

CONSTRUCTION PLANS FOR THE MCCULLOUGH ROAD BRIDGE IMPROVEMENT PEORIA COUNTY

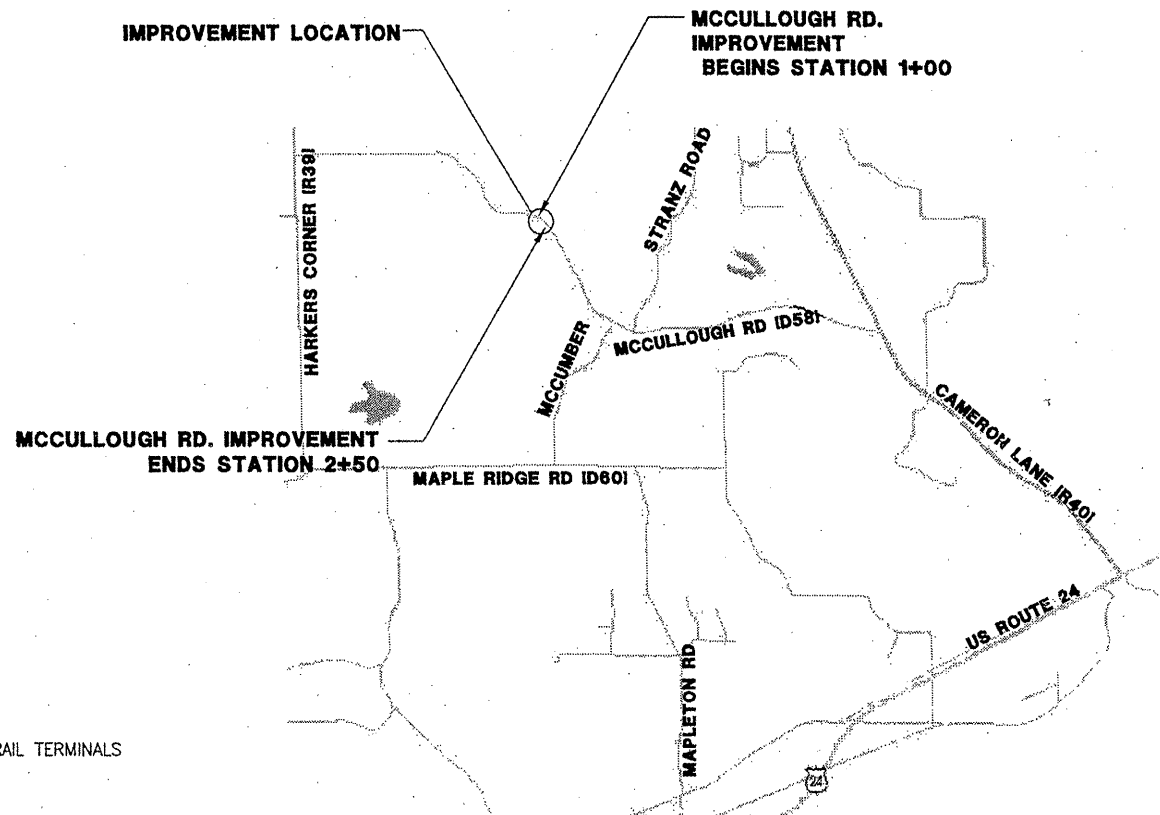
SECTION: 08-00037-02-BR
JOB NO. C-94-085-05
PROPOSED STRUCTURE NO. 072-5704
PROJECT NO. BROS-143(40)

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	1
ILLINOIS		CONTRACT # 89372	



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LOCATION MAP
NOT TO SCALE

HIGHWAY STANDARDS

- 000001-05 - STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 280001-04 - TEMPORARY EROSION CONTROL SYSTEMS
- 630001-08 - STEEL PLATE BEAM GUARDRAIL
- 630301-05 - SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631032-04 - TRAFFIC BARRIER TERMINAL, TYPE 6A
- 701901-01 - TRAFFIC CONTROL DEVICES
- BLR 21-8 - TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONST. ON RURAL LOCAL HIGHWAYS
- BLR 22-6 - TYP APPLICATION OF TRAFF CONT DEVICES ROAD CLOSED TO THRU TRAFFIC
- BLR 23-3 - TRAFFIC BARRIER TERMINAL TYPE 1

DESIGN CLASS - MCCULLOUGH ROAD, RURAL LOCAL ROAD

DESIGN SPEED - 40 MPH

MCCULLOUGH ROAD, STA. 1+00 TO STA. 2+50 - 150 FT - 0.228 MILES

EDWARD E. ANDREWS
 IL REG. P.E. NO. 062-0505
 EXPIRATION DATE: 11-30-09

PEORIA COUNTY HIGHWAY DEPARTMENT	
APPROVED <i>July 15 2009</i>	
<i>Thomas J. McJannet</i> PEORIA COUNTY HIGHWAY DEPARTMENT, COUNTY ENGINEER	
PASSED <i>7-15 2009</i>	
<i>Jack O'D</i> DISTRICT 4 ENGINEER OF LOCAL ROADS & STREETS	
RELEASING FOR BID BASED ON LIMITED REVIEW <i>July 16 2009</i>	
<i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS - REGION 3 ENGINEER	

REVISIONS

NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
DRAWN AJS, JLA
CHECKED EEA
DATE 06/10/09



COVER SHEET

PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	2
ILLINOIS CONTRACT # 89372			

GENERAL NOTES

ALL CONSTRUCTION WILL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, JANUARY 1, 2007 EDITION AND ALL APPLICABLE SUPPLEMENTAL SPECIFICATIONS (HEREAFTER REFERRED TO JOINTLY AS IDOT STANDARD SPECIFICATIONS).

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, RIGHT OF WAY MARKERS SHALL BE INSTALLED AS A FIRST ITEM OF CONSTRUCTION ON THIS CONTRACT.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATIONS OF PLAN QUANTITIES:

GRANULAR MATERIALS	2.05 TONS/CU YD
BITUMINOUS MATERIALS PRIME COAT	0.075 GAL/SQ YD
AGGREGATE PRIME COAT	0.002 TONS/SQ YD
BITUMINOUS CONCRETE SURFACE COARSE	112 LBS/SQ YD INCH
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
SHORT TERM PAVEMENT MARKING	10 FT/100 FT OF APP
MIXTURE FOR CRACKS, JOINTS & FLANGEWAYS	0.0003 TONS/SQ YD
MULCH, METHOD 2	2 TONS/ACRE
EMULSIFIED ASPHALT	100 GAL/TON OF MULCH
SUPPLEMENTAL WATERING	3 GAL/SY/APP

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF IDOT STANDARD SPECIFICATIONS. ANY UTILITIES THAT ARE DISTURBED DURING CONSTRUCTION WILL BE REPAIRED AND/OR RELOCATED AT NO COST TO THE OWNER. THE J.U.L.I.E. NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT (48) HOURS NOTICE IS REQUIRED.

MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF IMPROVEMENT ARE:

GAS: AMEREN CILCO
 ELECTRIC: AMEREN CILCO
 COMMUNICATIONS: AT&T, MCLEOD USA
 CABLE: TEL-STAR CABLEVISION
 WATER: PLEASANT VALLEY PUBLIC WATER, T-L RURAL WATER DISTRICT

ALL LOCATIONS OF UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATIONS WITH UTILITIES WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES. ANY AND ALL UTILITY COORDINATION AND RELATED EXPLORATORY WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT AND NO COMPENSATION WILL BE ALLOWED.

THE PAVEMENT AND STRUCTURES ON OR ADJACENT TO THE WORK SHALL BE PROTECTED FROM DAMAGE BY EQUIPMENT. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE. CONTRACTOR SHALL REMOVE AND REPLACE DRIVEWAYS PARTIALLY DAMAGED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.

EXCEPT AS NOTED IN THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

UNLESS OTHERWISE INDICATED, EXISTING SURFACE TOPOGRAPHY AND DRAINAGE SHALL NOT BE ALTERED BY CONSTRUCTION. CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION AND DRAINAGE FEATURE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE CONTRACT.

ALL DRAINAGE STRUCTURES AND SYSTEMS INSTALLED DURING CONSTRUCTION SHALL BE PROTECTED BY STANDARD EROSION CONTROL ITEMS AS DETAILED ON THE EROSION CONTROL SHEETS.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR WILL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

ALL EROSION CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE IDOT STANDARD SPECIFICATIONS AND THE IEPA/USDA NRCS ILLINOIS URBAN MANUAL, 1995 (FROM THE ILLINOIS DEPARTMENT OF AG. SOIL CONSERVATION SERVICE).

CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED.

ALL EARTHWORK OPERATIONS SHALL BE CONDUCTED SO THAT POSITIVE DRAINAGE IS PROVIDED AT ALL TIMES. DITCHES AND WATERWAYS SHALL BE CONSTRUCTED AND MAINTAINED TO THE LINES, GRADES, AND CROSS SECTIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL ALSO EXCAVATE A DITCH AT THE TOW OF THE SLOPE OF FILLS AND AT THE TOE OF SLOPE OF CUTS AT LOCATIONS DESIGNATED BY THE OWNER OR HIS REPRESENTATIVE AT THE EARLIEST OPPORTUNITY DURING CONSTRUCTION TO CONTROL RUNOFF FROM THE EMBANKMENT OR CUT SECTION. EXCAVATED MATERIAL FROM DITCHES AT THE TOP OF SLOPE CUTS SHALL BE PLACED IN A WINDROW BETWEEN THE DITCH AND TOE OF SLOPE.

SEDIMENT TRAPS, SILT FENCES, AND OTHER EROSION CONTROL ITEMS WILL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. INSPECTION AND REPAIR WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCLUDED IN THE EROSION CONTROL BEING INSPECTED AND REPAIRED.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. AREAS TO BE SEEDDED SHALL BE DETERMINED BY THE ENGINEER.

PERMANENT SEEDING SHALL BE ESTABLISHED AT THE EARLIEST POSSIBLE TIME USING THE PREVIOUSLY MENTIONED APPLICATIONS RATES.

MULCH, METHOD 2 WILL BE APPLIED TO ALL SEEDDED AREAS IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS.

ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, 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.

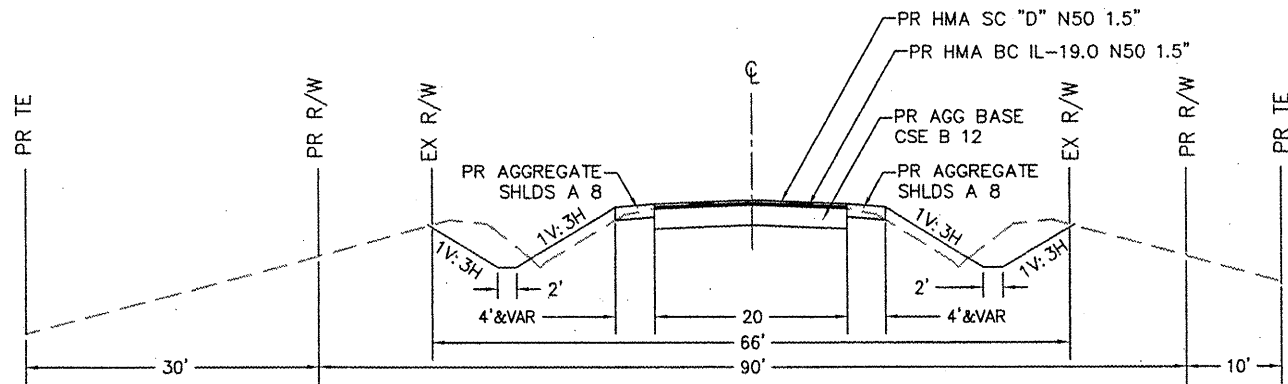
PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

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 P10100
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 P10101

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



**PROPOSED TYPICAL SECTION
 STA 0+00 TO 1+27 AND STA 2+08 TO 2+50**

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE USE(S)	SURFACE COURSE	BINDER COURSE
	1 1/2"	1 1/2"
AC/PG:	SBS OR SBR PG64-22	SBS OR SBR PG64-22
% RAP (MAX):	10%	
DESIGN AIR VOIDS:	4.0% @ N=50	4.0% @ N=50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 19.0
FRICITION AGGREGATE	MIXD	N.A.

LEGEND

- > GUY ANCHOR
- W WATER VALVE
- W GAS VALVE
- o EXISTING POWER POLE
- o EXISTING POWER POLE WITH TRANSFORMER
- o EXISTING POWER POLE WITH LIGHT
- d EXISTING SIGN
- W TELEPHONE PEDESTAL
- W FIRE HYDRANT
- W WATER VALVE
- o MANHOLE
- o ELECTRIC MANHOLE
- * CONIFEROUS TREE
- o DECIDUOUS TREE

- EX RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED TEMPORARY EASEMENT
- PROPOSED DRAINAGE EASEMENT
- ☁ TREELINE
- EUE--- UNDERGROUND ELECTRIC
- OAE--- OVERHEAD ELECTRIC
- CTV--- CABLE TV
- TEL--- TELEPHONE
- UG--- UNDERGROUND GAS
- WME--- WATERMAIN
- EXISTING SHOULDER
- EXISTING EDGE OF PAVEMENT
- EXISTING DITCH FLOWLINE
- EXISTING SANITARY SEWER
- PROPOSED DITCH FLOWLINE
- PROPOSED DITCH FLOW DIRECTION
- PROPOSED EDGE OF PAVEMENT

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NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09



TYPICAL SECTIONS, GENERAL NOTES

PEORIA COUNTY HIGHWAY DEPT.



MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	3
ILLINOIS		CONTRACT # 89372	

SUMMARY OF QUANTITIES

Item Number	Items	Unit	Quantity
20200100	EARTH EXCAVATION	CU YD	108
20300100	CHANNEL EXCAVATION	CU YD	278
20400800	FURNISHED EXCAVATION	CU YD	75
25000210	SEEDING, CLASS 2A	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	22
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	22
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	22
25100115	MULCH, METHOD 2	ACRE	0.25
28000300	TEMPORARY DITCH CHECKS	EACH	5
28000400	PERIMETER EROSION BARRIER	FOOT	350
28500100	FABRIC FORMED CONCRETE REVETMENT MAT	SQ YD	342
35102400	AGGREGATE BASE COURSE TYPE B 12"	SQ YD	204.4
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	40
40600300	AGGREGATE (PRIME COAT)	TON	0.8
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N50	TON	34.0
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	34
44000100	PAVEMENT REMOVAL	SQ YD	260
48100700	AGGREGATE SHOULDERS, TYPE A 8 INCH	SQ YD	39
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	25.8
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1800
50800105	REINFORCEMENT BARS	POUND	3100
* 50901050	STEEL RAILING, TYPE SM	FOOT	120
51201600	FURNISHING STEEL PILES HP12X53	FOOT	120
51202305	DRIVING PILES	FOOT	120
51203600	TEST PILES STEEL HP12X53	EACH	2
51204650	PILE SHOES	EACH	10
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	200
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	540
* 63000005	STEEL PLATE BEAM GUARD RAIL TYPE B	FOOT	110
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	EACH	3
* 63100087	TRAFFIC BARRIER TERMINAL TYPE 6A	EACH	4
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	3.3
67100100	MOBILIZATION	L SUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
* 78200450	MONODIRECTIONAL GUARD RAIL REFLECTORS	EA	14
ZD013798	CONSTRUCTION LAYOUT	L SUM	1
* LR631020	TRAFFIC BARRIER TERMINAL TYPE 1	EACH	1

* SPECIALTY ITEMS


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SUMMARY OF QUANTITIES

PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-3063
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604



SCHEDULE OF QUANTITIES

EROSION CONTROL QUANTITIES					PERIMETER EROS BAR (FOOT)	TEMP DITCH CHECK (EACH)	FAB FORM CONC REV MAT (SQ YD)
LOCATION					QUANTITY	QUANTITY	QUANTITY
STATION 0+89 LT	TO	STATION 1+79 LT	LENGTH	WIDTH			61
STATION 1+00	TO	STATION 1+67	67		150		
STATION 1+33 LT			8			1	
STATION 1+16 RT	TO	STATION 1+48 LT	32				126
STATION 1+60 LT			8			1	
STATION 1+69 RT	TO	STATION 2+26 RT	57				37
STATION 1+70	TO	STATION 2+50	80		200		
STATION 1+76 RT			8			1	
STATION 1+90 RT	TO	STATION 2+20 LT	30				118
STATION 1+93 RT			8			1	
STATION 2+07 RT			8			1	
TOTAL					350.00	5	342.00

