

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, COMMITMENTS AND TYPICAL CROSS SECTIONS
- 3-5 SUMMARY OF QUANTITIES
- 6 SCHEDULE OF QUANTITIES
- 7 ALIGNMENT, SURVEY TIES AND BENCHMARKS
- 8-9 PLAN AND PROFILE SHEETS
- 10 EROSION CONTROL PLAN
- 11-20 STRUCTURE PLANS S.N. 053-4213
- 21-23 CROSS SECTIONS

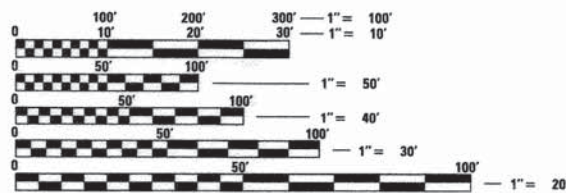
HIGHWAY STANDARD DETAILS

- 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
- 515001-03 NAME PLATE FOR BRIDGES
- 601101-02 CONCRETE HEADWALL FOR PIPE DRAIN
- 701901-05 TRAFFIC CONTROL DEVICES
- 725001 OBJECT AND TERMINAL MARKERS
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
- B.L.R. 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITIES:

- POWER - AMEREN ILLINOIS POWER
- TELEPHONE - FRONTIER COMMUNICATIONS

FUNCTIONAL CLASSIFICATION: RURAL LOCAL ROAD
 DESIGN SPEED: 30 MPH
 DESIGN TRAFFIC: 2032 ADT=76
 % TRUCKS: 0%
 % PASSENGER VEHICLES: 100%



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

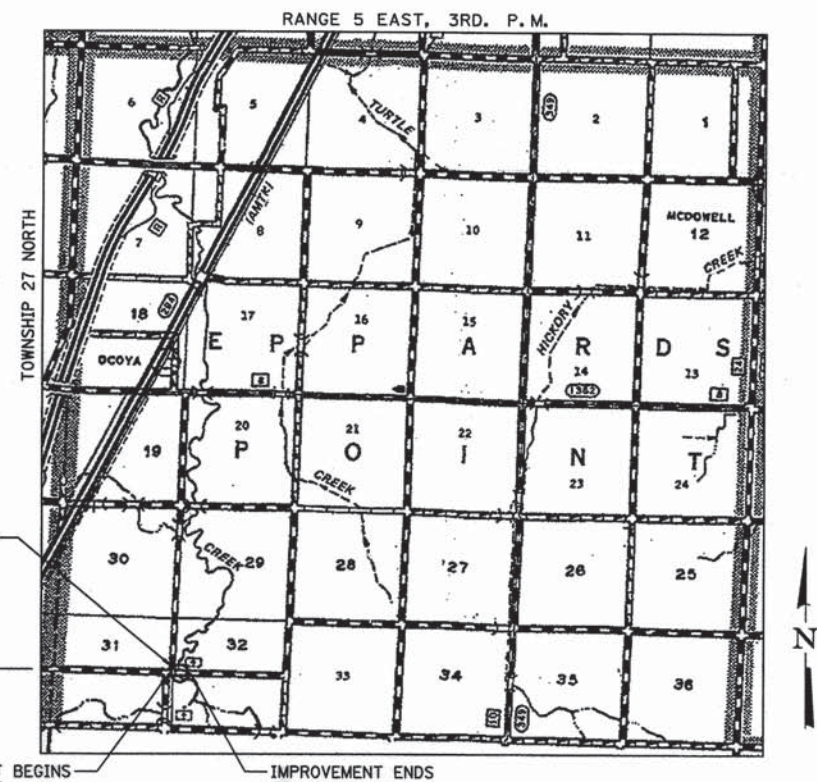
PROJECT ENGINEER: JOHN ZEMAN, PE
PROJECT MANAGER: JOE LOWRANCE, SE
CONTRACT NO. 87598

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
SURFACE TRANSPORTATION
PROGRAM - BRIDGE

LIVINGSTON COUNTY
EPPARDS POINT ROAD DISTRICT
SECTION 11-08108-00-BR
ROUTE: T.R. 209 (950N)
FEDERAL PROJECT BROS-0105-(061)
C-93-095-14



STATION 9+80.00 S.N. 053-4213 (PR.)/
 STATION 10+00.00 S.N. 053-3331 (EX.)
 85'-0" LONG SINGLE SPAN PRECAST
 PRESTRESSED CONCRETE DECK BEAM
 BRIDGE OVER ROOKS CREEK

T.R. 209/950N

IMPROVEMENT BEGINS
 STA. 7+00.00

IMPROVEMENT ENDS
 STA. 14+50.00

LOCATION MAP



GROSS LENGTH = 750.00 FT. = 0.142 MILE
 NET LENGTH = 750.00 FT. = 0.142 MILE

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	1
		ILLINOIS	CONTRACT NO. 87598	



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 3/30 20 16

 TOWNSHIP COMMISSIONER OF HIGHWAYS

SUBMITTED MARCH 29 20 16
Clay Metcalf
 COUNTY HIGHWAY ENGINEER

PASSED 4-5 20 16
David R...
 DISTRICT 3 LOCAL ROADS AND STREETS ENGINEER

RELEASING FOR BID BASED ON LIMITED REVIEW
4-5 20 16
Paul A. Locke
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER



John C. Zeman Date 3/23/16
 JOHN ZEMAN
 ILLINOIS PROFESSIONAL ENGINEER
 NO. 062-065759
 EXPIRATION 11/30/17



GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK WILL BE INCLUDED IN THE COST OF THE HMA SURFACE.

EXCEPT AS NOTED ON 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.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS. FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

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

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

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

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 SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

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 WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

WORK PERFORMED BY OTHERS:
- TREE REMOVAL

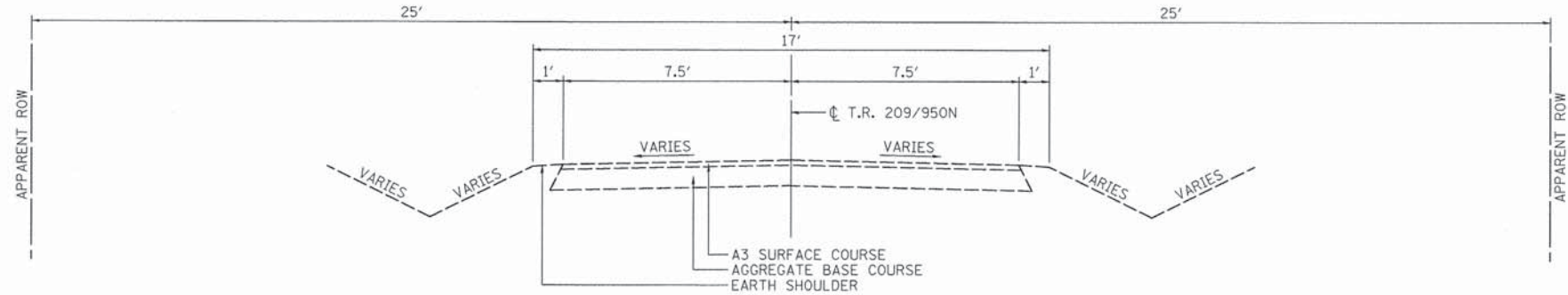
COMMITMENTS

NO IN-STREAM WORK SHALL BE DONE BETWEEN MAY 1ST AND JUNE 15TH OF THE CALENDAR YEAR.

BALLED AND BURLAPPED TREES SHALL BE PLANTED ON THE PROPERTY OF DANNY L RUTHERFORD. LOCATION OF TREES WILL BE DETERMINED BY THE ENGINEER.

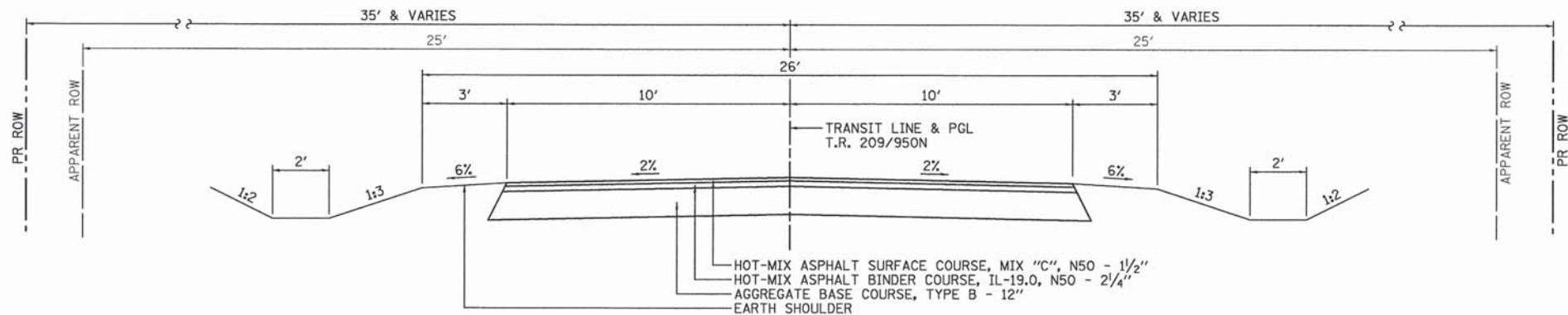
MIXTURES TABLE

	HMA BINDER COURSE	HMA SURFACE COURSE
PG GRADE	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL-19.0	IL-9.5
FRICTION AGGREGATE	-	MIXTURE C
DENSITY TEST METHOD	CORES	CORES
MIXTURE WEIGHT	112 LBS / SQ YD / IN	112 LBS / SQ YD / IN
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA
SUBLOT SIZE	N/A	N/A
LOCATION(S)	ENTIRE PROJECT	ENTIRE PROJECT



EXISTING TYPICAL CROSS SECTION

T.R. 209/950N



PROPOSED TYPICAL CROSS SECTION

T.R. 209/950N
STA 7+00.00 TO STA 14+50.00



DESIGNED - JJO	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
DATE - 03/23/16	CHECKED - JML
	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, COMMITMENTS
AND TYPICAL CROSS SECTIONS

SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	2
CONTRACT NO. 87598			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY	BRIDGE
				0004 RURAL	0011 S. N. 053-4213
20200100	EARTH EXCAVATION	CU YD	415	415	
20300100	CHANNEL EXCAVATION	CU YD	545	545	
20400800	FURNISHED EXCAVATION	CU YD	135	135	
20800150	TRENCH BACKFILL	CU YD	25	25	
△ 25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,984	1,984	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	360	360	
28000305	TEMPORARY DITCH CHECKS	FOOT	120	120	
28000400	PERIMETER EROSION BARRIER	FOOT	892	892	
28000500	INLET AND PIPE PROTECTION	EACH	2	2	
28100107	STONE RIPRAP, CLASS A4	SQ YD	824		824
28200200	FILTER FABRIC	SQ YD	824		824
35101400	AGGREGATE BASE COURSE, TYPE B	TON	1,221	1,221	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	3,777	3,777	

* PAY ITEMS WITH SPECIAL PROVISION
△ SPECIALTY PAY ITEMS



DESIGNED - JJO	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	3
CONTRACT NO. 87598			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY	BRIDGE
				0004 RURAL	0011 S. N. 053-4213
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	371	371	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	209	209	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	137	137	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50105220	PIPE CULVERT REMOVAL	FOOT	26	26	
50200100	STRUCTURE EXCAVATION	CU YD	60		60
50300225	CONCRETE STRUCTURES	CU YD	29.2		29.2
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	2,238		2,238
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3,560		3,560
△ 50900205	STEEL RAILING, TYPE S1	FOOT	170		170
51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	160		160
51202305	DRIVING PILES	FOOT	160		160
51203200	TEST PILE METAL SHELLS	EACH	2		2

* PAY ITEMS WITH SPECIAL PROVISION
△ SPECIALTY PAY ITEMS



DESIGNED - JJO
CHECKED - JCZ
DRAWN - DJM
DATE - 03/23/16
CHECKED - JML

REVISED
REVISED
REVISED
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	4
			CONTRACT NO. 87598	
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				ROADWAY	BRIDGE
				0004 RURAL	0011 S. N. 053-4213
51500100	NAME PLATES	EACH	1		1
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	130	130	
67100100	MOBILIZATION	LSUM	1	1	
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LSUM	1	1	
△ 72501100	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
△ A2007122	TREE, QUERCUS RUBRA (RED OAK), 3" CALIPER, BALLED AND BURLAPPED	EACH	4	4	
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	134		134
△ * X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.4	0.4	
* X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	49		49

* PAY ITEMS WITH SPECIAL PROVISION
△ SPECIALTY PAY ITEMS



DESIGNED - JJO	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	5
			CONTRACT NO. 87598	
ILLINOIS FED. AID PROJECT				

SCHEDULE OF EARTHWORK ITEMS					
LOCATION	20200100	20300100	TOTAL EXCAVATION ADJUSTED FOR 30% SHRINKAGE	EMBANKMENT	20400800
	EARTH EXCAVATION	CHANNEL EXCAVATION			FURNISHED EXCAVATION
	CU YD	CU YD	CU YD	CU YD	CU YD
STA 7+00 TO STA 14+50	415	545	670	805	135
TOTAL	415	545	670	805	135

NOTE: SEE STRUCTURAL SHEETS FOR LOCATION OF CHANNEL EXCAVATION.

SCHEDULE OF PIPE CULVERT ITEMS			
LOCATION	20800150	50105220	542D0220
	TRENCH BACKFILL	PIPE CULVERT REMOVAL	PIPE CULVERTS, CLASS D, TYPE 1 15"
	CU YD	FOOT	FOOT
STA 7+61.88, 19.5' LT	7		78
STA 8+88.75, 17.7' RT	12	26	
STA 8+88.75, 26.4' RT	6		52
TOTAL	25	26	130

SCHEDULE OF LANDSCAPING ITEMS			
LOCATION	25100635	28000250	X2501000
	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	SEEDING, CLASS 2 (SPECIAL)
	SQ YD	POUND	ACRE
STA 7+00 LT TO STA 14+50 LT	1,113	180	0.2
STA 7+00 RT TO STA 14+50 RT	871	180	0.2
TOTAL	1,984	360	0.4

280000305 - TEMPORARY DITCH CHECKS	
LOCATION	FOOT
STA 7+50 RT	10
STA 8+00 RT	10
STA 8+20 LT	10
STA 8+40 LT	10
STA 8+50 RT	10
STA 8+60 LT	10
STA 8+80 LT	10
STA 9+00 LT	10
STA 9+20 LT	10
STA 9+30 RT	10
STA 10+50 LT	10
STA 11+50 LT	10
TOTAL	120

28000400 - PERIMETER EROSION BARRIER	
LOCATION	FOOT
STA 8+50, 35' LT TO STA 9+22, 35' LT	72
STA 10+25, 35' LT TO STA 14+50, 11.44' LT	427
STA 10+59, 35' RT TO STA 14+50, 14.85' RT	393
TOTAL	892

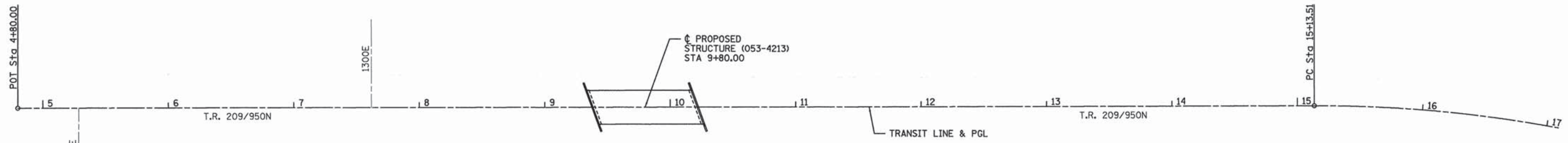
28000500 - INLET AND PIPE PROTECTION	
LOCATION	EACH
STA 7+22.85, 19.5' LT	1
STA 8+62.75, 25.06' RT	1
TOTAL	2

SCHEDULE OF PAVEMENT ITEMS					
LOCATION	35101400	40600275	40600290	40603080	40603310
	AGGREGATE BASE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50
	TON	POUND	POUND	TON	TON
STA 7+00 TO STA 9+37.50	377	1,211	119	67	44
STA 7+61.88 10' LT TO STA 7+61.88 60' LT	137	438	43	24	16
STA 8+88.75 10' RT TO STA 8+88.75 34.5' RT	33				
STA 10+22.50 TO STA 14+50	674	2,128	209	118	77
TOTAL	1,221	3,777	371	209	137

78201000 - TERMINAL MARKER - DIRECT APPLIED	
LOCATION	EACH
STA 9+30.96 14' LT	1
STA 9+40.79 14' LT	1
STA 10+19.21 14' LT	1
STA 10+29.04 14' LT	1
TOTAL	4

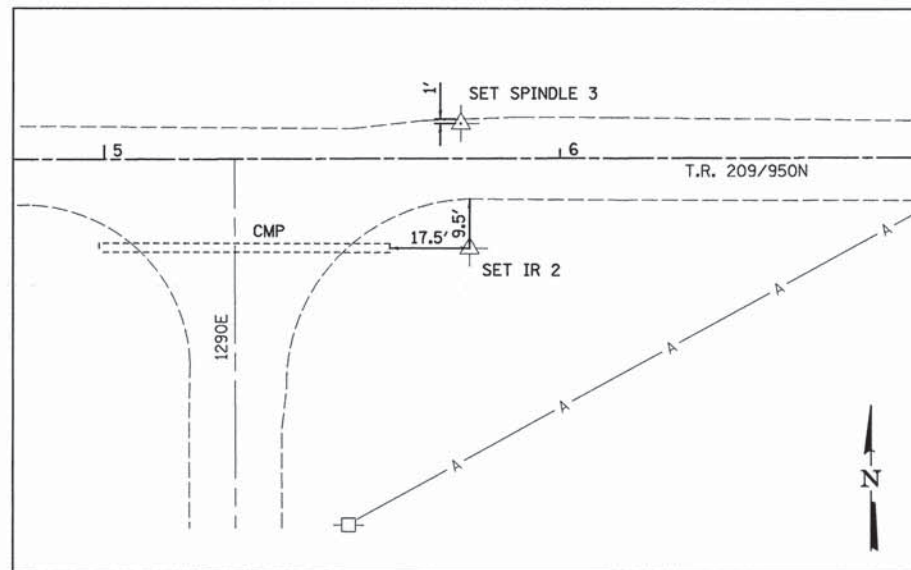
A2007122 - TREE, QUERCUS RUBRA (RED OAK), 3" CALIPER, BALLED AND BURLAPPED	
LOCATION	EACH
STA 9+00 RT TO STA 14+50 RT	4
TOTAL	4

NOTE: THE ENGINEER WILL LAYOUT THE PRECISE LOCATION FOR EACH TREE.



