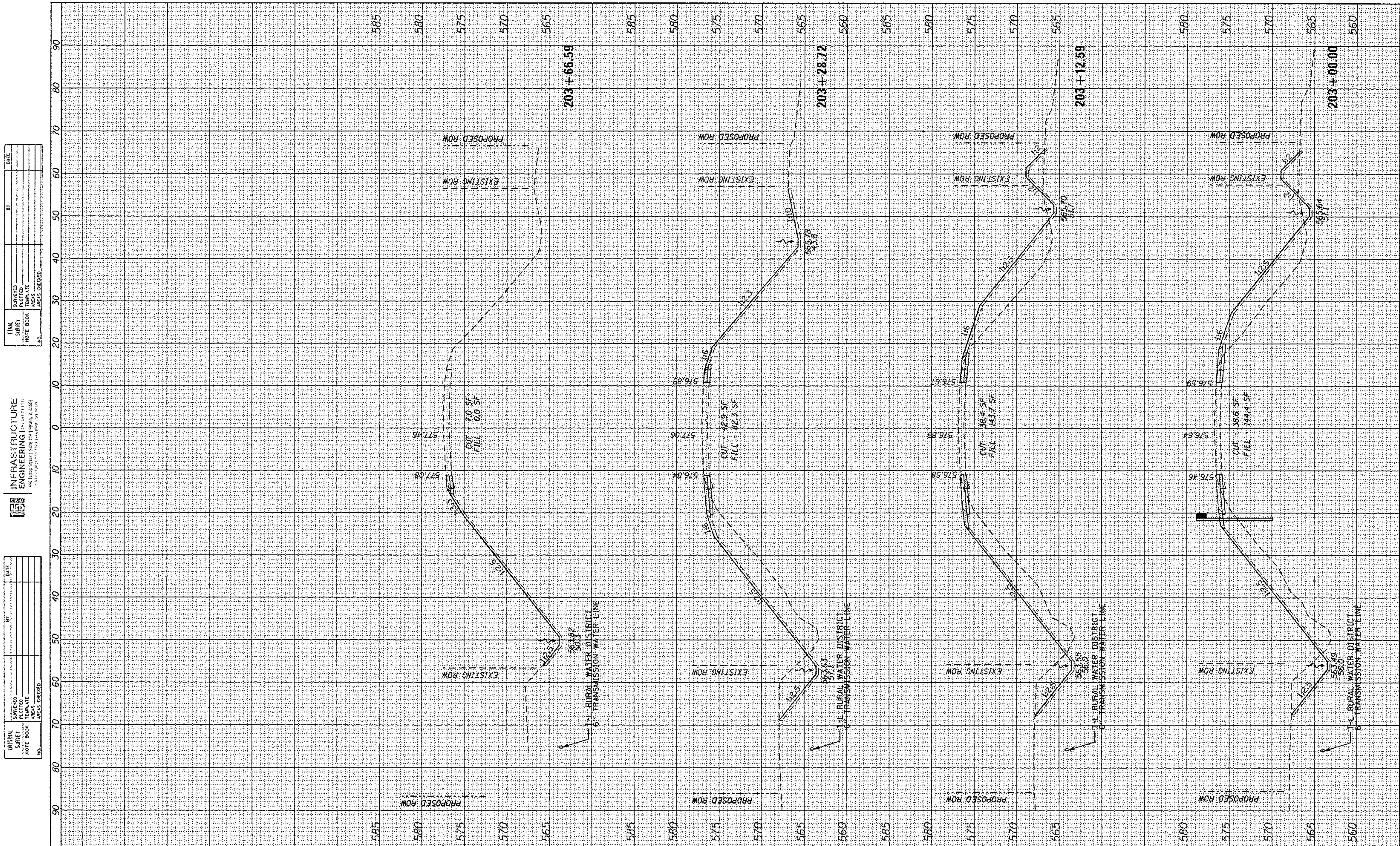
CROSS SECTIONS

SCALE: 10H : 5V | SHEET 5 OF 6 SHEETS | STA. 201+06.64 TO STA. 202+74.72

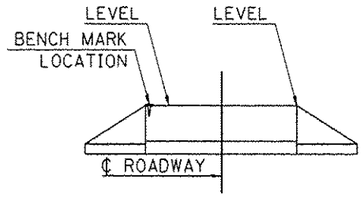
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	45

CONTRACT NO. 89464

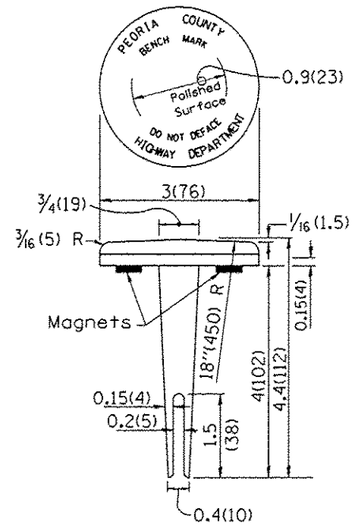
ILLINOIS | FED. AID PROJECT

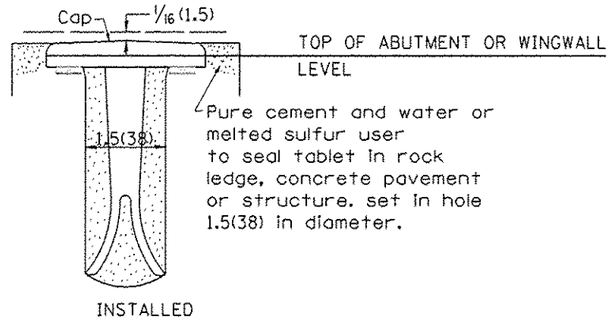


FILE NAME :	USER NAME : IEI	DESIGNED - AJP	REVISED -	PEORIA COUNTY HIGHWAY DEPARTMENT	CROSS SECTIONS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FILEL		DRAWN - AJP	REVISED -			1381	10-00005-03-BR	PEORIA	55	46
	PLOT SCALE = 20.0000 ' / in.	CHECKED - BAR	REVISED -			CONTRACT NO. 89464				
Default	PLOT DATE = 10/20/2012	DATE - 11/02/2012	REVISED -		SCALE: 10H : 5V SHEET 6 OF 6 SHEETS STA. 203+00.00 TO STA. 203+66.59	ILLINOIS FED. AID PROJECT				