PAVEMENT QUANTITIES																	
LOCATION					HMA BC IL-19.0 N50 1.5" (TON)	HMA SC D N50 1.5" (TON)	AGG BASE CSE TYB 12" (SQ YD)	BIT MAT (PRIME CT) (GALLON)	AGG (PRIME CT) (TON)	PAVEMENT REM (SQ YD)	AGG SHDRS TY A 8" (SQ YD)	STEEL PB GUARD RAIL TY B (FOOT)	TRAF BAR TERM T1 (EACH)	TRAF BAR TERM T1 SPL TAN (EACH)	TRAF BAR TERM T6A (EACH)	MONO DIR GUARDRAIL REFL (EACH)	
LOCATION					LENGTH	WIDTH	HEIGHT	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	
STATION 0+34 RT	TO	STATION 1+30 RT	LENGTH	WIDTH								55					
STATION 1+35 LT	TO	STATION 1+47 LT	70										1			7	
STATION 1+00	TO	STATION 1+38.52	39	20			7.3	7.3	86.7	8.67	0.17						
STATION 1+00	TO	STATION 1+04.5	4.5	20													
STATION 1+05 RT	TO	STATION 1+30 RT	25	3.5							9.72						
STATION 1+22 LT	TO	STATION 1+47 LT	25	3.5							9.72						
STATION 1+35	TO	STATION 1+38	3	20													
STATION 1+00	TO	STATION 1+52	52	20							115.56						
STATION 1+38.52	TO	STATION 1+97.55	60	30			16.8	16.8	20.00	0.40							
STATION 1+85	TO	STATION 2+50	65	20							144.44						
STATION 1+90 RT	TO	STATION 2+15 RT	25	3.5							9.72						
STATION 1+90 RT	TO	STATION 2+85 RT	90										1		1		
STATION 1+97	TO	STATION 2+00	3	20													
STATION 1+97.55	TO	STATION 2+50	53	20			9.9	9.9	117.8	11.78	0.24						
STATION 2+05 LT	TO	STATION 2+30 LT	25	3.5													
STATION 2+07 LT	TO	STATION 3+57 LT	150														
STATION 2+45.5	TO	STATION 2+50	4.5	20								55		1	1	7	
TOTAL							34	34	204	40	0.8	260	38.9	110	1	3	4

EARTHWORK QUANTITIES																
LOCATION					EARTH EXCAVATION (CU YD)	FURNISHED EXCAVATION (CU YD)	CHANNEL EXCAVATION (CU YD)	SEEDING, CLASS 2A (ACRE)	NITROGEN FERT NUTR (POUND)	PHOSPHORUS FERT NUTR (POUND)	POTASIUM FERT NUTR (POUND)	MULCH METHOD 2 (ACRE)	COMMENTS			
LOCATION					LENGTH	WIDTH	HEIGHT	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY		
STATION 1+00 LT	TO	STATION 1+75 LT	LENGTH	WIDTH	HEIGHT				0.09	8	8	8	0.09	Min. Seeding & Nutrient Quantities for bidding purposes shall cover 0.25 acres		
STATION 1+00 RT	TO	STATION 1+68 LT														
STATION 1+00	TO	STATION 2+50	150				108.0	75.0								
STATION 1+45	TO	STATION 1+67	30	15	10											
STATION 1+65 RT	TO	STATION 2+25 LT														
STATION 1+75	TO	STATION 1+95	30	10	10											
STATION 2+20 LT	TO	STATION 2+50 LT	30	10					0.01	1	1	1	0.01			
STATION 2+00 RT	TO	STATION 2+25 RT	25	10					0.01	1	1	1	0.01			
TOTAL=								108.0	75.0	277.8	0.10	9	9	9	0.10	Min. Mulch Quantity for bidding = 0.25 Acre

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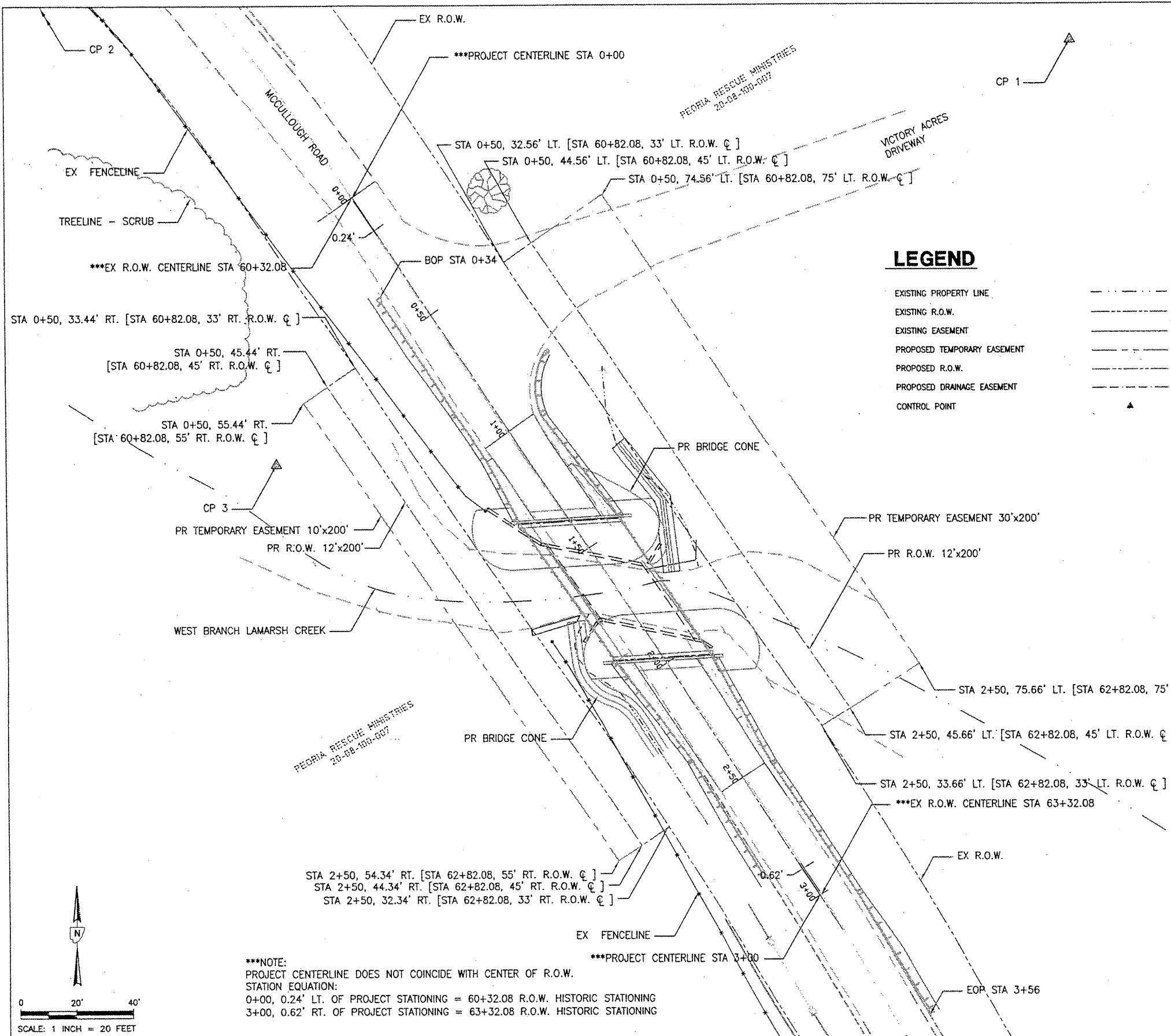
ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE, LICENSE #184-001138

SCHEDULE OF QUANTITIES

PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

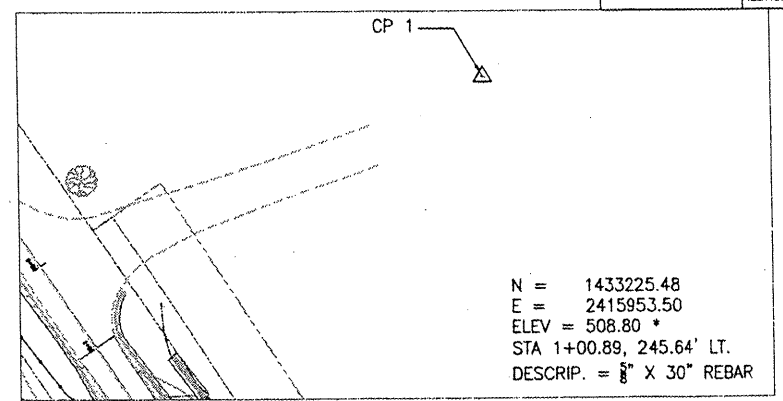


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08-00037-02-BR	PEORIA	27	5
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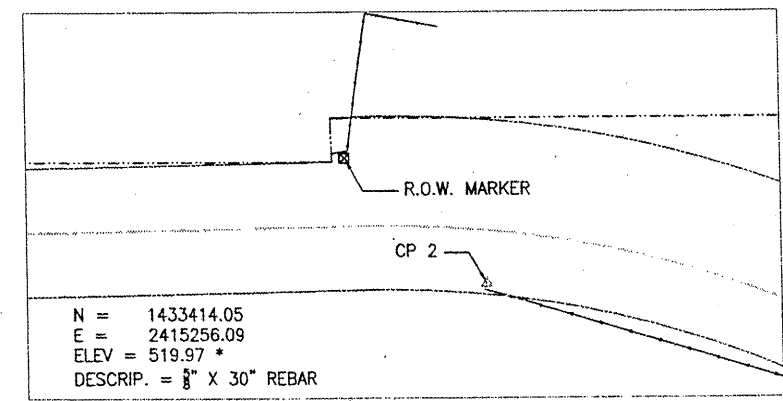
LEGEND

- EXISTING PROPERTY LINE
- EXISTING R.O.W.
- EXISTING EASEMENT
- PROPOSED TEMPORARY EASEMENT
- PROPOSED R.O.W.
- PROPOSED DRAINAGE EASEMENT
- CONTROL POINT



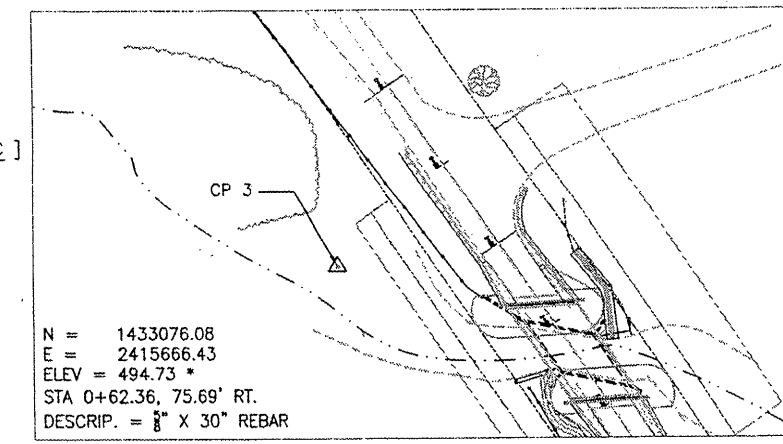
CONTROL POINT 1

SCALE: 1" = 50'



CONTROL POINT 2

SCALE: 1" = 50'

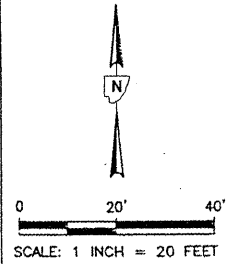


CONTROL POINT 3

SCALE: 1" = 50'

*NOTE:
HORIZONTAL COORDINATES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES FOR ILLINOIS - WEST.
ELEVATION DATUM SHOWN HEREON IS BASED ON NAVD88.
HORIZONTAL AND VERTICAL VALUES ARE DERIVED FROM OPUS STATIC 2 HOUR+ OBSERVATION AND GROUND SURVEY.

***NOTE:
PROJECT CENTERLINE DOES NOT COINCIDE WITH CENTER OF R.O.W.
STATION EQUATION:
0+00, 0.24' LT. OF PROJECT STATIONING = 60+32.08 R.O.W. HISTORIC STATIONING
3+00, 0.62' RT. OF PROJECT STATIONING = 63+32.08 R.O.W. HISTORIC STATIONING



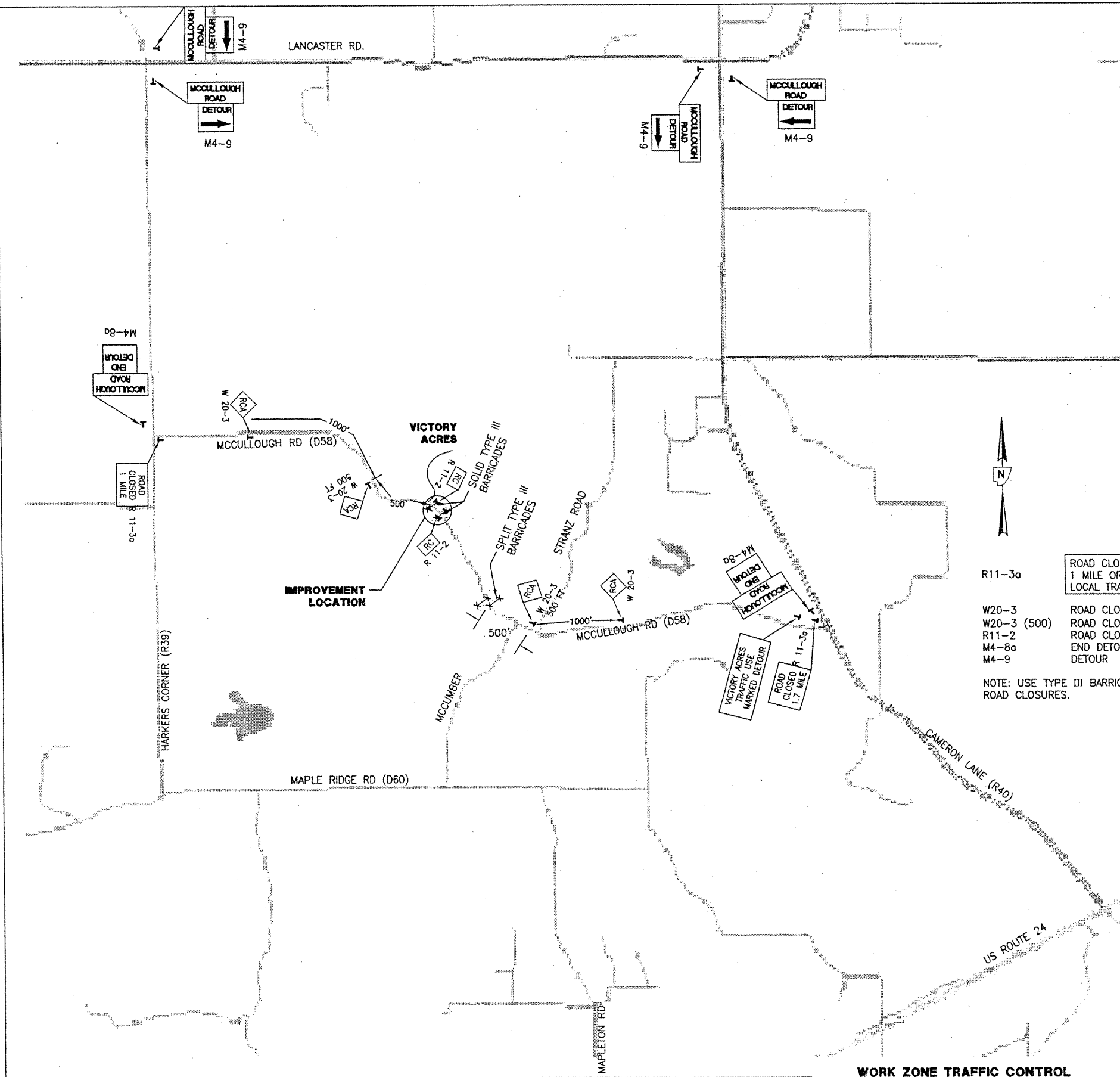
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MACTEC
ENGINEERING AND CONSULTING, INC.
ILLINOIS PROFESSIONAL DESIGN FIRM PEISE, LICENSE #184-001138

MCCULLOUGH ROAD BRIDGE
ROW STRIP MAP AND CONTROL
PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-3063
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	6
ILLINOIS		CONTRACT # 89372	



MAINTENANCE OF TRAFFIC

1. INSTALL R11-3A "ROAD CLOSED 1.7 MILES" AT CAMERON LANE FOR WESTBOUND TRAFFIC.
2. INSTALL R11-3A "ROAD CLOSED 1 MILE" AT HARKER'S CORNER FOR EASTBOUND TRAFFIC.
3. INSTALL ADVISORY SIGN "VICTORY ACRES USE MARKED DETOUR", AT CAMERON LANE.
4. INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH IDOT STANDARD BLR 22, EAST OF THE IMPROVEMENT, CONFIGURED SO THAT SOUTHBOUND STRANZ ROAD AND NORTHBOUND MCCUMBER ROAD CAN SEE THE TRAFFIC CONTROL.
5. INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH IDOT STANDARD BLR 22, WEST OF THE IMPROVEMENT, CONFIGURED SO THAT TRAFFIC CAN ACCESS THE DRIVEWAY TO VICTORY ACRES.
6. LOCATE TYPE III BARRICADES WEST OF MCCUMBER ROAD, SPLIT TO ALLOW LOCAL TRAFFIC.
7. LOCATE TYPE III BARRICADES AT THE LIMITS OF THE WORK ZONE TO COMPLETELY BLOCK OFF MCCULLOUGH ROAD DURING CONSTRUCTION. LOCATE R11-2 "ROAD CLOSED" SIGNS ON THE TYPE III BARRICADES AS SHOWN ON THE APPLICABLE IDOT STANDARDS.
8. TRAFFIC CONTROL AND PROTECTION SHALL CONSIST OF FURNISHING, INSTALLATION, MAINTENANCE, RELOCATION AND REMOVAL OF ALL TRAFFIC CONTROL AND PROTECTION INDICATED ON THIS DRAWING AND AS REQUIRED BY SECTION 701 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND BY THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
9. SIGNS REQUIRING SPECIAL FABRICATION E.G. MCCULLOUGH ROAD, VICTORY ACRES..., ETC., SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

R11-3a ROAD CLOSED 1 MILE OR 1.7 MILES AHEAD LOCAL TRAFFIC ONLY

W20-3 ROAD CLOSED AHEAD ROAD CLOSED 500'

R11-2 ROAD CLOSED

M4-8a END DETOUR

M4-9 DETOUR

NOTE: USE TYPE III BARRICADES FOR ALL ROAD CLOSURES.

