

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	1
FEDERAL AID PROJECT		ILLINOIS	CONTRACT NO.	

SEE SHEET NO. 2 FOR INDEX OF SHEETS
SEE SHEET NO. 2 FOR LIST OF ILLINOIS D.O.T. HIGHWAY STANDARDS

PLANS FOR PROPOSED SURFACE TRANSPORTATION /BRIDGE PROGRAM

FAU 7987 (W FAYETTE AVENUE)
OVER JACKSONVILLE BRANCH
SECTION 11-00472-00-BR
PROJECT NO. BRM-5146(088)
CITY OF SPRINGFIELD SANGAMON COUNTY
JOB NUMBER C-96-207-14

UTILITY CONTACTS:

UTILITY TYPE: GAS
AMEREN CILCO
(217) 753-5187
ATTN: RICK COMBS

UTILITY TYPE: CABLE TV
COMCAST
(217) 527-2967 EXT. 68967
ATTN: DAVID BLY

UTILITY TYPE: FIBER OPTIC /TELEPHONE
AT&T
(217) 789-8666
ATTN: TERESA MAYER

UTILITY TYPE: ELECTRIC
CWLP ELECTRIC DEPT.
(217) 321-1352
ATTN: ROB CUNNINGHAM

UTILITY TYPE: SANITARY SEWER
SPRINGFIELD METRO SANITARY DISTRICT
(217) 528-0491
ATTN: ROB LEINWEBER

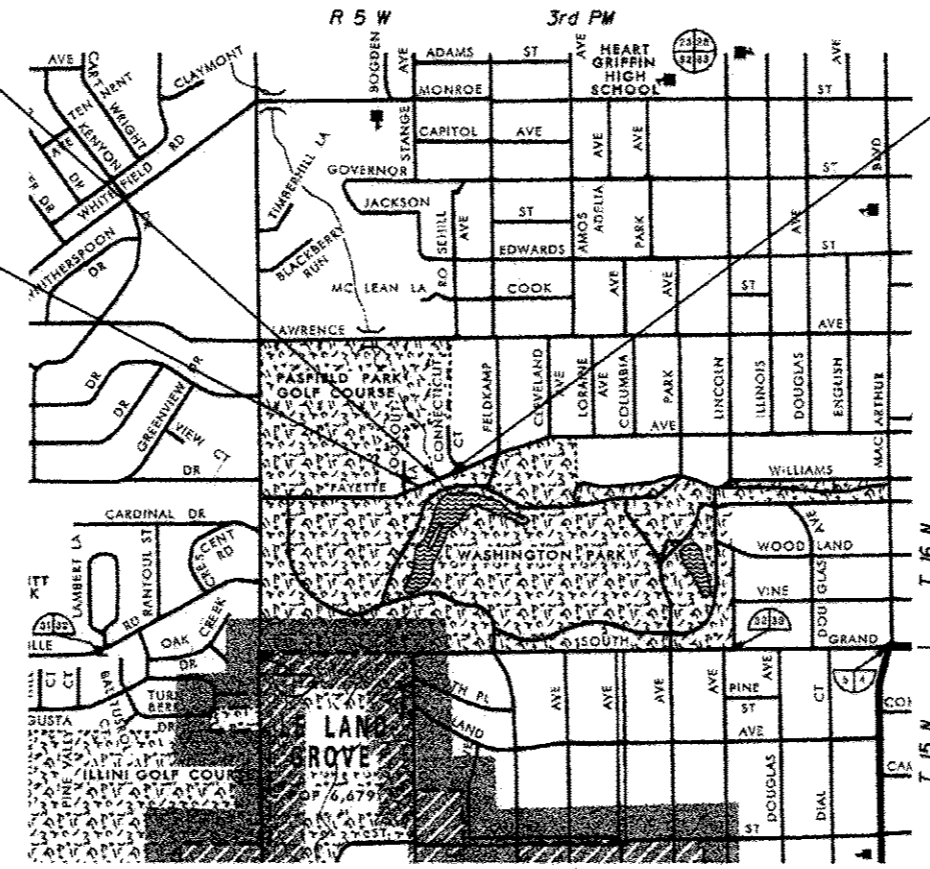
UTILITY TYPE: WATER
CWLP WATER
(217) 789-2323
ATTN: MIKE JOHNSON



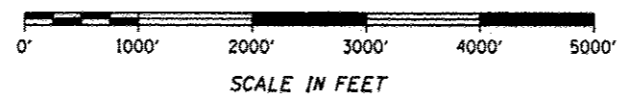
PR SN 084-6020
STA 10+00 SINGLE SPAN PRECAST
PRESTRESSED CONCRETE DECK
BEAM BRIDGE 40'-0" O-O,
50'-0" BK - BK ABUTMENTS
REPLACES EX SN 084-8000

BEGIN PROJECT
STA 7+90.00

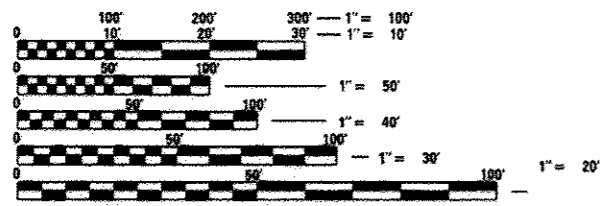
END PROJECT
STA 11+55.00



LAYOUT



SCALE IN FEET
NET LENGTH OF SECTION 365.00 FEET (0.069 MILES)
FUNCTIONAL CLASSIFICATION: COLLECTOR (URBAN)
DESIGN SPEED 40 MPH
CURRENT ADT = 1,860 (2013)

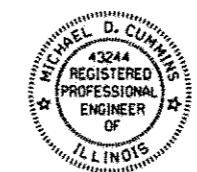


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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



CONTRACT No. 93618



Michael D. Cummins (2-27-14)
ILLINOIS PROFESSIONAL NO. 43244
(Expires 11/30/15)

APPROVED March 12, 2014
Nathan Bottoms
CITY OF SPRINGFIELD, ILLINOIS

PASSED March 25, 2014
Terrence Fast
DISTRICT SIX ENGINEER OF LOCAL ROADS AND STREETS

PASSED March 25, 2014
Ron Oberbauer
DISTRICT ENGINEER OF CONSTRUCTION

RELEASED FOR
BID BASED ON
LIMITED REVIEW March 25, 2014
Clayton D. Doherty
DEPUTY DIRECTOR OF HIGHWAYS,
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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43-51	CROSS SECTIONS

GENERAL NOTES

- 1 THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012, THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, AND THE SPECIAL PROVISIONS INCLUDED IN THESE PLANS.
- 2 ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE EDITION, AS INDICATED BY THE SUB-NUMBER, LISTED IN THE INDEX OF SHEETS, OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- 3 THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.
- 4 THE LOCATION OF THOSE BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.26 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E NUMBER IS 1 (800) 892-0123. A MINIMUM 48 HOURS ADVANCE NOTICE IS REQUIRED. SEE SPECIAL PROVISIONS FOR STATUS OF UTILITIES WITH UTILITY COMPANIES LISTED.
- 5 THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.
- 6 WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. SAW CUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE TYPE OF WORK ENCOUNTERED.
- 7 ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON NAVD 88 DATUM.
- 8 WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- 9 PROPOSED PCC BASE COURSE WIDENING SHALL BE CONSTRUCTED MONOLITHIC WITH CONCRETE GUTTER TYPE B AND COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.18

GRAVITY SANITARY SEWER CONSTRUCTION NOTES

- 1 THE GRAVITY SANITARY SEWER WITH APPURTENANCES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, SIXTH EDITION" DATED JULY 2009 (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS") AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AS APPLICABLE.
- 2 THE SANITARY SEWER SHALL BE TESTED AS SPECIFIED IN SECTION 31-1.12 AND 31-1.13 OF THE STANDARD SPECIFICATIONS. EXFILTRATION OF AIR PER SECTION 31-1.13C SHALL BE USED FOR LEAK TESTING.
- 3 IN ADDITION TO THE REQUIREMENTS OF SECTIONS 5-5 OF THE STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL, PRIOR TO STARTING EXCAVATION, ASCERTAIN FROM ALL LOCAL UTILITIES THE EXACT LOCATIONS OF ALL MAINS AND BUILDING SERVICES IN THE AREA OF OPERATIONS, WHETHER SUCH ARE INDICATED ON THE PLANS OR NOT. ANY SUCH MAINS AND SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED, WHENEVER POSSIBLE. BUILDING OWNERS OR OCCUPANTS SHALL BE NOTIFIED IN ADVANCE IF THEIR UTILITY SERVICE IS TO BE DISCONNECTED AND NO BUILDING SHALL BE LEFT WITHOUT SERVICE OVERNIGHT.
- 4 ALL MATERIALS SHALL BE APPROVED BY THE ENGINEER AND THE CITY OF SPRINGFIELD PRIOR TO CONSTRUCTION.
- 5 THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING GRAVITY SANITARY SEWER TO VERIFY THE ALIGNMENT OF THE PROPOSED GRAVITY SANITARY SEWER REPLACEMENT.
- 6 THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PROTECT PUBLIC AND PRIVATE PROPERTY. IF AT ANY TIME, PUBLIC OR PRIVATE PROPERTY IS DAMAGED OR DESTROYED, THE CONTRACTOR SHALL RESTORE SUCH PROPERTY TO A CONDITION EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 7 TRENCH BACKFILL AROUND THE GRAVITY SANITARY SEWER SHALL BE COMPACTED AS SPECIFIED IN ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 8 ALL EXCESS EARTH FROM THE TRENCHES SHALL BE DISPOSED OF BY THE CONTRACTOR AS SPECIFIED IN ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. DISPOSING OF EXCESS EARTH SHALL BE INCLUDED IN THE COST OF PROPOSED SANITARY SEWERS.
- 9 THE CONTRACTOR SHALL ACQUIRE NECESSARY PERMITS FROM THE CITY OF SPRINGFIELD OFFICE OF PUBLIC WORKS TO WORK IN THE PUBLIC RIGHT-OF-WAY.
- 10 THE CONTRACTOR SHALL NOTIFY THE THE CITY OF SPRINGFIELD AT LEAST 48 HOURS PRIOR TO TAKING AN EXISTING GRAVITY SANITARY SEWER OUT OF SERVICE.

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	Standard Symbols, Abbreviations and Patterns
001001-02	Areas of Reinforcement Bars
280001-07	Temporary Erosion Control Systems
420401-10	Bridge Approach Pavement Connector
515001-03	Name Plate for Bridges
542401-01	Metal End Section for Pipe Culverts
602301-04	Inlet, Type A
602306-03	Inlet, Type B
602401-03	Manhole, Type A
602406-06	Manhole, Type A, 6' Diameter
602421-04	Manhole, Type A, 9' Diameter
602601-03	Precast Reinforced Concrete Flat Slab Top
602701-02	Manhole Steps
604006-04	Frame and Lids, Type 3
606001-05	Concrete Curb Type B and Combination Concrete Curb and Gutter
606201-02	Type B Gutter (inlet, Outlet, and Entrance)
701001-02	Off-Road Operations, 2L, 2W, More Than 15' (4.5 m) Away
701006-05	Off-Road Operations, 2L, 2W, 15' (4.5 m) to 24" (600 mm) From Pavement Edge
701311-03	Lane Closure, 2L, 2W, Moving Operations - Day Only
701901-03	Traffic Control Devices
700001-04	Typical Pavement Markings
BLR 21-9	Typical Application of Traffic Control Devices for Construction on Rural Local Highways

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

MIXTURE USES	HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50	LEVELING BINDER (MACHINE METHOD) N50 < 2 1/4" THICK	LEVELING BINDER (MACHINE METHOD) N50 =/> 2 1/4" THICK	BRIDGE APPROACH PAVEMENT CONNECTOR FLEXIBLE
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0 @ NDESIGN = 50	4.0 @ NDESIGN = 50	4.0 @ NDESIGN = 50	4.0 @ NDESIGN = 50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE	MIX "C"	N/A	N/A	N/A

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

GRANULAR MATERIALS	2.05 Tons/Cu. Yd.
RIPRAP	1.5 Tons/Cu. Yd.
BITUMINOUS MATERIALS (PRIME COAT)	0.1 Gallon/Sq. Yd. (ON PAVEMENT)
HOT-MIX ASPHALT	112 Lbs/Sq. Yd./Inch

* 936-18



JOB # 2284
 FILE NAME = 2284-sht-general.dgn
 PLOT SCALE = 2.8800 ' / IN.
 PLOT DATE = 2/20/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 9/18/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

INDEX OF SHEETS, GENERAL NOTES, HIGHWAY STANDARDS
 & GRAVITY SANITARY SEWER CONSTRUCTION NOTES

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

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	2
CONTRACT NO. *				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES					CONSTRUCTION CODE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020					
				STP/B/URBAN	0011				
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	205	205					
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	100	100					
20200100	EARTH EXCAVATION	CU YD	175	175					
20300100	CHANNEL EXCAVATION	CU YD	240	240					
20400800	FURNISHED EXCAVATION	CU YD	284	284					
20800150	TRENCH BACKFILL	CU YD	190	190					
25100900	TURF REINFORCEMENT MAT	SQ YD	175	175					
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	160	160					
28000400	PERIMETER EROSION BARRIER	FOOT	561	561					
28100207	STONE RIPRAP, CLASS A4	TON	972	972					
28200200	FILTER FABRIC	SQ YD	1,404	1,404					
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	66	66					
35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	44	44					
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	68	68					

* SPECIAL PROVISION

△ SPECIALTY ITEMS



JOB # 2284
 FILE NAME : 2284soq.dgn
 PLOT SCALE : 20.0000 ' / IN.
 PLOT DATE : 3/4/2014

DESIGNED - NAK
 DRAWN - TJD
 CHECKED - NAK
 DATE - 4/8/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SUMMARY OF QUANTITIES

FAU RTE. 7987	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 3
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 93618				

SUMMARY OF QUANTITIES				CONSTRUCTION CODE					
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020					
				STP/B/URBAN					
				0011					
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	241	241					
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	57	57					
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	67	67					
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	20	20					
44000100	PAVEMENT REMOVAL	SQ YD	248	248					
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	31	31					
44000400	GUTTER REMOVAL	FOOT	411	411					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	281	281					
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1					
50200300	COFFERDAM EXCAVATION	CU YD	1,610	1,610					
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	270	270					
* 50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1	1					
* 50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1	1					
50300100	FLOOR DRAINS	EACH	4	4					

* SPECIAL PROVISION

△ SPECIALTY ITEMS

x 93618



JOB : 2284
 FILE NAME : 2284sq.dgn
 PLOT SCALE : 20.0000' / IN.
 PLOT DATE : 3/4/2014

DESIGNED - NAK
 DRAWN - TJD
 CHECKED - NAK
 DATE - 4/8/2011

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SUMMARY OF QUANTITIES

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	4
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. *	

SUMMARY OF QUANTITIES				CONSTRUCTION CODE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020				
				STP/B/URBAN	0011			
50300225	CONCRETE STRUCTURES	CU YD	411.6	411.6				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	111.3	111.3				
50300260	BRIDGE DECK GROOVING	SQ YD	312	312				
50300265	SEAL COAT CONCRETE	CU YD	287.0	287.0				
50300300	PROTECTIVE COAT	SQ YD	453	453				
* 50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	2,000	2,000				
50800105	REINFORCEMENT BARS	POUND	31,820	31,820				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	31,380	31,380				
51201600	FURNISHING STEEL PILES HP12X53	FOOT	812	812				
51500100	NAME PLATES	EACH	1	1				
54213447	END SECTIONS 12"	EACH	2	2				
55100500	STORM SEWER REMOVAL 12"	FOOT	56	56				
55100700	STORM SEWER REMOVAL 15"	FOOT	44	44				
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	150	150				

* SPECIAL PROVISION

Δ SPECIALTY ITEMS

x 93618



JOB : 2284
 FILE NAME : 2284sq.dgn
 PLOT SCALE : 20,0000 ' / IN.
 PLOT DATE : 3/1/2014

DESIGNED - NAK
 DRAWN - TJD
 CHECKED - NAK
 DATE - 4/8/2011

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SUMMARY OF QUANTITIES

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	5
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
			CONTRACT NO. X	

SUMMARY OF QUANTITIES					CONSTRUCTION CODE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020					
				STP/B/URBAN	0011				
60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	3	3					
60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	3	3					
60500040	REMOVING MANHOLES	EACH	5	5					
60500060	REMOVING INLETS	EACH	6	6					
60500105	FILLING MANHOLES	EACH	1	1					
60600095	CLASS S1 CONCRETE (OUTLET)	CU YD	22.1	22.1					
60602800	CONCRETE GUTTER, TYPE B	FOOT	152	152					
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	212	212					
67100100	MOBILIZATION	L SUM	1	1					
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1					
70300100	SHORT TERM PAVEMENT MARKING	FOOT	40	40					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	13	13					
△ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,460	1,460					
542D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	36	36					

* SPECIAL PROVISION

△ SPECIALTY ITEMS



JOB : 2284
 FILE NAME : 2284+sq.dgn
 PLOT SCALE : 20,0000 / IN.
 PLOT DATE : 3/4/2014

DESIGNED - NAK
 DRAWN - TJD
 CHECKED - NAK
 DATE - 4/8/2011

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SUMMARY OF QUANTITIES

PAV. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	6
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. X				

x 93618

SUMMARY OF QUANTITIES					CONSTRUCTION CODE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020					
				STP/B/URBAN	0011				
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	76	76					
△ *	X0323814 SANITARY SEWER REMOVAL, 18"	FOOT	149	149					
*	X0325862 CONCRETE BRIDGE RAILING	FOOT	100	100					
△ *	X0322791 FILL EXISTING SANITARY SEWERS	CU YD	21	21					
*	X0327725 ADDITIONAL DEPTH OF MANHOLES	FOOT	15	15					
△ *	X0539200 DROP MANHOLE CONNECTION	EACH	1	1					
*	X2501000 SEEDING, CLASS 2 (SPECIAL)	ACRE	0.8	0.8					
*	X4401198 HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	271	271					
△ *	X5030221 CONCRETE ENCASEMENT	CU YD	33.8	33.8					
*	X5030305 CONCRETE WEARING SURFACE, 5"	SQ YD	150	150					
*	X5860110 GRANULAR BACKFILL FOR STRUCTURES	CU YD	200	200					
*	X6020090 MANHOLES WITH RESTRICTOR PLATE	EACH	1	1					
*	X6022810 MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1					
*	X6022830 MANHOLES, SANITARY, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1					

* SPECIAL PROVISION

△ SPECIALTY ITEMS

x 93618



JOB # 2284
 FILE NAME + 228400.dgn
 PLOT SCALE + 20.0000 1/1 IN.
 PLOT DATE + 3/4/2014

DESIGNED - NAK
 DRAWN - TJD
 CHECKED - NAK
 DATE - 4/8/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SUMMARY OF QUANTITIES

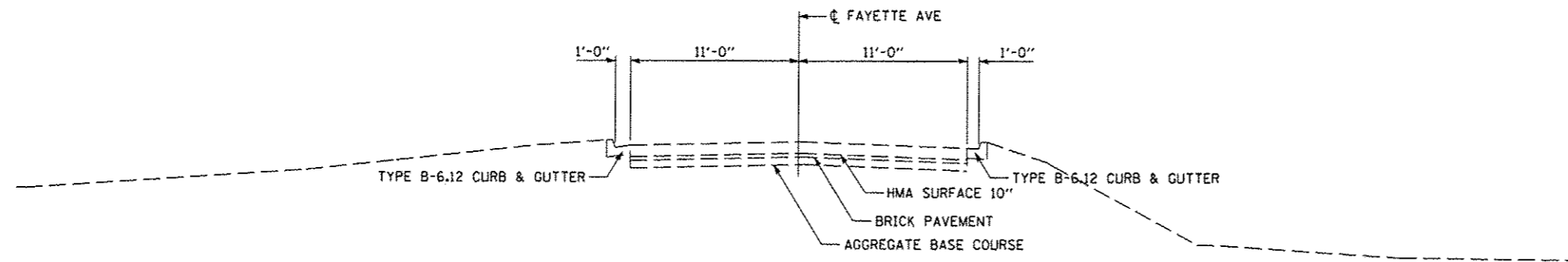
FAD RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	7

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. X

SUMMARY OF QUANTITIES					CONSTRUCTION CODE				
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 084-6020					
				STP/B/URBAN	0011				
△ *	X6022855	MANHOLE SANITARY, 9' DIAMETER, TYPE 1 FRAME CLOSED LID	EACH	1	1				
△ *	XX002082	SANITARY SEWER REMOVAL 24"	FOOT	106	106				
△ *	XX006052	SANITARY SEWER REMOVAL (SPECIAL)	FOOT	103	103				
△ *	XX007892	SANITARY SEWER REMOVAL 27"	FOOT	16	16				
△ *	XX007901	SANITARY SEWER REMOVAL 30"	FOOT	40	40				
△ *	XX008932	SANITARY SEWER REMOVAL 14"	FOOT	137	137				
△ *	XX008933	SANITARY SEWER REMOVAL 36"	FOOT	92	92				
*	Z0016702	DETOUR SIGNING	L SUM	1	1				
△ *	Z0056900	SANITARY SEWER 8"	FOOT	24	24				
△ *	Z0057700	SANITARY SEWER 30"	FOOT	28	28				
△ *	Z0057950	SANITARY SEWER 42"	FOOT	346	346				
*	Z0065000	SETTING PILES IN ROCK	EACH	28	28				

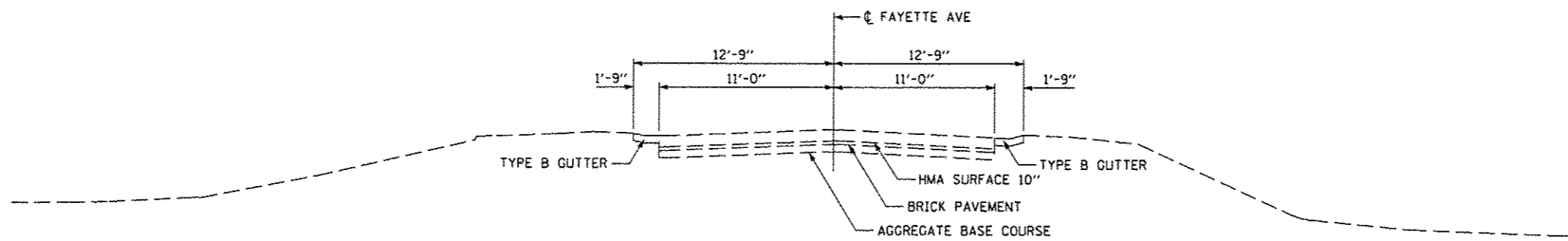
* SPECIAL PROVISION
 △ SPECIALTY ITEMS

x 93618



EXISTING TYPICAL CROSS SECTION (EAST APPROACH)
STA 10+14.00 TO STA 11+55.00

EX BRIDGE OMISSION
STA 9+86.00 TO STA 10+14.00



EXISTING TYPICAL CROSS SECTION (WEST APPROACH)
STA 7+90.00 TO STA 9+86.00

* 93618

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB # 2284
FILE NAME = 2284-shl-typicals.dgn
PLOT SCALE = 10,0000' / IN.
PLOT DATE = 2/19/2014

DESIGNED - NAK
DRAWN - SJS
CHECKED - NAK
DATE - 2/19/2013

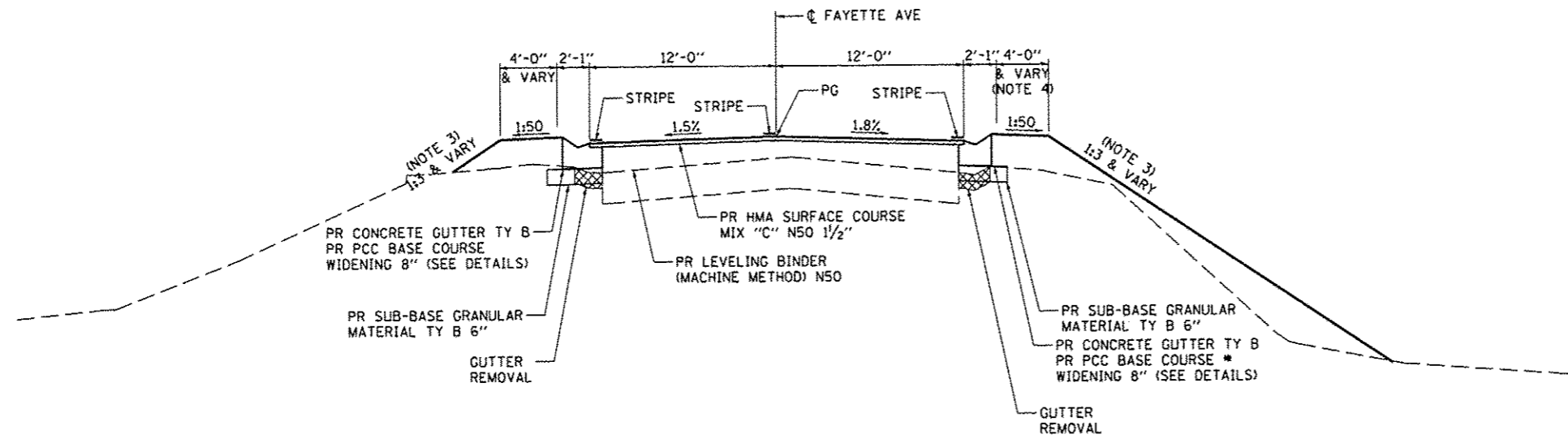
REVISED -
REVISED -
REVISED -
REVISED -

CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS

W FAYETTE AVE
TYPICAL CROSS SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	9
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. *	



