1-18-13 LETTING ITEM 039

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 72A19		

D-96-505-06

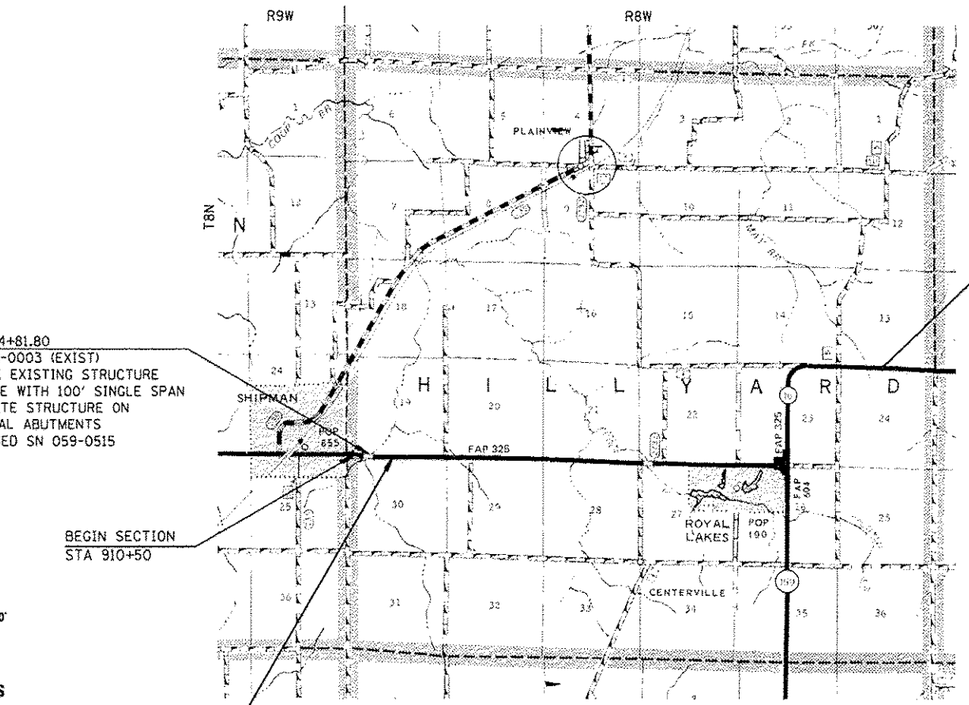
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP ROUTE 325 (IL 16)
SECTION 116BR-1
PROJECT ACF-0325(058)
MACOUPIN COUNTY
C-96-128-10
BRIDGE REPLACEMENT
IL 16 OVER COOP BRANCH 0.1 MILE E OF SHIPMAN

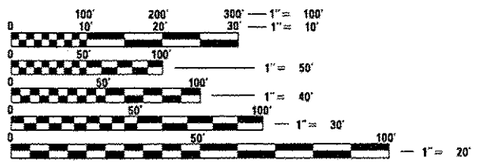
SEE SHEET NO. 2 FOR
INDEX OF SHEETS AND
LIST OF ILLINOIS DOT STANDARDS

DESIGN DESIGNATION
OTHER PRINCIPAL ARTERIAL
ADT 2,650 (2011) 3,677 (2033)
PV = 89.7% SU = 4.4% MU = 5.9%
DESIGN SPEED 60 MPH



GROSS AND NET LENGTH OF SECTION: 950.00 FEET = 0.180 MILES

LOCATION OF SECTION INDICATED THUS: ▬



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

SENIOR TEAM LEADER – MARK DUST (217) 785-0597
TEAM LEADER – RENE CABRERA (217) 557-9062

CONTRACT NO. 72A19

MARY COOMBE BLOXDORF 43208 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

ILLINOIS PROFESSIONAL NO 43208
EXPIRES 11-30-13
DATE: 10-18-2012

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 19 20 12
Roger L Driskell
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 4 20 12
John D. Baranzelli, P.E. /BR
acting ENGINEER OF DESIGN AND ENVIRONMENT
Dec 7 20 12
William R. Frey /BR
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

LIST OF HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420401-09	BRIDGE APPROACH PAVEMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER DETAILS - ADJACENT TO FLEXIBLE PAVEMENT
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-01	METAL END SECTION FOR PIPE CULVERT
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 4.5m (15') AWAY
701006-04	OFF-RD OPERATIONS, 2L, 2W, 4.5m (15') TO 600m (24") AWAY FROM PAVEMENT EDGE
701011-03	LANE CLOSURE, OFF-ROAD MOVING OPERATIONS, 2L. 2W DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, DAY ONLY, SLOW MOVING OPERATIONS, FOR SPEEDS >= 45 MPH
701321-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701901-03	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED RELECTIVE PAVEMENT MARKERS

COMMITMENTS

THE FIELD/RESIDENT ENGINEER SHALL CONTACT DISTRICT 6 STUDIES & PLANS AT 217-782-6990 CONCERNING ANY MAJOR PLAN CHANGES TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN, AND TO ALLOW IMPROVEMENTS IN THE DESIGN FOR FUTURE PROJECTS.

STORM WATER POLLUTION PREVENTION PLAN REQUIRED FOR NPDES PERMIT BY IEPA.

GENERAL NOTES

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 RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS. THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

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

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF 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 INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ALL DISTURBED UNSURFACED AREAS WITHIN THE ROW AND EASEMENTS SHALL BE SEEDED, FERTILIZED, AND MULCHED AS SHOWN IN THE PLANS, SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION.

IN ACCORDANCE WITH STATE OF ILLINOIS P.A. 86-0674, THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES NOT MORE THAN 14 DAYS NOR LESS THAN 48 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS) IN ADVANCE OF THE START OF EXCAVATION OR DEMOLITION.

J.U.L.I.E. TELEPHONE NUMBER
1-800-892-0123

KNOWN UTLITIES LOCATED WITHIN THE LIMITS OF THIS IMPROVEMENT ARE:

FRONTIER COMMUNICATIONS (TELEPHONE)
MJM ELECTRIC COOPERATIVE (ELECTRIC)

ALL EXISTING FENCE WITHIN THE PROPOSED RIGHT-OF-WAY SHALL BE REMOVED. THE COST OF THE FENCE REMOVAL WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE LOCATION OF BURIED AND ABOVE GROUND UTLITIES SHOWN ARE APPROXIMATE, AND ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTLITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE, BURIED AND ABOVE GROUND UTILITY LOCATIONS. IDENTIFICATION AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVE GROUND UTILITIES REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

SEEDING SHALL BE COMPLETED AS DESIGNATED IN THE STORM WATER POLLUTION PREVENTION PLAN. ALL AREAS WITH POTENTIAL FOR EROSION SHALL BE SEEDED BY OCTOBER 1, AND SHALL NOT BE REOPENED UNTIL AFTER THE WINTER SHUT DOWN PERIOD (SEE SWPPP).

ROADS SHALL BE OPENED AT ALL TIMES TO PROVIDE FARMERS ACCESS TO NECESSARY FARM FIELDS.

IF THE CONTRACTOR ELECTS TO USE CONCRETE BASE COURSE, MILLING WILL BE PAID FOR AS HMA SURFACE REMOVAL, VD. NO ADDITIONAL COMPENSATION SHALL BE PAID FOR MILLING CONCRETE.

AN EMULSIFIED ASPHALT PRIME SHALL BE REQUIRED FOR THE PRIMING OF THE MAINLINE PAVEMENT TO BE RESURFACED. THE AREA PRIMED SHALL BE LIMITED TO THAT WHICH WILL BE COVERED WITH HMA THAT SAME DAY.

EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REMOVED PRIOR TO RESURFACING.

THE FOLLWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

AGGREGATE (SURFACE, BASE, SUBBASE, OR BACKFILL)	2.05 TONS/CUBIC YARD
STONE RIPRAP	1.50 TONS/CUBIC YARD
BITUMINOUS MATERIALS (PRIME COAT)	0.00038 TON/SQUARE YARD (ON PAVEMENT)
BITUMINOUS MATERIALS (PRIME COAT)	0.001425 TON/SQUARE YARD (ON AGGREGATE)
AGGREGATE (PRIME COAT)	0.002 TON/SQUARE YARD
HMA SURFACE/BINDER (112 LBS)	0.056 TON/SQUARE YARD - INCH (MIX A-C)
HMA SURFACE/BINDER (120 LBS)	0.060 TON/SQUARE YARD - INCH (MIX D-E)
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS/ACRE
MULCH	2 TONS/ACRE
AGRICULTURAL GROUND LIMESTONE	2 TONS/ACRE

ALL DETAILS IN THE PLANS SHALL GOVERN CONSTRUCTION OF THIS PROJECT, AND IN CASE OF CONFLICT WITH ANY STANDARD DRAWINGS INCLUDED, THE SAID DETAILS SHALL TAKE PRECEDENCE AND GOVERN.

NO PASSING ZONES • TO BE FIELD VERIFIED BY BUREAU OF OPERATIONS. THE RESIDENT ENGINEER SHALL NOTIFY THE BUREAU OF OPERATIONS 14 DAYS PRIOR TO PERMANENT PAVEMENT MARKINGS.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

MIXTURE USES:	HMA BASE CSE/WID & PATCHING	HMA SURFACE CSE (RESURFACING)/ HMA SHLD	MACH METH LEVEL BIND
AC/PG	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50
MIX COMPOSITION (GRADATION MIXTURE)	IL-19.0	IL 9.5 OR 12.5	IL-9.5
FRICTION AGGREGATE	N/A	MIX "C"	N/A

DISTRICT SIX

EXAMINED 10/15 20 12
Bill Bunn
OPERATIONS ENGINEER

EXAMINED Oct. 11 20 12
ARM
PROGRAM DEVELOPMENT ENGINEER

EXAMINED OCT 9 20 12
Jerry Zink
PROJECT IMPLEMENTATION ENGINEER

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = ...\d672419-sht-202-notes.dgn	USER NAME = CFC...	DESIGNED -	REVISED -	
		DRAWN -	REVISED -	
	PLOT SCALE = 5.2000 ' / IN.	CHECKED -	REVISED -	
CB PROJECT NO 10205-1	PLOT DATE = 10/10/2012	DATE - / /	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES, HIGHWAY STANDARDS & COMMITMENTS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	2
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE ROADWAY 0004 RURAL	STP FUNDING 80% FED / 20% STATE BRIDGE 0011 S. N.
	20100500	TREE REMOVAL, ACRES	ACRE	3.7	3.7	
	20200100	EARTH EXCAVATION	CU YD	4157	4157	
*	25000200	SEEDING, CLASS 2	ACRE	1.5	1.5	
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	132	132	
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	132	132	
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	132	132	
*	25000700	AGRICULTURAL GROUND LIMESTONE	TON	3	3	
*	25100115	MULCH, METHOD 2	ACRE	1.5	1.5	
	28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	14	14	
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	585	585	
	28000315	AGGREGATE DITCH CHECKS	TON	71	71	
	28000500	INLET AND PIPE PROTECTION	EACH	4	4	

* SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d6720419-sht-003-soq-001.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:09:53PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	3
		CONTRACT NO. 72A19		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE	
				ROADWAY 0004 RURAL	BRIDGE 0011 S. N.
28001000	AGGREGATE (EROSION CONTROL)	TON	17	17	
28100107	STONE RIPRAP, CLASS A4	SQ YD	2903	1882	1021
28200200	FILTER FABRIC	SQ YD	2903	1882	1021
35101400	AGGREGATE BASE COURSE, TYPE B	TON	105	105	
35650510	BASE COURSE WIDENING 11"	SQ YD	982	982	
35800100	PREPARATION OF BASE	SQ YD	80	80	
35800200	AGGREGATE BASE REPAIR	TON	3	3	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1	1	
40600300	AGGREGATE (PRIME COAT)	TON	6	6	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	349	349	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	240	240	

*SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-004-soq-002.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10085-1	PLOT DATE = Oct-19-2012 02:09:55PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 2 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	4
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE ROADWAY 0004 RURAL	STP FUNDING 80% FED / 20% STATE BRIDGE 0011 S.N.
40600990	TEMPORARY RAMP	SQ YD	27	27	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	250	250	
~~42001165~~	~~BRIDGE APPROACH PAVEMENT~~	~~SQ YD~~	~~240~~	~~240~~	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	48	48	
44000100	PAVEMENT REMOVAL	SQ YD	182	182	
44200150	PAVEMENT PATCHING, TYPE IV, 12 INCH	SQ YD	97	97	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	113	113	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	220	220	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50105220	PIPE CULVERT REMOVAL	FOOT	84	84	
50200100	STRUCTURE EXCAVATION	CU YD	386		386
50300100	FLOOR DRAINS	EACH	7		7

*SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672419-sht-005-soq-003.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:09:56PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 3 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	1168R-1	MACOUPIN	67	5
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE ROADWAY 0004 RURAL	STP FUNDING 80% FED / 20% STATE BRIDGE 0011 S.N.
50300225	CONCRETE STRUCTURES	CU YD	68.9		68.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	293.0		293.0
50300260	BRIDGE DECK GROOVING	SQ YD	605		605
50300300	PROTECTIVE COAT	SQ YD	758		758
50401105	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 54 IN.	FOOT	687		687
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	67120		67120
50800515	BAR SPLICERS	EACH	599		599
51201600	FURNISHING STEEL PILES HP12X53	FOOT	360		360
51202305	DRIVING PILES	FOOT	360		360
51203600	TEST PILE STEEL HP12X53	EACH	2		2
51500100	NAME PLATES	EACH	1		1
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	21	21	

12 *SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672419-sht-006-sog-004.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:09:58PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 4 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	1168R-1	MACOUPIN	67	6
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE ROADWAY 0004 RURAL	STP FUNDING 80% FED / 20% STATE BRIDGE 0011 S. N.
	54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	132	132	
	54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2	
	54215553	METAL END SECTIONS 18"	EACH	6	6	
	54248510	CONCRETE COLLAR	CU YD	0.6	0.6	
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	105		105
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	662.5	662.5	
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
	63200310	GUARDRAIL REMOVAL	FOOT	1259	1259	
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	10	10	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
	67100100	MOBILIZATION	L SUM	1	1	

* SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d72A19-sht-007-soq-005.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:09:59PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 5 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	7
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE	
				ROADWAY 0004 RURAL	BRIDGE 0011 S.N.
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	513	513	
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	2138	2138	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	57	57	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	437.5	437.5	

*SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pw_work\pwidot\sparksgw\d0325252\d672019-sht-008-sqq-006.dgn		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:10:01PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 6 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	8
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE	
					ROADWAY 0004 RURAL	BRIDGE 0011 S.N.
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	387.5	387.5	
*	78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	2138	2138	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	13	13	
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	15	15	
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	891	891	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	13	13	
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	40		40
	Z0004552	APPROACH SLAB REMOVAL	SQ YD	237	237	
	Z0018010	DRAINAGE SCUPPERS, DS-33	EACH	6		6
*	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
*	70600332	IMPACT ATTENUATORS, RELOCATE (FULLYREDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	

* SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d6772A19-sht-009-soq-007.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:10:02PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 7 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	9
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP FUNDING 80% FED / 20% STATE	
				ROADWAY 0004	BRIDGE 0011
				RURAL	S.N.
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	176		176
Z0065796	RIPRAP SLURRY	SQ YD	362	362	
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	965		965
X0322936	REMOVE EXISTING FLARED END SECTION	EACH	2	2	
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	3000	3000	
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	222		222

*SPECIALTY ITEM

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksg\d0325252\d072A19-sht-010-sog-008.dgn	USER NAME = sparksg	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.0000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:10:04PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	10
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

APPROACH SLAB REMOVAL SCHEDULE	
LOCATION SN 059-0003	APPROACH SLAB REMOVAL
	SQ YD
WEST APPROACH AND APPROACH SHLD	118
EAST APPROACH AND APPROACH SHLD	120
TOTAL	**237**

PIPE CULVERT REMOVAL SCHEDULE			
ENTRANCE STATION	TYPE	SIZE (IN)	LENGTH (FT)
RT STA 911+31	CMP	15"	28
LT STA 911+97	CMP	15"	24
LT STA 919+49	CMP	15"	32
TOTAL			**84**

REMOVE EXISTING FLARED END SECTION		
CULVERT STATION	OFFSET	EACH
LT STA 918+98	30.1' LT	1
RT STA 918+98	23.0' RT	1
TOTAL		**2**

DRAINAGE SCHEDULE					
LOCATION (STATION)	OFFSET	PIPE CULVERTS		PRCFES	METAL END SECTIONS
		CL A TY-1 24"	CL D TY-1 18"	24"	18"
		FT	FT	EACH	EACH
LT STA 918+98	30.1' LT	18		1	
RT STA 918+98	23.0' RT	3		1	
RT STA 911+31			43		2
LT STA 911+97			43		2
LT STA 919+49			46		2
TOTALS		**21**	**132**	**2**	**6**

TEMPORARY EROSION CONTROL - ESTIMATED QUANTITIES		
ITEMS	UNIT	TOTAL
AGGREGATE DITCH CHECKS	TON	71
INLET AND PIPE PROTECTION	EACH	4

PERMANENT EROSION CONTROL		
APPROX. LOCATION	AGGREGATE (EROSION CONTROL)	EARTH EX FOR EROSION CONTROL (SEDIMENT BASIN)
	TON	CU YD
STA 914+16, 60' RT	4.3	3.56
STA 914+80, 60' LT	4.3	3.56
STA 914+86, 64' RT	4.3	3.56
STA 915+56, 60' LT	4.3	3.56
TOTAL	**17**	**14**

PAVEMENT REMOVAL SCHEDULE	
STATION	PAVEMENT REMOVAL
	SQ YD
STA 913+86.40 to STA 914+25.1	82
STA 915+33.85 to STA 915+75.11	100
TOTAL	**182**

PAVEMENT PATCHING SCHEDULE	
APPROX. LOCATION	PAVEMENT PATCHING, TY 4, 12"
	SQ YD
STA 914+05 - EBL	**51.11**
STA 915+70 - EBL	**46**
TOTAL	**97**

SUMMARY OF EARTHWORK					
LOCATION	EARTH EXCAVATION	CUT * 0.7	EMBANKMENT	WASTE OR (SHORTAGE)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD
PRE-STAGE I	96.0	67.2	0.0	67.20	67.20
STAGE I	2638.0	1846.6	427.0	1419.60	1486.80
STAGE II	1423.0	996.1	1613.0	(616.90)	869.90
TOTAL	**4157**	**2910**	**2040**	**870**	**870**

SUMMARY OF EARTHWORK - PRE - STAGE I					
LOCATION	EARTH EXCAVATION	CUT * 0.7	EMBANKMENT	WASTE	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD
STA 910+50 TO STA 914+31.80	39.7	27.8	0	27.79	27.79
STA 915+31.80 TO STA 920+00	56.0	39.2	0	39.20	66.99
TOTAL	**96**	**67**	**0**	**67**	**67**

SUMMARY OF EARTHWORK - STAGE I					
LOCATION	EARTH EXCAVATION	CUT * 0.7	EMBANKMENT	WASTE	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD
STA 910+50 TO STA 914+31.80	774.1	541.9	374.9	166.97	166.97
STA 915+31.80 TO STA 920+00	1863.7	1304.6	52.2	1252.39	1419.36
TOTAL	**2638**	**1846**	**427**	**1419**	**1419**

SUMMARY OF EARTHWORK - STAGE II					
LOCATION	EARTH EXCAVATION	CUT * 0.7	EMBANKMENT	WASTE	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD
STA 910+50 TO STA 914+31.80	680.1	476.1	403.5	72.57	72.57
STA 915+31.80 TO STA 920+00	742.9	520.0	1209.6	(689.57)	-617.00
TOTAL	**1423**	**996**	**1613**	**(617)**	**-617**

GUARDRAIL SCHEDULE					
LOCATION	S.P.B.G.R. TYPE A, 6-FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)	TRAFFIC BARRIER TERMINAL TYPE 6	GUARDRAIL MARKERS, TYPE A - CRYSTAL	TERMINAL MARKERS DIRECT APPLIED
	FT	EACH	EACH	EACH	EACH
NE QUADRANT SN 059-0515	225	1	1	4	1
SE QUADRANT SN 059-0515	150	1	1	4	1
NW QUADRANT SN 059-0515	125	1	1	3	1
SW QUADRANT SN 059-0515	162.5	1	1	4	1
TOTALS	**662.5**	**4**	**4**	**15**	**4**

GUARDRAIL REMOVAL SCHEDULE	
LOCATION	GUARDRAIL REMOVAL (FOOT)
NORTH SIDE SN 059-0003	716.3
SOUTH SIDE SN 059-0003	542.5
TOTAL	**1259**

AGGREGATE SHOULDER SCHEDULE	
LOCATION (STATION TO STATION)	AGG SHLD, TY B, VAR DEPTH
	TON
STA 910+50 TO STA 913+00	39.88
STA 913+00 TO STA 919+00	65.57
STA 919+00 TO STA 920+00	7.24
TOTAL	**113**

STONE RIPRAP SCHEDULE			
STATION	STONE RIPRAP, CL A4 SQ YD	FILTER FABRIC SQ YD	RIPRAP SLURRY SQ YD
LT 910+50 TO 911+50	90.17	90.17	
LT 911+50 TO 911+75	18.27	18.27	18.30
LT 912+15 TO 912+50	34.14	34.14	34.10
LT 912+50 TO 915+20	327.10	327.10	
LT 915+20 TO 918+50	320.35	320.35	
LT 918+50 TO 919+30	78.35	78.35	78.40
LT 919+60 TO 920+00	20.16	20.16	20.20
RT 910+50 TO 911+00	44.83	44.83	
RT 911+00 TO 911+15	9.86	9.86	9.90
RT 911+50 TO 912+50	88	88	88.00
RT 912+50 TO 914+45	227	227	
RT 914+53 TO 915+25	199	199	
RT 915+25 TO 916+50	113	113	112.60
RT 916+50 TO 920+00	312.24	312.24	
TOTAL	**1882**	**1882**	**362**

RESURFACING SCHEDULE (MAINLINE PAVEMENT)					
LOCATION STATION TO STATION	HMA SURF REM, VD	BIT (PRIME COAT)	AGG (PRIME COAT)	LVL BINDER MM N50	HMA SURF CSE, MIX C, N50 1-1/2"
	SQ YD	TON	TON	TON	TON
STA 910+50 TO STA 913+00	960.54	0.36	1.92	144.95	80
STA 913+00 TO STA 919+00	1684.22	0.64	3.37	152.81	140
STA 919+00 TO STA 920+00	355.6	0.14	0.71	20.62	30
ADDITIONAL FROM TEMPORARY RAMPS				30.95	
TOTALS	**3000**	**1**	**6**	**349**	**250**

BASE COURSE WIDENING 11"	
LOCATION STATION TO STATION	BASE COURSE WIDENING, 11"
	SQ YD
LT STA 910+50 TO STA 911+65.02	51
RT STA 910+50 TO STA 911+12.54	28
RT STA 911+12.54 TO STA 913+94.87	188
LT STA 911+65.02 TO STA 914+43	185
LT STA 915+44 TO STA 918+85	227
RT STA 915+51.41 TO STA 917+90	159
LT STA 918+85 TO STA 920+00	51
RT STA 917+90 TO STA 920+00	93
TOTALS	**982**

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-011-schedule-001.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 2.000000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:13:35PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	11
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

SEEDING SCHEDULE

LOCATION	SEEDING CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHOROUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH METHOD 2	TEMPORARY EROSION CONTROL SEEDING
	ACRE	LB	LB	LB	TON	ACRE	LB
STA 910+50 TO STA 914+31.80	0.573	51.57	51.57	51.57	1.15	0.573	229.2
STA 915+31.80 TO STA 920+00	0.890	80.10	80.10	80.10	1.78	0.89	356.0
TOTALS	**1.50**	**132**	**132**	**132**	**3**	**1.50**	**585**

ENTRANCE IMPROVEMENT SCHEDULE

LOCATION	TYPE OF ENTRANCE	EX MATERIAL TYPE	WIDTH	LENGTH (FROM EOP/HMA SHLD TO LIMITS OF IMPROVEMENT	PREP OF BASE	AGG BASE REPAIR	AGG BASE COURSE, TY-B
(LT/RT) / (STATION)	(FE/CE/PE/MB)	EARTH/AGG/ HMA/PCC	FOOT	FOOT	SQ YD	TON	TON
RT STA 911+31	FE	EARTH	22	34	26.67	1.14	29.81
LT STA 911+85	FE	EARTH	22	30	26.67	1.14	33.99
LT STA 919+49	FE	EARTH	22	40	26.67	1.14	41.31
TOTAL					**80**	**3**	**105**

IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

LOCATION	IMPACT ATTENUATOR	IMPACT ATTENUATOR, RELOCATE
	EACH	EACH
STAGE I		
STA 912+88.27	1	
STA 916+75.32	1	
STAGE II		
STA 912+63.36		1
STA 917+00.26		1
TOTALS	**2**	**2**

TEMPORARY CONCRETE BARRIER SCHEDULE

LOCATION	TEMP CONC BARRIER	TEMP CONC BARRIER, RELOCATE
	FT	FT
STAGE I		
STA 912+88.27 TO STA 916+75.32	387.5	
STAGE II		
STA 912+63.36 TO STA 917+00.26	50	387.5
TOTALS	**437.5**	**387.5**

BRIDGE APPROACH PAVEMENT SCHEDULE

STATION	BRIDGE APPROACH PAVEMENT
	SQ YD
STA 914+01.80 TO STA 914+31.80	120
STA 915+31.80 TO STA 915+51.80	120
TOTAL	**240**

BUTT JOINT AND TEMPORARY RAMP SCHEDULE

APPROX. STATION	WIDTH	APPROXIMATE LOCATION	HMA SURFACE REMOVAL - BUTT JOINT	TEMP RAMP	TEMP RAMP - PAID FOR AS LVL BND (MM) N50
	FT		SQ YD	SQ. YD	TON
910+50	24	BEGINNING OF JOB	80	13.33	
	18	BRIDGE APPROACH WEST - STAGE I *			3.06
	24	BRIDGE APPROACH WEST - STAGE II *	40		8.16
	18	BRIDGE APPROACH EAST - STAGE I *			5.38
	24	BRIDGE APPROACH EAST - STAGE II *	40		14.35
920+00	24	END OF JOB	80	13.33	
TOTAL			**240**	**27**	**30.95**

RAISED REFLECTIVE PAVEMENT MARKER SCHEDULE

LOCATION (STATION TO STATION)	LENGTH	R.R.P.M. CRYSTAL	R.R.P.M. REMOVAL
	FT	EACH	EACH
STA 910+50 TO STA 913+00	250	4	4
STA 913+00 TO STA 919+00	600	7	7
STA 919+00 TO STA 920+00	100	2	2
TOTAL		**13**	**13**

BRIDGE APPROACH PAVEMENT CONNECTOR - FLEXIBLE SCHEDULE

STATION	BR APPR PVT CONN - FLEX
	SQ YD
STA 913+95.80 TO STA 914+01.80	24
STA 915+61.80 TO STA 915+67.80	24
TOTAL	**48**

*** TEMPORARY RAMPS AT STRUCTURE PAID FOR AS LEVELING BINDER (MACHINE METHOD), N50 AS THEY WILL BE LEFT IN PLACE AFTER EACH STAGE.**

PAVEMENT MARKING SCHEDULE

LOCATION (STATION TO STATION)	LENGTH	5" PAINT YELLOW LN SKIP-DASH	5" PAINT WHITE LN SOLID	5" TEMP PVT MARKING LN
	FT	FT	FT	FT
STA 910+50 TO STA 913+00	250	63	500	563
STA 913+00 TO STA 919+00	600	150	1200	1350
STA 919+00 TO STA 920+00	100	25	200	225
TOTAL		**2138**		**2138**

PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION	LENGTH	REMOVAL
STATION TO STATION	FT	SQ FT
STA 910+50 TO STA 913+00	250	234.30
STA 913+00 TO STA 919+00	600	562.50
STA 919+00 TO STA 920+00	100	93.70
TOTAL		**891**

HMA SHOULDER SCHEDULE

LOCATION (STATION TO STATION)	HMA SHOULDERS
	TON
STA 910+50 TO STA 913+00	69.76
STA 913+00 TO STA 919+00	132.80
STA 919+00 TO STA 920+00	16.95
TOTAL	**220**

WORK ZONE PAVEMENT MARKING REMOVAL SCHEDULE

LOCATION STATION TO STATION	LENGTH (FT)	REMOVAL (SQ FT)
SHORT TERM STA 910+50 TO STA 913+00	250	15
SHORT TERM STA 913+00 TO STA 919+00	600	36
SHORT TERM STA 919+00 TO STA 920+00	100	6
TOTAL		**57**

SHORT TERM PAVEMENT MARKING SCHEDULE

LOCATION STATION TO STATION	LENGTH FT	SHORT TERM (3 APPS) FT
STA 910+50 TO STA 913+00	250	135
STA 913+00 TO STA 919+00	600	324
STA 919+00 TO STA 920+00	100	54
TOTAL		**513**

TREE REMOVAL SCHEDULE

LOCATION	TREE REMOVAL
	ACRE
STA 909+00 TO STA 920+00	3.70
TOTAL	**3.70**

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

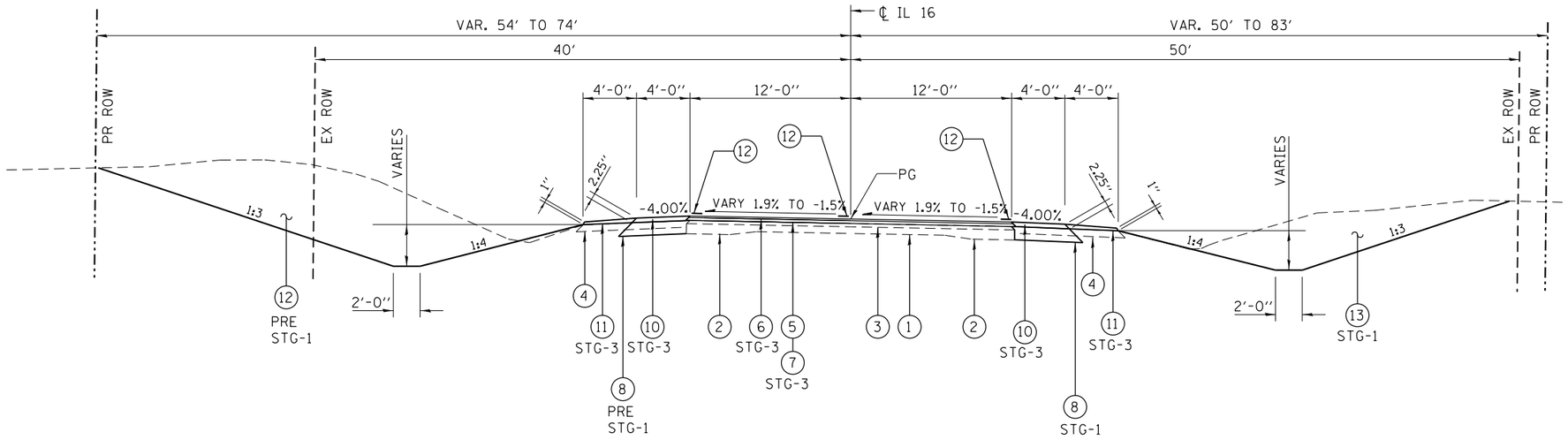
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-012-schedule-002.dgn
USER NAME = sparksgw
PLOT SCALE = 2.000000 ' / in.
PLOT DATE = Oct-19-2012 02:13:42PM
CB PROJECT NO 10005-1
DESIGNED -
DRAWN - CFC
CHECKED - CCJ
DATE - / /
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	12
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

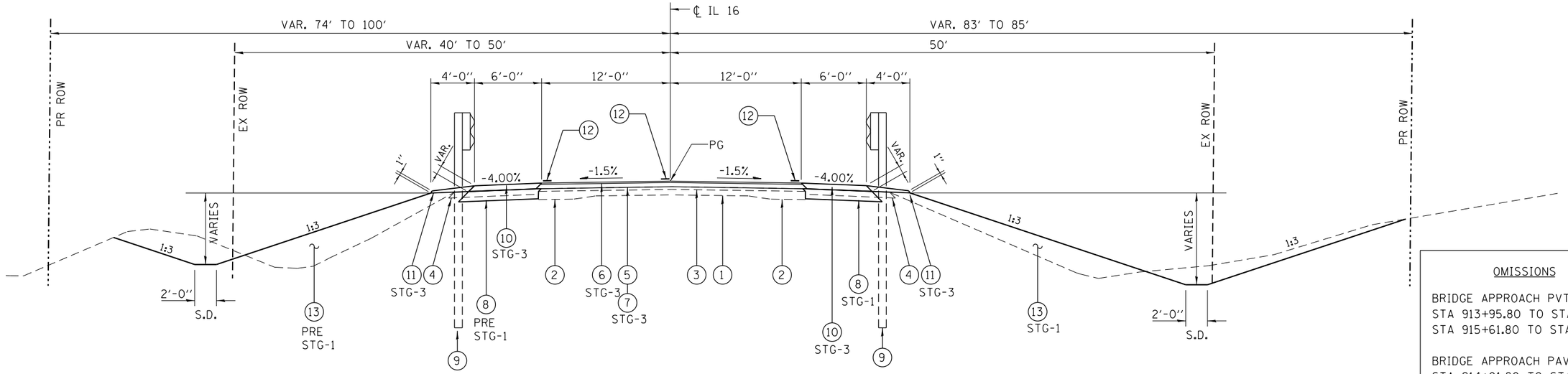


FAP 325 TYPICAL CROSS SECTION NO 1

RT STA 910+50 TO STA 911+49.77	S.E. 1.9%
RT STA 911+49.77 TO STA 912+40	S.E. TRANSITION
LT STA 910+50 TO STA 911+49.77	S.E. 1.9%
LT STA 911+49.77 TO STA 912+74	S.E. TRANSITION

TYPICAL CROSS SECTION LEGEND

1. EXISTING PCC PAVEMENT 9-6-9
2. EXISTING HMA BASE COURSE 9″
3. EXISTING HMA SURFACE COURSE
4. EXISTING AGGREGATE SHOULDER
5. PR HMA SURFACE REMOVAL - VARIABLE DEPTH
6. PR HMA SURFACE COURSE 1 1/2″
7. PR LEVELING BINDER (MACHINE METHOD) - VARIABLE DEPTH TO ATTAIN PROFILE
8. PR BASE COURSE WIDENING 11″
9. PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS, TRAFFIC BARRIER TERMINAL TYPE 6A, OR TRAFFIC BARRIER TERMINAL, TYPE 1 (SP)
10. PR HMA SHOULDER, VARIABLE DEPTH
11. PR AGGREGATE WEDGE SHOULDER, TYPE B
12. PR PAVEMENT MARKING LINE - 5″
13. PR EARTHWORK (EARTH EXCAVATION & EMBANKMENT)



FAP 325 TYPICAL CROSS SECTION NO 2

RT STA 912+40 TO STA 913+07.24	S.E. TRANSITION
RT STA 913+07.24 TO STA 914+31.80	N.C.
LT STA 912+74 TO STA 913+07.24	S.E. TRANSITION
LT STA 913+07.24 TO STA 914+31.80	N.C.
STA 915+31.80 TO STA 915+42.26	N.C.
STA 915+42.25 TO STA 916+04.08	S.E. TRANSITION

OMISSIONS

BRIDGE APPROACH PVT CONN - FLEX
STA 913+95.80 TO STA 914+01.80
STA 915+61.80 TO STA 915+67.80

BRIDGE APPROACH PAVEMENT
STA 914+01.80 TO STA 914+31.80
STA 915+31.80 TO STA 915+61.80

BRIDGE
STA 914+31.80 TO STA 915+31.80

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

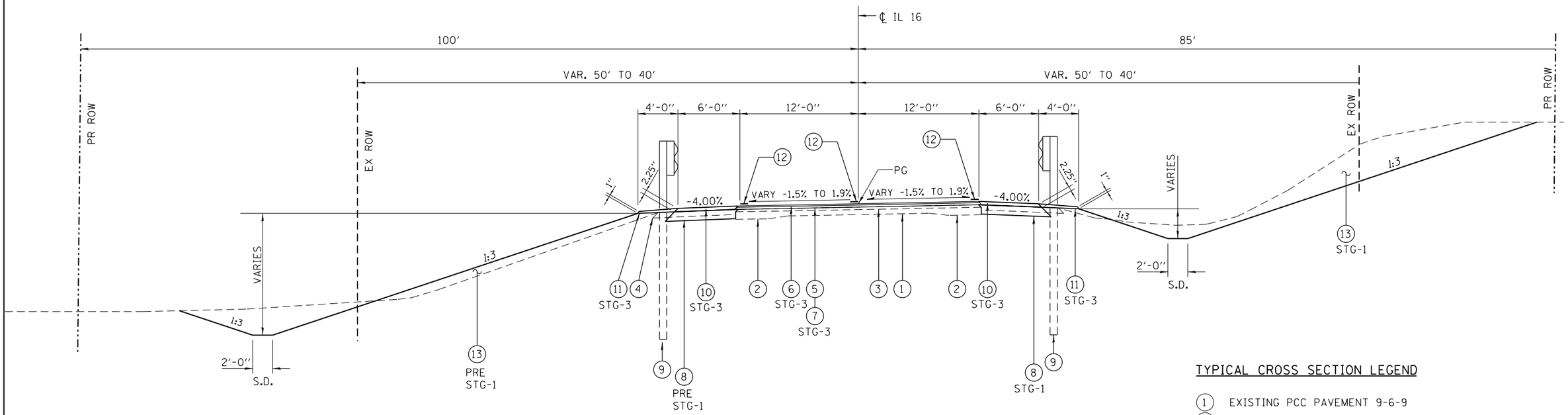
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d72A19-sht-013-typicals.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10.0000 ′ / in.	CHECKED -	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:13:48PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

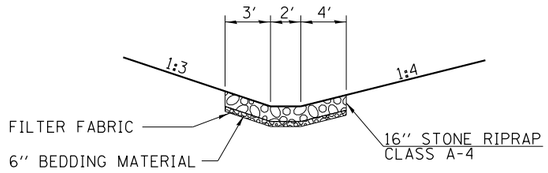
SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	13
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



FAP 325 TYPICAL CROSS SECTION NO 3

LT	STA 916+04.08 TO STA 916+99.73	S.E. TRANSITION
LT	STA 916+99.73 TO STA 917+09.00	S.E. 1.9%
RT	STA 916+04.08 TO STA 916+99.73	S.E. TRANSITION
RT	STA 916+99.73 TO STA 917+46.50	S.E. 1.9%