TYPICAL BRIDGE LOCATION





BRONZE TABLET

GENERAL NOTES

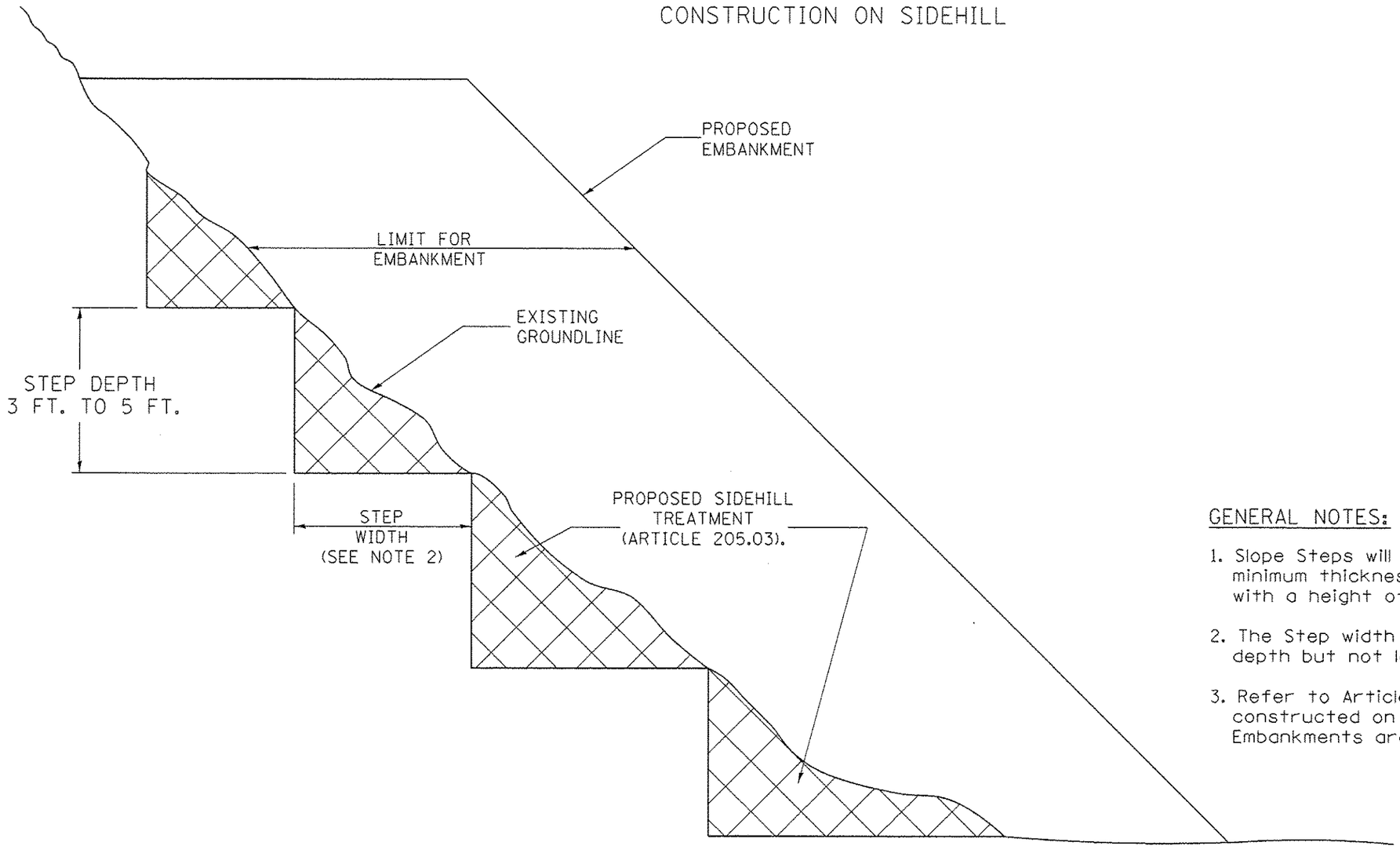
1. The Permanent Bench Mark shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall beattached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the Bench Mark shall be in accordance with the plans in general
4. The Bench Mark shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further 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.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after the Bench Mark has been installed.

FILE NAME = *FILES*	DESIGNED - AJP	REVISED -		PEORIA COUNTY HIGHWAY DEPARTMENT	PERMANENT BENCH MARK				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME = IEI	DRAWN - AJP	REVISED -							1381	10-00005-03-BR	PEORIA	55	46A
PLOT SCALE = 200.0000 ' / in.	CHECKED - BAR	REVISED -									CONTRACT NO. 89464		
PLOT DATE = 10/29/2012	DATE - 11/02/2012	REVISED -			SCALE: N.T.S.	SHEET NO. OF SHEETS	STA.	TO STA.			ILLINOIS FED. AID PROJECT		

DESIGNER NOTE:
1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFACATION).

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.
	BOX, REVISED GENERAL NOTES.	
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

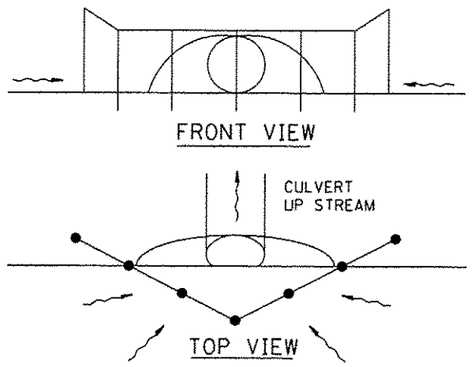
SLOPE STEPS DETAIL

NOT TO SCALE

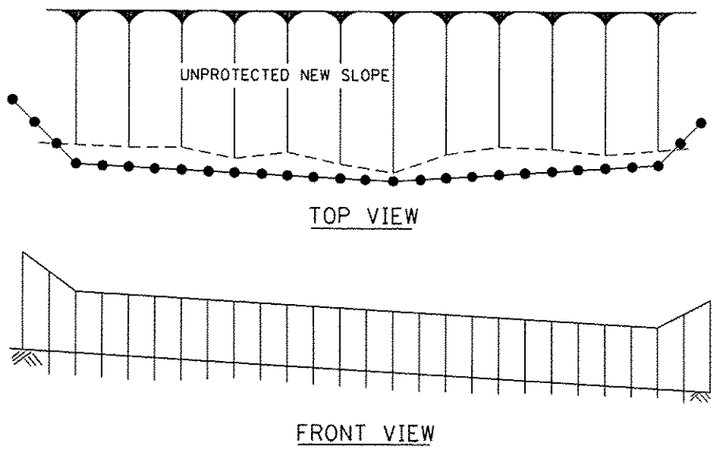
CADD STD. 205001-04

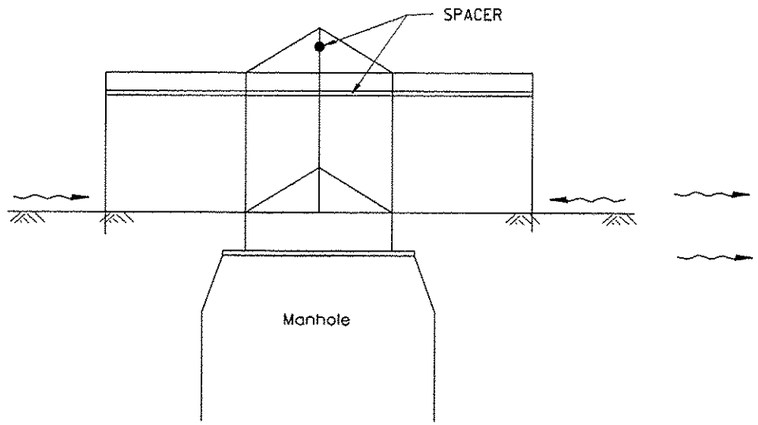
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	47
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Designer NOTEs:
1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
2. Include Highway Standard 280001 "TEMPORARY EROSION CONTROL SYSTEM."