WORK ZONE TRAFFIC CONTROL

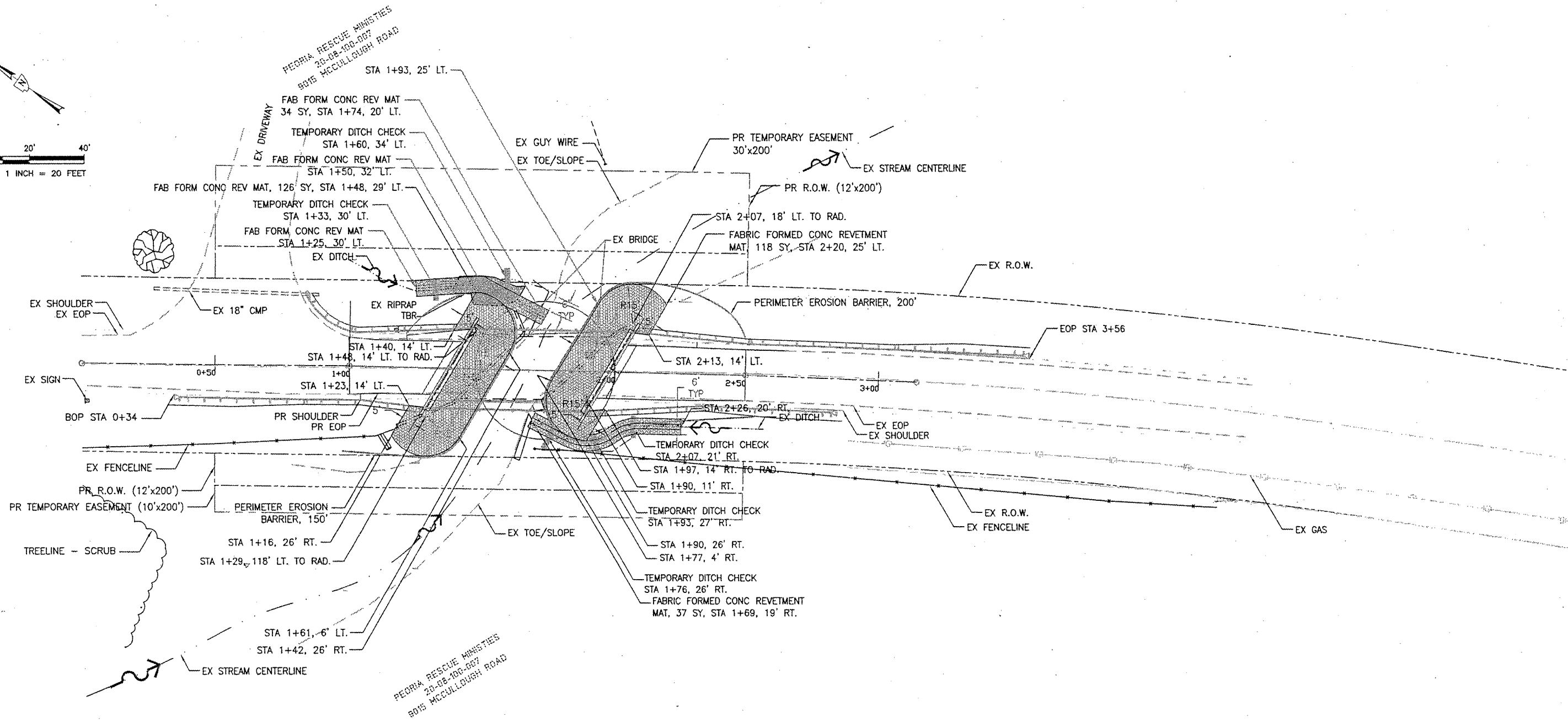
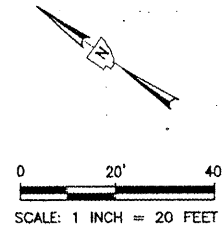
REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/08

MACTEC
 ENGINEERING AND CONSULTING, INC.
 ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE, LICENSE #184-001138

TRAFFIC CONTROL
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604


SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	7
	ILLINOIS	CONTRACT # 89372	



REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

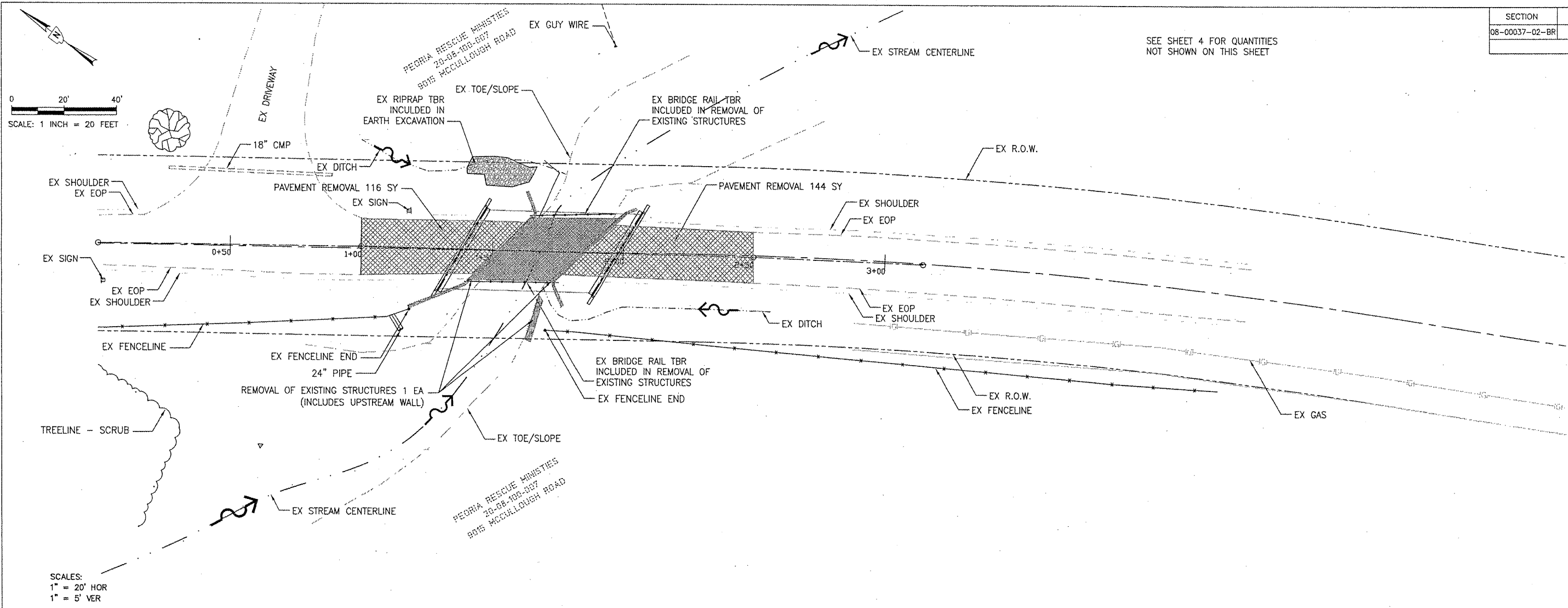
DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 05/10/09

MACTEC
 ENGINEERING AND CONSULTING, INC.
ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE, LICENSE #184-001138

MCCULLOUGH ROAD BRIDGE
EROSION CONTROL
 PEORIA COUNTY HIGHWAY DEPT.

 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

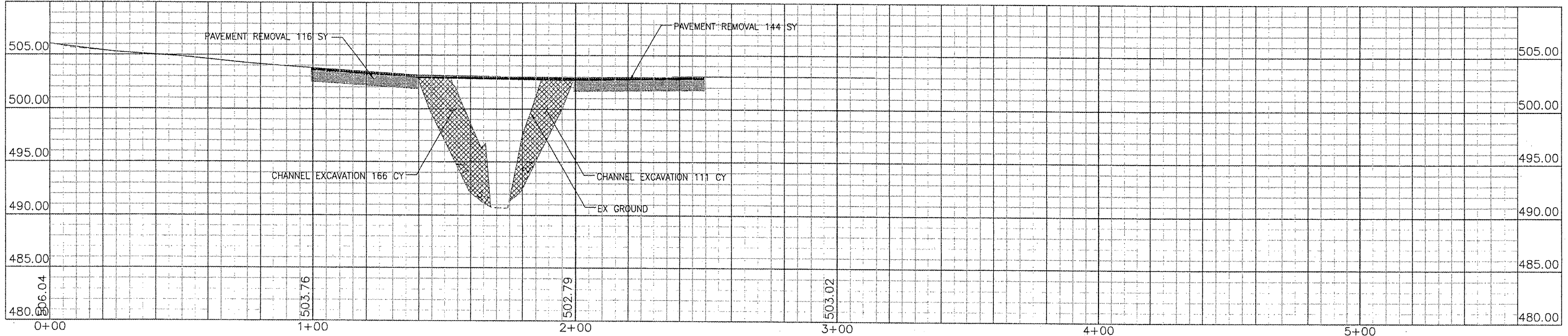
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	8
		ILLINOIS	CONTRACT # 89372

SEE SHEET 4 FOR QUANTITIES NOT SHOWN ON THIS SHEET



SCALE: 1 INCH = 20 FEET

SCALES:
1" = 20' HOR
1" = 5' VER



P:\316008007\PE99\SHF-8_DEMOLITION.dwg, 7/13/2009 10:15:13 AM

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

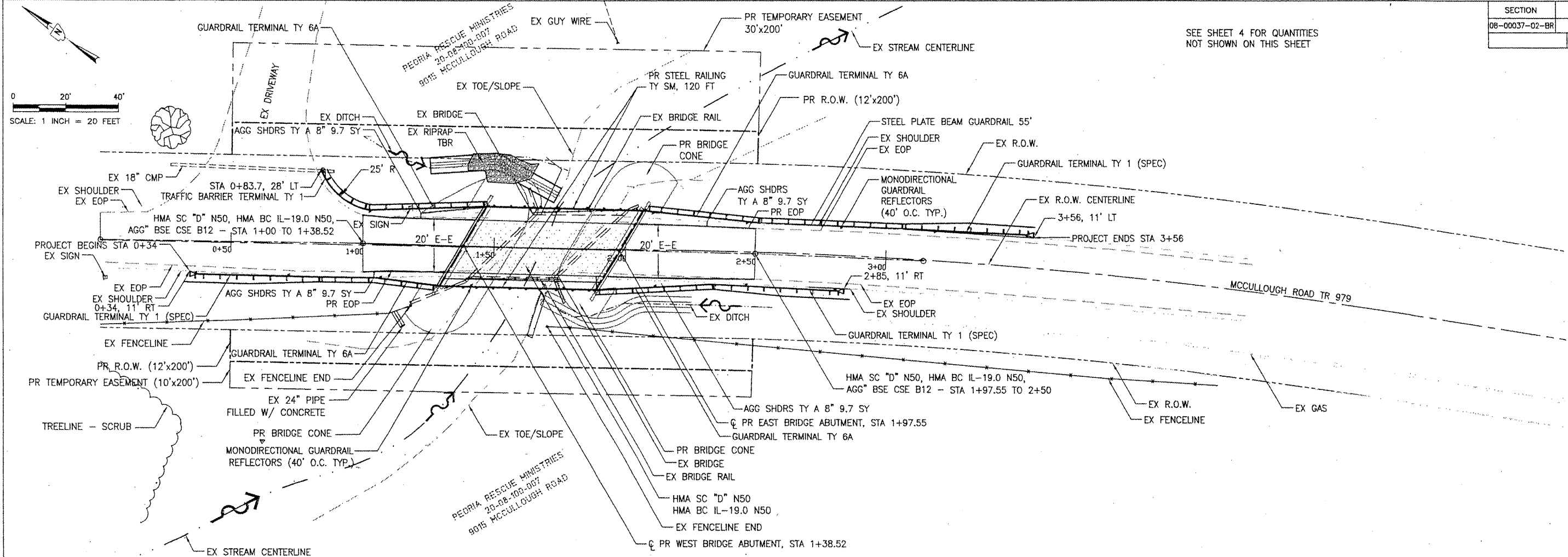
DESIGNED AJS
DRAWN AJS, JLA
CHECKED EEA
DATE 06/10/09

MACTEC
ENGINEERING AND CONSULTING, INC.
ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE, LICENSE #184-001138

**MCCULLOUGH ROAD BRIDGE
ROADWAY DEMOLITION**
PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-3063
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604

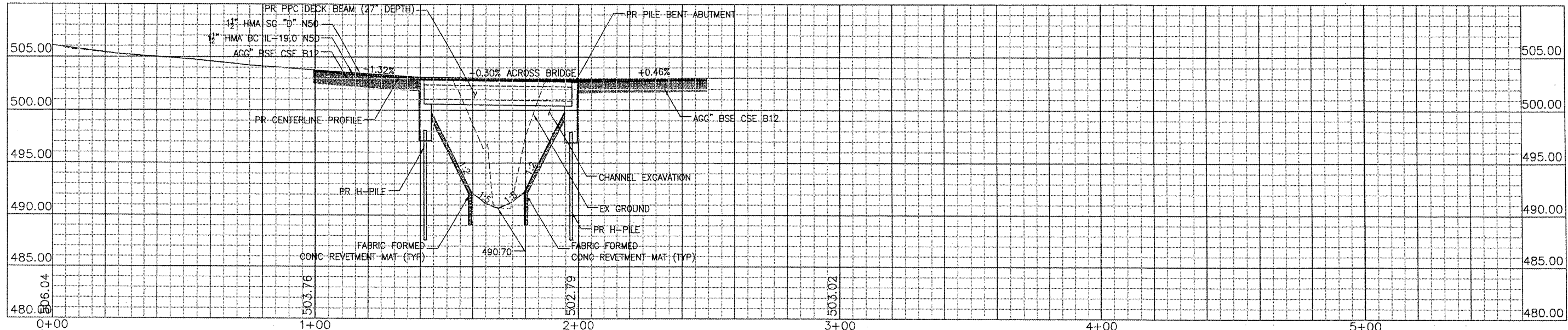
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	9
ILLINOIS		CONTRACT # 89372	

SEE SHEET 4 FOR QUANTITIES
NOT SHOWN ON THIS SHEET



SCALE: 1 INCH = 20 FEET

SCALES:
1" = 20' HOR
1" = 5' VER



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REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED: AJS
DRAWN: AJS, JLA
CHECKED: EEA
DATE: 06/10/08