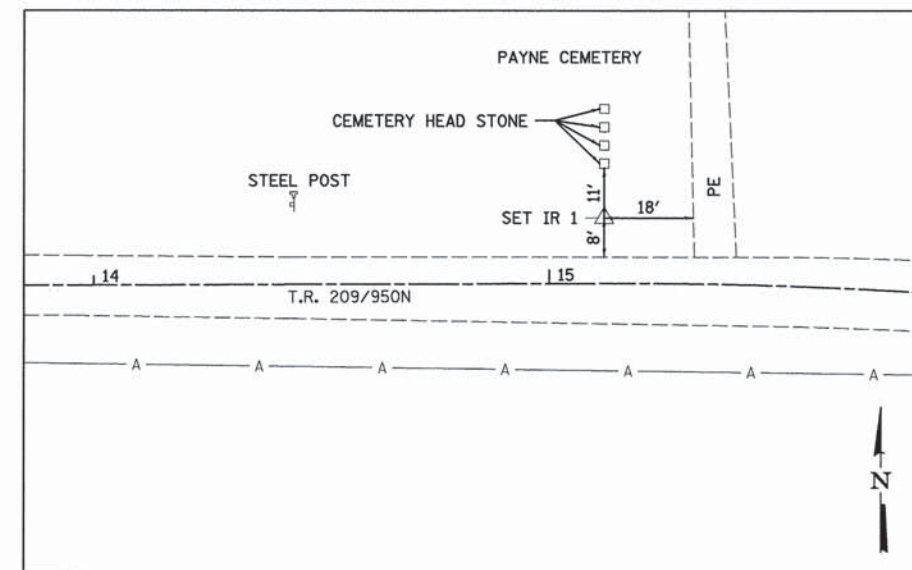
BENCHMARK:
 #4255, SET R.R. SPIKE NORTH FACE OF POWER POLE, SOUTH SIDE OF T.R. 209/950N, EAST OF BRIDGE. STA 13+63.51/17.21' RT. ELEVATION = 677.08

BENCHMARK:
 #4439, SET R.R. SPIKE SOUTH FACE OF POWER POLE, NORTHEAST CORNER OF T.R. 209/950N & 1300E. STA 7+91.38/49.93' LT. ELEVATION = 686.63



SET IR #2
 STA 5+80.09/19.83' RT.
 N=1492379.135
 E=888167.814
 ELEV=686.358

SET SPINDLE #3
 STA 5+78.24/7.69' LT.
 N=1492406.649
 E=888165.857
 ELEV=689.240



SET IR #1
 STA 15+12.13/14.64' LT.
 N=1492417.105
 E=889099.715
 ELEV=678.498

Farnsworth GROUP
 2709 McGRAW DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-8435 / info@fw.com

DESIGNED - JJJ	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED
DATE - 03/23/16	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALIGNMENT, SURVEY TIES AND BENCHMARKS

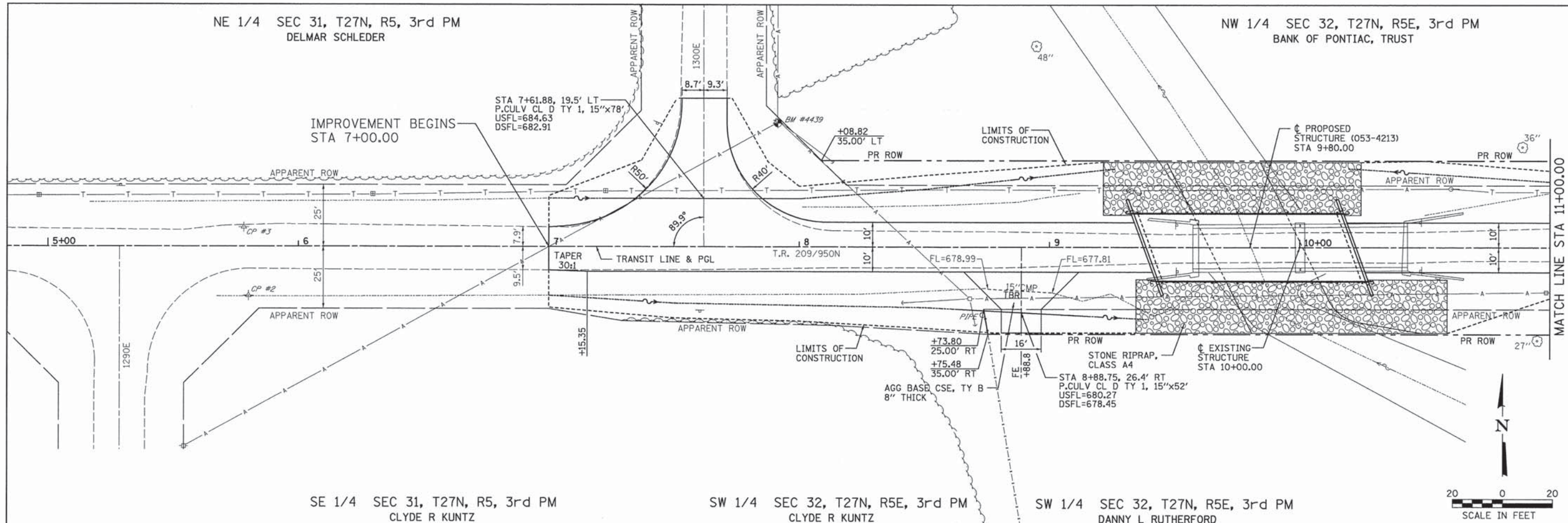
SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	7
				CONTRACT NO. 87598
ILLINOIS FED. AID PROJECT				

NE 1/4 SEC 31, T27N, R5, 3rd PM
DELMAR SCHLEDER

NW 1/4 SEC 32, T27N, R5E, 3rd PM
BANK OF PONTIAC, TRUST

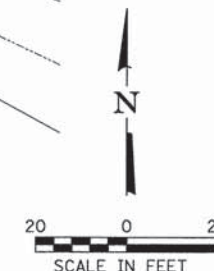
PLAN	SUBMITTED	DATE
	BY	
	NOTED	
	CHECKED	
	DATE	



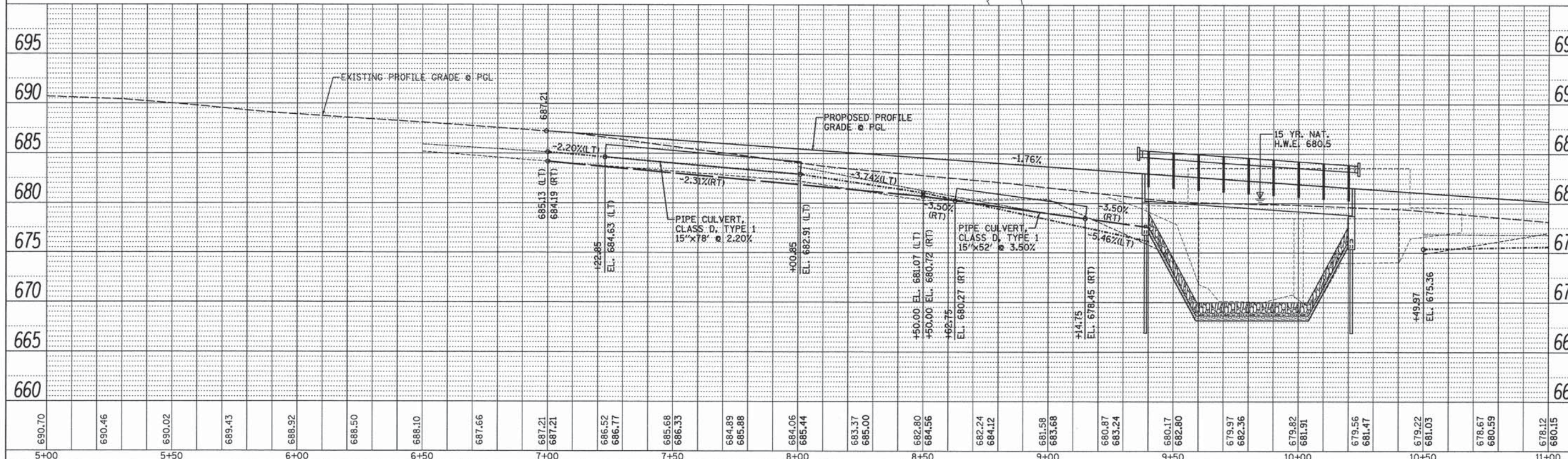
SE 1/4 SEC 31, T27N, R5, 3rd PM
CLYDE R KUNTZ

SW 1/4 SEC 32, T27N, R5E, 3rd PM
CLYDE R KUNTZ

SW 1/4 SEC 32, T27N, R5E, 3rd PM
DANNY L RUTHERFORD



PROFILE	SUBMITTED	DATE
	BY	
	NOTED	
	CHECKED	
	DATE	



Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@fw.com

DESIGNED - JJQ	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED
DATE - 03/23/16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: SHEET NO. OF SHEETS STA. 5+00 TO STA. 11+00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	8
CONTRACT NO. 87598			ILLINOIS FED. AID PROJECT	

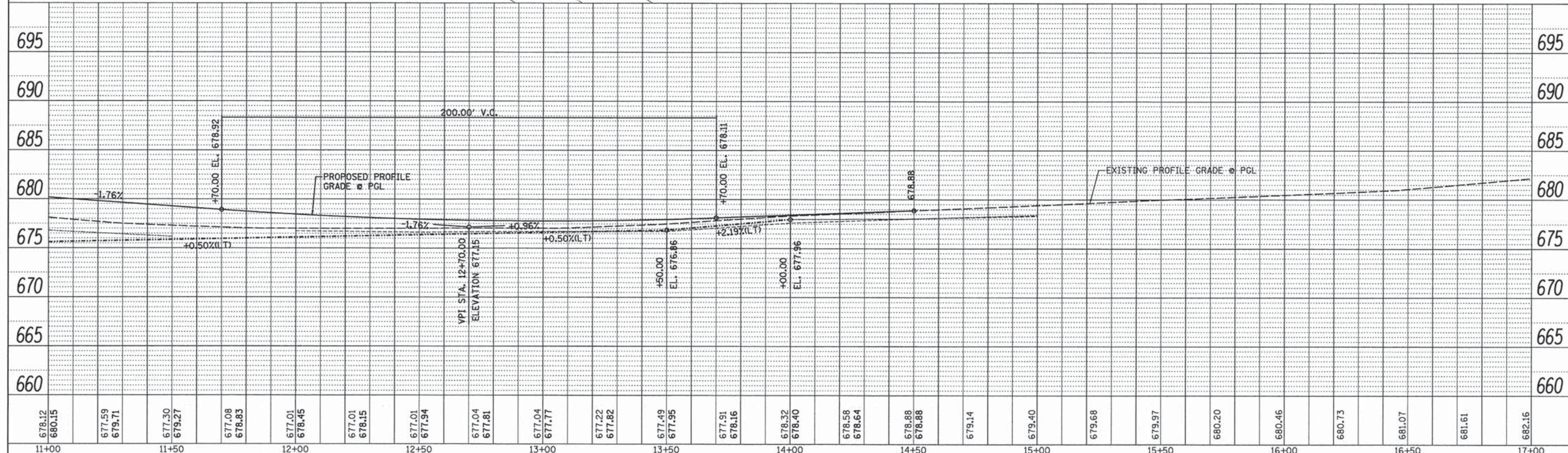
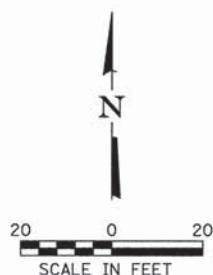
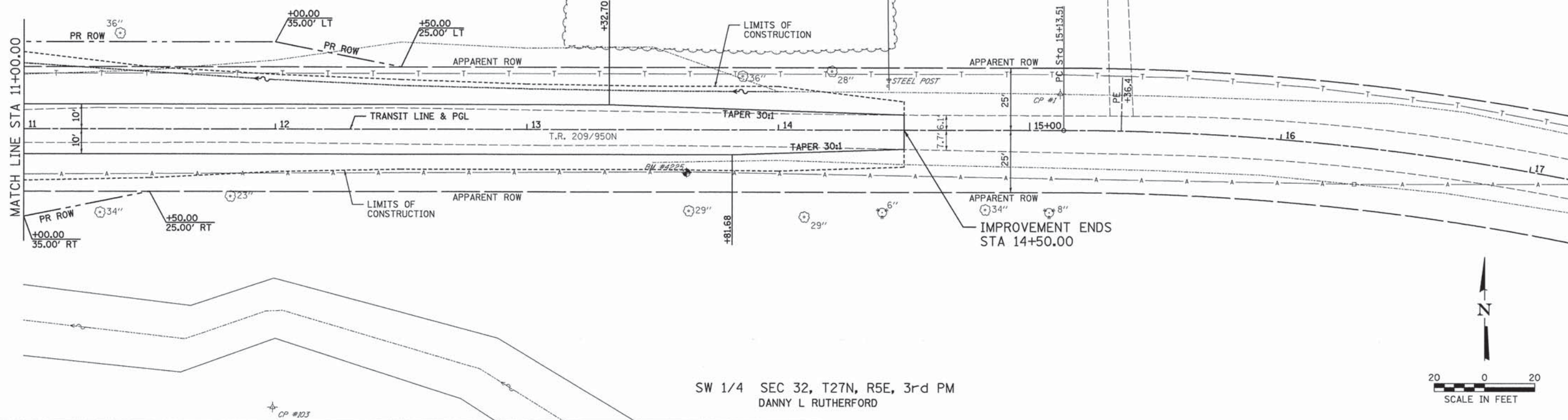
NW 1/4 SEC 32, T27N, R5E, 3rd PM
BANK OF PONTIAC, TRUST