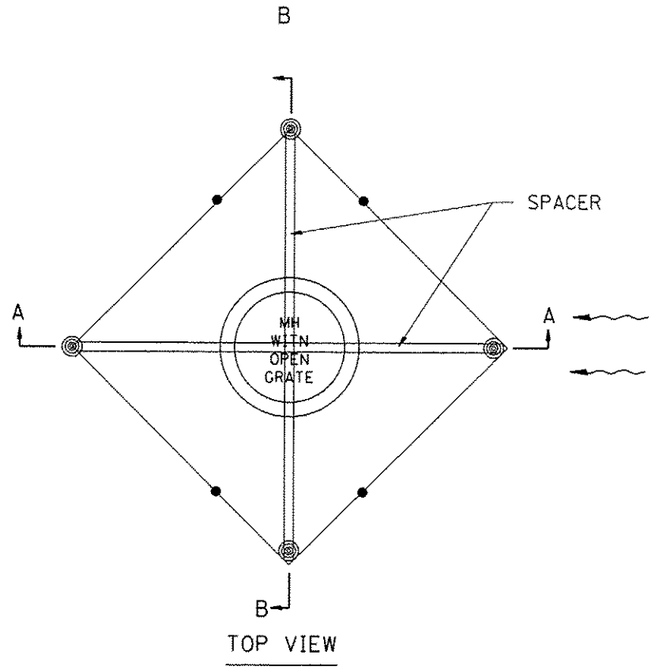


UPSTREAM PIPE CULVERT EROSION CONTROL

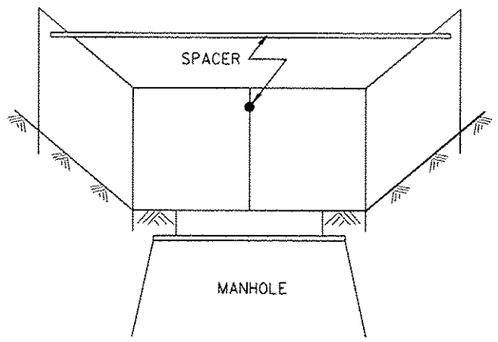




SIDE VIEW
A-A



TOP VIEW



Front View
B-B

EROSION CONTROL
AT
OPEN GRATE MAN HOLE

GENERAL NOTES:

1. This work shall be performed in accordance with Sections 280 & 1081, of the Standard Specifications.
2. Additional Timber or Metal Post shall be installed, as needed.

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

1-1-97		T.P.
3-11-03	ELIMINATED SILT FENCE DITCH CHECK	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

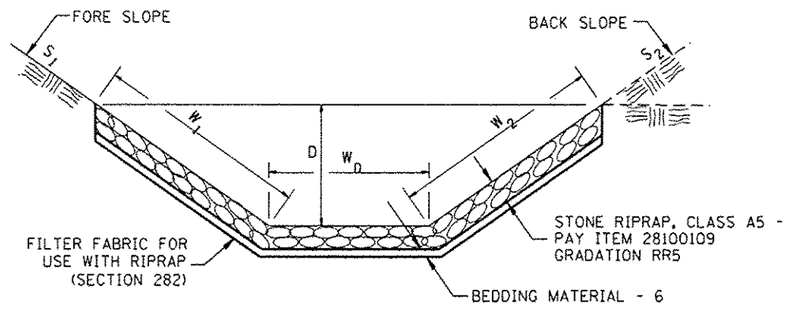
TYPICAL APPLICATION OF SILT FILTER FENCE

NOT TO SCALE — CADD STD. 280001-04

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	48
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Designer NOTES:
1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
2. (•) Designer to specify pay item including material, quality, and gradation.
3. (••) Designer to specify thickness of bedding material.
4. Include District Special Provision if needed.

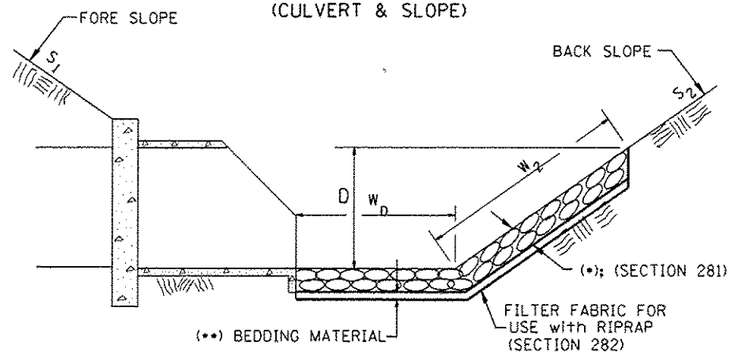
CASE 1
(DITCH)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	sq yds (m^2)	sq yds (m^2)
197+50 TO 198+50 RIGHT	13'	100'	144	144
198+50 TO 199+99 RIGHT	13'	149'	215	215
198+39 TO 199+98 LEFT	13'	159'	230	230
200+08 TO 200+85 RIGHT	13'	77'	111	111
TOTAL			700	700

(1) WIDTH = $W_1 + W_2 + W_D$

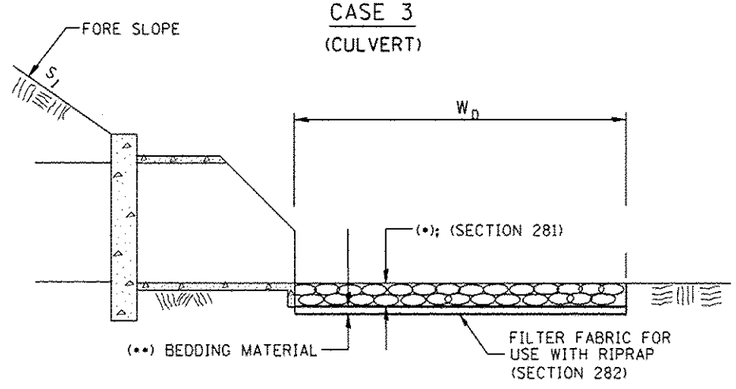
CASE 2
(CULVERT & SLOPE)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = $W_2 + W_D$

CASE 3
(CULVERT)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = W_D

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

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

1-1-97	RENUM. A-12.02, NEW REVISION BOX	T.P.
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