PROPOSED TYPICAL CROSS SECTION
STA 8+10.00 TO STA 9+37

* STA 9+15 TO STA 9+25 - TRANSITION FROM CONCRETE GUTTER TY B TO COMBINATION CONCRETE CURB & GUTTER TY B-6.18

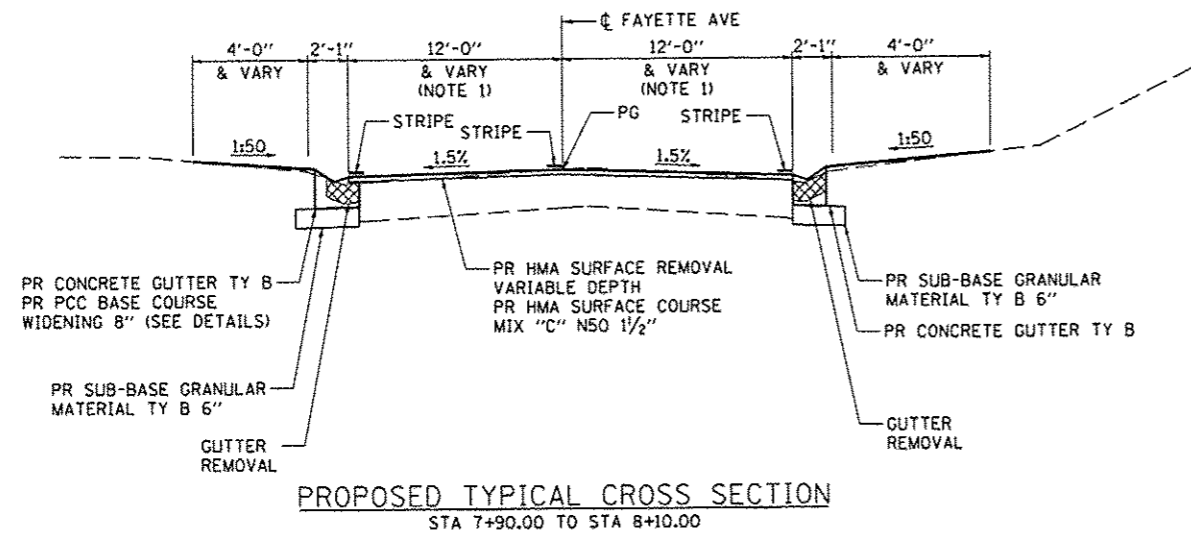
NOTES

1. TRANSITION PROPOSED PAVEMENT WIDTH FROM 22'-8" (EXISTING) AT STA 7+90 TO 24'-0" AT STA 8+20
2. TRANSITION PROPOSED CONCRETE GUTTER TYPE B TO MATCH EXISTING GUTTER FORM STA 7+90 TO STA 8+12. TRANSITION WILL BE PAID FOR AS CONCRETE GUTTER TYPE B
3. TRANSITION FRONT SLOPE FROM 1:3 AT STA 9+25 TO 1:2 AT STA 9+60
4. TRANSITION BERM WIDTH FROM 4'-0" AT STA 9+25 TO 5'-11" AT STA 9+40

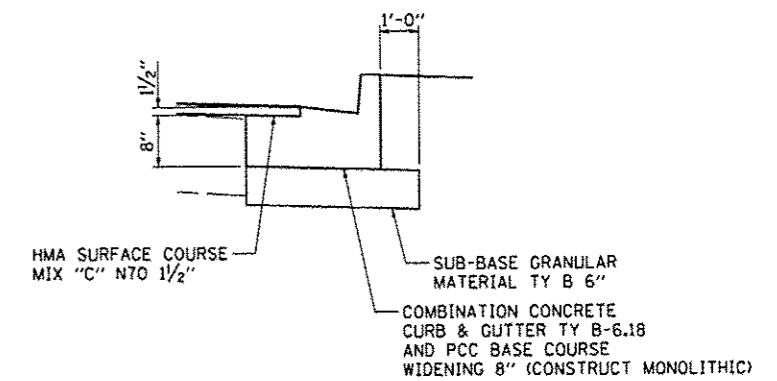
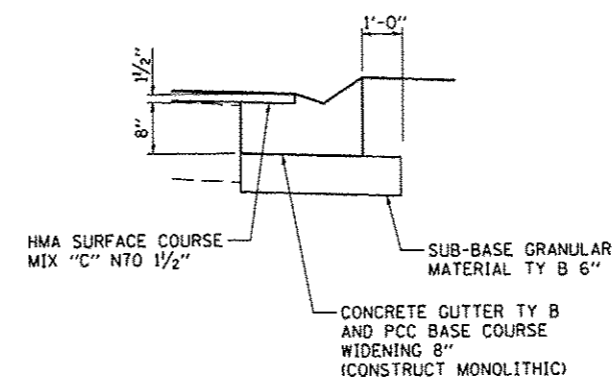
OMISSIONS

- BRIDGE APPROACH PAVEMENT
STA 9+45 TO STA 9+75
STA 10+25 TO STA 10+55
BRIDGE (SN 084-6020)
STA 9+75 TO STA 10+25

SEE SHEET 3 OF 3 FOR HMA SURFACE REMOVAL DEPTHS, LEVELING BINDER THICKNESS AND PCC BASE COURSE WIDENING WIDTH.



PROPOSED TYPICAL CROSS SECTION
STA 7+90.00 TO STA 8+10.00



WIDENING DETAIL

* 93618



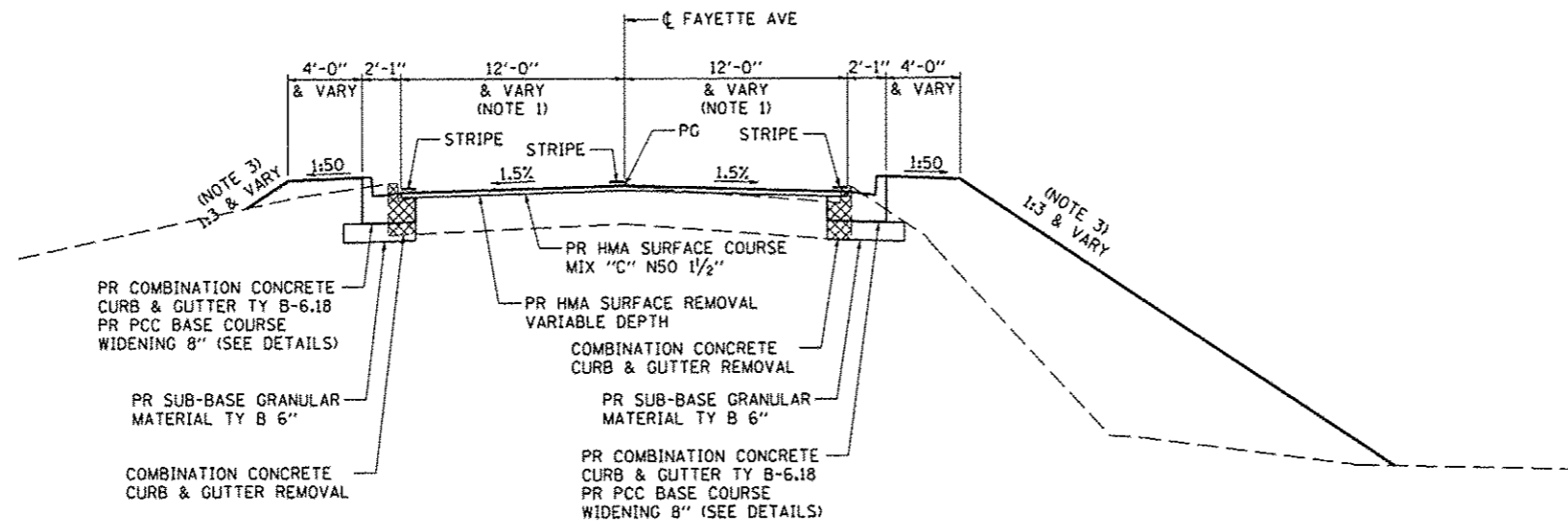
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FILE NAME = 2284-shr-typicals.dgn	DRAWN - SJS	REVISED -
PLOT SCALE = 10.0000' / 1"	CHECKED - NAK	REVISED -
PLOT DATE = 2/25/2014	DATE - 2/19/2013	REVISED -

CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS

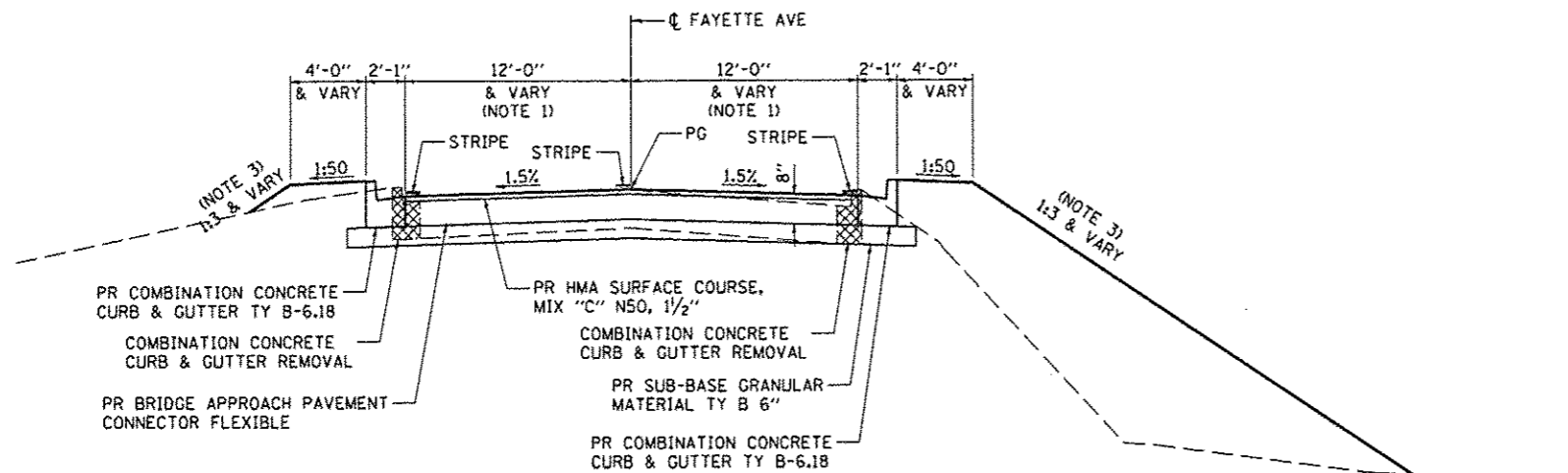
W FAYETTE AVE
TYPICAL CROSS SECTIONS

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

F.A.U. RTE. 7978	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 10
CONTRACT NO. *				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



PROPOSED TYPICAL CROSS SECTION
STA 10+51.00 TO STA 11+55.00



PROPOSED TYPICAL CROSS SECTION
STA 9+37 TO STA 9+45
STA 10+55 TO STA 10+72

NOTES

1. TRANSITION PROPOSED PAVEMENT WIDTH FROM 24'-0" AT STA 11+25 TO 22'-0" (EXISTING) AT STA 11+55
2. TRANSITION PROPOSED COMBINATION CONCRETE CURB & GUTTER TO MATCH EXISTING GUTTER FORM STA 11+45 TO STA 11+55
3. TRANSITION FRONT SLOPE FROM 1:2 AT STA 10+40 TO 1:3 AT STA 10+75
4. SEE SHEET 2 OF 3 FOR WIDENING DETAIL AND OMISSIONS
5. TRANSITION PROPOSED COMBINATION CONCRETE CURB AND GUTTER TO MATCH BRIDGE APPROACH PAVEMENT CURB IN 10 FEET.

STA	HMA SURFACE REMOVAL VARIABLE DEPTH		
	THICKNESS (INCH)		
	11' LT	CL	11' RT
7+90	0.12	0.12	0.12
8+00	0.00	0.12	0.01
8+10	0.00	0.00	0.00
10+51	0.00	0.01	0.00
10+75	0.00	0.10	0.00
11+00	0.00	0.10	0.00
11+25	0.00	0.12	0.00
11+50	0.03	0.11	0.00
11+55	0.12	0.12	0.12

STA	PCC BASE COURSE WIDENING 8"	
	WIDTH (FOOT)	
	LT	RT
7+90	0.00	0.00
8+00	0.56	0.00
8+25	1.75	0.13
8+42	1.94	0.22
8+50	1.99	0.26
8+75	1.56	0.36
9+00	1.14	0.45
9+25	0.79	0.34
9+49	0.47	0.25
BRIDGE, APPROACH PVT, OMISSION		
10+51	0.96	0.92
10+75	0.79	1.09
11+00	0.76	0.98
11+25	0.68	1.19
11+50	0.11	0.25
11+55	0.00	0.00

STA	LEVELING BINDER		
	THICKNESS (INCH)		
	11' LT	CL	11' RT
7+90	0.00	0.00	0.00
8+00	0.06	0.00	0.00
8+25	0.29	0.18	0.20
8+42	0.61	0.44	0.45
8+50	0.75	0.55	0.58
8+75	0.77	0.63	0.85
9+00	0.78	0.61	0.82
9+25	0.83	0.56	0.87
9+49	0.64	0.46	0.86
BRIDGE, APPROACH PVT, OMISSION			
10+51	0.14	0.00	0.00
10+75	0.00	0.00	0.16
11+00	0.01	0.00	0.17
11+25	0.01	0.00	0.09
11+50	0.00	0.00	0.09
11+55	0.00	0.00	0.00

* 93618

TREE REMOVAL

STA.	OFFSET	(6 TO 15 UNITS DIAMETER)	(OVER 15 UNITS DIAMETER)
		UNIT	UNIT
LT STA 9+20.00	20.9	8	
LT STA 9+33.00	21.8	6	
LT STA 9+36.00	20.7	6	
LT STA 9+10.00	38.2	15	
LT STA 9+20.00	42.4	6	
LT STA 9+25.00	44.1	6	
LT STA 9+43.00	39.2	8	
LT STA 9+58.00	33.8	12	
LT STA 9+66.00	26.8	15	
LT STA 10+26.00	56.2	12	
LT STA 10+23.00	48.4	6	
LT STA 10+23.00	48.4	6	
LT STA 10+30.00	33.7	18	
LT STA 10+37.00	18.6	12	
LT STA 10+49.00	18.6	15	
LT STA 10+57.00	39.6		40
LT STA 10+59.00	38.2	12	
RT STA 9+29.00	56.0	6	
RT STA 9+29.00	56.0	6	
RT STA 9+29.00	56.0	6	
RT STA 9+60.00	92.6	12	
RT STA 10+72.00	91.0		30
RT STA 10+42.00	17.6	12	
RT STA 10+82.00	23.2		30
TOTAL		205	100

EARTHWORK

LOCATION	EXCAVATION	EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
LT STA 7+90 TO STA 9+75	75	56	160	-104
LT STA 10+25 TO STA 11+55	100	75	255	-180
TOTAL	175	131	415	-284

SHRINKAGE = 25%

PERIMETER EROSION BARRIER

LOCATION	QTY FOOT
LT STA 8+50 TO STA 9+10	62
1077 1175	102
RT STA 7+75 TO STA 9+64	230
RT STA 10+43 TO STA 11+75	167
TOTAL	561

TURF REINFORCEMENT MAT

LOCATION	AREA SQ FT	QTY SQ YD
LT STA 8+56 TO STA 9+10	170.2	18.91
LT STA 8+81 TO STA 9+14	92.0	10.22
LT STA 10+71 TO STA 10+91	63.6	7.07
LT STA 10+75 TO STA 10+16	134.5	14.94
RT STA 8+20 TO STA 9+51	1011.1	112.34
RT STA 10+81 TO STA 10+91	26.3	2.92
RT STA 10+89 TO STA 11+16	80.3	8.92
TOTAL		175.32

SUBBASE GRANULAR MATERIAL, TYPE B

LOCATION	AREA SQ FT	QTY TON
LT STA 7+90 TO STA 9+45	586	22.25
LT STA 10+55 TO STA 11+55	335	12.72
RT STA 7+90 TO STA 9+45	484	18.37
RT STA 10+55 TO STA 11+55	338	12.83
TOTAL		66.17

PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"

LOCATION	AREA SQ FT	QTY SQ YD
LT STA 7+90 TO STA 9+45	195	21.67
LT STA 10+55 TO STA 11+55	65	7.22
RT STA 7+90 TO STA 9+45	41	4.56
RT STA 10+55 TO STA 11+55	94	10.44
TOTAL		43.89

BITUMINOUS MATERIALS (PRIME COAT)

LOCATION	AREA SQ FT	QTY GALLON
STA 7+90 TO STA 9+45	3,700	41.11
STA 10+55 TO STA 11+55	2,372	26.36
TOTAL		67.47

LEVELING BINDER (MACHINE METHOD), N50

LOCATION	END AREA SQ FT	QTY TON
STA 7+90	0.00	
STA 8+00	0.06	0.04
STA 8+25	4.53	8.57
STA 8+42	10.45	19.01
STA 8+50	12.96	13.98
STA 8+58	13.47	15.79
STA 8+69	14.56	23.02
STA 8+75	15.13	13.30
STA 9+00	15.69	57.53
STA 9+11	15.34	25.49
STA 9+25	15.87	32.62
STA 9+37	15.06	27.71
STA 10+72	0.62	
STA 10+75	0.51	0.25
STA 10+84	0.44	0.64
STA 11+00	0.60	1.24
STA 11+25	0.00	1.12
STA 11+50	0.08	0.15
STA 11+55	0.00	0.03
TOTAL		240.49

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

LOCATION	AREA SQ FT	QTY TON
STA 7+90 TO STA 9+45	3,700	34.53
STA 10+55 TO STA 11+55	2,372	22.14
TOTAL		56.67



JOB # 2284
 FILE NAME = 2284-ahs-Schedules.dgn
 PLOT SCALE = 2.0000" / IN.
 PLOT DATE = 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 9/18/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SCHEDULES OF QUANTITIES

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

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-8R	SANGAMON	51	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

*93618

CONTRACT NO. *

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

LOCATION	QTY SQ YD
STA 9+37 TO STA 9+45	21.33
STA 10+55 TO STA 10+72	45.33
TOTAL	66.66

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH

LOCATION	AREA SQ FT	QTY SQ YD
LT STA 8+40	180	20.00
TOTAL		20.00

PAVEMENT REMOVAL

LOCATION	AREA SQ FT	QTY SQ YD
STA 9+37.00 TO STA 9+85.50	1,138	126.44
STA 10+14.30 TO STA 10+65.00	1,097	121.89
TOTAL		248.33

DRIVEWAY PAVEMENT REMOVAL

LOCATION	AREA SQ FT	QTY SQ YD
LT STA 8+06.62 TO STA 8+48.77	278	30.89
TOTAL		30.89

GUTTER REMOVAL

LOCATION	QTY FOOT
LT STA 7+90.00 TO STA 9+85.50	195.50
LT STA 10+21.90 TO STA 10+36.10	20.40
RT STA 7+90.00 TO STA 9+85.50	195.50
TOTAL	411.40

COMBINATION CURB AND GUTTER REMOVAL

LOCATION	QTY FOOT
LT STA 10+14.30 TO STA 11+55.00	140.70
RT STA 10+14.30 TO STA 11+55.00	140.70
TOTAL	281.40

END SECTIONS 12"

LOCATION	QTY EACH
LT STA 9+40	1
LT STA 10+60	1
TOTAL	2

STORM SEWER REMOVAL 12"

LOCATION	QTY FOOT
LT STA 10+25 TO STA 10+30.00	5.4
LT STA 10+30 TO RT STA 10+34.00	25.3
RT STA 10+30 TO STA 10+34.00	19.2
RT STA 10+34 TO STA 10+40.00	6.2
TOTAL	56.1

STORM SEWER REMOVAL 15"

LOCATION	QTY FOOT
LT STA 9+59 TO RT STA 9+59	27.6
RT STA 9+59	16.9
TOTAL	44.5

INLETS, TYPE A, TYPE 3 FRAME AND GRATE

LOCATION	QTY EACH
LT STA 10+75	1
RT STA 9+40	1
RT STA 10+75	1
TOTAL	3

INLETS, TYPE B, TYPE 3 FRAME AND GRATE

LOCATION	QTY EACH
LT STA 9+40	1
LT STA 10+60	1
RT STA 10+60	1
TOTAL	3

CLASS SI CONCRETE (OUTLET)

LOCATION	TYPE	QTY CU YD
LT STA 8+02.94 TO STA 8+52.67	ENTRANCE	3.78
LT STA 8+55.94 TO STA 9+11.67	OUTLET	4.55
LT STA 10+72.68 TO STA 11+16.13	OUTLET	4.02
RT STA 8+20.00 TO STA 8+87.23	OUTLET	5.33
RT STA 10+82.25 TO STA 11+15.88	OUTLET	4.37
TOTAL		22.05

PIPE CULVERTS, CLASS D, TYPE 1 12"

LOCATION	QTY FOOT
LT STA 9+40.00	16.00
LT STA 10+60.00	20.00
TOTAL	36.00

CONCRETE GUTTER, TYPE B

LOCATION	QTY FOOT
LT STA 7+90.00 TO STA 8+02.94	12.94
LT STA 8+52.67 TO STA 8+55.94	3.27
LT STA 8+79.94 TO STA 9+15.00	35.06
RT STA 7+90.00 TO STA 8+20.00	30.00
RT STA 8+44.00 TO STA 9+15.00	71.00
TOTAL	152.27

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18

LOCATION	QTY FOOT
LT STA 9+15.00 TO STA 9+45.00	30.00
LT STA 10+55.00 TO STA 10+92.12	37.12
LT STA 11+16.13 TO STA 11+55.00	38.87
RT STA 9+15.00 TO STA 9+45.00	30.00
RT STA 10+55.00 TO STA 10+91.84	36.84
RT STA 11+15.88 TO STA 11+55.00	39.12
TOTAL	211.95

SHORT TERM PAVEMENT MARKING

LOCATION	QTY FOOT
STA 7+90.00 TO STA 11+55.00	40
TOTAL	40

WORK ZONE PAVEMENT MARKING REMOVAL

LOCATION	QTY SQ FT
STA 7+90.00 TO STA 11+55.00	13
TOTAL	13

PAINT PAVEMENT MARKING - LINE 4"

LOCATION	QTY SQ FT
SOLID WHITE EDGE LINE	
LT STA 7+90.00 TO STA 11+55.00	365
RT STA 7+90.00 TO STA 11+55.00	365
SUBTOTAL WHITE	730
DOUBLE YELLOW CENTERLINE	
STA 7+90.00 TO STA 11+55.00	730
TOTAL	1,460



JOB - 2284
 FILE NAME - 2284-sht-Schedules.dgn
 PLOT SCALE - 2.0000' / 1"
 PLOT DATE - 2/25/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 9/18/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

SCHEDULES OF QUANTITIES

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	13
CONTRACT NO. *				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

x 93618

STORM SEWERS, CLASS A, TYPE 1 12"

LOCATION	QTY FOOT
LT STA 9+40.00 TO RT STA 9+40.00	25.00
LT STA 10+60.00 TO RT STA 10+60.00	24.50
LT STA 10+61.00 TO STA 10+74.00	13.00
RT STA 10+61.00 TO STA 10+74.00	13.00
TOTAL	75.50

SEEDING, CLASS 2 (SPECIAL)

LOCATION	AREA SQ FT	QTY ACRE
LT STA 7+90 TO STA 8+10	90	0.002
LT STA 8+49 TO STA 9+10	310	0.007
LT STA 8+93 TO STA 9+45	300	0.007
LT STA 9+10 TO STA 9+75	3,190	0.073
LT STA 9+74 TO STA 11+75	11,020	0.253
LT STA 10+55 TO STA 10+91	260	0.006
RT STA 7+90 TO STA 9+65	9,430	0.216
RT STA 10+40 TO STA 11+75	10,700	0.246
RT STA 10+55 TO STA 10+91	200	0.005
TOTAL		0.815

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH

LOCATION	AREA SQ FT	QTY SQ YD
LT STA 7+90.00 TO STA 8+10.00	429	47.67
RT STA 10+65.00 TO STA 11+55.00	2,007	223.00
TOTAL		270.67

* 93618



JOB # 2284
 FILE NAME # 2284-ah-Schedules.dgn
 PLOT SCALE # 2.0000 1/4" IN.
 PLOT DATE # 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 9/18/2012

REVISED -
 REVISED -
 REVISED -
 REVISED -

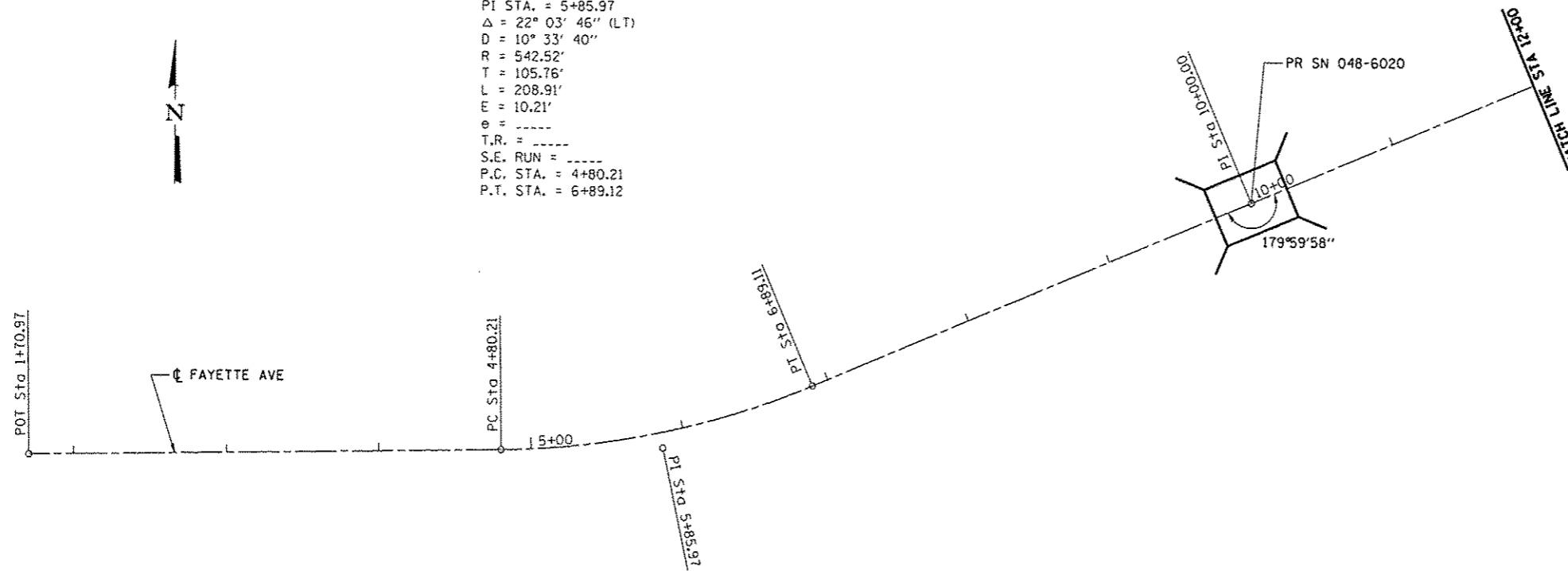
**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

SCHEDULES OF QUANTITIES

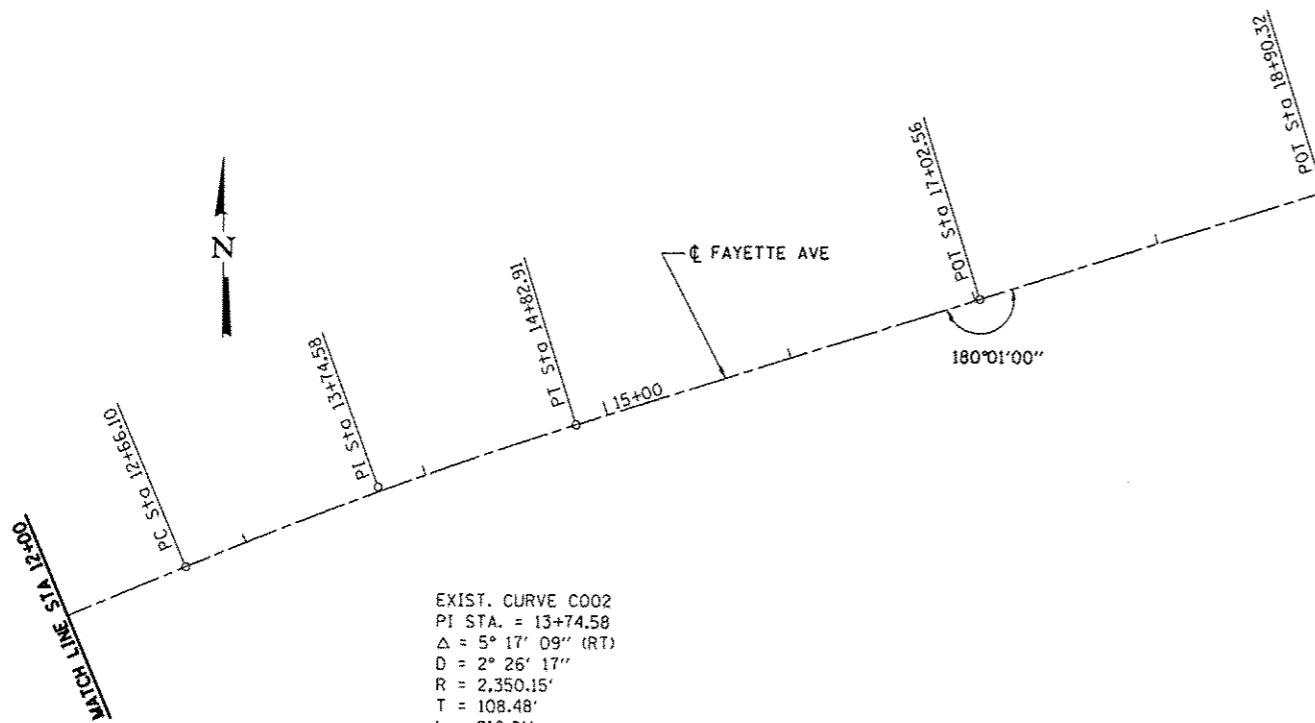
SCALE: SHEET NO. OF SHEETS STA. TO STA.