NW 1/4 SEC 32, T27N, R5E, 3rd PM
PAYNE CEMETERY

SW 1/4 SEC 32, T27N, R5E, 3rd PM
DANNY L RUTHERFORD

DATE	BY

DATE	BY



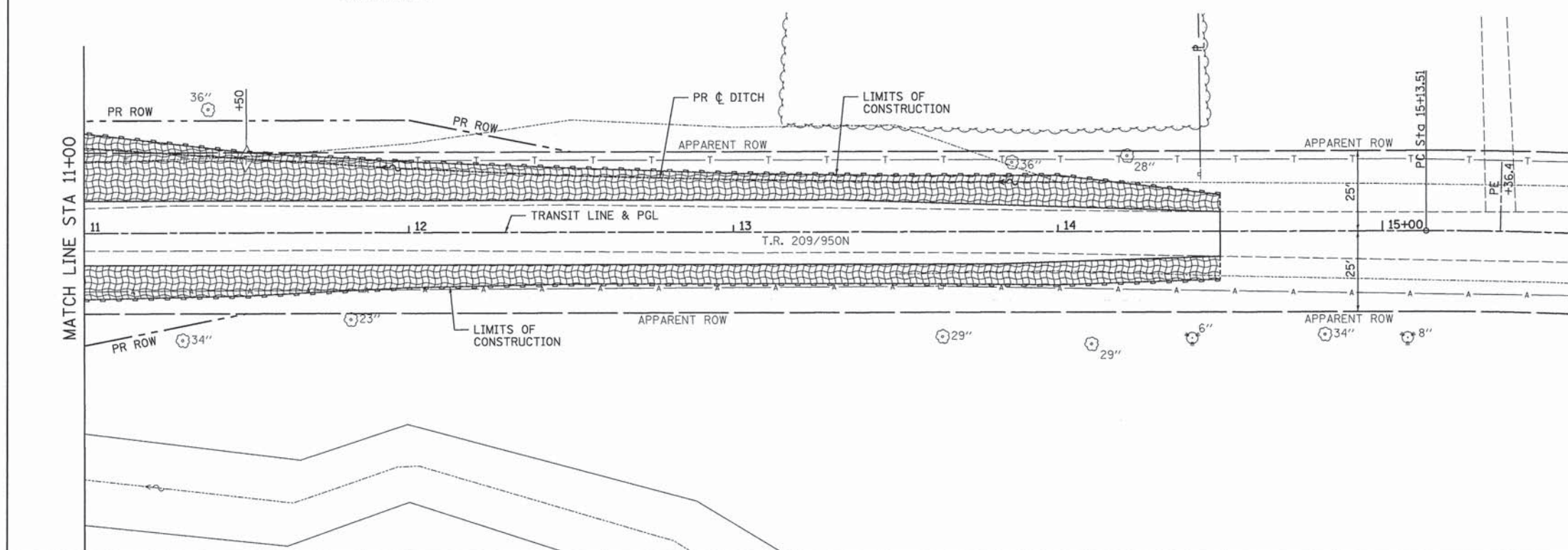
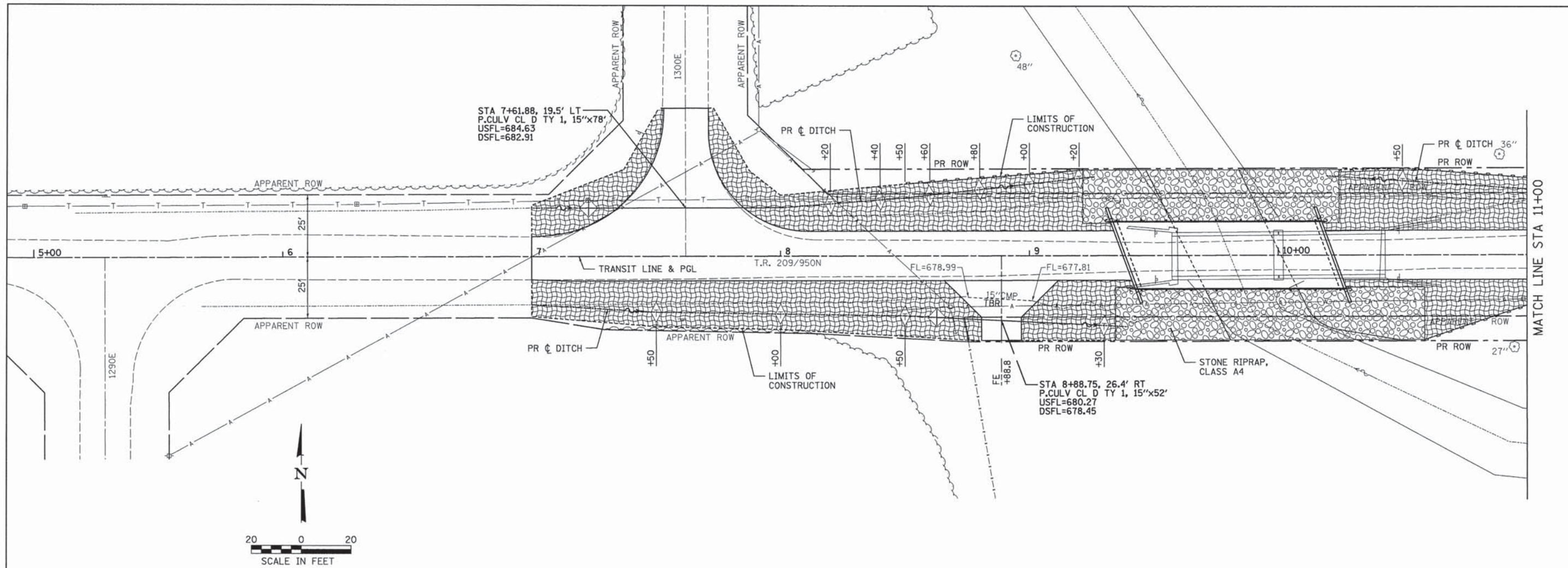
Farnsworth
GROUP
2709 MCGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

DESIGNED - JJO	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED
DATE - 03/23/16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	9
CONTRACT NO. 87598				
ILLINOIS FED. AID PROJECT				



LEGEND

- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- HEAVY DUTY EROSION CONTROL BLANKET
- STONE RIPRAP, CLASS A4
- LIMITS OF CONSTRUCTION

- NOTES:**
- ALL SEDIMENT AND EROSION CONTROL SYSTEMS SHALL BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY.
 - ALL SEDIMENT AND EROSION CONTROL SYSTEMS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EACH 1/2" OR GREATER RAIN EVENT.

Farnsworth GROUP
 2709 McGRAH DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-8435 / info@fsw.com

DESIGNED - JJO	REVISED
CHECKED - JCZ	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED
DATE - 03/23/16	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL PLAN

SHEET NO. OF SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 87598	

Benchmarks: BM #4255 Railroad Spike in 2nd power pole, South side of road, ±364' East of bridge, Station 13+63.51/17.21' RT., Elevation 677.08.
 BM #4439 Railroad Spike in power pole, Northeast corner of 950N Road & 1300E Road, North Side of road, ±209' West of bridge, Station 7+91.38/49.93' LT., Elevation 686.63.

Existing Structure: S.M. 053-3331 was originally constructed in 1920. The superstructure consists of a two-span concrete thru girder bridge. The substructure consists of closed concrete abutments and a solid wall pier. The back-to-back abutment dimension measures 86'-0" and the out-to-out dimension measures 19'-6". Each span length is 43'-0". The structure is to be replaced during road closure.

No Salvage.

WATERWAY INFORMATION

Drainage Area = 40.9 Sq. Mi.		Low Grade Elev. 677.8 @ Sta. 12+99.50					
Flood Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. Head - Ft.	Prop. Head - Ft.	Exist. Headwater El.	Prop. Headwater El.	
Design	15	3939	520	595	680.5	680.5	
Base	100	6310	520	595	681.6	681.6	
Overtopping	2	1420	520	595	678.4	678.4	
Max. Calc.							

10 Yr. Velocity = 2.33 ft/sec. (Proposed)
 10 Yr. Velocity = 2.13 ft/sec. (Existing)

INDEX OF SHEETS

SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	GENERAL DATA
B3	33" x 36" PPC DECK BEAM
B4	33" x 36" PPC DECK BEAM DETAILS
B5	STEEL RAILING, TYPE S1
B6	WEST ABUTMENT
B7	EAST ABUTMENT
B8	METAL SHELL PILE DETAILS
B9-B10	SOIL BORING LOGS

DESIGN SPECIFICATIONS

2015 Interim AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 7th Edition

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi (Cast-In-Place Concrete)
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_{cl} = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low relaxation strands)
 $f_{pb1} = 201,960$ psi ($\frac{1}{2}$ " ϕ low relaxation strands)

LOADING HL-93

Allow 25#/sq. ft. for future wearing surface.

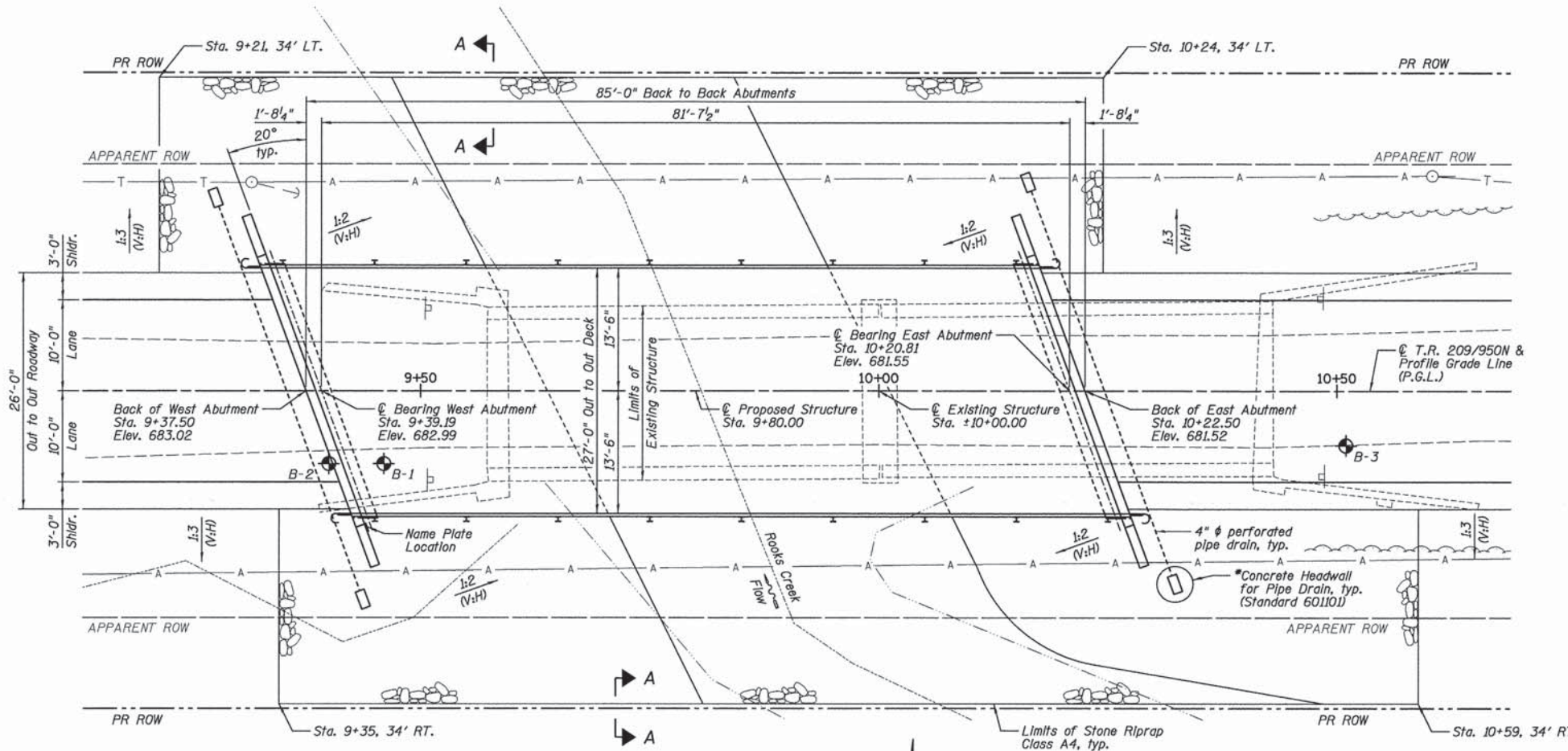
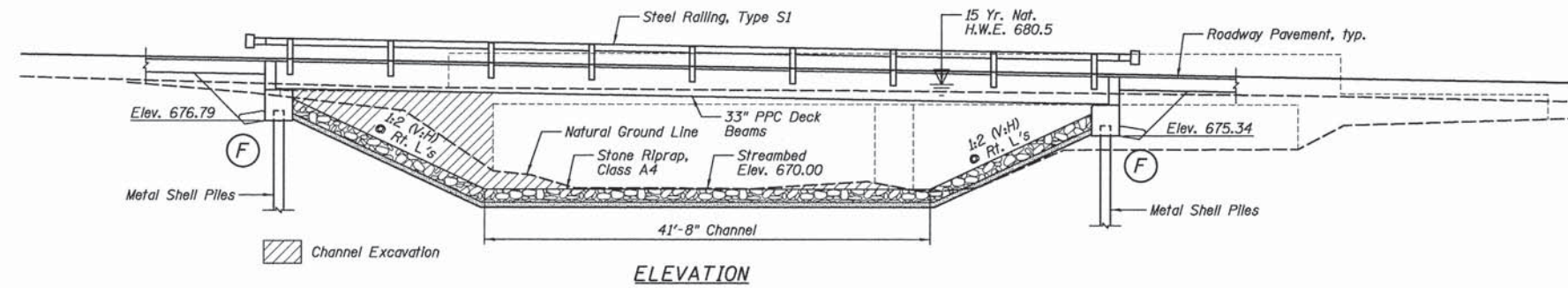
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.113
 Design Spectral Acceleration at 0.2 sec. (SDs) = 0.183
 Soil Site Class = D

I certify that to the best of my knowledge, 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'.

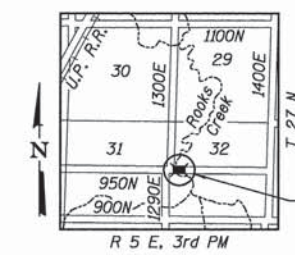
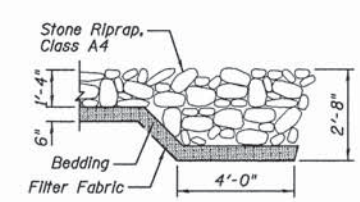


Joseph M. Lowrance
 JOSEPH M. LOWRANCE
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-006446
 Exp. Date 11/30/16



Note: West Abutment Piles should be driven through a 2" diameter precored hole to an elevation of 669.42 according to Article 512.09(c).

*Included in cost of Pipe Underdrains for Structures.



T.R. 209 OVER ROOKS CREEK
 SECTION 11-08108-00-BR
 LIVINGSTON COUNTY
 STA. 9+80.00

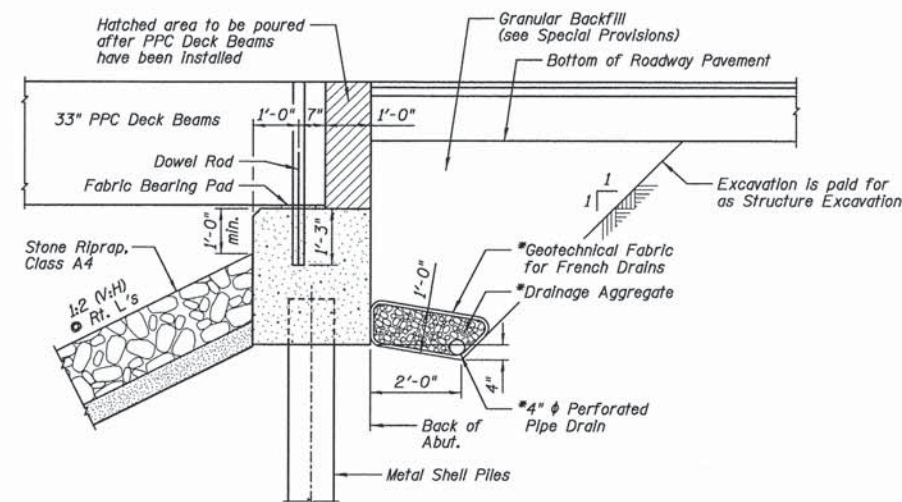
Farnsworth GROUP 2709 McGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 863-8435 / info@fw.com	DESIGNED - TCR	REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 053-4213 SHEET NO. B1 OF 10 SHEETS	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - JML	REVISIONS			209	11-08108-00-BR	LIVINGSTON	23	11
DATE - 03/23/16	DRAWN - DJM	REVISIONS			CONTRACT NO. 87598				
	CHECKED - JML	REVISIONS			ILLINOIS FED. AID PROJECT				

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		824	824
Filter Fabric	Sq. Yd.		824	824
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		60	60
Concrete Structures	Cu. Yd.		29.2	29.2
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	2,238		2,238
Reinforcement Bars, Epoxy Coated	Pound		3,560	3,560
Steel Railing, Type S1	Foot	170		170
Furnishing Metal Shell Piles 12" X 0.250"	Foot		160	160
Driving Piles	Foot		160	160
Test Pile Metal Shells	Each		2	2
Name Plates	Each		1	1
Pipe Underdrains for Structures 4"	Foot		134	134
Granular Backfill for Structures	Cu. Yd.		49	49

GENERAL NOTES:

- 1.) Reinforcement bars designated (E) shall be epoxy coated.
- 2.) Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 3.) The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 4.) Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- 5.) Excavation required for construction of Stone Riprap, Class A4 will be paid for as "Channel Excavation". See Roadway Sheets for Channel Excavation quantity.
- 6.) Granular Backfill for Structures shall be compacted according to Article 207.03 of the Standard Specifications.