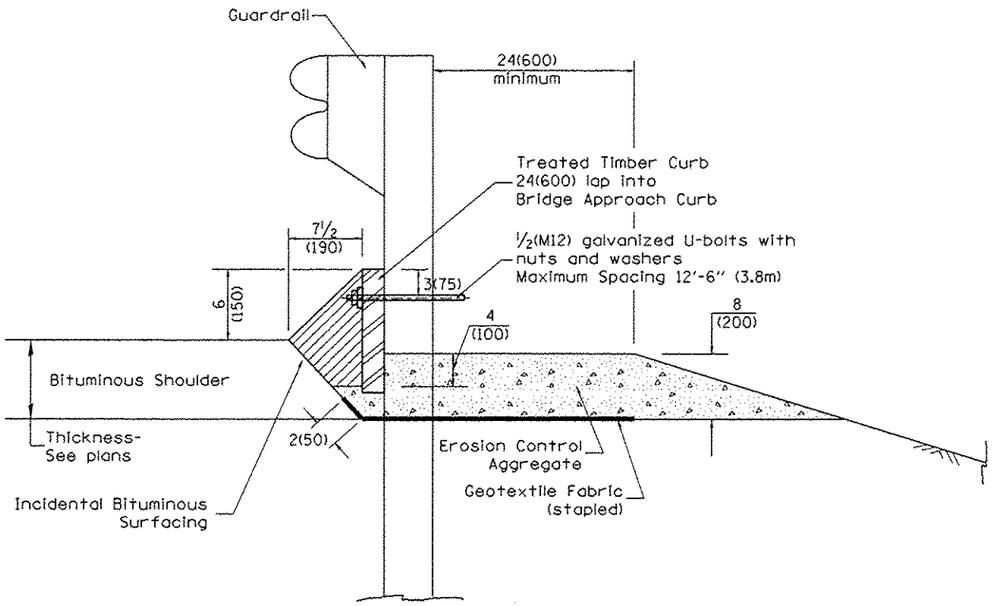
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIPRAP DITCH FOR EROSION PROTECTION

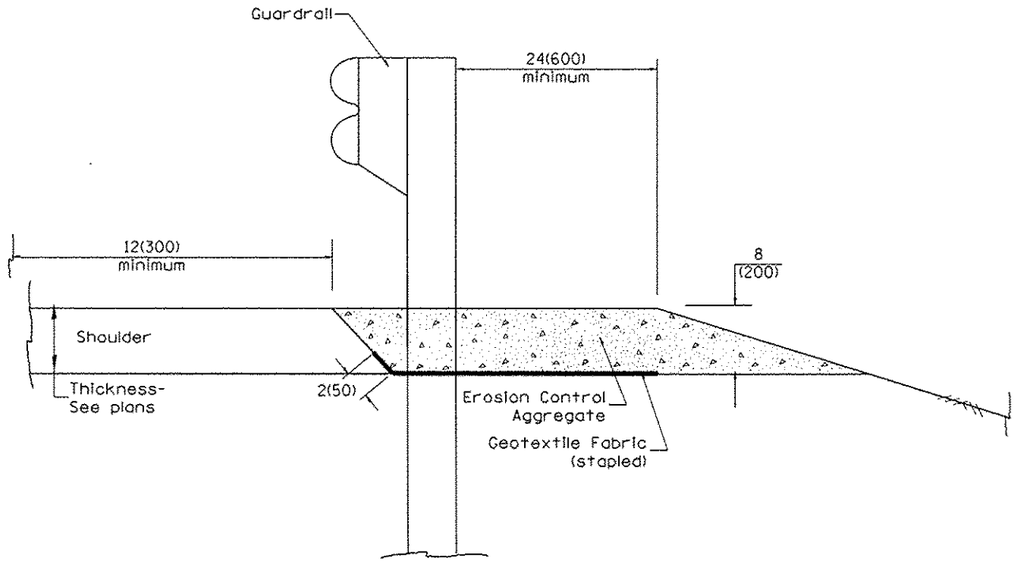
NOT TO SCALE — CADD STD. 281001-04

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	49
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1% and at inlets. (Include District Special Provision)
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% (Include District Special Provision)
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Buried Pipes; Seepage Collars for Exposed Pipes; Slope Drains for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision -"Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

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

01-01-97	RENUM. C-22.01. NEW REVISION BOX	T.P.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-03-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

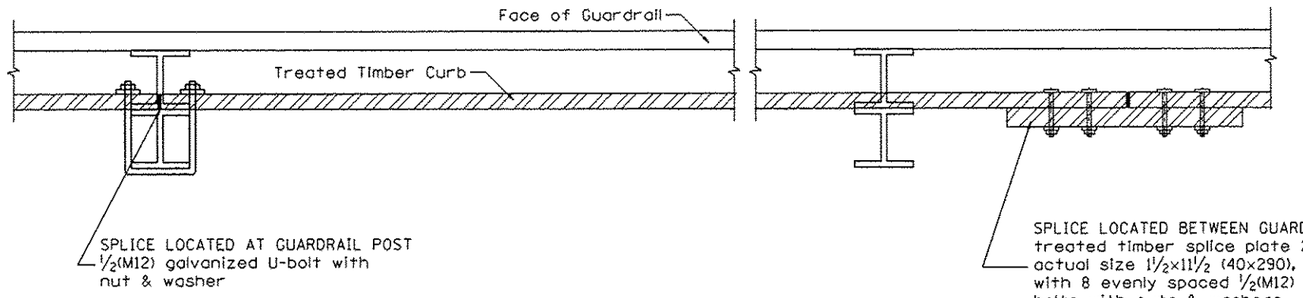
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

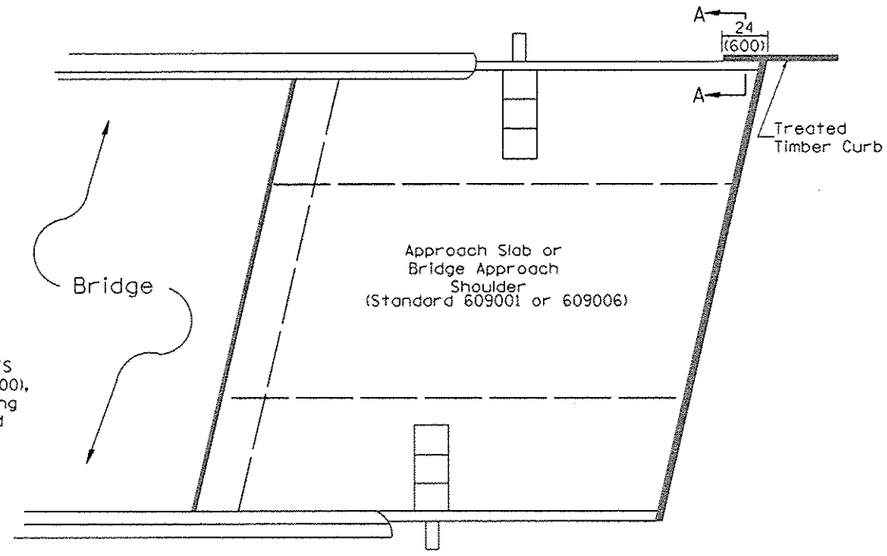
SHT. 1 OF 2
CADD STD. 630101-04

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	50
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