RIPRAP DITCH DETAIL

TYPICAL CROSS SECTION LEGEND

1. EXISTING PCC PAVEMENT 9-6-9
2. EXISTING HMA BASE COURSE 9"
3. EXISTING HMA SURFACE COURSE
4. EXISTING AGGREGATE SHOULDER
5. PR HMA SURFACE REMOVAL - VARIABLE DEPTH
6. PR HMA SURFACE COURSE 1 1/2"
7. PR LEVELING BINDER (MACHINE METHOD) - VARIABLE DEPTH TO ATTAIN PROFILE
8. PR BASE COURSE WIDENING 11"
9. PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS, TRAFFIC BARRIER TERMINAL TYPE 6A, OR TRAFFIC BARRIER TERMINAL, TYPE 1 (SP)
10. PR HMA SHOULDER, VARIABLE DEPTH
11. PR AGGREGATE WEDGE SHOULDER, TYPE B
12. PR PAVEMENT MARKING LINE - 5"
13. PR EARTHWORK (EARTH EXCAVATION & EMBANKMENT)

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

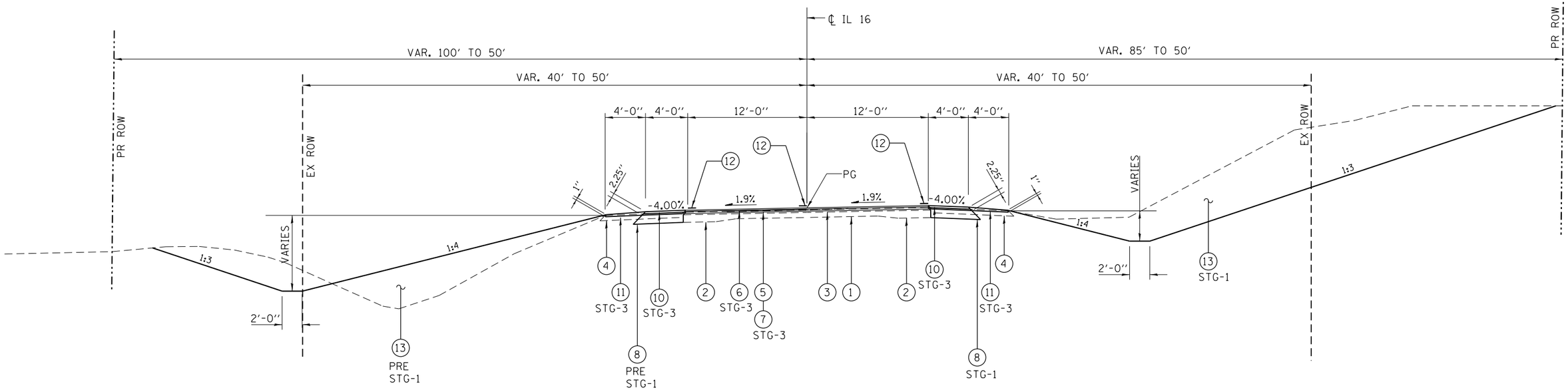
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-013-typicals.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:13:49PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	14
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



FAP 325 TYPICAL CROSS SECTION NO 4

LT STA 917+09.00 TO STA 920+00 S.E. 1.9%
RT STA 917+46.50 TO STA 920+00 S.E. 1.9%

TYPICAL CROSS SECTION LEGEND

1. EXISTING PCC PAVEMENT 9-6-9
2. EXISTING HMA BASE COURSE 9″
3. EXISTING HMA SURFACE COURSE
4. EXISTING AGGREGATE SHOULDER
5. PR HMA SURFACE REMOVAL - VARIABLE DEPTH
6. PR HMA SURFACE COURSE 1 1/2″
7. PR LEVELING BINDER (MACHINE METHOD) - VARIABLE DEPTH TO ATTAIN PROFILE
8. PR BASE COURSE WIDENING 11″
9. PR STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS, TRAFFIC BARRIER TERMINAL TYPE 6A, OR TRAFFIC BARRIER TERMINAL. TYPE 1 (SP)
10. PR HMA SHOULDER, VARIABLE DEPTH
11. PR AGGREGATE WEDGE SHOULDER, TYPE B
12. PR PAVEMENT MARKING LINE - 5″
13. PR EARTHWORK (EARTH EXCAVATION & EMBANKMENT)

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

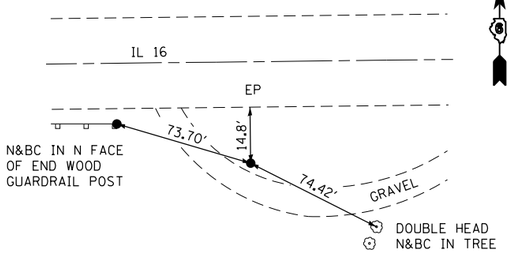
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-013-typicals.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
	PLOT SCALE = 10.0000 ′ / in.	DRAWN -	REVISED -
	PLOT DATE = Oct-19-2012 02:13:49PM	CHECKED -	REVISED -
CB PROJECT NO 10005-1		DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

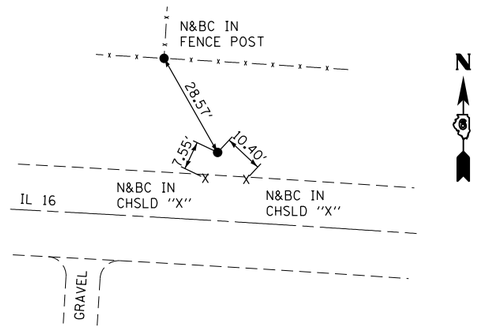
SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	15
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		



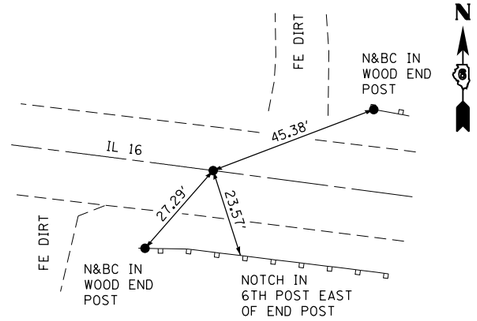
TRAVERSE POINT 200501

#4 REBAR/IDOT CAP (FLUSH)
STA 906+33.87, 27.61' RT
N 892157.34700
E 2334239.3120
EL 623.332



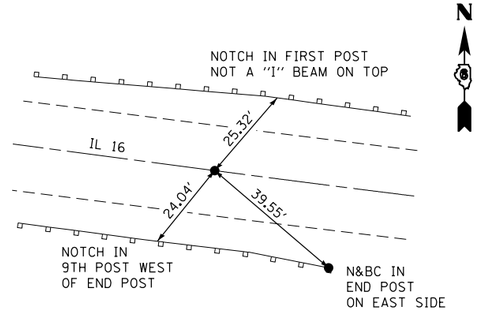
PI STA 906+73.709

#4 REBAR
N 892200.6971
E 2334280.8040



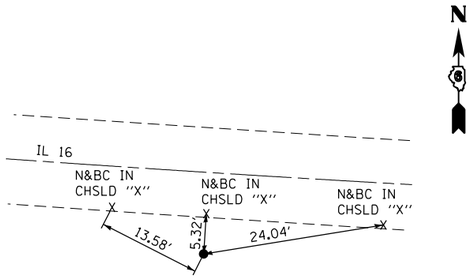
PT STA 911+79.099

PK NAIL IN CHISELED "X"
N 892134.5376
E 2334783.5696



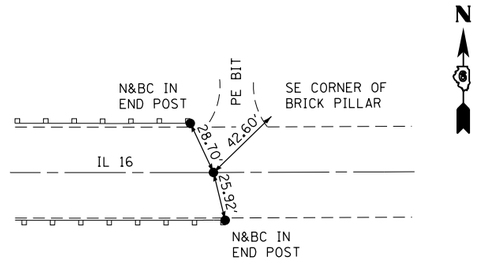
PC STA 916+70.395

PK NAIL IN CHISELED "X"
N 892070.4400
E 2335270.6665



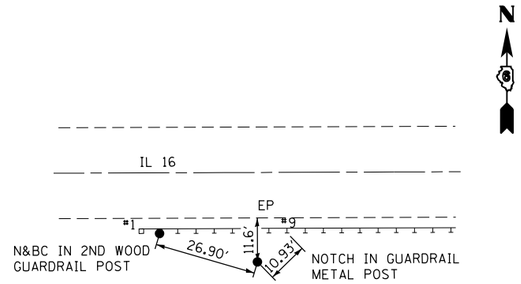
PI STA 921+53.395

#4 REBAR
N 892007.4248
E 2335749.5381



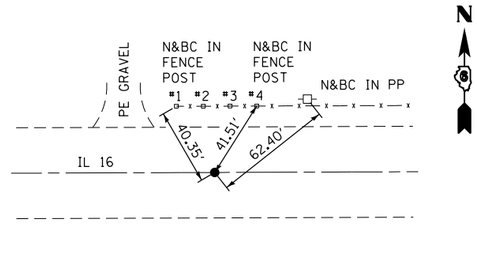
PT STA 926+34.939

PK NAIL IN CHISELED "X"
N 892009.1763
E 2336232.5350



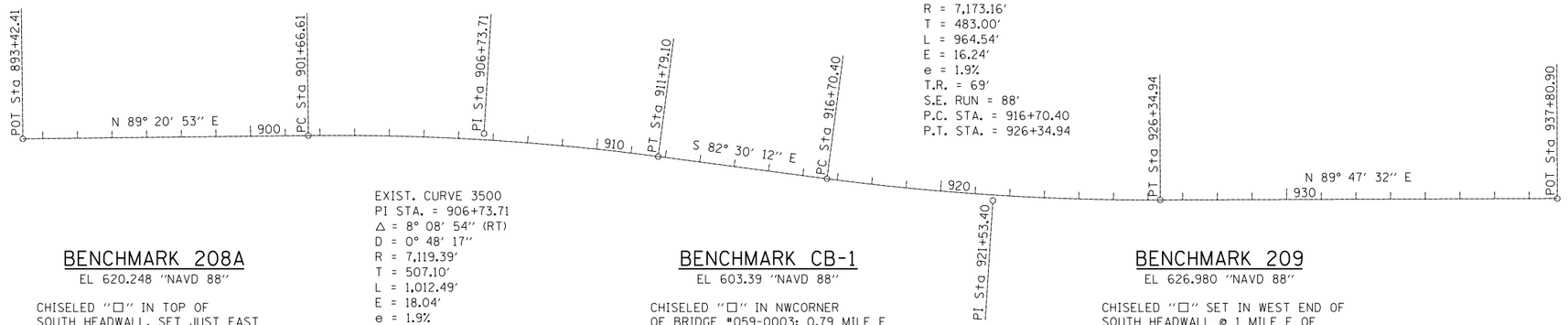
TRAVERSE POINT 200502

#4 REBAR
STA 925+31.1, 23.7' RT
N 891985.8500
E 2336128.4720
EL 625.893



POT 512

PK NAIL IN CHISELED "X"
STA 937+80.903
N 892013.3320
E 2337378.4910



EXIST. CURVE 3501
PI STA. = 921+53.40
△ = 7° 42' 16" (LT)
D = 0° 47' 56"
R = 7,173.16'
T = 483.00'
L = 964.54'
E = 16.24'
e = 1.9%
T.R. = 69'
S.E. RUN = 88'
P.C. STA. = 916+70.40
P.T. STA. = 926+34.94

EXIST. CURVE 3500
PI STA. = 906+73.71
△ = 8° 08' 54" (RT)
D = 0° 48' 17"
R = 7,119.39'
T = 507.10'
L = 1,012.49'
E = 18.04'
e = 1.9%
T.R. = 60'
S.E. RUN = 88'
P.C. STA. = 901+66.61
P.T. STA. = 911+79.10

BENCHMARK 208A

EL 620.248 "NAVD 88"

CHISELED "□" IN TOP OF
SOUTH HEADWALL, SET JUST EAST
OF ST DENIS CEMETERY @ 0.6 MILE
EAST OF RR VIADUCT IN SHIPMAN
(FROM BOOK FA91; BK11)
STA 904+62, 30' RT

BENCHMARK CB-1

EL 603.39 "NAVD 88"

CHISELED "□" IN NWCORNER
OF BRIDGE #059-0003; 0.79 MILE E
OF RR OVERPASS IN SHIPMAN
(FROM FA91; BK11)
STA 914+68.70 15.25' LT

BENCHMARK 209

EL 626.980 "NAVD 88"

CHISELED "□" SET IN WEST END OF
SOUTH HEADWALL @ 1 MILE E OF
RR OVERPASS IN SHIPMAN
STA 925+55, 20.5' RT

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

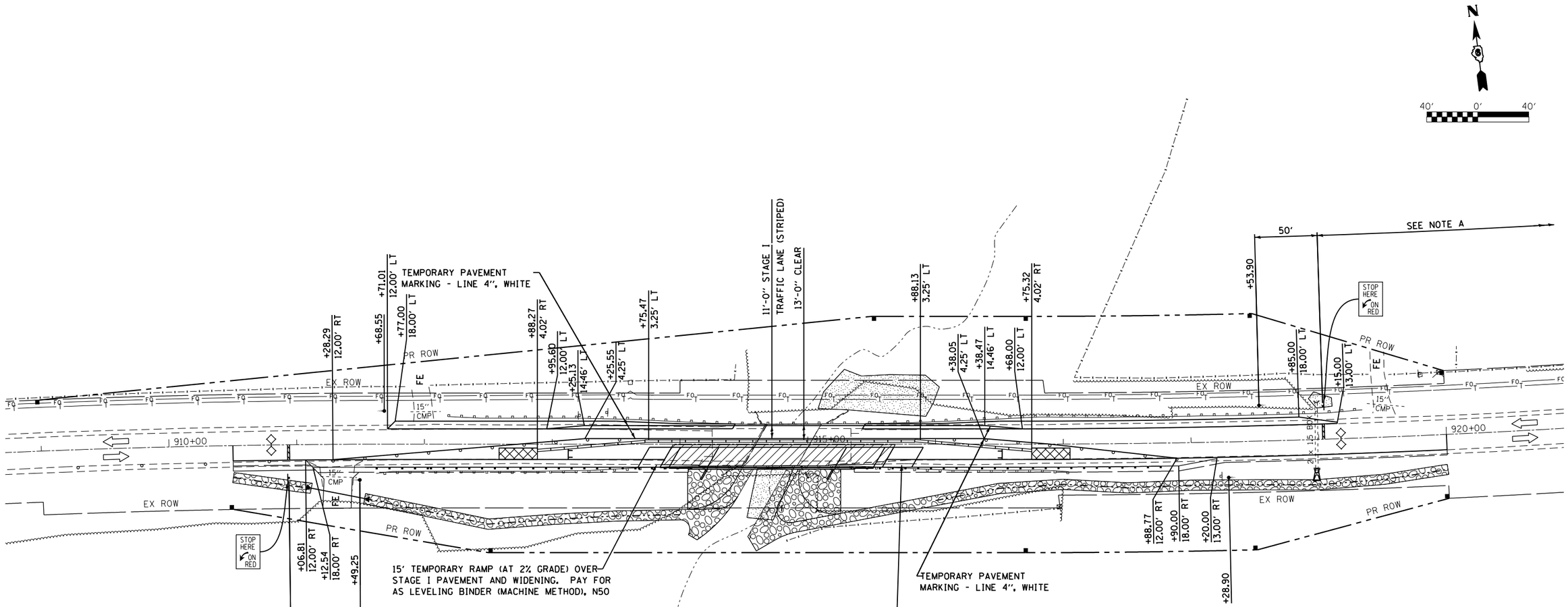
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-016-atb.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 400.000000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:14:00PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	16
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



GENERAL NOTES

1. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
2. THIS TRAFFIC CONTROL PLAN SHALL BE USED IN CONJUNCTION WITH STANDARD 701321 AND AS DIRECTED BY THE ENGINEER.
3. VERTICAL PANELS, DRUMS WITH STEADY BURNING LIGHTS, TYPE III BARRICADES, SIGNS, DETECTOR LOOPS, TEMPORARY PAVEMENT MARKINGS, AND TYPE C BIDIRECTIONAL REFLECTORS SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
4. THE CONTRACTOR SHALL PROVIDE AND ERECT W12-1102 MAXIMUM WIDTH SIGNS. THESE SIGNS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER BEFORE IMPLEMENTING ANY STAGE TRAFFIC CONTROL.
5. THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 BUREAU OF OPERATIONS (PH: (217) 785-5836) AT LEAST SEVEN DAYS PRIOR TO IMPLEMENTING ANY STAGE I TRAFFIC CONTROL AND AT LEAST SEVEN DAYS PRIOR TO IMPLEMENTING STAGE 2 TRAFFIC CONTROL.
6. THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 BUREAU OF OPERATIONS ((217) 785-5836) AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.

SEQUENCE OF CONSTRUCTION

PRE-STAGE 1

1. CONSTRUCT BASE COURSE WIDENING ON THE LEFT SIDE AS SHOWN IN THE PLANS.

STAGE 1

1. INSTALL STAGE 1 TRAFFIC CONTROL AND PROTECTION AS DETAILED IN THE PLANS AND ACCORDING TO STANDARD 701321. ALSO PLACE TEMPORARY RUMBLE STRIPS AT LOCATIONS SHOWN ON STANDARD 701321.
2. PLACE TRAFFIC IN STAGE 1 LANE. REMOVE CONFLICTING PAVEMENT MARKINGS, INSTALL TEMPORARY CONCRETE BARRIER, TEMPORARY IMPACT ATTENUATORS, AND TEMPORARY PAVEMENT MARKINGS.
3. REMOVE STAGE 1 PORTION OF THE EXISTING BRIDGE, APPROACH PAVEMENT, AND APPROACH SHOULDER PAVEMENT.
4. CONSTRUCT EARTHWORK AND INSTALL TEMPORARY EROSION CONTROL RIGHT STATION 910+50 TO STATION 920+00.
5. CONSTRUCT STAGE 1 PORTION OF THE PROPOSED BRIDGE, BRIDGE APPROACH PAVEMENT, AND CONNECTOR PAVEMENT.
6. CONSTRUCT BASE COURSE WIDENING RIGHT STATION AS SHOWN IN THE PLANS.
7. CONSTRUCT TEMPORARY RAMPS AT APPROACH PAVEMENTS.
8. INSTALL PROPOSED GUARDRAIL AND TERMINALS ON THE RIGHT SIDE AS SHOWN IN THE PLANS.

NOTE A

REMAINDER OF SIGNING ACCORDING TO STANDARD 701321 EXCEPT PLACE SIGN R3-1-2424 AT ENTRANCE STA 929+89.39 AS SHOWN AND AS DIRECTED BY THE ENGINEER.
TEMPORARY RUMBLE STRIPS WILL BE USED AND PLACED ACCORDING TO STANDARD 701321.
ALL SIGNING AND PAVEMENT MARKING SHOWN OR ACCORDING TO STANDARD 701321 IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

LEGEND

- WORK AREA
- SIGN (SEE STD 701321)
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE)
- TYPE III BARRICADE W/ LIGHTS
- DETECTOR LOOPS
- DIRECTION OF TRAFFIC

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

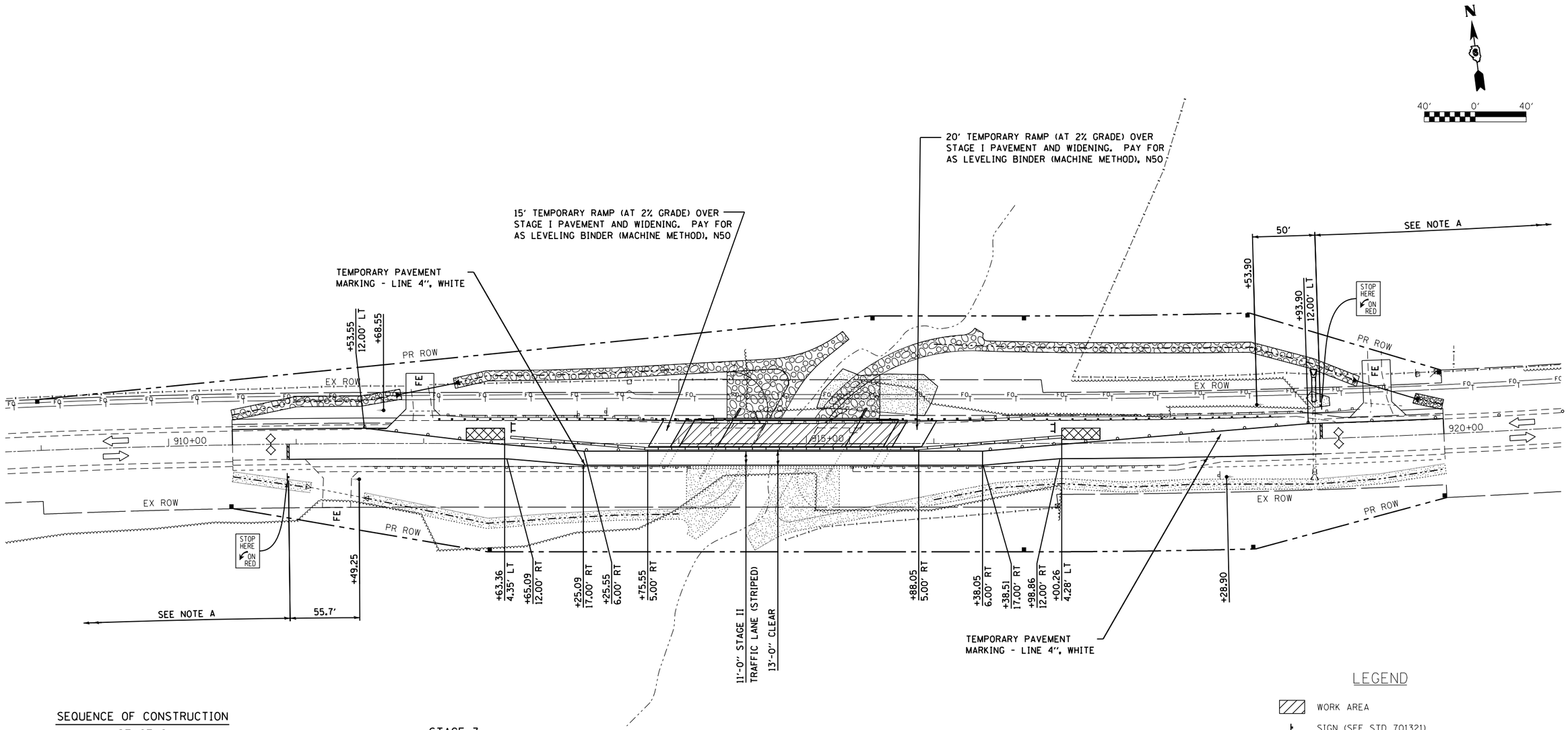
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-017-stage-1.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 80.000000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:14:02PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I TRAFFIC CONTROL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	17
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



SEQUENCE OF CONSTRUCTION

STAGE 2

1. PLACE TRAFFIC IN STAGE 2 LANE, RELOCATE TEMPORARY CONCRETE BARRIER AND TEMPORARY IMPACT ATTENUATORS, REMOVE CONFLICTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS.
2. REMOVE STAGE 2 PORTION OF THE EXISTING BRIDGE, APPROACH PAVEMENT, APPROACH SHOULDER PAVEMENT, PAVEMENT, AND HMA BASE COURSE WIDENING.
3. CONSTRUCT EARTHWORK AND INSTALL TEMPORARY EROSION CONTROL LEFT STATION 910+50 TO STATION 920+00.
4. CONSTRUCT STAGE 2 PORTION OF THE PROPOSED BRIDGE, BRIDGE APPROACH PAVEMENT, AND CONNECTOR PAVEMENT.
5. CONSTRUCT TEMPORARY RAMPS AT APPROACH PAVEMENTS.
6. INSTALL PROPOSED GUARDRAIL AND TERMINAL ON THE LEFT SIDE AS SHOWN IN THE PLANS.

STAGE 3

1. REMOVE TEMPORARY CONCRETE BARRIER, TEMPORARY IMPACT ATTENUATORS AND TEMPORARY PAVEMENT MARKINGS, INSTALL SHORT TERM PAVEMENT MARKINGS AND PLACE TRAFFIC IN PERMANENT LANES.
2. MILL PAVEMENT AND PLACE HMA BINDER AND SURFACE COURSE.
3. CONSTRUCT HMA AND AGGREGATE SHOULDERS.
4. INSTALL PAVEMENT MARKINGS.

NOTE A

REMAINDER OF SIGNING ACCORDING TO STANDARD 701321 EXCEPT PLACE SIGN R3-1-2424 AT ENTRANCE STA 929+89.39 AS SHOWN AND AS DIRECTED BY THE ENGINEER.
ALL SIGNING AND PAVEMENT MARKING SHOWN OR ACCORDING TO STANDARD 701321 IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

LEGEND

- WORK AREA
- SIGN (SEE STD 701321)
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE)
- TYPE III BARRICADE W/ LIGHTS
- DETECTOR LOOPS
- DIRECTION OF TRAFFIC

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

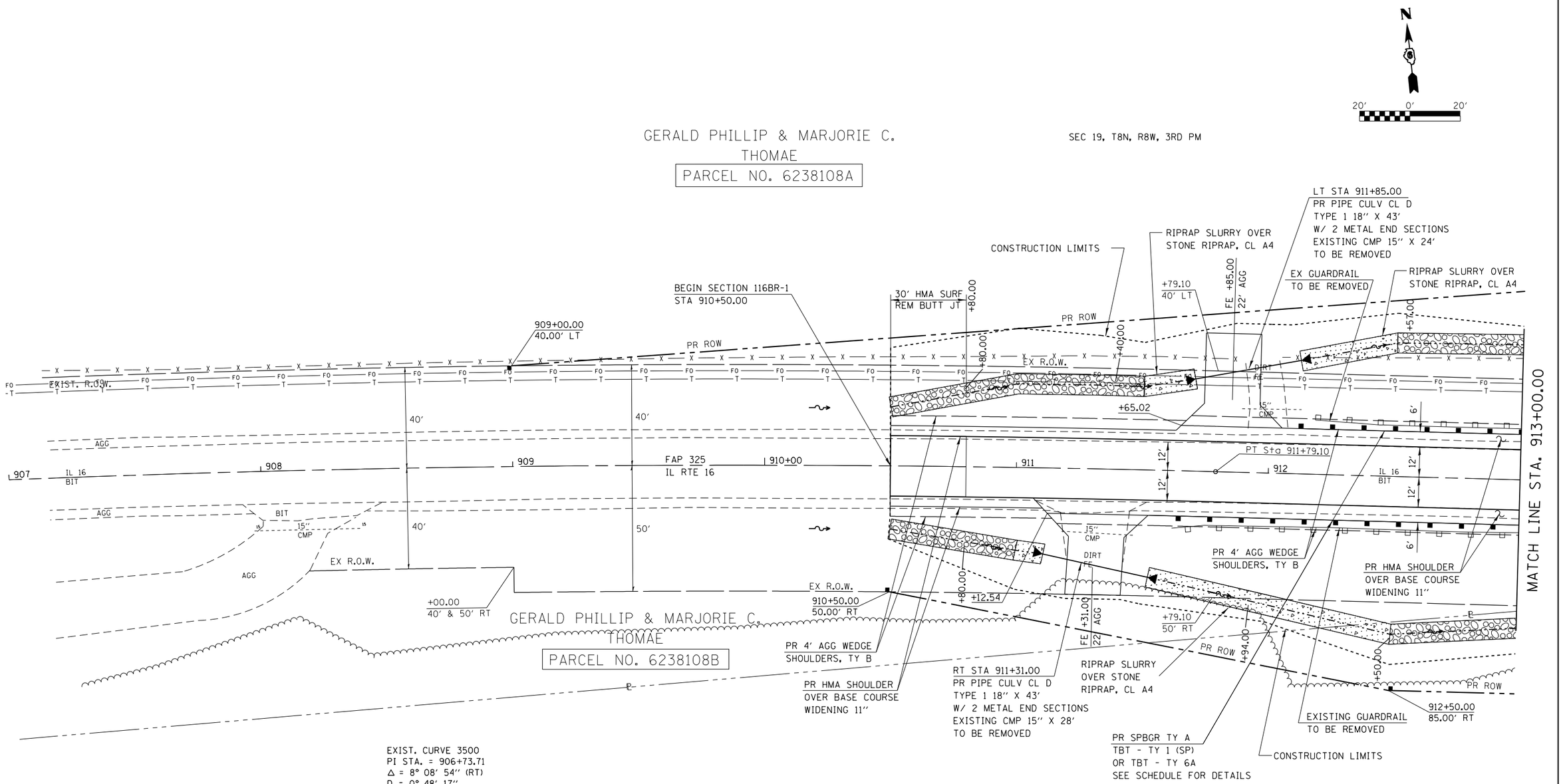
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-018-stage-ii.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CFC	REVISED -
	PLOT SCALE = 80.000000 ' / in.	CHECKED - CCJ	REVISED -
CB PROJECT NO 10005-1	PLOT DATE = Oct-19-2012 02:14:05PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II TRAFFIC CONTROL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	18
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



EXIST. CURVE 3500
PI STA. = 906+73.71
Δ = 8° 08' 54" (RT)
D = 0° 48' 17"
R = 7,119.39'
T = 507.10'
L = 1,012.49'
E = 18.04'
e = 1.90%
T.R. = 69
S.E. RUN = 88
P.C. STA. = 901+66.61
P.T. STA. = 911+79.10
REMOVE SE STA 911+49.77 TO STA 913+07.24

SEC 30, T8N, R8W, 3RD PM

EARL F. & OPAL E. ALLEN AS TRUSTEES
OF THE EARL F. & OPAL E. ALLEN
REVOCABLE LIVING TRUST
DATED MAY 1, 1991
PARCEL NO. 6238109

INDICATES LIMITS OF
STONE RIPRAP CLASS A4

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672419-sht-019-plan-1.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
	PLOT SCALE = 40.000000 ' / in.	DRAWN -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:08PM	CHECKED -	REVISED -
		DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

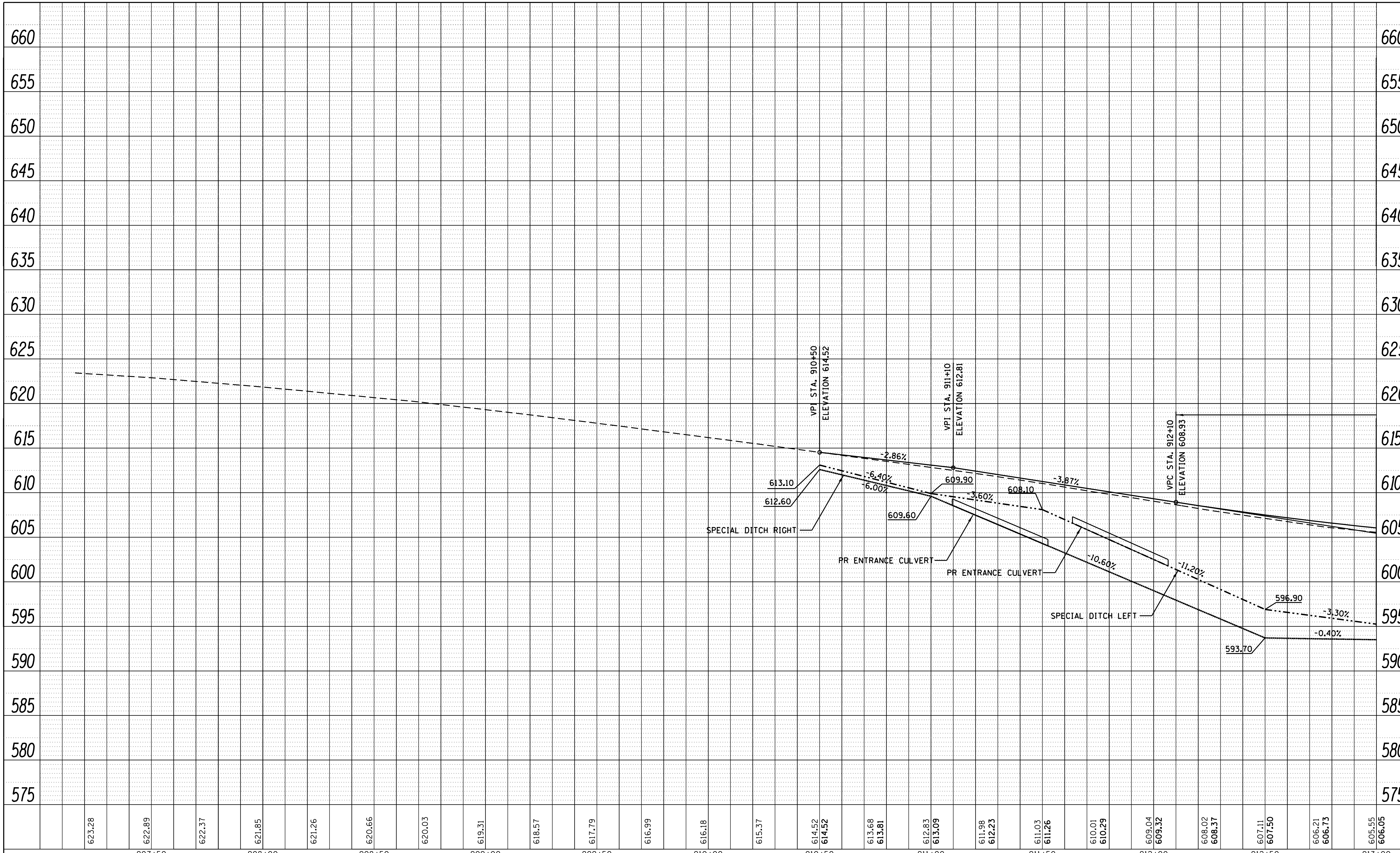
PLAN – IL 16

SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. 907+00 TO STA. 913+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	19
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

PLAN
NOTE BOOK
NO. ____
SURVEYED ____
PLOTTED ____
ALIGNMENT CHECKED ____
RT. OF WAY CHECKED ____
CADD FILE NAME ____
BY
DATE

PROFILE
NOTE BOOK
NO. ____
SURVEYED ____
PLOTTED ____
GRADES CHECKED ____
B.M. NOTED ____
STRUCTURE NOTAT'NS CH'KD
BY
DATE



FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-020-pro-001.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:10PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROFILE – IL 16

SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. 907+00 TO STA. 913+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	20

CONTRACT NO. 72A19

ILLINOIS | FED. AID PROJECT

EXISTING STRUCTURE:

S.N. 059-0003 AT STA. 914+80.00 - SINGLE SPAN P.P.C. DECK BEAM STRUCTURE ON CLOSED CONCRETE ABUTMENTS. 45'-2 1/2" BK.-BK. ABUTS., 33'-0" o.-o. PIERS, AT 30° SKEW LT FWD, TBR

PROPOSED STRUCTURE:

S.N. 059-0515 AT STA. 914+81.80 - SINGLE SPAN STRUCTURE ON INTEGRAL ABUTMENTS. 100'-0" BK.-BK. ABUTS., 39'-2" o.o. DECK, AT 30° SKEW LT FWD.

GERALD PHILLIP & MARJORIE C. THOMAE

PARCEL NO. 6238108A

SEC 19, T8N, R8W, 3RD PM

JOHN P. JOHNSON AS TRUSTEE, OF THE JOHN P. JOHNSON REVOCABLE LIVING TRUST AS TO UNDIVIDED 1/2 INTEREST; & ESTATE OF WANDA M. JOHNSON, DECEASED AS TO UNDIVIDED 1/2 INTEREST

PARCEL NO. 6238110A

N

20' 0' 20'

MATCH LINE STA. 913+00.00

MATCH LINE STA. 919+00.00

PR BRIDGE APPROACH PVMT CONN. - FLEXIBLE

CONSTRUCTION LIMITS

LIMITS OF CL A4 RIPRAP SEE STRUCTURE PLANS FOR DETAILS

915+50.00 100.00' LT

916+70.40 100.00' LT

PR 4' AGG WEDGE SHOULDERS, TY B

PR BRIDGE APPROACH PAVEMENT

PR ROW

+00.00 40' & 50' LT

LT STA 918+98.00
PR BOX CULVERT EXTENSION
EX PRC FLARED END SEC TBR
PR PIPE CULV CL A TY 1 24"X18'
PR PRC FLARED END SEC 24"
PR CONCRETE COLLAR

RIPRAP SLURRY OVER STONE RR, CL A4

918+50.00 100.00' LT

PR BRIDGE APPROACH PAVEMENT

PR BRIDGE APPROACH PVMT CONN. - FLEXIBLE +70.40 50' LT

+84.21 50' LT

+85.53 40' LT

PR HMA SHOULDER OVER BASE COURSE WIDENING 11"

EX R.O.W.