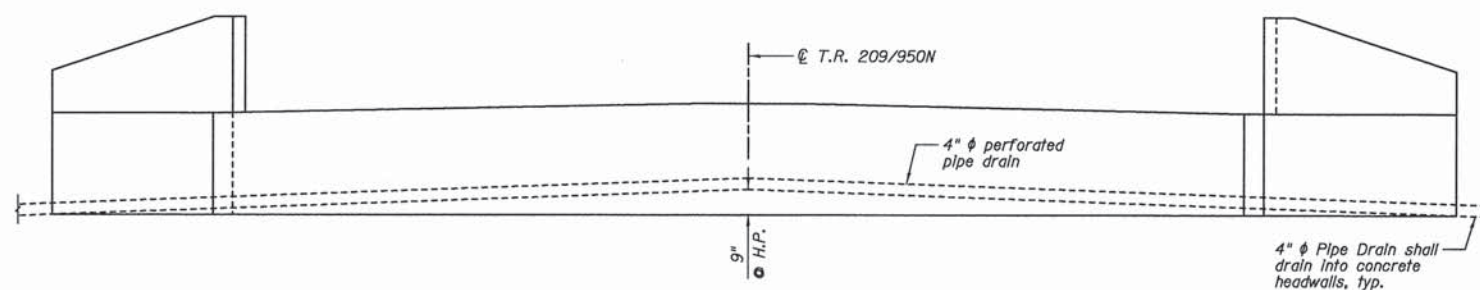


SECTION THRU EAST ABUTMENT

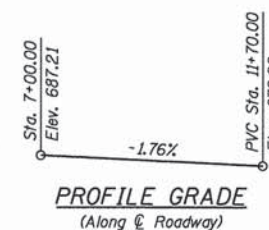
(Similar for West Abutment)

NOTES:

- 1.) Horizontal dimensions ϕ Rt. L's to Abutment.
- 2.) *Included in cost of Pipe Underdrains for Structures (see Special Provisions).
- 3.) 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).



ABUTMENT ELEVATION, TYPICAL DRAIN DETAIL



ROOKS CREEK
BUILT 20__ BY
LIVINGSTON COUNTY
SECTION 11-08108-00-BR
STATION 9+80.00
STR. NO. 053-4213 LOADING HL-93

NAME PLATE
See Standard 515001

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 983-8435 / info@f-w.com

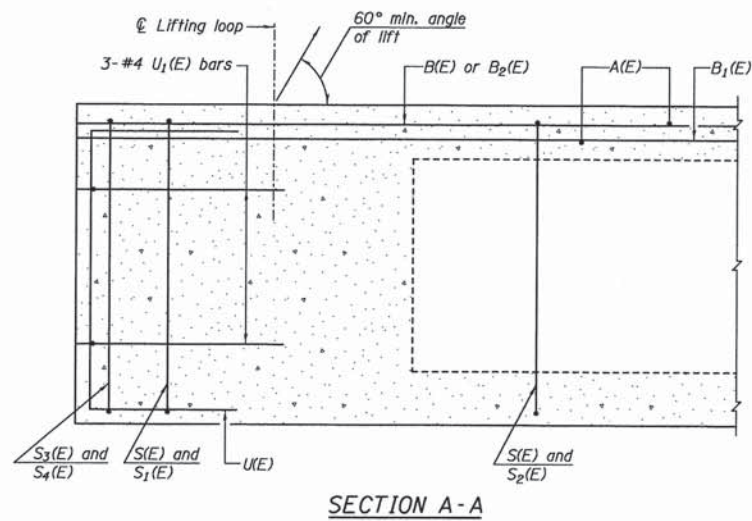
DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - DJM	REVISED
DATE - 03/23/16	CHECKED - JML
	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

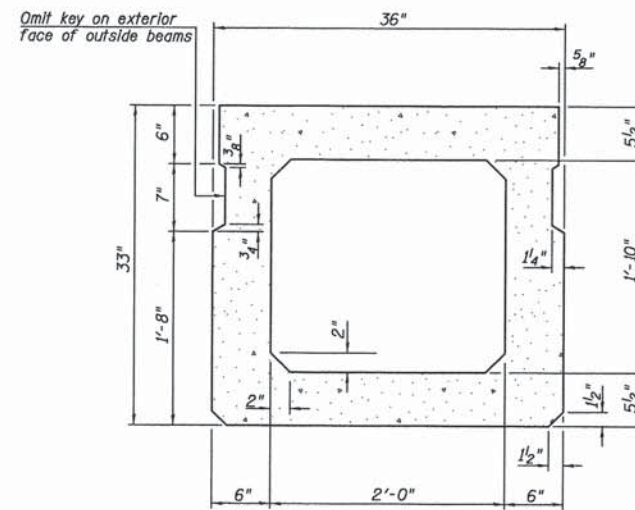
**GENERAL DATA
STRUCTURE NO. 053-4213**

SHEET NO. B2 OF 10 SHEETS

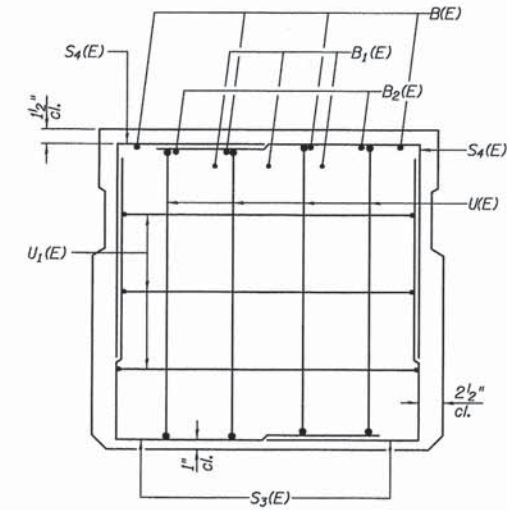
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	12
			CONTRACT NO. 87598	
ILLINOIS FED. AID PROJECT				



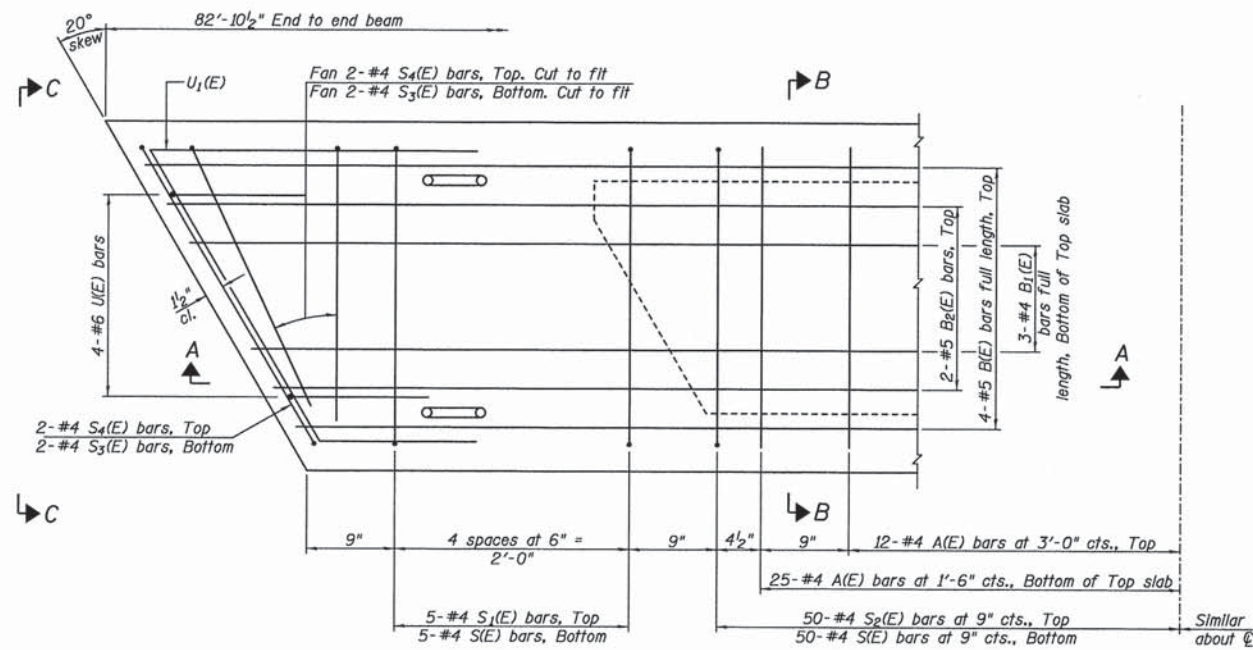
SECTION A-A



SECTION B-B
(Showing dimensions)



VIEW C-C

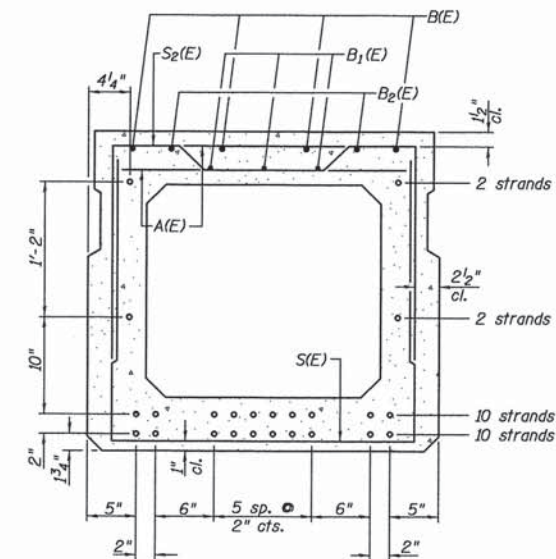


PLAN VIEW

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.

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"



SECTION B-B

(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)	74	#4	2'-7"	—
B(E)	12	#5	29'-3"	—
B1(E)	12	#4	22'-2"	—
B2(E)	4	#5	10'-0"	—
S(E)	110	#4	7'-8"	┌
S1(E)	10	#4	6'-5"	┌
S2(E)	100	#4	6'-8"	┌
S3(E)	8	#4	4'-11"	┌
S4(E)	8	#4	4'-4"	┌
UK(E)	8	#6	5'-0"	┌
U1(E)	6	#4	6'-1"	┌

Note: See Sheet B4 for additional details and Bill of Material.

PD-3336-R

6-8-15

Farnsworth
GROUP
2709 MACRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

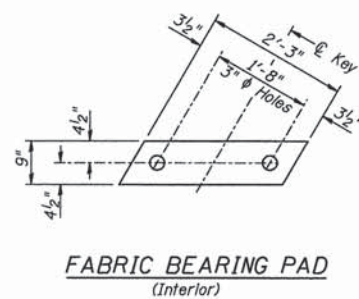
DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - DJM	REVISED
CHECKED - JML	REVISED
DATE - 03/23/16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

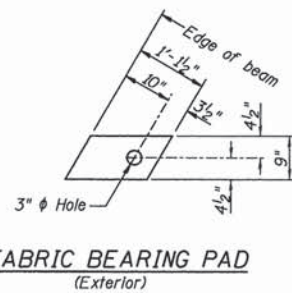
33" x 36" PPC DECK BEAM
STRUCTURE NO. 053-4213

SHEET NO. B3 OF 10 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	13
				CONTRACT NO. 87598
ILLINOIS FED. AID PROJECT				



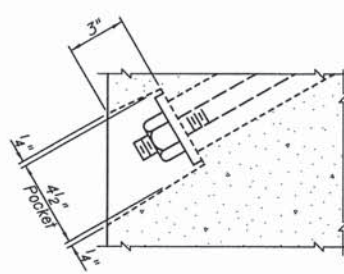
FABRIC BEARING PAD
(Interior)



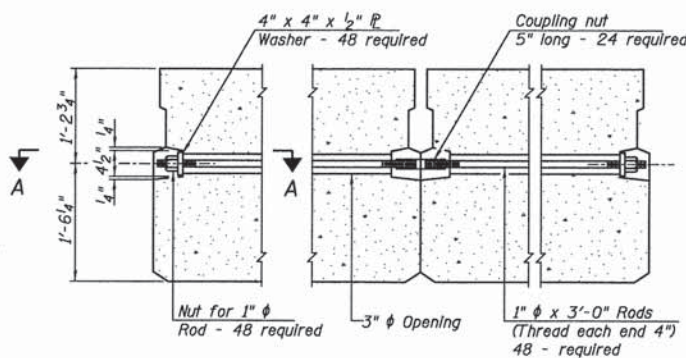
FABRIC BEARING PAD
(Exterior)

FIXED

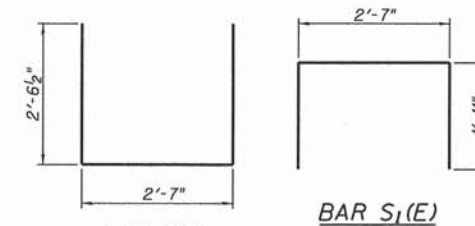
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



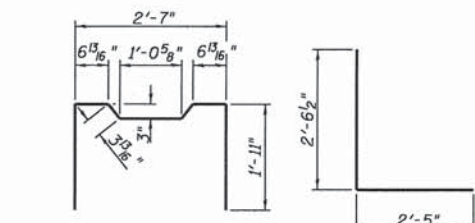
SECTION A-A



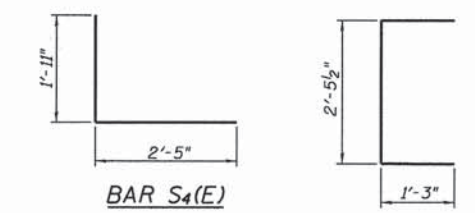
TYPICAL TRANSVERSE TIE ASSEMBLY



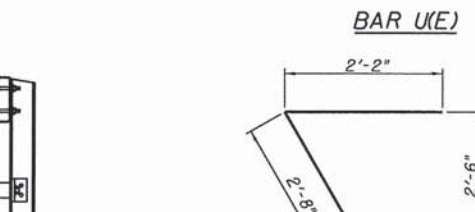
BAR S1(E)



BAR S2(E)

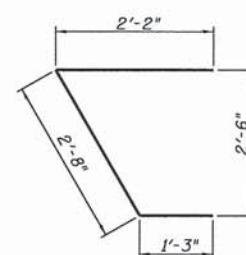


BAR S3(E)

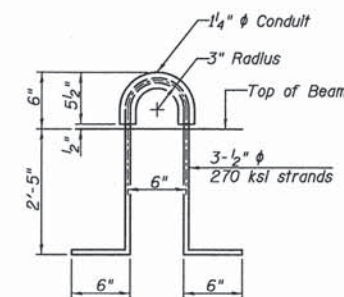


BAR S4(E)

BAR U1(E)



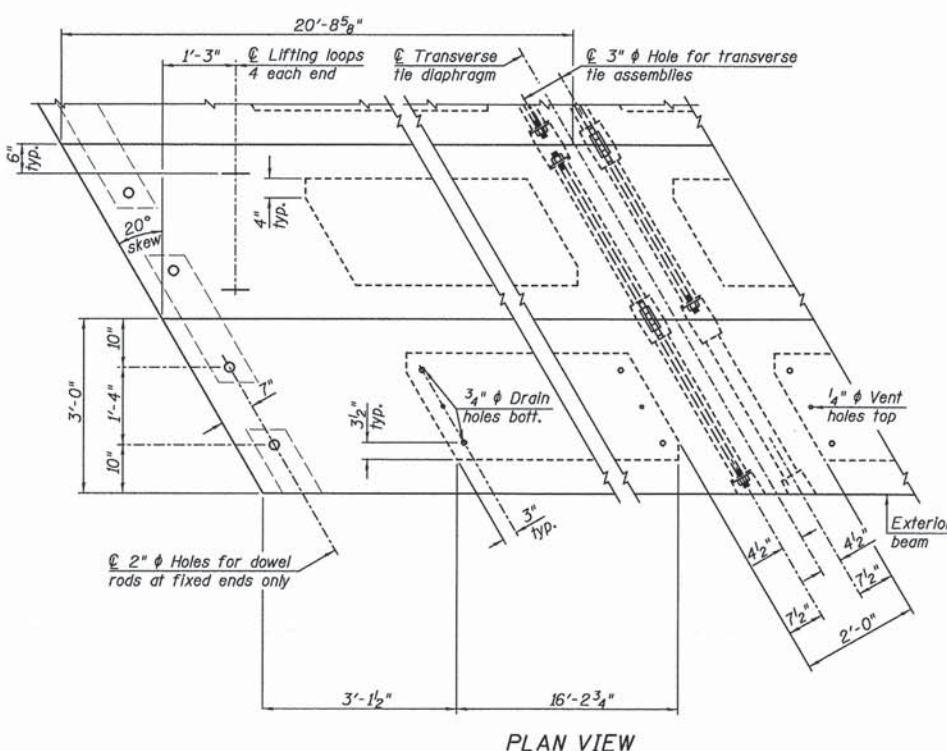
BAR U1(E)



LIFTING LOOP DETAIL

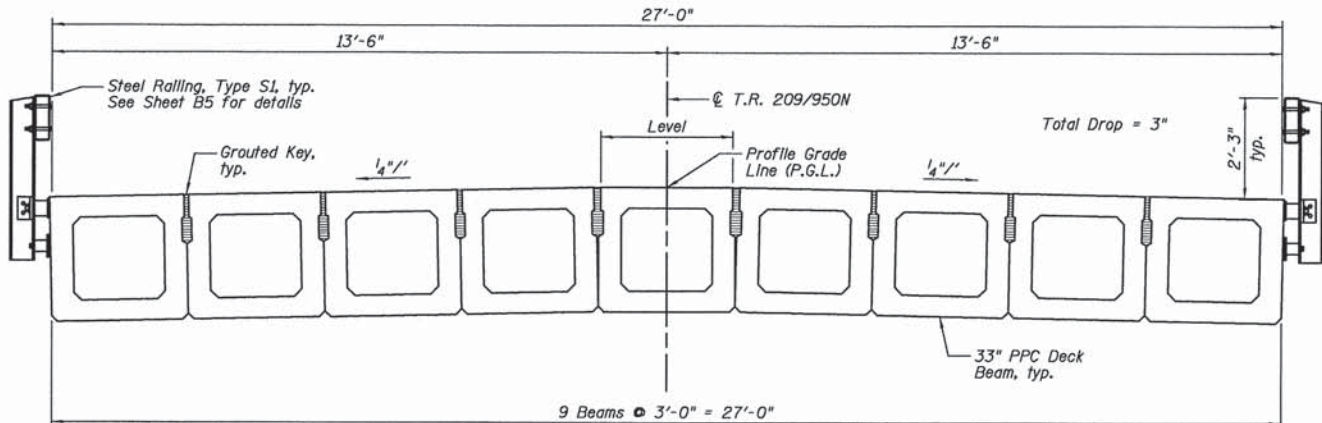
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	2,238
---	---------	-------



PLAN VIEW

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



CROSS SECTION
(Looking East @ C of Bridge)

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. 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)(10) and 1021.07 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.