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	14
FED. ROAD DIST. NO.		[ILLINOIS] FED. AID PROJECT		
CONTRACT NO.				* 93618

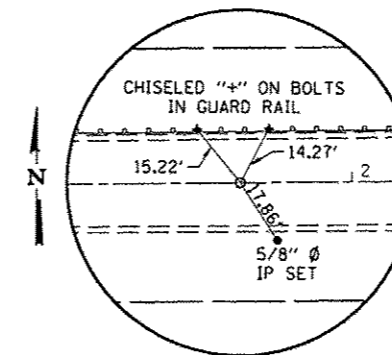
EXIST. CURVE C001
 PI STA. = 5+85.97
 $\Delta = 22^\circ 03' 46''$ (LT)
 $D = 10^\circ 33' 40''$
 $R = 542.52'$
 $T = 105.76'$
 $L = 208.91'$
 $E = 10.21'$
 $\theta = \text{-----}$
 $T.R. = \text{-----}$
 S.E. RUN = -----
 P.C. STA. = 4+80.21
 P.T. STA. = 6+89.12



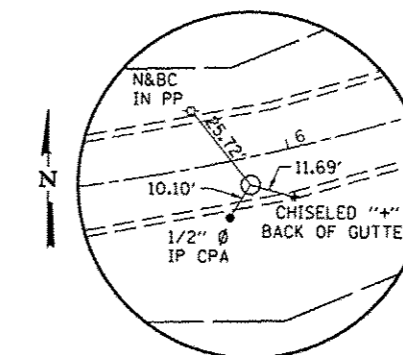
FAYETTE AVE			
CONTROL POINT	STATION	COORDINATES	
		NORTHING	EASTING
P.O.T	1+70.97	1137905.88	2432108.93
P.C.	4+80.21	1137910.20	2432416.14
P.I.	5+85.97	1137911.68	2432621.89
P.T.	6+89.11	1137952.77	2432619.34
P.I.	10+00.00	1138073.56	2432905.80
P.C.	12+66.10	1138178.05	2433151.00
P.I.	13+74.58	1138219.10	2433250.96
P.T.	14+82.91	1138251.86	2433354.38
P.O.T	17+02.56	1138318.19	2433563.77
P.O.T	18+90.32	1138374.90	2433742.77



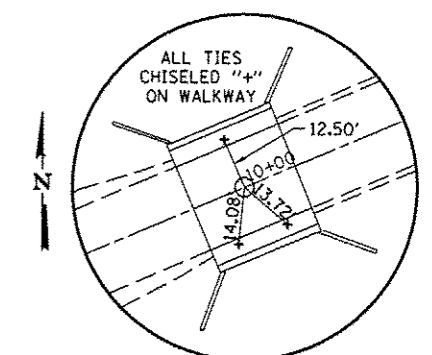
EXIST. CURVE C002
 PI STA. = 13+74.58
 $\Delta = 5^\circ 17' 09''$ (RT)
 $D = 2^\circ 26' 17''$
 $R = 2,350.15'$
 $T = 108.48'$
 $L = 216.81'$
 $E = 2.50'$
 $\theta = \text{-----}$
 $T.R. = \text{-----}$
 S.E. RUN = -----
 P.C. STA. = 12+66.10
 P.T. STA. = 14+82.91



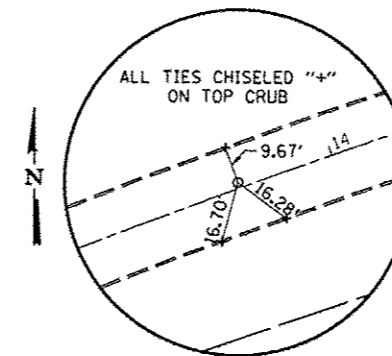
POT STA 1+70.97
MAG NAIL (SET)



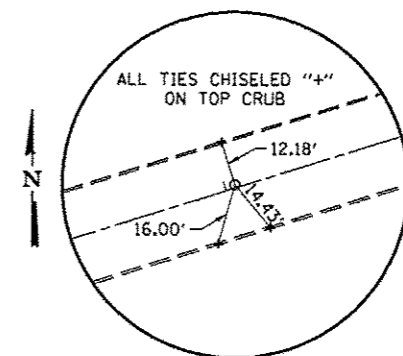
PI STA 5+85.97
MAG NAIL (SET)



PI STA 10+00.00
MAG NAIL (SET)



PI STA 13+74.58
MAG NAIL (SET)



POT STA 17+02.56
MAG NAIL (SET)

- BM*1 - RR SPIKE IN POWER POLE
25' LT STA 2+64
ELEV 584.78
- BM*2 - RR SPIKE IN POWER POLE
14' LT STA 5+72
ELEV 585.42
- BM*3 - CHISELED "D" BRIDGE WALK
16' RT STA 10+00
ELEV 562.25
- BM*4 - RR SPIKE IN POWER POLE
16' LT STA 13+18
ELEV 570.11
- BM*5 - MAG SPIKE IN POWER POLE
28' LT STA 15+71
ELEV 582.13

* 93618

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB # 2284
 FILE NAME = 2284A18.dgn
 PLOT SCALE = 1/8" = 1' IN.
 PLOT DATE = 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 2/19/2013

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

ALIGNMENT, BENCH MARKS AND CROSS TIES

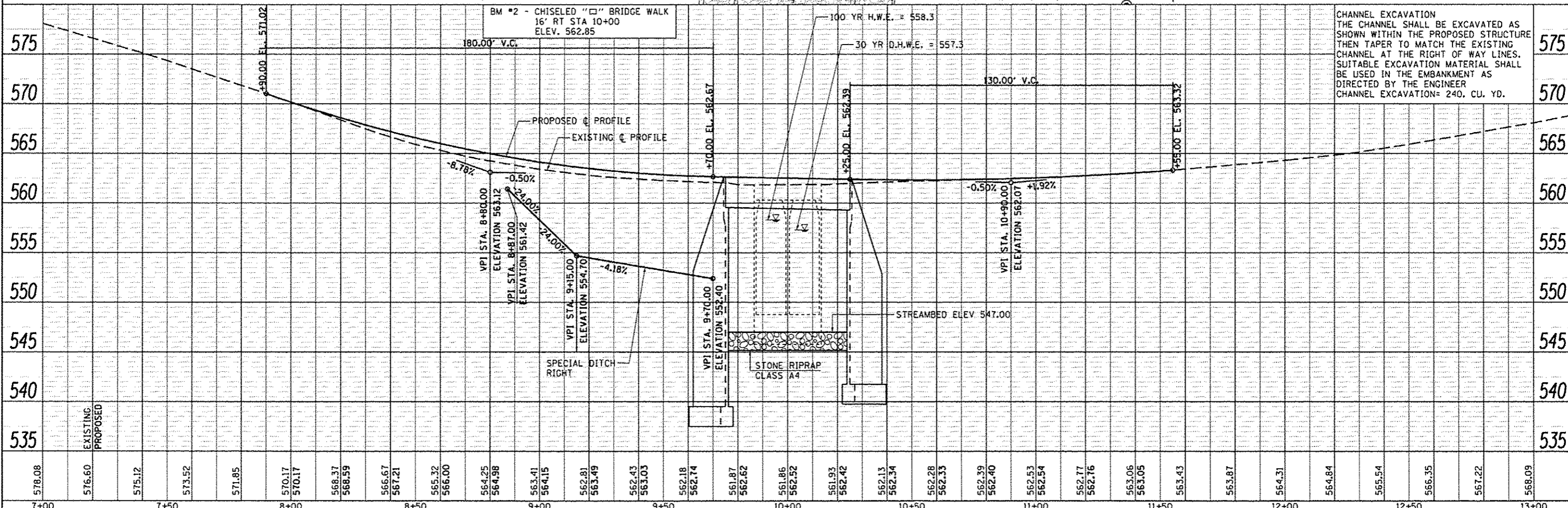
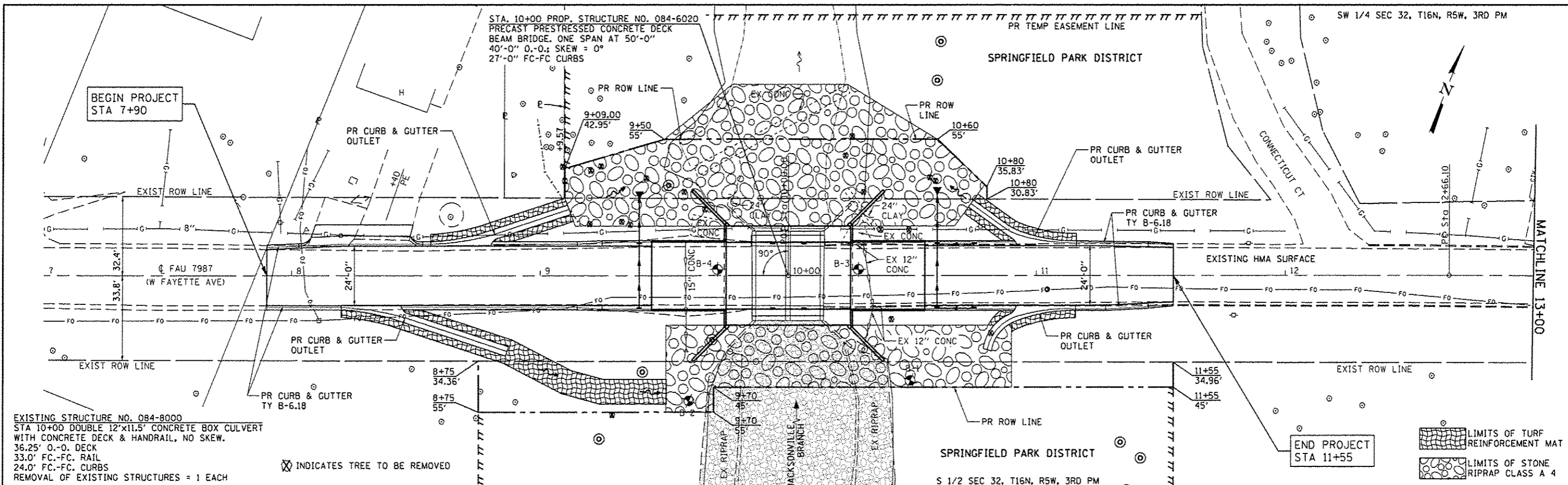
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	15

CONTRACT NO. *

DATE	
BY	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
PROFILE	
NOTE BOOK	
NO.	



578.08	576.60	575.12	573.52	571.85	570.17	570.17	568.37	566.59	566.67	567.21	565.32	566.00	564.25	564.98	563.41	564.15	562.81	563.49	562.43	563.03	562.18	562.74	561.87	562.62	561.86	562.52	561.93	562.42	562.13	562.34	562.28	562.33	562.39	562.40	562.53	562.54	562.77	562.76	563.06	563.05	563.43	563.87	564.31	564.84	565.54	566.35	567.22	568.09												
7+00	7+10	7+20	7+30	7+40	7+50	7+60	7+70	7+80	7+90	8+00	8+10	8+20	8+30	8+40	8+50	8+60	8+70	8+80	8+90	9+00	9+10	9+20	9+30	9+40	9+50	9+60	9+70	9+80	9+90	10+00	10+10	10+20	10+30	10+40	10+50	10+60	10+70	10+80	10+90	11+00	11+10	11+20	11+30	11+40	11+50	11+60	11+70	11+80	11+90	12+00	12+10	12+20	12+30	12+40	12+50	12+60	12+70	12+80	12+90	13+00

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB # 2284
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PLOT SCALE = 48.0000' / 1" IN.
PLOT DATE = 4/30/2014

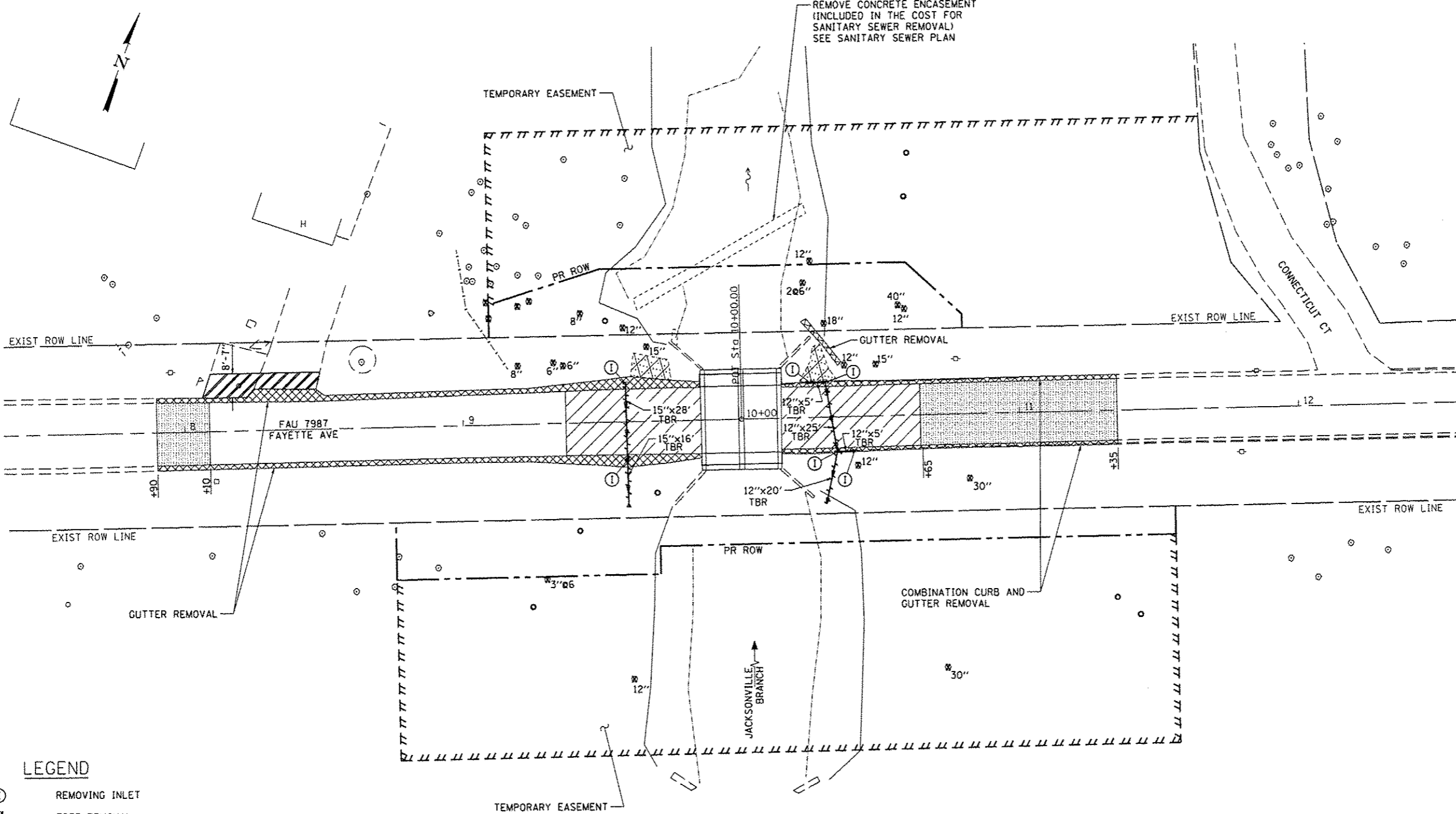
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DRAWN - SJS
CHECKED - MDC
DATE - 10/17/2013

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SCALE: SHEET NO. OF SHEETS STA. 7+00 TO STA. 13+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	16
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 93618	



LEGEND

- ① REMOVING INLET
- ⊗ TREE REMOVAL
- [Cross-hatched box] GUTTER REMOVAL OR CONCRETE CURB AND GUTTER REMOVAL
- [Diagonal lines box] PAVEMENT REMOVAL
- [Dotted box] HMA SURFACE REMOVAL VARIABLE DEPTH
- [Horizontal lines box] DRIVEWAY PAVEMENT REMOVAL
- [Dashed line] STORM SEWER REMOVAL
- TBR TO BE REMOVED
- [Cross-hatched box] CONCRETE SLOPE PROTECTION REMOVAL

EXISTING STRUCTURE NO 084-8000
 STA 10+00 DOUBLE 12'x11.5' CONCRETE
 BOX CULVERT WITH CONCRETE DECK
 AND HANDRAIL, NO SKEW
 36.25' O-O DECK
 33.0' FC-FC RAIL
 24.0' FC-FC CURBS

REMOVAL OF EXISTING STRUCTURE INCLUDES
 REMOVAL OF EXISTING CONCRETE SLOPE PROTECTION

REMOVAL OF EXISTING STRUCTURES 1 EACH

* 93618

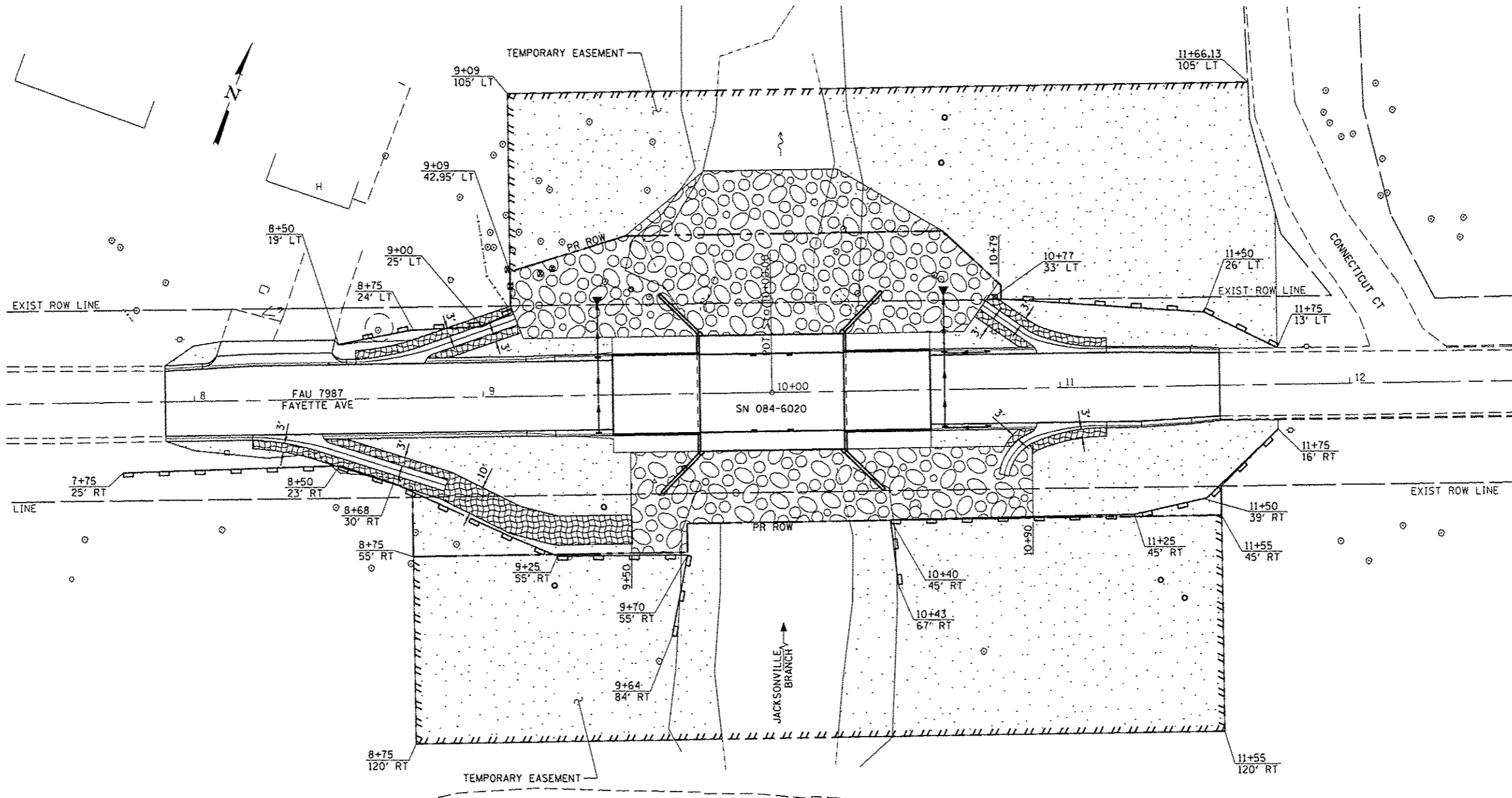


JOB # 2284	DESIGNED - NAK	REVISED -
FILE NAME = 2284_sht.rem.dgn	DRAWN - SJS	REVISED -
PLOT SCALE = 40.0000' / IN.	CHECKED - NAK	REVISED -
PLOT DATE = 2/19/2014	DATE - 11/1/2013	REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

REMOVAL PLAN				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.U. RTE. 7978	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 17
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



DESCRIPTION OF CONSTRUCTION ACTIVITY

1. The project consists of replacing the existing bridge over the Jacksonville Branch and reconstructing approach roadway.
2. Construction consists of constructing embankments, relocating sanitary sewer, installing drainage structures, construction of bridge approach pavements, PCC base course widening, combination concrete curb and gutter, HMA leveling binder and surface course, and other miscellaneous work to complete the improvements to the proposed roadways.

SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

1. Relocate sanitary sewer
2. Construction of embankments
3. Installing drainage structures
4. Construction of bridge approach pavements, PCC base course widening, combination concrete curb and gutter, HMA leveling binder and surface course
5. Final grading and seeding

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.

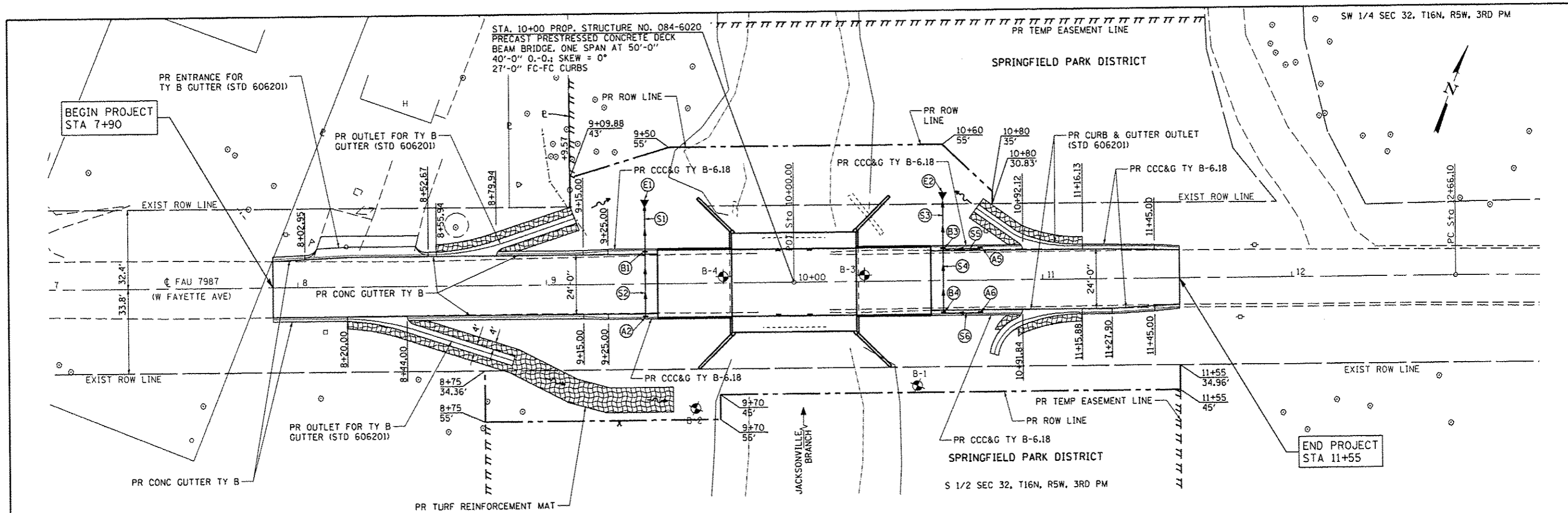
The Contractor shall place permanent erosion control systems and seeding within a reasonable amount of time; therefore, reducing the amount of area being open to the possibility of erosion and reducing the amount of temporary erosion control systems and temporary seeding.