40'

+11.54

+08.73

6'

BIT

913

914

915+00

916

917

918

12'

SN 059-0003 CONC DECK

+72.19

+68.73

+54.87

IL 16 BIT

AGG

PC STA 916+70.40

50'

+85.00

FAP 325 IL RTE 16

+02.00

1.5 BOX CULVERT

+51.41

PR BRIDGE APPROACH PAVEMENT

+91.41

+94.87

PR HMA SHOULDER OVER BASE COURSE WIDENING 11"

+90.00

RT STA 918+98.00
PR BOX CULVERT EXTENSION
EX PRC FLARED END SEC TBR
PR PIPE CULV CL A TY 1 24"X3'
PR PRC FLARED END SEC 24"
PR CONCRETE COLLAR

+96.02 40' RT

+97.31 50' RT

PR 4' AGG WEDGE SHOULDER, TY B

+70.40 50' RT

STA 914+81.80 PR SN 059-0515

RIPRAP SLURRY OVER STONE RIPRAP, CL A4

916+70.40 85.00' RT

EX GUARDRAIL TO BE REMOVED

+97.31 50' RT

918+50.00 85.00' RT

LIMITS OF CL A4 RIPRAP SEE STRUCTURE PLANS FOR DETAILS

CONSTRUCTION LIMITS

PR SPBGR TY A, TBT - TY 1 (SP), OR TBT- TY 6 SEE SCHEDULE FOR DETAILS

EARL F. & OPAL E. ALLEN AS TRUSTEES OF THE EARL F. & OPAL E. ALLEN REVOCABLE LIVING TRUST DATED MAY 1, 1991

PARCEL NO. 6238109

SEC 30, T8N, R8W, 3RD PM

EXIST. CURVE 3501
PI STA. = 921+53.40
Δ = 7° 42' 16" (LT)
D = 0° 47' 56"
R = 7,173.16'
T = 483.00'
L = 964.54'
E = 16.24'
e = 1.90%
T.R. = 69'
S.E. RUN = 88'
P.C. STA. = 916+70.40
P.T. STA. = 926+34.94
ATTAIN SE STA 915+42.26 TO STA 916+99.73

JOHN P. JOHNSON AS TRUSTEE, OF THE JOHN P. JOHNSON REVOCABLE LIVING TRUST AS TO UNDIVIDED 1/2 INTEREST; & ESTATE OF WANDA M. JOHNSON, DECEASED AS TO UNDIVIDED 1/2 INTEREST

PARCEL NO. 6238110B

INDICATES LIMITS OF STONE RIPRAP CLASS A4

EXISTING RIPRAP - TBR COST INCLUDED IN COST FOR EARTH EX

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-021-plan-2.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:12PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

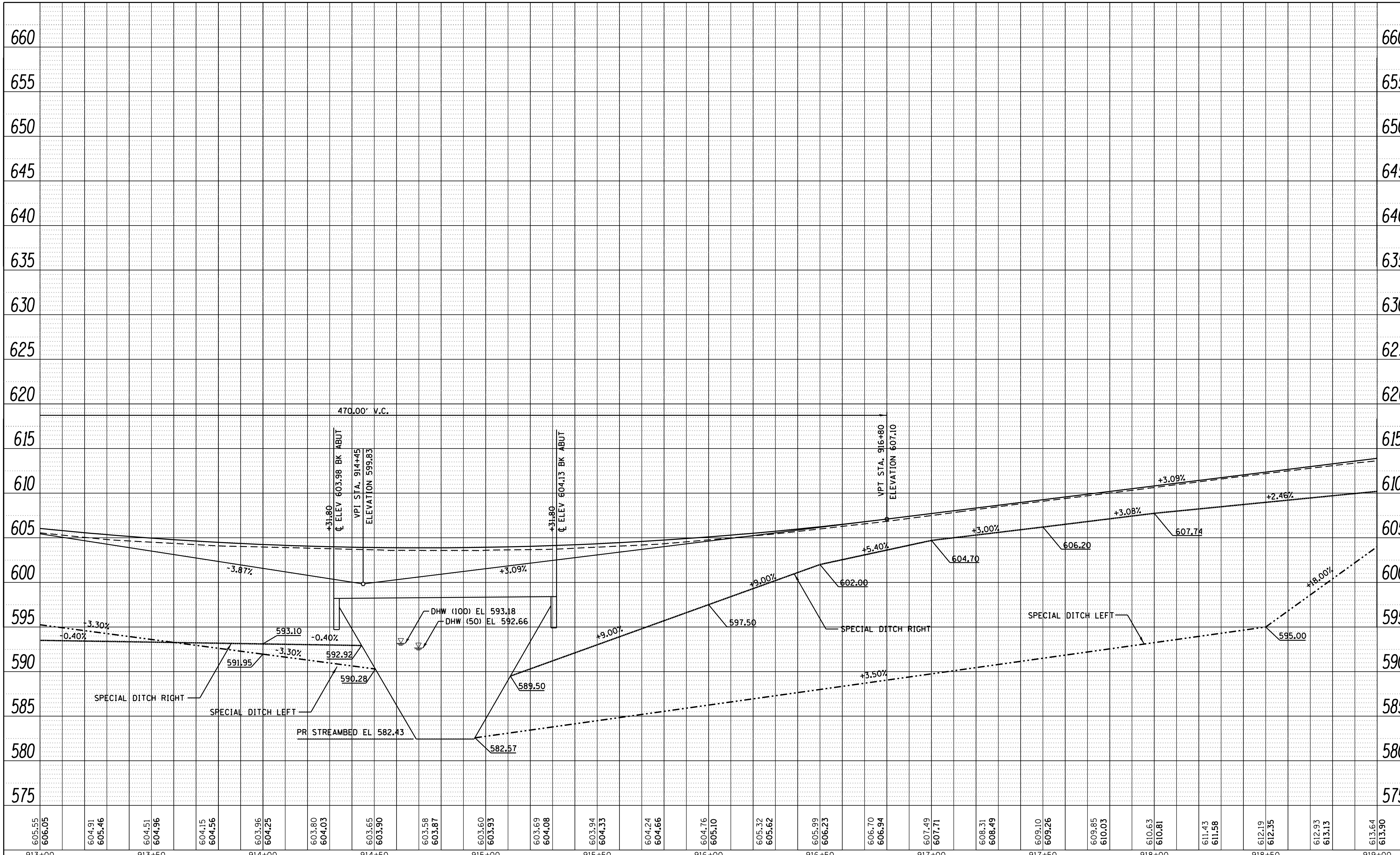
PLAN – IL 16

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. 913+00 TO STA. 919+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	21
		CONTRACT NO. 72A19		
	ILLINOIS	FED. AID PROJECT		

PLAN
NOTE BOOK
NO. ______
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
BY
DATE

PROFILE
NOTE BOOK
NO. ______
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE



FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-022-pro-002.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:14PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROFILE – IL 16

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. 913+00 TO STA. 919+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	22

CONTRACT NO. 72A19

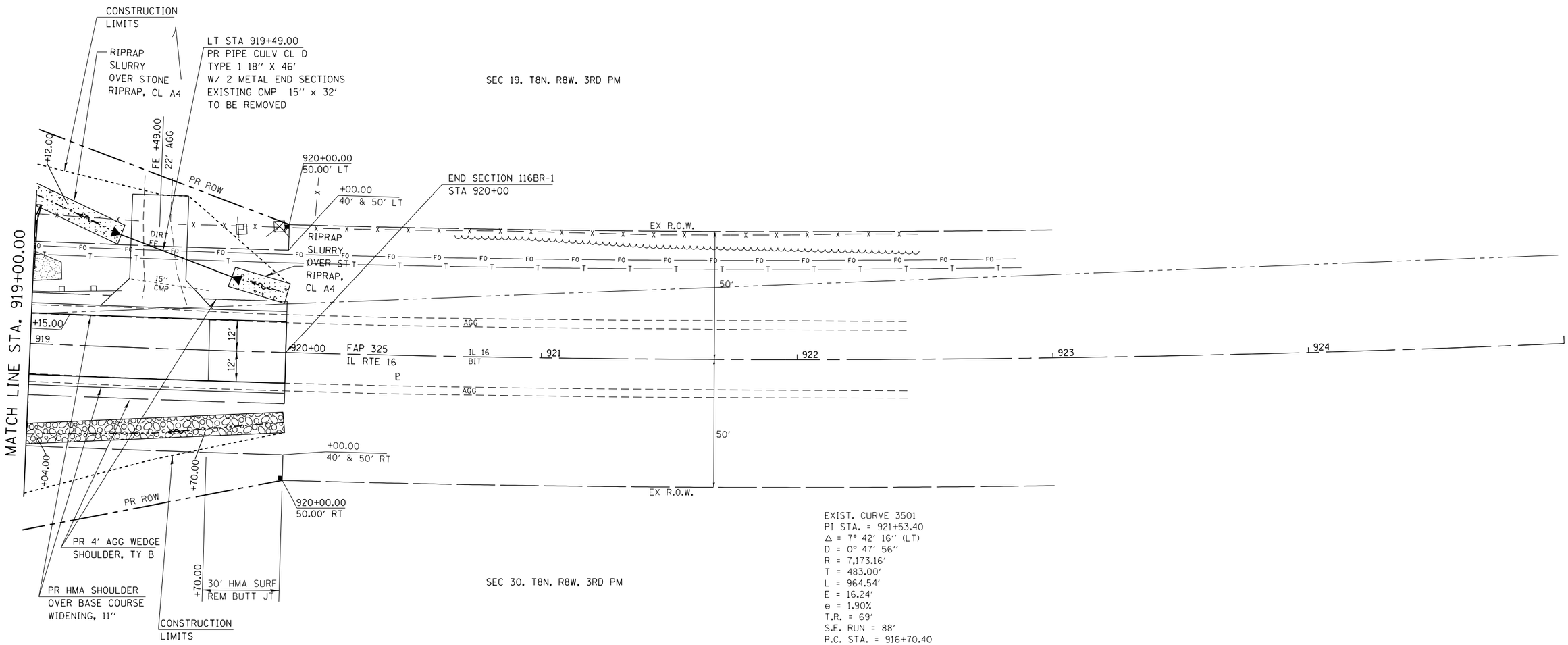
ILLINOIS | FED. AID PROJECT

JOHN P. JOHNSON AS TRUSTEE, OF THE JOHN
P. JOHNSON REVOCABLE LIVING TRUST AS TO
UNDIVIDED 1/2 INTEREST;
& ESTATE OF WANDA M. JOHNSON, DECEASED AS TO
UNDIVIDED 1/2 INTEREST

PARCEL NO. 6238110A

N

20' 0' 20'



EXIST. CURVE 3501
PI STA. = 921+53.40
Δ = 7° 42' 16" (LT)
D = 0° 47' 56"
R = 7,173.16'
T = 483.00'
L = 964.54'
E = 16.24'
e = 1.90%
T.R. = 69'
S.E. RUN = 88'
P.C. STA. = 916+70.40
P.T. STA. = 926+34.94
ATTAIN SE STA 915+42.26 TO STA 916+99.73

JOHN P. JOHNSON AS TRUSTEE, OF THE JOHN
P. JOHNSON REVOCABLE LIVING TRUST AS TO
UNDIVIDED 1/2 INTEREST;
& ESTATE OF WANDA M. JOHNSON, DECEASED AS TO
UNDIVIDED 1/2 INTEREST

PARCEL NO. 6238110B

INDICATES LIMITS OF STONE RIPRAP CLASS A4

EXISTING RIPRAP - TBR
COST INCLUDED IN COST
FOR EARTH EX

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-023-plan-3.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:15PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN – IL 16

SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. 919+00 TO STA. 924+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	23
		CONTRACT NO. 72A19		
		ILLINOIS	FED. AID PROJECT	

PLAN

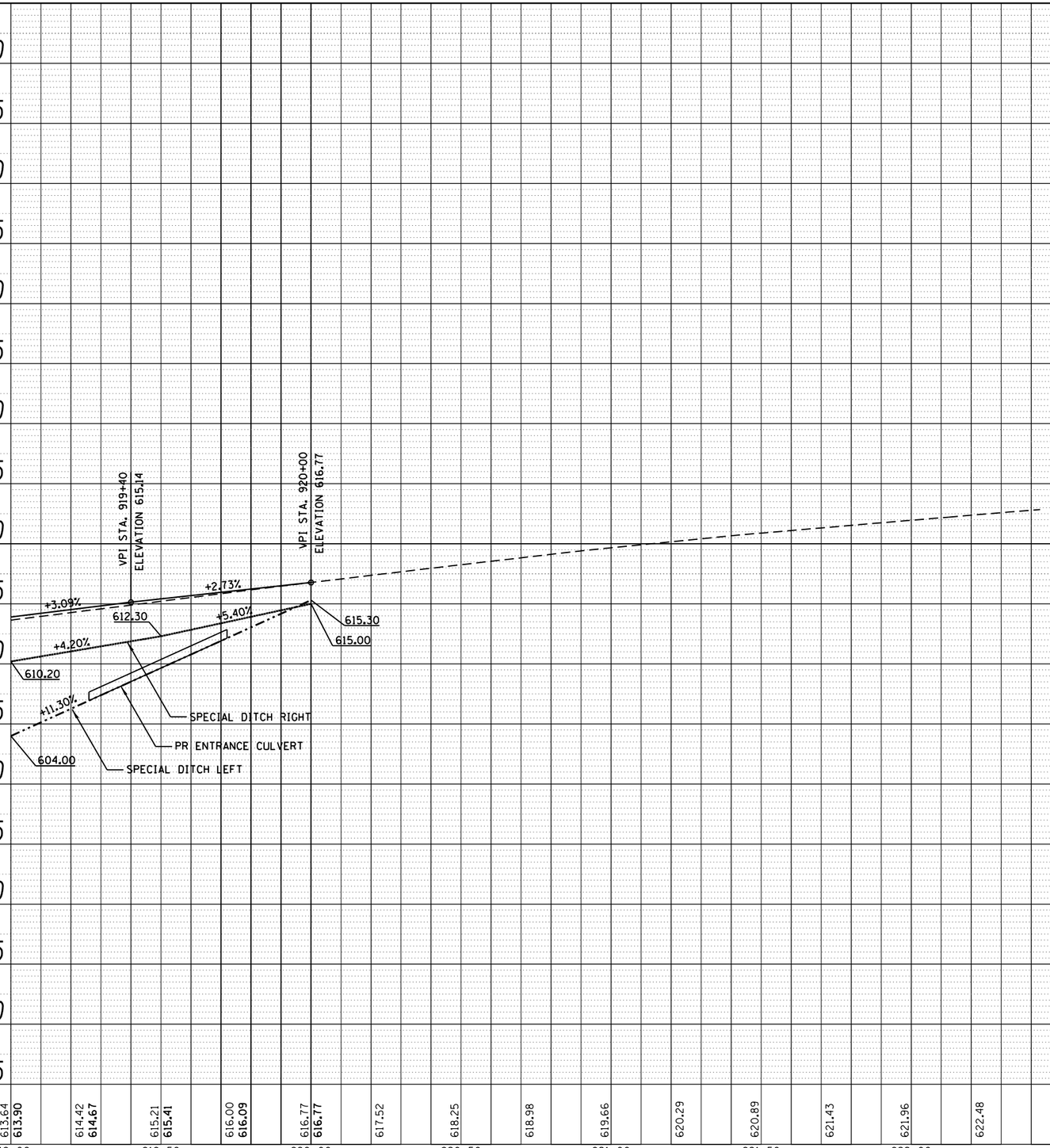
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
CADD FILE NAME	
NOTE BOOK	
NO.	

BY	DATE

PROFILE

SURVEYED	
PLOTTED	
GRADES CHECKED	
BM. NOTED	
STRUCTURE NOTATNS CHKD	
NOTE BOOK	
NO.	

BY	DATE



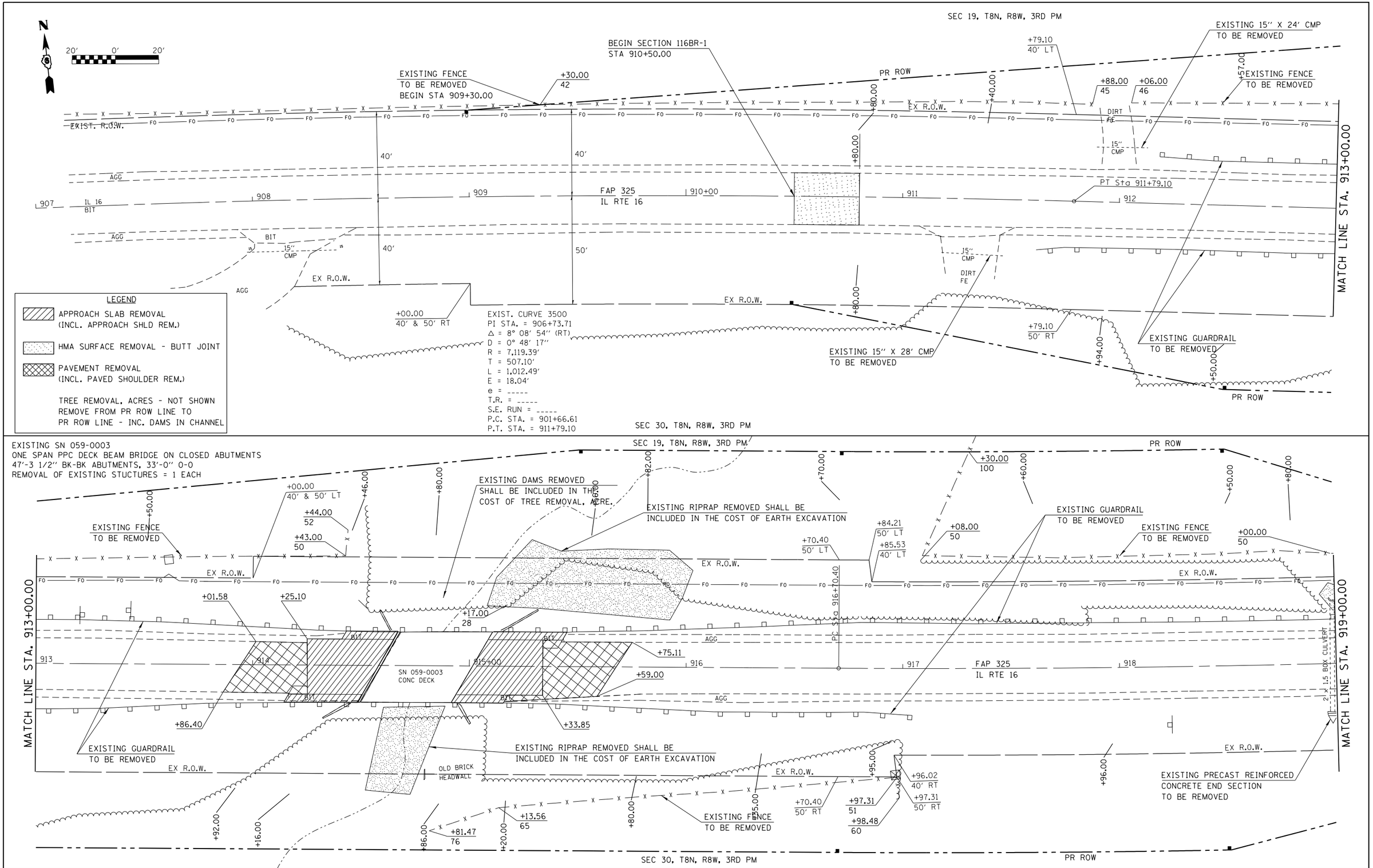
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-024-pro-003.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:14:17PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROFILE – IL 16

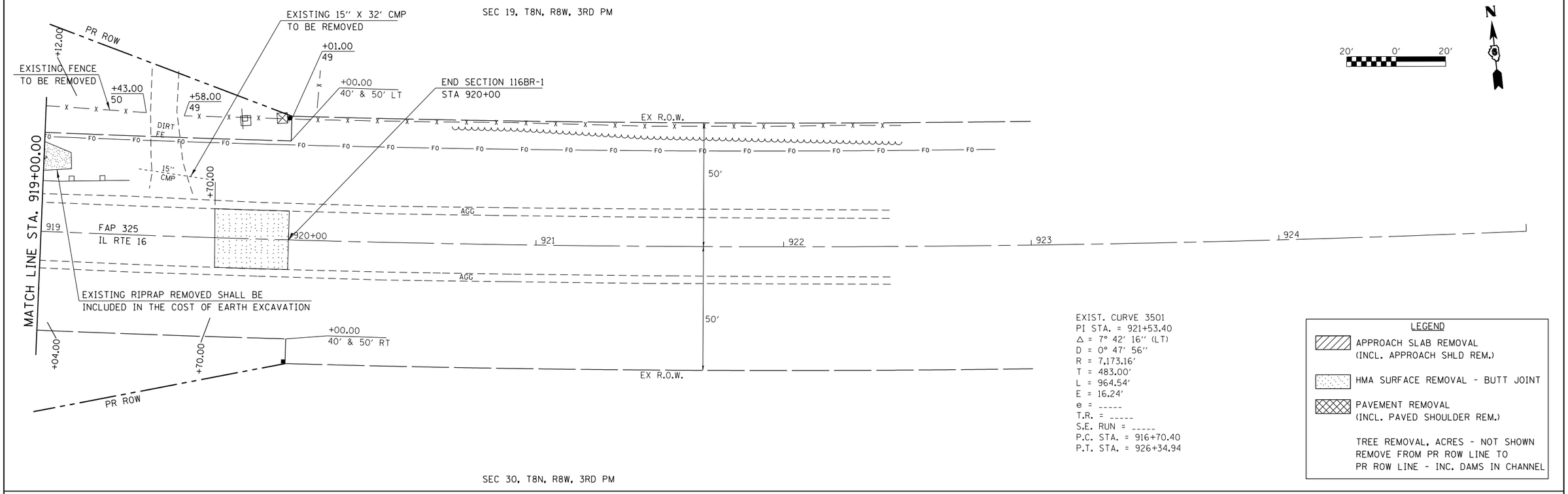
SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. 919+00 TO STA. 924+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	24
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		



FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-025-removal.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REMOVAL PLAN – IL 16**
	PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -		
	PLOT DATE = Oct-19-2012 02:14:19PM	CHECKED -	REVISED -		SCALE: SHEET NO. 1 OF 2 SHEETS STA. 907+00 TO STA. 919+00
		DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	25
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXIST. CURVE 3501
PI STA. = 921+53.40
Δ = 7° 42' 16" (LT)
D = 0° 47' 56"
R = 7,173.16'
T = 483.00'
L = 964.54'
E = 16.24'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 916+70.40
P.T. STA. = 926+34.94

LEGEND

- APPROACH SLAB REMOVAL (INCL. APPROACH SHLD REM.)
- HMA SURFACE REMOVAL - BUTT JOINT
- PAVEMENT REMOVAL (INCL. PAVED SHOULDER REM.)

TREE REMOVAL, ACRES - NOT SHOWN
REMOVE FROM PR ROW LINE TO
PR ROW LINE - INC. DAMS IN CHANNEL

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-025-removal.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = Oct-19-2012 02:14:19PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN – IL 16

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. 919+00 TO STA. 925+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	26
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STORM WATER POLLUTION PREVENTION PLAN

Route: FAP 325 Marked: IL 16

Section: 116BR-1 Project No.:

County: MACOUPIN Contract No.: 72A19

Starting Station: 910+50 (Longitude: 90°01'56.92460") Latitude: 39°06'59.96434")

Ending Station: 920+00 (Longitude: 90°01'44.96294" Latitude: 39°06'58.81112")

Structure Center Station: 914+81.80 (Longitude: 90°01'51.49178" Latitude 39°06'59.41269")

This plan has been prepared to comply with the provision of the NPDES Permit Number ILR10_____ issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquire of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Roger L Driskell (Signature) 10/19/12 (Date)

Region 4 Engineer (Title)

Note: The above boxed in area will be filled out by IDOT - Construction after the award of the contract to obtain the required NPDES permit.

The following plan was established and included in these plans to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES. The Contractor shall abide to all requirements within this plan as part of the contract.

The purpose of this plan is to prevent / minimize siltation within the construction zone and to eliminate sediments from entering and leaving the construction zone by utilizing proper temporary erosion control systems and providing ground cover within a reasonable time.

Certain items, as shown in this plan and referenced by the legend, shall be placed by the Contractor at the beginning of construction. Other items shall be placed by the Contractor as directed by the Engineer on a case by case situation resulting from the Contractor's sequence of activities, time of the year, and expected weather conditions.

The Contractor shall place permanent erosion control systems and seeding within a reasonable amount of time; therefore, reducing the amount of area being open to the possibility of erosion and reducing the amount of temporary erosion control systems and temporary seeding. The Resident Engineer will determine if temporary erosion control systems shown in the plan can be deleted, the size of the proposed ditch checks, the proper method of installation, and if any additional temporary erosion control systems shall be added which are not included in this plan. The Contractor shall perform all work as directed by the Engineer and as shown in special details and in Standard 280001 of the plans.

All disturbed areas having high potential for erosion, as determined by the Engineer, shall be temporarily seeded or permanently seeded by October 1st of each construction year and shall not be reopened until after the winter shutdown period.

SITE DESCRIPTION

Description of Construction Activity:

1. The proposed project consists of replacing a bridge on IL 16 just east of Shipman with a single larger bridge and extension of an existing box culvert. The project will also include resurfacing of approx. 0.18 mi of IL 16.

2. Construction consists of grading, constructing bridges / culverts, HMA pavement, widening, HMA resurfacing, placing aggregate shoulders and other miscellaneous work to complete improvements to the proposed roadways.

Description of Intended Sequence of Major Construction Activities Which Will Disturb Earth and Lead to Possible Erosion for Major Portions of the Construction Site:

1. Tree removal will be completed to clear approximately 4 acres of wooded land.

2. Excavation will be completed along the entire length to grade out for proposed roadway ditches and waterways.

3. Excavation will also be completed in proposed cut sections to lower the existing ground elevation to meet the proposed roadway grade/vertical alignment.

4. Embankment will be completed in fill areas to raise the existing ground elevation to meet the proposed roadway foreslope and backslope.

5. Drainage structures will be installed before and/or during the construction of the excavation and embankment to allow proper drainage across the proposed two lane facility.

6. Placement, maintenance, removal and proper clean-up of temporary erosion control, such as erosion control fence, riprap ditch checks, sediment basins, temporary seeding, etc.

7. Placement of permanent erosion control, such as riprap ditch lining, riprap stilling basins, riprap dry dams, excelsior blanket, seeding, etc.

8. Final grading, paving and other miscellaneous items.

Area of Construction Site:

The total drainage area entering and including the construction site is estimated to be approx. 4.5 sq miles in which 3.7 acres will be disturbed by excavation, grading or other activities.

Other Reports, Studies and Plans which Aid in the Development of this Storm Water Pollution Prevention Plan as Referenced Documents:

1. Estimated run-off coefficients are contained in the project drainage study which were utilized for proposed placement of the temporary erosion control systems.

2. Information on the soils within the site was obtained from field reviews which were utilized for proposed placement of the temporary erosion control systems.

3. Site maps indicating drainage patterns and approximate slopes were contained in the project design report, USGS drainage maps, project drainage study, and project plan documents were all utilized for proposed placement of the temporary erosion control systems.

Drainage Tributaries Receiving Water from this Construction Site:

Coop Branch

Macoupin Creek

FILE NAME = ...\d672A19-sht-027-swppp.dgn SWPPLAN.DGN	USER NAME = CFC..	DESIGNED -	REVISED - AUG 2007 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION PLAN
		DRAWN - CADD	REVISED - OCT 2010 (JCN)		
	PLOT SCALE = 20.000 ' / IN.	CHECKED - JCN	REVISED - MAY 2012 (JPM)		SCALE: / SHEET NO. 1 OF 4 SHEETS / STA. / TO STA.
	PLOT DATE = 10/18/2012	DATE - APRIL 5, 1999	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	27
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

Description of Stabilization Practices at the Beginning of Construction:

1. The area between the existing and proposed right-of-way/temporary easement boundaries and limits of the project will be improved and managed for the purposes of controlling erosion within the area, reducing water flow by temporary diversion and minimizing siltation into the construction zone, and establishing vegetative cover which will become permanent vegetation and act as an erosion barrier. Work at the beginning of construction will consist of the following:

   (a) Areas of existing vegetation (woods and grasslands) outside the proposed construction slope limits shall be identified for preserving and shall be protected from mowing, brush cutting, tree removal and other activities which would be detrimental to their maintenance and development.

   (b) Dead, diseased, or unsuitable vegetation within the site shall be removed as directed by the Engineer, along with required tree removal.

   (c) As soon as reasonable access is available (such as trees cleared) to all locations where water drains away from the project, sediment basins, riprap ditch checks, temporary ditch checks, and/or erosion control fence shall be installed as called out in this plan and directed by the Engineer.

   (d) Bare and sparsely vegetated ground in highly erodable areas as determined by the Engineer shall be temporarily seeded at the beginning of construction where no construction activities are immediately expected as stated in the special provision "Temporary Erosion and Sediment Control".

   (e) Immediately after tree removal is completed in certain areas which are highly erodable areas as determined by the Engineer, the areas shall be temporarily seeded where no construction activities are immediately expected as stated in the special provision "Temporary Erosion and Sediment Control".

   (f) At locations where a significant amount of water drains into the construction zone from outside areas (adjacent landowners), erosion control fence, temporary ditch checks, or riprap ditch checks will be utilized to locally divert water, reduce flow rates, and collect outside siltation inside the right-of-way line. Erosion control items will not be allowed to be installed to cause flooding to upstream private property which could cause crop damages or other undesireable conditions.

2. Establishment of these temporary erosion control measures will have additional benefits to the project. Desirable grass seed will become established in these areas and will spread seeds onto the construction site until permanent seeding/mowing and overseeding can be complete.

3. A third benefit of these filter areas is that they will begin to provide a screen and buffer. They will help protect the construction site from winds and excess sun and mitigate construction noise and dust.

Description of Stabilization Practices During Construction:

1. During roadway construction, areas outside the construction slope limits as outlined previous herein shall be protected from damaging effects of construction. The Contractor shall not use this area for staging (except as designated on the plans or directed by the Engineer), parking of vehicles or construction equipment, storage of materials, or other construction related activities.
   (a) Within the construction zone, critical areas which have high flows of water as determined by the Engineer shall remain undisturbed until full scale construction is underway to prevent unnecessary soil erosion.
   (b) Top soil and earth stockpiles shall be temporarily seeded if they are to remain unused for more than fourteen days.
   (c) As the Contractor constructs a portion of roadway in a fill section, he/she shall follow the following steps as directed by the Engineer:

   i. Place temporary erosion control systems at locations where water leaves and enters the construction zone
   ii. Temporary seed highly erodable areas outside the construction slope limits
   iii. Construct roadside ditches and provide temporary erosion control systems
   iv. Temporary divert water around proposed culvert locations
   v. Build necessary embankment at culvert locations and then excavate and place culvert
   vi. Continue building up the embankment to the proposed grade while at the same time place permanent erosion control such as riprap ditch lining and conduct final shaping to the slopes

   (d) The Contractor shall immediately follow major earth moving operations with final grading equipment. After the major earth spread operation has moved to a new location, final grading shall be completed within fourteen days. If grading is not completed within fourteen days, all major earth moving operations will be stopped, as directed by the Engineer, until disturbed areas are final graded and seeded.

   (e) Excavated areas and embankments shall be permanently seeded when final graded. If not, they shall be temporarily seeded as stated in the special provision "Temporary Erosion and Sediment Control".

   (f) Construction equipment shall be stored and fueled only at designated locations. All necessary measures shall be taken to contain any fuel or pollution run-off in compliance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.

   (g) Qualified Personnel shall inspect the project at least every seven days and within 24 hours of the end of a storm that is 0.5 inch or greater as noted in BDE 2342.

   (h) Sediment collected during construction by the various temporary erosion control systems shall be disposed of on the site on a regular basis as directed by the Engineer.

   (i) The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The costs of this removal shall be included in the unit bid price for the various temporary erosion control pay items. No additional additional compensation will be allowed.

Description of Structural Practices After Final Grading:

1. Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas seeded and established with a proper stand.

2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up, and disturbed turf reseeded. Temporary riprap ditch checks will be allowed to remain in place where approved by the Engineer.

Maintenance after Construction:

1. Construction is complete after acceptance is received at the final inspection.

2. Areas will be inspected on a regular basis by IDOT District 6 Bureau of Operations.

3. Maintenance crews will perform regular mowings to aid in keeping weeds down and establishing a good roadside seed stand.

4. Maintenance crews will also aid in any ditch lining maintenance or in any drainage problems.

5. All maintenance will be conducted at times when weather conditions will not cause site damage.

DOCUMENTATION

1. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with Section 4.b. shall be made and retained as part of the plan for at least three years after the date of inspection. The report shall be signed in accordance with part VI.G of the general permit.

2. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incident of Noncompliance (ION)" report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI.G. of the general permit. The report of noncompliance shall be mailed to the following address:

   Illinois Environmental Protection Agency
   Division of Water Pollution Control
   2200 Churchill Road, P.O. Box 19276
   Springfield, IL 62794-9276
   Attn: Compliance Assurance Section

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-027-swppp.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - AUG 2007 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION PLAN
		DRAWN - CADD	REVISED - OCT 2010 (JCN)		
SWPPLAN.DGN	PLOT SCALE = 40.000 ' / in.	CHECKED - JCN	REVISED - MAY 2012 (JPM)		SCALE: / SHEET NO. 2 OF 4 SHEETS / STA. / TO STA.
	PLOT DATE = Oct-19-2012 02:14:21PM	DATE - APRIL 5, 1999	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	28
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACTOR CERTIFICATION STATEMENT

This certification statement is part of the Storm Water Pollution Plan for the project described below in accordance with NPDES Permit No. ILR10_____, issued by the Illinois Environmental Protection Agency on _____.

Route: _____ Marked: _____

Section: _____ Project No.: _____

County: _____ Contract No.: _____

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

Signature_____ Date_____

Title_____

Name of Firm_____ ☐ Contractor

Street Address_____ ☐ Subcontractor

City, State, Zip_____

Phone Number_____

Note: The above boxed in area shall be filled out by the Contractor after the award of the contract to obtain the required NPDES Permit from IEPA. This is a requirement for this contract.

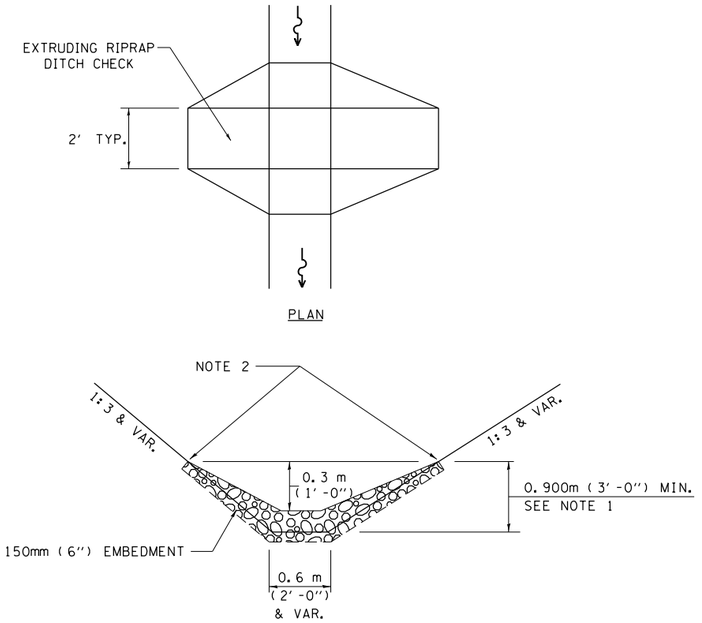
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-027-swppp.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - AUG 2007 (JCN)
		DRAWN - CADD	REVISED - OCT 2010 (JCN)
SWPPLAN.DGN	PLOT SCALE = 40.000 ' / in.	CHECKED - JCN	REVISED - MAY 2012 (JPM)
	PLOT DATE = Oct-19-2012 02:14:22PM	DATE - APRIL 5, 1999	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN

SCALE: | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

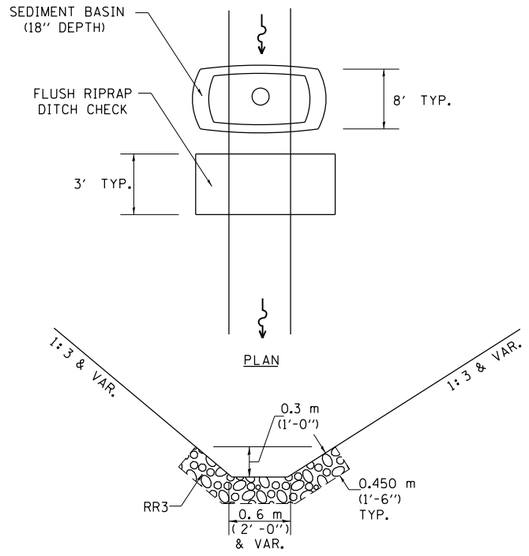
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	29
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ELEVATION

OPTION 1

(EXTRUDING DITCH CHECK)
RECOMMENDED FOR AREAS
W/ RIPRAP DITCH LINING



ELEVATION

OPTION 2

(FLUSH DITCH CHECK)
RECOMMENDED FOR AREAS
W/O RIPRAP DITCH LINING

STONE DUMPED RIPRAP DITCH CHECK

OPTIONS 1 & 2 OR
AS DIRECTED BY THE ENGINEER

NOTE 1: RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW 0.3m (1') OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP.

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.

LEGEND FOR STORM WATER POLLUTION PREVENTION PLAN

ITEM	SYMBOL
AGGREGATE DITCH CHECKS	
INLET PIPE PROTECTION	
PERIMETER EROSION BARRIER	
SEDIMENT BASINS EARTH EXCAVATION FOR EROSION CONTROL AGGREGATE (EROSION CONTROL)	
PRESERVE EXISTING TREES, WOODLANDS, AND UNDERSTORY (OUTSIDE CONSTRUCTION LIMITS)	
ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement)	* ITEM *
ITEM PLACED AS DIRECTED BY ENGINEER (When required by situation)	ITEM
DIRECTION OF OVERLAND FLOW	

GENERAL NOTES:
All items shall be constructed as shown on this sheet, on Standard 280001, and as directed by the Engineer.