PD-3336-RD 1-28-16

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

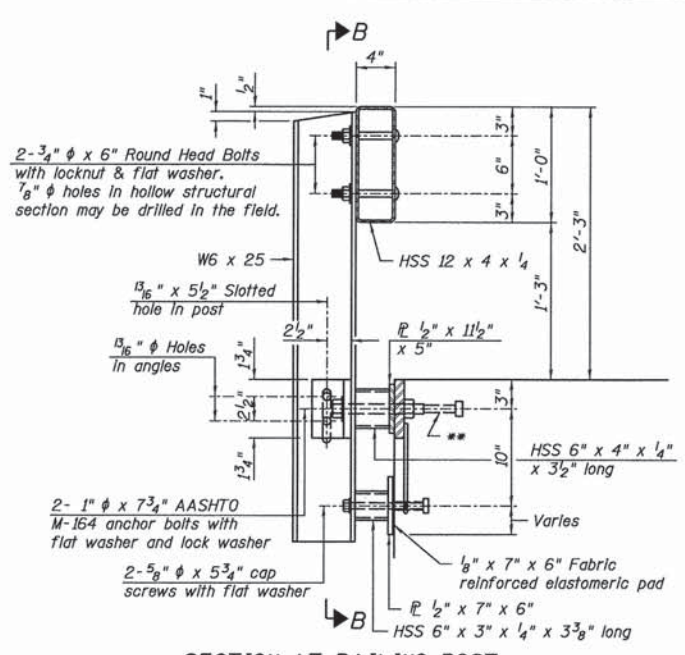
DESIGNED - TCR	REVISIONS
CHECKED - JML	REVISIONS
DRAWN - DJM	REVISIONS
DATE - 03/23/16	REVISIONS
CHECKED - JML	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

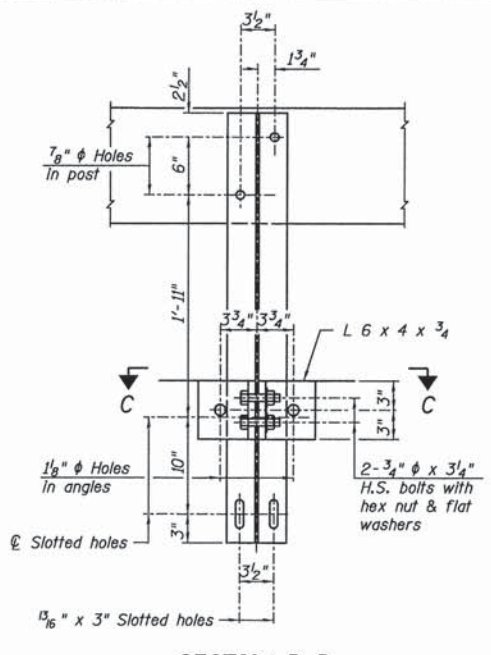
33" x 36" PPC DECK BEAM DETAILS
STRUCTURE NO. 053-4213

SHEET NO. B4 OF 10 SHEETS

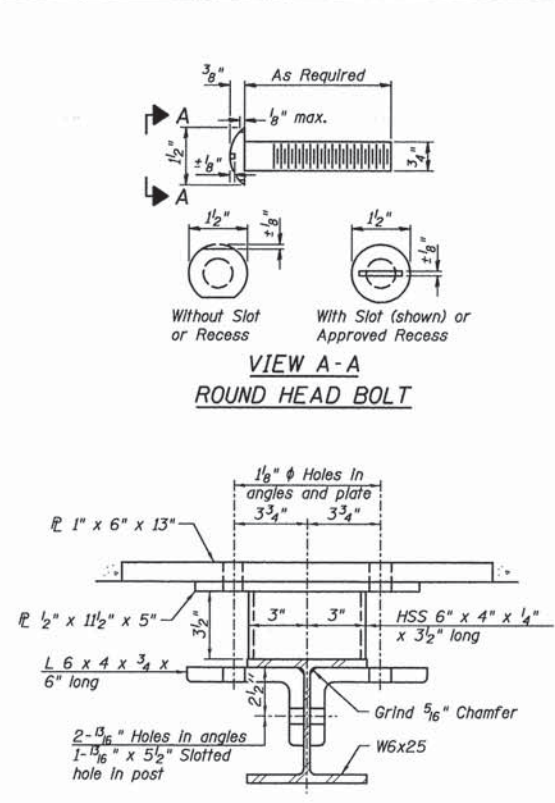
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	14
			CONTRACT NO. 87598	
ILLINOIS FED. AID PROJECT				



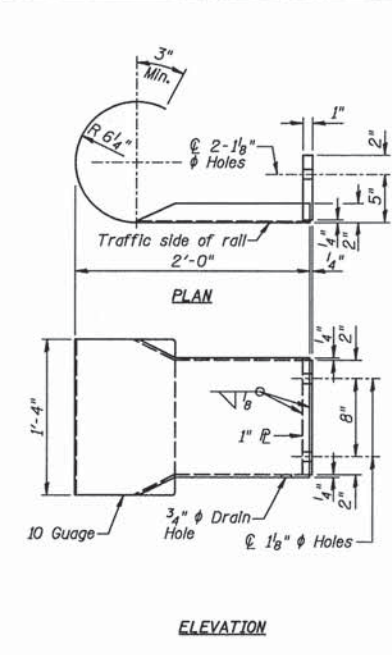
SECTION AT RAILING POST



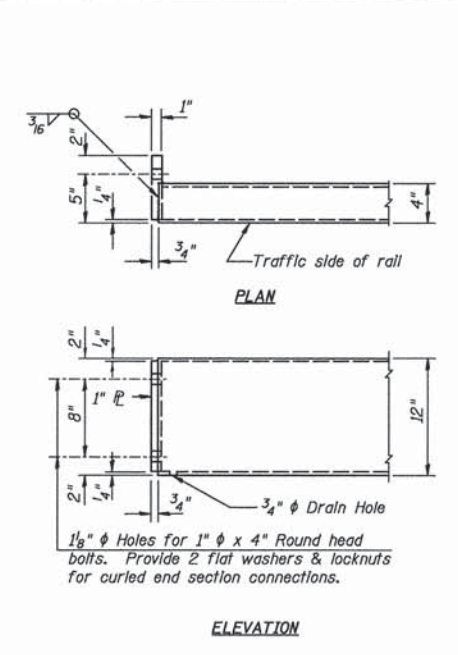
SECTION B-B



VIEW A-A
ROUND HEAD BOLT

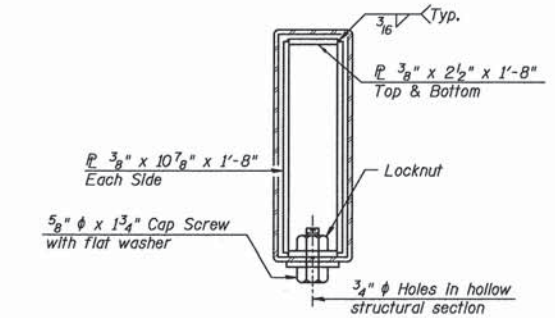


ELEVATION
CURLED END SECTION

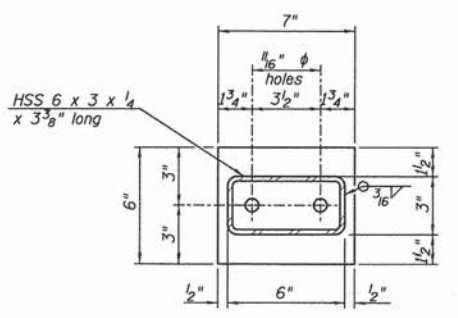


ELEVATION
END OF RAIL DETAILS

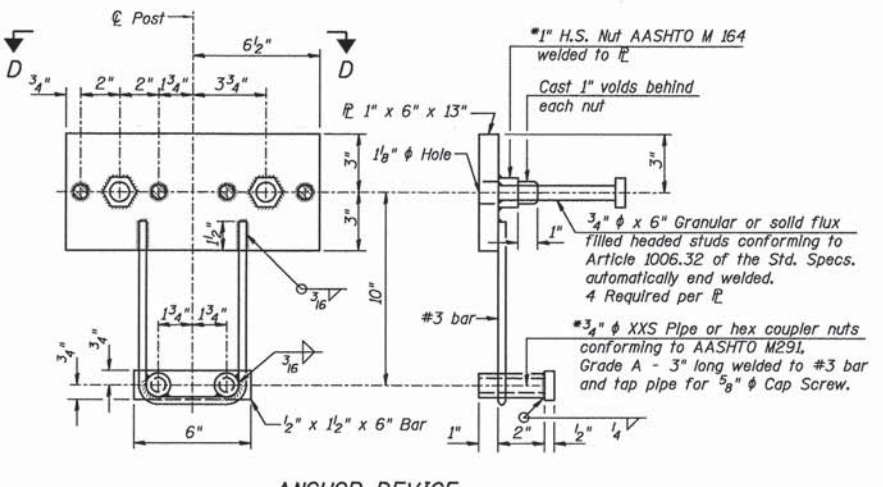
NOTE:
The cost of the curled end sections shall be included in the cost of Steel Railing, Type S1.



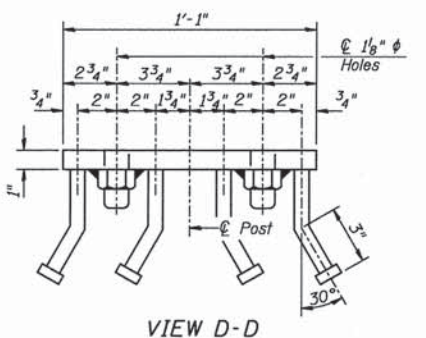
SECTIONS AT RAIL SPLICE



SECTION C-C

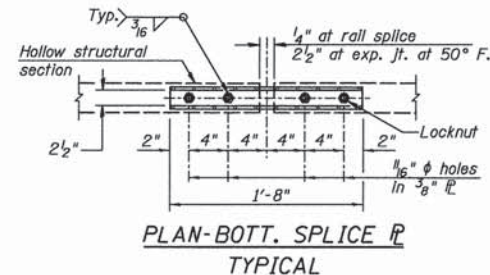


ANCHOR DEVICE

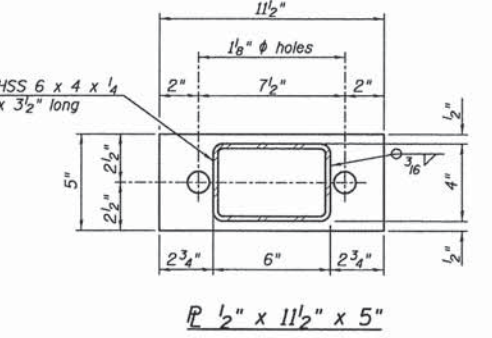


VIEW D-D

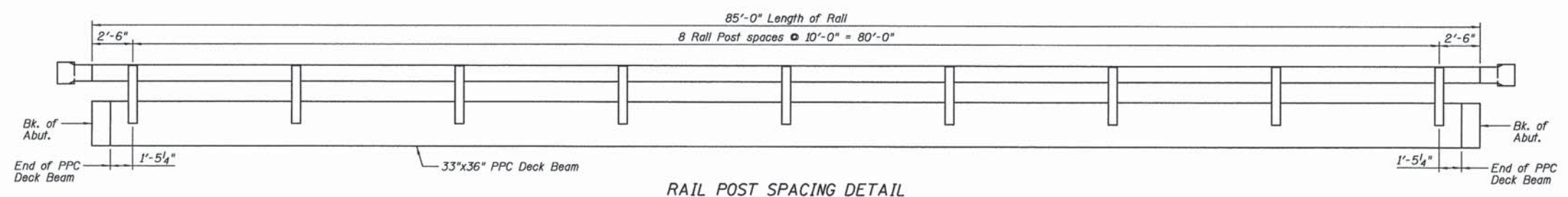
Notes:
For multi-span bridges, sufficient 1/4\"/>



PLAN-BOTT. SPLICE
TYPICAL



SECTION C-C



RAIL POST SPACING DETAIL

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	170

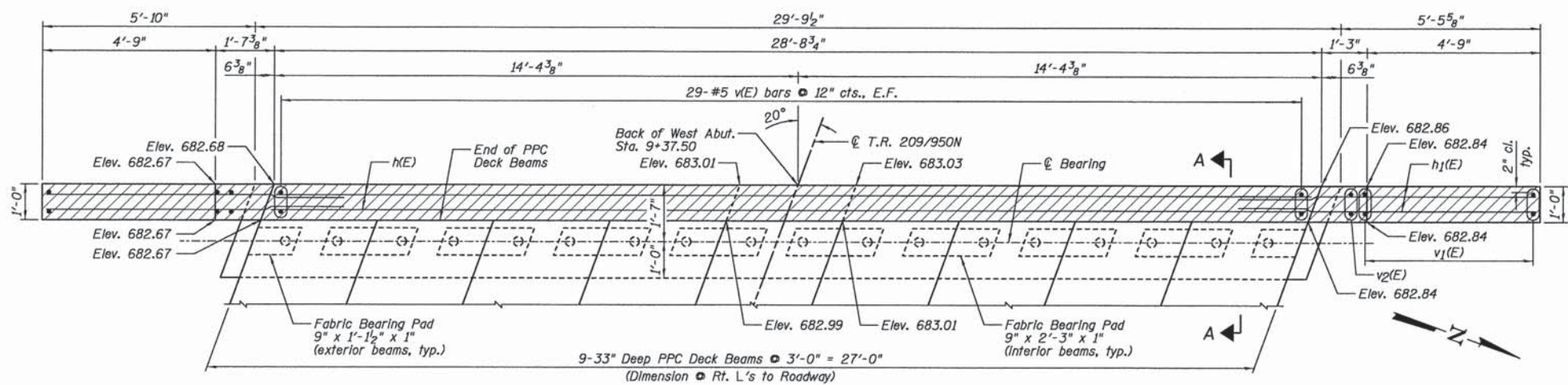
Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

DESIGNED - TCR	REVISIONS
CHECKED - JML	REVISIONS
DRAWN - DJM	REVISIONS
CHECKED - JML	REVISIONS
DATE - 03/23/16	

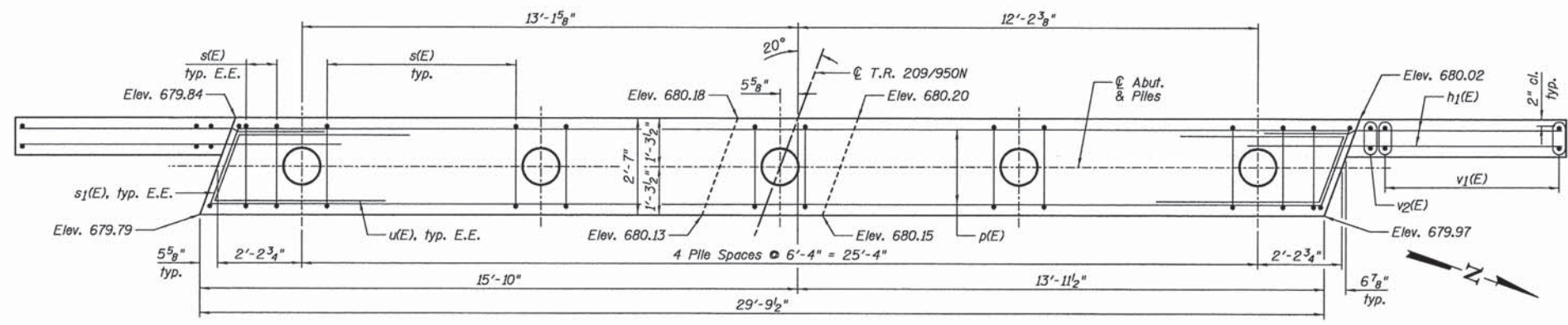
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S1
STRUCTURE NO. 053-4213
SHEET NO. B5 OF 10 SHEETS

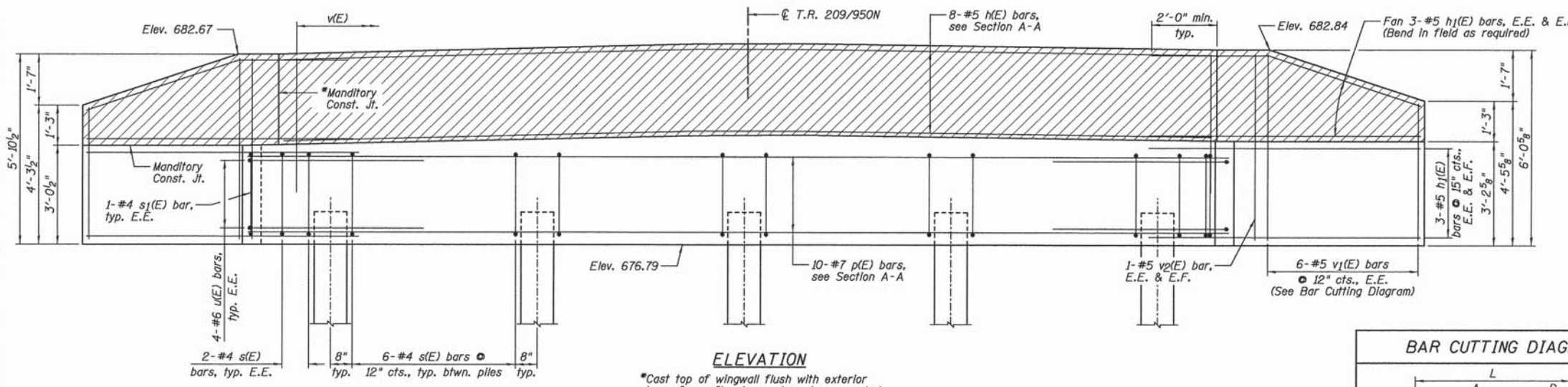
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	15
				CONTRACT NO. 87598
ILLINOIS FED. AID PROJECT				



TOP VIEW ABUTMENT



PLAN - PILE CAP

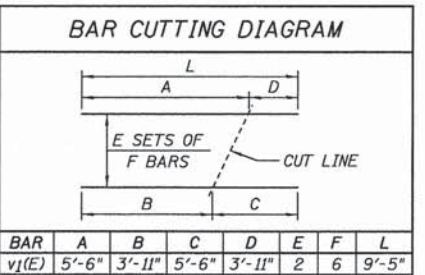


ELEVATION

*Cast top of wingwall flush with exterior beam face after beams have been erected.