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.

LEGEND

-  TURF REINFORCEMENT MAT
-  SEEDING, CLASS 2 (SPECIAL)
-  PERIMETER EROSION BARRIER
-  STONE RIPRAP



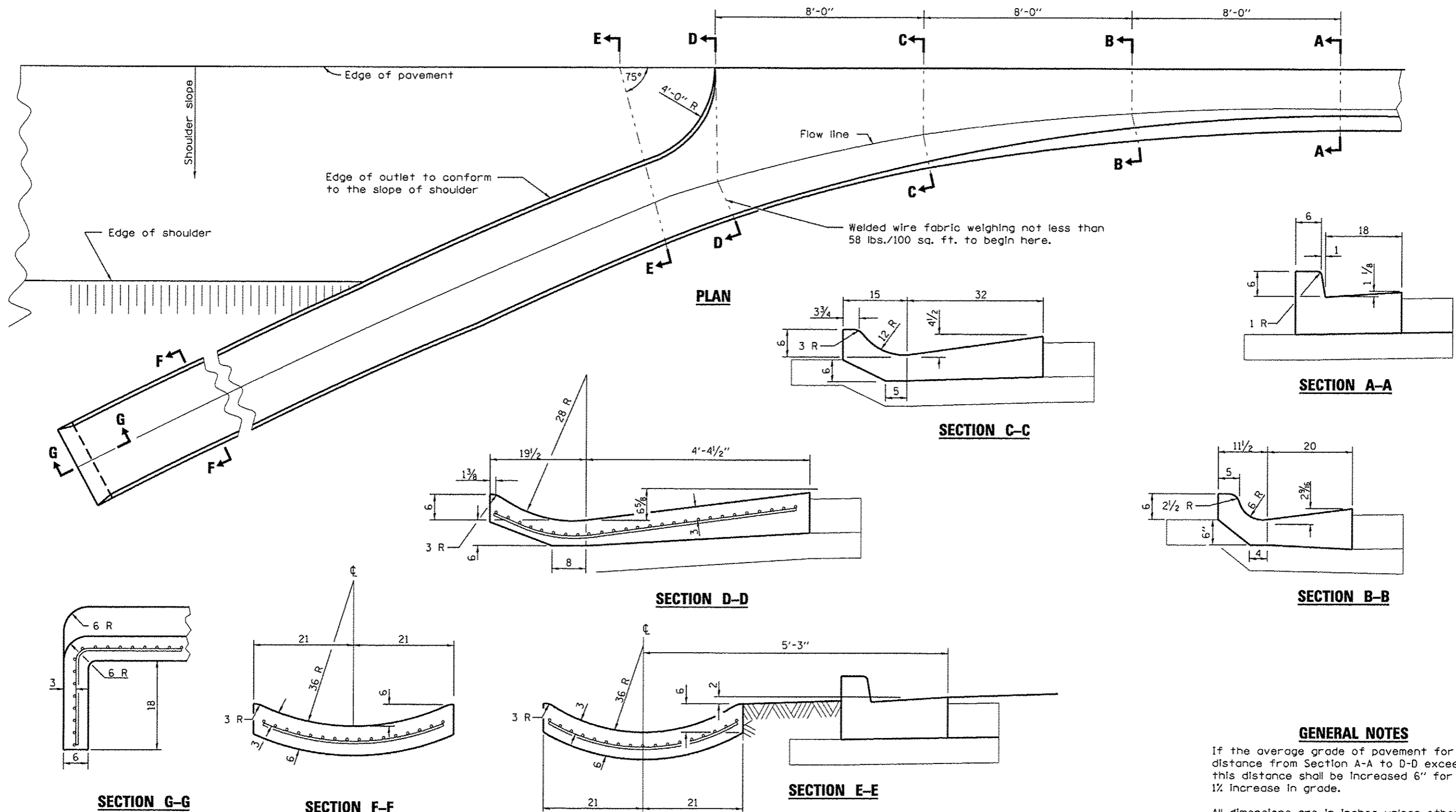
- 1. TRANSITION FROM CONCRETE GUTTER TYPE B TO COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.18 LEFT AND RIGHT STA 9+15.00 TO STA 9+25.00. TRANSITION TO BE PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.18
- 2. TRANSITION FROM COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.18 TO EXISTING CURB AND GUTTER LEFT AND RIGHT STA 11+45 TO STA 11+55 TRANSITION TO BE PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.18
- B1 INLETS TYPE B TYPE 3 FRAME & GRATE
13.3' LT STA 9+40
f 12" NORTH 559.5
f 12" SOUTH 559.3
- A2 INLETS TYPE A TYPE 3 FRAME & GRATE
13.25' RT STA 9+40
f 12" SOUTH 559.8

- B3 INLETS TYPE B TYPE 3 FRAME & GRATE
13.3' LT STA 10+60
f 12" NORTH 559.0
f 12" EAST 559.2
f 12" SOUTH 559.2
- B4 INLETS TYPE B TYPE 3 FRAME & GRATE
13.3' RT STA 10+60
f 12" NORTH 559.4
f 12" EAST 559.5
- A5 INLETS TYPE A TYPE 3 FRAME & GRATE
13.25' LT STA 10+75
f 12" WEST 559.3
- A6 INLETS TYPE A TYPE 3 FRAME & GRATE
13.25' RT STA 10+75
f 12" WEST 559.6
- E1 END SECTION 32.15' LT STA 9+40 557.9
- E2 END SECTION 36.2' LT STA 10+60 558.4

- S1 PIPE CULVERT CLASS D TYPE 1 12"x16'
USFL 14.45' LT STA 9+40 559.5
DSFL 30.45' LT STA 9+40 558.1
- S2 STORM SEWER CLASS A, TYPE 1 12"x25'
USFL 12.75' RT STA 9+40 559.8
DSFL 12.25' LT STA 9+40 559.6
- S3 PIPE CULVERT CLASS D TYPE 1 12"x20'
USFL 14.5' LT STA 10+60 559.0
DSFL 34.5' LT STA 10+60 558.6
- S4 STORM SEWER CLASS A, TYPE 1 12"x24.5'
USFL 12.25' RT STA 10+60 559.4
DSFL 12.25' LT STA 10+60 559.2
- S5 STORM SEWER, CLASS A, TYPE 1 12"x13'
USFL 13.25' LT STA 10+74 559.3
DSFL 13.3' LT STA 10+61 559.2
- S6 STORM SEWER, CLASS A, TYPE 1 12"x13'
USFL 13.25' LT STA 10+74 559.6
DSFL 13.3' LT STA 10+61 559.5

★ 93618

	JOB = 2284	DESIGNED - NAK	REVISED -	CITY OF SPRINGFIELD FAYETTE AVE IMPROVEMENTS	DRAINAGE PLAN				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME = 2284_sht.drainage.dgn	DRAWN - SJS	REVISED -						7978	11-00472-00-BR	SANGAMON	51	19
	PLT SCALE = 48.8900' / 1"	CHECKED - NAK	REVISED -						CONTRACT NO. ★				
PLT DATE = 2/25/2014	DATE - 11/1/2013	REVISED -	SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				



PLAN

SECTION A-A

SECTION C-C

SECTION B-B

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

GENERAL NOTES

If the average grade of pavement for the distance from Section A-A to D-D exceeds 2%, this distance shall be increased 6" for each 1% increase in grade.

All dimensions are in inches unless otherwise shown.

QUANTITIES

For Section A-A to E-E and curtain wall = 2.50 cu. yds. concrete for 9 1/2 pav't.,

For Section F-F = 0.069 cu. yds. concrete per ft.

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JOB # 2284	DESIGNED - NAK	REVISED -
FILE NAME = 2284-ahtroutlet.dgn	DRAWN - SJS	REVISED -
PLOT SCALE = 100.0000' / IN.	CHECKED - NAK	REVISED -
PLOT DATE = 2/19/2014	DATE - 2/19/2013	REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

**OUTLET FOR CONCRETE CURB AND GUTTER
TYPE B-6.18**

F.A.J. RTE. 7978	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 20
SCALE:		SHEET NO. OF SHEETS		STA. TO STA.
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SANITARY SEWER REMOVAL

LOCATION	14"	18"	24"	27"	30"	36"	5' BRICK
36.4' LT STA 9+51.8 TO 75.0' LT STA 10+24.0						82	
31.5' LT STA 10+27.8 TO 50.0' RT STA 10+79.0							93
45.0' RT STA 10+70.5 TO 50.0' RT STA 10+79.1							10
41.7' RT STA 10+82.4 TO 47.4' RT STA 10+90.6		10					
89.7' LT STA 10+52.5 TO 94.3' LT STA 10+61.3						10	
78.7' LT STA 10+59.9 TO 47.4' RT STA 10+90.6		139					
94.3' LT STA 10+61.3 TO 78.7' LT STA 10+59.9				16			
90.6' RT STA 9+07.0 TO 65.8' RT STA 9+23.9					30		
65.8' RT STA 9+24.0 TO 58.0' RT STA 9+29.5					10		
83.0' RT STA 9+34.3 TO 74.5' RT STA 9+39.6			10				
25.9' RT STA 9+69.5 TO 78.7' LT STA 10+59.9	137						
40.0' RT STA 9+41.1 TO 25.9' RT STA 9+69.5			30				
86.1' RT STA 9+57.9 TO 76.1' RT STA 9+58.9			10				
76.1' RT STA 9+58.9 TO 66.1' RT STA 9+59.9			10				
46.4' RT STA 9+56.9 TO 25.9' RT STA 9+69.5				24			
47.2' RT STA 9+64.1 TO 25.9' RT STA 9+69.5				22			
TOTAL	137	149	106		40	92	103

FILLING MANHOLES

LOCATION	EACH
MH 101 38.8' RT STA 9+41.3	1
TOTAL	1

EXISTING MANHOLE INFORMATION

MH 100 RIM 555.76 INV 544.34 FL 543.86 S (30") FL 543.89 N (30") FL 550.91 (8" SERVICE)	MH 105 SEALED (BOLTED) RIM 557.10 INV 543.34 FL 543.38 SE (27") FL 543.75 S (36" IRON) FL 547.49 N (30" IRON) FL 543.32 NW (27")
MH 101 RIM 555.13 INV 543.88 FL 543.70 S (30") FL 543.68 NW (36" IRON) FL 544.52 N (24" CONN.)	MH 201 RIM 555.67 INV 544.63 FL 544.43 S (60") FL 543.63 E (84" COMBINED) FL 543.56 NW (84" COMBINED)
MH 102 RIM 558.49 INV 544.27 FL 544.09 N (14" IRON) FL 546.86 SE (24") FL UNKNOWN (24" CONN.)	MH 202 RIM 556.81 INV 543.47 FL 544.43 S (30") FL 543.47 SE (84" COMBINED) FL 543.47 NW (84" COMBINED)
MH 104 RIM 557.19 INV 543.63 FL 543.53 SW (14" IRON) FL 543.47 NW (27") FL 543.60 SE (OLD 18")	

- GENERAL NOTES**
1. THE ENDS OF ABANDONED SANITARY SEWERS SHALL BE SEALED WITH CLASS S1 CONCRETE (COST INCLUDED IN SANITARY SEWER REMOVAL)
 2. THE ABANDONED 36" SANITARY SEWER BETWEEN EXISTING MANHOLES 101 AND 103 SHALL BE FILLED WITH CONTROLLED LOW DENSITY CELLULAR GROUT (SEE SPECIAL PROVISIONS).
 3. EXISTING MANHOLE 101 SHALL BE FILLED AS SPECIFIED IN SECTION 605 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EXCEPT THE MANHOLE SHALL BE REMOVED TO AN ELEVATION 2 FEET BELOW THE PROPOSED FINISHED GROUND.
 4. THE TRENCH UNDER THE PAVEMENT AND CURB FOR REMOVAL OF THE EXISTING 18" SANITARY SEWER SHALL BE BACKFILLED WITH TRENCH BACKFILL (SEE SPECIAL PROVISIONS) EST QTY 77 CU YD.

REMOVING MANHOLES

LOCATION	EACH
MH 100 65.8' RT STA 9+23.8	1
MH 102 25.8' RT STA 9+69.4	1
MH 103 36.4' LT STA 9+51.8	1
MH 104 78.7' LT STA 10+59.9	1
MH 105 94.3' LT STA 10+61.3	1
TOTAL	5

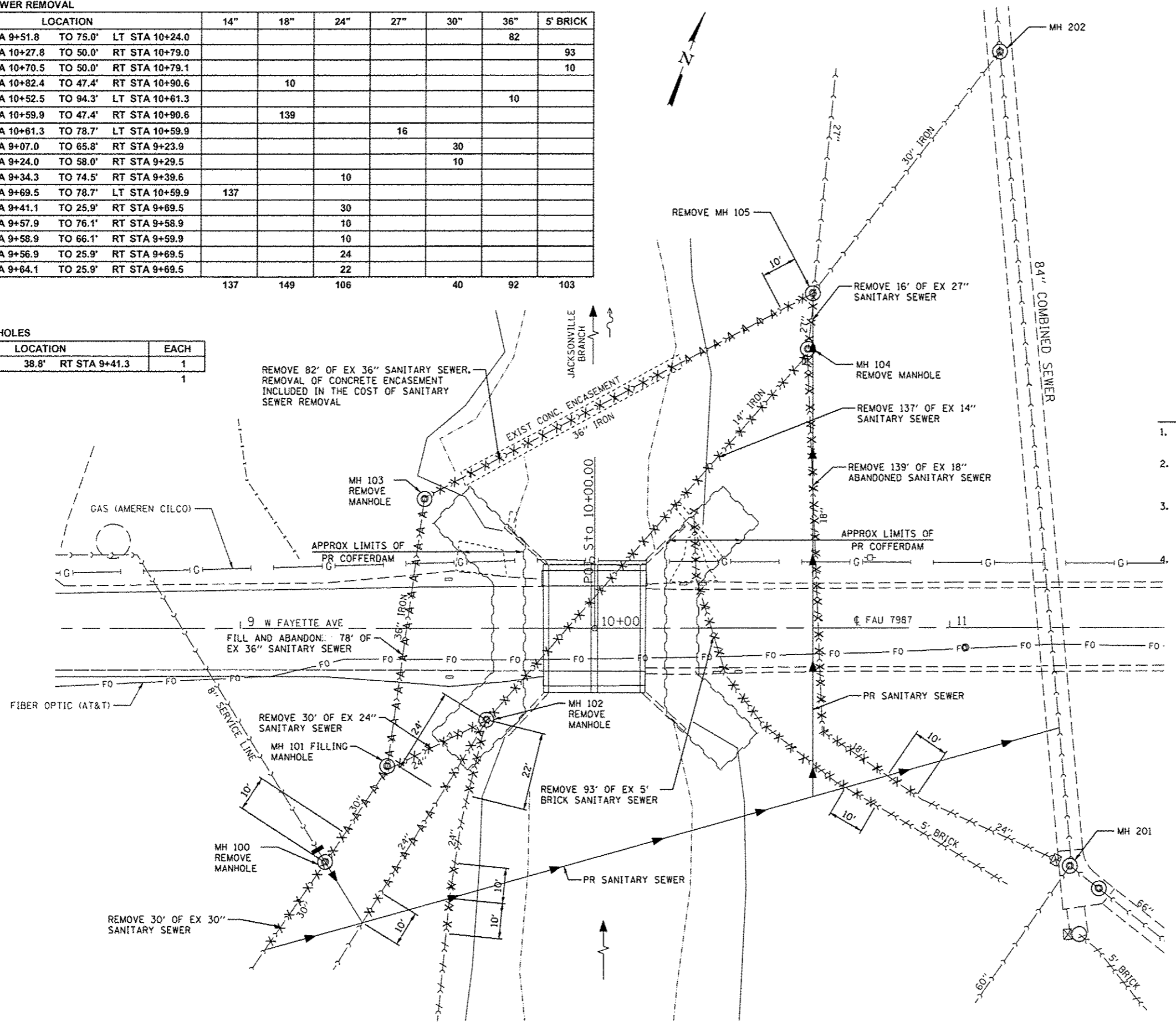
FILL

LOCATION	FOOT
38.8' RT STA 9+41.3 TO 36.5' LT STA 9+51.8	78
TOTAL	78

78" x 36" DIA
PAY 20.4 c.y.

- LEGEND**
- EXISTING MANHOLE
 - - - - - EXISTING SANITARY SEWERS
 - - - - - ABANDONED SANITARY SEWERS
 - ⊗ EXISTING PLUG IN ABANDONED SEWER
 - ××××× EXISTING SANITARY SEWER TO BE REMOVED
 - - - - - EXISTING SANITARY SEWER TO BE ABANDONED

* 93618



JOB # 2284	DESIGNED - NAK	REVISED -
FILE NAME = 2284_sht_Sanitary_Sewer_Rem.dgn	DRAWN - SJS	REVISED -
PLOT SCALE = 3/8" = 1' IN.	CHECKED - NAK	REVISED -
PLOT DATE = 2/25/2014	DATE - 10/31/2013	REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

SANITARY SEWER REMOVAL PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	21

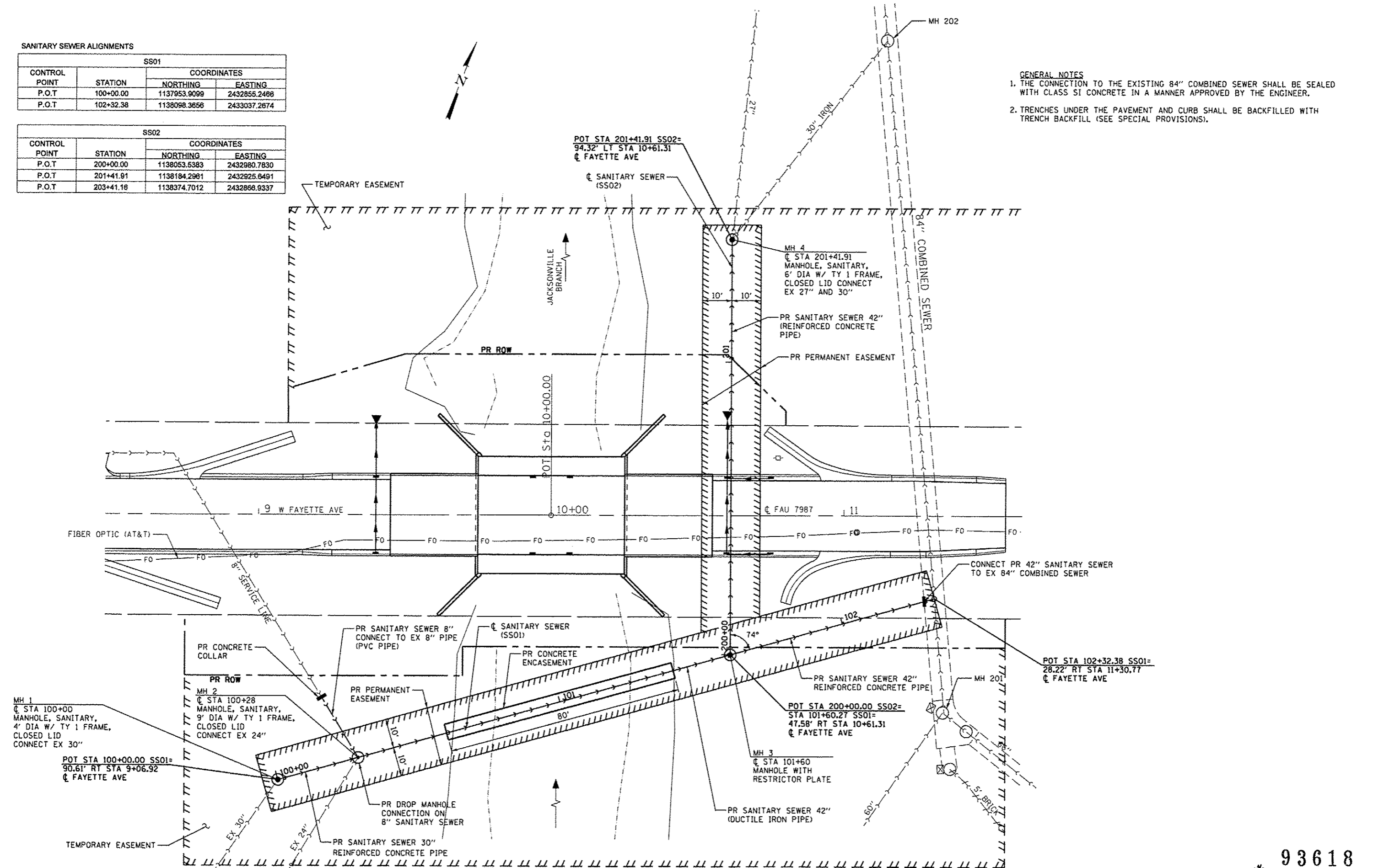
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. *

SANITARY SEWER ALIGNMENTS

SS01		COORDINATES	
CONTROL POINT	STATION	NORTHING	EASTING
P.O.T	100+00.00	1137953.9099	2432855.2488
P.O.T	102+32.38	1138098.3656	2433037.2674

SS02		COORDINATES	
CONTROL POINT	STATION	NORTHING	EASTING
P.O.T	200+00.00	1138053.5383	2432980.7830
P.O.T	201+41.91	1138184.2961	2432925.6491
P.O.T	203+41.16	1138374.7012	2432866.9337

- GENERAL NOTES**
1. THE CONNECTION TO THE EXISTING 84" COMBINED SEWER SHALL BE SEALED WITH CLASS SI CONCRETE IN A MANNER APPROVED BY THE ENGINEER.
 2. TRENCHES UNDER THE PAVEMENT AND CURB SHALL BE BACKFILLED WITH TRENCH BACKFILL (SEE SPECIAL PROVISIONS).