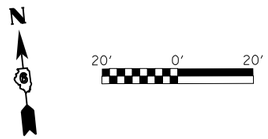
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-027-swppp.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - AUG 2007 (JCN)
		DRAWN - CADD	REVISED - OCT 2010 (JCN)
SWPPLAN.DGN	PLOT SCALE = 40.000 '/ in.	CHECKED - JCN	REVISED - MAY 2012 (JPM)
	PLOT DATE = Oct-19-2012 02:14:22PM	DATE - APRIL 5, 1999	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

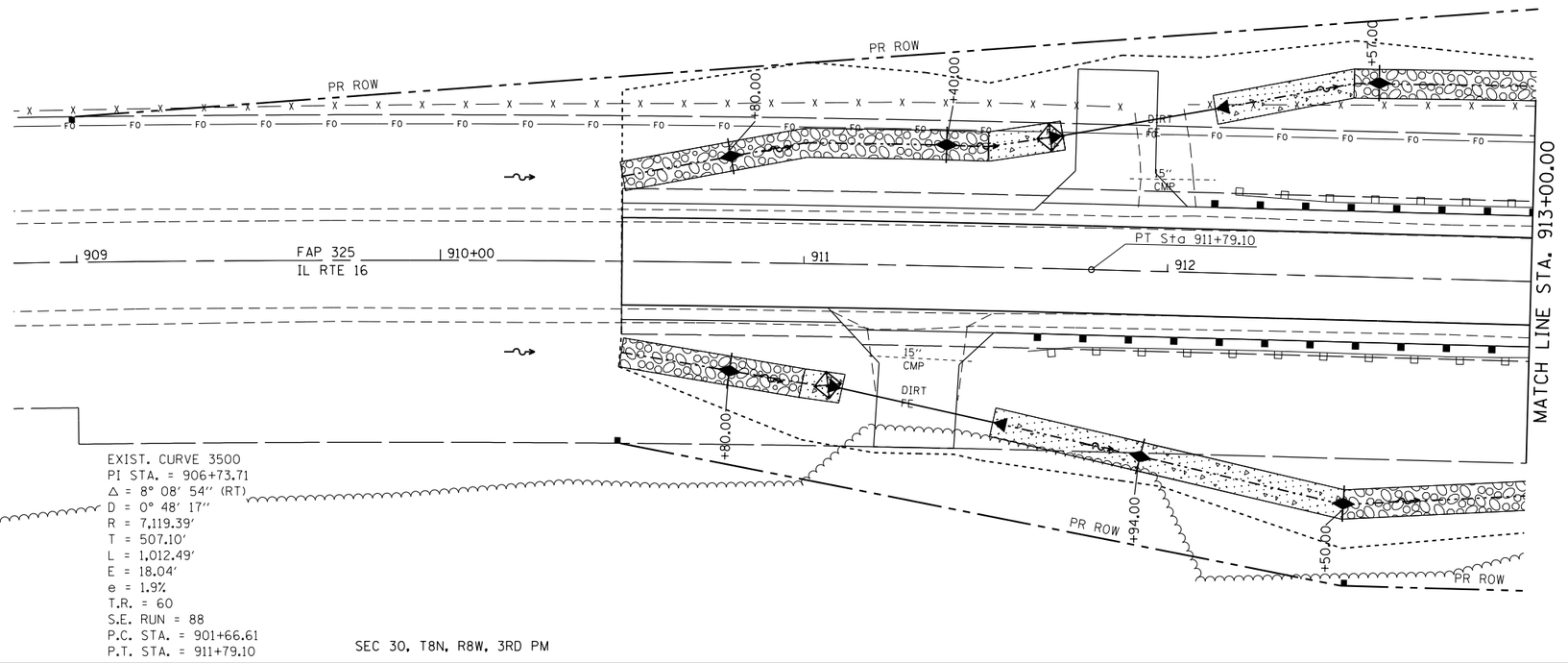
STORM WATER POLLUTION PREVENTION PLAN

SCALE: | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	30
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SEC 19, T8N, R8W, 3RD PM



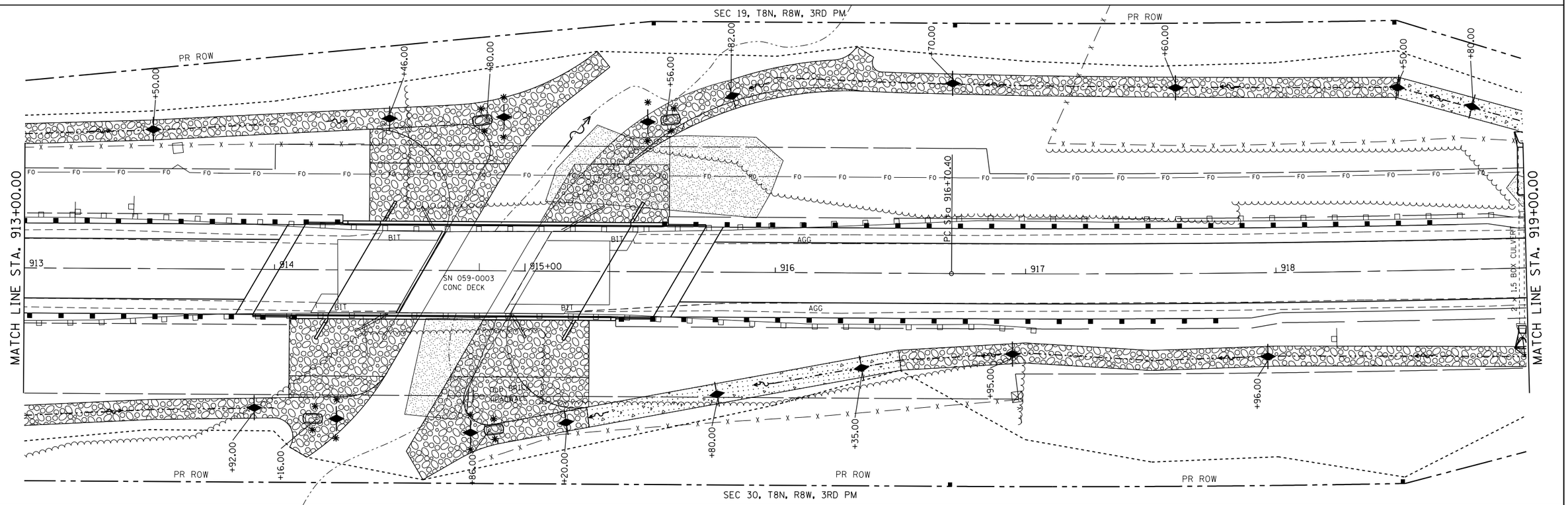
EXIST. CURVE 3500
PI STA. = 906+73.71
Δ = 8° 08' 54" (RT)
D = 0° 48' 17"
R = 7,119.39'
T = 507.10'
L = 1,012.49'
E = 18.04'
e = 1.9%
T.R. = 60
S.E. RUN = 88
P.C. STA. = 901+66.61
P.T. STA. = 911+79.10

LEGEND

- INLET AND PIPE PROTECTION
- AGGREGATE DITCH CHECK
- SEDIMENT BASIN
- *ITEM* ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement)

SEC 30, T8N, R8W, 3RD PM

SEC 19, T8N, R8W, 3RD PM



SEC 30, T8N, R8W, 3RD PM

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-031-eros.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = Oct-19-2012 02:14:24PM	DATE -	REVISED -

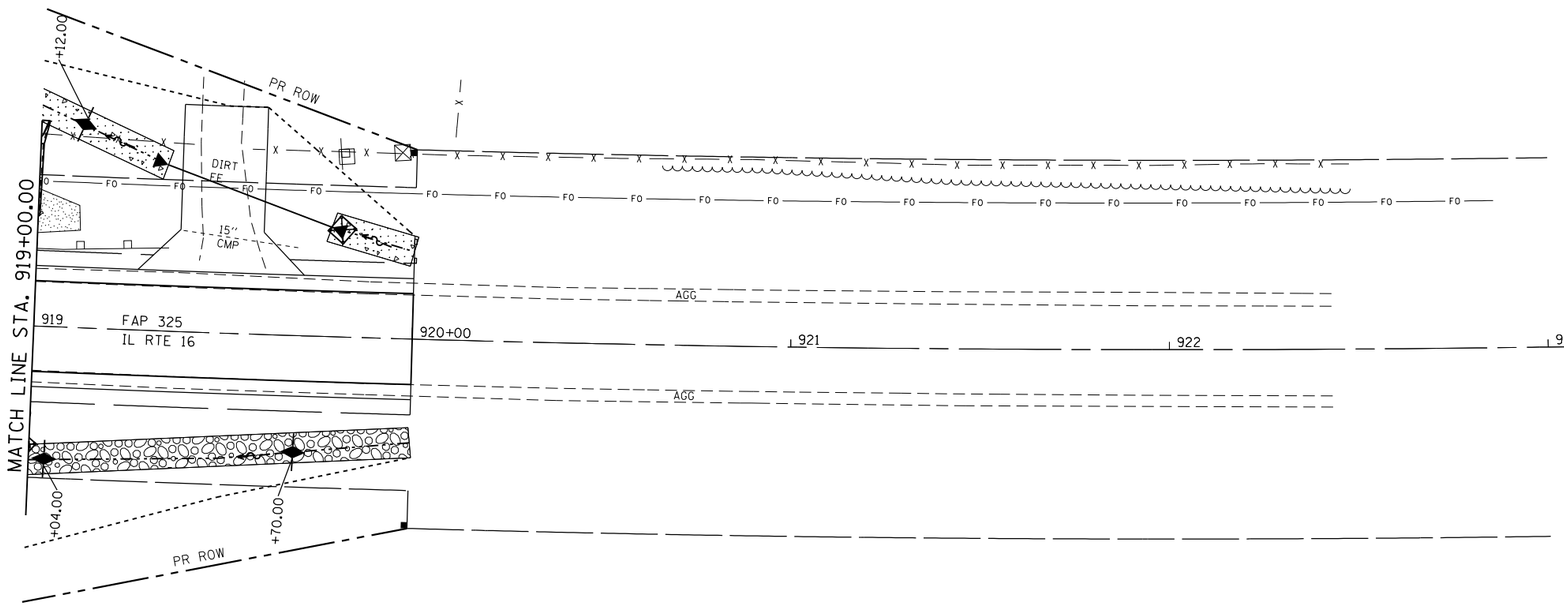
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

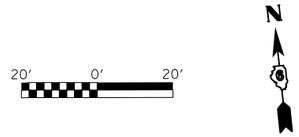
EROSION CONTROL PLAN – IL 16

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. 907+00 TO STA. 919+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	31
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEC 19, T8N, R8W, 3RD PM





EXIST. CURVE 3501
PI STA. = 921+53.40
Δ = 7° 42' 16" (LT)
D = 0° 47' 56"
R = 7,173.16'
T = 483.00'
L = 964.54'
E = 16.24'
e = 1.9%
T.R. = 69
S.E. RUN = 88
P.C. STA. = 916+70.40
P.T. STA. = 926+34.94

LEGEND

- INLET AND PIPE PROTECTION
- AGGREGATE DITCH CHECK
- SEDIMENT BASIN
- *ITEM* ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement)

SEC 30, T8N, R8W, 3RD PM

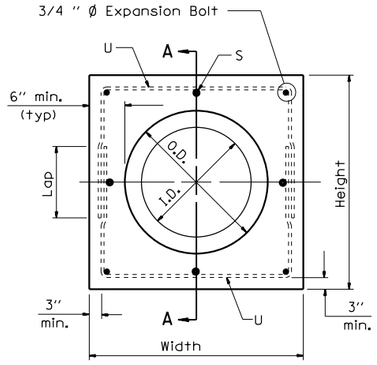
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-031-eros.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = Oct-19-2012 02:14:25PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

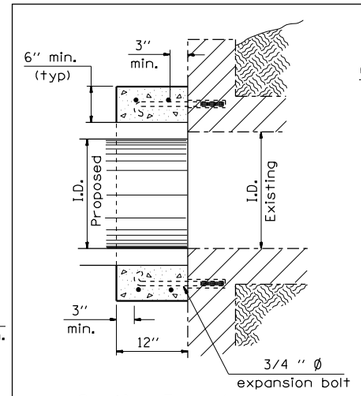
EROSION CONTROL PLAN – IL 16

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. 919+00 TO STA. 925+00

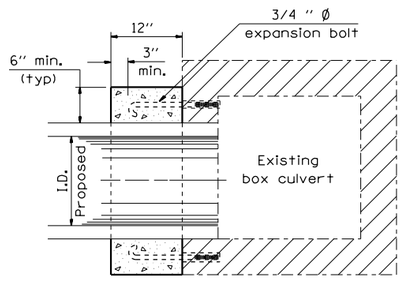
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	32
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



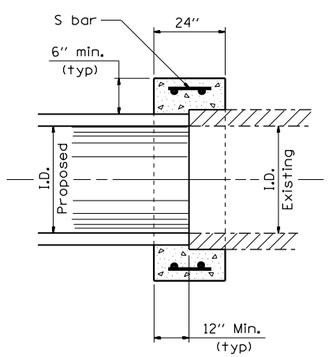
PIPE CULVERT EXTENSION COLLAR



Section Type A
(Box end extension)

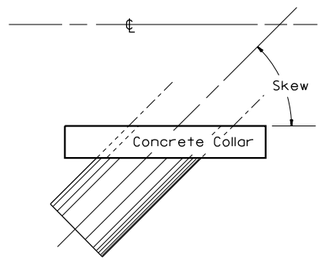


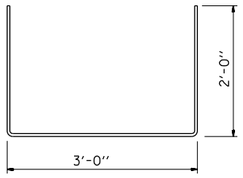
Section Type B
(Pipe in side extension)



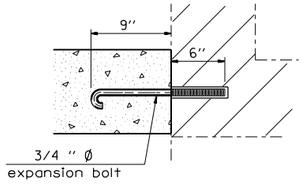
Section Type C
(Pipe end to pipe end extension
No expansion bolts required)

Section A - A





#4 U - bar



Expansion Bolt Detail

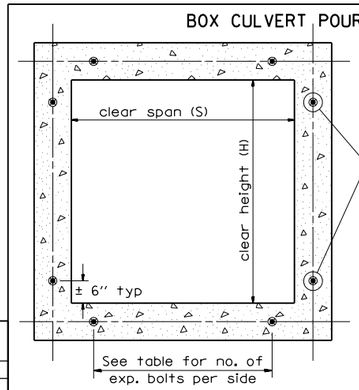
Notes:

1. Expansion bolts shall consist of self drilling expansion shields and ¾" Ø hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete. Minimum Certified Proof Load - 4,080 lbs.

2. Use minimum of 1 (one) expansion bolt at each corner.

Station	Section Type	Skew	Existing Culvert	Proposed Culvert		Collar		Reinforcement Bars									lb	Expansion Bolts 3/4 "	Class SI Concrete Collar
								S bar			U bar								
			Size	I.D.	O.D.	Height	Width	No.	Size	Length	No.	Size	A	B	Lap	Length		Each	yd^3
LT 918+98	A	0	2.0X1.5	24"	30"	3'-6"	3'-6"				4	#4	3'-0"	2'-0"	1'-0"	7'-0"	19	4	0.3
RT 918+98	A	0	2.0X1.5	24"	30"	3'-6"	3'-6"				4	#4	3'-0"	2'-0"	1'-0"	7'-0"	19	4	0.3
Total																	38	8	0.6

BOX CULVERT POURED IN PLACE EXTENSION



Section Thru Barrel

EXPANSION BOLTS REQUIRED
FOR CULVERT EXTENSIONS

H or S	No. Expansion Bolts Req'd. Per Side			
	Extension ≤ 15ft		Extension > 15ft	
	No.	Spacing	No.	Spacing
24"	*	*	*	*
30"	2	18"	2	18"
36"	2	24"	2	24"
48"	3	18"	3	18"
60"	4	16"	3	24"
72"	5	15"	4	20"
84"	5	18"	4	24"
96"	6	17"	5	21"
108"	6	19"	5	24"
120"	7	18"	6	21"
132"	8	17"	6	24"
144"	8	19"	7	22"

Note: Number of expansion bolts in table based on non-skewed culverts.

* Use minimum 1 (one) expansion bolt in each corner.

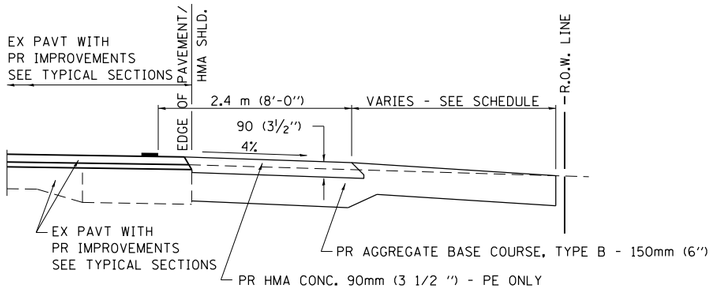
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-033-collar.dgn	USER NAME = sparksgw	DESIGNED - RLD	REVISED -
		DRAWN - CAD	REVISED -
COLLAR.DGN	PLOT SCALE = 40.000 ' / in.	CHECKED - RLD	REVISED -
	PLOT DATE = Oct-19-2012 02:14:26PM	DATE - 10/06/99	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

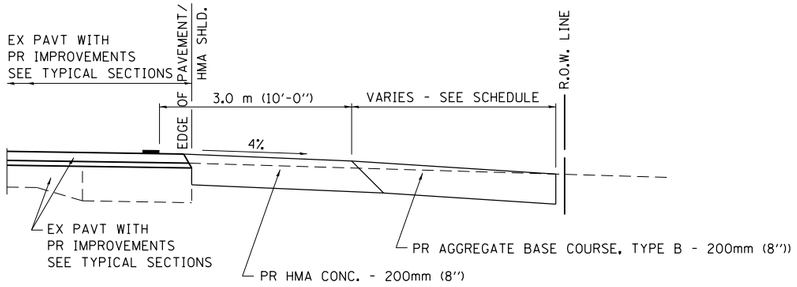
CONCRETE COLLAR AND CULVERT EXTENSION DETAILS

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

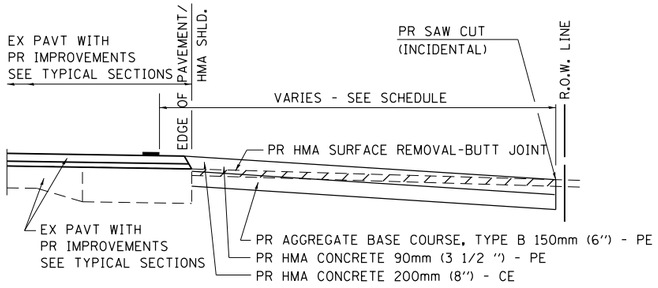
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	33
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



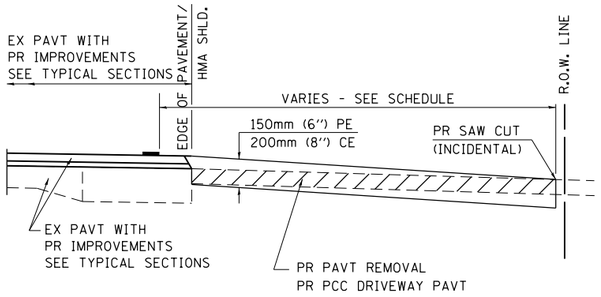
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



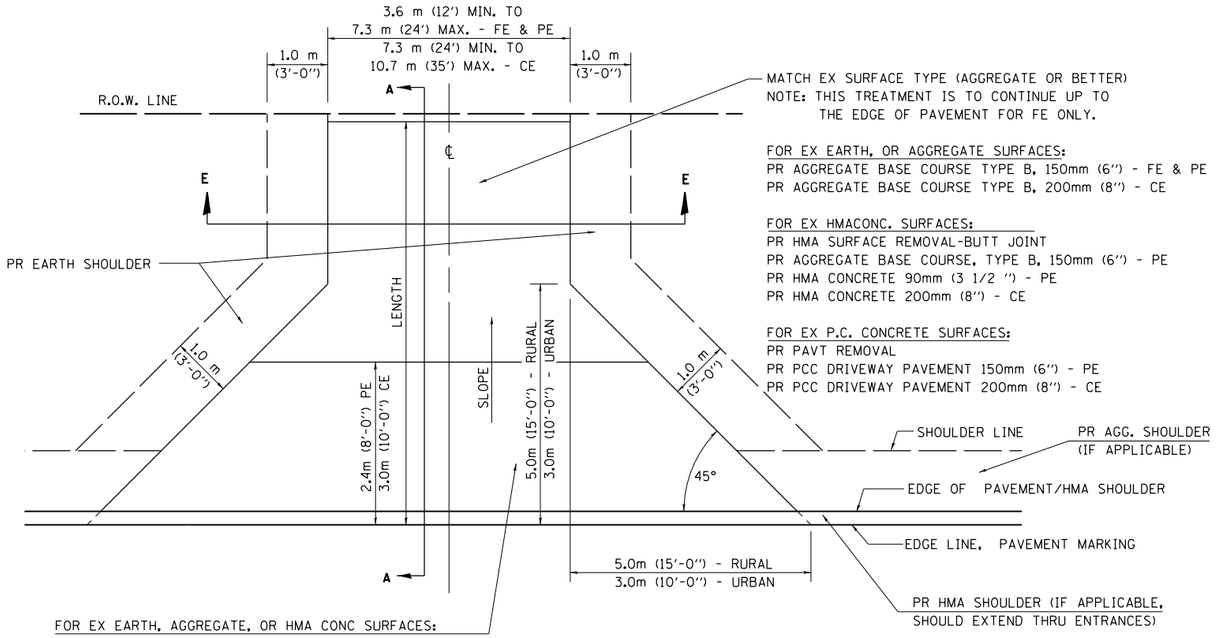
SECTION A-A FOR EX EARTH/AGGREGATE CE



SECTION A-A FOR EX HMA PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE



MATCH EX SURFACE TYPE (AGGREGATE OR BETTER)
NOTE: THIS TREATMENT IS TO CONTINUE UP TO THE EDGE OF PAVEMENT FOR FE ONLY.

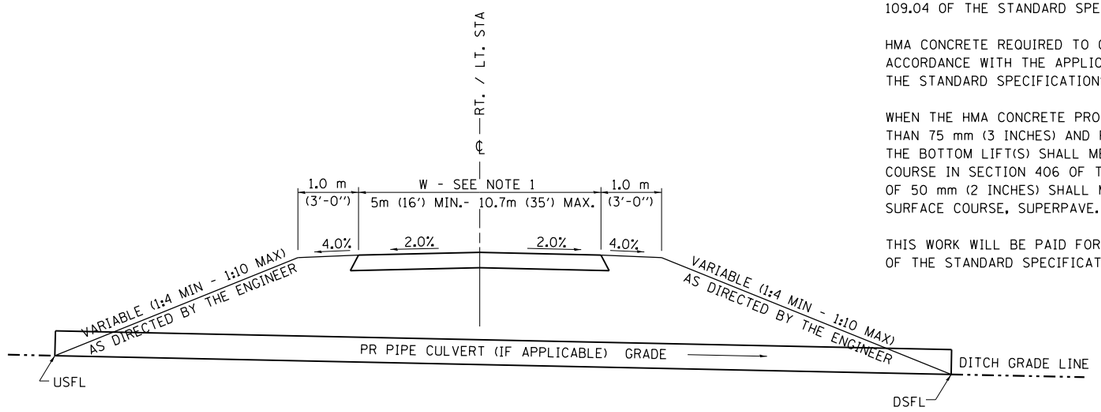
FOR EX EARTH, OR AGGREGATE SURFACES:
PR AGGREGATE BASE COURSE TYPE B, 150mm (6") - FE & PE
PR AGGREGATE BASE COURSE TYPE B, 200mm (8") - CE

FOR EX HMACONC. SURFACES:
PR HMA SURFACE REMOVAL-BUTT JOINT
PR AGGREGATE BASE COURSE, TYPE B, 150mm (6") - PE
PR HMA CONCRETE 90mm (3 1/2 ") - PE
PR HMA CONCRETE 200mm (8") - CE

FOR EX P.C. CONCRETE SURFACES:
PR PAVT REMOVAL
PR PCC DRIVEWAY PAVEMENT 150mm (6") - PE
PR PCC DRIVEWAY PAVEMENT 200mm (8") - CE

FOR EX EARTH, AGGREGATE, OR HMA CONC SURFACES:
PR HMA SURFACE REMOVAL-BUTT JOINT (IF APPLICABLE)
PR AGGREGATE BASE COURSE TYPE B 150mm (6") - FE
PR AGGREGATE BASE COURSE TYPE B, 150mm (6") &
PR HMA CONCRETE 90mm (3 1/2 ") - PE
PR HMA CONCRETE 200mm (8") - CE

FOR P.C. CONCRETE SURFACES:
PR PAVT REMOVAL
PR PCC DRIVEWAY PAVT 150mm (6") - PE
PR PCC DRIVEWAY PAVT 200mm (8") - CE



SECTION E - E ENTRANCE TYPICAL SECTION

NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

HMA CONCRETE REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE HMA CONCRETE PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 75 mm (3 INCHES) AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF HMA BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 50 mm (2 INCHES) SHALL MEET THE REQUIREMENTS OF HMA CONCRETE SURFACE COURSE, SUPERPAVE.

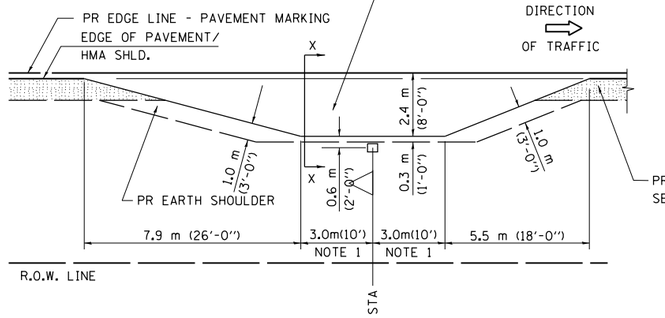
THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

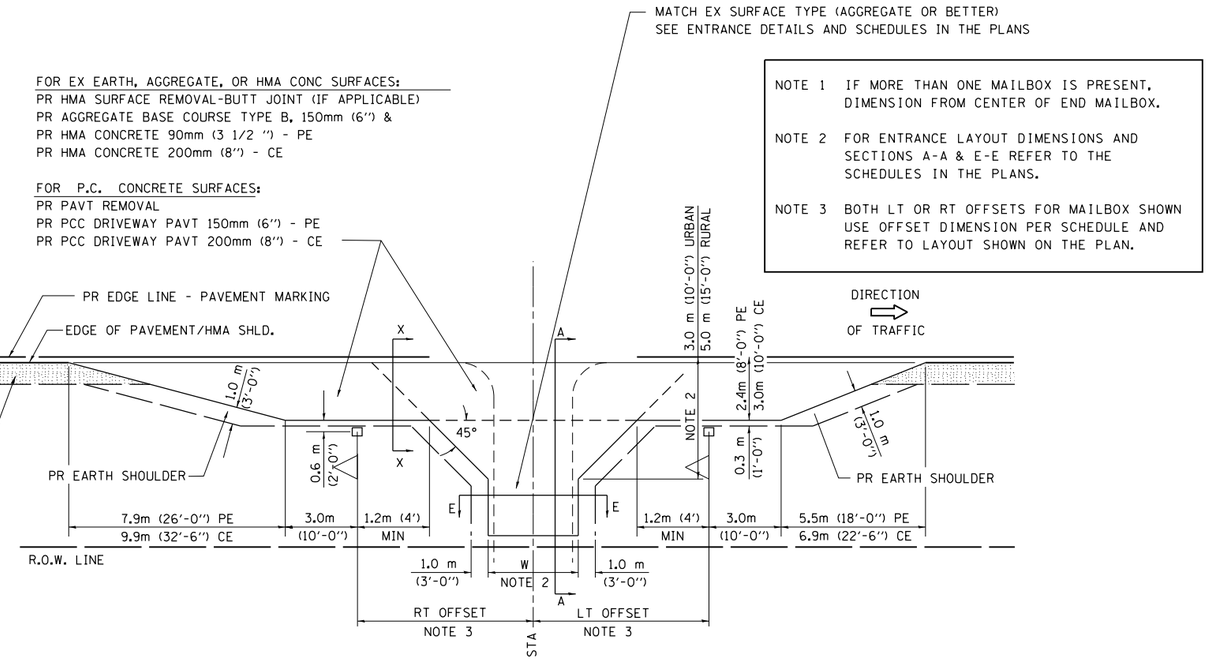
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672419-sht-034-ent-detail.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - 2/19/03 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & MAILBOX TURNOUT W/O CONC GUTTER (3R – PROJECTS)
	PLOT SCALE = 40.000 ' / in.	DRAWN - CADD	REVISED - 4/01/04 (JCN)		
ENT 3R.DGN	PLOT DATE = Oct-19-2012 02:14:27PM	CHECKED - JCN	REVISED - 8/01/07 (JCN)		SCALE: / SHEET NO. 1 OF 2 SHEETS / STA. / TO STA.
		DATE - FEBRUARY 23, 1999	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	34
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAILS OF MAILBOX TURNOUTS





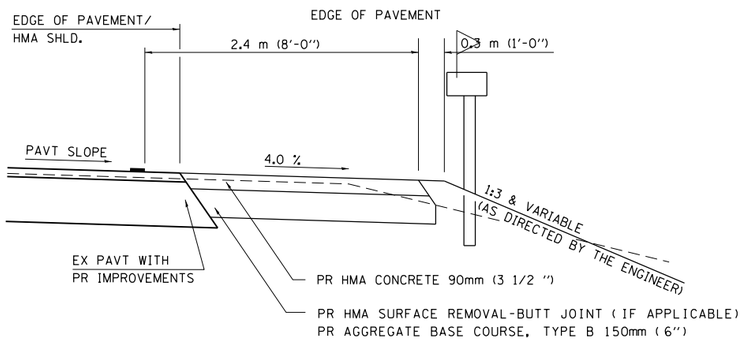
NOTE 1 IF MORE THAN ONE MAILBOX IS PRESENT, DIMENSION FROM CENTER OF END MAILBOX.

NOTE 2 FOR ENTRANCE LAYOUT DIMENSIONS AND SECTIONS A-A & E-E REFER TO THE SCHEDULES IN THE PLANS.

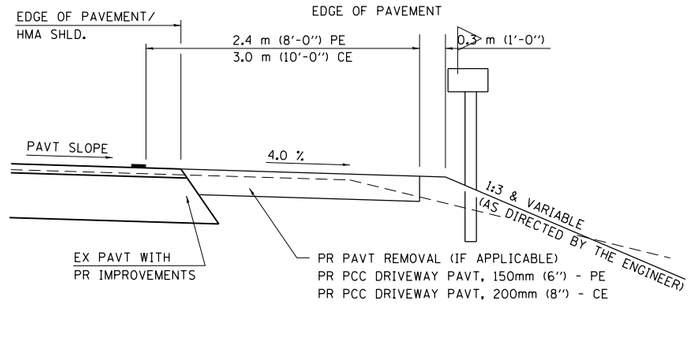
NOTE 3 BOTH LT OR RT OFFSETS FOR MAILBOX SHOWN USE OFFSET DIMENSION PER SCHEDULE AND REFER TO LAYOUT SHOWN ON THE PLAN.

PLAN - MAILBOX TURNOUTS

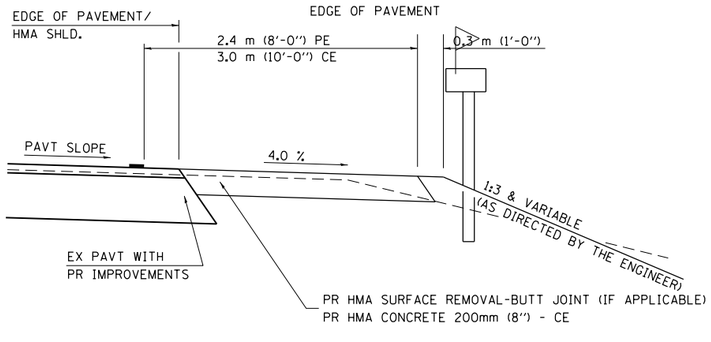
PLAN - COMBINED MAILBOX TURNOUT WITH TRAILING OR LEADING ENTRANCE



SECTION X-X THRU MAILBOX TURNOUT
ALSO APPLIES TO MAILBOX TURNOUTS COMBINED WITH EX EARTH, AGGREGATE, OR HMA PE & FE



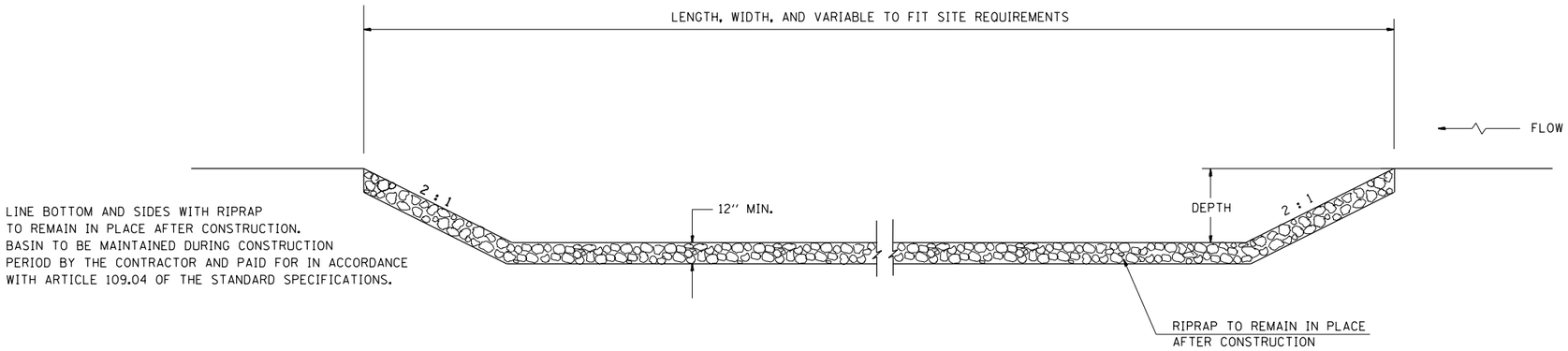
SECTION X-X THRU MAILBOX TURNOUT
COMBINED WITH EX CONC PE OR CE



SECTION X-X THRU MAILBOX TURNOUT
COMBINED WITH EX EARTH, AGGREGATE, OR HMA CE

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-034-ent-detail.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - 2/19/03 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & MAILBOX TURNOUT W/O CONC GUTTER (3R – PROJECTS)
	PLOT SCALE = 40.000 ' / in.	DRAWN - CADD	REVISED - 4/01/04 (JCN)		
ENT 3R.DGN	PLOT DATE = Oct-19-2012 02:14:28PM	CHECKED - JCN	REVISED - 8/01/07 (JCN)		SCALE: / SHEET NO. 2 OF 2 SHEETS / STA. / TO STA.
		DATE - FEBRUARY 23, 1999	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	35
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LINE BOTTOM AND SIDES WITH RIPRAP
TO REMAIN IN PLACE AFTER CONSTRUCTION.
BASIN TO BE MAINTAINED DURING CONSTRUCTION
PERIOD BY THE CONTRACTOR AND PAID FOR IN ACCORDANCE
WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

EARTH EXCAVATION FOR EROSION CONTROL

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

THE EARTHWORK WILL BE MEASURED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR " EARTH EXCAVATION FOR EROSION CONTROL. "

SEDIMENT BASINS SHALL BE CONSTRUCTED AT THE SAME TIME AS THE CULVERT OR DITCH.

SEDIMENT BASINS ARE TO BE CONSTRUCTED AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN.

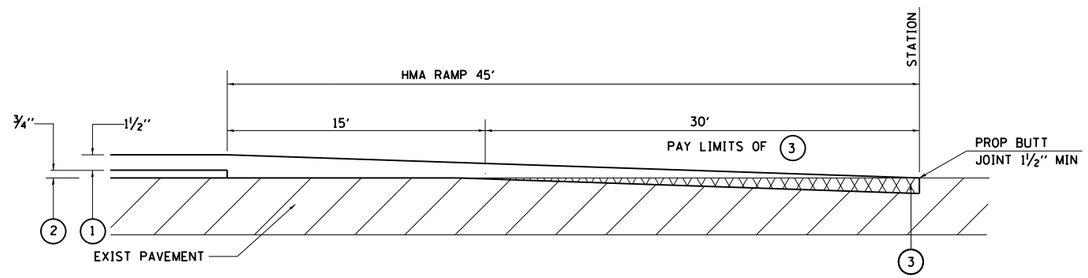
SEDIMENT BASINS

STATION	LENGTH	WIDTH	DEPTH	THICKNESS	EXCAV.	A4 RIPRAP
	FEET	FEET	FEET	INCHES	C.Y.	TONS
STA 914+80, LT	8	8	1.5	12	3.56	4.3
STA 914+86, RT	8	8	1.5	12	3.56	4.3
STA 915+56, LT	8	8	1.5	12	3.56	4.3
STA 915+56, LT	8	8	1.5	12	3.56	4.3
TOTAL					14	17

AGGREGATE (EROSION CONTROL)

AGGREGATE (EROSION CONTROL) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 601 OF THE STANDARD SPECIFICATIONS. THE LENGTH, WIDTH, AND DEPTH FOR RIPRAP PLACEMENT WILL BE DETERMINED BY THE ENGINEER

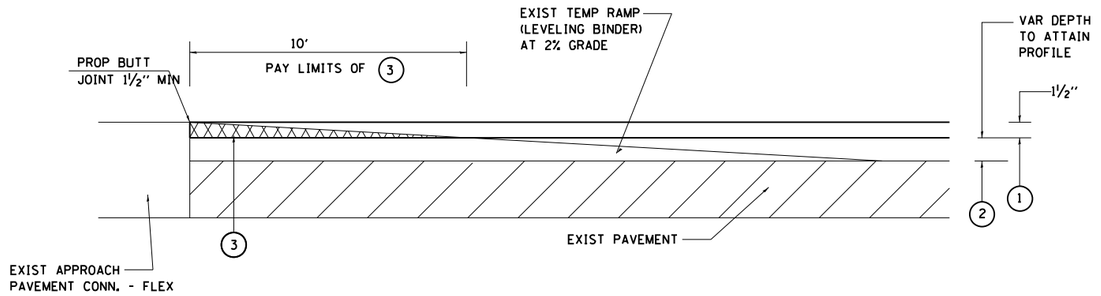
THE MATERIAL SHALL CONFORM TO CLASS C QUALITY AND GRADATION NO. 4



LEGEND

1. PROPOSED HMA SURFACE COURSE
2. PROPOSED LEVELING BINDER COURSE
3. PROPOSED HMA SURFACE REMOVAL - BUTT JOINT

MAINLINE BUTT JOINT



LEGEND

1. PROPOSED HMA SURFACE COURSE
2. PROPOSED LEVELING BINDER COURSE
3. PROPOSED HMA SURFACE REMOVAL - BUTT JOINT

BUTT JOINT AT TEMPORARY RAMPS

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-036-misc-detail.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN - CAD	REVISED -
STILL.DGN	PLOT SCALE = 40.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = Oct-19-2012 02:14:30PM	DATE - 11/19/90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEDIMENT BASIN AND HMA SURFACE REMOVAL, BUTT JOINT DETAILS

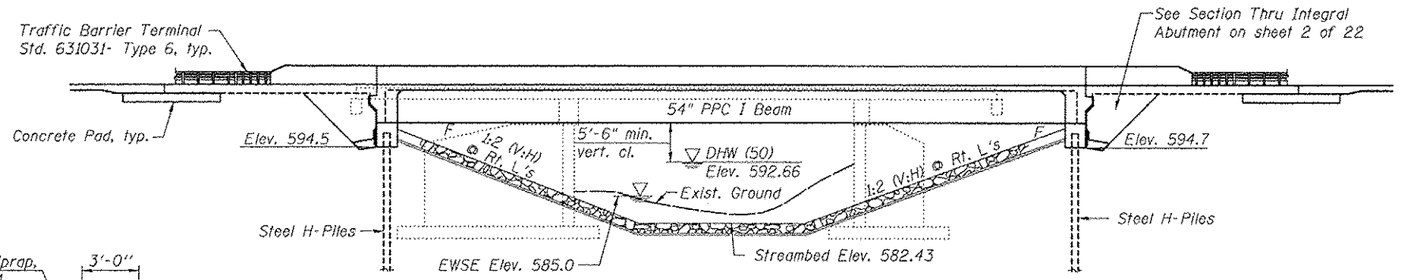
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	36
		CONTRACT NO. 72A19		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

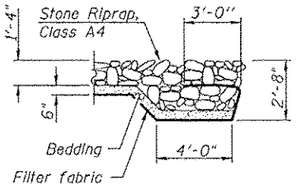
B.M.: Chiseled square on NW wingwall SN 059-0003, Elev. 603.39

Existing Structure: S.N. 059-0003 at Sta. 914+80 originally built in 1934 as SBI Rte 110, Section 116-B. In 1978, the superstructure was removed, replaced and widened under F.A. Rte 91, Section 116BR. The existing structure consists of single span P.P.C. deck beams on closed concrete abutments. The existing structure is 45'-2½" back to back of abutments and 33'-0" out to out of beams. The existing structure is to be removed and replaced with a new structure utilizing stage construction to maintain one lane of traffic.