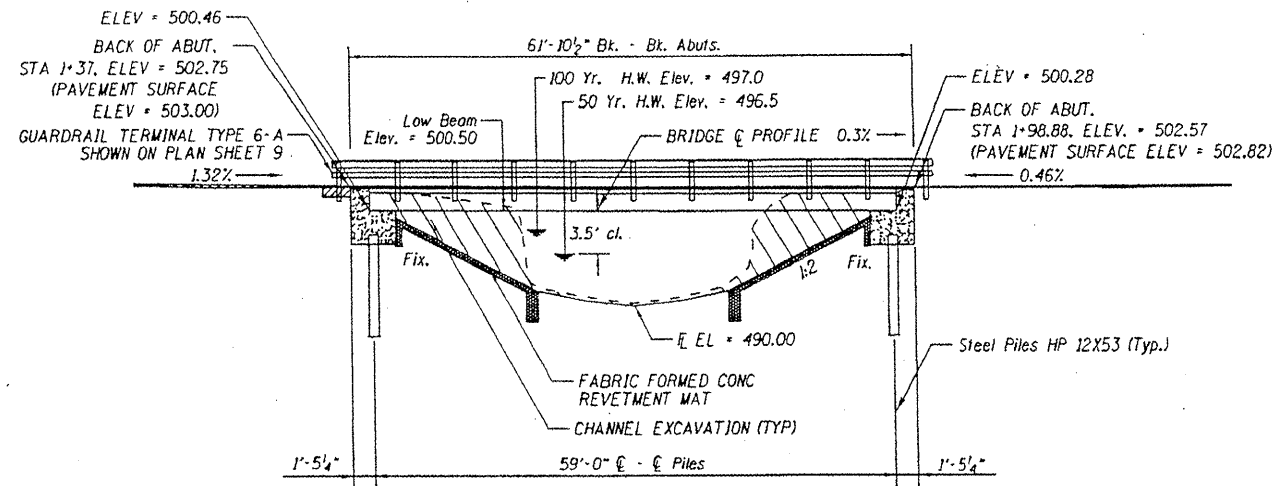
MCCULLOUGH ROAD BRIDGE
PLAN & PROFILE
PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-3063
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	10
ILLINOIS		CONTRACT #89372	

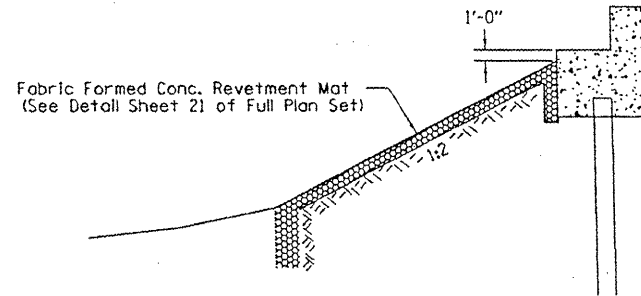
SHEET 1 OF 8

WEST BRANCH LAMARSH CREEK
 BUILT 200. BY
 PEORIA COUNTY HIGHWAY DEPT.
 SEC. 08-00037-02-BR
 EXISTING STR. NO. 072-3063
 PROPOSED STR. NO. 072-5704

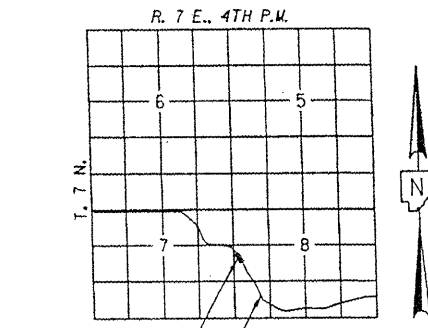
NAME PLATE
 SEE STD. 515001



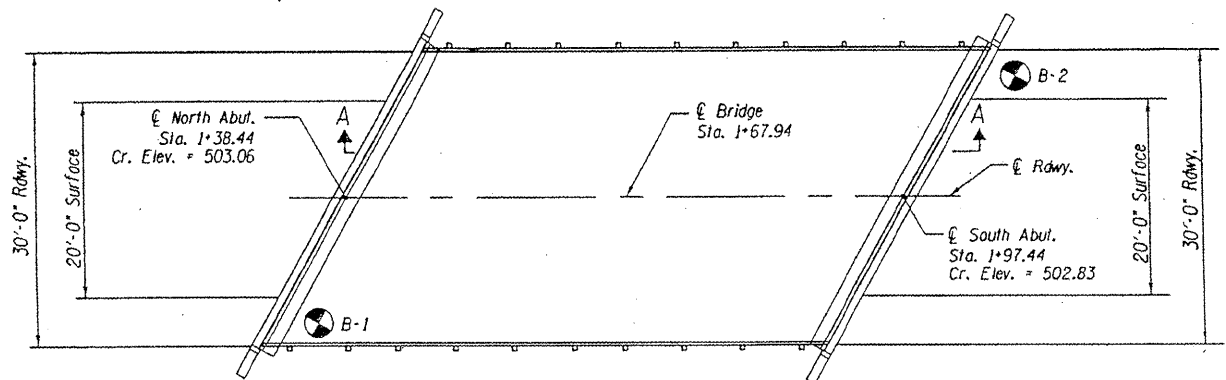
ELEVATION



SECTION A-A



LOCATION SKETCH



PLAN

TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	EACH			1
Concrete Structures	CU. YD.		25.8	25.8
Precast Prestress Concrete Deck Beams (27" Depth)	SQ. FT.	1800		1800
Reinforcement Bars	POUND		3100	3100
Name Plates	EACH			1
Steel Railing, Type SM	FOOT	120		120
Portland Cement Mortar Fairing	FOOT	540		540
Channel Excavation	CU. YD.			278
Waterproofing Membrane System	SQ. YD.	200		200
Test Piles Steel HP 12X53	EACH		120	120
Furnishing Steel Piles HP 12X53	FOOT		120	120
Driving Piles	FOOT		120	120
Pile Shoes	EACH		10	10

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_D) = 0.08g
 Design Spectral Acceleration at 0.2 sec (S_0) = 0.18g
 Soil Site Class = C

WATERWAY INFORMATION

Flood	Frequency Year	Discharge C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - Ft.		Headwater Elev.	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
			Low Grade Elev. =			Maximum Recorded H.W.E. = NA			
10	880	105	140	495.2	1.4	0.2	496.6	495.4	
Design	50	1570	155	200	496.5	2.8	0.3	499.3	496.8
Base	100	1900	176	220	497.0	3.4	0.3	500.4	497.3
Overtopping	500	2760	226	400	497.8	5.0	0.4	501.8	498.2
Max. Calc.									

10 Year Velocity through Existing Structure = 10.9 fps 10 Year Velocity through Proposed Structure = 6.2 fps

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Robert A. Lee
 ILLINOIS STRUCTURAL NO. 081-005246



Expires 11-30-2010

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_cl = 5,000$ psi
 $f'_s = 270,000$ psi (1/2" ϕ low lax. strands)
 $f'_sl = 201,960$ psi (1/2" ϕ low lax. strands)
 $f_y = 60,000$ psi (Reinf.)

LOADING HL 93

Design Specifications: 2008 AASHTO LRFD with all applicable interims.
 50#/Sq.Ft. included in dead load for future wearing surface.

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

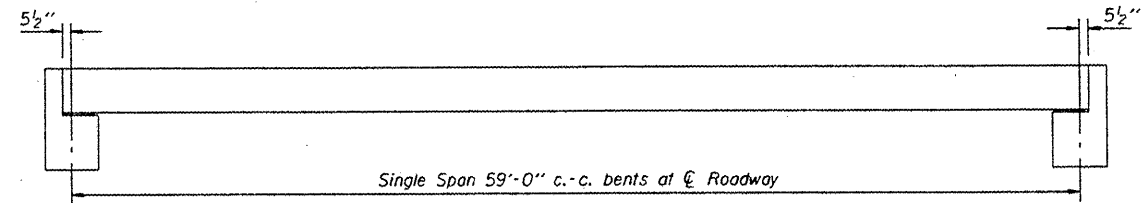
DESIGNED: AJS
 DRAWN: AJS, JLA
 CHECKED: EEA, RAJ
 DATE: 06/18/09



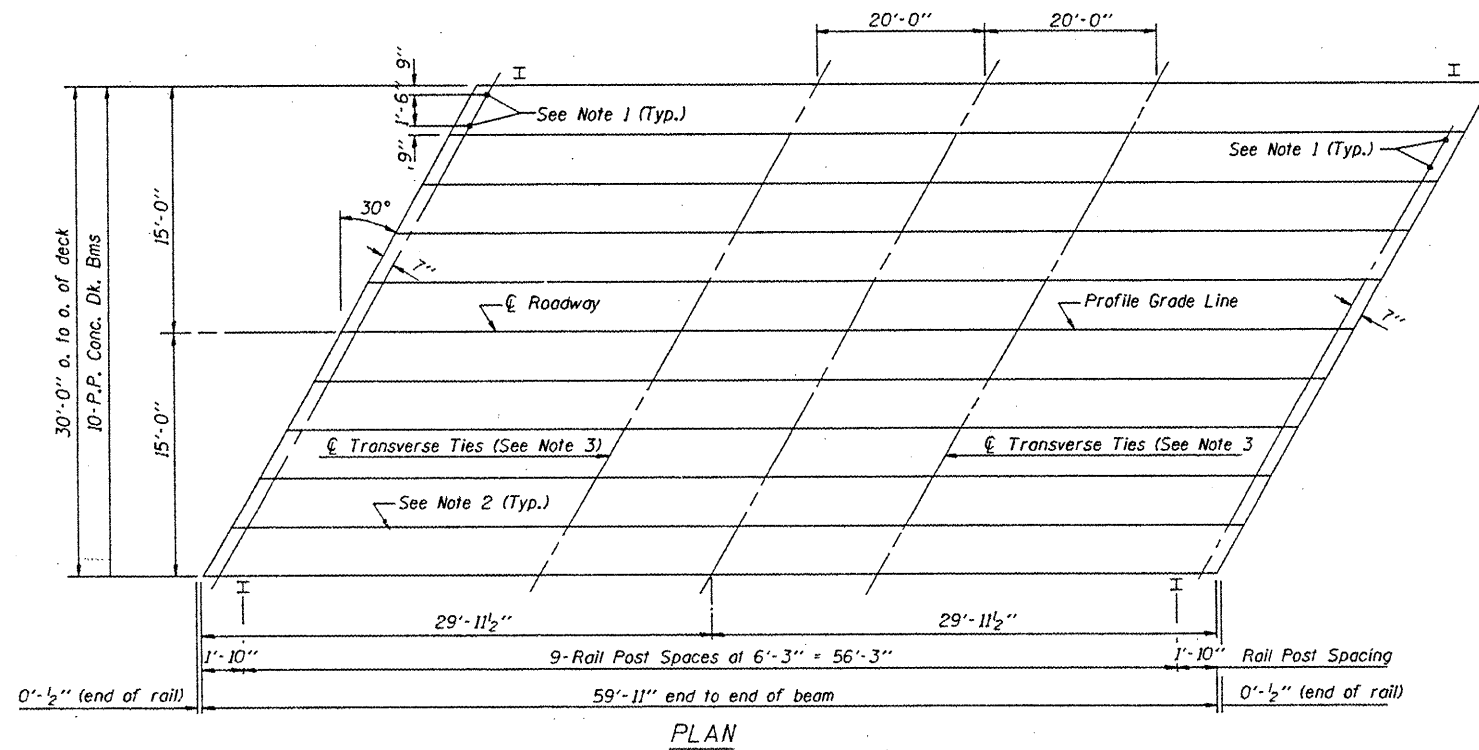
GENERAL PLAN AND ELEVATION
 STRUCTURE NO. 072-5704
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	27	11
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 89372	

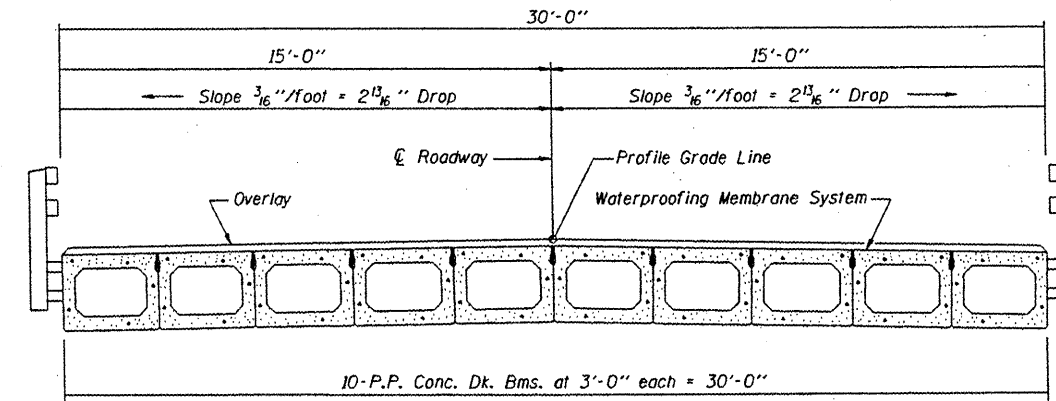
SHEET 2 OF 8



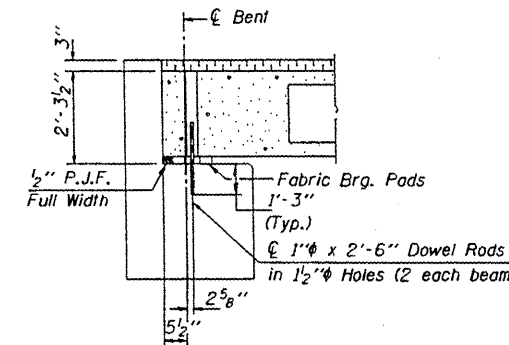
ELEVATION



PLAN



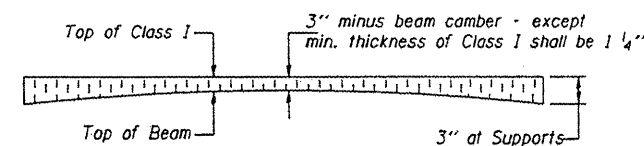
CROSS SECTION



SECTION AT ABUTS.
(Along \bar{c} Beams)

NOTES

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
2. Longitudinal keys shall be grouted.
3. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar outside shall be filled with grout after transverse tie assembly is in place.