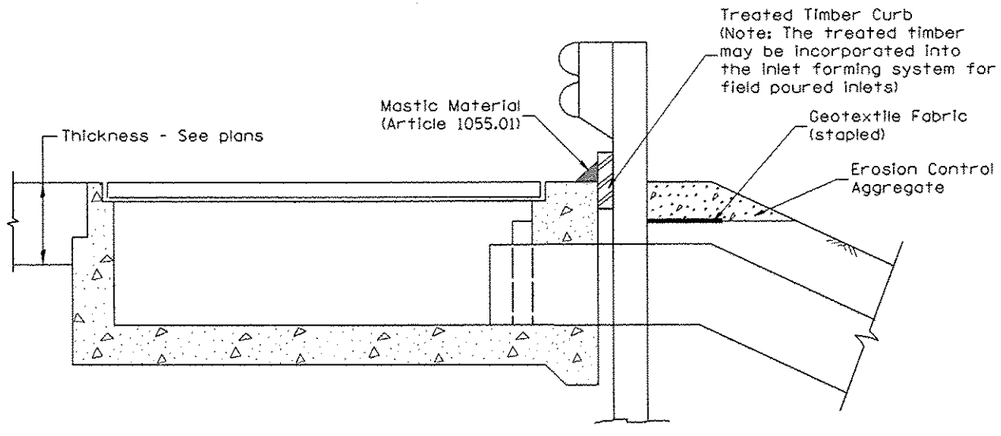
DETAIL A

(Typical Treated Timber Splices)

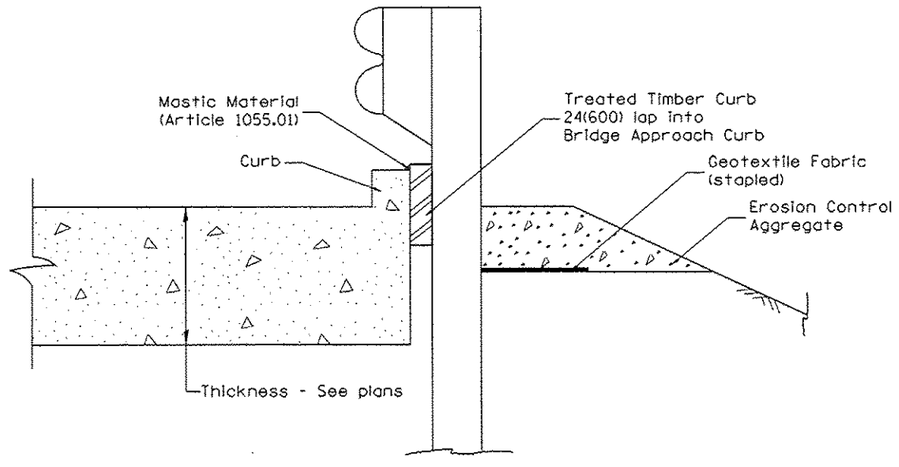


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB
AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB
AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

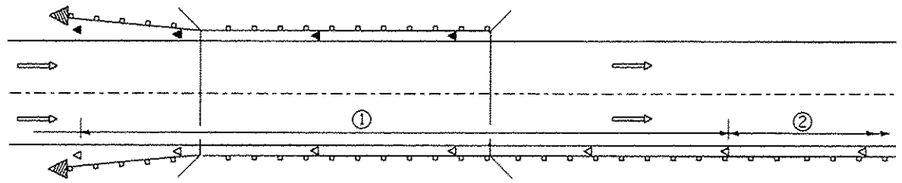
GUARDRAIL EROSION CONTROL TREATMENTS

SHT. 2 OF 2

NOT TO SCALE

CADD STD. 630101-D4

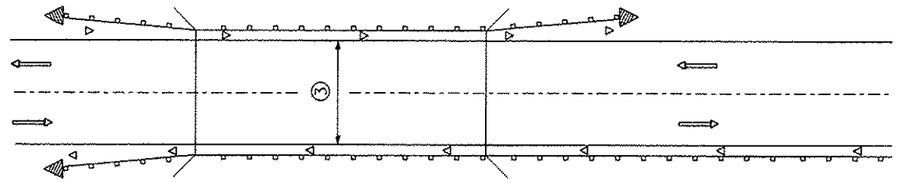
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	51
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



① Spacing 80 ft. (24 m) max. for first 400 ft. (122 m) or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).

② After 400 ft. (122 m), transition to normal delineator spacing shown in Standard 635001, and continue as required.

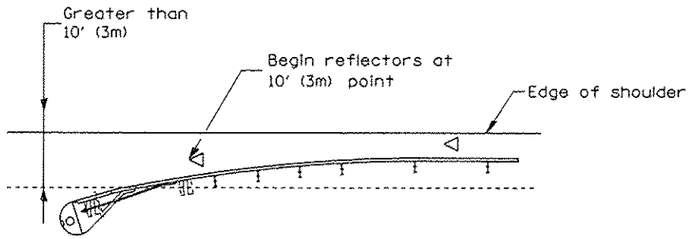
ONE-WAY TRAFFIC



③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the bridge pavement is less than 24 (610) wider than the pavement approaching the bridge.

TWO-WAY TRAFFIC

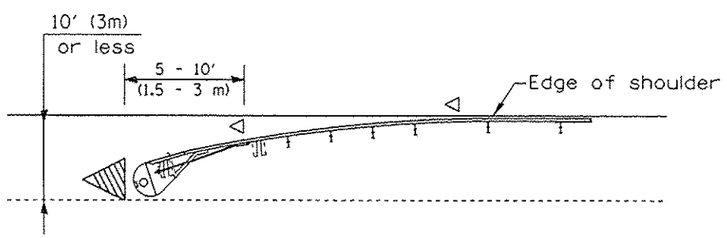
GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS



NOTE: Omit terminal marker when terminal over 10' (3m) from edge of paved shoulder or break point of unpaved shoulder, or when terminal buried in backslope.

Traffic Barrier Terminal Type(•) and/or Turned-Down Terminal

[Terminal over 10' (3m) from edge of shoulder]
•See Plans for Type

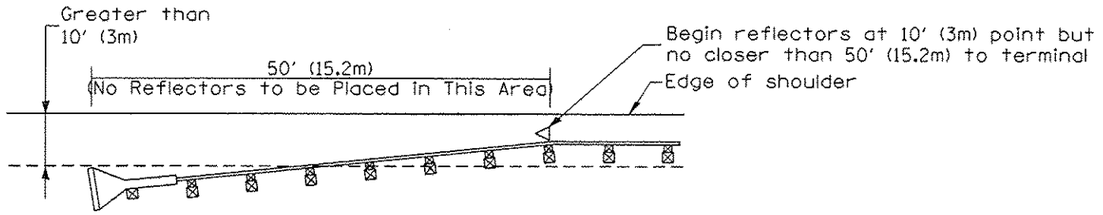


Traffic Barrier Terminal Type(•) and/or Turned-Down Terminal

[Terminal over 10' (3m) or less from edge of shoulder]
•See Plans for Type

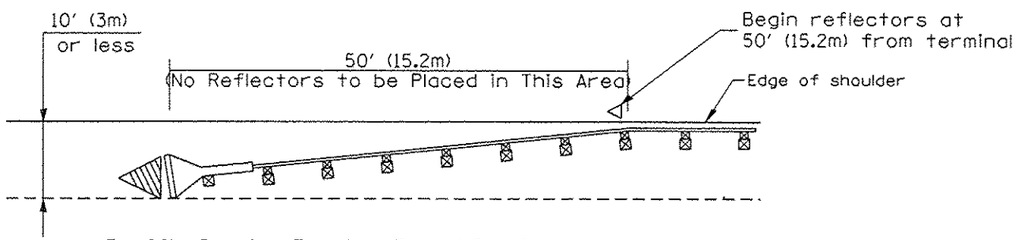
LEGEND

- Monodirectional silver
- Monodirectional amber
- Terminal Marker - Black/Yellow Left or Right as appropriate



NOTE: Omit terminal marker when terminal over (10') from edge of paved shoulder or break point of unpaved shoulder.