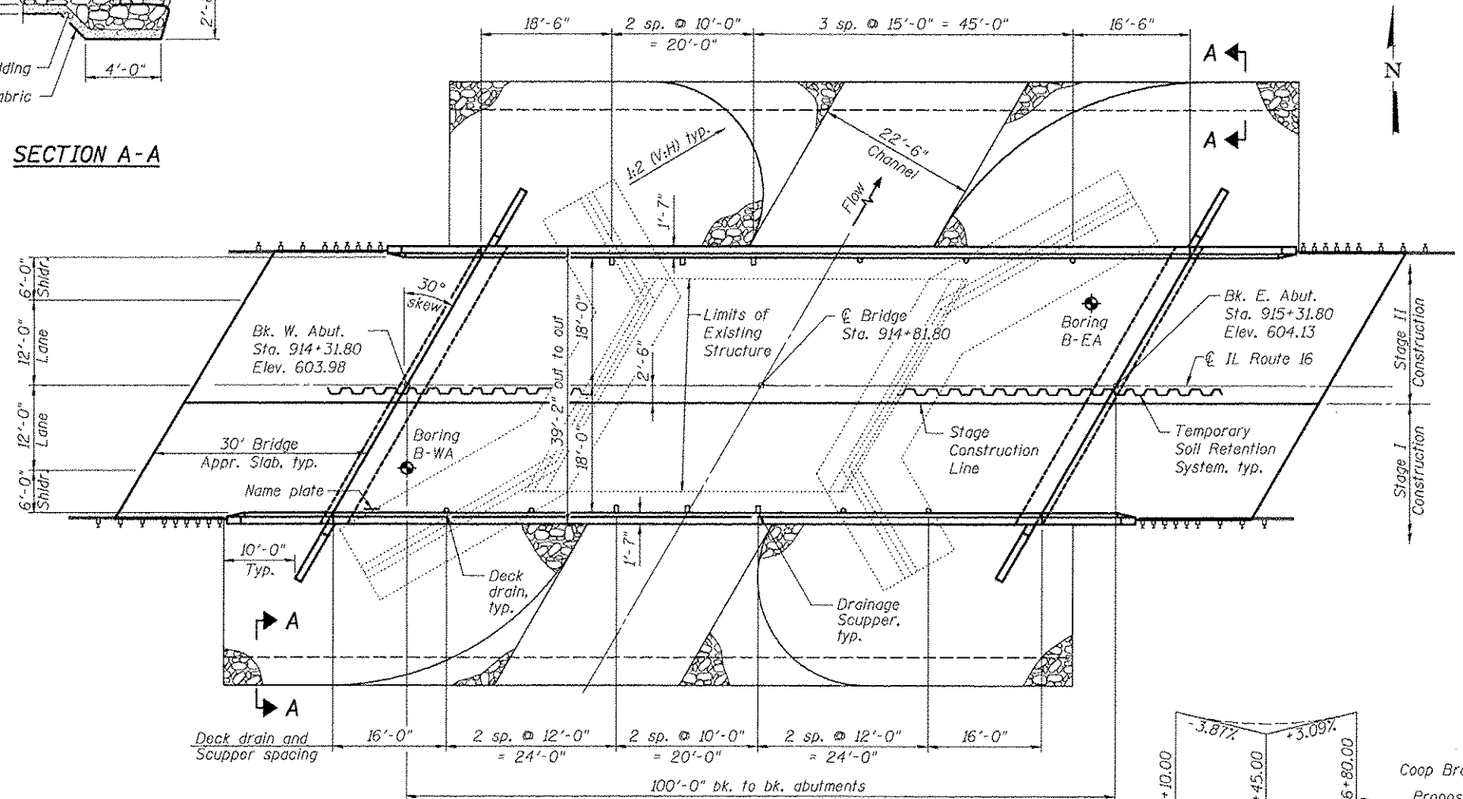
No Salvage.



ELEVATION



SECTION A-A



PLAN

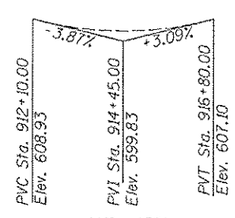
WATERWAY INFORMATION

Drainage Area = 4.5 sq. mi. Low Grade Elev. 603.9 ft. @ Sta. 914+71

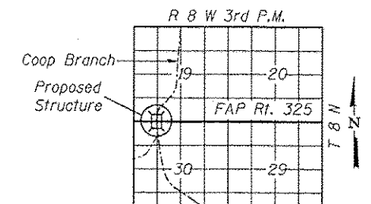
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1150	270	440	590.97	0.1	0.1	591.11	591.05
Design	50	1890	330	440	592.66	0.3	0.2	592.95	592.83
Base	100	2240	350	480	593.18	0.4	0.2	593.56	593.38
Max. Calc.	500	3080	390	550	594.14	0.6	0.3	594.78	594.42

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	594.5	594.7



PROFILE GRADE
(Along ℄ roadway)



LOCATION SKETCH

INDEX OF SHEETS

STATION 914+81.80
BUILT BY
STATE OF ILLINOIS
F.A.P. ROUTE 325 SEC. 116BR-1
LOADING HL 93
STRUCTURE NO. 059-0515

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 7,000 psi
f'ci = 6,000 psi
fpu = 270,000 psi (½" ϕ low lax. strands)
fpbt = 201,960 psi (½" ϕ low lax. strands)

LOADING HL 93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.137g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.311g
Soil Site Class = C

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LICENSED STRUCTURAL ENGINEER
MARY COOMBE BLOXDORF
4859
SPRINGFIELD
STATE OF ILLINOIS

ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/14
DATE: 10/18/2012

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 16 OVER COOP BRANCH
F.A.P. RTE. 325 SECTION 116BR-1
MACOUPIN COUNTY
STATION 914+81.80
STRUCTURE NO. 059-0515

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = _CFC_	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 1848.000 '/ / IN.	DRAWN - MML	REVISED -
PLOT DATE = 10/18/2012	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	37
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

FILE NAME = ...\059S2515-72A19-201-gpe.dgn
CB PROJECT NO 12025-1

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

No drilling shall be permitted into the existing precast prestressed concrete deck beams to be used for Stage I Traffic except for attachment of Temporary Concrete Barrier as shown on Sheet 4 of 22.

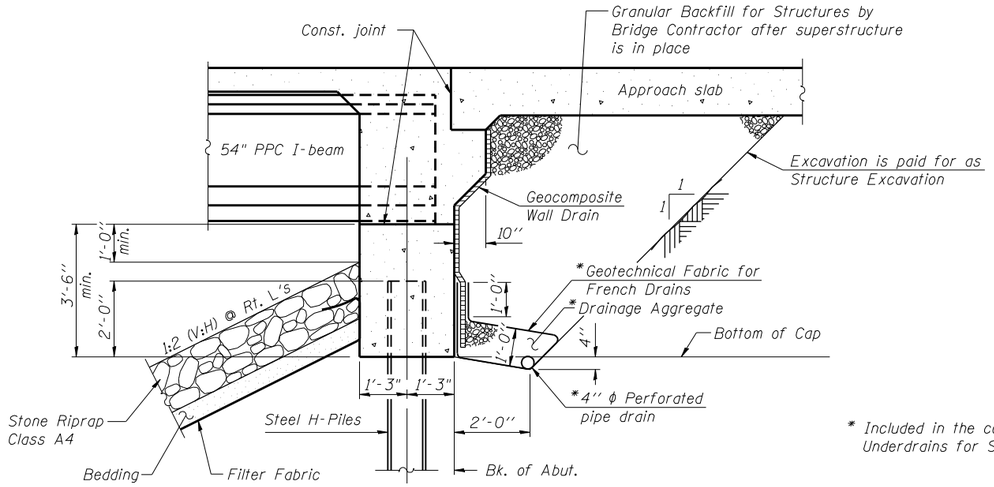
If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the existing deck beams, a detailed procedure, including calculations sealed by an Illinois Licensed Structural Engineer and verifying the structural adequacy of the beams for proposed loads, shall be submitted to the Engineer for approval.

The Contractor is advised that the existing PPC Deck Beams are in deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing beams when developing construction procedures for removal of the superstructure.

Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		222	222
Stone Riprap, Class A4	Sq. Yd.			1021
Filter Fabric	Sq. Yd.			1021
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		386	386
Floor Drains	Each	7		7
Concrete Structures	Cu. Yd.		68.9	68.9
Concrete Superstructure	Cu. Yd.	293.0		293.0
Bridge Deck Grooving	Sq. Yd.	605		605
Protective Coat	Sq. Yd.	758		758
Furnishing and Erecting Precast Prestressed Concrete I Beams, 54''	Foot	687		687
Reinforcement Bars, Epoxy Coated	Pound	55,610	11,510	67,120
Bar Splicers	Each	495	104	599
Furnishing Steel Piles HP 12x53	Foot		360	360
Driving Piles	Foot		360	360
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		105	105
Drainage Scupper, DS-33	Each	6		6
Asbestos Bearing Pad Removal	Each		40	40
Pipe Underdrains for Structures 4"	Foot		176	176
Temporary Soil Retention System	Sq. Ft.		965	965



* Included in the cost of Pipe Underdrains for Structures

SECTION THRU INTEGRAL ABUTMENT

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

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)

FILE NAME = ...\059051S-72A19-002-gen-data.dgn
CB PROJECT NO 10205-1

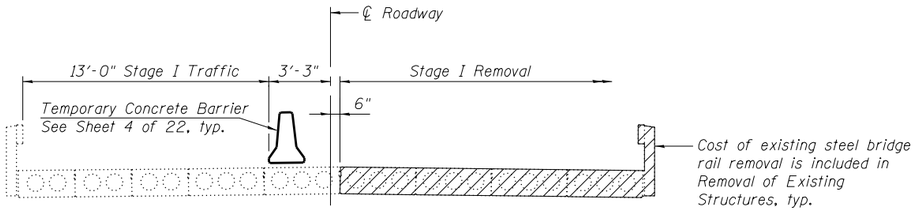
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2 ':' / IN.	DRAWN - MML	REVISED -
PLOT DATE = 11/19/2012	CHECKED - MCB	REVISED -

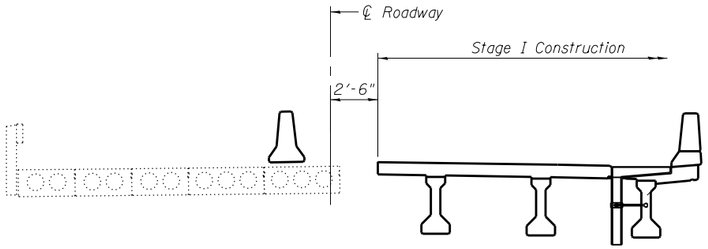
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 059-0515
SHEET NO. 2 OF 22 SHEETS

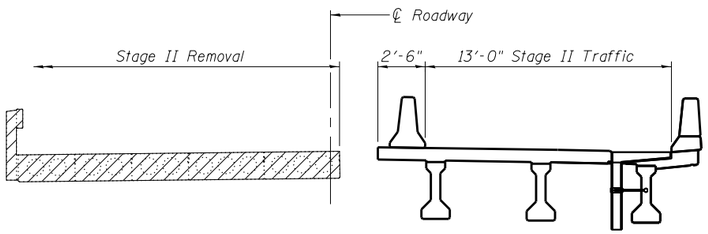
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	38
		CONTRACT NO. 72A19		
	ILLINOIS	FED. AID PROJECT		



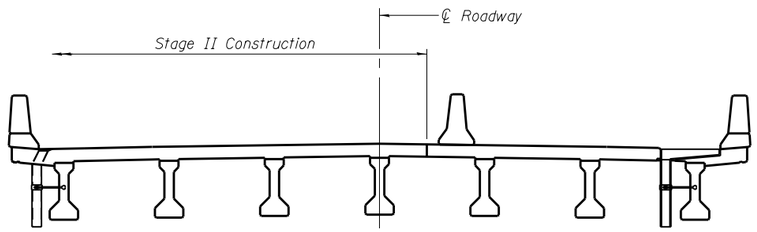
STAGE I REMOVAL



STAGE I CONSTRUCTION

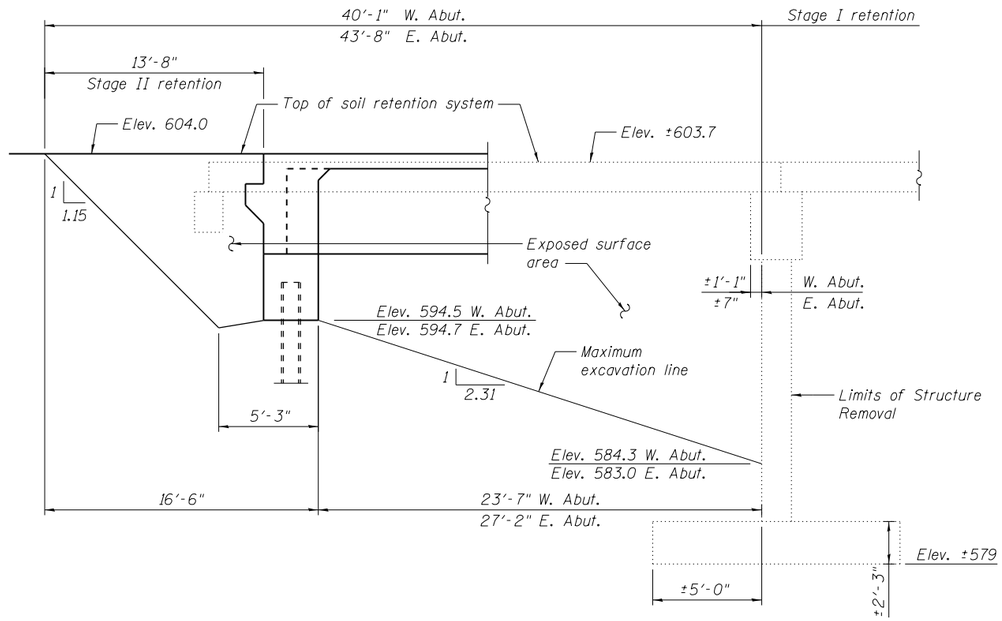


STAGE II REMOVAL



STAGE II CONSTRUCTION

Notes:
All staging cross sections are looking East.
For quantity of Temporary Concrete Barrier, see roadway plans.
Hatched area indicates Removal of Existing Structures



TEMPORARY SOIL RETENTION SYSTEM

(dimensions along ℄ roadway)

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq. Ft.	965

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-003-stagngdgn
CB PROJECT NO 10005-1

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

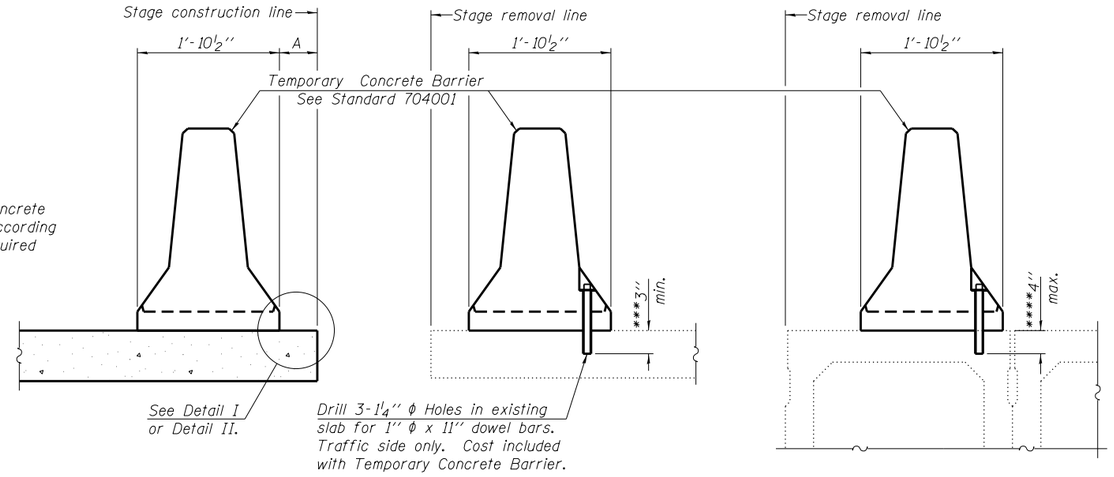
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 8ø '1' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:34PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 3 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	39
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

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



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7' 'x "W" steel PL to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

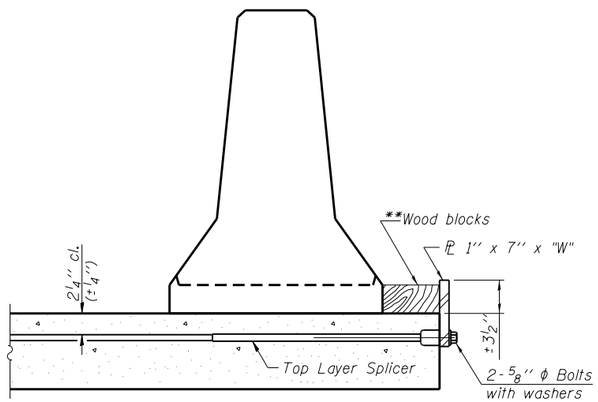
Cost of anchorage is included with Temporary Concrete Barrier.

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

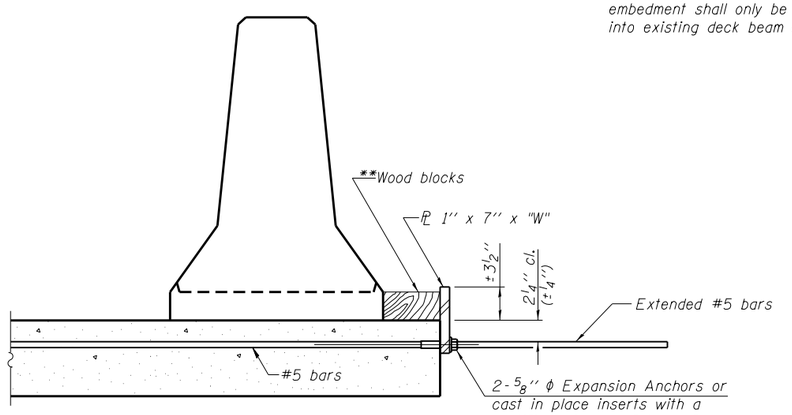
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



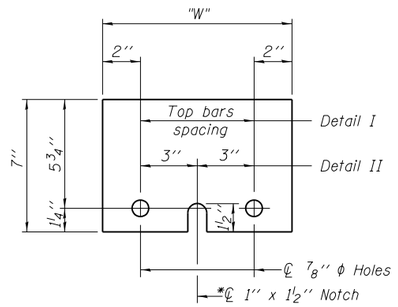
DETAIL I



DETAIL II

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

"W" = Top bars spacing + 4"



STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

R-27

7-1-10

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

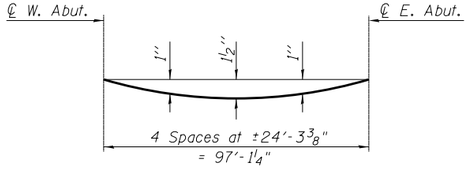
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.0000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:36PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 059-0515
SHEET NO. 4 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	40
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

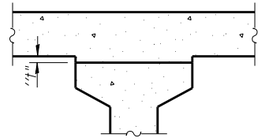
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d5905l5-72a19-004-tcb.dgn
CB PROJECT NO 10005-1



DEAD LOAD DEFLECTION DIAGRAM

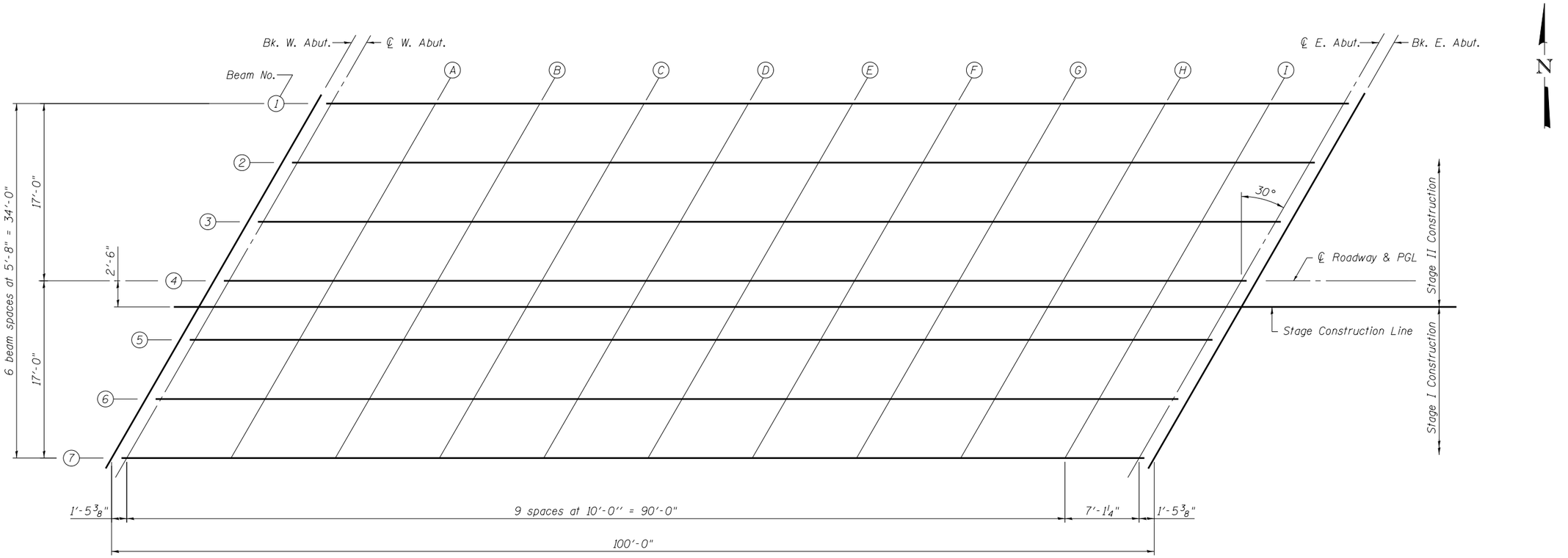
(Includes weight of concrete, excluding beams).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 6 of 22.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on sheet 6 of 22, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



PLAN

PI-E 7-1-10

Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703	USER NAME = sparksgw	DESIGNED - CME	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = 10.8 '' / in.	DRAWN - MML	REVISED -
	PLOT DATE = Oct-19-2012 02:14:37PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 059-0515
SHEET NO. 5 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	41
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

FILE NAME = c:\pw_work\pwidot\sparksgw\d0322252\D590515-72A19-005-tos-plan.dgn
CB PROJECT NO. 10005-1

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91441.61	-17.00	603.64	603.64
℄ West Abut.	91443.06	-17.00	603.64	603.64
A	91453.06	-17.00	603.60	603.64
B	91463.06	-17.00	603.58	603.65
C	91473.06	-17.00	603.58	603.68
D	91483.06	-17.00	603.59	603.70
E	91493.06	-17.00	603.61	603.73
F	91503.06	-17.00	603.65	603.76
G	91513.06	-17.00	603.71	603.80
H	91523.06	-17.00	603.77	603.84
I	91533.06	-17.00	603.86	603.89
℄ East Abut.	91540.17	-17.00	603.93	603.93
Bk. East Abut.	91541.61	-17.00	603.94	603.94

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91438.34	-11.33	603.77	603.77
℄ West Abut.	91439.79	-11.33	603.76	603.76
A	91449.79	-11.33	603.72	603.76
B	91459.79	-11.33	603.70	603.77
C	91469.79	-11.33	603.69	603.79
D	91479.79	-11.33	603.70	603.81
E	91489.79	-11.33	603.72	603.84
F	91499.79	-11.33	603.75	603.86
G	91509.79	-11.33	603.80	603.89
H	91519.79	-11.33	603.86	603.93
I	91529.79	-11.33	603.94	603.97
℄ East Abut.	91536.90	-11.33	604.01	604.01
Bk. East Abut.	91538.34	-11.33	604.02	604.02

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91435.07	-5.67	603.88	603.88
℄ West Abut.	91436.51	-5.67	603.87	603.87
A	91446.51	-5.67	603.82	603.86
B	91456.51	-5.67	603.79	603.87
C	91466.51	-5.67	603.78	603.88
D	91476.51	-5.67	603.78	603.90
E	91486.51	-5.67	603.80	603.92
F	91496.51	-5.67	603.83	603.94
G	91506.51	-5.67	603.87	603.96
H	91516.51	-5.67	603.93	603.99
I	91526.51	-5.67	604.00	604.03
℄ East Abut.	91533.63	-5.67	604.07	604.07
Bk. East Abut.	91535.07	-5.67	604.08	604.08

BEAM 4, ℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91431.80	0.00	603.98	603.98
℄ West Abut.	91433.24	0.00	603.97	603.97
A	91443.24	0.00	603.93	603.96
B	91453.24	0.00	603.89	603.96
C	91463.24	0.00	603.87	603.97
D	91473.24	0.00	603.87	603.98
E	91483.24	0.00	603.88	604.00
F	91493.24	0.00	603.90	604.02
G	91503.24	0.00	603.94	604.04
H	91513.24	0.00	604.00	604.06
I	91523.24	0.00	604.07	604.09
℄ East Abut.	91530.36	0.00	604.13	604.13
Bk. East Abut.	91531.80	0.00	604.14	604.14

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91430.35	2.50	603.95	603.95
℄ West Abut.	91431.80	2.50	603.94	603.94
A	91441.80	2.50	603.89	603.93
B	91451.80	2.50	603.86	603.93
C	91461.80	2.50	603.84	603.93
D	91471.80	2.50	603.83	603.94
E	91481.80	2.50	603.84	603.96
F	91491.80	2.50	603.86	603.97
G	91501.80	2.50	603.90	603.99
H	91511.80	2.50	603.95	604.01
I	91521.80	2.50	604.02	604.04
℄ East Abut.	91528.92	2.50	604.07	604.07
Bk. East Abut.	91530.35	2.50	604.09	604.09

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91428.53	5.67	603.91	603.91
℄ West Abut.	91429.97	5.67	603.91	603.91
A	91439.97	5.67	603.85	603.89
B	91449.97	5.67	603.81	603.88
C	91459.97	5.67	603.79	603.89
D	91469.97	5.67	603.78	603.90
E	91479.97	5.67	603.78	603.90
F	91489.97	5.67	603.80	603.92
G	91499.97	5.67	603.84	603.93
H	91509.97	5.67	603.89	603.95
I	91519.97	5.67	603.95	603.98
℄ East Abut.	91527.09	5.67	604.01	604.01
Bk. East Abut.	91528.52	5.67	604.02	604.02

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91425.25	11.33	603.85	603.85
℄ West Abut.	91426.70	11.33	603.84	603.84
A	91436.70	11.33	603.78	603.82
B	91446.70	11.33	603.73	603.81
C	91456.70	11.33	603.71	603.81
D	91466.70	11.33	603.69	603.81
E	91476.70	11.33	603.69	603.81
F	91486.70	11.33	603.71	603.82
G	91496.70	11.33	603.74	603.83
H	91506.70	11.33	603.78	603.85
I	91516.70	11.33	603.84	603.87
℄ East Abut.	91523.82	11.33	603.89	603.89
Bk. East Abut.	91525.25	11.33	603.91	603.91

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. West Abut.	91421.98	17.00	603.76	603.76
℄ West Abut.	91423.43	17.00	603.75	603.75
A	91433.43	17.00	603.68	603.72
B	91443.43	17.00	603.63	603.71
C	91453.43	17.00	603.60	603.70
D	91463.43	17.00	603.58	603.70
E	91473.43	17.00	603.58	603.70
F	91483.43	17.00	603.59	603.70
G	91493.43	17.00	603.61	603.70
H	91503.43	17.00	603.65	603.72
I	91513.43	17.00	603.71	603.73
℄ East Abut.	91520.54	17.00	603.76	603.76
Bk. East Abut.	91521.98	17.00	603.77	603.77

PI-E1

7-1-10

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-006-tos-elev.dgn
CB PROJECT NO 10005-1

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 02.000 '1' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:38PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 059-0515
SHEET NO. 6 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	42
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

NORTH EDGE OF SHOULDER

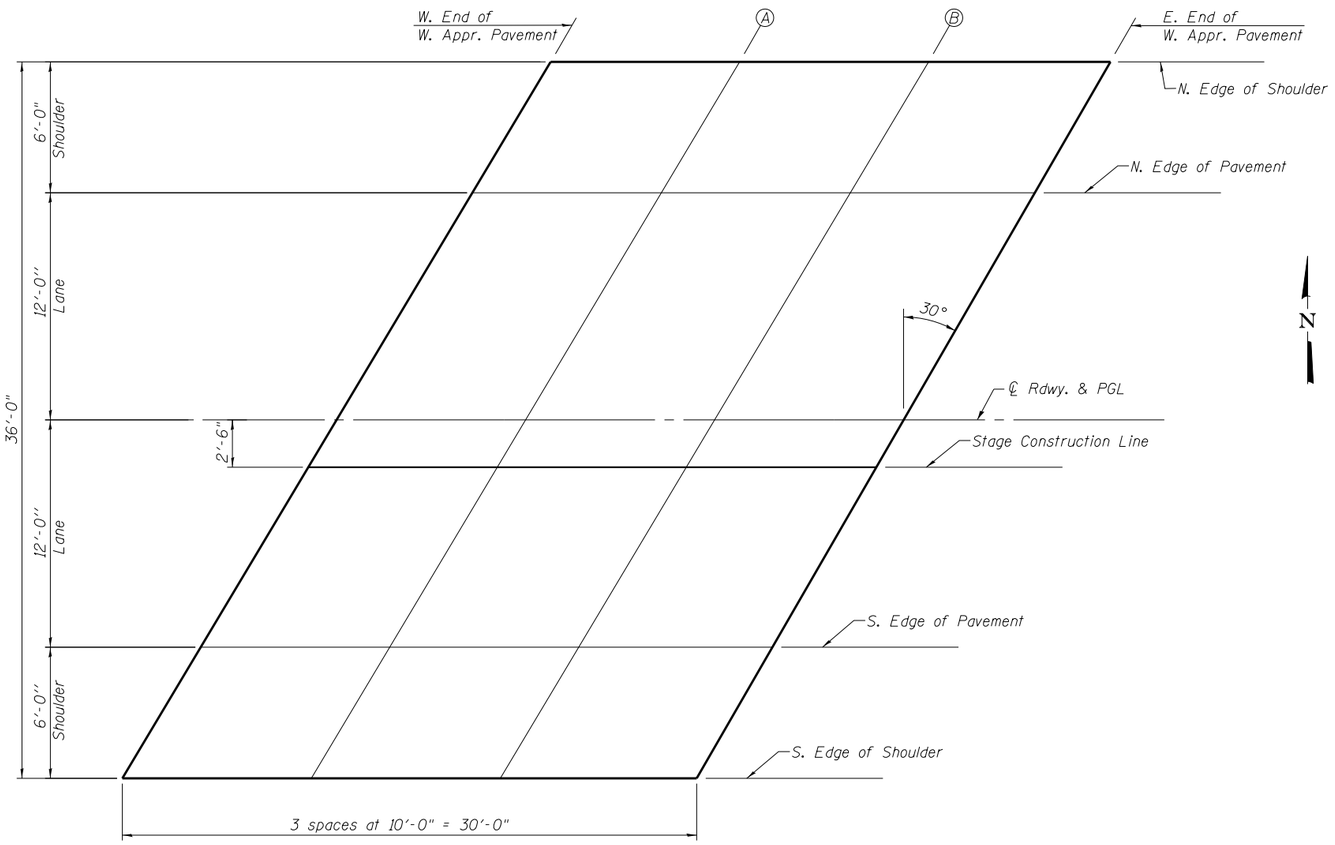
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91412.19	-18.00	603.81
A	91422.19	-18.00	603.73
B	91432.19	-18.00	603.67
E. End W. Approach	91442.19	-18.00	603.62

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91408.73	-12.00	603.97
A	91418.73	-12.00	603.88
B	91428.73	-12.00	603.81
E. End W. Approach	91438.73	-12.00	603.76

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91401.80	0.00	604.23
A	91411.80	0.00	604.13
B	91421.80	0.00	604.05
E. End W. Approach	91431.80	0.00	603.98



PLAN

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91400.35	2.50	604.20
A	91410.35	2.50	604.10
B	91420.35	2.50	604.02
E. End W. Approach	91430.35	2.50	603.95

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91394.87	12.00	604.11
A	91404.87	12.00	604.01
B	91414.87	12.00	603.92
E. End W. Approach	91424.87	12.00	603.84

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	91391.40	18.00	604.03
A	91401.40	18.00	603.92
B	91411.40	18.00	603.82
E. End W. Approach	91421.40	18.00	603.74

PA-E

7-1-10

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 02.0000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:40PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 059-0515
SHEET NO. 7 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	43
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

FILE NAME = c:\pw_work\pwdot\sparksgw\d0325252\D590515-72A19-007-tos-w-appr.dgn
CB PROJECT NO 18005-1

NORTH EDGE OF SHOULDER

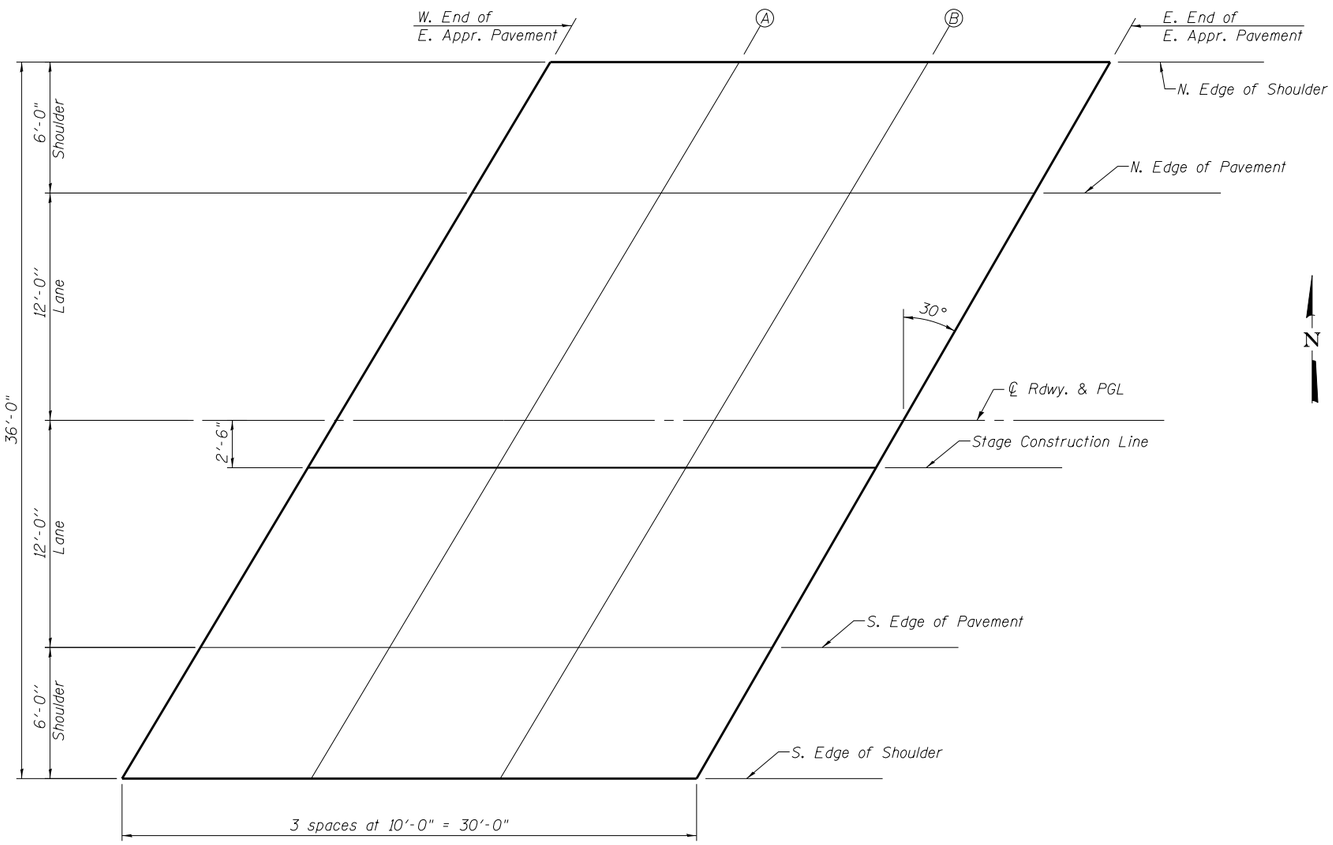
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91542.19	-18.00	603.93
A	91552.19	-18.00	604.04
B	91562.19	-18.00	604.17
E. End E. Approach	91572.19	-18.00	604.31

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91538.73	-12.00	604.02
A	91548.73	-12.00	604.12
B	91558.73	-12.00	604.24
E. End E. Approach	91568.73	-12.00	604.38

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91531.80	0.00	604.14
A	91541.80	0.00	604.24
B	91551.80	0.00	604.35
E. End E. Approach	91561.80	0.00	604.47



PLAN

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91530.35	2.50	604.09
A	91540.35	2.50	604.18
B	91550.35	2.50	604.29
E. End E. Approach	91560.35	2.50	604.42

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91524.87	12.00	603.89
A	91534.87	12.00	603.98
B	91544.87	12.00	604.08
E. End E. Approach	91554.87	12.00	604.20

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	91521.40	18.00	603.74
A	91531.40	18.00	603.82
B	91541.40	18.00	603.92
E. End E. Approach	91551.40	18.00	604.03

PA-E

7-1-10

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

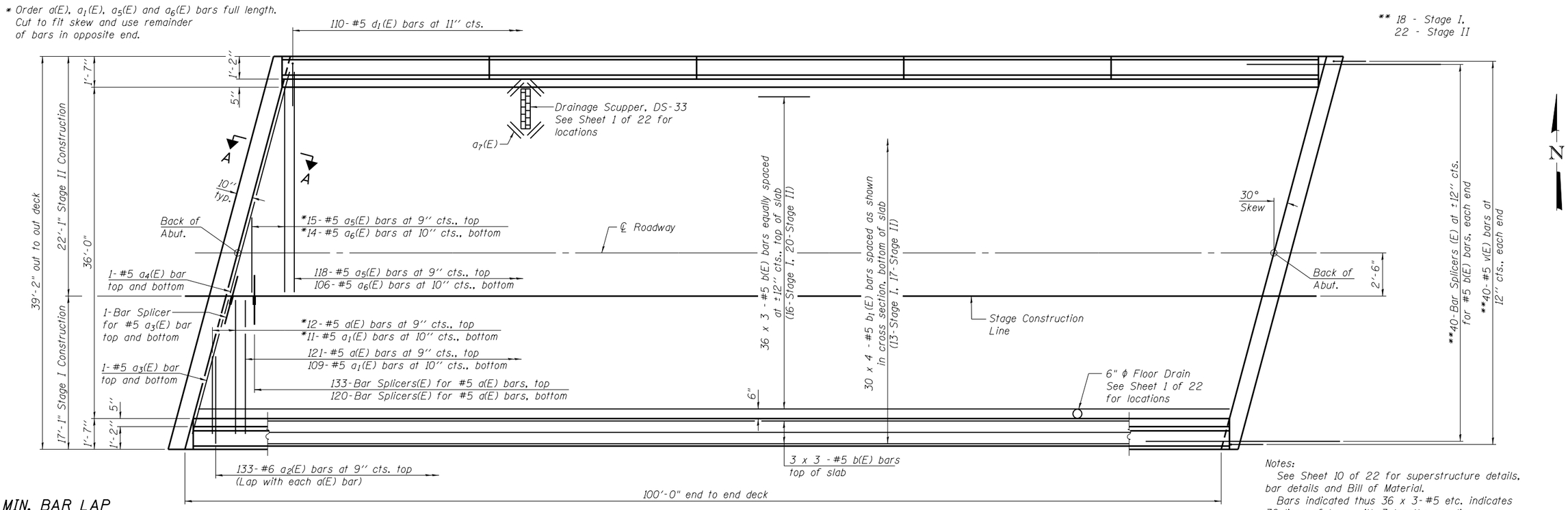
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.0000 ':' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:42PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 059-0515
SHEET NO. 8 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	44
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-008-tos-e-appr.dgn
CB PROJECT NO 100205-1

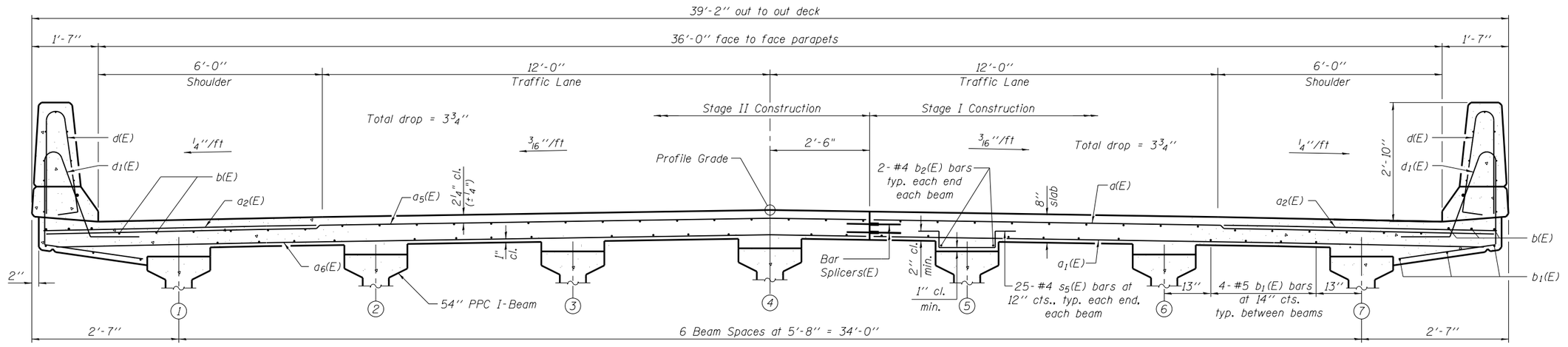


MIN. BAR LAP

#5 bar = 2'-7"

PLAN

Notes:
See Sheet 10 of 22 for superstructure details, bar details and Bill of Material.
Bars indicated thus 36 x 3-#5 etc. indicates 36 lines of bars with 3 lengths per line.
See Sheet 10 of 22 for parapet reinforcement.
See Sheets 10 and 14 of 22 for deck drain and scupper details.
See Sheet 11 of 22 for Section A-A and diaphram details.
See Sheet 21 of 22 for Bar Splicer Assembly Details.