PILE DATA:

Pile Type and Size	Metal Shell - 12 in. dia. x 0.250 in. walls
Nominal Required Bearing	255 kips
Factored Resistance Available	141 kips
Estimated Pile Length	21 Feet
Number of Production Piles	4
Number of Test Piles	1

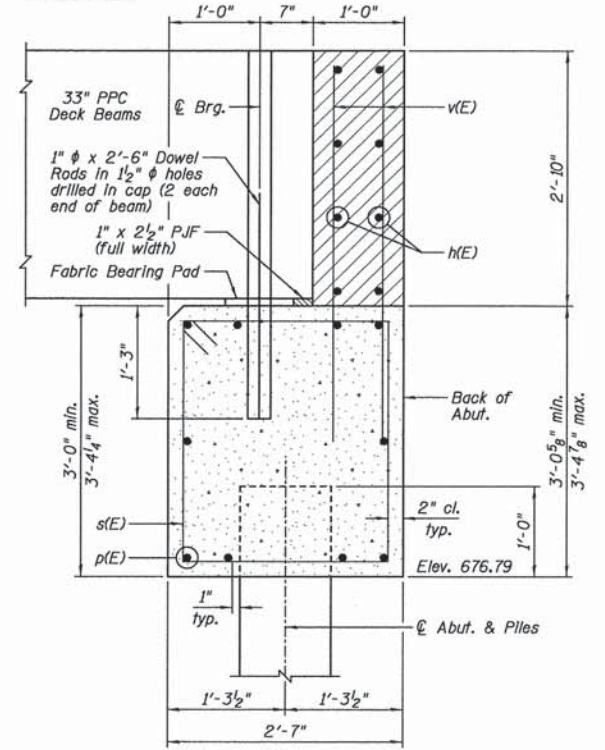
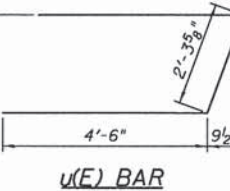
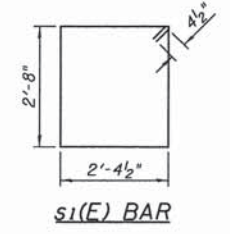
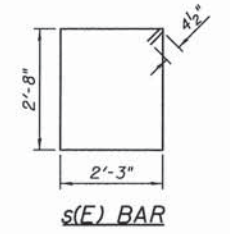


BAR	A	B	C	D	E	F	L
v1(E)	5'-6"	3'-11"	5'-6"	3'-11"	2	6	9'-5"

WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#5	28'-4"	
h1(E)	24	#5	8'-2"	
p(E)	10	#7	29'-5"	
s(E)	28	#4	10'-7"	□
s1(E)	2	#4	10'-10"	□
u(E)	8	#6	11'-4"	┌
v(E)	58	#5	4'-2"	
v1(E)	12	#5	9'-5"	
v2(E)	4	#5	5'-6"	

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	30
Concrete Structures	Cu. Yd.	14.6
Reinforcement Bars, Epoxy Coated	Pound	1,780
Furnishing Metal Shell Piles 12" x 0.250"	Foot	84
Driving Piles	Foot	84
Test Pile Metal Shells	Each	1
Pipe Underdrains For Structures 4"	Foot	67
Granular Backfill for Structures	Cu. Yd.	25



SECTION A-A
(Horiz. Dimensions @ Rt. L's)

LEGEND

Hatched area to be poured after PPC Deck Beams have been installed

NOTES:

- E.E. denotes Each End & E.F. denotes Each Face.
- Order v1(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of v1(E) bars in opposite face of wingwall.
- Piles should be driven through a 2' diameter precored hole to an elevation of 669.42 according to Article 512.09(a). Cost included in Driving Piles.

Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@fsw.com

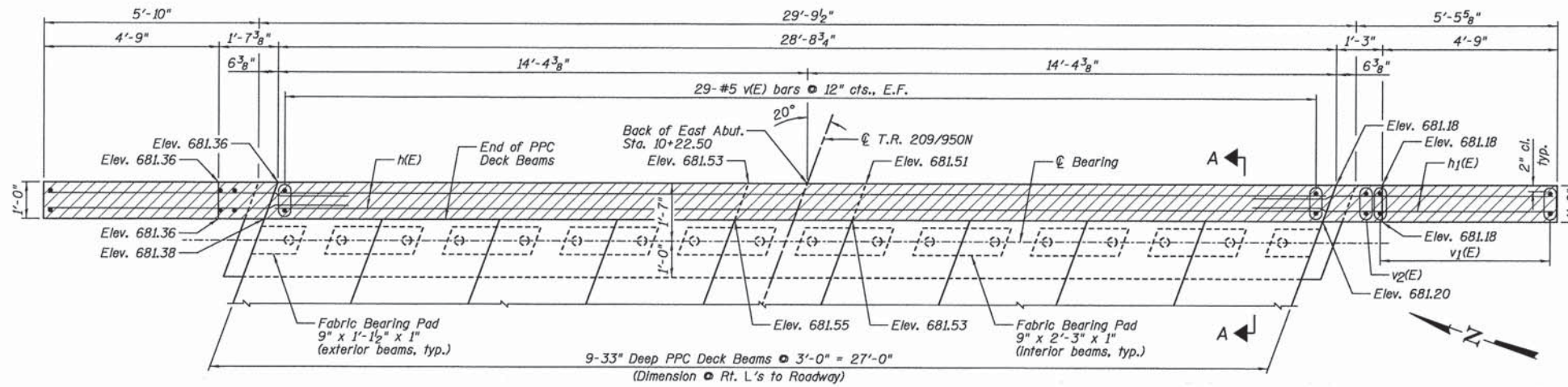
DESIGNED - TCR	REVISIONS
CHECKED - JML	REVISIONS
DRAWN - DJM	REVISIONS
CHECKED - JML	REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

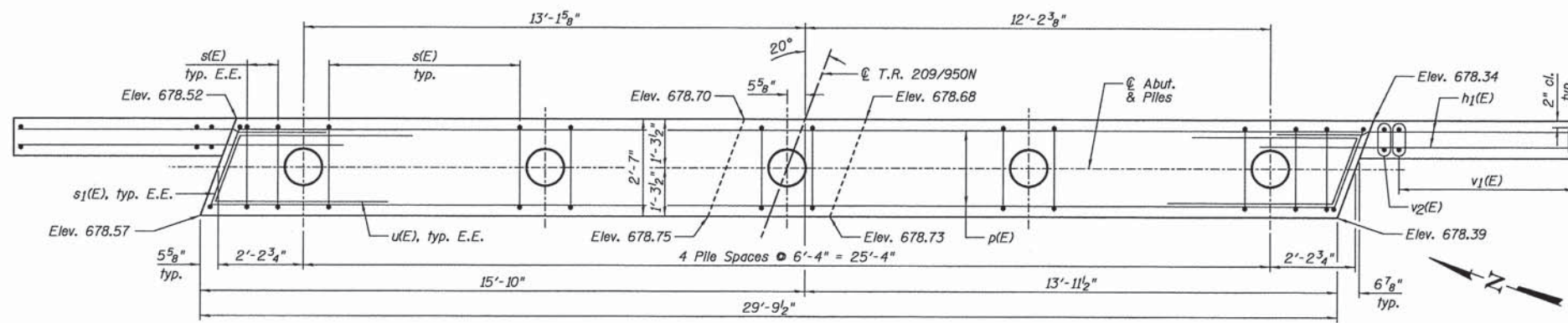
WEST ABUTMENT
STRUCTURE NO. 053-4213
SHEET NO. B6 OF 10 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	16

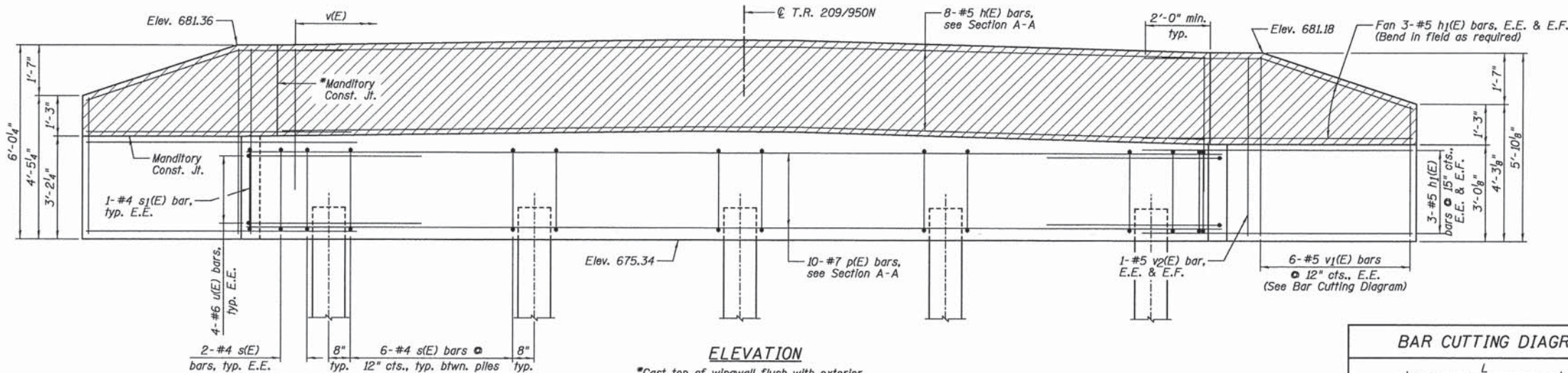
CONTRACT NO. 87598
ILLINOIS FED. AID PROJECT



TOP VIEW ABUTMENT



PLAN - PILE CAP

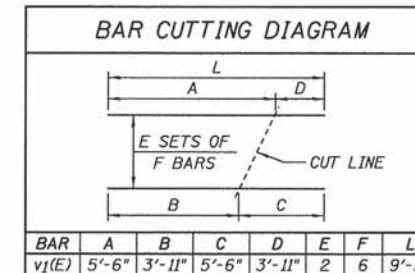


ELEVATION

*Cast top of wingwall flush with exterior beam face after beams have been erected.

PILE DATA:

Pile Type and Size	Metal Shell - 12 in. dia. x 0.250 in. walls
Nominal Required Bearing	250 kips
Factored Resistance Available	137 kips
Estimated Pile Length	19 Feet
Number of Production Piles	4
Number of Test Piles	1

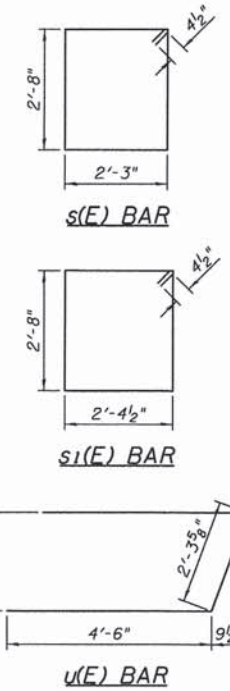


BAR	A	B	C	D	E	F	L
v1(E)	5'-6"	3'-11"	5'-6"	3'-11"	2	6	9'-5"

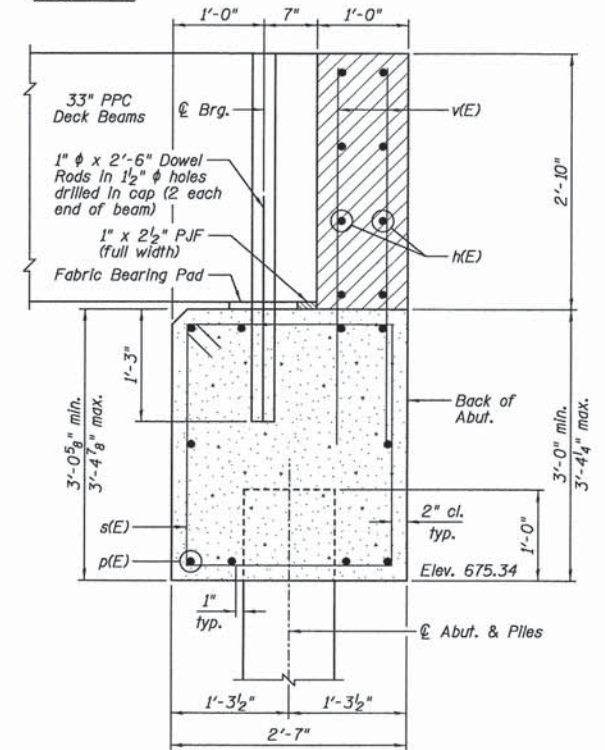
EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#5	28'-4"	—
h1(E)	24	#5	8'-2"	—
p(E)	10	#7	29'-5"	—
s(E)	28	#4	10'-7"	□
s1(E)	2	#4	10'-10"	□
u(E)	8	#6	11'-4"	—
v(E)	58	#5	4'-2"	—
v1(E)	12	#5	9'-5"	—
v2(E)	4	#5	5'-6"	—

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	30
Concrete Structures	Cu. Yd.	14.6
Reinforcement Bars, Epoxy Coated	Pound	1,780
Furnishing Metal Shell Piles 12" x 0.250"	Foot	76
Driving Piles	Foot	76
Test Pile Metal Shells	Each	1
Pipe Underdrains For Structures 4"	Foot	67
Granular Backfill for Structures	Cu. Yd.	24



u(E) BAR



SECTION A-A

(Horiz. Dimensions @ Rt. L's)

LEGEND

Hatched area to be poured after PPC Deck Beams have been installed

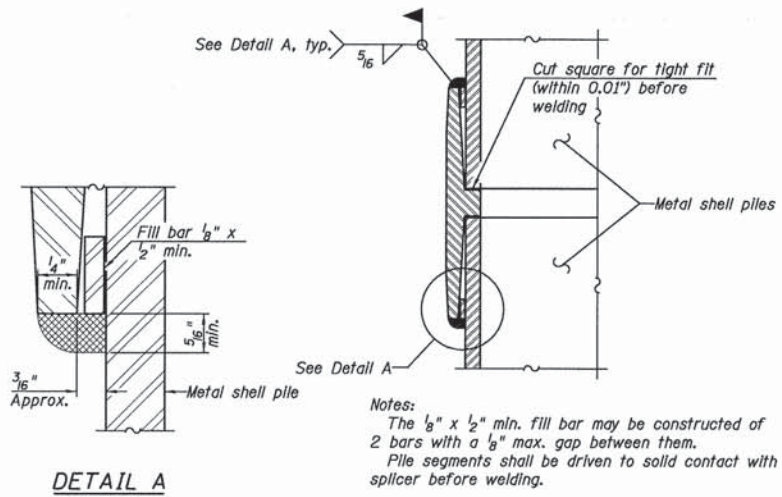
NOTES:

- E.E. denotes Each End & E.F. denotes Each Face.
- Order v1(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of v1(E) bars in opposite face of wingwall.