PROFILE OF OVERLAY

Note: Quantity of overlay for one span = 24.4 Tons

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

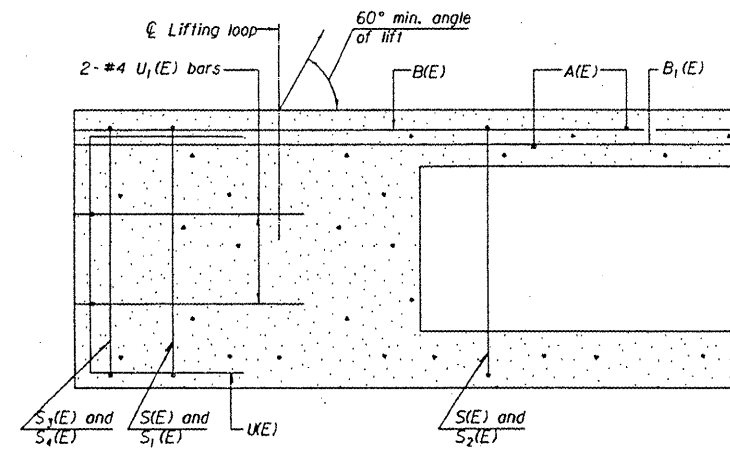
DESIGNED AJS
 DRAWN AJS/JLA
 CHECKED EEA
 DATE 06/10/09



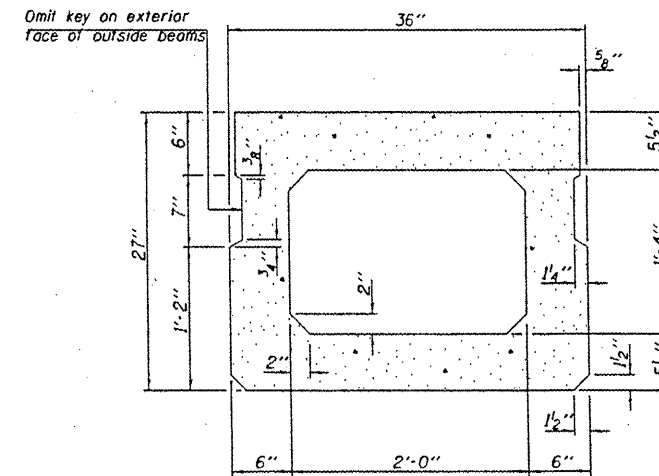
P.P.C. DECK BEAM SUPERSTRUCTURE
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	12
FED. ROAD DIST. NO. ILLINOIS		CONTRACT NO. 89372	

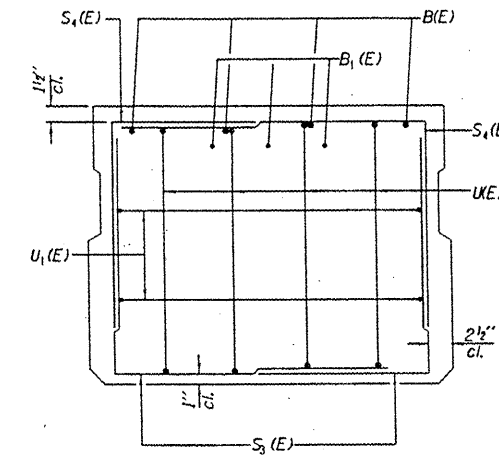
SHEET 3 OF 8



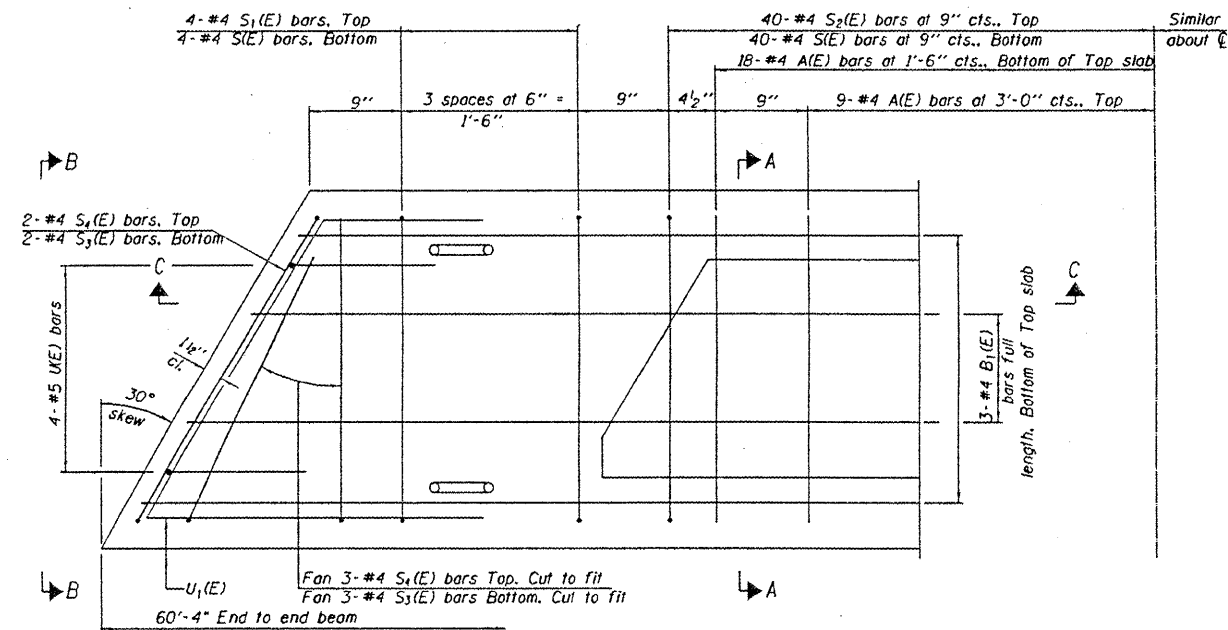
SECTION C-C



SECTION A-A
(Showing dimensions)

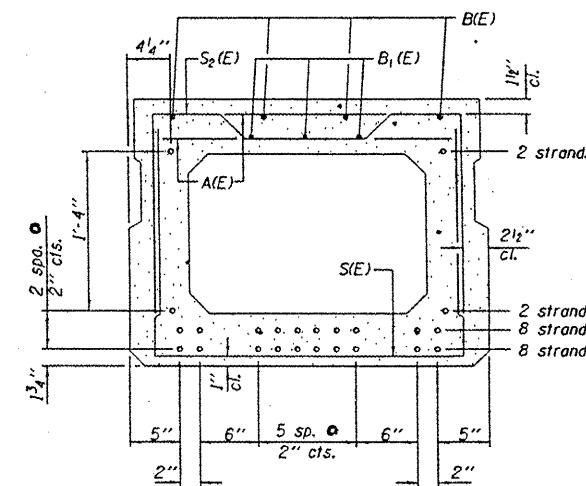


VIEW B-B



PLAN VIEW

Note: Spacing of S1(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION A-A
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY

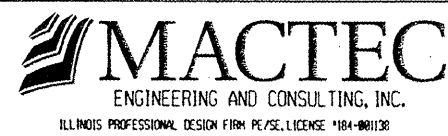
(For information only)

Bar	No.	Size	Length	Shape
A(E)	98	#4	2'-7"	—
B(E)	4	#5	60'-0"	—
B1(E)	3	#4	60'-0"	—
S1(E)	88	#4	6'-5"	U
S2(E)	8	#4	5'-11"	U
S3(E)	80	#4	6'-2"	U
S4(E)	10	#4	4'-1"	U
S5(E)	10	#4	3'-10"	U
U(E)	8	#5	4'-6"	U
U1(E)	4	#4	6'-10"	U

Note: See sheet 4 of 8 for additional details and Bill of Material.

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

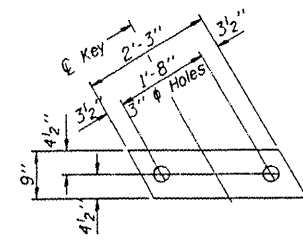
DESIGNED: AJS
DRAWN: AJS, JLA
CHECKED: FEA
DATE: 06/18/09



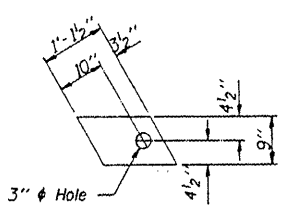
27" X 36" PPC DECK BEAM
PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-5704
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61684

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	13
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 89372	

SHEET 4 OF 8



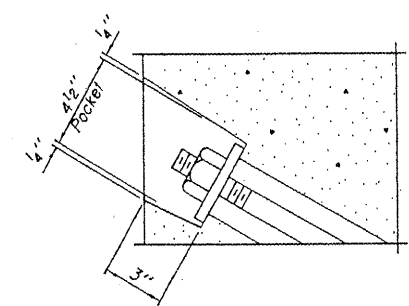
FABRIC BEARING PAD
(Interior)



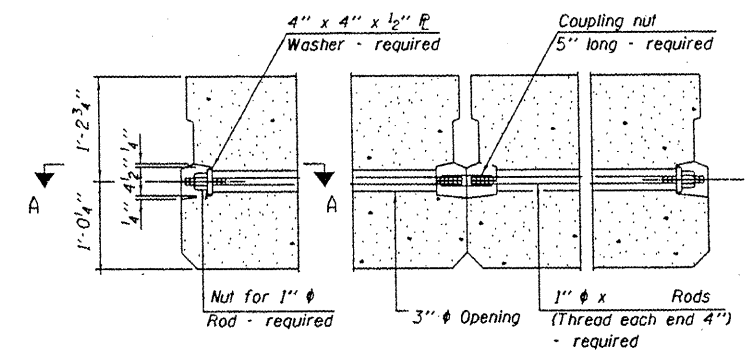
FABRIC BEARING PAD
(Exterior)

FIXED

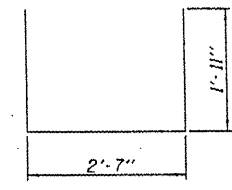
Note: Omit holes when using expansion bearings.



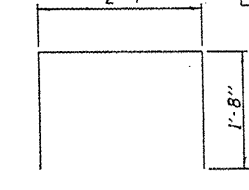
SECTION A-A



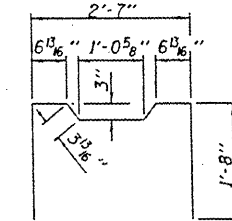
TYPICAL TRANSVERSE TIE ASSEMBLY



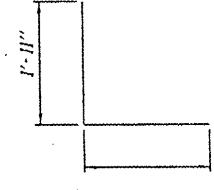
BAR S1(E)



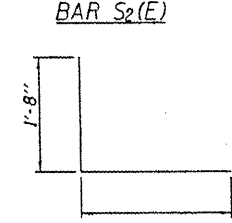
BAR S2(E)



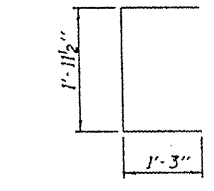
BAR S3(E)



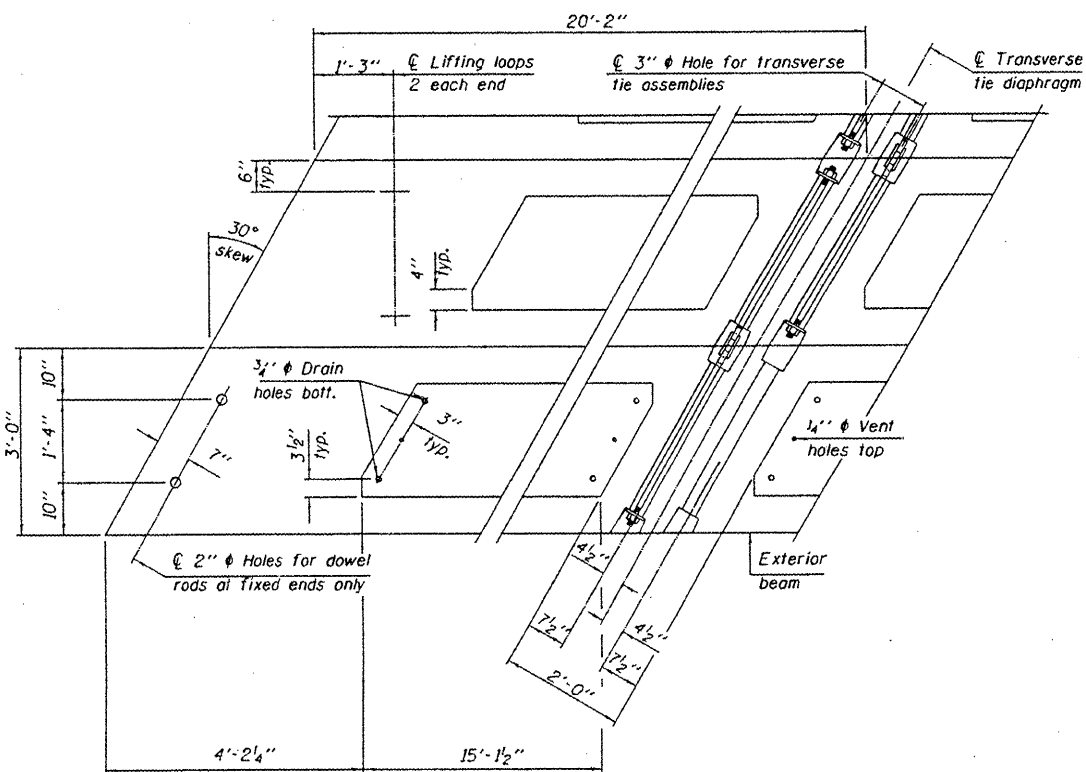
BAR S4(E)



BAR S5(E)



BAR U1(E)



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).

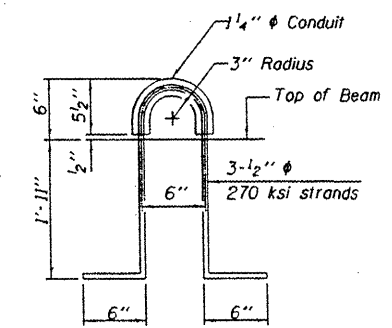
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling.

Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

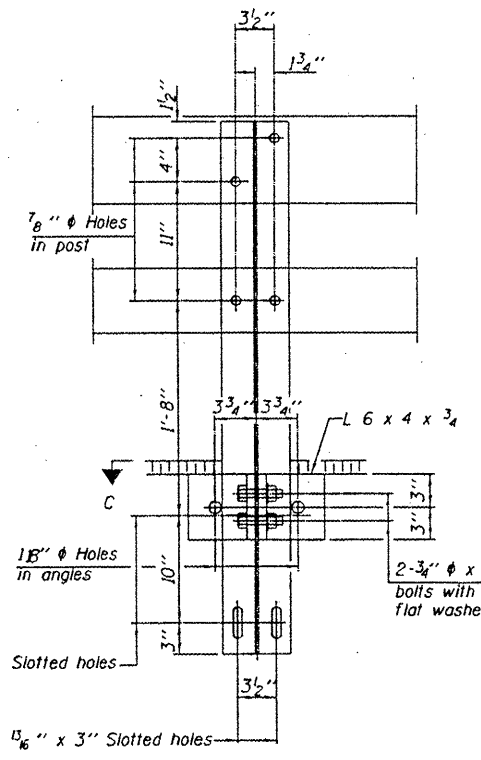
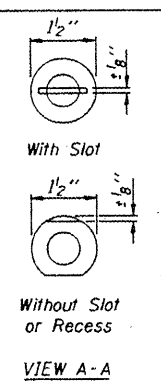
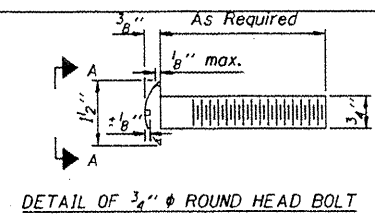
Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1800
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REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

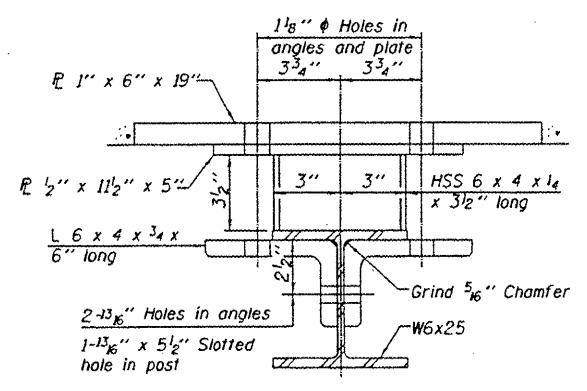
DESIGNED	AJS
DRAWN	AJS-JLG
CHECKED	EEA
DATE	06/10/09

MACTEC
ENGINEERING AND CONSULTING, INC.
ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE LICENSE #181-001138

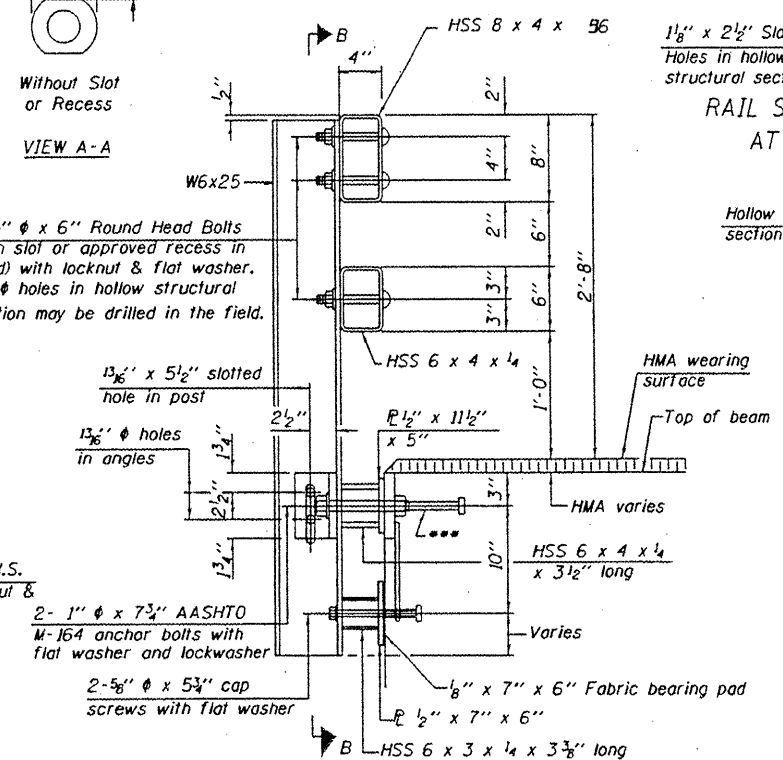
SUPERSTRUCTURE DETAILS
27" X 36" PPC DECK BEAM DETAILS
PEORIA COUNTY HIGHWAY DEPT.
MCCULLOUGH ROAD BRIDGE #072-5704
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604