CROSS SECTION

(Looking East)

PII-1-L 1-27-12

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

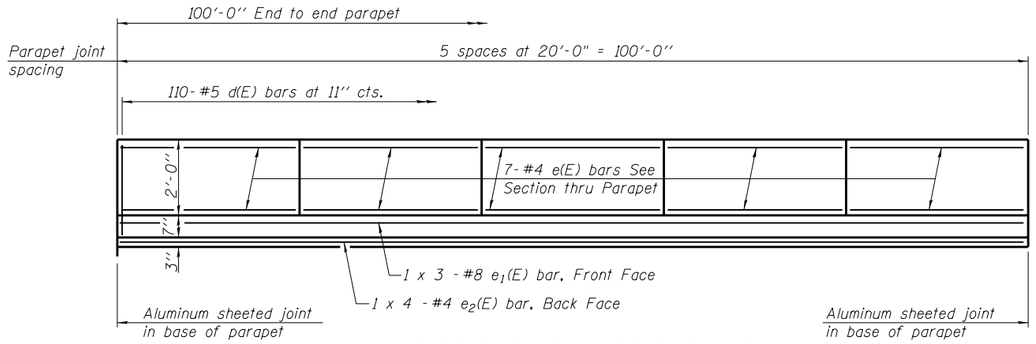
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.000 '/ / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:43PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

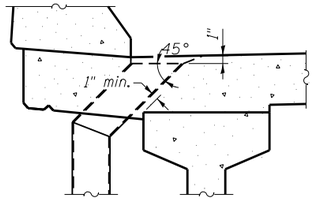
SUPERSTRUCTURE
STRUCTURE NO. 059-0515
SHEET NO. 9 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	45
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

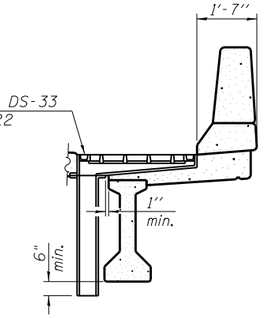
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-009-super-str.dgn
CB PROJECT NO 10085-1



INSIDE ELEVATION OF PARAPET

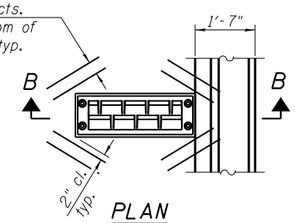


DETAIL A



Notes: Cut longitudinal reinforcement to clear drainage scuppers.
See Sheet 1 of 22 for scupper locations.

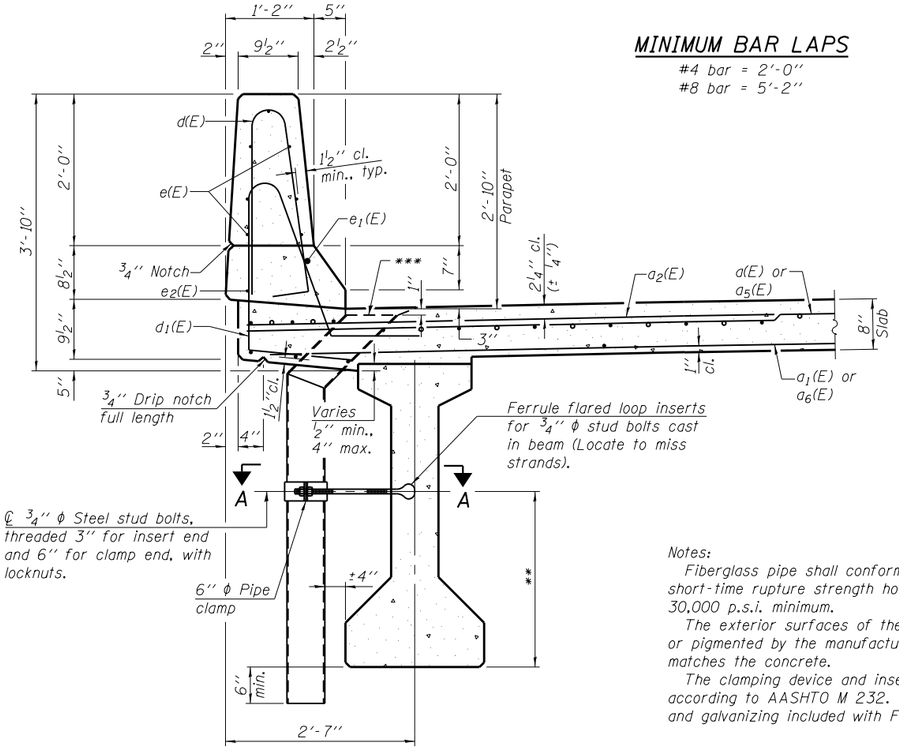
SECTION B-B



PLAN
DETAIL AT SCUPPER LOCATIONS

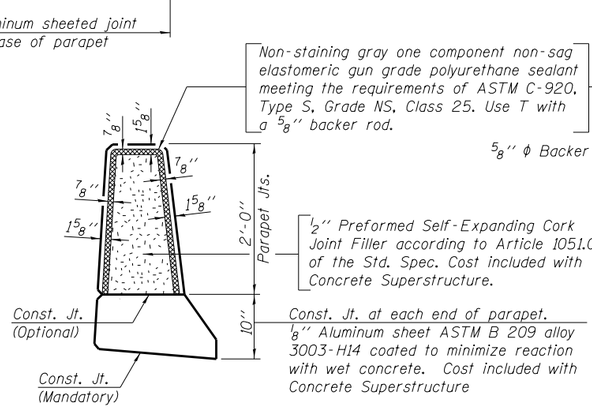
MINIMUM BAR LAPS

#4 bar = 2'-0"
#8 bar = 5'-2"

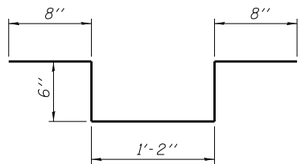


SECTION THRU PARAPET

**For insert locations see sheet 16 of 22.
***Angle drain as required, see Detail A.



PARAPET JOINT DETAILS



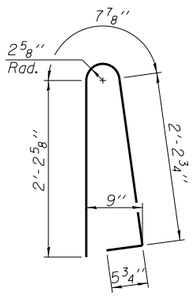
BAR s5(E)

SUPERSTRUCTURE BILL OF MATERIAL

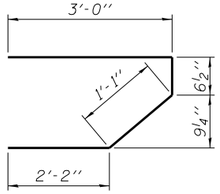
Bar	No.	Size	Length	Shape
d(E)	133	#5	16'-7"	——
a1(E)	120	#5	16'-0"	——
a2(E)	266	#6	6'-6"	——
a3(E)	4	#5	19'-1"	——
a4(E)	4	#5	24'-11"	——
a5(E)	133	#5	21'-7"	——
a6(E)	120	#5	21'-0"	——
a7(E)	48	#5	2'-0"	——
b(E)	126	#5	35'-0"	——
b1(E)	120	#5	26'-11"	——
b2(E)	28	#4	25'-0"	——
d(E)	220	#5	5'-7"	
d1(E)	220	#5	6'-11"	
e(E)	70	#4	19'-8"	——
e1(E)	6	#8	36'-8"	——
e2(E)	8	#4	26'-5"	——
m(E)	10	#6	19'-4"	——
m1(E)	10	#6	25'-2"	——
m2(E)	28	#6	8'-9"	——
m3(E)	4	#6	1'-6"	——
m4(E)	12	#6	4'-1"	——
s(E)	72	#5	6'-10"	⊐
s1(E)	60	#4	12'-10"	⊓
s5(E)	350	#4	3'-6"	⊔
v(E)	80	#5	3'-9"	⌐
Reinforcement Bars, Epoxy Coated			Lbs.	29,040
Concrete Superstructure			Cu. Yds.	171.9

Bars indicated thus 1 x 3 -#8 etc. indicates 1 line of bars with 3 lengths per line.

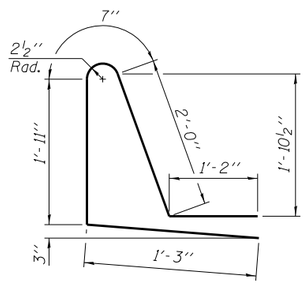
Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.
The clamping device and inserts shall be galvanized according to AASHTO M 232. Cost of clamping device and galvanizing included with Floor Drains.



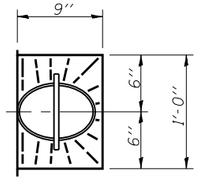
BAR d(E)



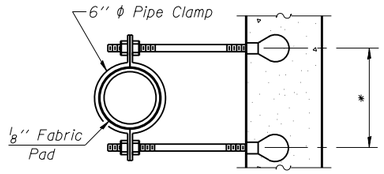
BAR s(E)



BAR d1(E)

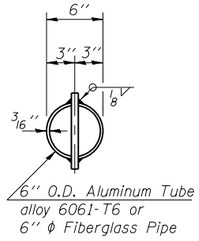


TOP PLAN

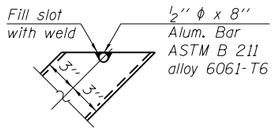


SECTION A-A

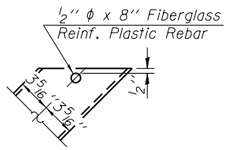
*Dimension as required by Pipe Clamp



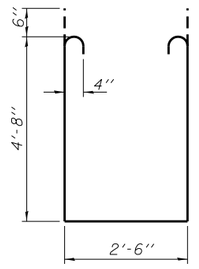
TOP PLAN
(Showing Aluminum Tube)



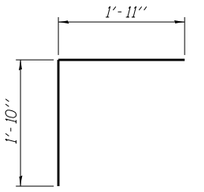
ALUMINUM TUBE



FIBERGLASS PIPE



BAR s1(E)



BAR v(E)

PI-I-D 7-1-10

FILE NAME = c:\pw_work\pwidot\sparksgw\d0326252\D590515-72A19-010-super-det.dgn
CB PROJECT NO 10205-1

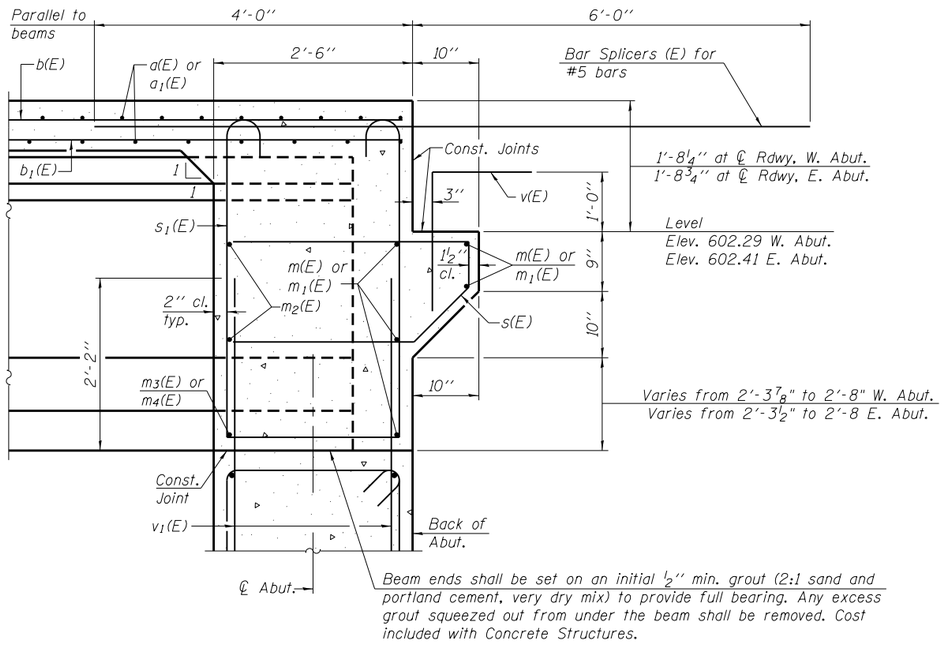
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -	
	CHECKED - MCB	REVISED -	
PLOT SCALE = 0:2.0000 '' / in.	DRAWN - MML	REVISED -	
PLOT DATE = Oct-19-2012 02:14:45PM	CHECKED - MCB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 10 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	46
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



SECTION A-A

Dimensions at right angles to abutment, except as shown.

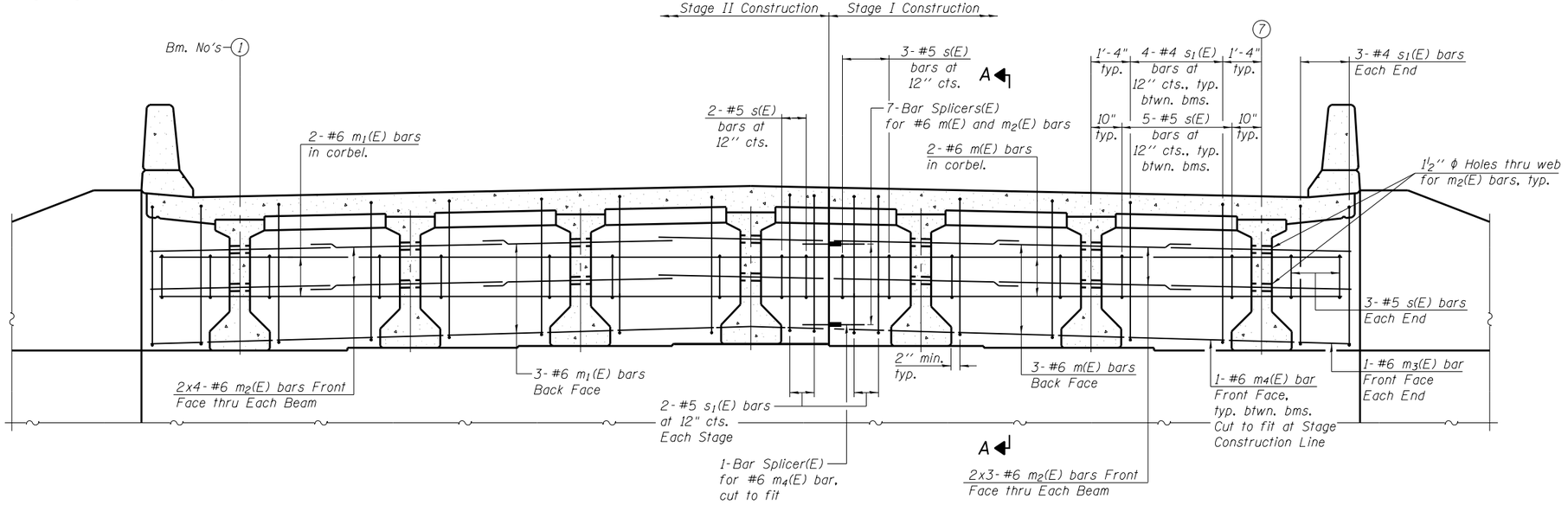
Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 22.

Concrete in diaphragm is included with Concrete Superstructure on sheet 10 of 22.

For details of bars s(E) and s_1(E) see sheet 10 of 22.

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



DIAPHRAGM ELEVATION AT ABUTMENT

East Abutment looking east

MIN. BAR LAP

#6 bar = 3'-4"

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-011-diaphragm.dgn
CB PROJECT NO 10005-1

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

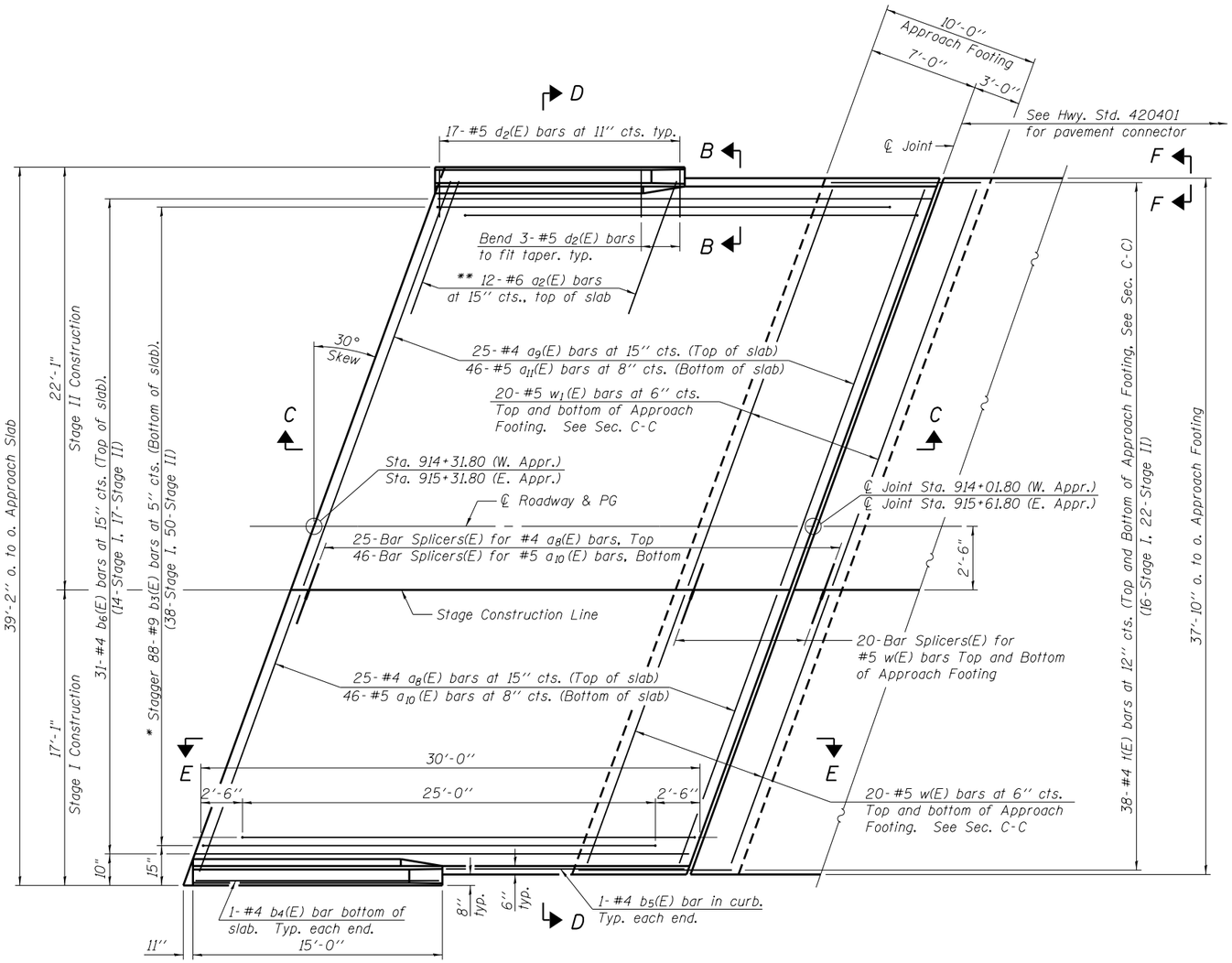
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0.2.0000 ':' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:46PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 11 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	47
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

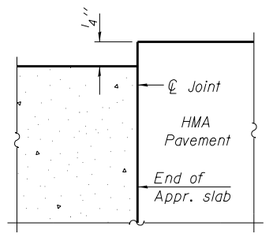
Notes:
See sheet 13 of 22 for Sections C-C & D-D and View E-E.
a_5(E) thru a_8(E) bar spacings measured along ℄ Rdwy.



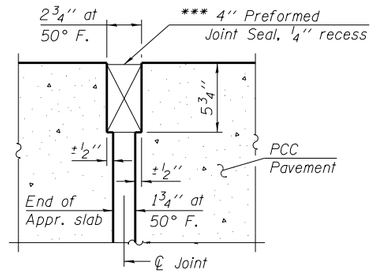
PLAN
(Showing East Approach Slab)
(West Approach Slab Similar)

* Tilt #9 b_3(E) bars as required to maintain clearance.
** Space between a_8(E) and a_9(E) bars, typ. each parapet.

*** Cost included with Concrete Superstructure.

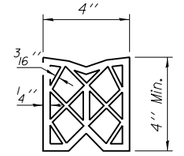


FLEXIBLE PAVEMENT

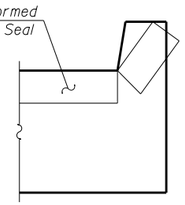


RIGID PAVEMENT

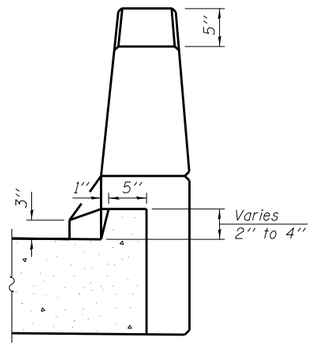
DETAIL A



PREFORMED JOINT SEAL



VIEW F-F
Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

BA-L 1-27-12

(Sheet 1 of 2)

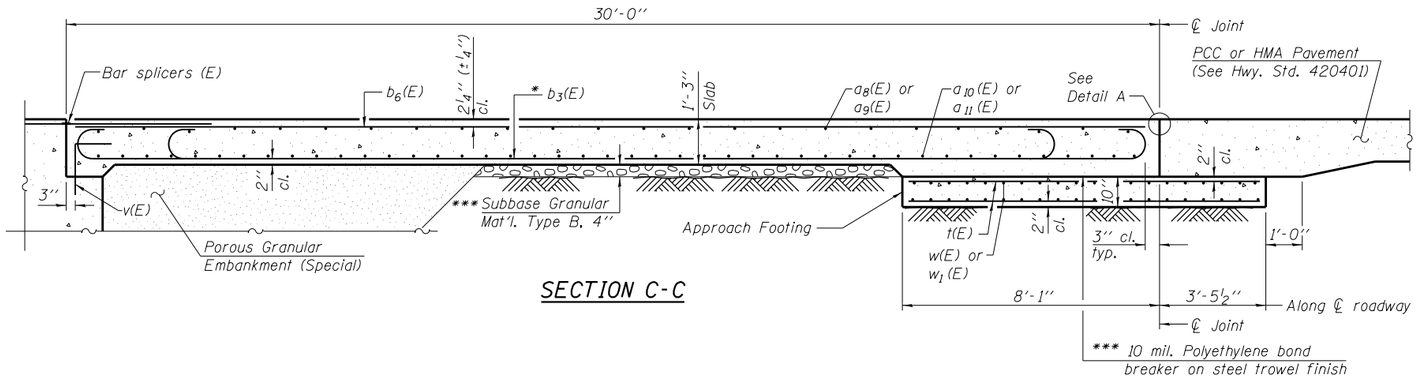
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703	USER NAME = sparksgw	DESIGNED - CME	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = 0:2.000 '' / in.	DRAWN - MML	REVISED -
	PLOT DATE = Oct-19-2012 02:14:47PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

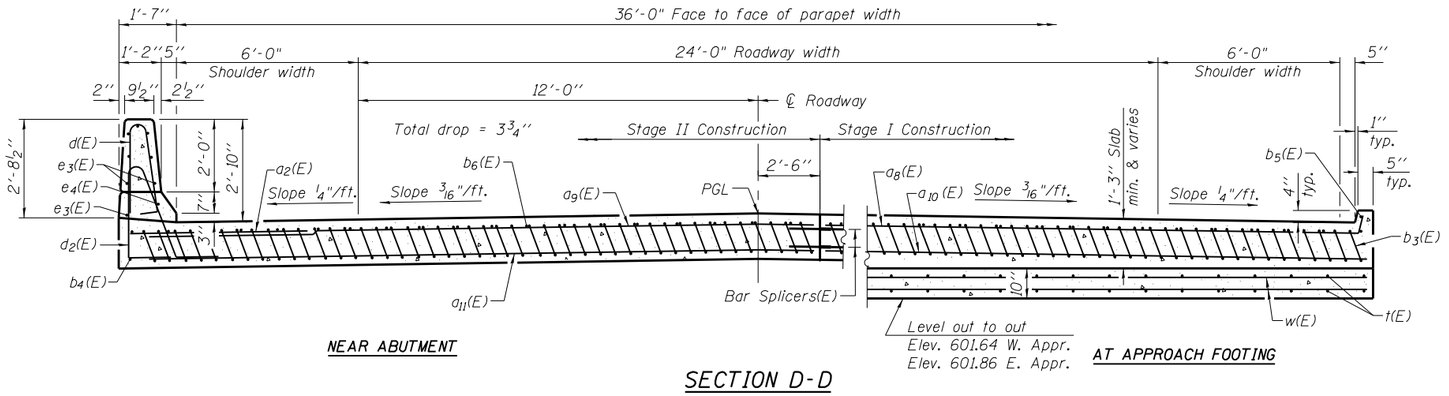
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 12 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	48
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-B12-appr.dgn
CB PROJECT NO 120095-1

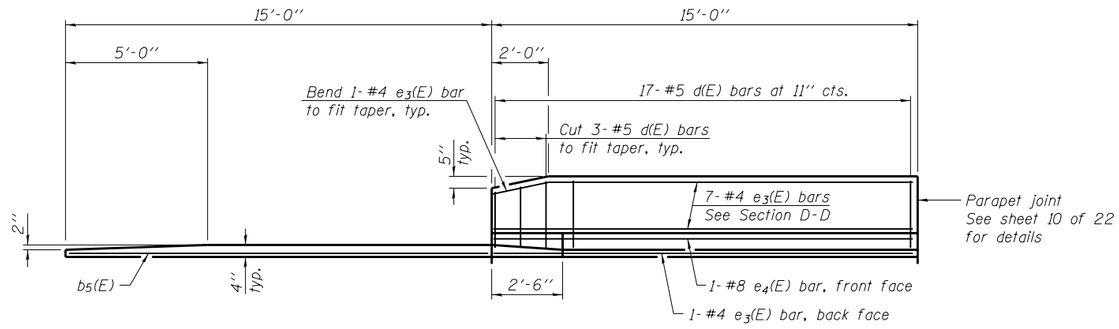


SECTION C-C

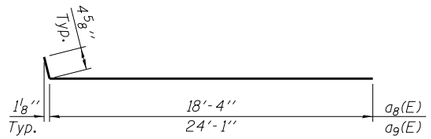


SECTION D-D

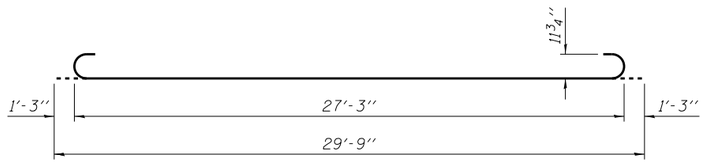
(See Plan for dimensions not shown)



VIEW E-E



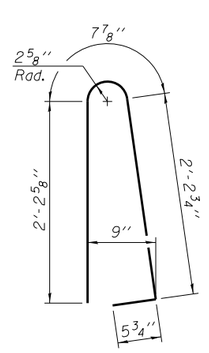
BARS $a_8(E)$ or $a_9(E)$



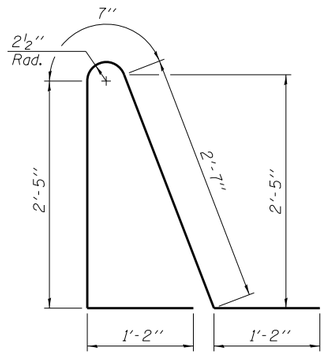
BAR $b_3(E)$

Notes:

See sheet 12 of 22 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 10 of 22.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 21 of 22.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 22.
For additional parapet details, see sheet 10 of 22.



BAR d(E)



BAR $d_2(E)$

* Tilt #9 $b_3(E)$ bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_2(E)$	48	#6	6'-6"	
$a_8(E)$	50	#4	18'-9"	
$a_9(E)$	50	#4	24'-6"	
$a_{10}(E)$	92	#5	18'-7"	
$a_{11}(E)$	92	#5	24'-4"	
$b_3(E)$	176	#9	29'-9"	
$b_4(E)$	4	#4	14'-8"	
$b_5(E)$	4	#4	14'-2"	
$b_6(E)$	62	#4	29'-8"	
$d(E)$	68	#5	5'-7"	
$d_2(E)$	68	#5	7'-11"	
$e_3(E)$	32	#4	14'-8"	
$e_4(E)$	4	#8	14'-8"	
$t(E)$	152	#4	11'-2"	
$w(E)$	80	#5	18'-7"	
$w_1(E)$	80	#5	24'-4"	
Concrete Superstructure			Cu. Yd.	121.1
Concrete Structures			Cu. Yd.	26.9
** Reinforcement Bars, Epoxy Coated			Pound	31,280

** 26,570 Superstructure
4,710 Substructure

BA-L 1-27-12

(Sheet 2 of 2)

FILE NAME = c:\pw_work\pwdot\sparksgw\d0325252\D590515-72A19-013-appr-det.dgn
CB PROJECT NO 12005-1

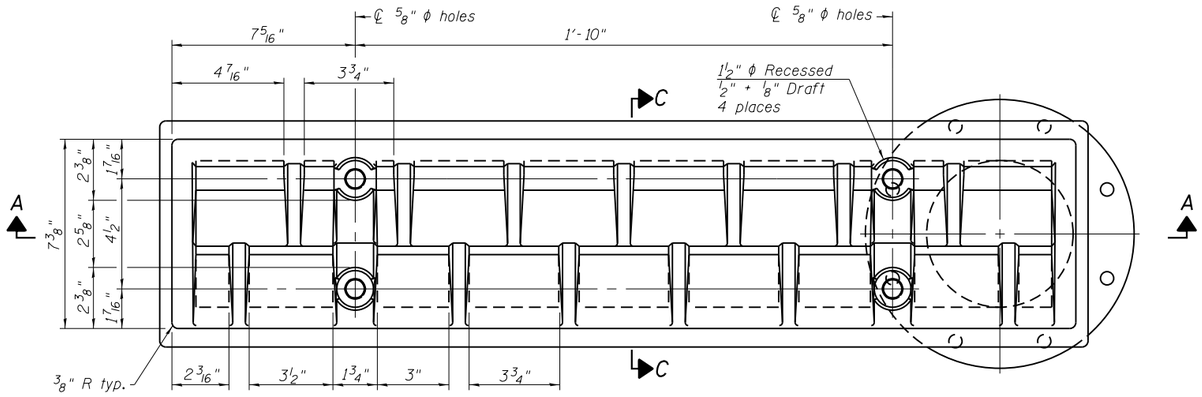
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 02.000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:50PM	CHECKED - MCB	REVISED -

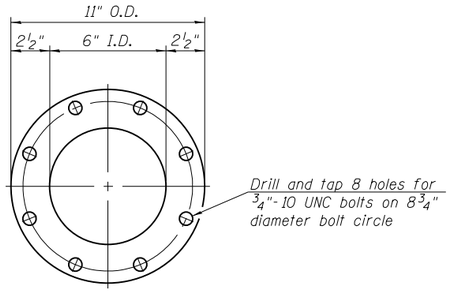
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 13 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	49
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		



PLAN



VIEW B-B

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

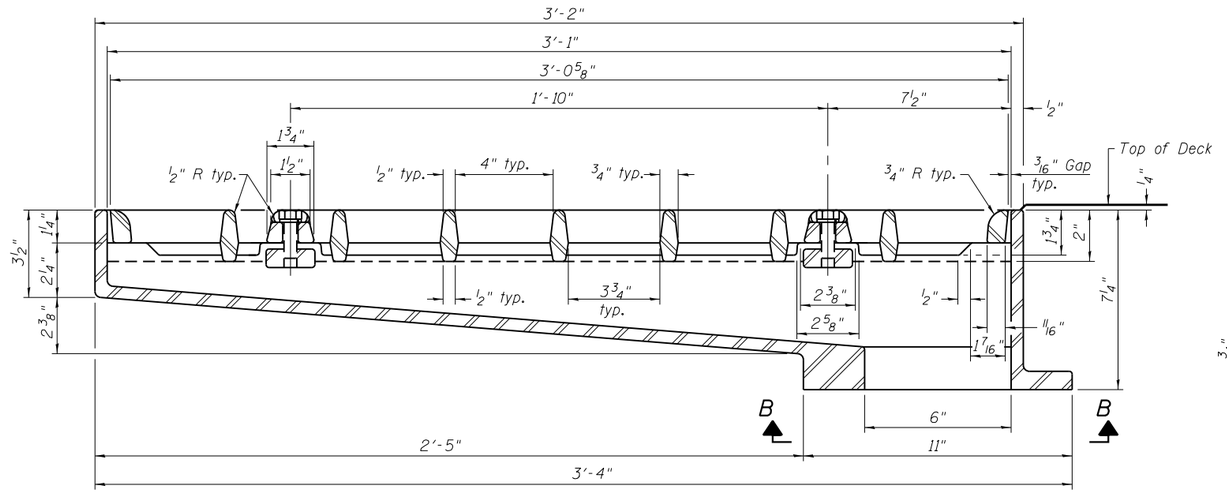
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

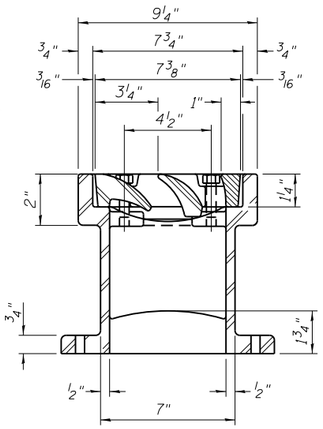
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-33.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

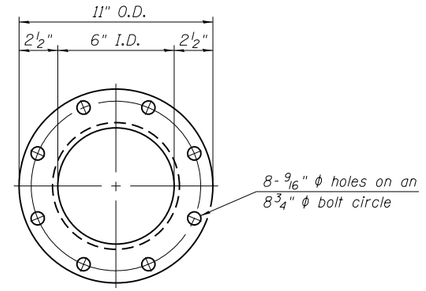


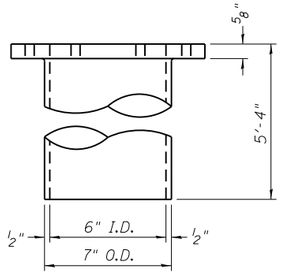
SECTION A-A

See sheet 10 of 22 for scupper location relative to parapet.