93618

<p>Cummins Engineering Corporation Civil and Structural Engineering</p>	JOB # 2284	DESIGNED - NAK	REVISED -	<p>CITY OF SPRINGFIELD FAYETTE AVE IMPROVEMENTS</p>	<p>SANITARY SEWER PLAN</p>		F.A.U. RTE. 7978	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 22	
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	PLOT DATE = 2/19/2014	DATE = 10/31/2013	REVISED -									

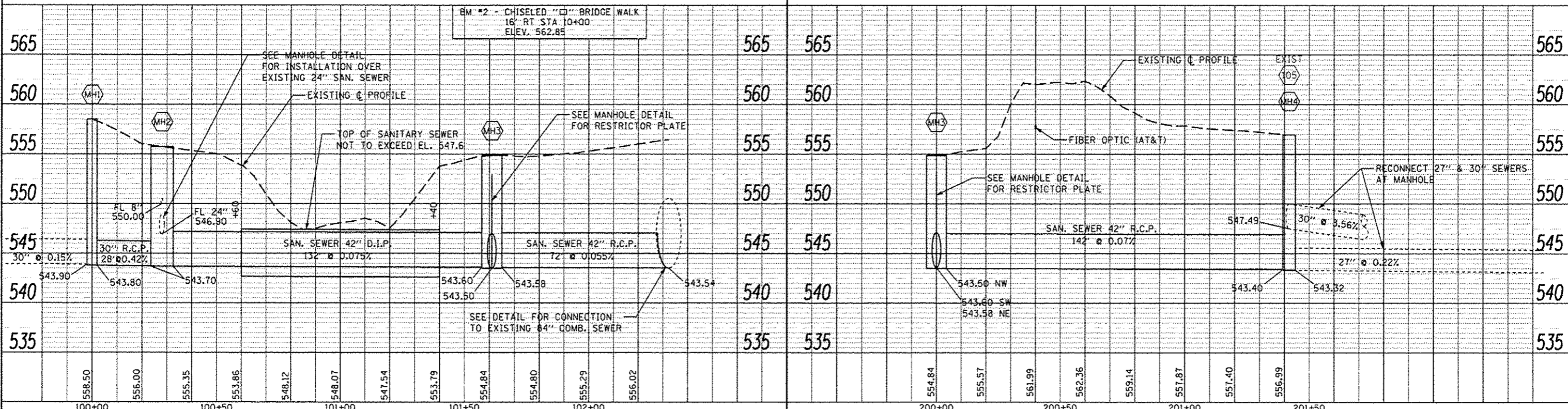
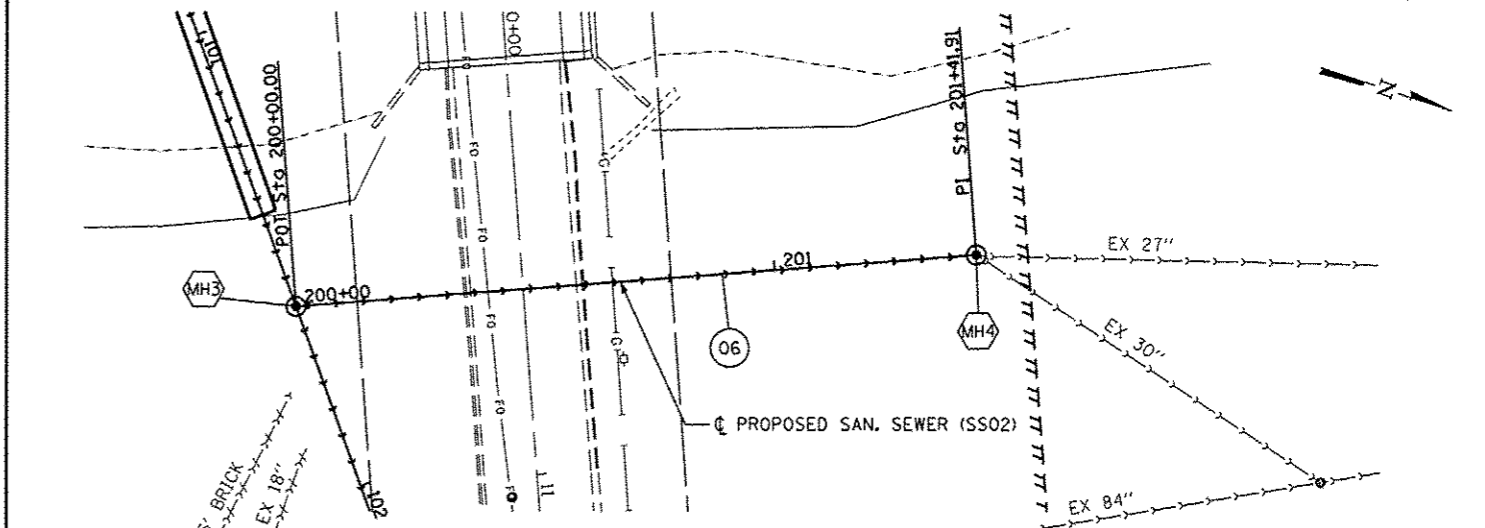
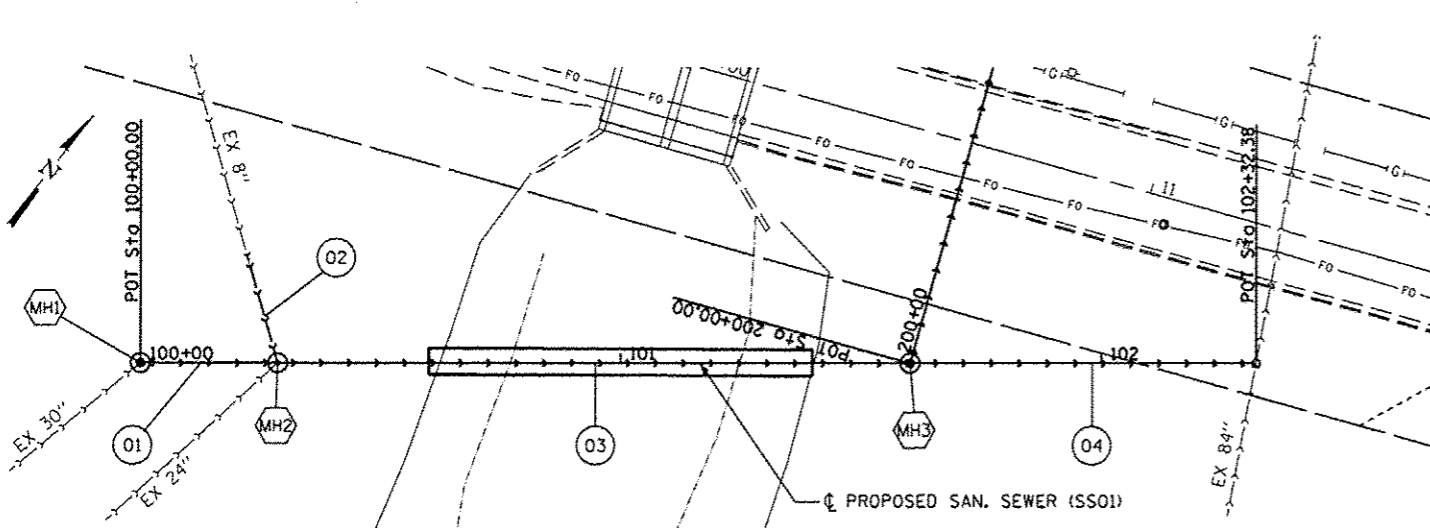
SANITARY SEWER STRUCTURE TABLE

STRUCTURE NO.	LOCATION	MANHOLES	MANHOLES,	MANHOLES	MANHOLES,	TOP OF GRATE ELEV	INVERT ELEVATIONS			
		SANITARY, TY A, 4' DIA TY 1 FR, CL LID	SANITARY, TY A, 6' DIA TY 1 FR, CL LID	WITH RESTRICTOR PLATE	SANITARY, TY A, 9' DIA TY 1 FR, CL LID					
MH1	100+00	1				558.50	543.90 S	543.80 NE		
MH2	100+28				1	555.75	543.70 SW	543.70 NE	546.90 N & S	550.80 NW
MH3	101+60=200+00			1		554.90	543.60 SW	543.58 NE	543.50 NW	
MH4	201+41.91		1			557.10	543.40 SE	547.49 NE	543.32 NW	
TOTAL		1	1	1	1					

SANITARY SEWER PIPE TABLE

Pipe No.	Station - Station	SANITARY SEWER 30" FOOT	SANITARY SEWER 42" FOOT	SANITARY SEWER 8" FOOT	PIPE MATERIAL	TRENCH WIDTH FOOT	TRENCH BACKFILL CU. YD.
01	100+00 TO 100+28	28			RCP	6.08	-
02	LT 100+28			24	PVC	3.83	-
03	100+28 TO 101+60		132		DIP	6.58	-
04	101+60 TO 102+32.38		72		RCP	7.25	-
05	200+00 TO 201+41.91		142		RCP	7.25	112.7
TOTALS		28	346	24			112.7

SEE SANITARY SEWER REMOVAL PLAN FOR DETAILS OF EXISTING SEWERS NOT SHOWN



DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	



JOB # 2284
 FILE NAME = 2284_sht_sanitaryplan.dgn
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 PLOT DATE = 2/25/2014

DESIGNED - TSH
 DRAWN - SJS
 CHECKED - MDC
 DATE - 11/1/2013

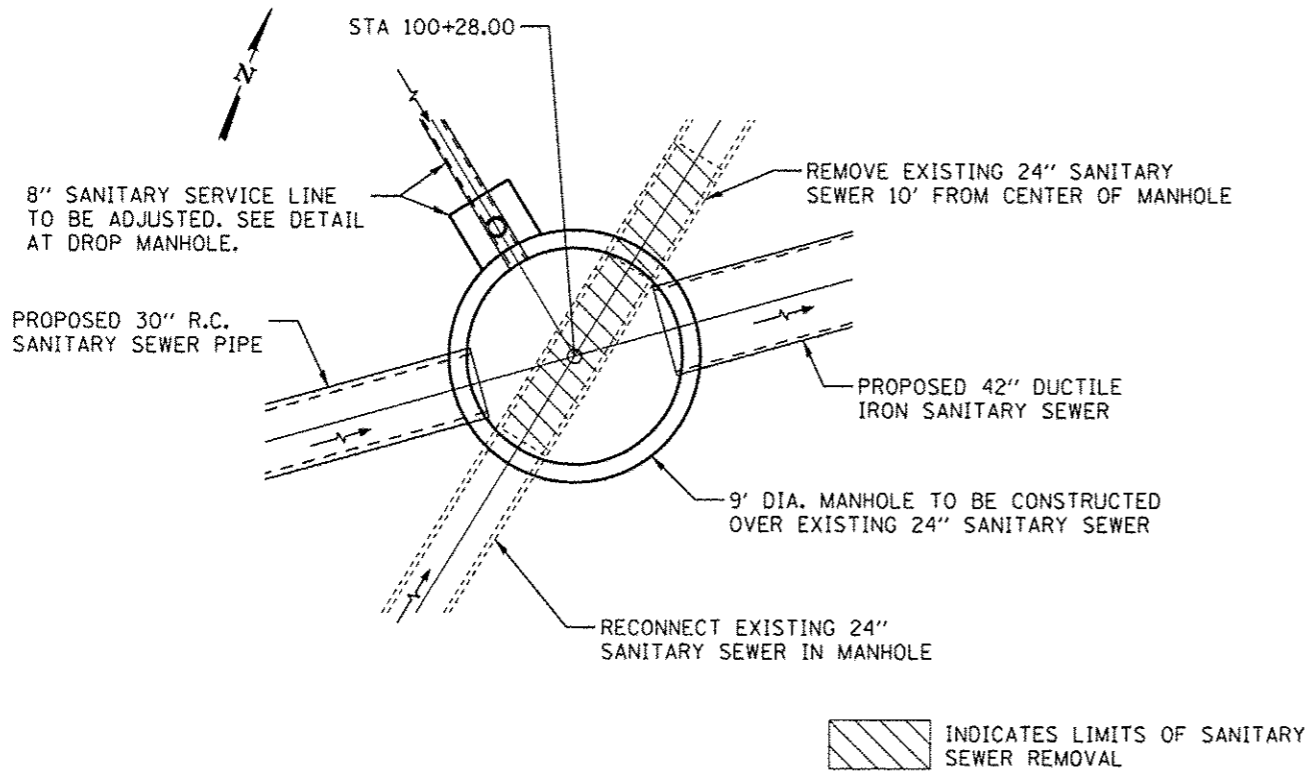
REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

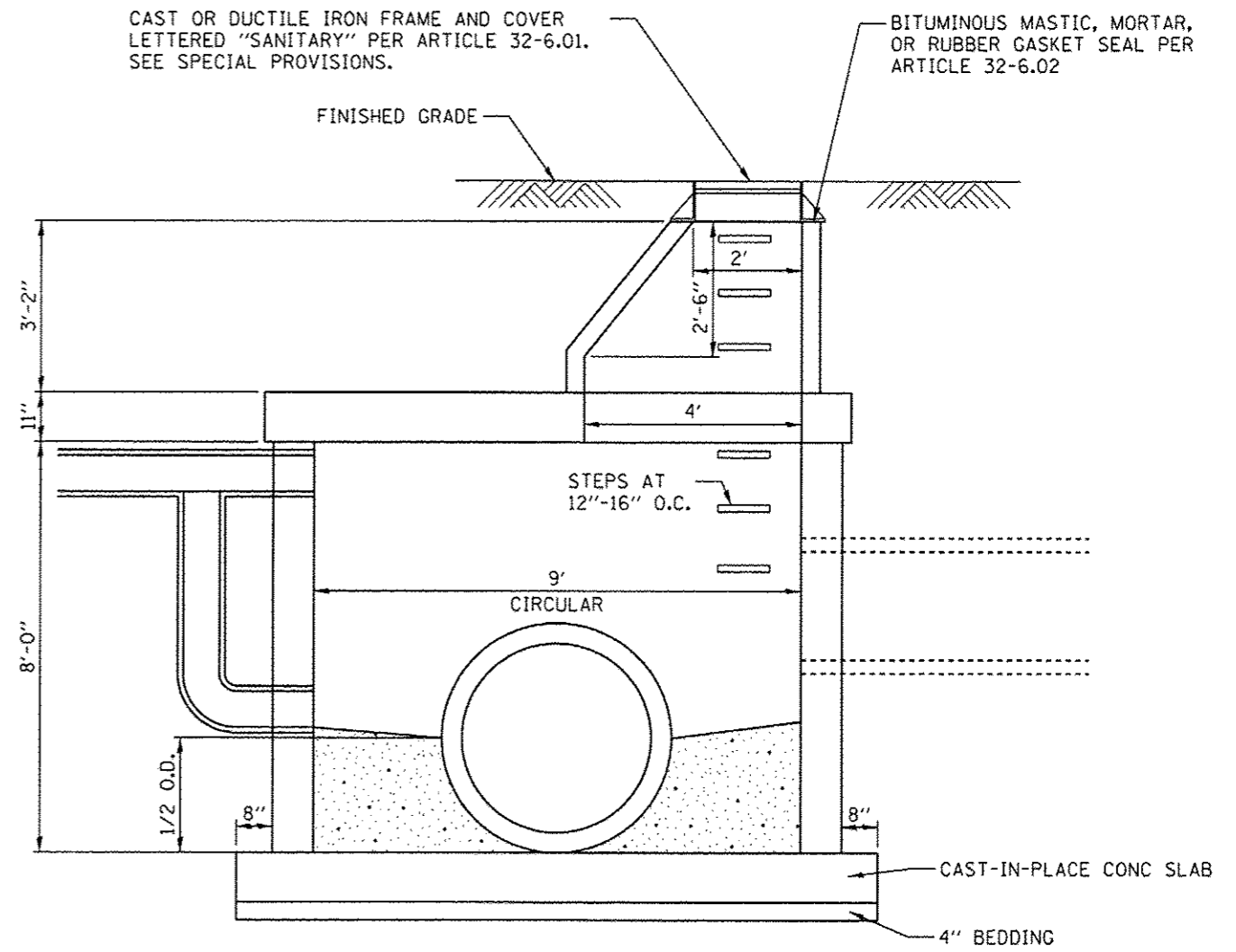
SANITARY SEWER RELOCATION
 PLAN AND PROFILE SHEET
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	23
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

93618



PLAN

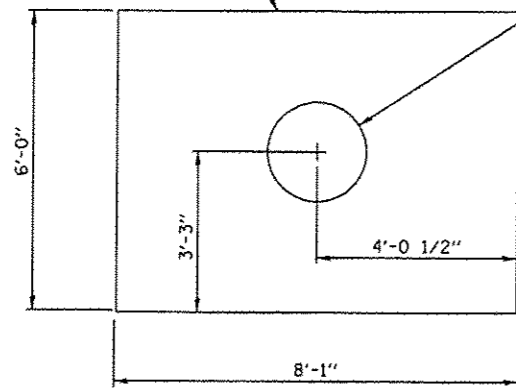


ELEVATION

DETAIL AT MANHOLE NO. 2 STA 100+28.00

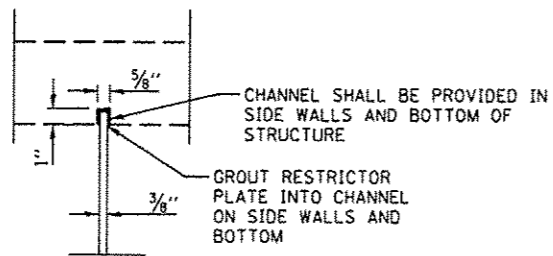
SEE HIGHWAY STD 602421 FOR MANHOLE TYPE A, 9' DIAMETER
 SEE HIGHWAY STD 602701 FOR DETAILS OF MANHOLE STEPS

STAINLESS STEEL $\frac{3}{8}$ " x 6'-0" x 8'-1" 24"Ø CIRCULAR ORIFICE



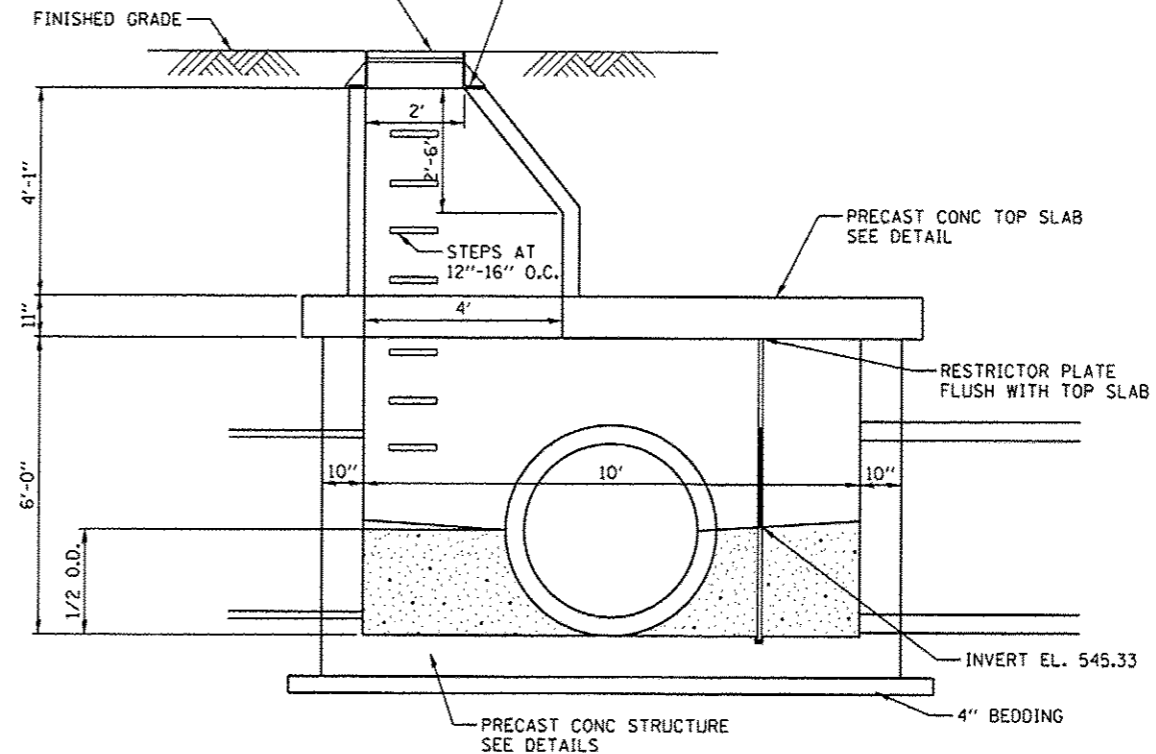
RESTRICTOR PLATE

STAINLESS STEEL PLATE SHALL BE INSTALLED INTO MANHOLE SPECIAL. THE COST OF THE STEEL PLATE, GROUT, AND INSTALLATION SHALL BE INCLUDED IN THE COST FOR MANHOLE, SANITARY (SPECIAL) WITH RESTRICTOR.

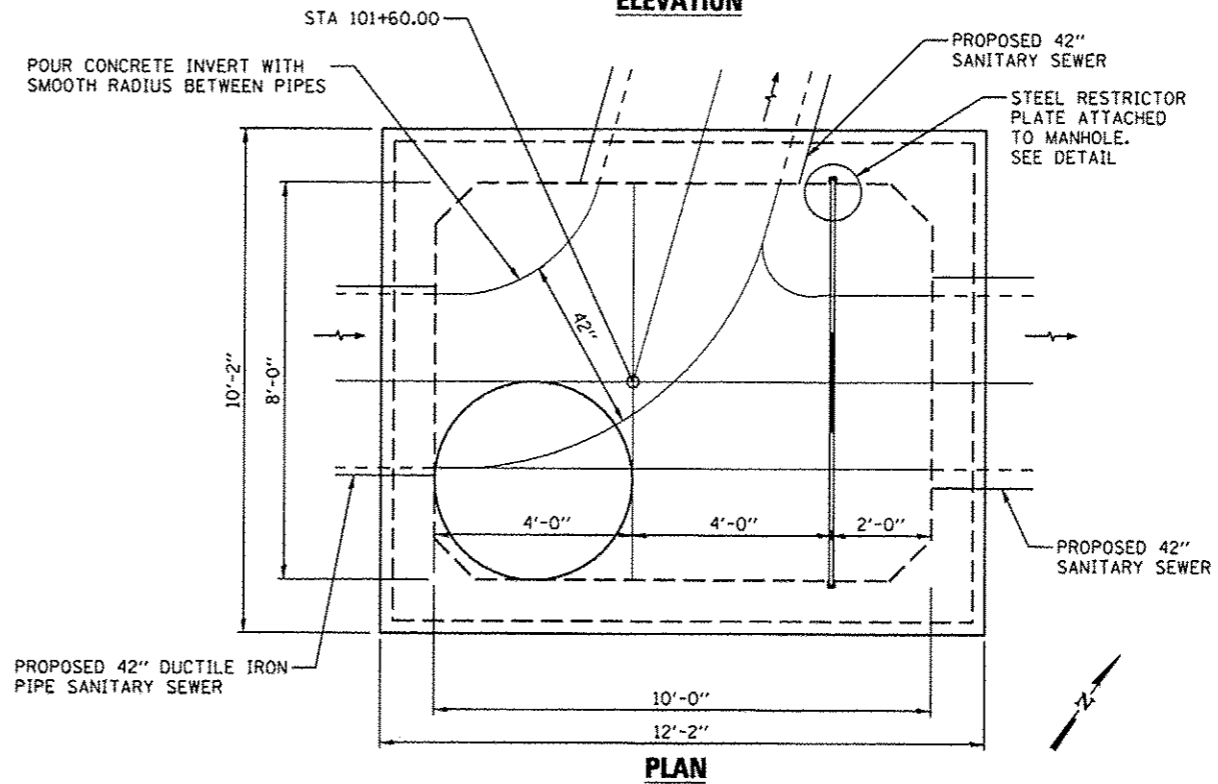


RESTRICTOR PLATE CONNECTION

CAST OR DUCTILE IRON FRAME AND COVER LETTERED "SANITARY" PER ARTICLE 32-6.01. SEE SPECIAL PROVISIONS. BITUMINOUS MASTIC, MORTAR, OR RUBBER GASKET SEAL PER ARTICLE 32-6.02



ELEVATION



PLAN

DETAIL AT MANHOLE NO. 3 STA 101+60.00

SEE HIGHWAY STD 602701 FOR DETAILS OF MANHOLE STEPS

SHEET 1 OF 2

* 93618

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB # 2204
FILE NAME = 2204_sht_sanitarydetail.dgn
PLOT SCALE = 3/8" = 1' IN.
PLOT DATE = 2/19/2014

DESIGNED - NAK
DRAWN - SJS
CHECKED - NAK
DATE - 1/30/2014

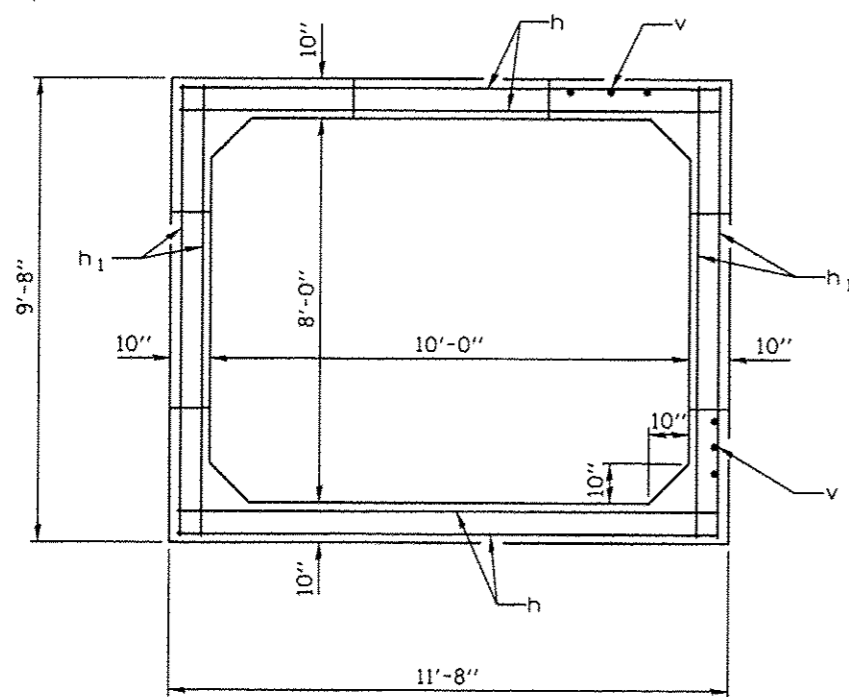
REVISED -
REVISED -
REVISED -
REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

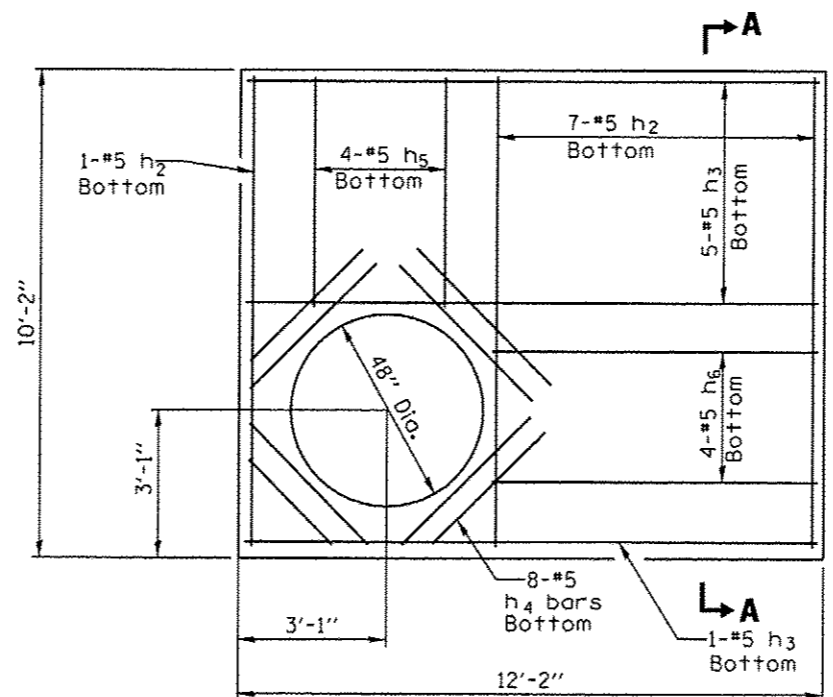
SANITARY SEWER DETAILS

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

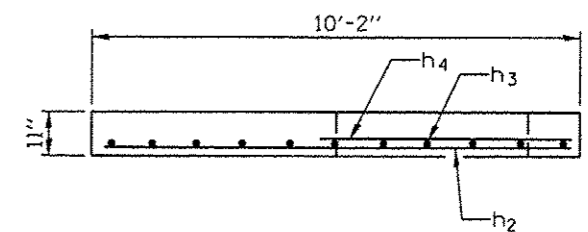
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	25
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. *	