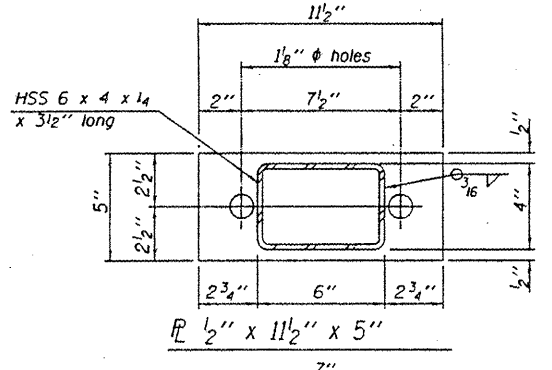
SECTION B-B



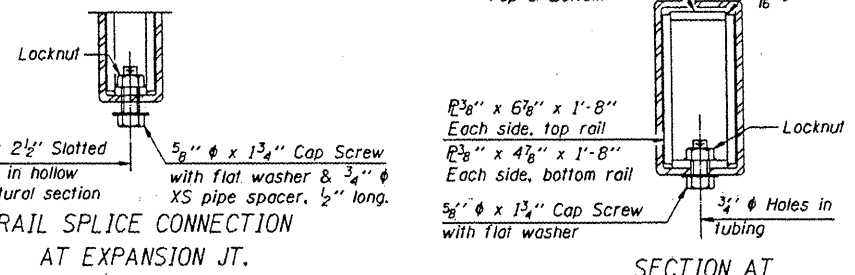
SECTION C-C



SECTION AT RAIL POST

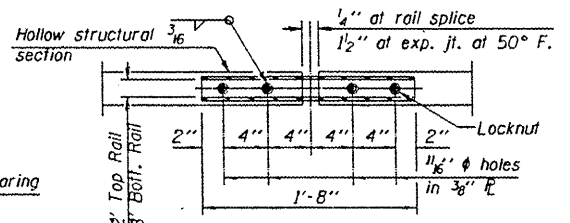


PLAN-BOTT. SPLICE R TYPICAL

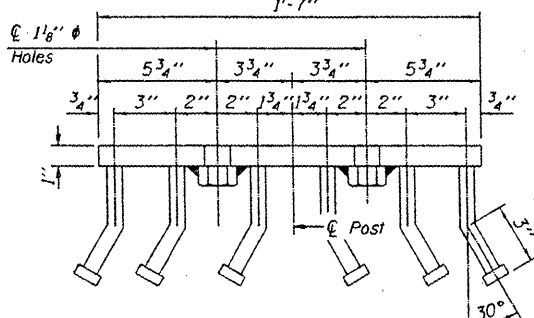


RAIL SPLICE CONNECTION AT EXPANSION JT.

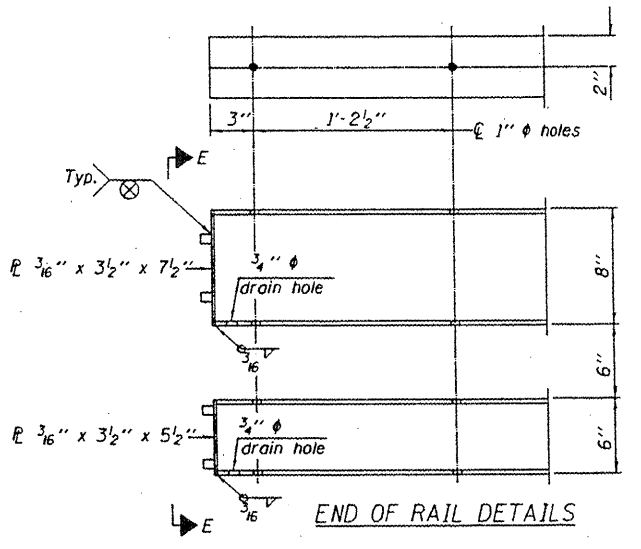
SECTION AT RAIL SPLICE



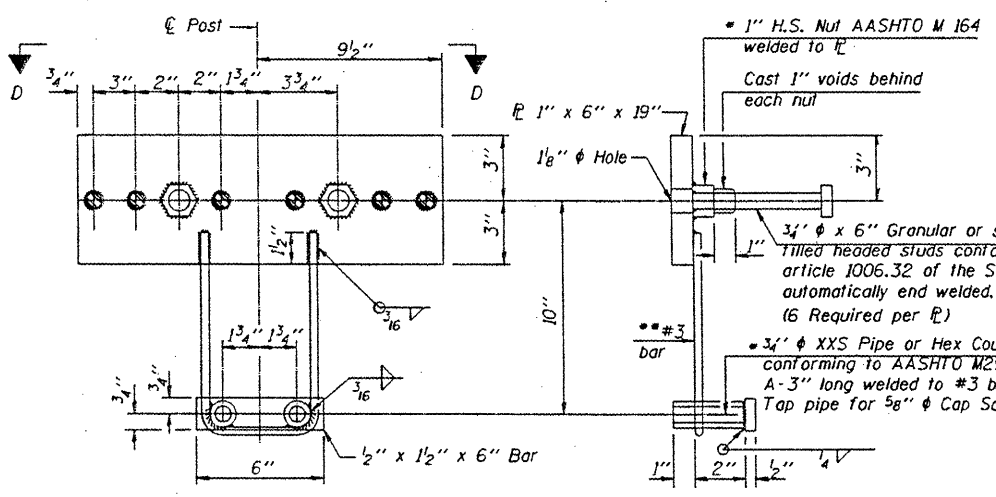
VIEW D-D



VIEW E-E



END OF RAIL DETAILS



ANCHOR DEVICE

Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 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.

Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	120

(6'-3" Maximum Post Spacing) (1/4" minimum to 3/8" maximum HMA thickness)

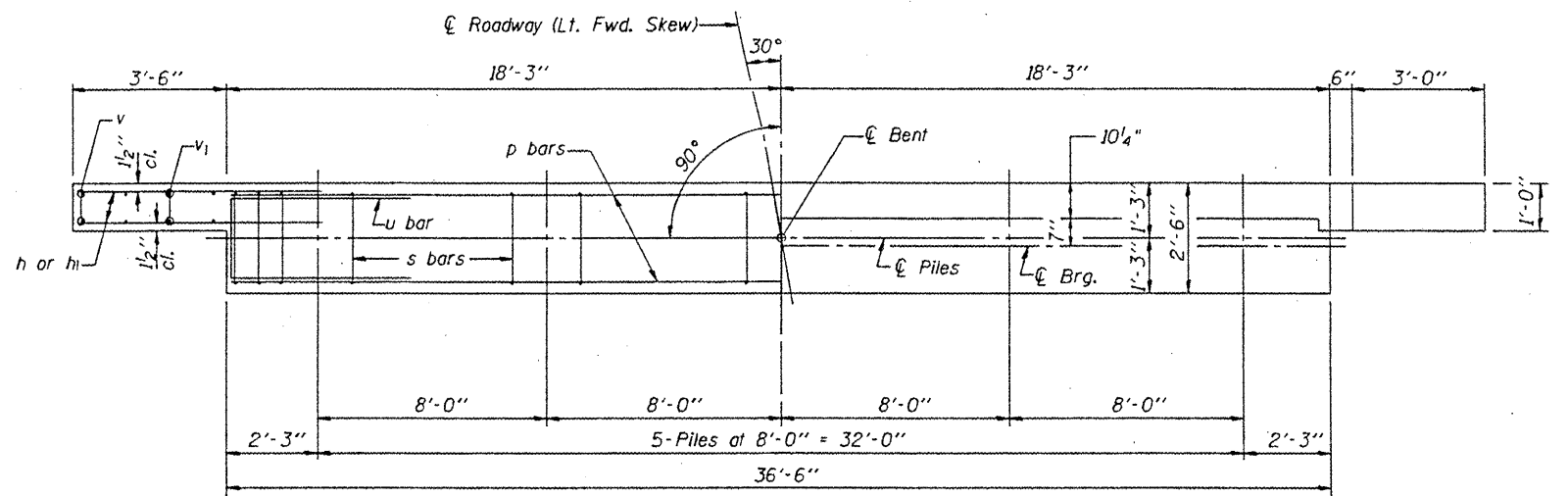
*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

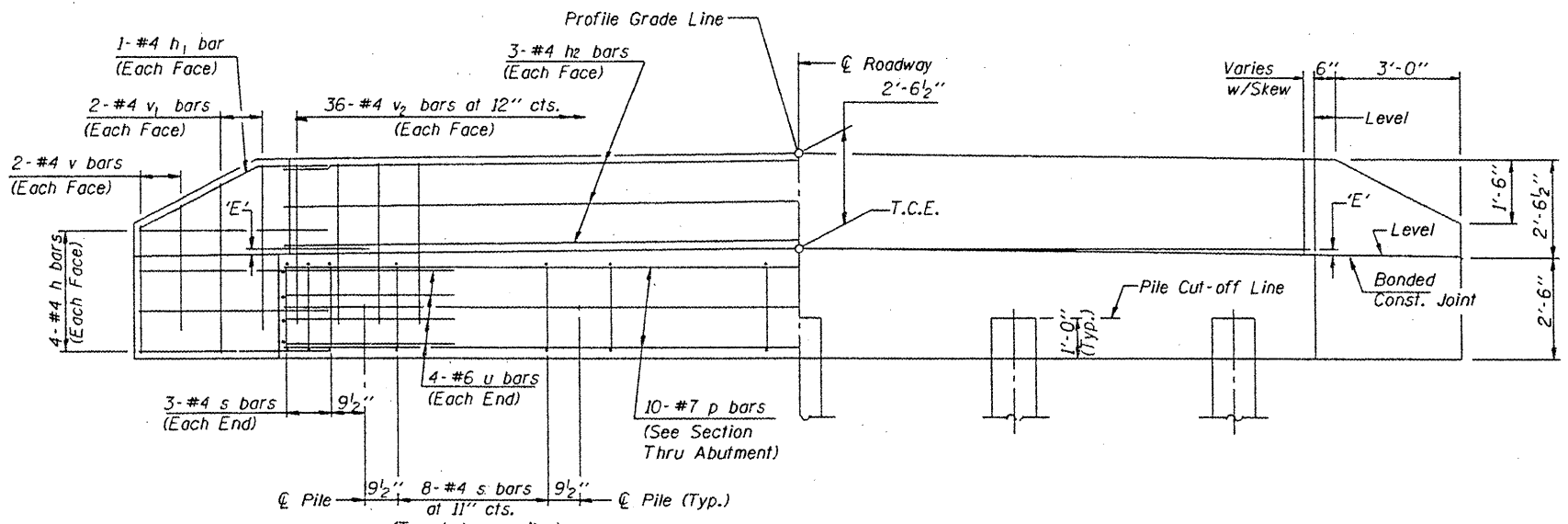
DESIGNED: AJS
 DRAWN: AJS, JLR
 CHECKED: EEA
 DATE: 06/18/09

MACTEC
 ENGINEERING AND CONSULTING, INC.
 ILLINOIS PROFESSIONAL DESIGN FIRM PE/SC LICENSE #184-081138

STEEL RAILING, TYPE SM
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604



PLAN
(D=Designated Skew Angle)



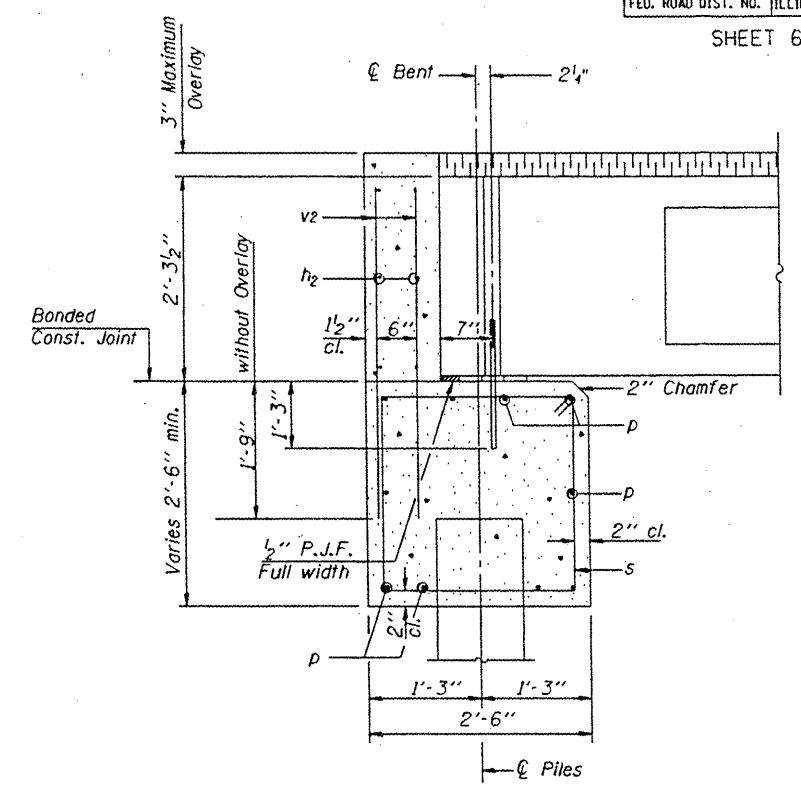
ELEVATION

DIMENSION 'E'

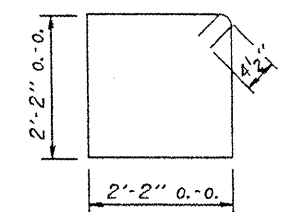
UPGRADE END	DOWNGRADE END
2 3/8"	3 1/2"

NOTES

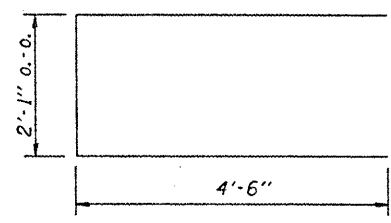
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.



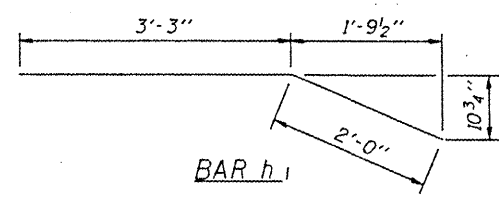
SECTION THRU ABUTMENT
(At Right Angles)



BAR s



BAR u



BAR h1

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	36'-2"	—
p	10	#7	36'-2"	—
s	38	#4	9'-5"	□
u	8	#6	11'-1"	□
v	8	#4	3'-2"	—
v1	8	#4	4'-2"	—
v2	72	#4	3'-11"	—
Concrete Structures			12.9 Cu. Yds.	
Reinforcement Bars			1550 Lb.	