Traffic Barrier Terminal Type 1 (Special)
[Terminal over 10' (3m) from edge of shoulder]



Traffic Barrier Terminal Type 1(Special)
[Terminal 10' (3m) or less from edge of shoulder]

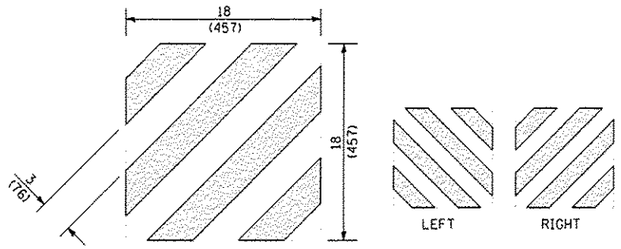
TERMINAL MARKER PLACEMENT

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

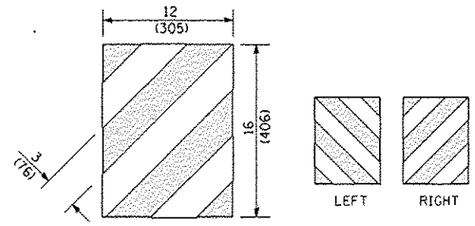
DESIGNER NOTES:

1. INCLUDE APPROPRIATE SPECIAL PROVISIONS FOR "GUARD RAIL DELINEATION POLICY: 1. FROM INTERIM SPECIAL PROVISIONS 94-74; "GUARDRAIL AND BARRIER WALL DELINEATION."
2. IF POST MOUNT TERMINAL MARKER IS USED, INCLUDE STATE STD. T2001I.

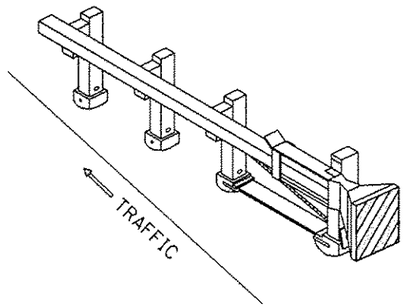
01-01-97	RENUM. E-10.02. NEW REVISION BOX	T.P.			STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GUARDRAIL AND BARRIER WALL DELINEATION	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
03-01-97	CORRECT STD. SPEC. •	J.A.					1381	10-00005-03-BR	PEORIA	55	52
10-16-06	REVISED TO 2007 SPEC.	M.A.				SHT. 1 OF 3			CONTRACT NO. 89464		
						NOT TO SCALE CADD STD. 635101-04	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



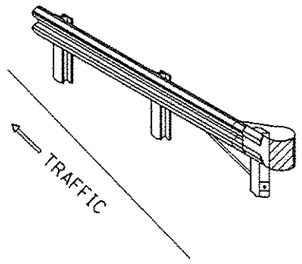
For Traffic Barrier Terminal Type 1 (Special)



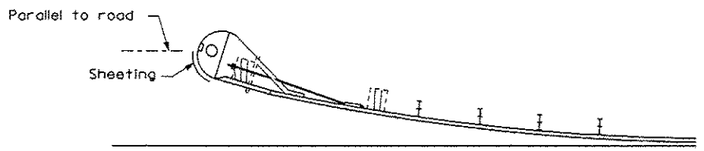
For Traffic Barrier Terminal Type (•)
and Post Mount
• See Plans for Type



Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type 1 (Special)



Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type (•)
• See Plans for Type



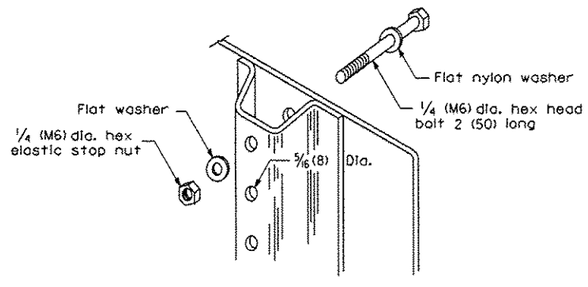
Sheeting Position for
Traffic Barrier Terminal Type (•)
• See Plans for Type

TERMINAL MARKER DETAILS

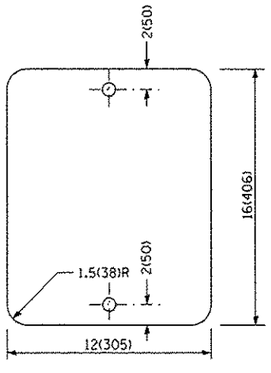
Color: Black / Yellow reflectorized

OM - I100 (L or R) Direct applied reflective sheeting

OM - I200 (L or R) Post mounted

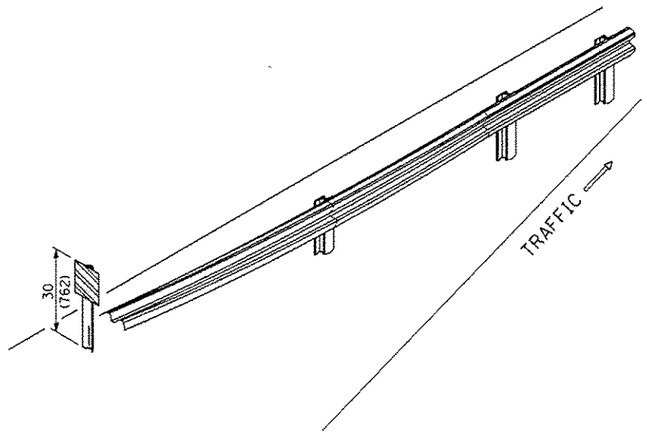


DETAIL OF MOUNTING TERMINAL MARKER TO POST



STANDARD TERMINAL MARKER

POST MOUNTED TERMINAL MARKER ASSEMBLY



ALTERNATE TREATMENT - POST MOUNTED
(For turned-down terminal where sheeting cannot be direct applied)