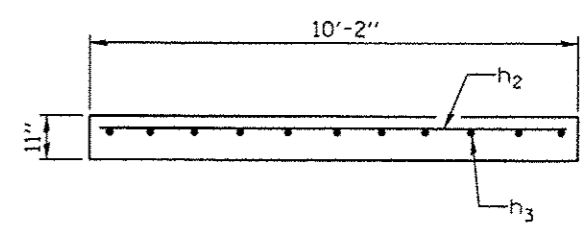
SECTION THRU STRUCTURE - WALLS



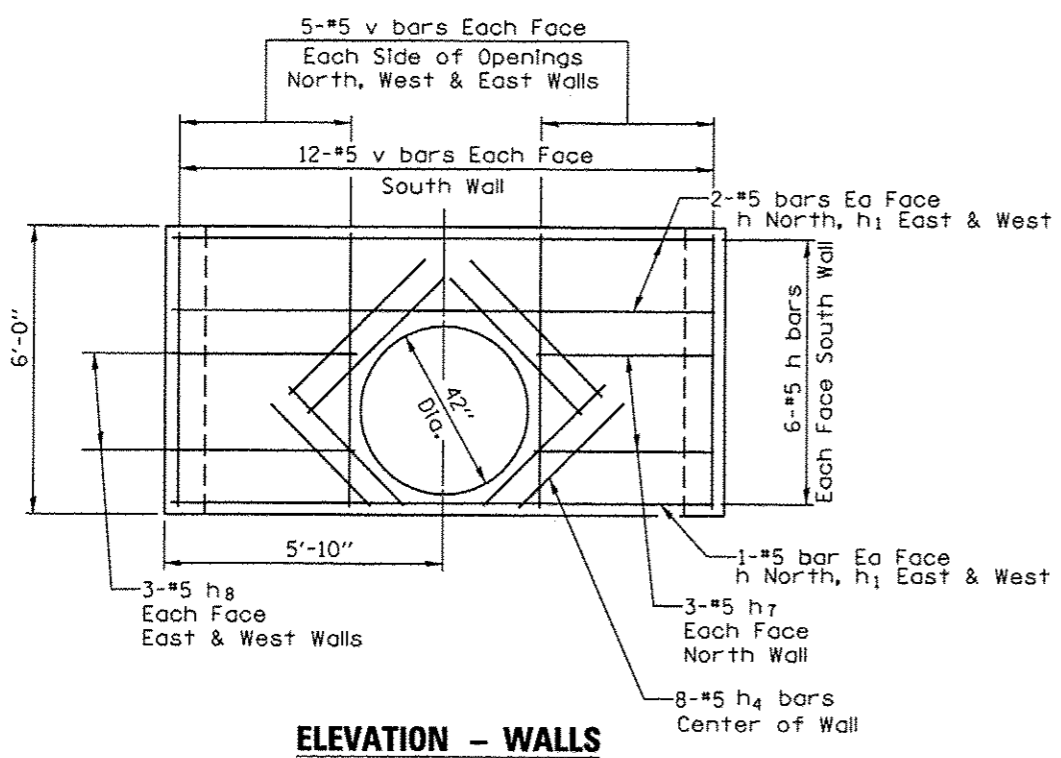
PLAN - TOP SLAB



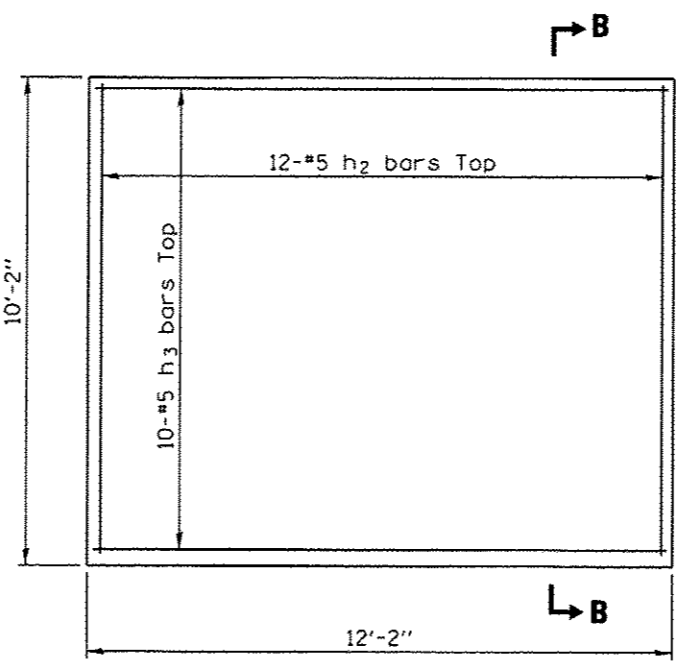
**SECTION A-A
TOP SLAB**



**SECTION B-B
BOTTOM SLAB**



ELEVATION - WALLS



PLAN - BOTTOM SLAB

**BAR LIST
(FOR INFORMATION ONLY)**

Bar	No.	Size	Length	Shape
h	18	#5	11'-4"	—
h ₁	12	#5	9'-4"	—
h ₂	20	#5	9'-10"	—
h ₃	16	#5	11'-10"	—
h ₄	32	#5	4'-0"	—
h ₅	4	#5	4'-9"	—
h ₆	4	#5	6'-9"	—
h ₇	12	#5	3'-9"	—
h ₈	24	#5	2'-9"	—
v	84	#5	5'-8"	—

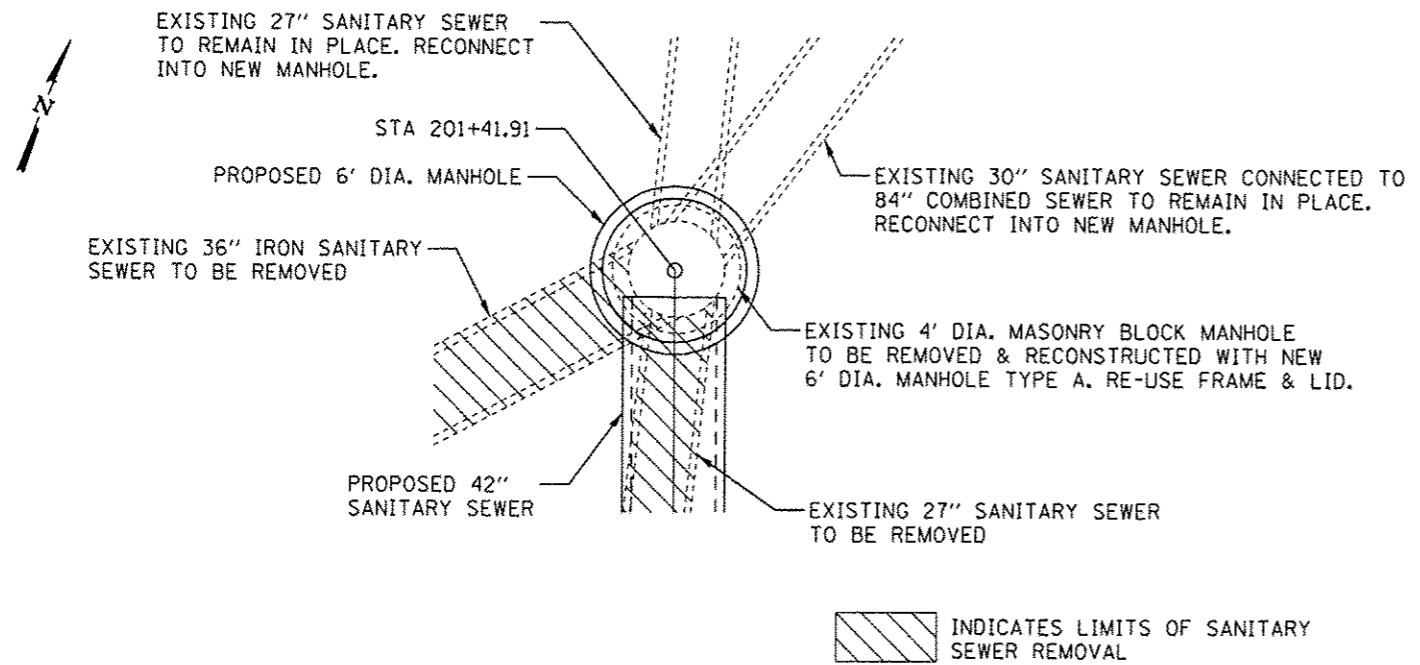
CONCRETE STRUCTURES = 15.0 CU YD
REINFORCEMENT BARS = 1,530 LBS

NOTES

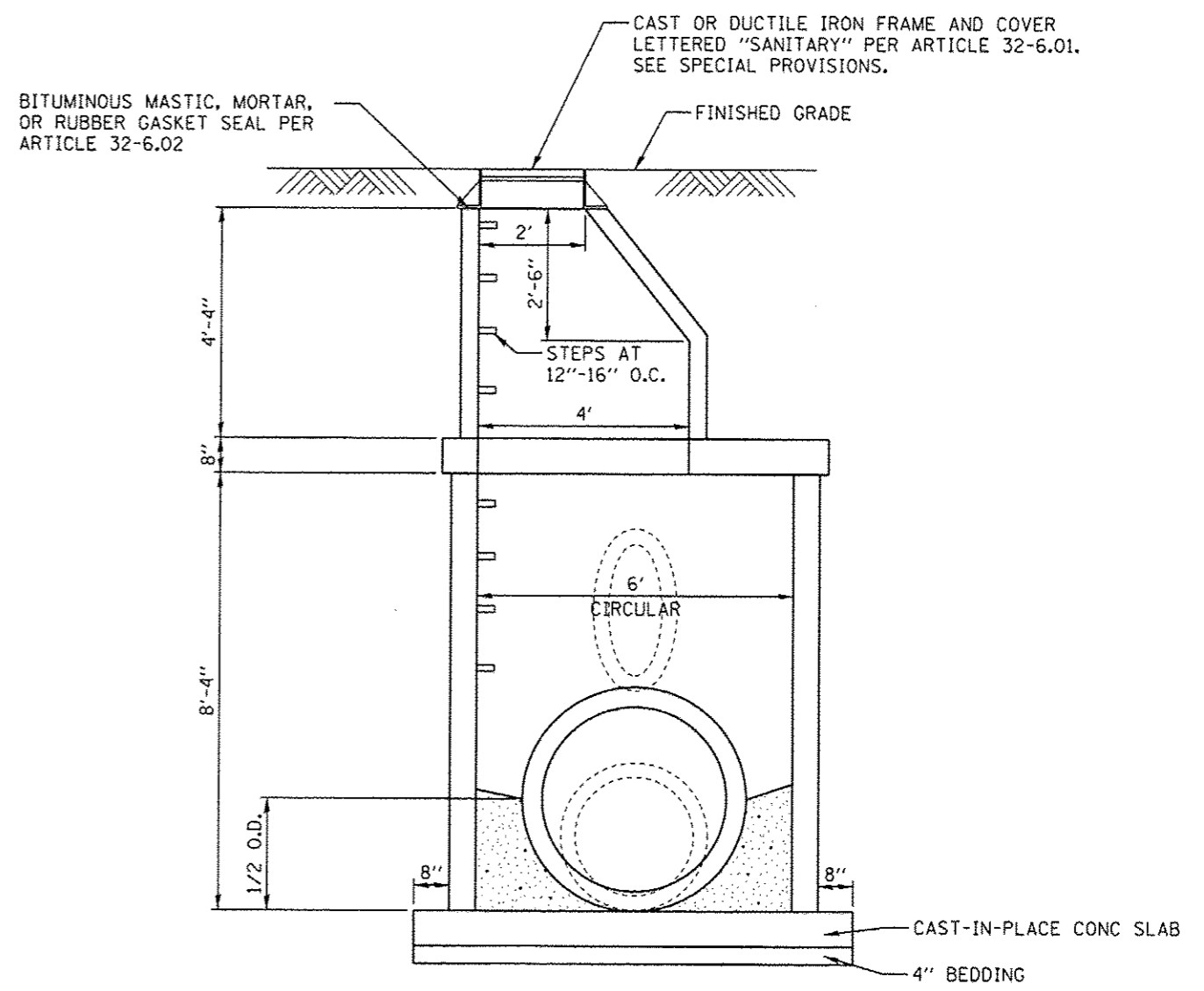
ALL CONCRETE, REINFORCEMENT BARS, RESTRICTOR PLATE, FRAME & LID, GASKETS, GROUT, STEPS AND INSTALLATION SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF MANHOLE SPECIAL.

A 10'x8' precast culvert section meeting the requirements of ASTM C1577 with openings for pipes at the locations shown shall be permitted for Manhole Special.

**MANHOLE NO. 3 STA 101+60
SHOWING REINFORCEMENT**



PLAN



ELEVATION

DETAIL AT MANHOLE NO. 4 STA 201+41.91

SEE HIGHWAY STD 602406 FOR MANHOLE TYPE A, 6' DIAMETER
 SEE HIGHWAY STD 602701 FOR DETAILS OF MANHOLE STEPS

*** 93618**

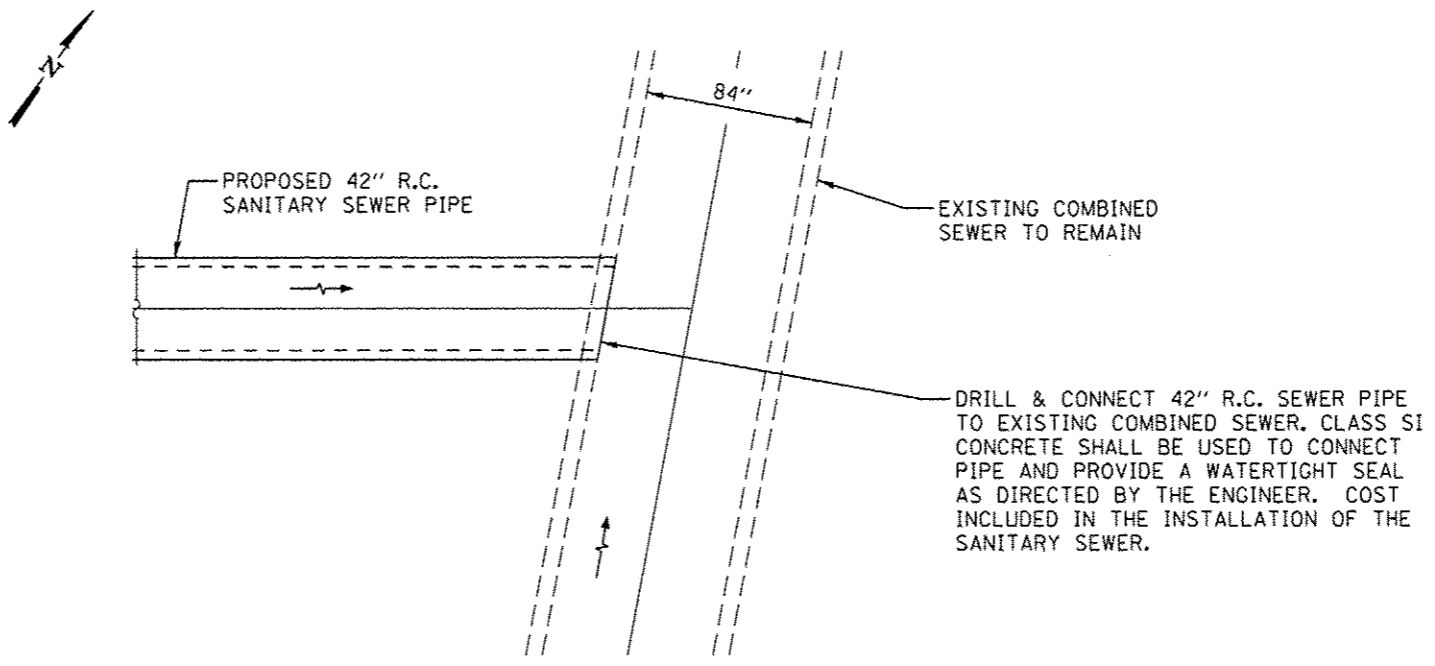


JOB # 2284	DESIGNED - NAK	REVISED -
FILE NAME = 2284_sht_sanitarydetail.dgn	DRAWN - SJS	REVISED -
PLOT SCALE = 32,0000' / IN.	CHECKED - NAK	REVISED -
PLOT DATE = 2/19/2014	DATE - 1/14/2014	REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

SANITARY SEWER DETAILS			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

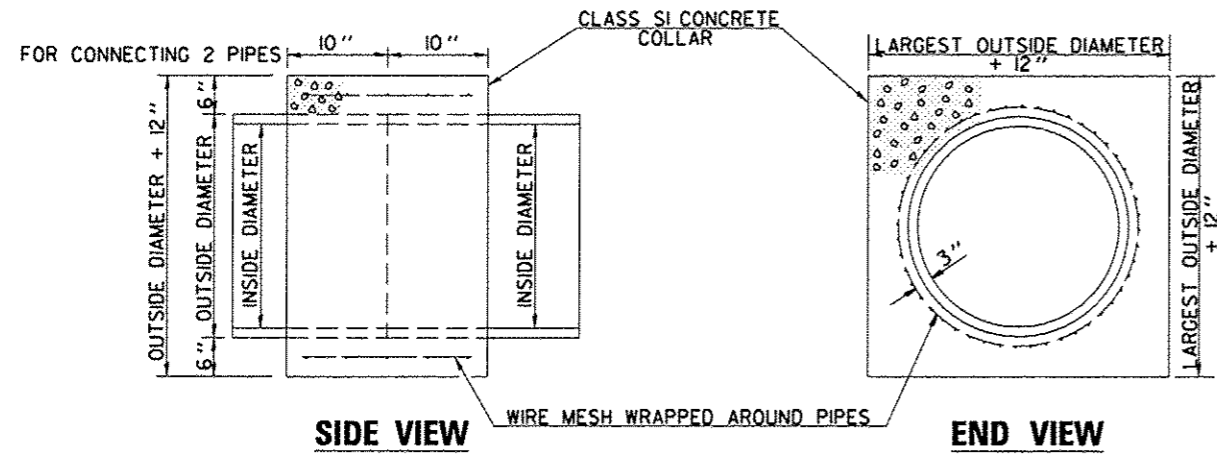
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	27
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. *



DETAIL AT 84" COMBINED SEWER CONNECTION

93618

DETAIL OF CONCRETE COLLAR (SPECIAL)

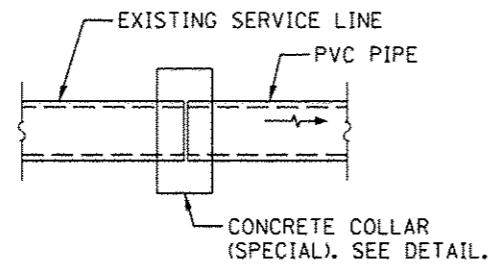


GENERAL NOTES

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
3. THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT.

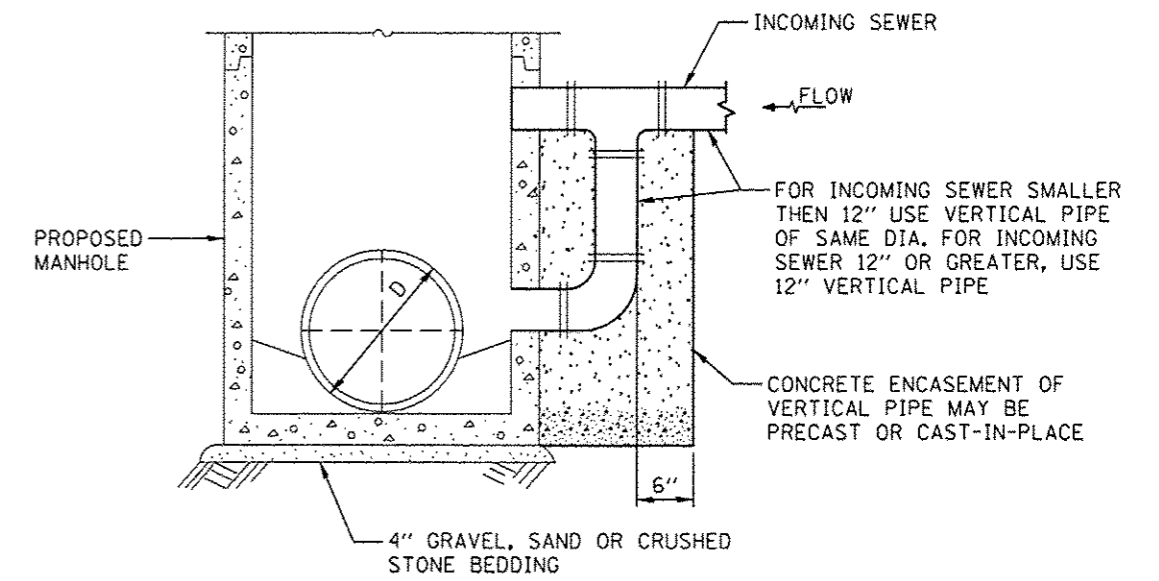
CONCRETE COLLAR (SPECIAL)

LOCATION	EXISTING PIPE SIZE & TYPE	QUANTITY CU YD
RT STA 9+21.75	8" CLAY	0.17
TOTAL		0.17



SERVICE PIPE CONNECTION DETAIL

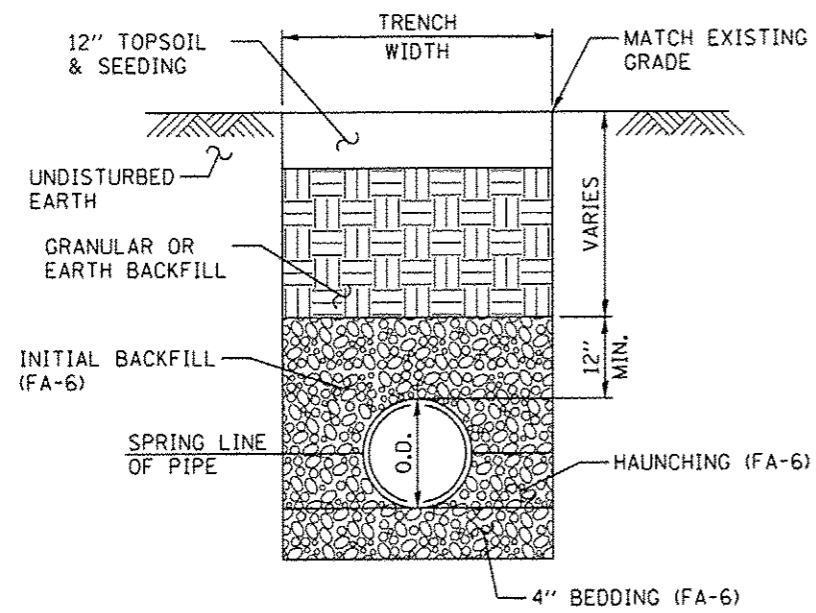
DETAIL OF DROP MANHOLE CONNECTION



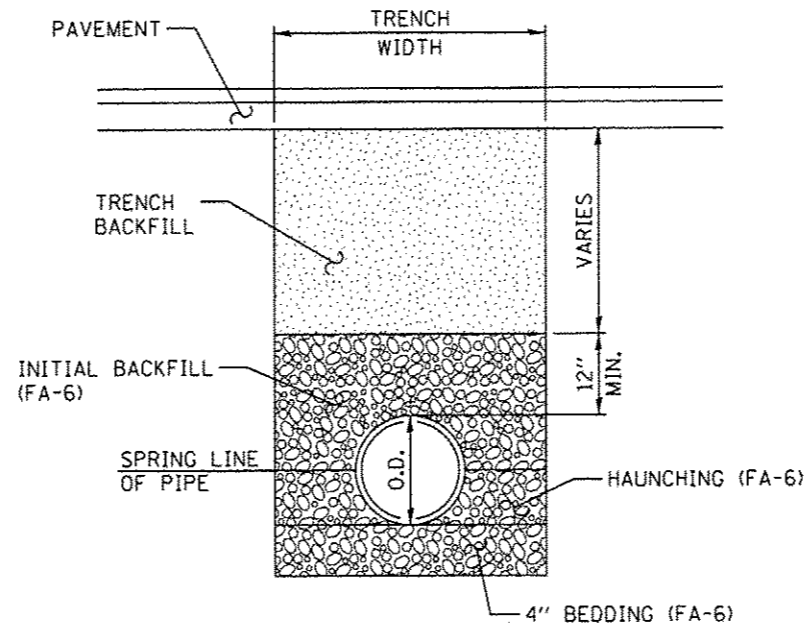
DROP MANHOLE CONNECTION

LOCATION	INCOMING SEWER	VERTICAL PIPE	DROP MANHOLE CONNECTION EACH
RT STA 9+22.00	8"	8"	1
TOTAL			1

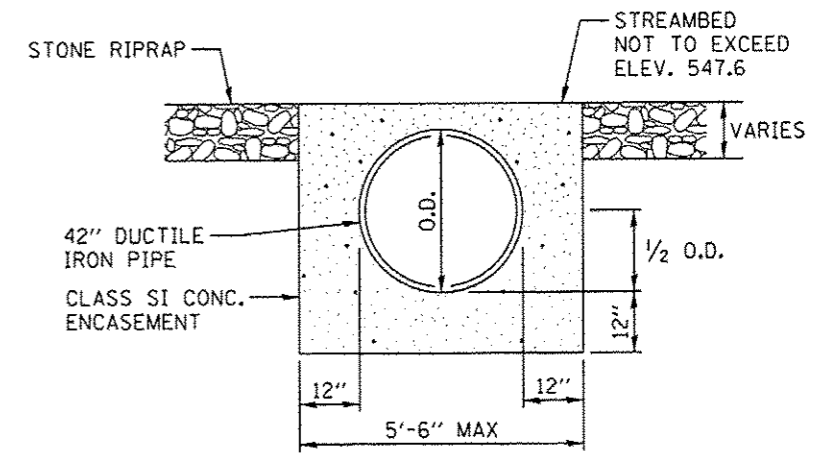
* 93618



TYPICAL TRENCH AND BACKFILL DETAIL



TYPICAL TRENCH AND BACKFILL DETAIL UNDER PAVEMENT



TYPICAL ENCASEMENT DETAIL AT STREAM CROSSING FOR DUCTILE IRON PIPE

* 93618

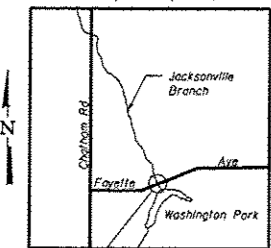
BM #2 Chiseled Square on bridge walk SN 084-8000, 16.0' Rt Sta 10+00, Elev. 562.85

Existing Structure: The existing structure is a double 12'x11.5' concrete box culvert with concrete deck & handrail. The overall length is 28'-10" Bk-Bk. The bridge width is 36'-3" out to out and 33'-0" Fc-Fc rail. The roadway width is 24'-0" Fc-Fc curbs. The contractor will remove and replace the existing structure with a new single span PCC deck beam bridge on closed abutments.

Structure to be built under road closure.

No Salvage.