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi

MAXIMUM PILE LOADS

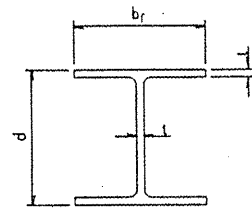
SPAN	TONS
60'	41

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED: AJS
DRAWN: AJS, JLA
CHECKED: EEA
DATE: 06/10/09

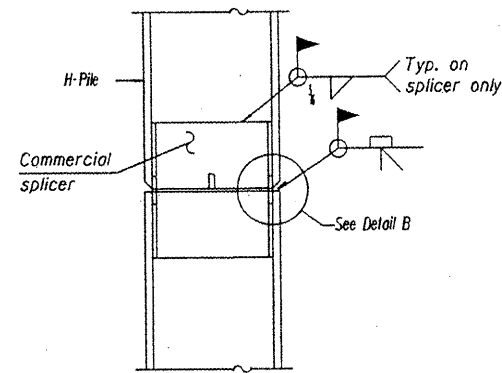


ABUTMENTS
PEORIA COUNTY HIGHWAY DEPT.
McCULLOUGH ROAD BRIDGE #072-5704
6915 W. PLANK ROAD
PEORIA, ILLINOIS 61604

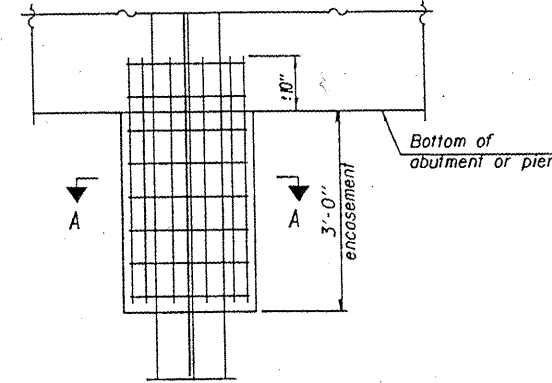


STEEL PILE TABLE

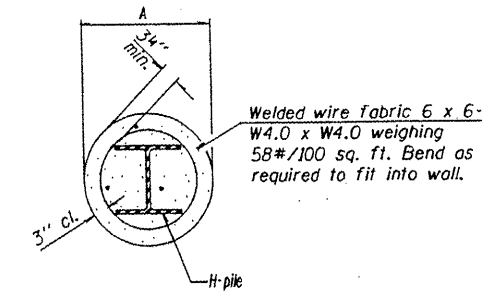
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	11/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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



ELEVATION



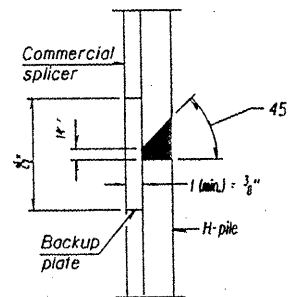
ELEVATION



SECTION A-A

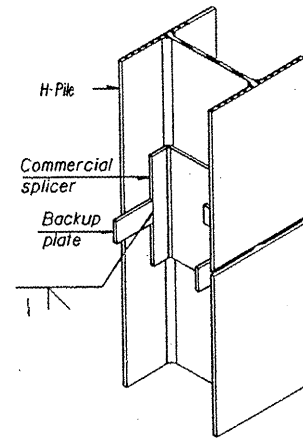
Note: Forms for encasement may be omitted when soil conditions permit.

PILE ENCASEMENT

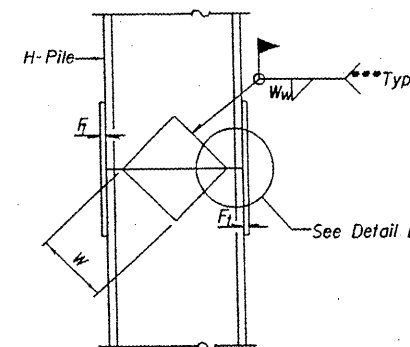


DETAIL "B"

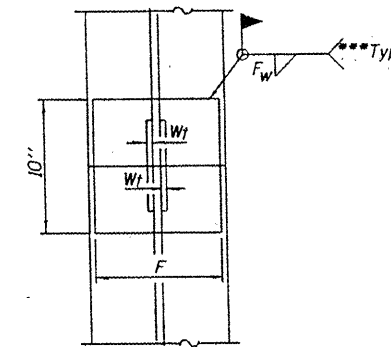
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

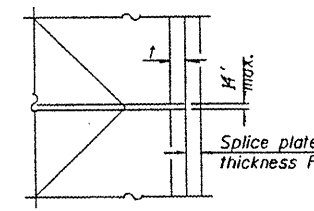


ELEVATION



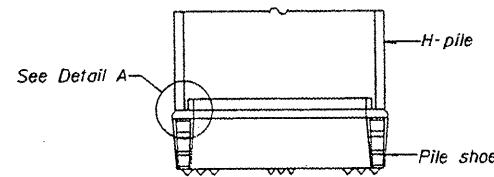
END VIEW

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

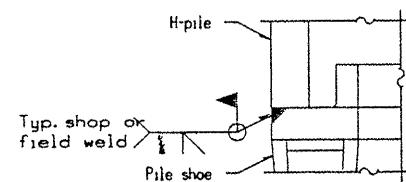


DETAIL D

WELDED PLATE FIELD SPLICE

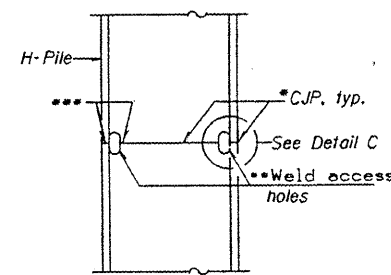


ELEVATION



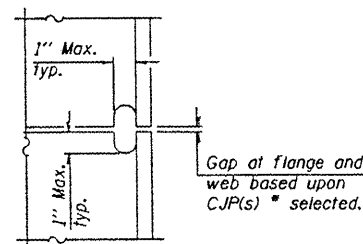
DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION

COMPLETE PENETRATION WELD SPLICE



DETAIL C


- * Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
- ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
- *** Interrupt welds H' from end of each pile.

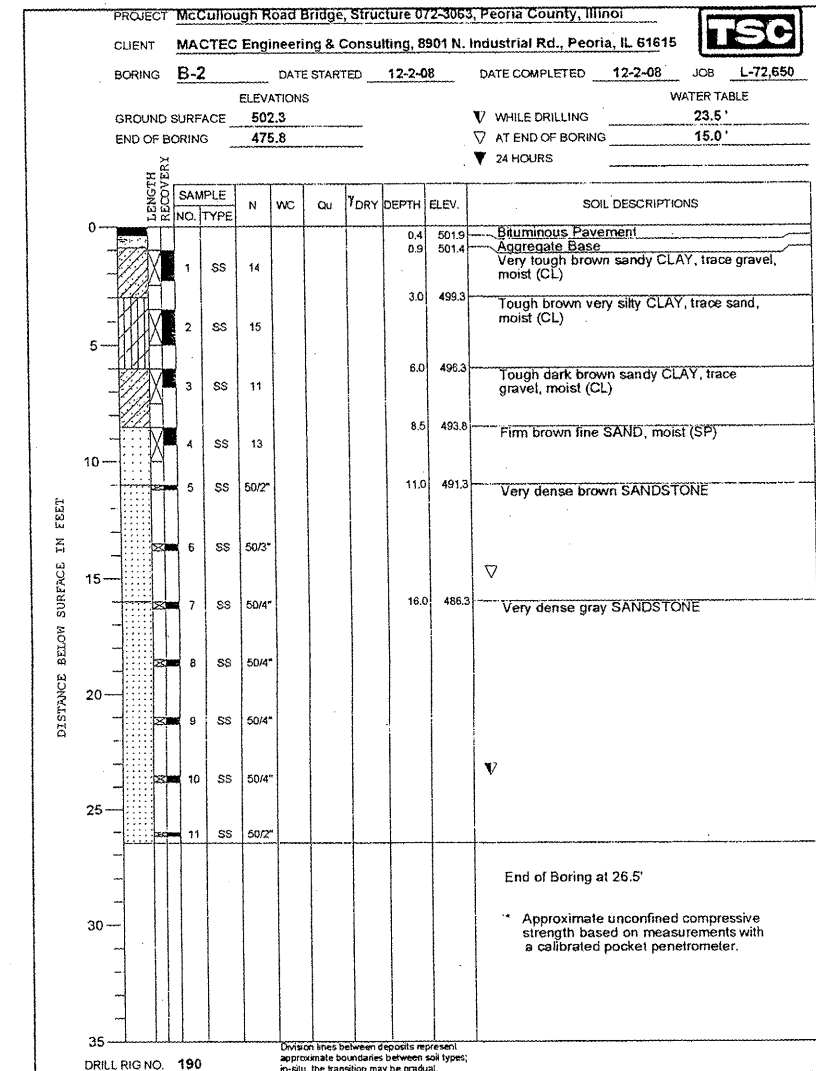
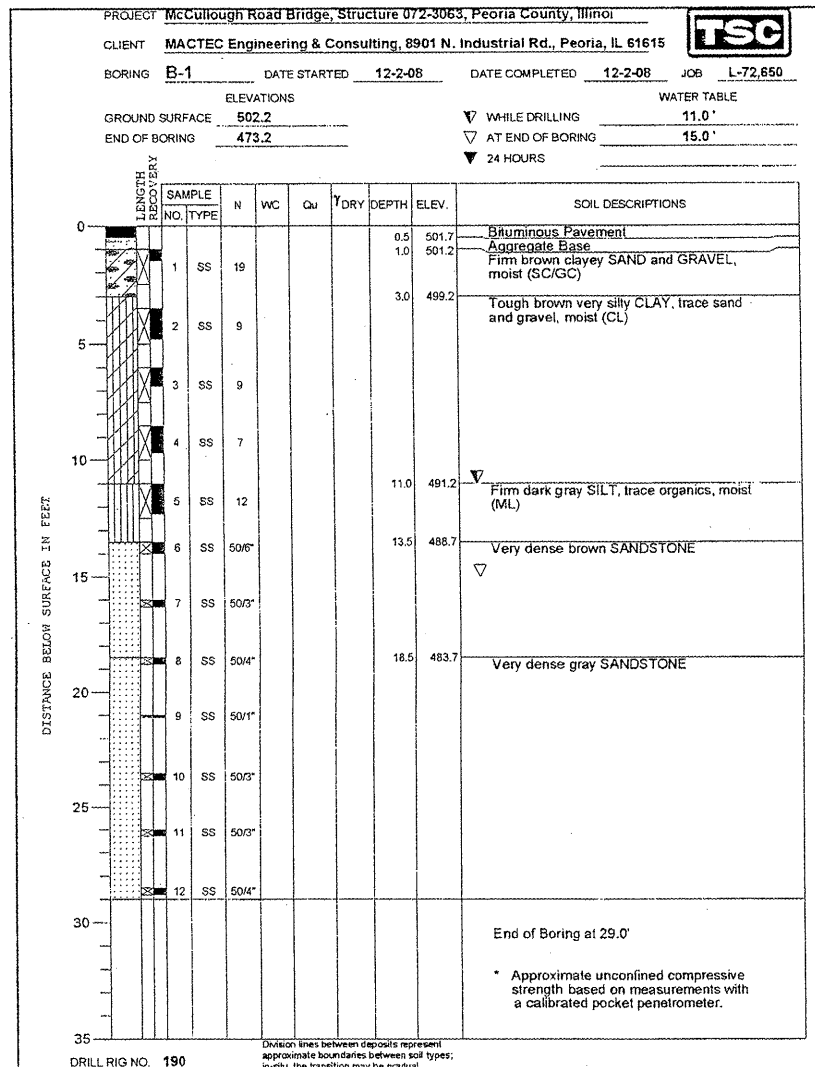
Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED: AJS
 DRAWN: AJS, JLA
 CHECKED: EEA
 DATE: 06/10/09

MACTEC
 ENGINEERING AND CONSULTING, INC.
 ILLINOIS PROFESSIONAL DESIGN FIRM PE/SE, LICENSE #184-001130

PILE DETAILS
 PEORIA COUNTY HIGHWAY DEPT.

 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 N. PLANK ROAD
 PEORIA, ILLINOIS 61604



SOIL BORING REPORTS

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

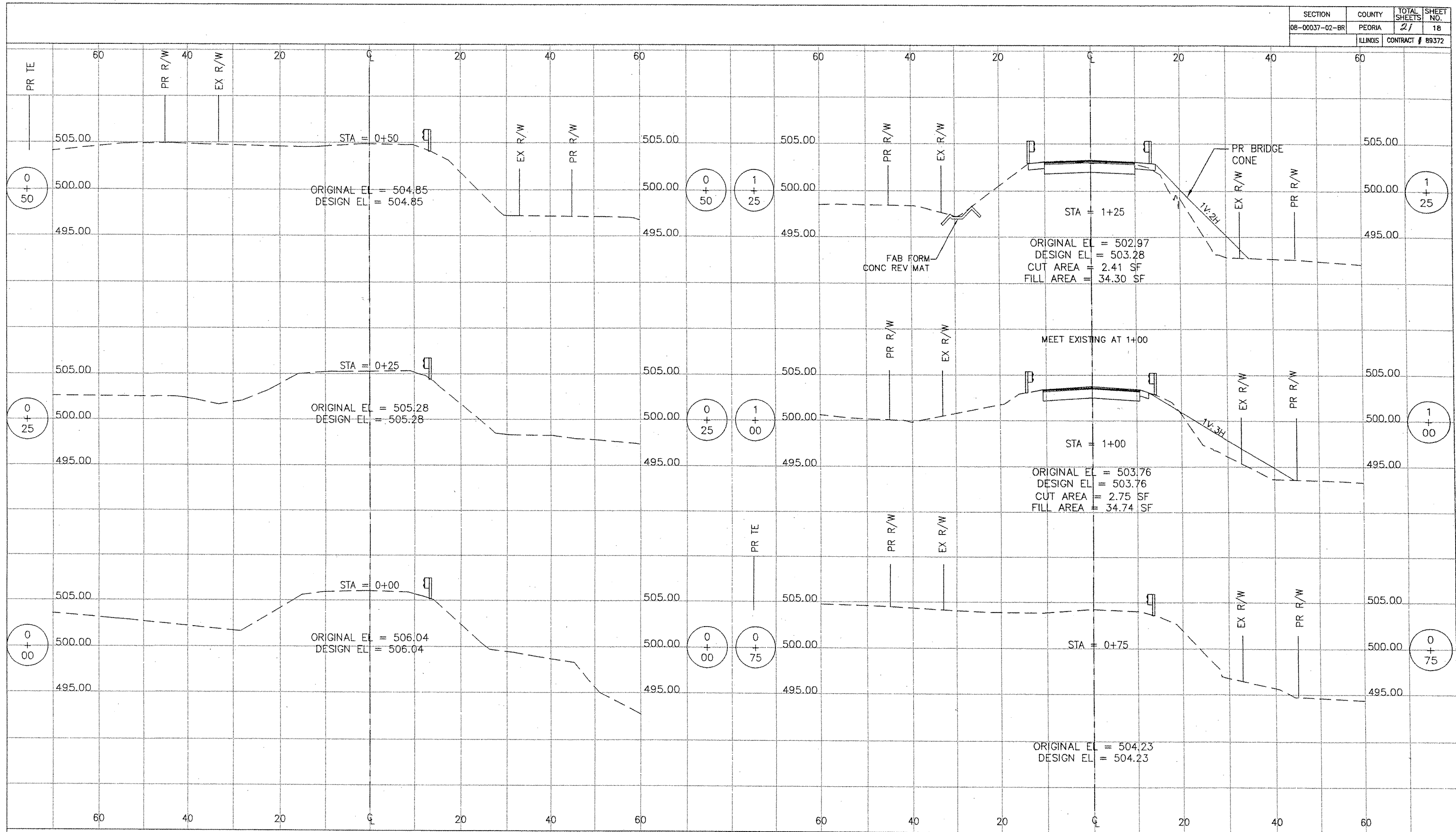
DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09



SOIL BORINGS

PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604


SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	18
ILLINOIS		CONTRACT # B9372	



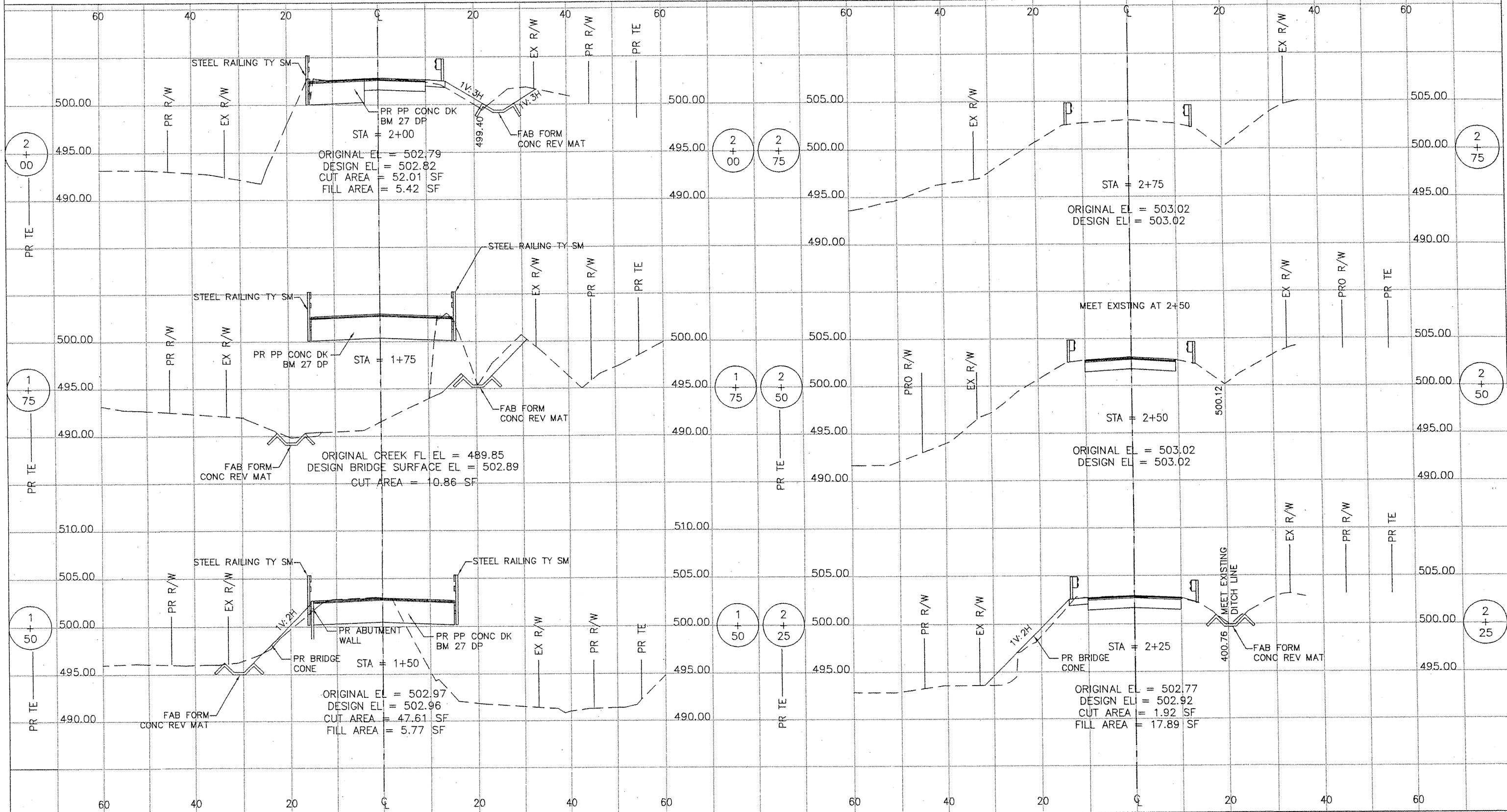
REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09



CROSS SECTIONS - MCCULLOUGH RD.
 PEORIA COUNTY HIGHWAY DEPT.