TERMINAL MARKER TREATMENTS

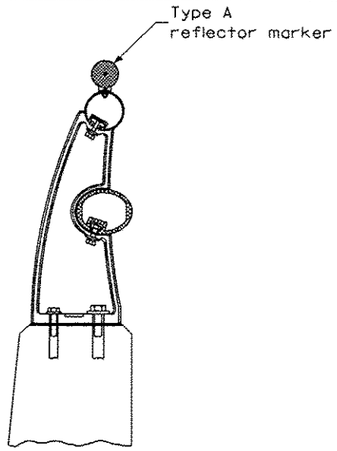
GENERAL NOTES

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

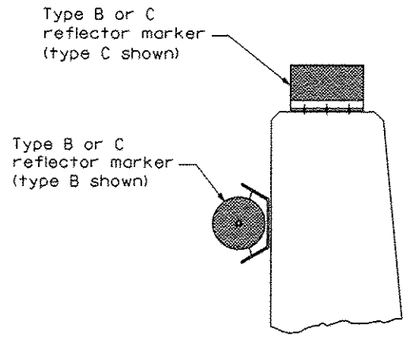
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL AND BARRIER WALL DELINEATION
SHT. 2 OF 3
NOT TO SCALE
CADD STD. 635101-D4

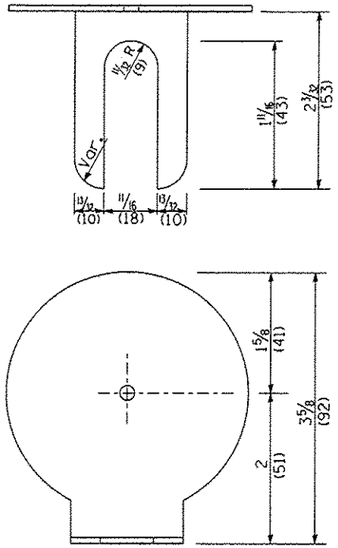
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	53
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

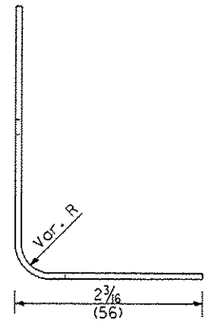


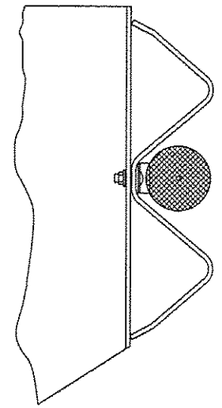
TYPICAL MOUNTING DETAIL
FOR BRIDGE RAIL REFLECTOR



TYPICAL MOUNTING DETAIL
FOR BARRIER WALL REFLECTOR

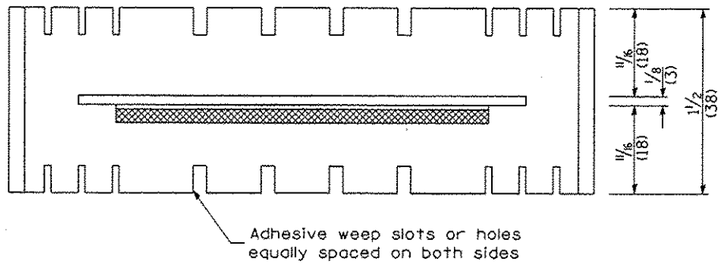


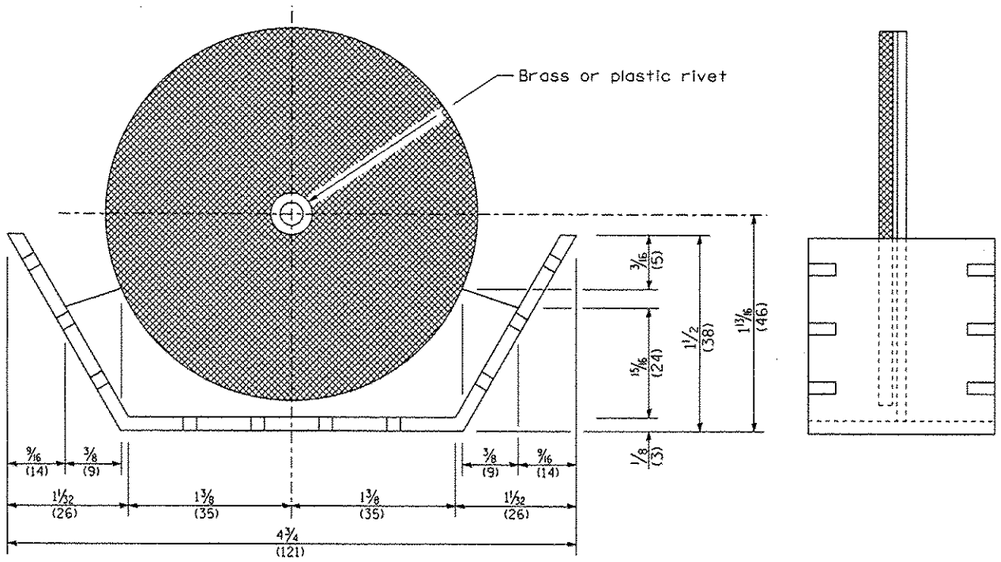




TYPICAL GUARDRAIL MOUNTING WITH
REFLECTOR MARKER TYPE A

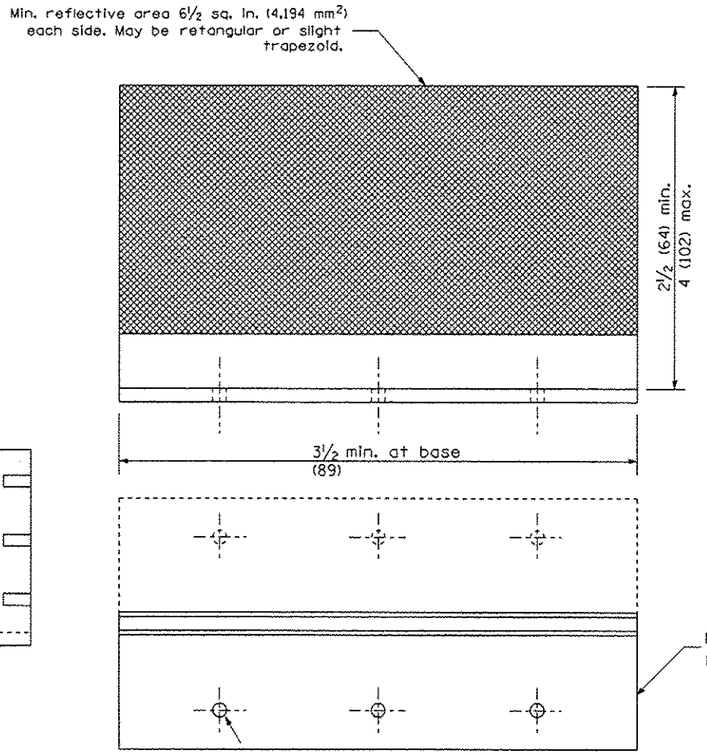
REFLECTOR MOUNTING



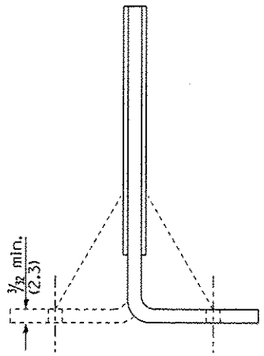


REFLECTOR MARKER TYPE B

REFLECTOR MARKER TYPE A



REFLECTOR MARKER TYPE C



Cross section may be "T"
or "L" shaped and may have
side supports at ends.