Sec 32, R5W, 3rd PM



LOCATION SKETCH

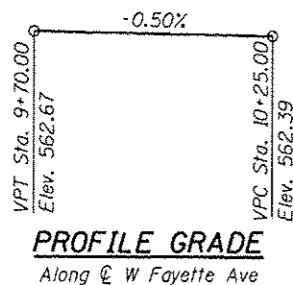
JACKSONVILLE BRANCH
BUILT 20... BY
CITY OF SPRINGFIELD
SEC. 11-00472-00-BR
FAU 7987
WEST FAYETTE AVENUE
STR. NO. 084-6020 LOADING HL93

LETTERING FOR NAME PLATE

See Std. 515001

CONSTRUCTION PERMITS

This project has been approved for construction under Statewide Permit No. 12, issued by the Department of Natural Resources/Office of Water Resources.



PROFILE GRADE

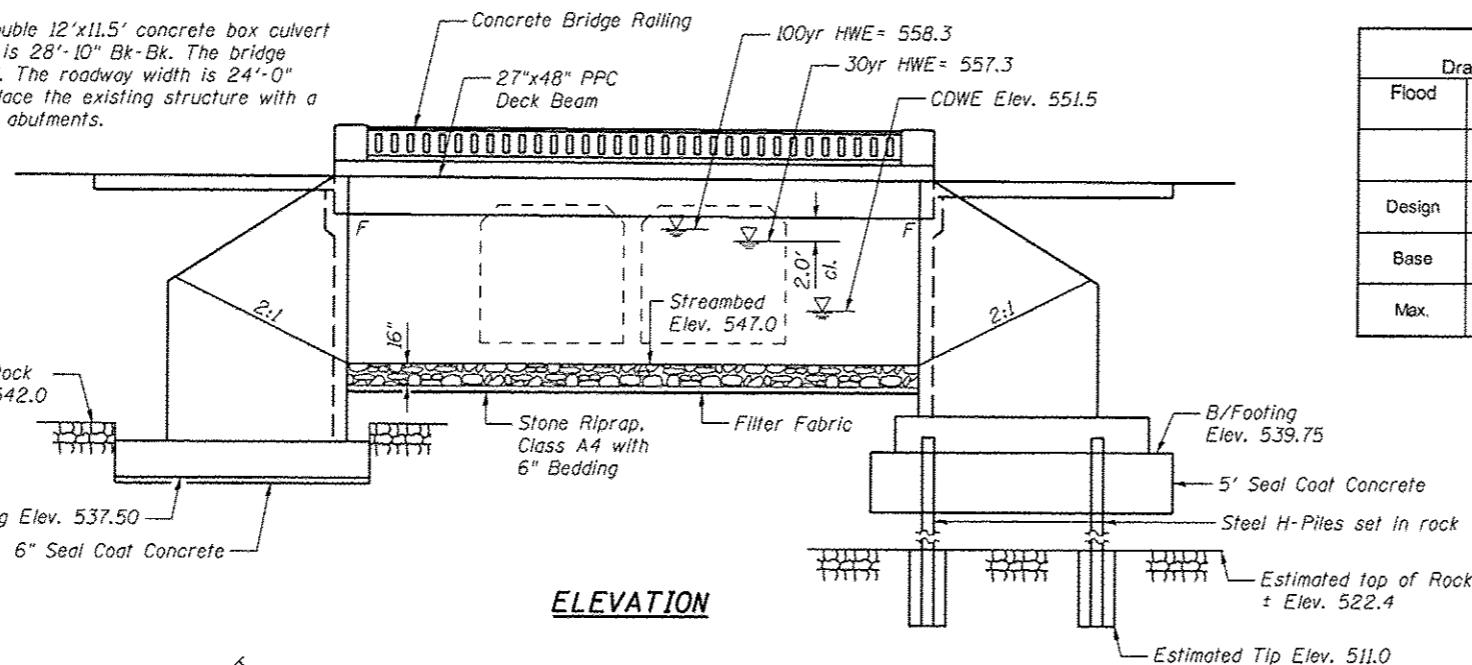
Along @ W Fayette Ave

DESIGN SCOUR ELEVATION TABLE

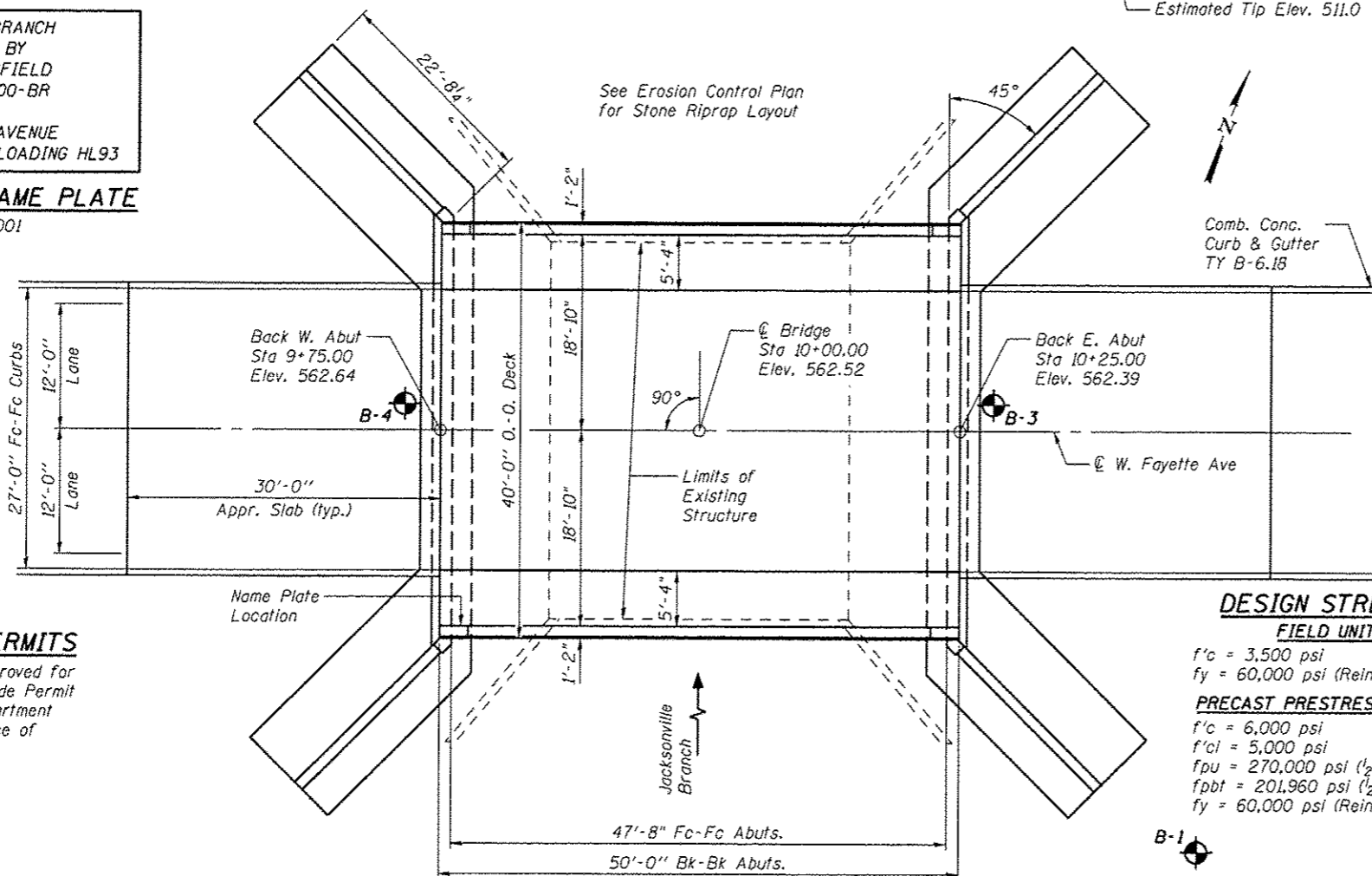
Design Scour Elevation (ft.)	W. Abut	E. Abut
	537.50	539.75

LOADING HL-93

Design Specifications: 2010 AASHTO LRFD with 2010 Interims
Allow 50#/Sq. Ft. for future wearing surface.



ELEVATION



PLAN

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2" φ low lax. strands)
fpbt = 201,960 psi (1/2" φ low lax. strands)
fy = 60,000 psi (Reinforcement)

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

Michael D. Cummins (2-27-14)
ILLINOIS STRUCTURAL NO. 4822 (Expires 11/30/14)

WATERWAY INFORMATION TABLE

		Existing Low Grade Elevation = 561.86 ft @ Sta. 10+00		Proposed Low Grade Elevation = 562.33 ft @ Sta. 10+60					
Drainage Area = 8.8 sq. mi.									
Flood	Frequency Year	Discharge C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	1,392	178	438	556.2	1.1	0.1	557.3	556.3
Design	30	2,032	205	490	557.3	2.2	0.1	559.5	557.4
Base	100	2,689	229	538	558.3	3.3	0.3	561.6	558.6
Max.	500	3,682	258	590	559.5	3.9	0.6	563.4	560.1

10 yr velocity through existing = 7.8 fps

10 yr velocity through proposed = 3.2 fps

GENERAL NOTES

See Special Provisions for Boring Data.

Layout of the Stone Riprap may be varied to suit ground condition in the field as directed by the Engineer.

The back of the abutments and wingwalls shall be waterproofed in accordance with Article 503.18 of the Standard Specifications.

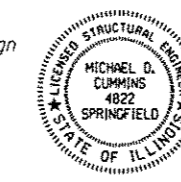
Type 2 Cofferdams are required at abutments. The Cofferdam Design Water Elevation (CDWE) for the design of the Cofferdam and the seal coat that are included in these plans is Elev. 551.50. Due to scour concerns, the seal coat concrete shall not be eliminated under any circumstances.

Reinforcement bars designated (E) shall be epoxy coated.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Ton	-	972	972
Filter Fabric	Sq. Yd.	-	1404	1404
Removal of Existing Structures	L. Sum	-	-	1
Cofferdam Excavation	Cu. Yd.	-	1610	1610
Rock Excavation for Structures	Cu. Yd.	-	270	270
* Cofferdam (Type 2)(Location 1) W Abut.	Each	-	1	1
* Cofferdam (Type 2)(Location 2) E Abut.	Each	-	1	1
Floor Drains	Each	4	-	4
Concrete Structures	Cu. Yd.	-	411.6	411.6
Concrete Superstructure	Cu. Yd.	111.3	-	111.3
Bridge Deck Grooving	Sq. Yd.	312	-	312
Seal Coat Concrete	Cu. Yd.	-	287	287
Protective Coat	Sq. Yd.	453	-	453
Precast Prestressed Concrete	Sq. Ft.	2000	-	2000
* Deck Beams (27" Depth)				
Reinforcement Bars	Pound	-	31,820	31,820
Reinforcement Bars, Epoxy Coated	Pound	21,185	10,195	31,380
Furnishing Steel Piles HP 12x53	Foot	-	812	812
Name Plates	Each	1	-	1
Geocomposite Wall Drain	Sq. Yd.	-	150	150
* Concrete Bridge Railing	Foot	100	-	100
* Concrete Wearing Surface, 5"	Sq. Yd.	150	-	150
* Granular Backfill for Structures	Cu. Yd.	-	200	200
* Setting Piles in Rock	Each	-	28	28

* See Special Provisions



GENERAL PLAN & ELEVATION
W FAYETTE AVE OVER JACKSONVILLE BR.
SECTION 11-00472-00-BR
SANGAMON COUNTY
STA. 10+00
STRUCTURE NO. 084-6020



JOB	• 2284	DESIGNED	- AAN	REVISED	-
FILE	• 2284gpe.dgn	CHECKED	- MDC	REVISED	-
DATE	• 2/26/2014	DRAWN	- SJS	REVISED	-
		CHECKED	- MDC	REVISED	-

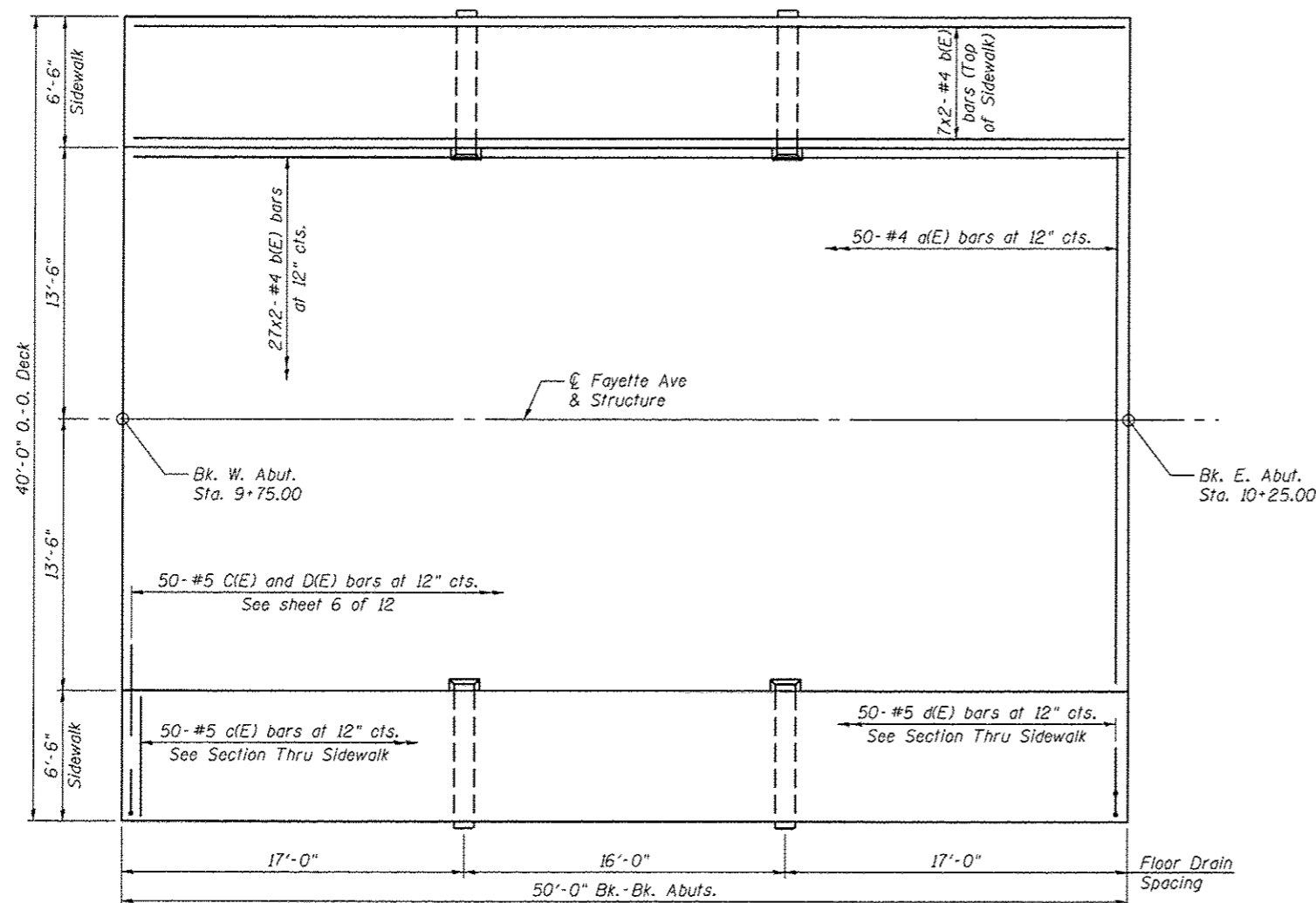
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CHECKED	- MDC	REVISED	-
DRAWN	- SJS	REVISED	-
CHECKED	- MDC	REVISED	-

DESIGNED	- AAN	REVISED	-
CHECKED	- MDC	REVISED	-
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CHECKED	- MDC	REVISED	-

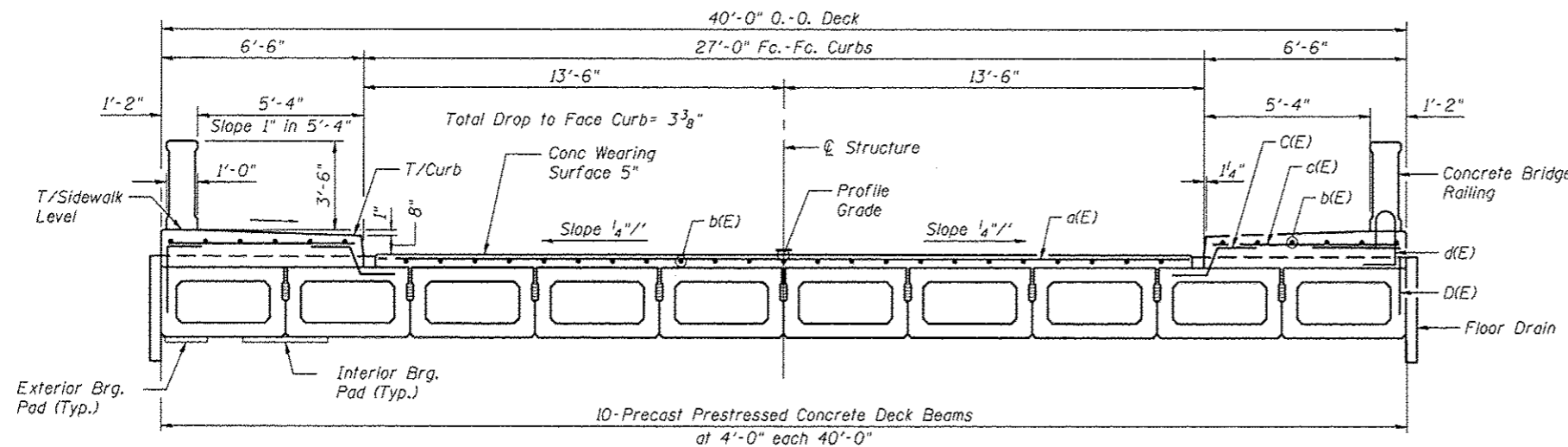
CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS

GENERAL PLAN & ELEVATION
STRUCTURE NO. 084-6020
SHEET NO. 1 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	31
CONTRACT: 93618				
FED. ROAD DIST. NO. ILLINOIS FEQ. AID PROJECT				

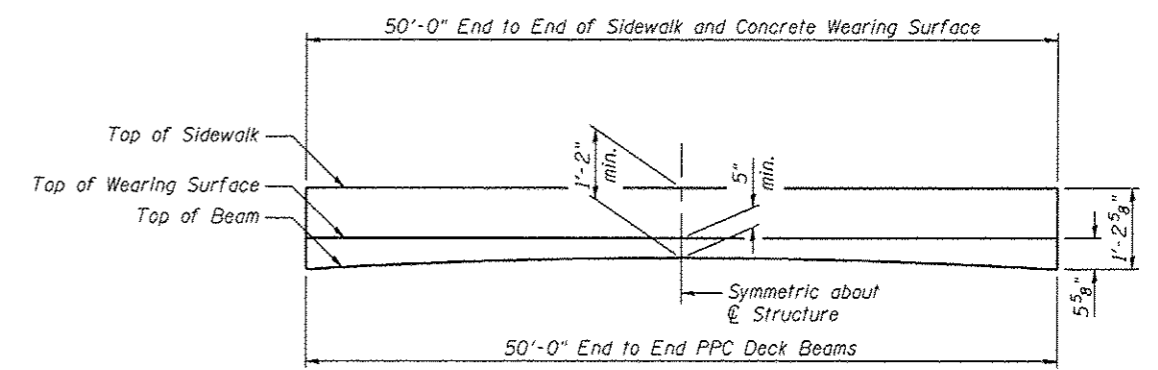


PLAN
(Showing Sidewalk and Concrete Wearing Surface)

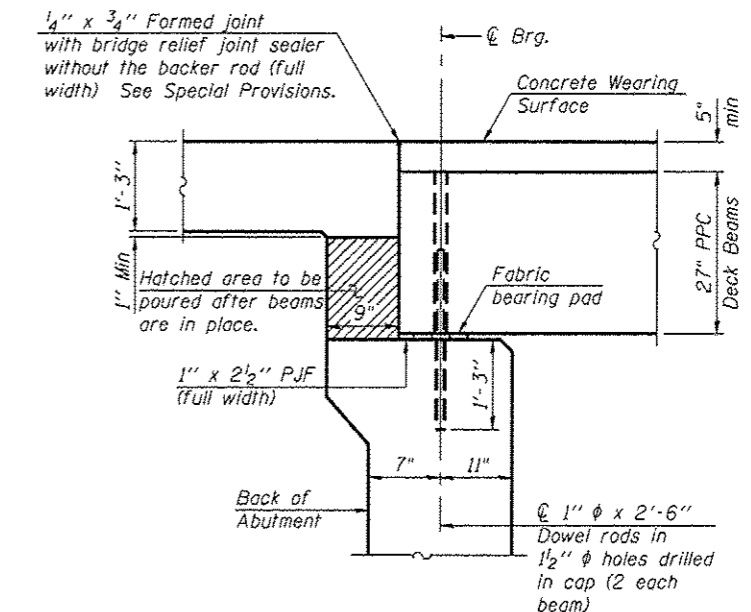


CROSS SECTION

Notes:
See Sheet 3 for Section Thru Sidewalk
See Sheet 4 for Concrete Bridge Railing.



SIDEWALK AND CONCRETE WEARING SURFACE (CWS) PROFILE



SECTION THRU ABUTMENT

TOP OF CONCRETE WEARING SURFACE ELEVATION

Station	P.G. Elev.	Fc. Curb Elev.	T/Curb	T/Sidewalk
9+75.00	562.64	562.36	563.03	563.11
9+85.00	562.59	562.31	562.98	563.06
9+95.00	562.54	562.26	562.93	563.01
10+05.00	562.49	562.21	562.88	562.96
10+15.00	562.44	562.16	562.83	562.91
10+25.00	562.39	562.11	562.78	562.86

* 93618



Cummins Engineering Corporation
JOB # 2284
FILE # 2284super.dgn
DATE # 2/19/2014

DESIGNED - AAN
CHECKED - MDC
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

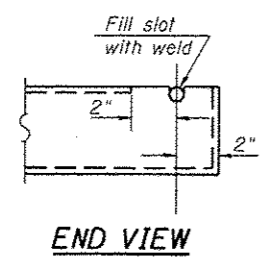
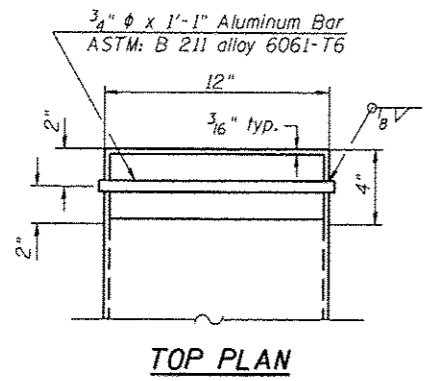
**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

**CONCRETE WEARING SURFACE AND SIDEWALK
STRUCTURE NO. 084-6020**

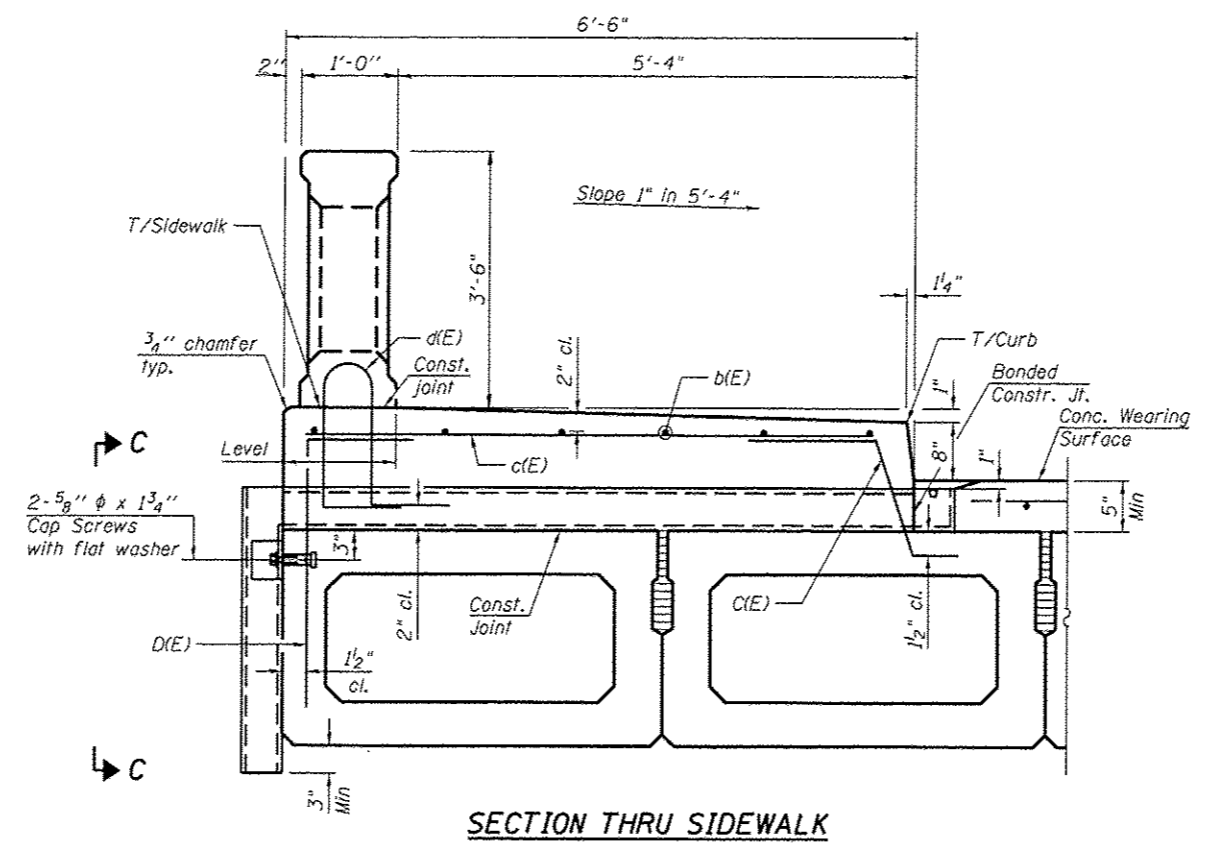
SHEET NO. 2 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	32