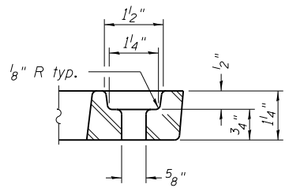


SECTION C-C

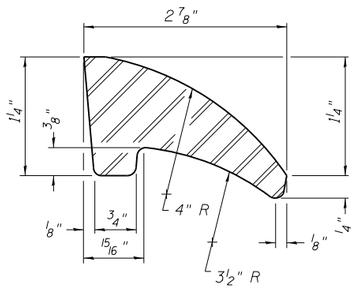




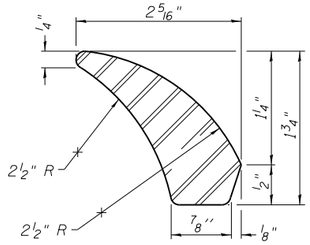
DOWNSPOUT



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	6

DS-33 7-1-10

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-014-scupper.dgn
CB PROJECT NO 10085-1

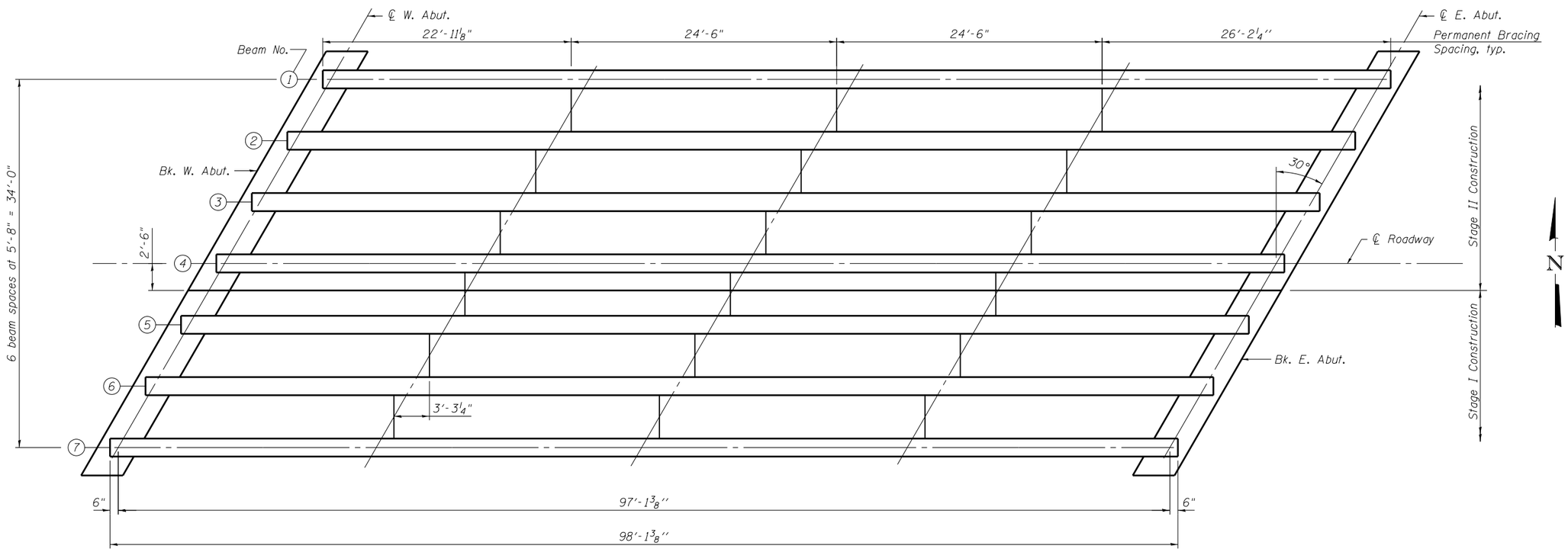
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.0000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:52PM	CHECKED - MCB	REVISED -

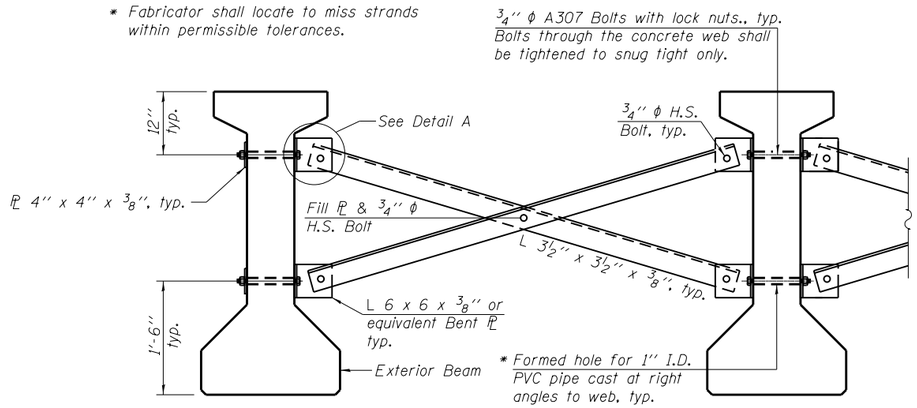
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-33
STRUCTURE NO. 059-0515
SHEET NO. 14 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	50
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



PLAN



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

Two hardened washers are required for each set of oversized holes.

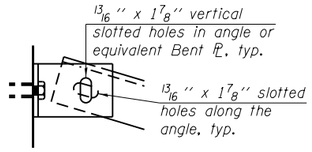
All holes shall be $^{15}/_{16}$"ϕ unless otherwise noted.

$^{5}/_{16}$" x 3" x 3" plate washers are required over all slotted holes.

All bolts shall be galvanized according to AASHTO M232.

Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.



DETAIL A

PERMANENT BRACING DETAIL

INTERIOR BEAM MOMENT TABLE		0.5 Sp.
I	(in^4)	213,715
I'	(in^4)	471,963
S_b	(in^3)	8559
S_b'	(in^3)	12,447
S_t	(in^3)	7362
S_t'	(in^3)	29,348
DC1	(k/')	1.23
M_{DC1}	('k)	1450
DC2	(k/')	0.15
M_{DC2}	('k)	177
DW	(k/')	0.26
M_{DW}	('k)	307
M_{L+IM}	('k)	1441

INTERIOR BEAM REACTION TABLE		Abut.
R_{DC1}	(k)	60
R_{DC2}	(k)	7
R_{DW}	(k)	13
R_{L+IM}	(k)	85
R_{Total}	(k)	165

I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_b': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_t: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
S_t': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft).
M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-015-framing.dgn
CB PROJECT NO 10085-1

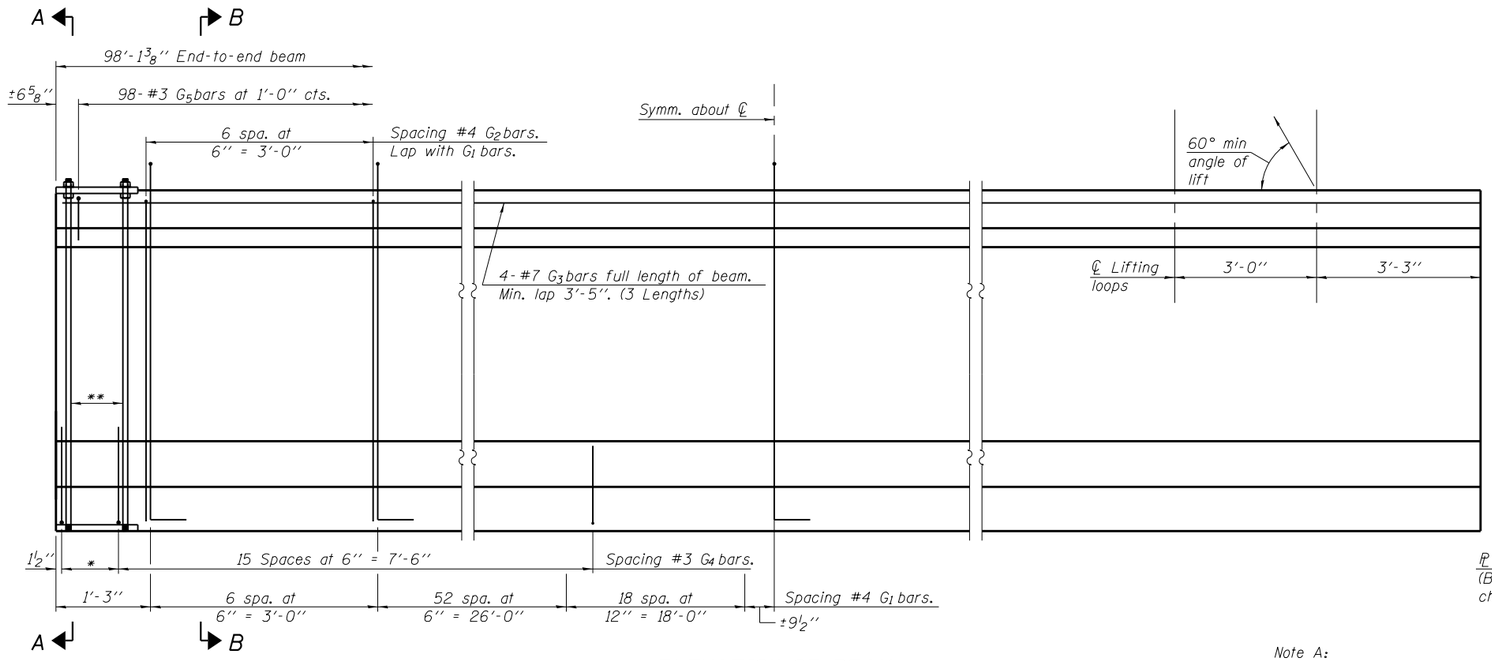
Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB/RKM	REVISED -
PLOT SCALE = 10⌀8.000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:53PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

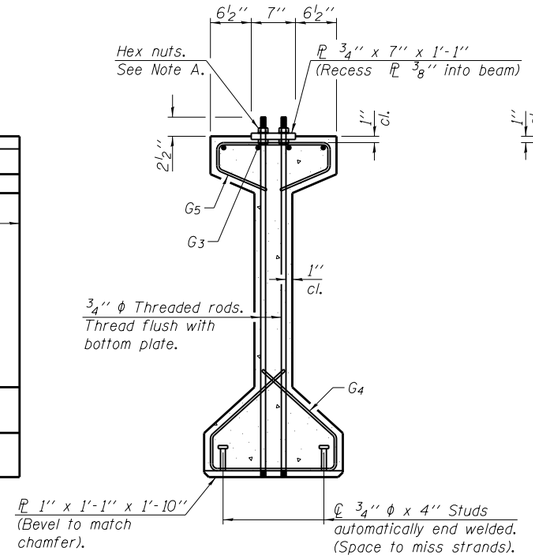
FRAMING PLAN
STRUCTURE NO. 059-0515
SHEET NO. 15 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	51
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

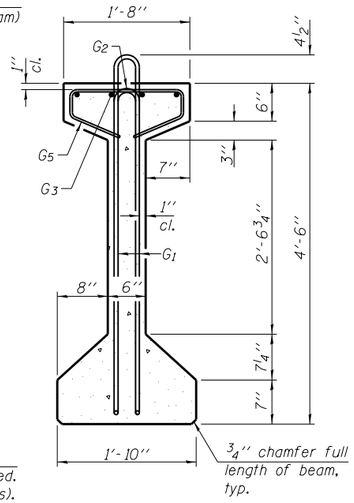


ELEVATION OF BEAM
(Showing reinforcement & dimensions)

* 3 spaces at 3" = 9".
** 4-3/4" ϕ threaded dowel rods at 3" cts., Each Face.

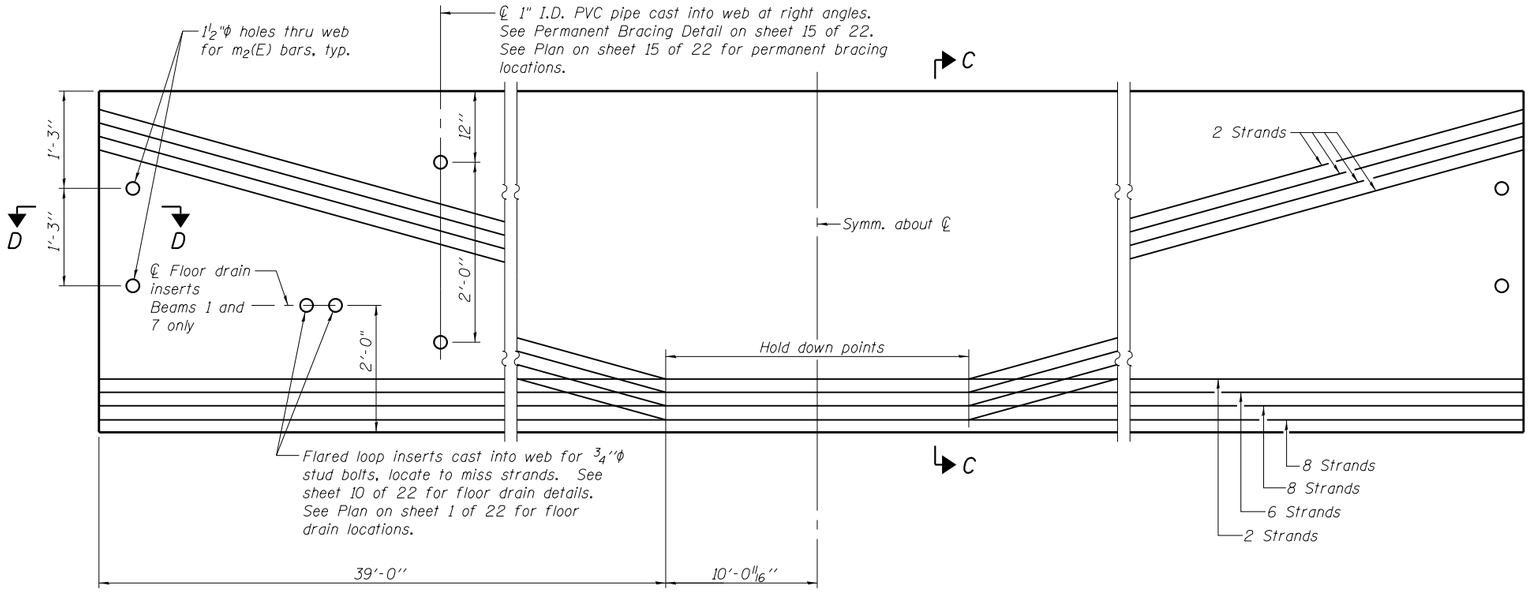


SECTION A-A

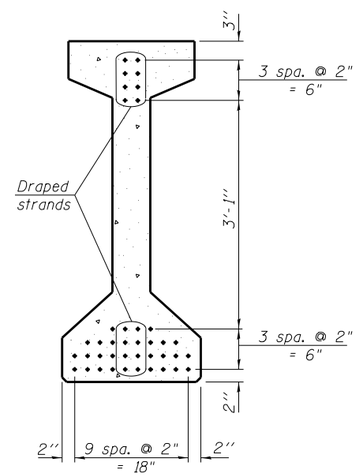


SECTION B-B

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



ELEVATION OF BEAM
(Showing prestressing steel)



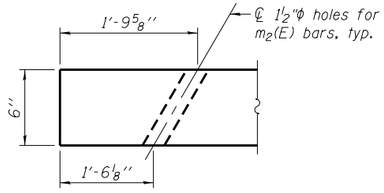
SECTION C-C

***BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G_1	155	#4	10'-5"	
G_2	14	#4	8'-8"	
G_3	12	#7	35'-0"	
G_4	38	#3	4'-11"	
G_5	98	#3	3'-5"	

***For information only

Notes:
See sheet 17 of 22 for additional details and Bill of Material.
Required release strength, f'ci, shall be 6000 psi.



SECTION D-D

PI-4-54 7-1-10

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

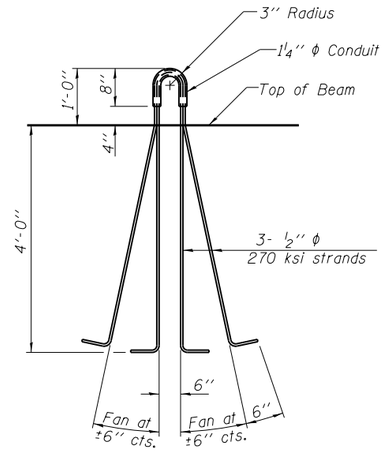
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB/RKM	REVISED -
PLOT SCALE = 0:2.0000 ':' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:55PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

54" PPC I-BEAM
STRUCTURE NO. 059-0515
SHEET NO. 16 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	52
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-016-beam.dgn
CB PROJECT NO 100051



LIFTING LOOP DETAIL

NOTES

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

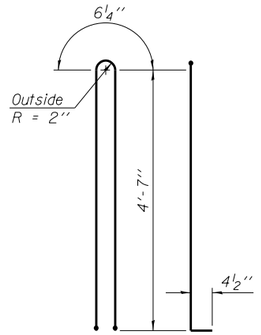
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

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

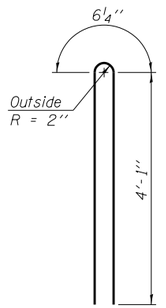
The top and bottom plates shall be AASHTO M270 Grade 50.

The bottom plates and studs shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized.

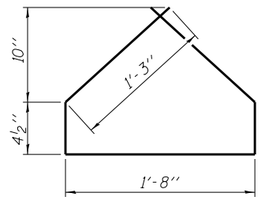
Threaded rods shall be ASTM F 1554 Grade 55.



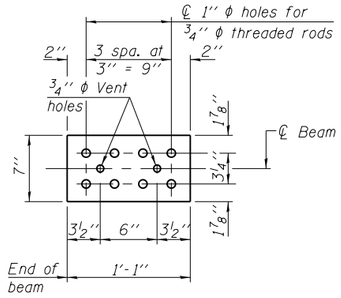
BAR G1



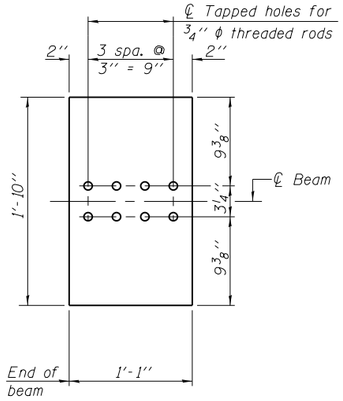
BAR G2



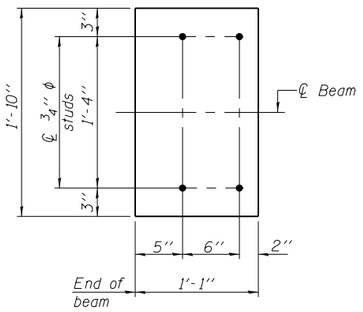
BAR G4



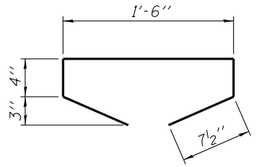
TOP PLATE



BOTTOM PLATE
(Showing threaded rods)



BOTTOM PLATE
(Showing studs)



BAR G5

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 54"	Ft.	687

PI-4-54D 1-28-11

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB/RKM	REVISED -
PLOT SCALE = 0:2.0000 '1' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:14:56PM	CHECKED - MCB	REVISED -

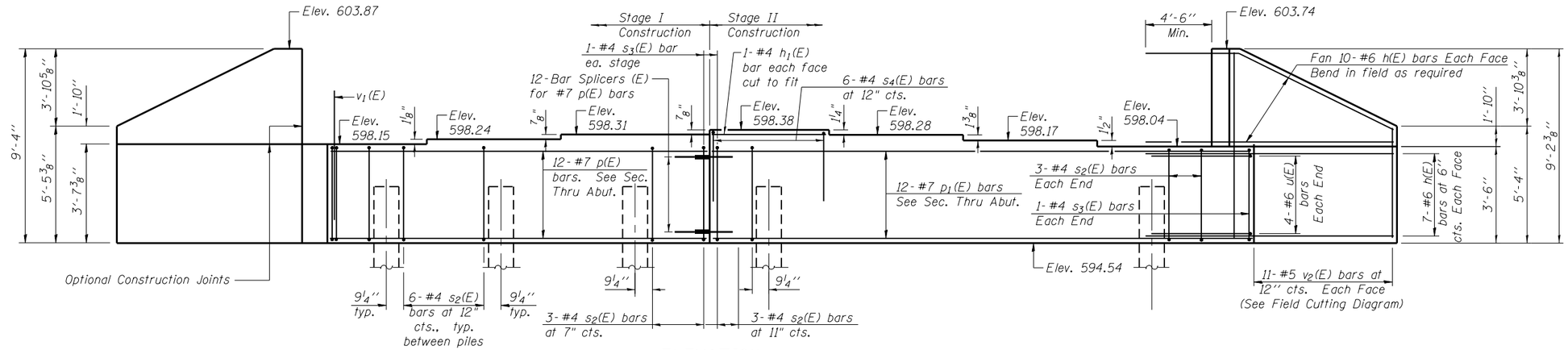
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

54" PPC I-BEAM DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 17 OF 22 SHEETS

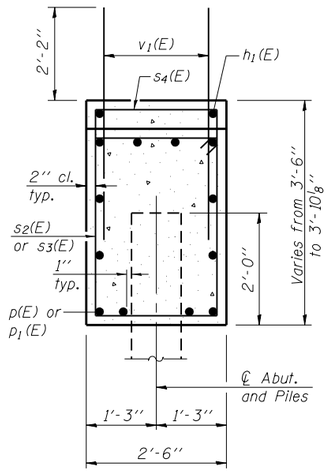
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	53
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-017-beam-det.dgn
CB PROJECT NO 10005-1

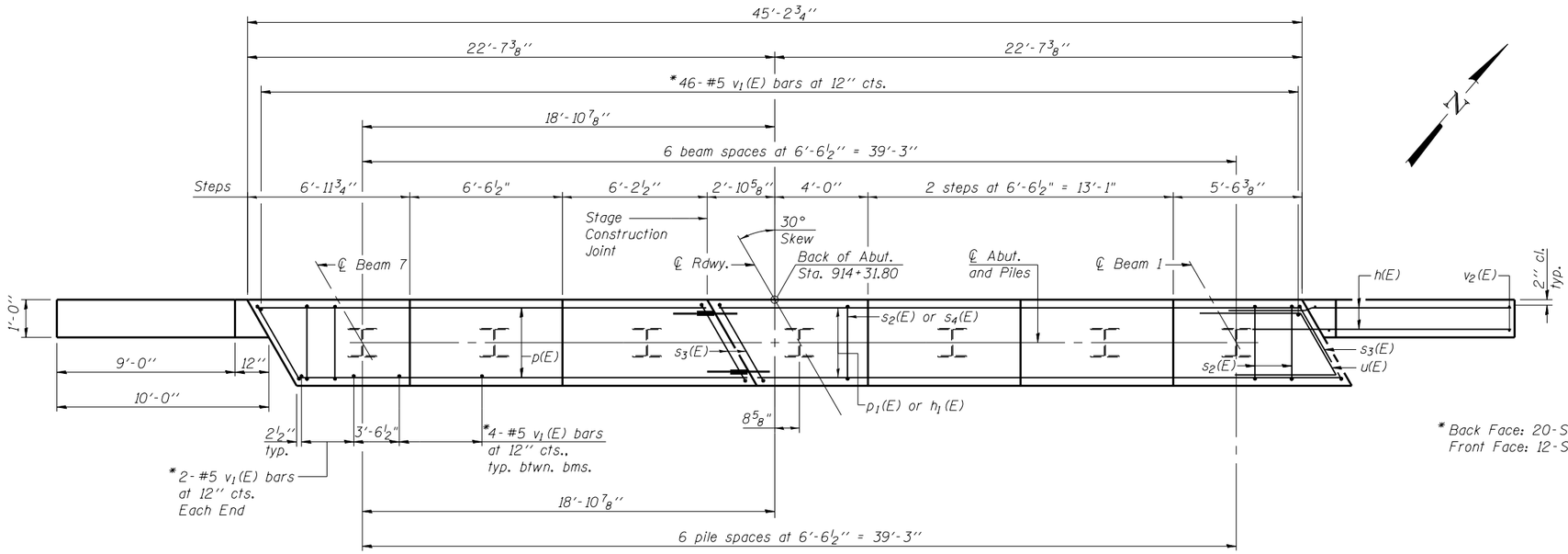
Notes:
Pour steps monolithically with cap.



ELEVATION



SEC. THRU ABUT.



PLAN

* Back Face: 20-Stage I, 26-Stage II;
Front Face: 12-Stage I, 16-Stage II

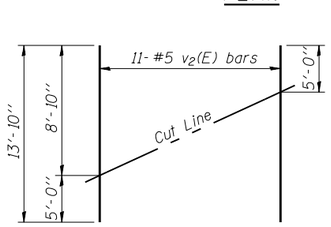
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	68	#6	14'-4"	——
h_1(E)	2	#4	6'-6"	——
p(E)	12	#7	19'-4"	——
p_1(E)	12	#7	25'-2"	——
s_2(E)	42	#4	11'-5"	□
s_3(E)	4	#4	12'-1"	□
s_4(E)	6	#4	6'-2"	⊓
u(E)	8	#6	11'-3"	⌐
* v_1(E)	74	#5	4'-4"	——
v_2(E)	22	#5	13'-10"	——
Structure Excavation		Cu. Yd.	193	
Concrete Structures		Cu. Yd.	20.9	
Reinforcement Bars, Epoxy Coated		Pound	3400	
Furnishing Steel Piles HP 12x53		Foot	180	
Driving Piles		Foot	180	
Test Pile Steel HP 12x53		Each	1	

For details of Bar Splicers, see sheet 21 of 22.
For details of piles, see sheet 20 of 22.

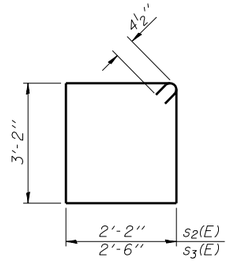
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 k
Factored Resistance Available: 230 k
Est. Length: 30'
No. Production Piles: 6
No. Test Piles: 1

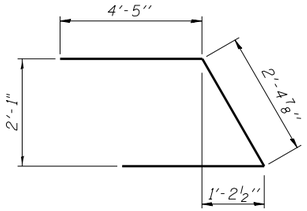


FIELD CUTTING DIAGRAM

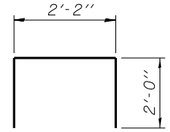
Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s_2(E) & s_3(E)



BAR u(E)



BAR s_4(E)

AI-L 7-1-10

FILE NAME = c:\pw_work\pwdot\sparksgw\d0325252\D590515-72A19-018-w-abut.dgn
CB PROJECT NO 12005-1

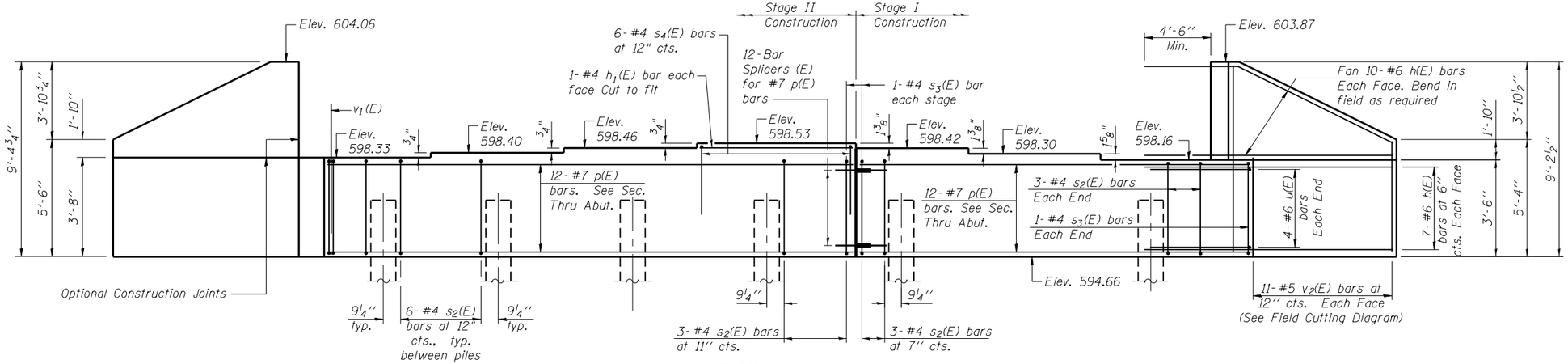
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703	USER NAME = sparksgw	DESIGNED - CME	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = 02.0000 '' / in.	DRAWN - MML	REVISED -
	PLOT DATE = Oct-19-2012 02:14:58PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

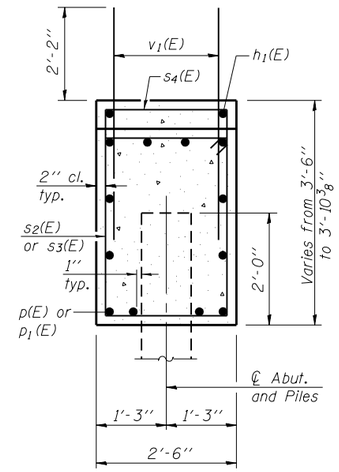
WEST ABUTMENT
STRUCTURE NO. 059-0515
SHEET NO. 18 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	54
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

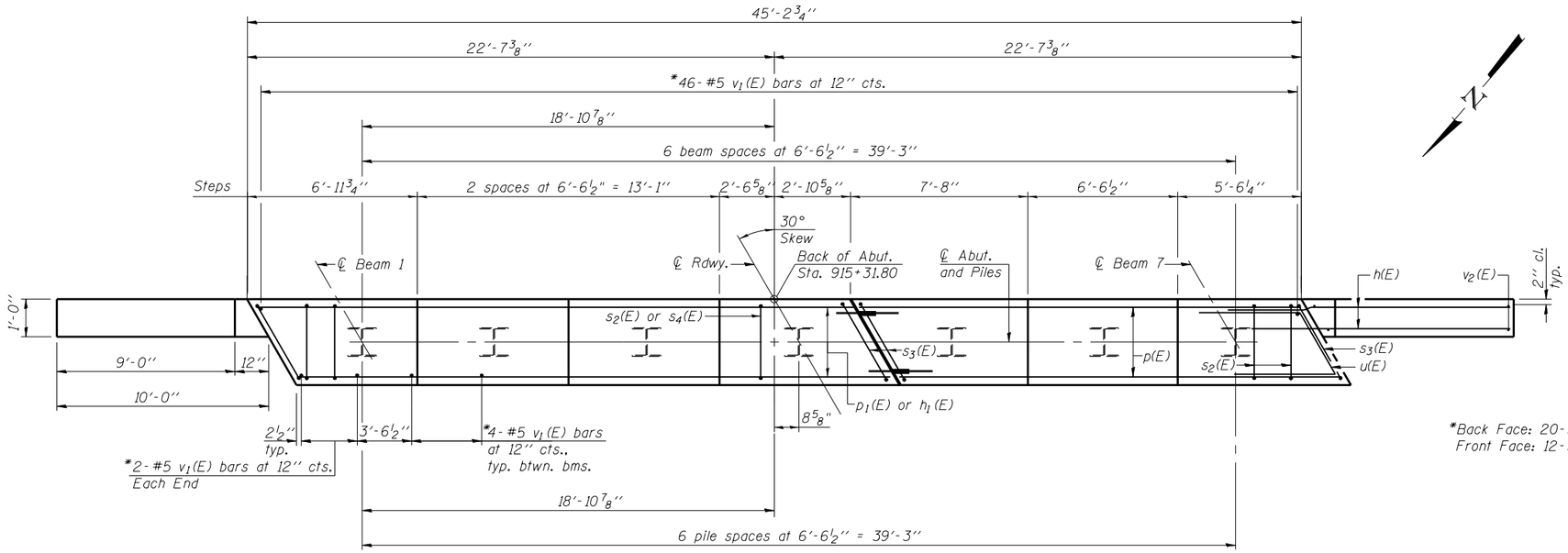
Notes:
Pour steps monolithically with cap.



ELEVATION



SEC. THRU ABUT.



PLAN

*Back Face: 20-Stage I, 26-Stage II;
Front Face: 12-Stage I, 16-Stage II

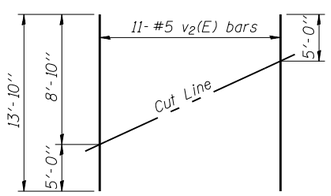
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h(E)	68	#6	14'-4"	——
	h_1(E)	2	#4	6'-6"	——
	p(E)	12	#7	19'-4"	——
	p_1(E)	12	#7	25'-2"	——
	s_2(E)	42	#4	11'-5"	□
	s_3(E)	4	#4	12'-1"	□
	s_4(E)	6	#4	6'-2"	⊓
	u(E)	8	#6	11'-3"	◺
*	v_1(E)	74	#5	4'-4"	——
	v_2(E)	22	#5	13'-10"	——
	Structure Excavation	Cu. Yd.		193	
	Concrete Structures	Cu. Yd.		21.1	
	Reinforcement Bars, Epoxy Coated	Pound		3400	
	Furnishing Steel Piles HP 12x53	Foot		180	
	Driving Piles	Foot		180	
	Test Pile Steel HP 12x53	Each		1	

For details of Bar Splicers, see sheet 21 of 22.
For details of piles, see sheet 20 of 22.

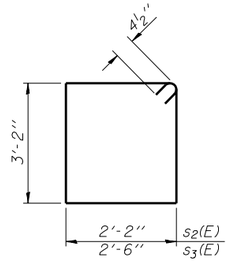
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 k
Factored Resistance Available: 230 k
Est. Length: 30'
No. Production Piles: 6
No. Test Piles: 1

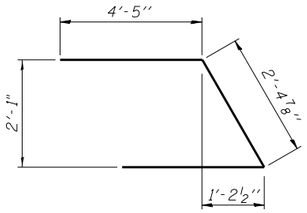


FIELD CUTTING DIAGRAM

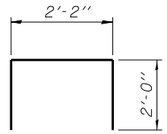
Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s_2(E) & s_3(E)



BAR u(E)



BAR s_4(E)

AI-L 7-1-10

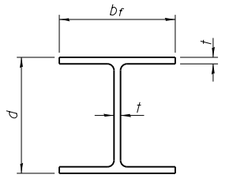
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-019-e-abut.dgn
CB PROJECT NO 12005-1

Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703	USER NAME = sparksgw	DESIGNED - CME	REVISED -
		CHECKED - MCB	REVISED -
	PLOT SCALE = 02.0000 '' / in.	DRAWN - MML	REVISED -
	PLOT DATE = Oct-19-2012 02:14:59PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

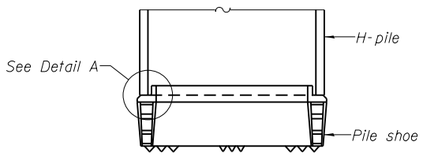
EAST ABUTMENT
STRUCTURE NO. 059-0515
SHEET NO. 19 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	55
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

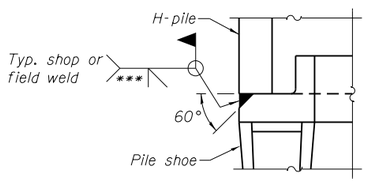


STEEL PILE TABLE

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

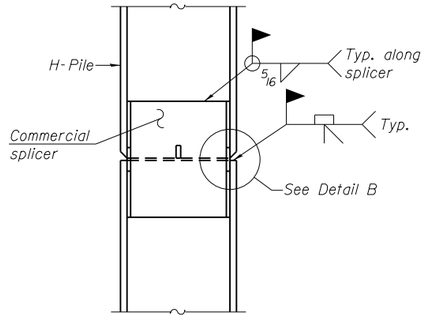


ELEVATION

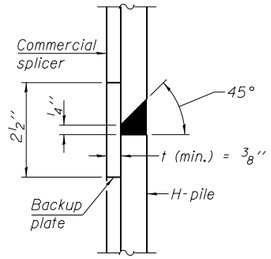


DETAIL A

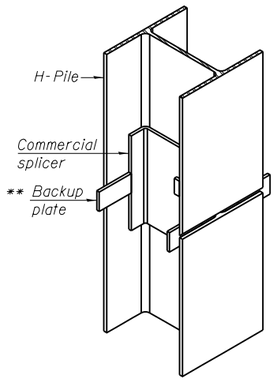
H-PILE SHOE ATTACHMENT



ELEVATION

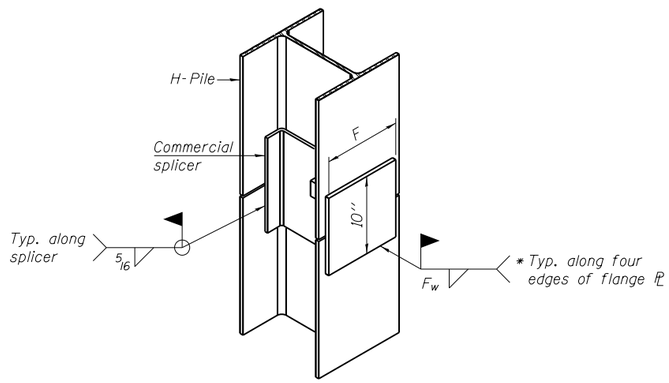


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



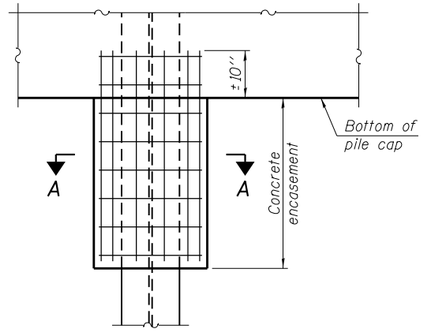
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

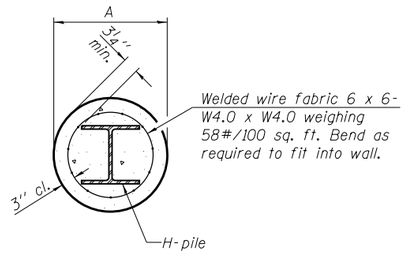
* Interrupt welds 1/4'' from end of web and/or each flange.