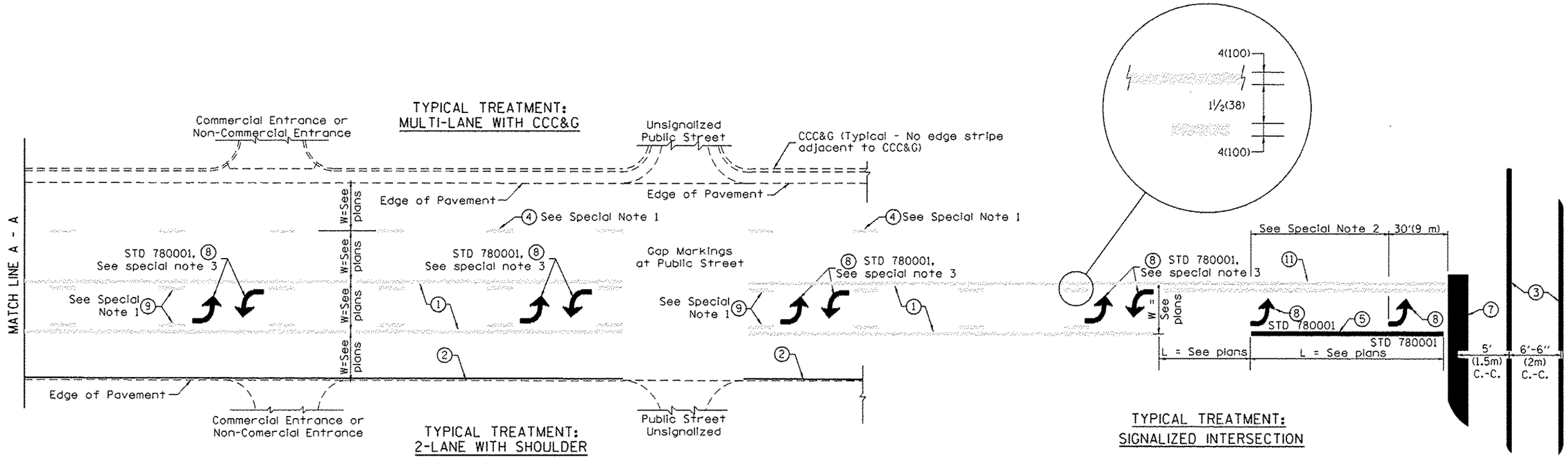
REFLECTORS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL AND BARRIER WALL DELINEATION
SHT. 3 OF 3
NOT TO SCALE
CADD STD. 635101-04

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	54
		CONTRACT NO. 89464		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend.
Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°, 11(280) C.-C., See Table A
11. 4(100) Double Solid (Yellow)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

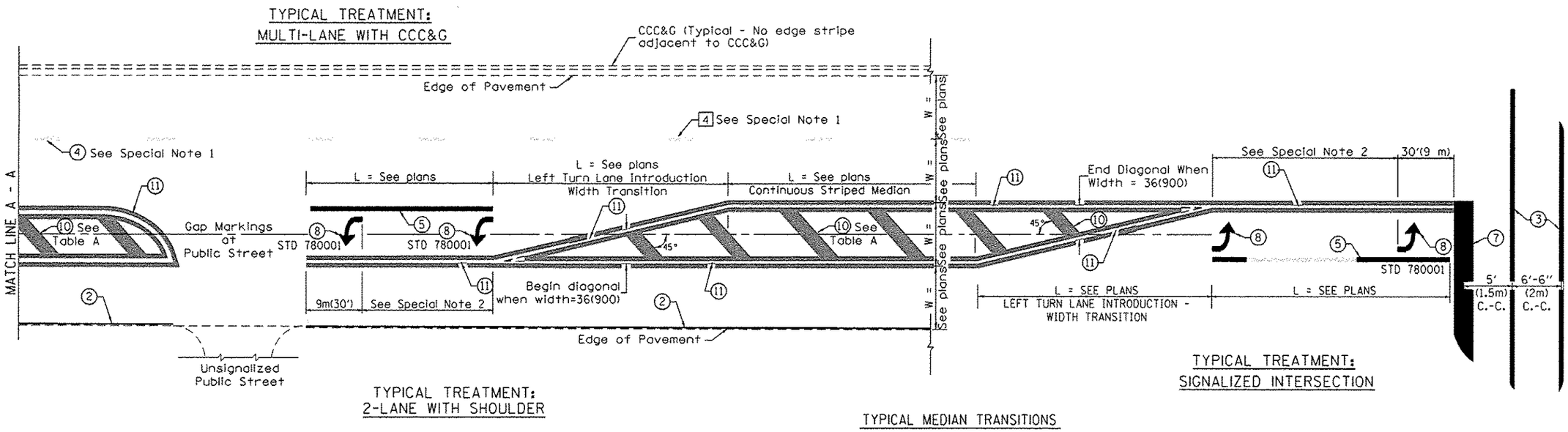
GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.					NOT TO SCALE SHT. 1 OF 2 CADD STD. 780001-D4
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.					
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.					

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	55
		CONTRACT NO.		
ILLINOIS	FED. AID PROJECT			

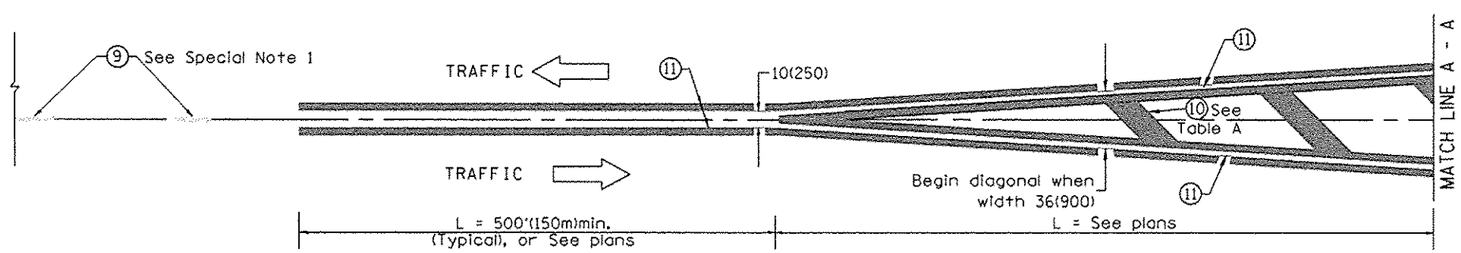


FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

TYPICAL PAVEMENT MARKINGS

SHT. 2 OF 2
CADD STD. 780001-D4

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1381	10-00005-03-BR	PEORIA	55	55A
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			