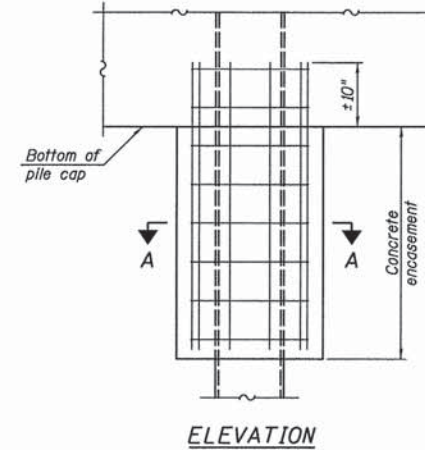


METAL SHELL PILE TABLE

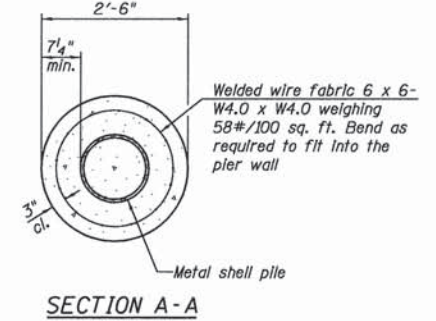
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



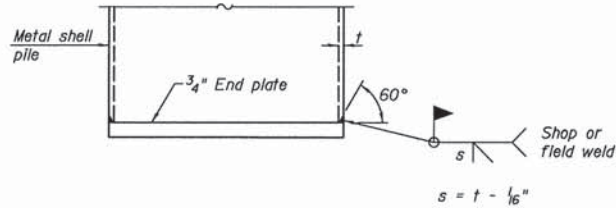
WELDED COMMERCIAL SPLICE



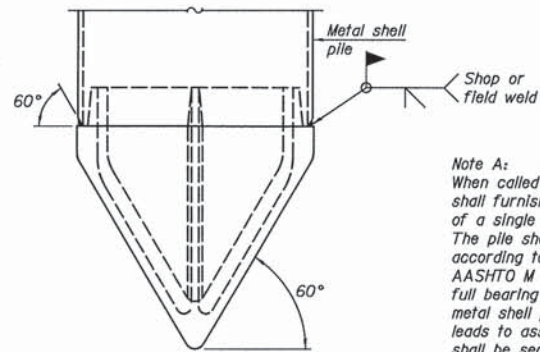
CONCRETE ENCASEMENT AT PIERS



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

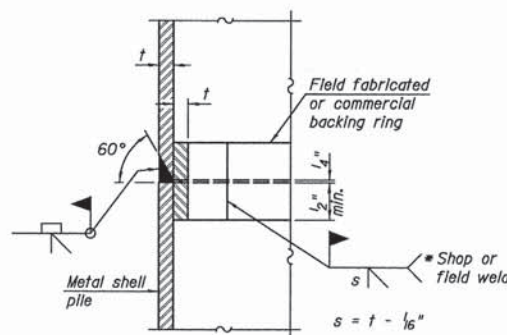


END PLATE ATTACHMENT

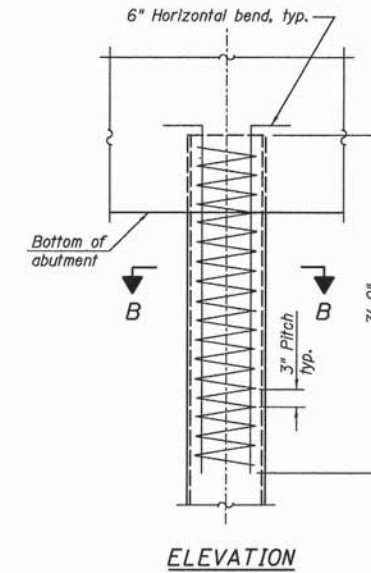


METAL SHELL PILE SHOE ATTACHMENT
(See Note A)

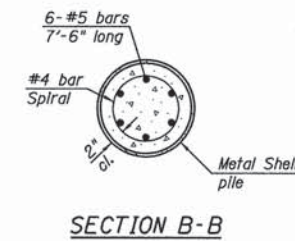
Note A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



COMPLETE PENETRATION WELD SPLICE
* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



METAL SHELL REINFORCEMENT AT ABUTMENTS



Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS

1-27-12

Farnsworth GROUP
2709 MCGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 863-8435 / info@fw.com

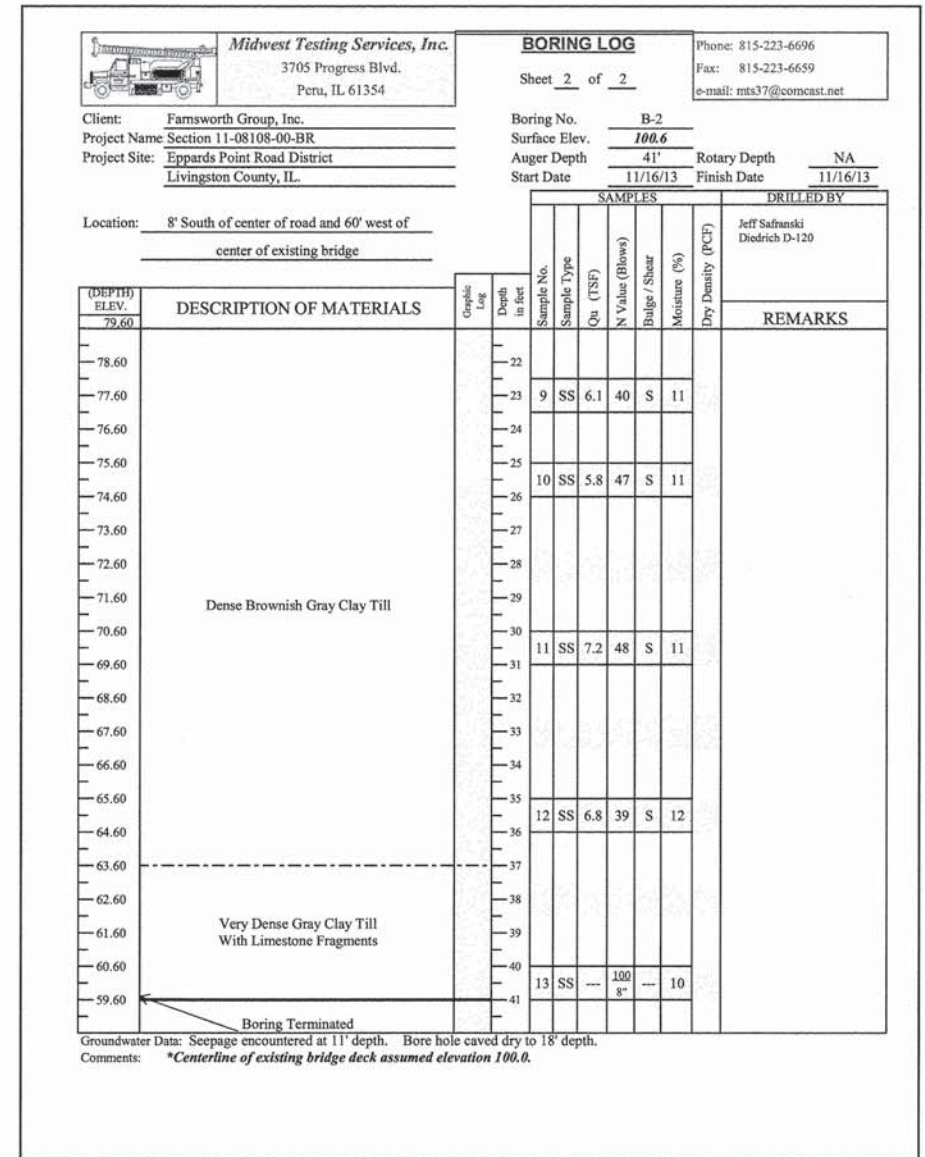
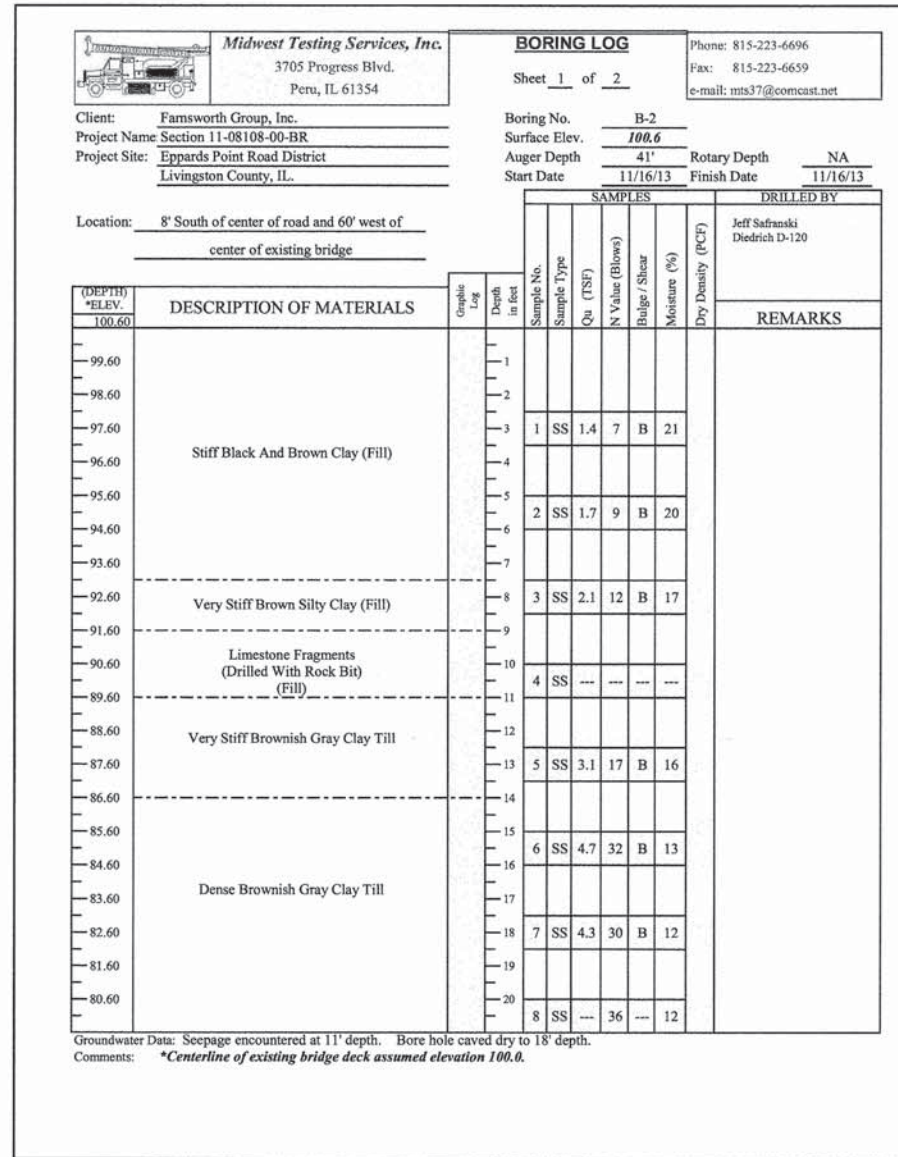
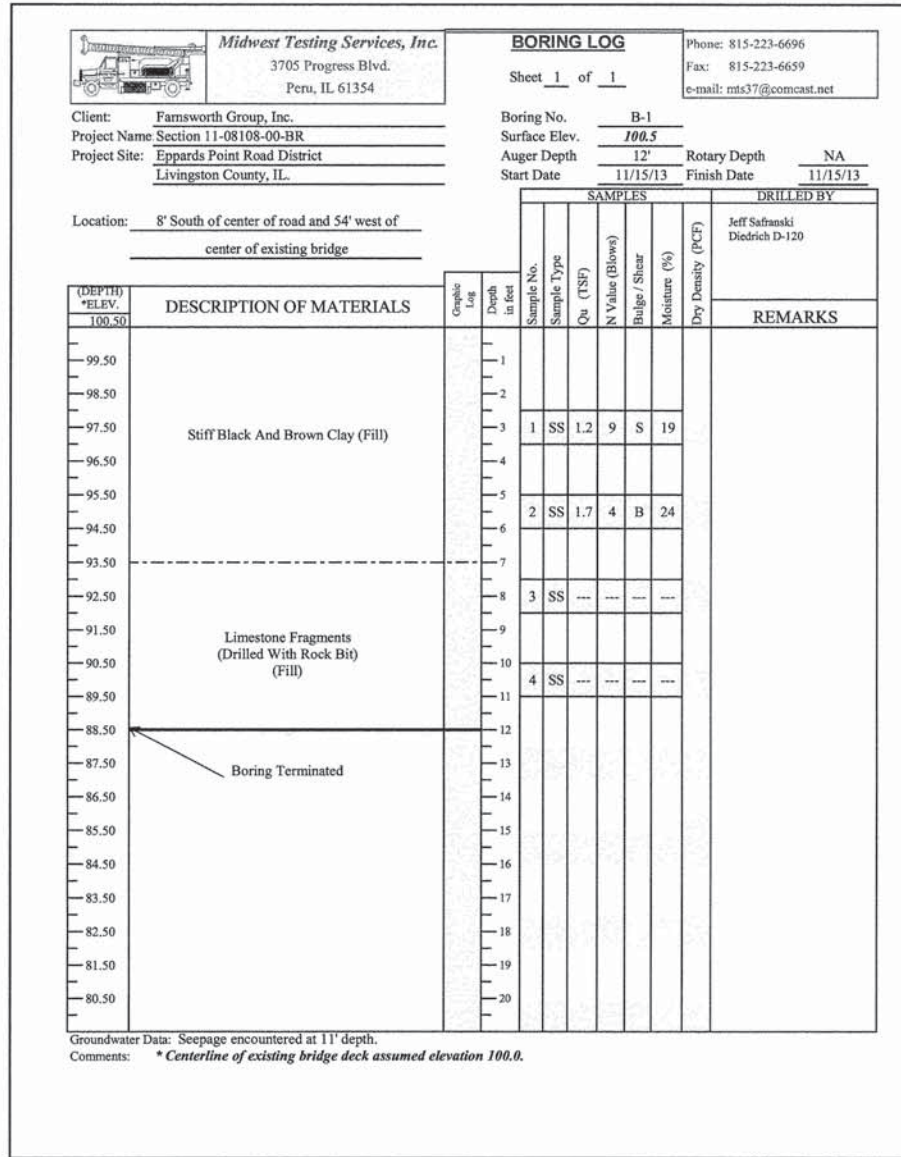
DESIGNED - TCR	REVISION
CHECKED - JML	REVISION
DRAWN - DJM	REVISION
DATE - 03/23/16	REVISION
CHECKED - JML	REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

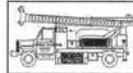
METAL SHELL PILE DETAILS
STRUCTURE NO. 053-4213

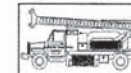
SHEET NO. B8 OF 10 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	18
			CONTRACT NO. 87598	
ILLINOIS FED. AID PROJECT				



NOTE:
Elevation 100.0 at the centerline of the existing bridge deck equals elevation 679.82 U.S.G.S. Mean Sea Level Datum.