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

*** Weld size per pile shoe manufacturer (5/16'' min.).



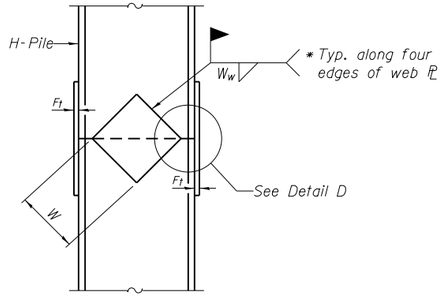
ELEVATION



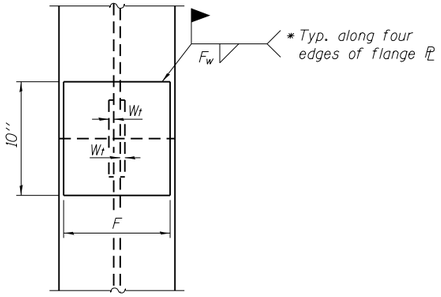
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

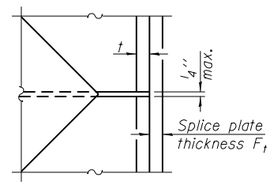
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

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

WELDED PLATE FIELD SPLICE

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

F-HP 1-27-12

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

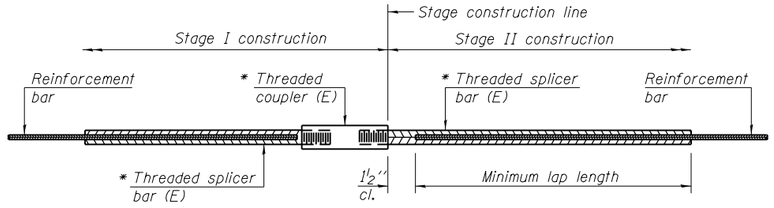
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:15:00PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 20 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	56
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-B20-piles.dgn
CB PROJECT NO 10005-1



STANDARD BAR SPLICER ASSEMBLY

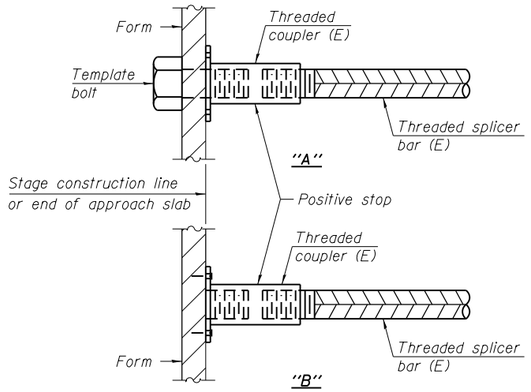
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

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

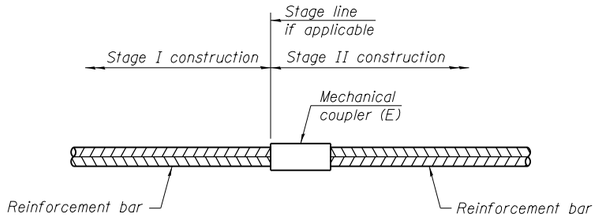
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Slab	#5	257	3
Diaphragms	#6	16	4
Approach Slabs	#4	50	4
Approach Slabs	#5	92	3
Approach Footings	#5	80	3
Abutments	#7	24	4



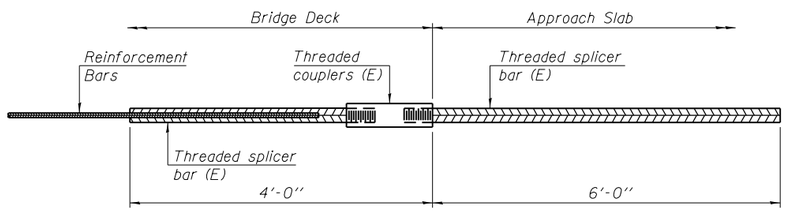
INSTALLATION AND SETTING METHODS

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



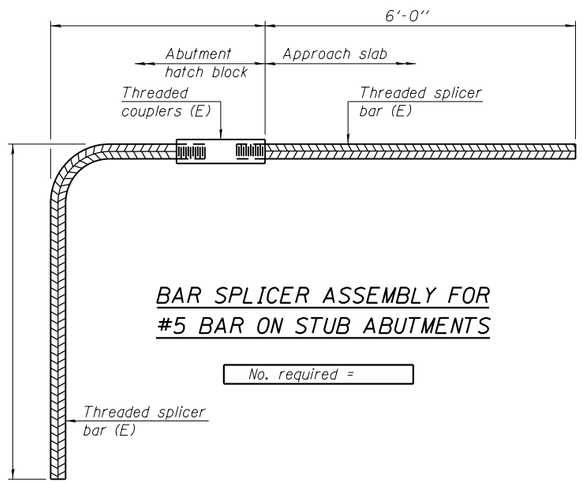
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required = 80



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

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

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

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

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

BSD-1

1-27-12

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\D590515-72A19-021-splicer.dgn
CB PROJECT NO 10005-1

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0.2.0000 '' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:15:02PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 059-0515
SHEET NO. 21 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	57
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
District 6

SOIL BORING LOG

Date 8/31/10

ROUTE FAP 325 DESCRIPTION IL 16 Over Coop Branch LOGGED BY M. Tappan

SECTION 116BR-1 LOCATION SW 1/4, SEC. 19, TWP. 8 N, RNG. 8 W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 059-0515 (Pr) 059-0003 (Ex)
Station 914+82

BORING NO. EA East Abut
Station 915+27
Offset 14.0ft LT
Ground Surface Elev. 603.6 ft

Surface Water Elev. 582.5 ft
Stream Bed Elev. 582.3 ft

Groundwater Elev.:
▽ First Encounter 582.1 ft
▽ Upon Completion Plugged ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
				Grey Dirty CA-6 Fill Poor Recovery
	0			
	1			
601.10	1			
				SILTY CLAY (Fill)
	0			
	1	0.8	21	Greyish Brown Moist
-5	2	B		
	0			
	1	0.6	20	Brown and Grey to Black Moist
595.60	1	B		
				Light Grey Moist SILTY CLAY LOAM (Fill)
	0			
	1	0.8	23	
593.60 -10	2	B		
				SILTY CLAY
	0			
	1	0.4	29	Black Moist
	1	B		
	1			
	2	1.2	24	
-15	3	B		
	1			
	2	1.1	21	Dark Grey
	2	B		
585.10				
	0			Brown and Grey Wet LOAM
-20	0	0.1	24	
	1	B		

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
583.10				Brown and Grey Wet LOAM *(continued)*
	0			Brown and Grey Moist CLAY with 4" Seam Dirty Medium Sandy Gravel
	1	1.2	31	▽
	3	B		FREE WATER
580.60				Brown and Grey Moist Shaley CLAY
	0			
	3	2.8	21	
-25	5	S-10		
575.60				Clayey SHALE
	3			
	8	-	18	Grey Moist Flssile Very Poorly Indurated
-30	11			
	17			
569.10	100/5"	-	9	Grey Dry Fissile
-35				Boring Completed
-40				

File Name:S:\SOILS\JOINT FILES\MACOUPIN\IL 16 OVER COOP BRANCH GPJ Data Template:DIFTEMPLT.GDT Date Printed:9/10/10
Latitude 39°05.998'N Longitude 90°01.552'W Datum NAD83 Job Number D-96-505-08

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 6

SOIL BORING LOG

Date 8/31/10

ROUTE FAP 325 DESCRIPTION IL 16 Over Coop Branch LOGGED BY M. Tappan

SECTION 116BR-1 LOCATION SW 1/4, SEC. 19, TWP. 8 N, RNG. 8 W, 3 PM

COUNTY Macoupin DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 059-0515 (Pr) 059-0003 (Ex)
Station 914+82

BORING NO. WA West Abut.
Station 914+32
Offset 14.0ft RT
Ground Surface Elev. 603.5 ft

Surface Water Elev. 582.5 ft
Stream Bed Elev. 582.3 ft

Groundwater Elev.:
▽ First Encounter 582.0 ft
▽ Upon Completion Plugged ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
				SILTY CLAY (Fill)
	0			
	1	0.5	29	Grey and Brown Moist
-5	2	B		
	0			
	1	0.9	21	
	2	B		
576.00				Clayey SHALE
	0			
	1	0.5	26	Black Moist
-10	1	B		
593.00				
				SILTY CLAY
	1			
	2	0.8	27	Black Moist
	2	S-12		
	1			
	2	1.3	22	
-15	3	B		
	0			
	1	1.0	28	
	2	B		
	W			
	O	0.4	22	Grey Very Moist with Grey Very Moist Loam Seams
-20	H	B		

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Description
583.00				SILTY CLAY *(continued)*
	0			SAND
				▽
	0			Grey Dirty Medium to Coarse
	1			FREE WATER
	0			
	1			Grey Dirty Medium Sandy Gravel
-25	2			
	3			Clayey SHALE
	12	-	15	Grey Moist Poorly Indurated
-30	19			
	10			
569.00	100/5"	-	12	Grey Dry Fissile
-35				Boring Completed
-40				

File Name:S:\SOILS\JOINT FILES\MACOUPIN\IL 16 OVER COOP BRANCH GPJ Data Template:DIFTEMPLT.GDT Date Printed:9/10/10
Latitude 39°05.998'N Longitude 90°01.552'W Datum NAD83 Job Number D-96-505-08

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\059515-72A19-B22-borings.dgn
CB PROJECT NO 10005-1

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

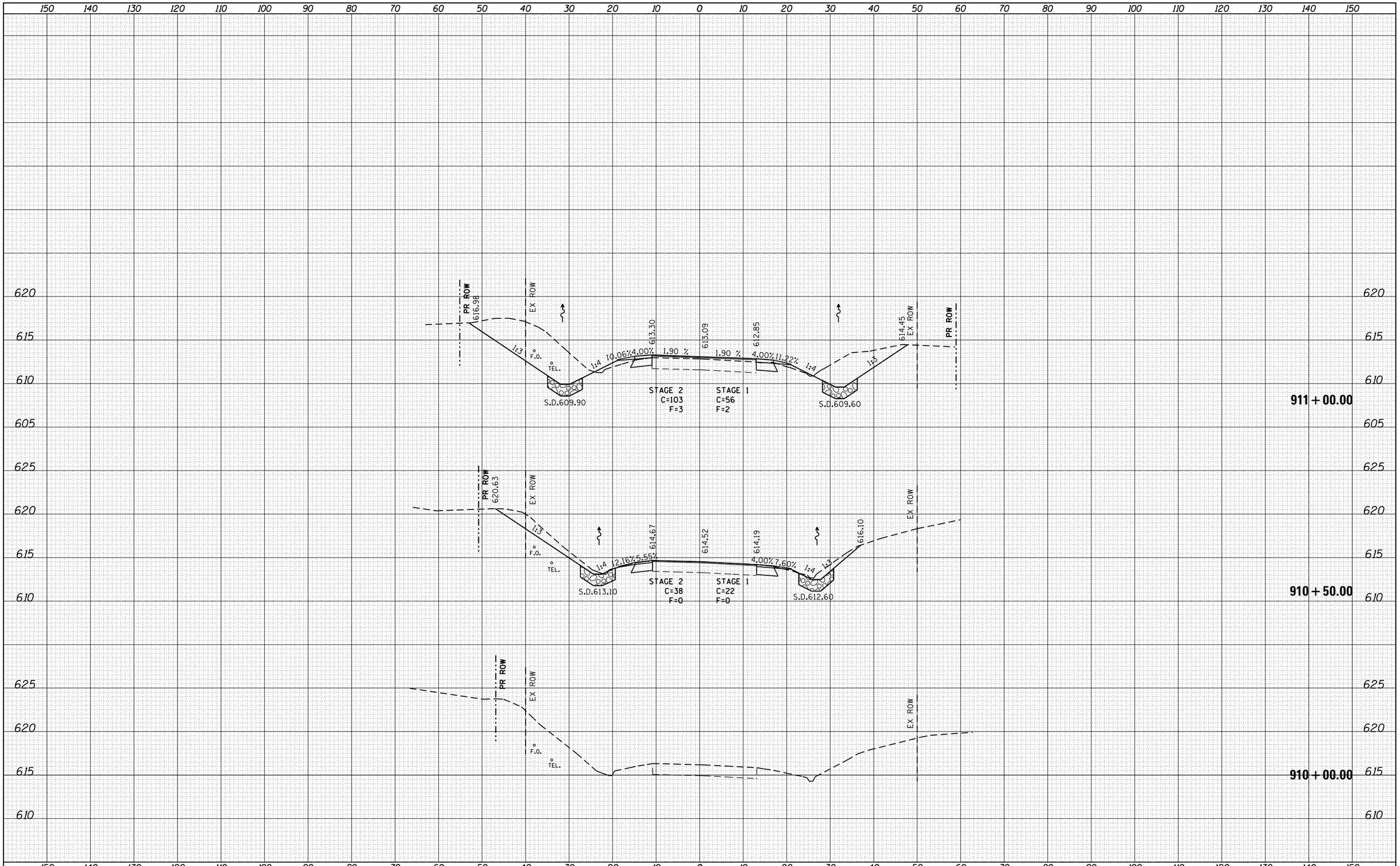
USER NAME = sparksgw	DESIGNED - CME	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.0000 ' / in.	DRAWN - MML	REVISED -
PLOT DATE = Oct-19-2012 02:15:05PM	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 059-0515
SHEET NO. 22 OF 22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	58
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

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



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

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:11PM	DATE - / /	REVISED -

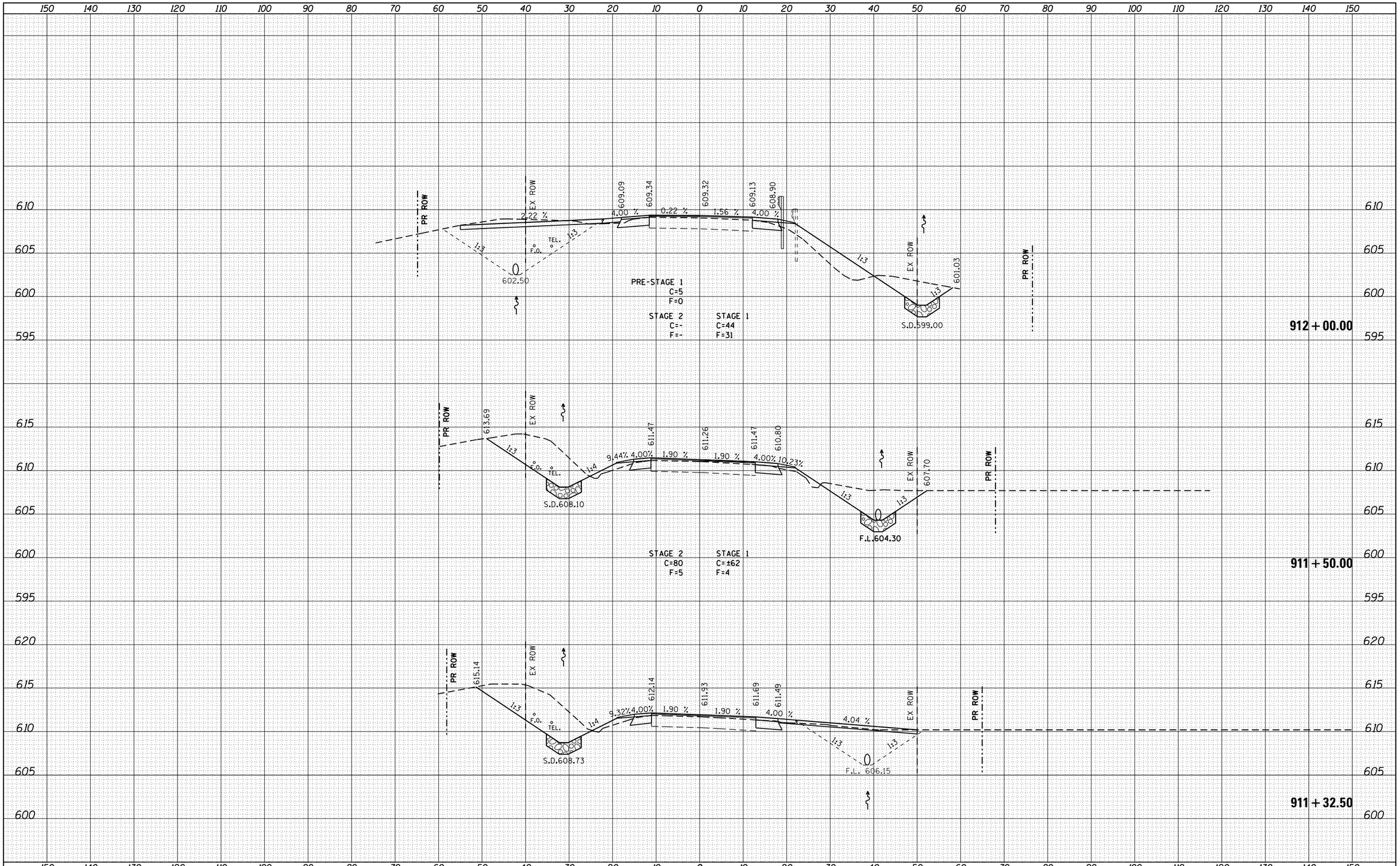
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 1 OF 9 SHEETS | STA. 910+00.00 TO STA. 911+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	59
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

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



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

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	DRAWN -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:11PM	CHECKED -	REVISED -
		DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

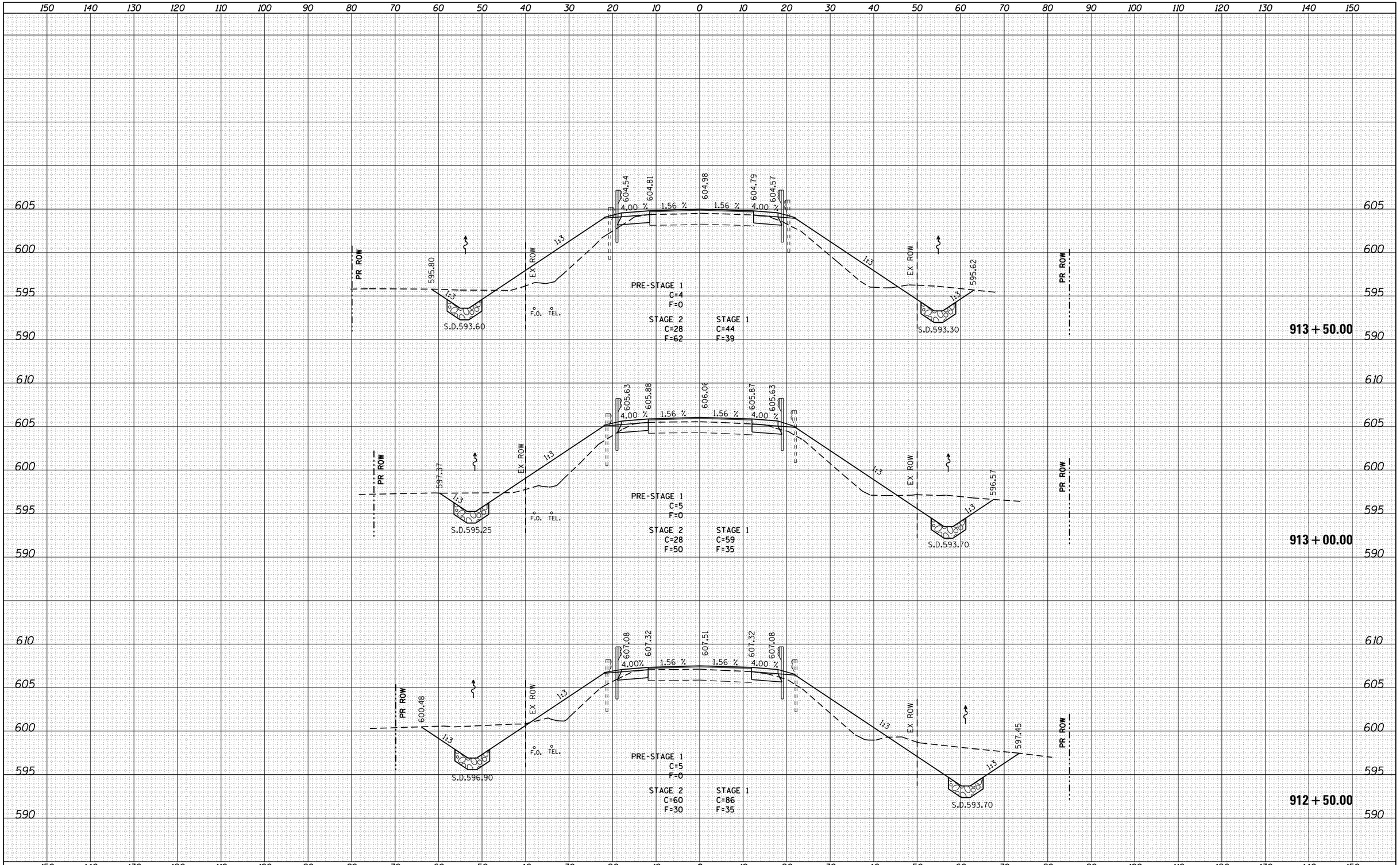
CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 2 OF 9 SHEETS | STA. 911+32.50 TO STA. 912+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	60
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

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

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



FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:12PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 3 OF 9 SHEETS | STA. 912+50.00 TO STA. 913+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	61
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

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

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

600 595 590 585 580 605 600 595 590 585 605 600 595 590 585

PR ROW

EX ROW

EX ROW

PR ROW

914 + 68.81

603.66 603.98 603.66

1.56 % 1.56 %

EX ROW

PR ROW

TEL.

F.O.

S.D.589.57

S.D.591.64

914 + 31.80

603.82 604.10 604.28 603.99

4.00 % 1.56 % 1.56 % 4.00 %

PR ROW

594.65

1:3

EX ROW

1:3

1:3

EX ROW

PR ROW

F.O. TEL.

S.D.591.95

S.D.593.10

PRE-STAGE 1
C=3
F=0

STAGE 2
C=37
F=83

STAGE 1
C=±55
F=69

914 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:12PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

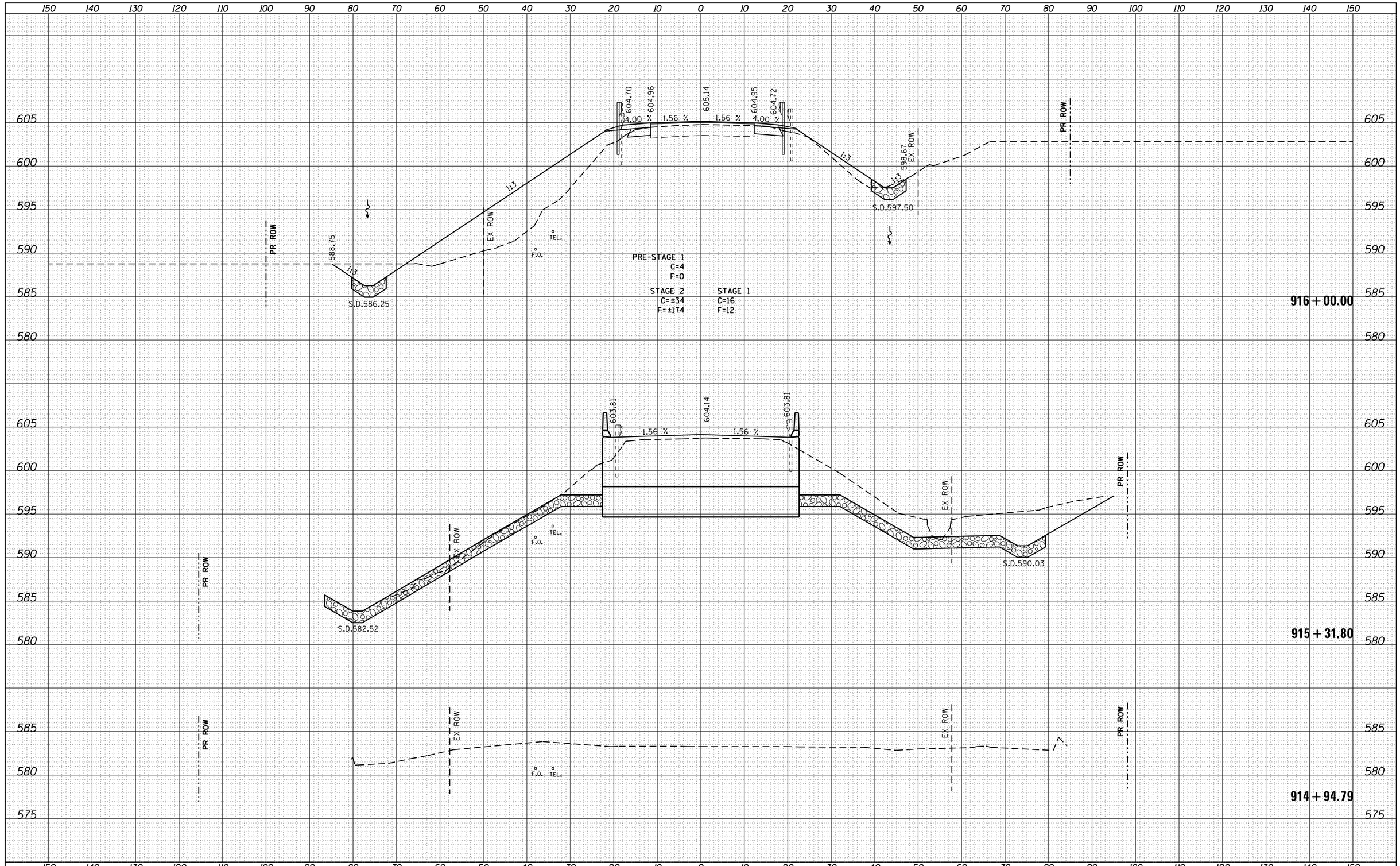
CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 4 OF 9 SHEETS | STA. 914+00.00 TO STA. 914+68.81

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	62

CONTRACT NO. 72A19

ILLINOIS | FED. AID PROJECT



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

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

FILE NAME =	USER NAME = sparksgw	DESIGNED -	REVISED -
c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:13PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

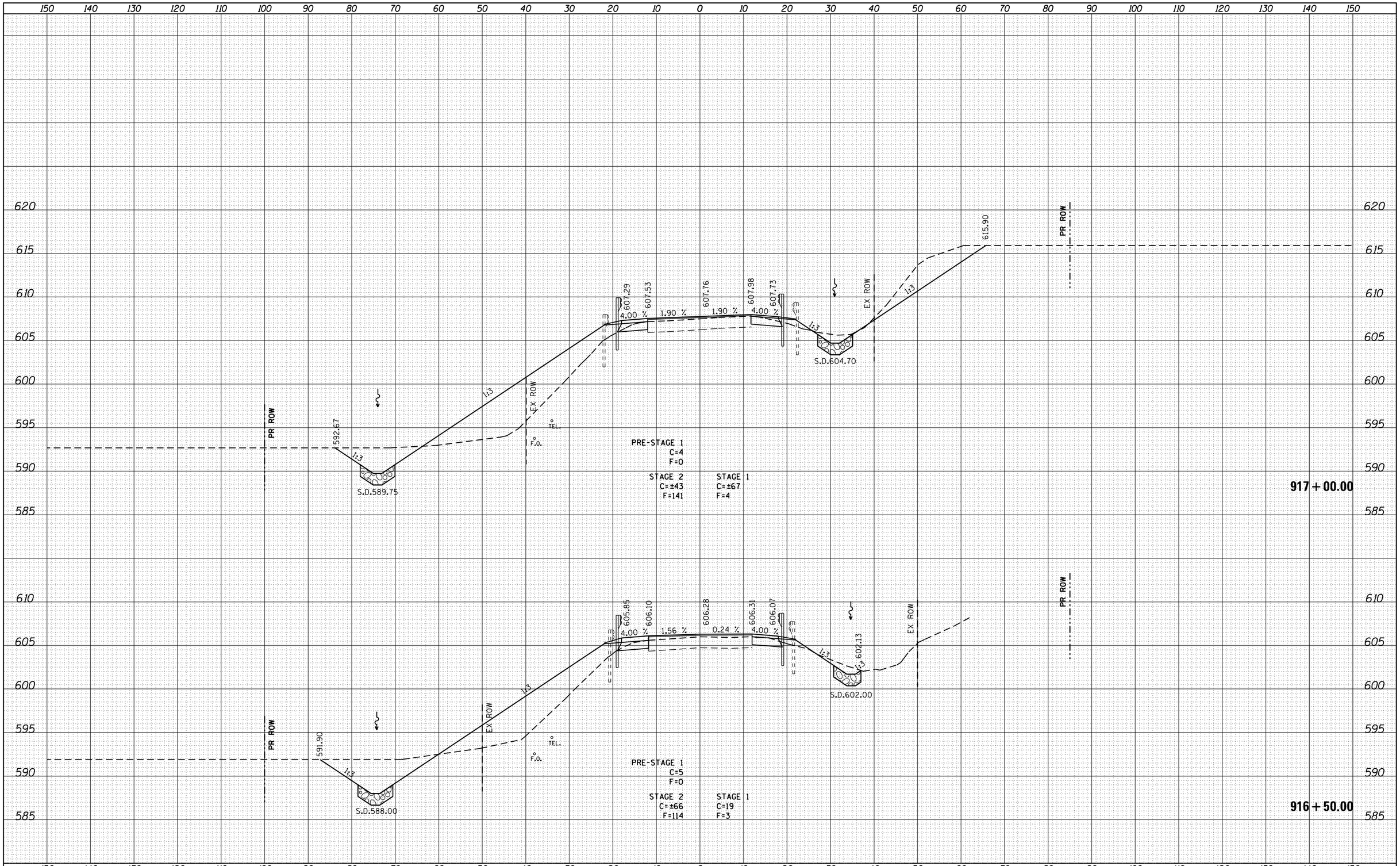
CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 5 OF 9 SHEETS | STA. 914+94.79 TO STA. 916+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	63
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		

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

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



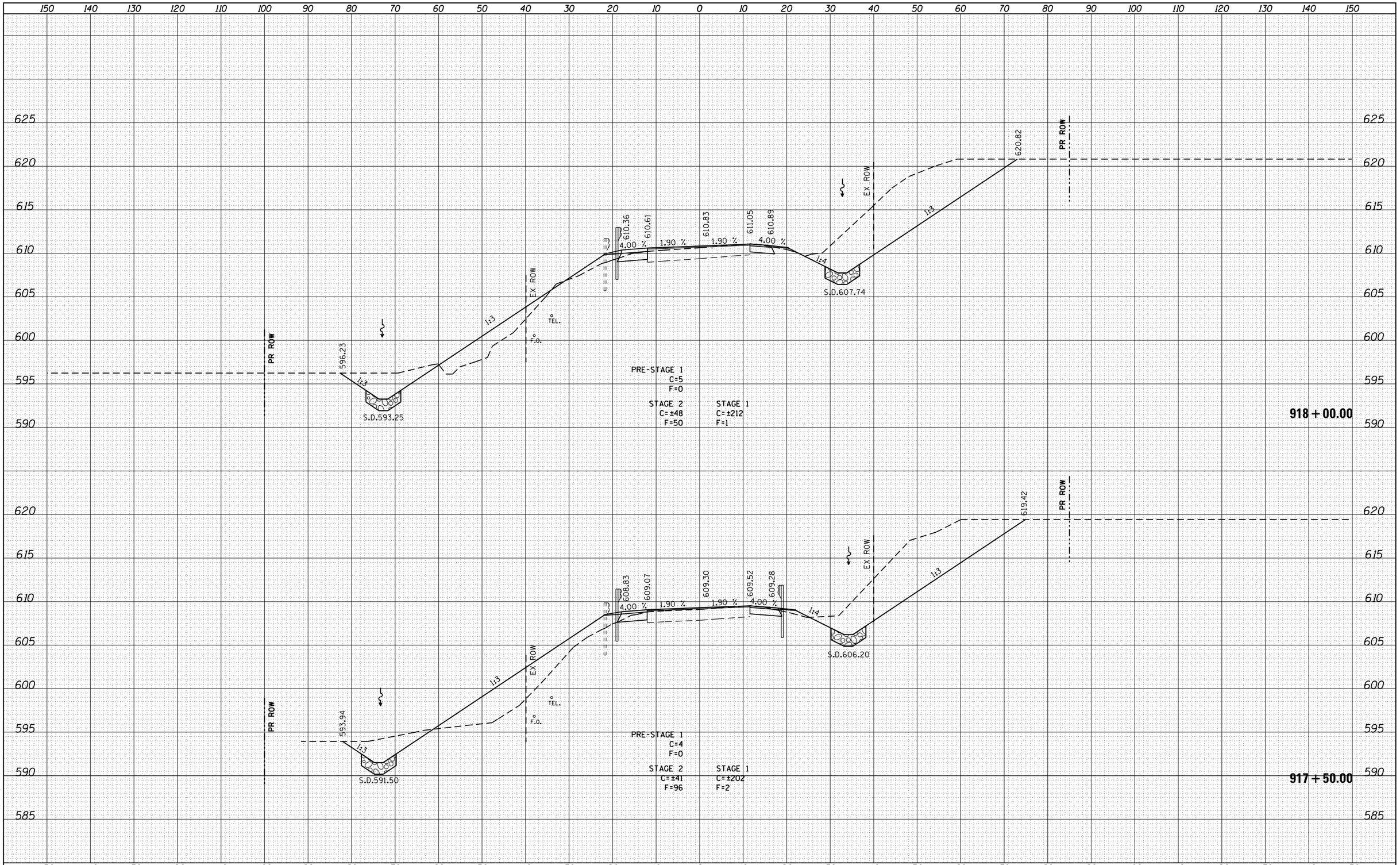
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	DRAWN -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:13PM	CHECKED -	REVISED -
		DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 6 OF 9 SHEETS | STA. 916+50.00 TO STA. 917+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	64
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

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

ORIGINAL SURVEY

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

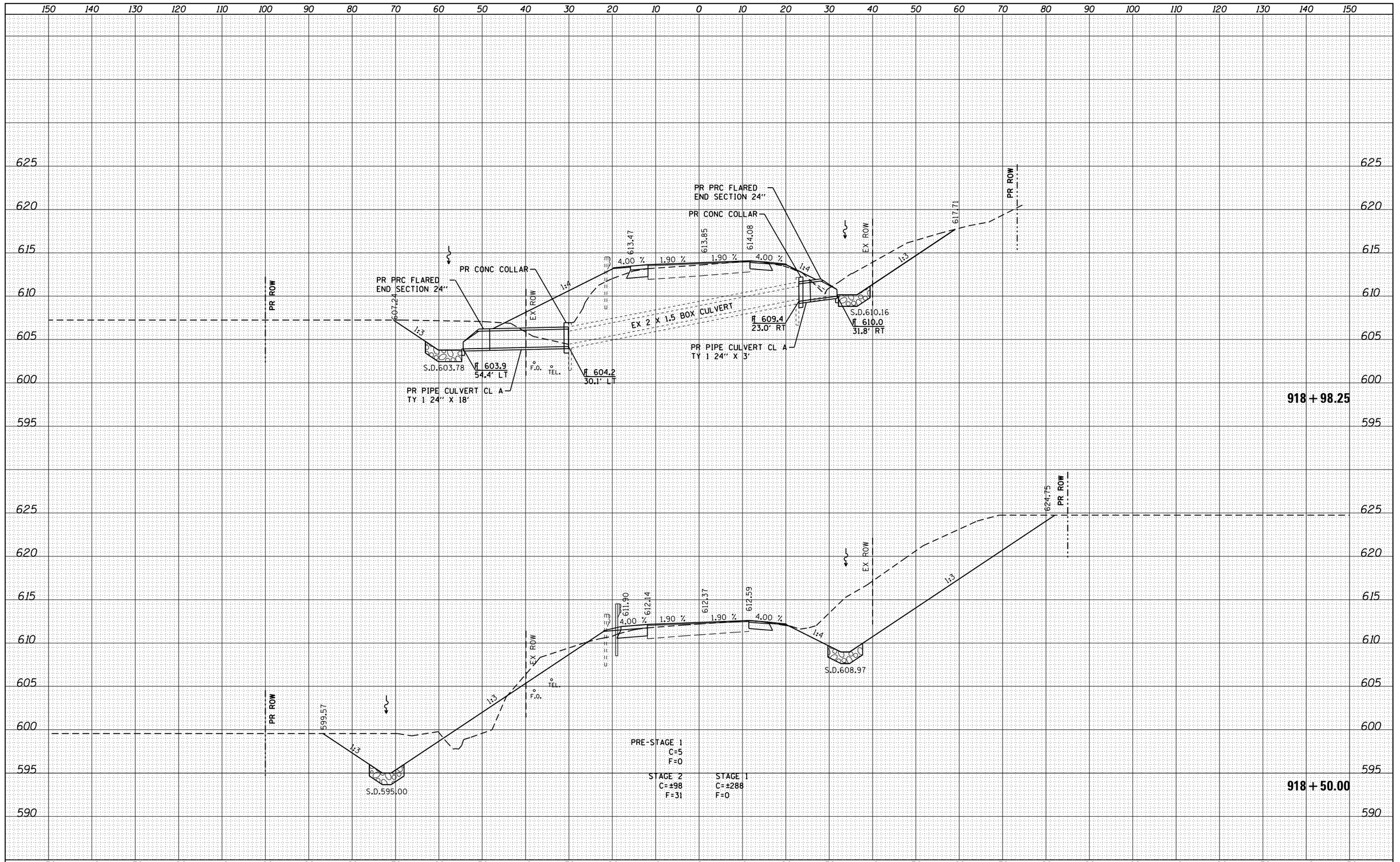
FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:14PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 7 OF 9 SHEETS | STA. 917+50.00 TO STA. 918+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	65
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

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

ORIGINAL SURVEY

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

FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:14PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

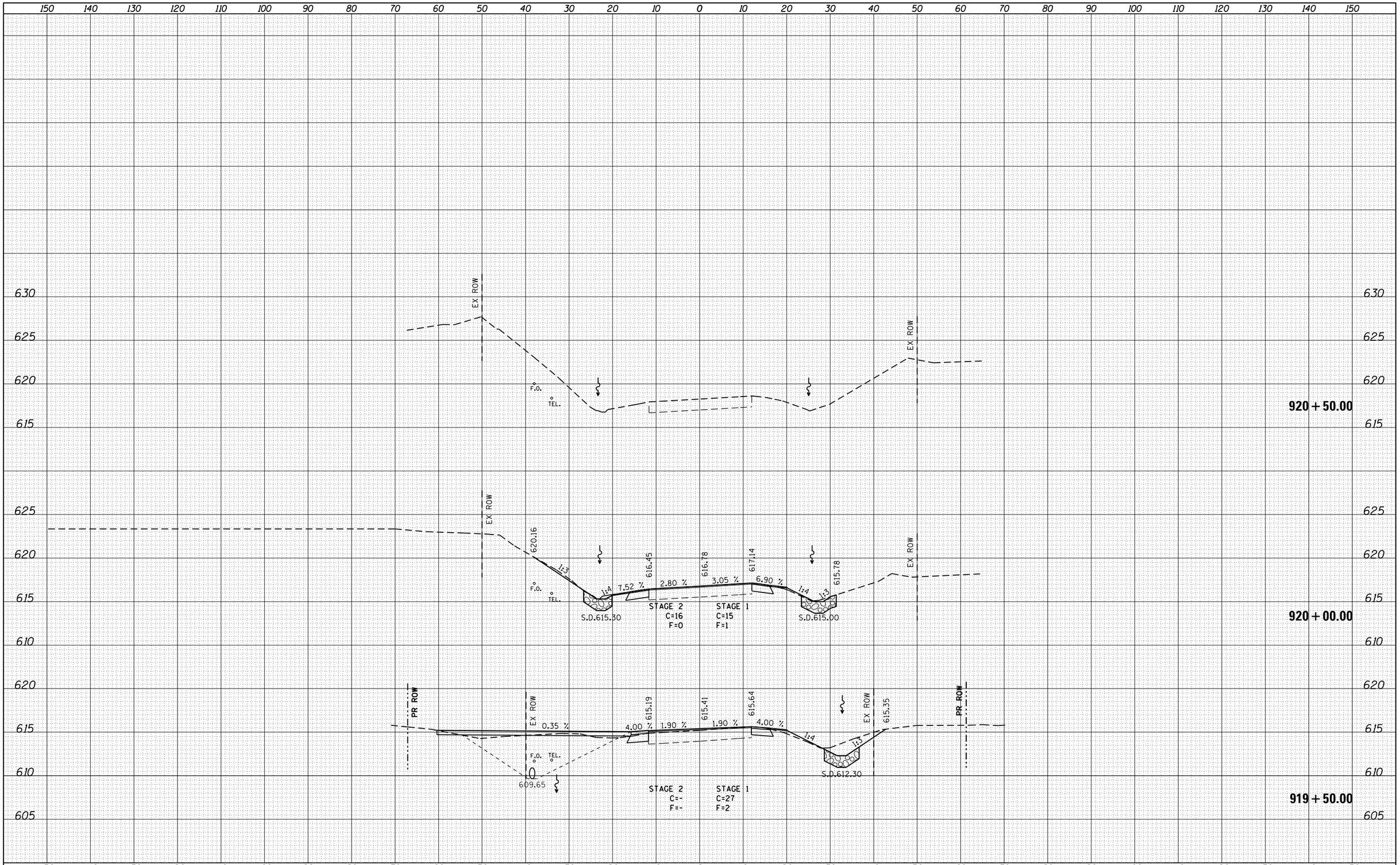
CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 8 OF 9 SHEETS | STA. 918+50.00 TO STA. 918+98.25

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	66
		CONTRACT NO. 72A19		
	ILLINOIS FED. AID PROJECT			

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

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



FILE NAME = c:\pw_work\pwidot\sparksgw\d0325252\d672A19-sht-059-xssht-11-16.dgn	USER NAME = sparksgw	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.000000 ' / in.	CHECKED -	REVISED -
CB PROJECT NO	PLOT DATE = Oct-19-2012 02:15:15PM	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 16

SCALE: | SHEET NO. 9 OF 9 SHEETS | STA. 919+50.00 TO STA. 920+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	116BR-1	MACOUPIN	67	67
		CONTRACT NO. 72A19		
		ILLINOIS FED. AID PROJECT		