 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	19
ILLINOIS		CONTRACT # 89372	



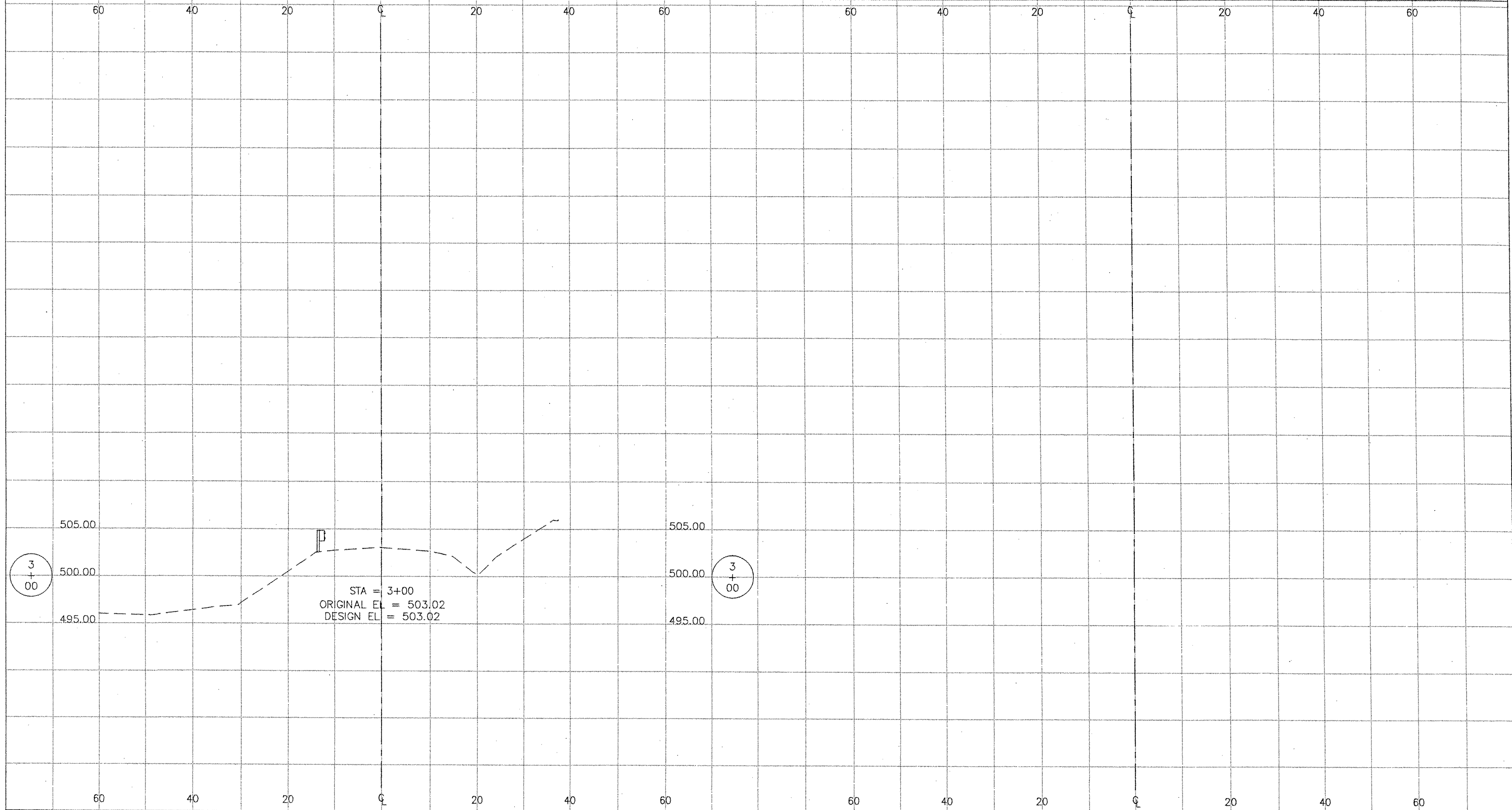
REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09



CROSS SECTIONS - MCCULLOUGH RD.
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	20
ILLINOIS			




STA = 3+00
 ORIGINAL EL = 503.02
 DESIGN EL = 503.02

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

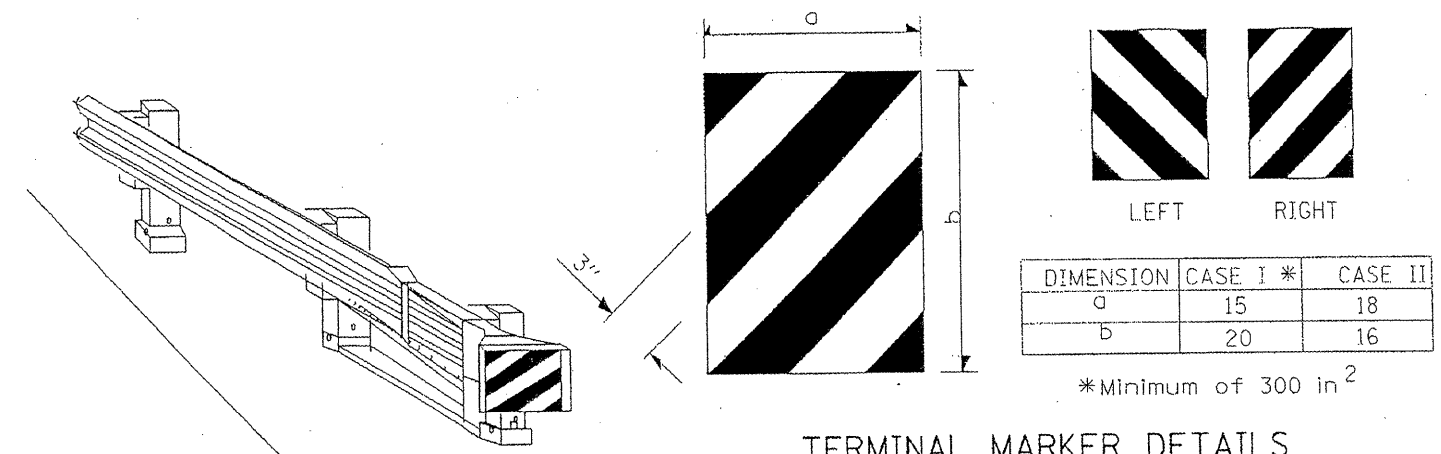
DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09



CROSS SECTIONS - MCCULLOUGH RD.
 PEORIA COUNTY HIGHWAY DEPT.

 MCCULLOUGH ROAD BRIDGE #072-3063
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00037-02-BR	PEORIA	21	21
ILLINOIS		CONTRACT # 89372	

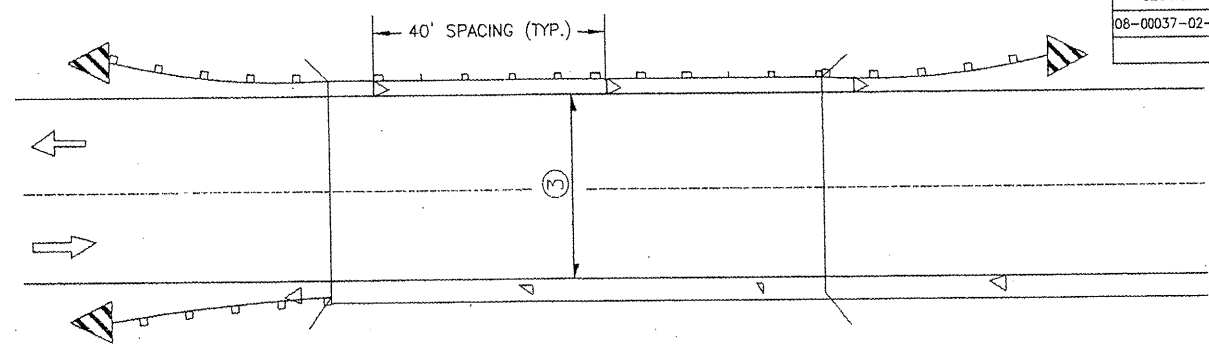
CASE I



DIMENSION	CASE I *	CASE II
a	15	18
b	20	16

*Minimum of 300 in²

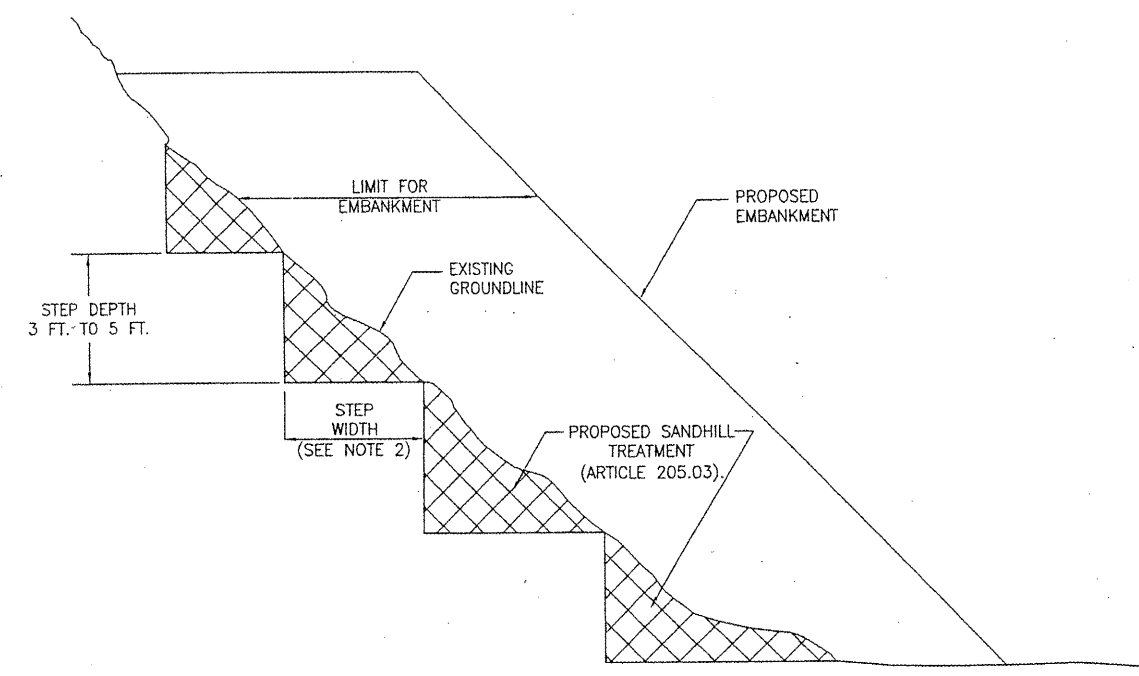
TERMINAL MARKER DETAILS
Color: Black / Yellow reflectorized



- ③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the pavement is less than 24" wider than the pavement approaching the bridge.
- ◁ Monodirectional silver
- ▷ Monodirectional amber
- ◁▷ Terminal Marker - Black/Yellow Left or Right as appropriate

TWO-WAY TRAFFIC

GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS



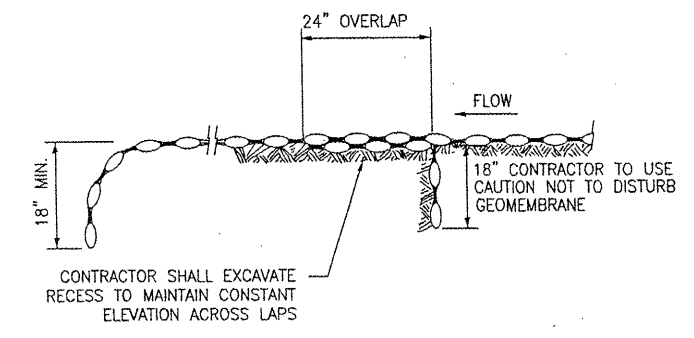
SLOPE STEPS DETAIL
TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL

NOT TO SCALE

REPLACEMENT MATERIAL:
 STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFICATION).

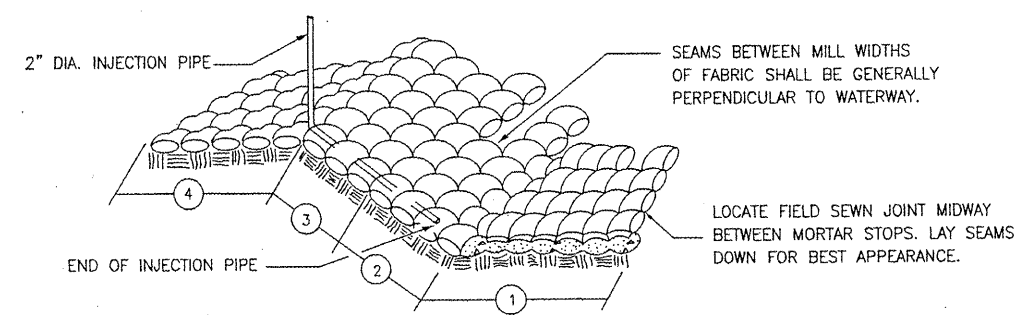
GENERAL NOTES

1. SLOPE STEPS WILL BE REQUIRED FOR ALL 12" MINIMUM THICKNESS "SILVER FILLS" AND ON A FILLS WITH A HEIGHT OF 10'.
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.



CUT OFF WALL DETAILS

TYPICAL LAP JOINTS W/ANCHOR WALL



INSTALLATION DETAILS

1. IN PLACING INSERTS THROUGH FABRIC USE CARE TO AVOID BREAKING DROP STITCHES.
2. ① INDICATES SEQUENCE OF POUR.

GENERAL NOTES

DIMENSIONS GIVEN WITH MINIMUM LIMITS SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
 ALL ANCHOR WALLS ON SIDE SLOPES AND AT LAP JOINTS, AS WELL AS CUT OFF WALLS, SHALL BE INSTALLED IN TRENCHES.
 CUT OFF WALLS SHALL BE INSTALLED AT THE UPSTREAM AND DOWNSTREAM ENDS.

UNIFORM SECTION FABRIC FORMED CONCRETE MAT (USFM)

NOT TO SCALE

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

DESIGNED AJS
 DRAWN AJS, JLA
 CHECKED EEA
 DATE 06/10/09

ILLINOIS PROFESSIONAL DESIGN FIRM PEISE, LICENSE #184-001138

DETAILS
 PEORIA COUNTY HIGHWAY DEPT.
 MCCULLOUGH ROAD BRIDGE #072-5704
 6915 W. PLANK ROAD
 PEORIA, ILLINOIS 61604