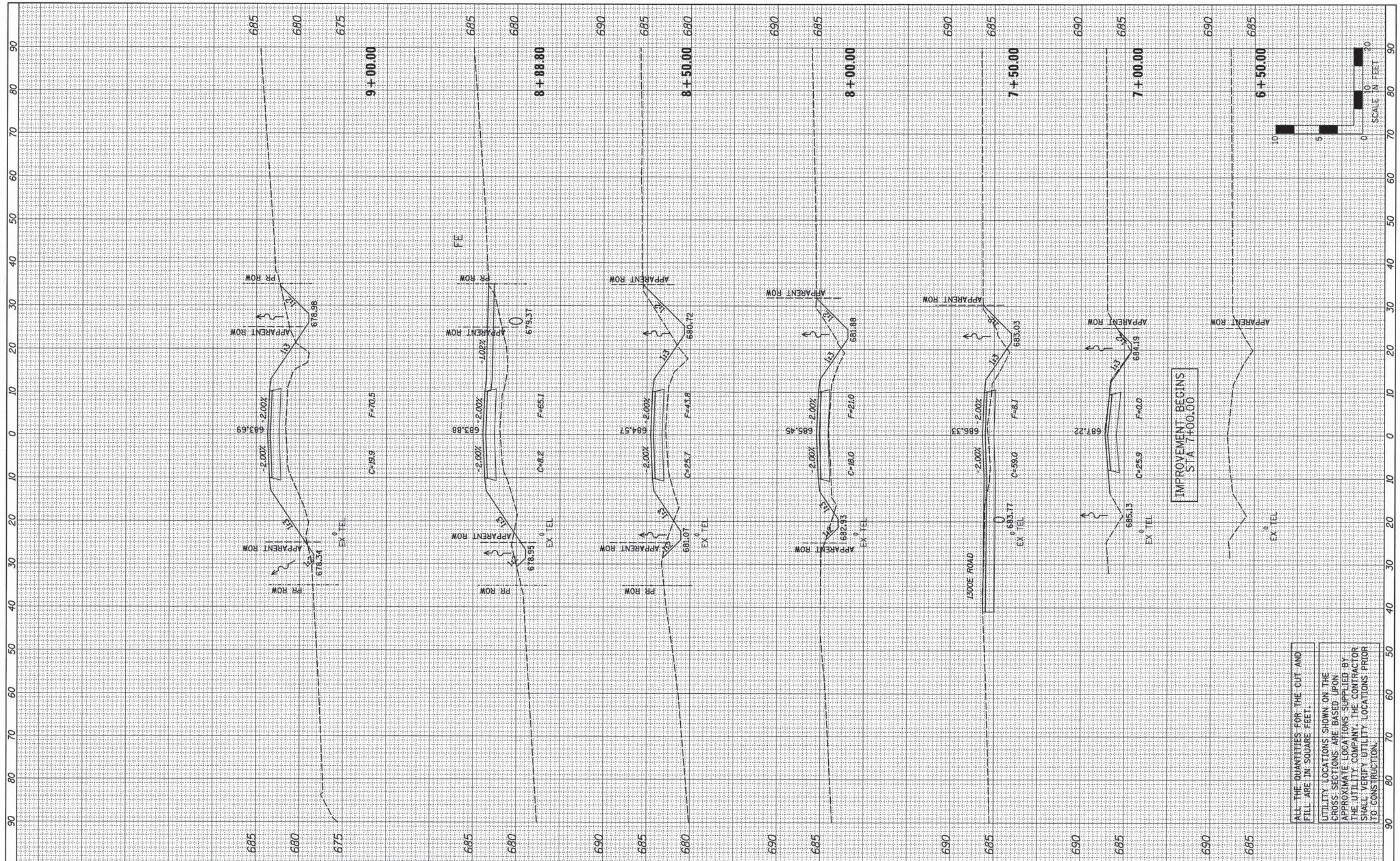
 Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354		BORING LOG Sheet 1 of 2 Phone: 815-223-6696 Fax: 815-223-6659 e-mail: mts37@comcast.net																																																													
Client: Farnsworth Group, Inc. Project Name: Section 11-08108-00-BR Project Site: Eppards Point Road District Livingston County, IL.		Boring No. B-3 Surface Elev. 100.6 Auger Depth 41' Rotary Depth NA Start Date 11/16/13 Finish Date 11/16/13																																																													
Location: 6' South of center of road and 51' east of center of existing bridge																																																															
(DEPTH) *ELEV. 100.60 99.60 98.60 97.60 96.60 95.60 94.60 93.60 92.60 91.60 90.60 89.60 88.60 87.60 86.60 85.60 84.60 83.60 82.60 81.60 80.60	DESCRIPTION OF MATERIALS	Graphical Log Depth in feet 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	DRILLED BY Jeff Safanski Diedrich D-120																																																												
			SAMPLES <table border="1"> <thead> <tr> <th>Sample No.</th> <th>Sample Type</th> <th>Qu (TSF)</th> <th>N Value (Blows)</th> <th>Bulge / Shear</th> <th>Moisture (%)</th> <th>Dry Density (PCF)</th> </tr> </thead> <tbody> <tr><td>1</td><td>SS</td><td>---</td><td>13</td><td>---</td><td>12</td><td></td></tr> <tr><td>2</td><td>SS</td><td>2.0</td><td>11</td><td>B</td><td>19</td><td></td></tr> <tr><td>3</td><td>SS</td><td>2.2</td><td>11</td><td>B</td><td>19</td><td></td></tr> <tr><td>4</td><td>SS</td><td>2.0</td><td>10</td><td>B</td><td>17</td><td></td></tr> <tr><td>5</td><td>SS</td><td>3.3</td><td>20</td><td>B</td><td>13</td><td></td></tr> <tr><td>6</td><td>SS</td><td>3.8</td><td>22</td><td>S</td><td>13</td><td></td></tr> <tr><td>7</td><td>SS</td><td>4.5</td><td>31</td><td>S</td><td>12</td><td></td></tr> <tr><td>8</td><td>SS</td><td>5.5</td><td>33</td><td>S</td><td>11</td><td></td></tr> </tbody> </table>	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	1	SS	---	13	---	12		2	SS	2.0	11	B	19		3	SS	2.2	11	B	19		4	SS	2.0	10	B	17		5	SS	3.3	20	B	13		6	SS	3.8	22	S	13		7	SS	4.5	31	S	12		8	SS	5.5	33
Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)																																																									
1	SS	---	13	---	12																																																										
2	SS	2.0	11	B	19																																																										
3	SS	2.2	11	B	19																																																										
4	SS	2.0	10	B	17																																																										
5	SS	3.3	20	B	13																																																										
6	SS	3.8	22	S	13																																																										
7	SS	4.5	31	S	12																																																										
8	SS	5.5	33	S	11																																																										
REMARKS																																																															
Groundwater Data: Seepage encountered at 10' depth. Bore hole caved dry to 15' depth. Comments: *Centerline of existing bridge deck assumed elevation 100.0.																																																															

 Midwest Testing Services, Inc. 3705 Progress Blvd. Peru, IL 61354		BORING LOG Sheet 2 of 2 Phone: 815-223-6696 Fax: 815-223-6659 e-mail: mts37@comcast.net																																								
Client: Farnsworth Group, Inc. Project Name: Section 11-08108-00-BR Project Site: Eppards Point Road District Livingston County, IL.		Boring No. B-3 Surface Elev. 99.6 Auger Depth 41' Rotary Depth NA Start Date 11/16/13 Finish Date 11/16/13																																								
Location: 6' South of center of road and 51' east of center of existing bridge																																										
(DEPTH) *ELEV. 78.60 77.60 76.60 75.60 74.60 73.60 72.60 71.60 70.60 69.60 68.60 67.60 66.60 65.60 64.60 63.60 62.60 61.60 60.60 59.60 58.60	DESCRIPTION OF MATERIALS	Graphical Log Depth in feet 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	DRILLED BY Jeff Safanski Diedrich D-120																																							
			SAMPLES <table border="1"> <thead> <tr> <th>Sample No.</th> <th>Sample Type</th> <th>Qu (TSF)</th> <th>N Value (Blows)</th> <th>Bulge / Shear</th> <th>Moisture (%)</th> <th>Dry Density (PCF)</th> </tr> </thead> <tbody> <tr><td>9</td><td>SS</td><td>6.6</td><td>36</td><td>S</td><td>12</td><td></td></tr> <tr><td>10</td><td>SS</td><td>7.0</td><td>34</td><td>S</td><td>12</td><td></td></tr> <tr><td>11</td><td>SS</td><td>6.9</td><td>46</td><td>S</td><td>11</td><td></td></tr> <tr><td>12</td><td>SS</td><td>---</td><td>100 7"</td><td>---</td><td>12</td><td></td></tr> <tr><td>13</td><td>SS</td><td>---</td><td>100 5"</td><td>---</td><td>10</td><td></td></tr> </tbody> </table>	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	9	SS	6.6	36	S	12		10	SS	7.0	34	S	12		11	SS	6.9	46	S	11		12	SS	---	100 7"	---	12		13	SS	---	100 5"
Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)																																				
9	SS	6.6	36	S	12																																					
10	SS	7.0	34	S	12																																					
11	SS	6.9	46	S	11																																					
12	SS	---	100 7"	---	12																																					
13	SS	---	100 5"	---	10																																					
REMARKS																																										
Boring Terminated Groundwater Data: Seepage encountered at 10' depth. Bore hole caved dry to 15' depth. Comments: *Centerline of existing bridge deck assumed elevation 100.0.																																										

NOTE:
 Elevation 100.0 at the centerline of the existing bridge deck equals elevation 679.82 U.S.G.S. Mean Sea Level Datum.

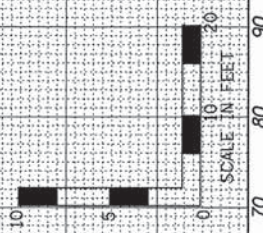
FINAL SURVEY	SUBMITTED	BY	DATE
NO.	NO.		
PLATE	PLATE		
AREAS CHECKED	AREAS CHECKED		

ORIGINAL SURVEY	SUBMITTED	BY	DATE
NO.	NO.		
PLATE	PLATE		
AREAS CHECKED	AREAS CHECKED		



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.



Farnsworth GROUP
 2709 McGRAW DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-8435 / info@f-w.com

DESIGNED - JJQ
 CHECKED - JCZ
 DRAWN - JJQ
 CHECKED - JML

DATE - 03/23/16

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

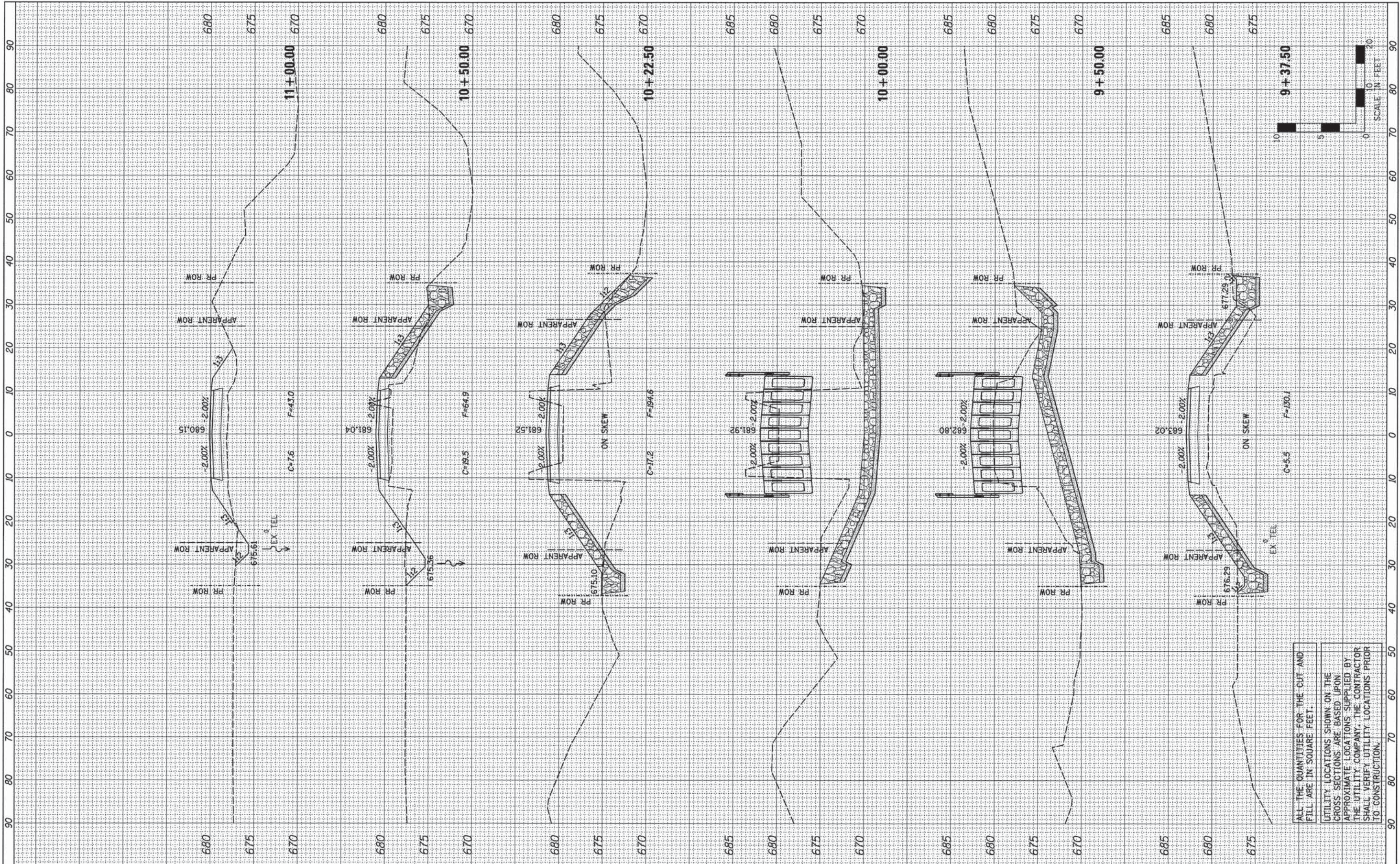
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 6+50.00 TO STA. 9+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	21
CONTRACT NO. 87598				
ILLINOIS FED. AID PROJECT				

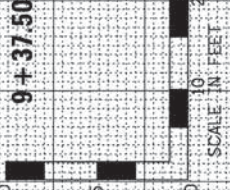
FINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
TEMPLATE		
AREAS CHECKED		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
TEMPLATE		
AREAS CHECKED		
AREAS CHECKED		



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.



Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

DESIGNED - JJO
CHECKED - JCZ
DRAWN - JJO
CHECKED - JML

REVISIONS
REVISION NO. DESCRIPTION
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

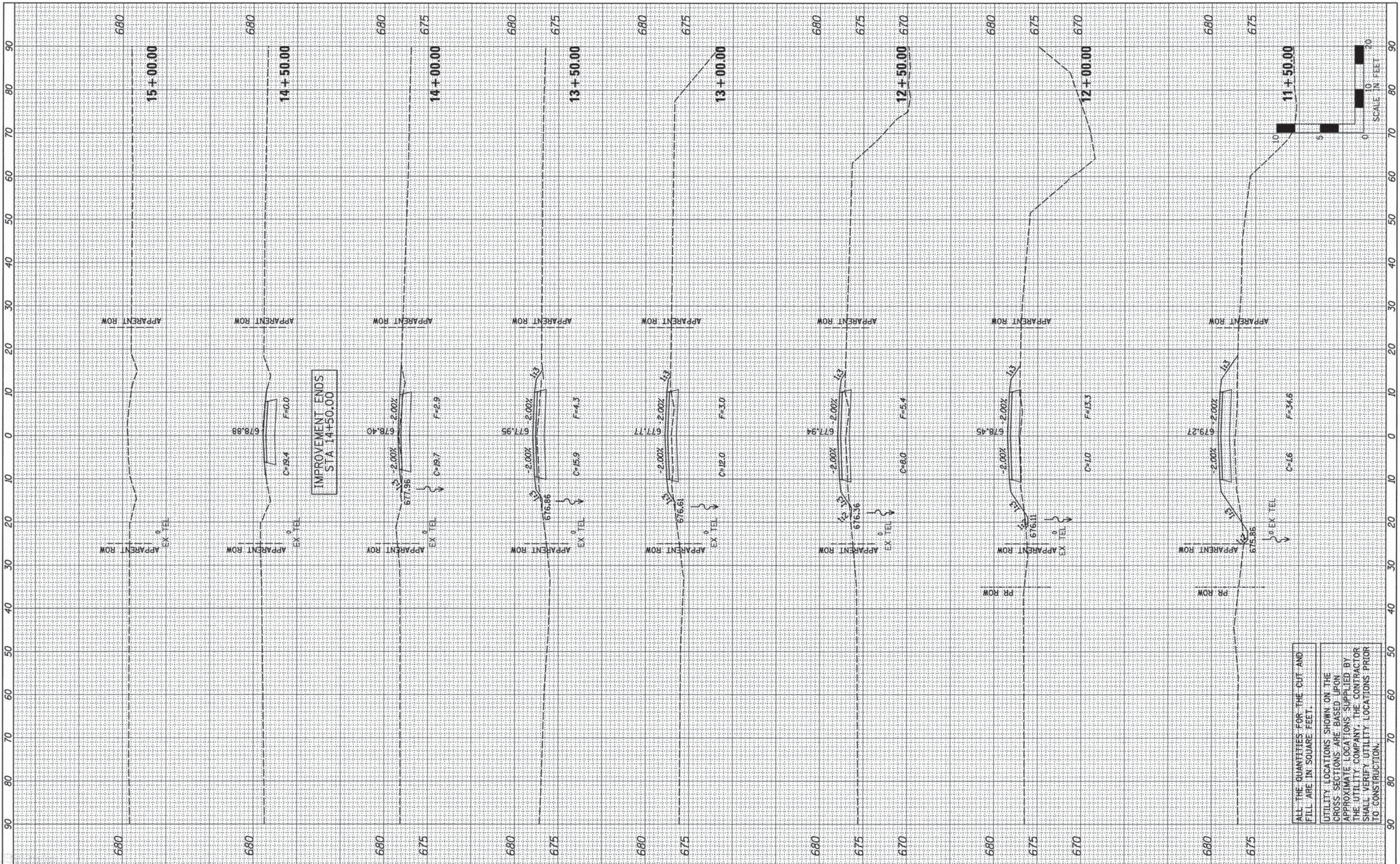
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 9+37.50 TO STA. 11+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	22
CONTRACT NO. 87598			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	REVISIONS	DATE

ORIGINAL SURVEY NO.	DATE



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.



Farnsworth GROUP
2709 McGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-8435 / info@f-w.com

DESIGNED - JJO	REVISIONS -
CHECKED - JCZ	REVISIONS -
DRAWN - JJO	REVISIONS -
CHECKED - JML	REVISIONS -

DATE - 03/23/16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 11+50.00 TO STA. 15+00.00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
209	11-08108-00-BR	LIVINGSTON	23	23
CONTRACT NO. 87598				
ILLINOIS FED. AID PROJECT				