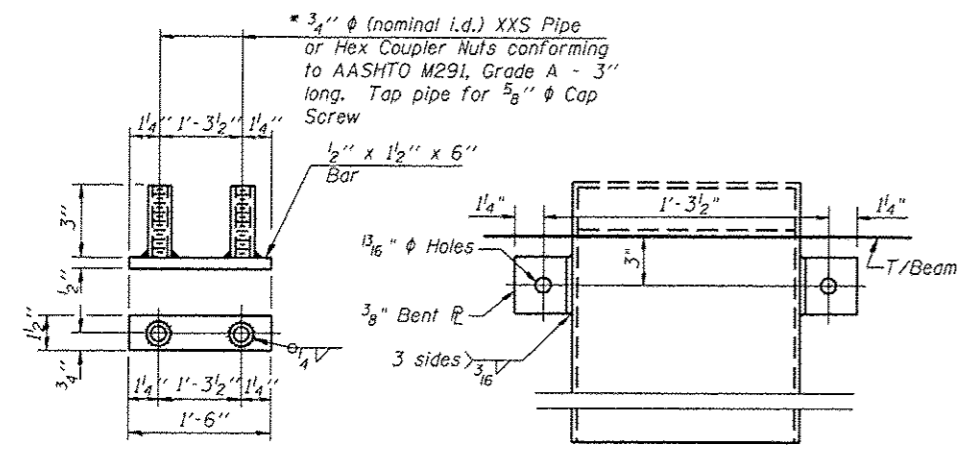
CONTRACT NO. *
ILLINOIS FED. AID PROJECT



FLOOR DRAIN INLET DETAILS



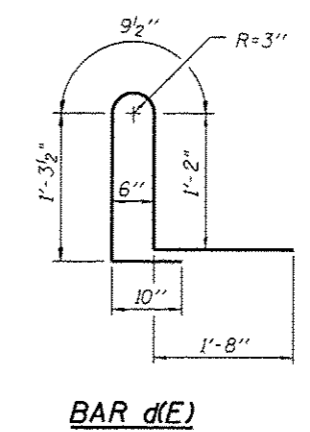
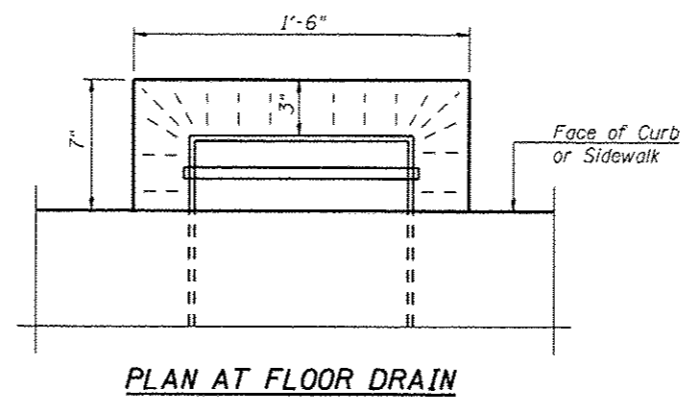
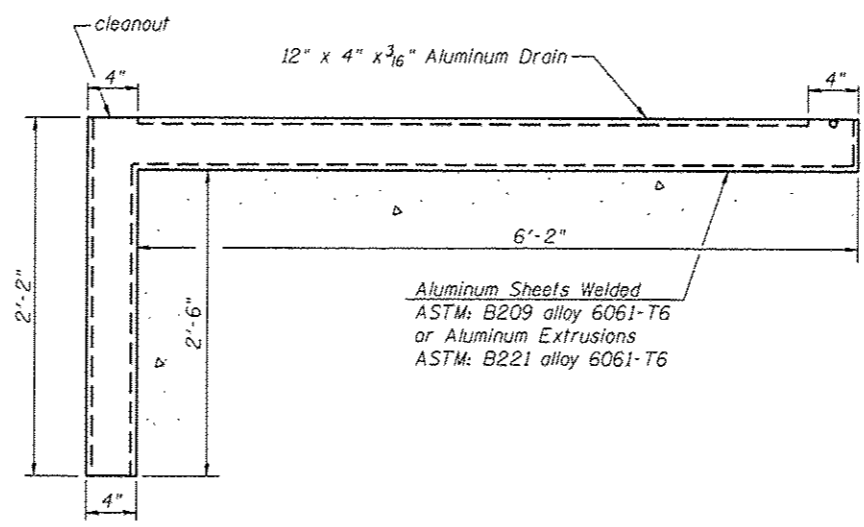
MIN. BAR LAP
#5 bars = 2'-6"



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

FLOOR DRAIN ANCHOR DETAILS

Notes:
The exterior surfaces of the floor drains shall be coated by the manufacturer with a color that matches the concrete.
All cap screws and washers shall be galvanized according to AASHTO M 232.
Anchor devices shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385.



CONCRETE WEARING SURFACE AND SIDEWALK BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	50	#4	26'-8"	—
b(E)	82	#4	25'-8"	—
c(E)	100	#5	6'-0"	—
d(E)	100	#5	5'-9"	L
Reinforcement Bars, Epoxy Coated			Pound	3530
Concrete Superstructure			Cu. Yds.	27.8
Concrete Wearing Surface, 5"			Sq. Yds.	150
Floor Drains			Each	4
Concrete Bridge Railing			Foot	100

Bars indicated thus 28 x 2-#5 etc. indicates 28 lines of bars with 2 lengths per line. Reinforcement bars designated (E) shall be Epoxy Coated.

*** 93618**



JOB	• 2284	DESIGNED	- AAN	REVISED	-
FILE	• 2284resling.dgn	CHECKED	- MDC	REVISED	-
DATE	• 2/20/2014	DRAWN	- SJS	REVISED	-
		CHECKED	- MDC	REVISED	-

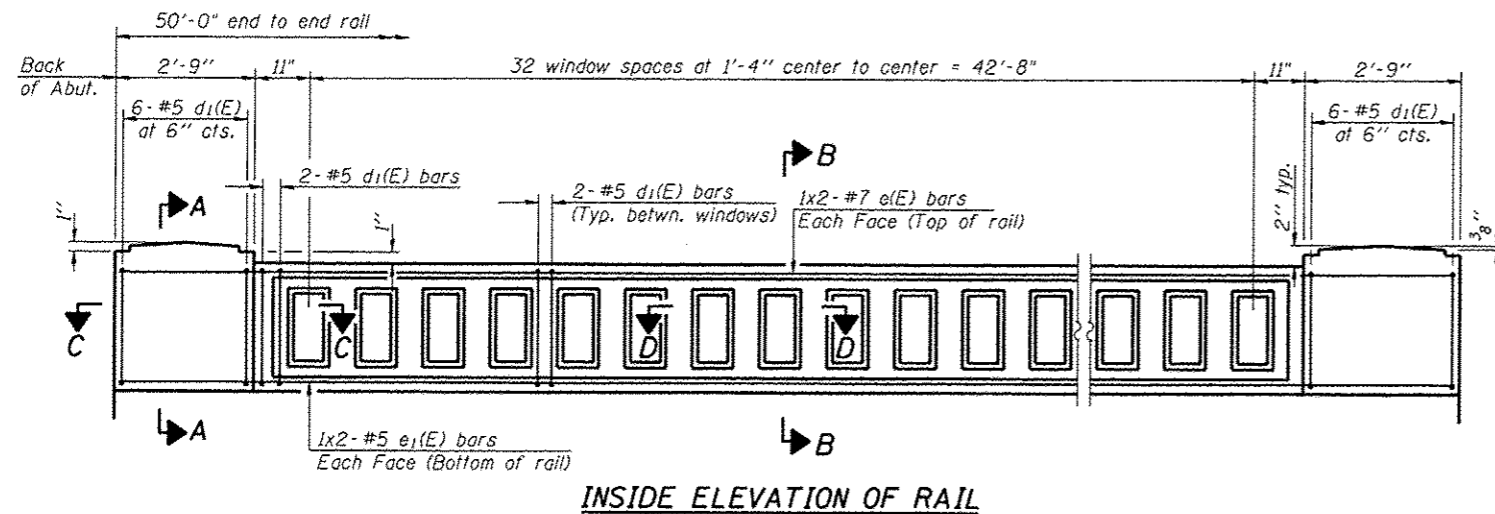
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CHECKED	- MDC	REVISED	-
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CHECKED	- MDC	REVISED	-

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

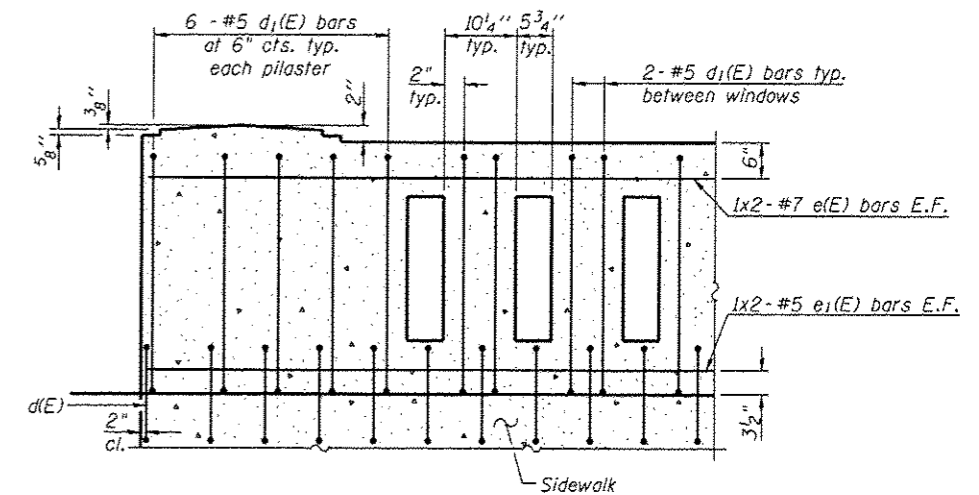
**CONCRETE WEARING SURFACE AND SIDEWALK
STRUCTURE NO. 084-6020**

SHEET NO. 3 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	33
CONTRACT NO. *				
ILLINOIS FED. AID PROJECT				

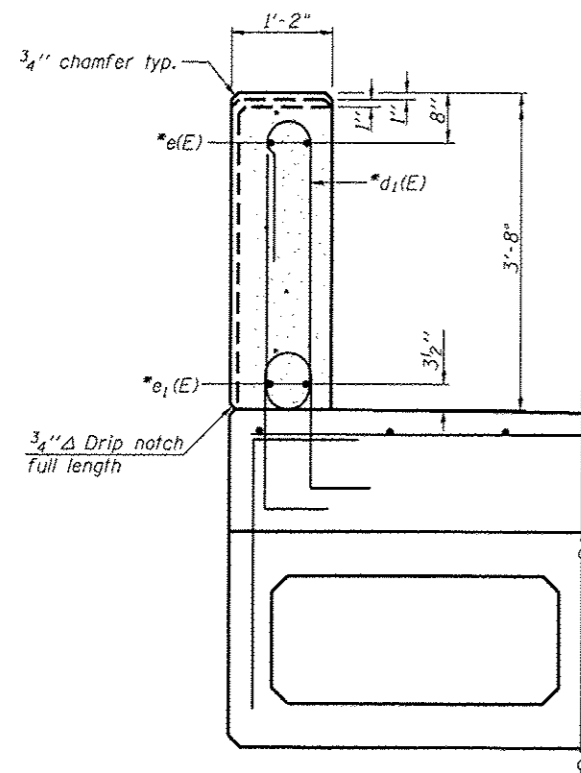


INSIDE ELEVATION OF RAIL

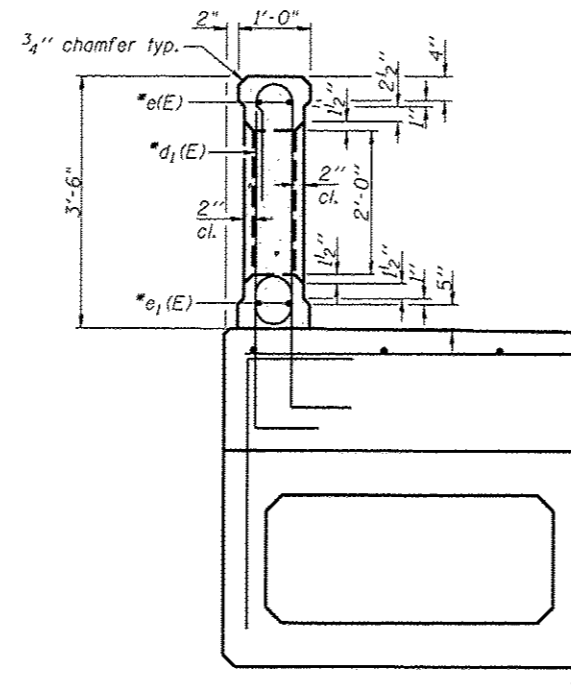


TYPICAL REINFORCEMENT PLACEMENT

(Inside Face)

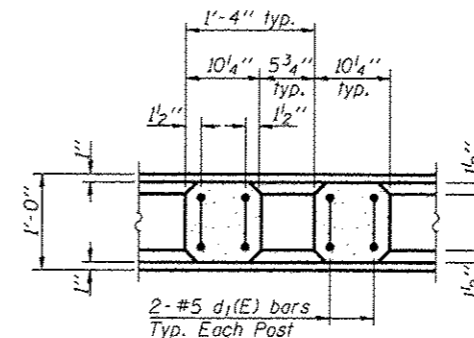


SECTION A-A THRU POST

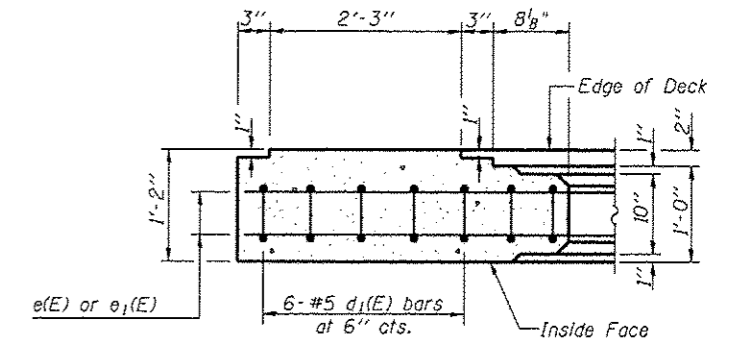


SECTION B-B THRU WINDOW

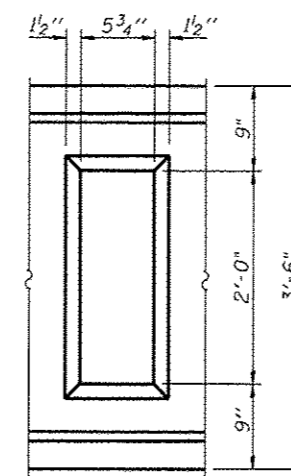
*Bars e1(E), e1(E) and d1(E) are included in the cost of Concrete Bridge Railing.



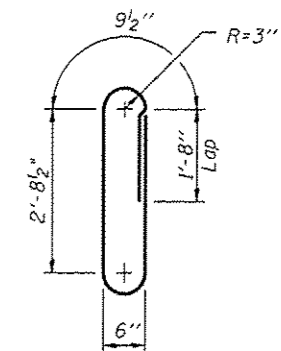
SECTION D-D



SECTION C-C



WINDOW DETAIL



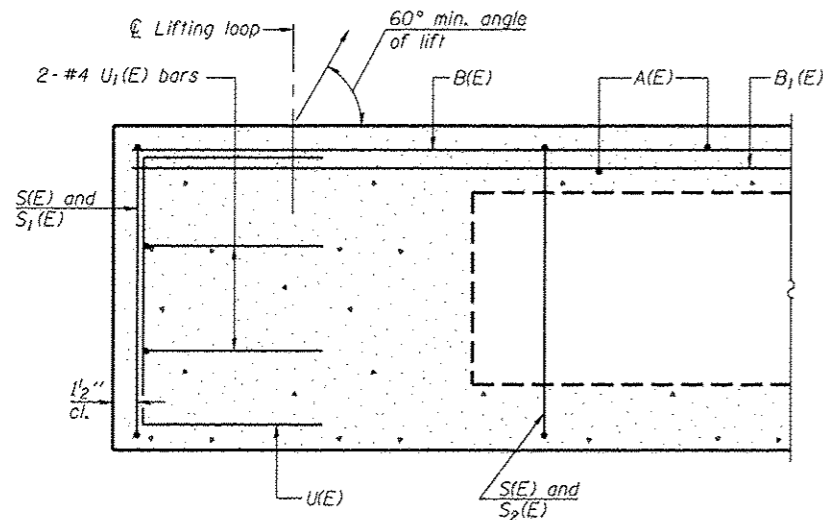
BAR d1(E)

CONCRETE BRIDGE RAILING BAR LIST *

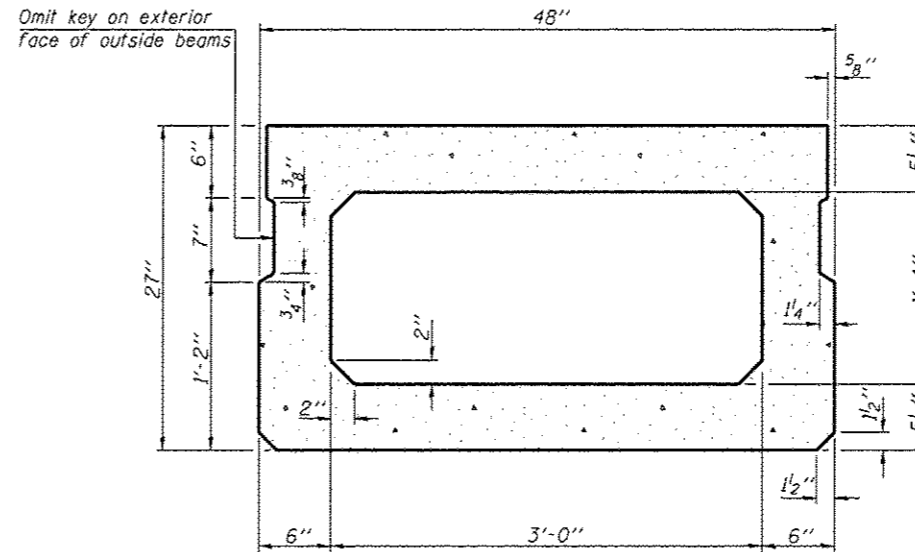
Bar	No.	Size	Length	Shape
d1(E)	160	#5	8'-8"	
e1(E)	8	#7	26'-10"	
e1(E)	8	#5	26'-1"	

Notes:

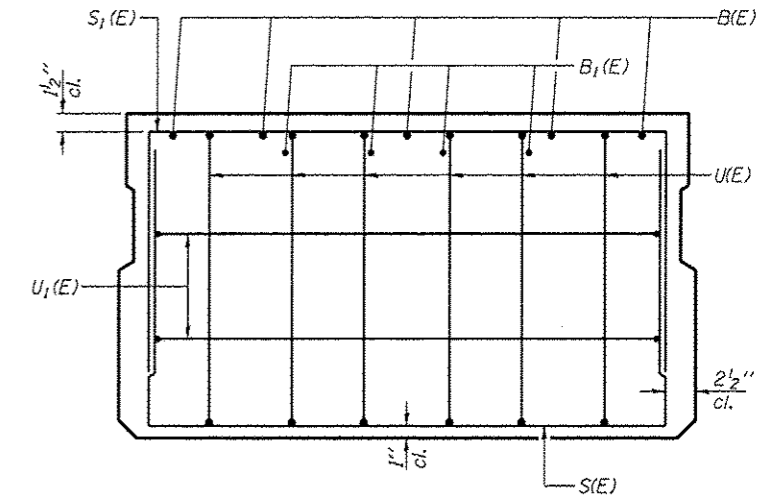
All concrete for railing wall shall be Class BS according to Article 1020.04 of the Standard Specifications. Surface of railing shall receive a rubbed finish according to Article 503.15(b) of the Standard Specifications.
All parts of the railing including concrete, reinforcing and rubbed finish will be paid for at the contract unit price per foot for Concrete Bridge Railing.
Holes and recesses must be formed or cored. Drilling is not permitted.



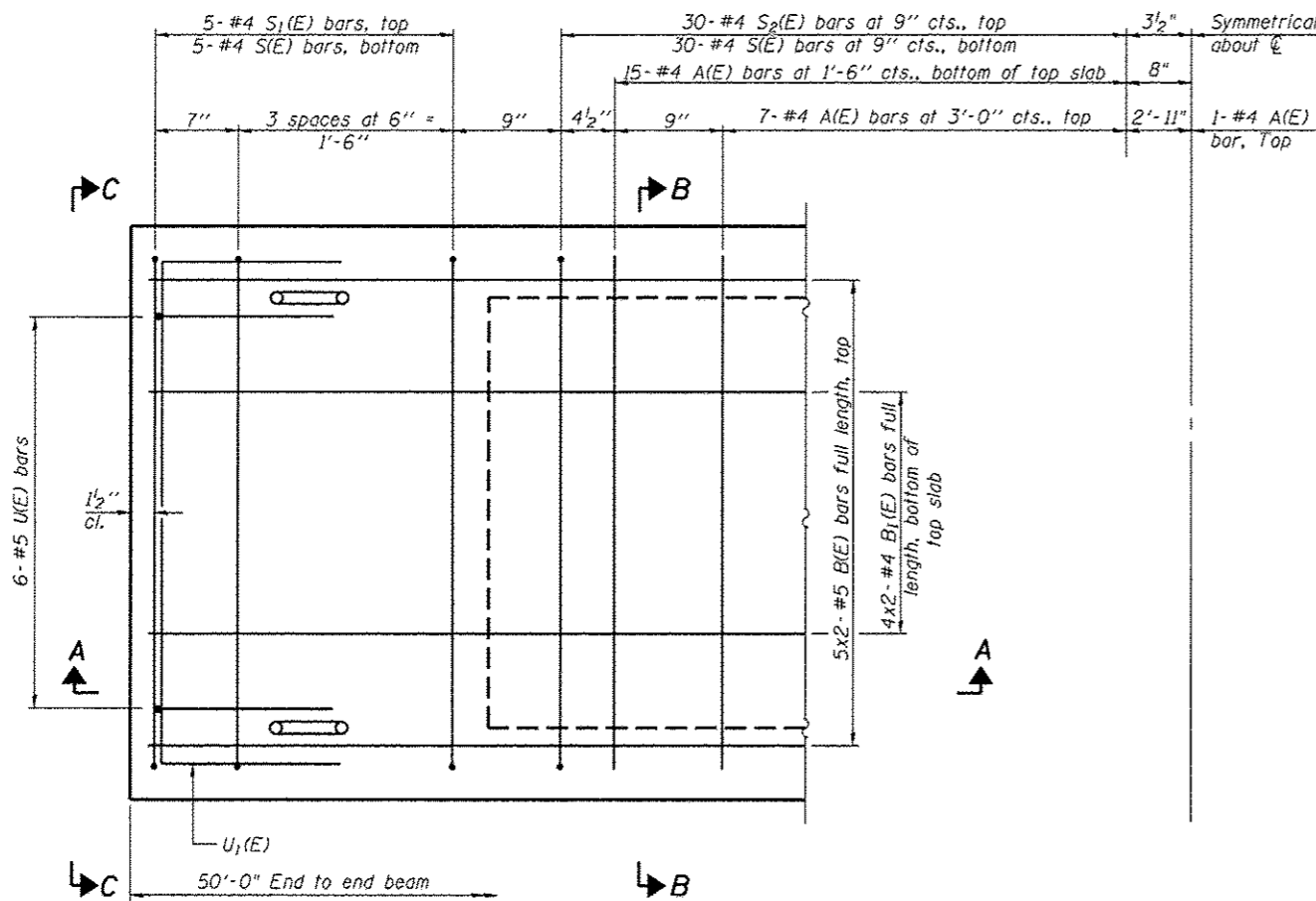
SECTION A-A



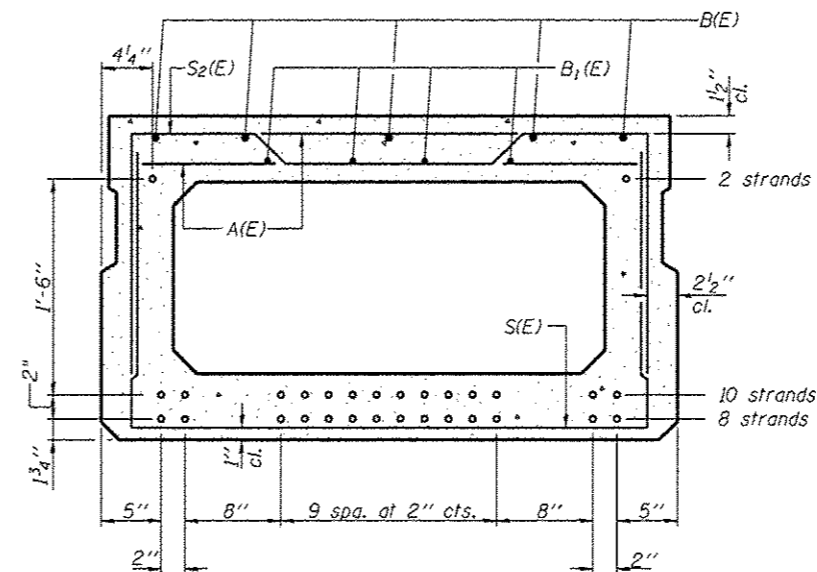
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	45	#4	3'-7"	—
B(E)	10	#5	26'-2"	—
B1(E)	8	#4	25'-11"	—
S(E)	70	#4	7'-5"	U
S1(E)	10	#4	6'-11"	U
S2(E)	60	#4	7'-2"	U
U(E)	12	#5	4'-6"	U
U1(E)	4	#4	6'-0"	U

ADDITIONAL BARS REQUIRED FOR EXTERIOR BEAMS ONLY

Bar	No.	Size	Length	Shape
C(E)	50	#5	2'-6"	U
D(E)	50	#5	3'-0"	U

Note: See sheet 6 of 12 for additional details and Bill of Material.

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

PD-2748-0

7-1-10

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB • 2284
FILE • 2284deckbeam.dgn
DATE • 2/19/2014

DESIGNED - AAN
CHECKED - MOC
DRAWN - SJS
CHECKED - MOC

REVISED -
REVISED -
REVISED -
REVISED -

CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS

27" x 48" PPC DECK BEAM
STRUCTURE NO. 084-6020

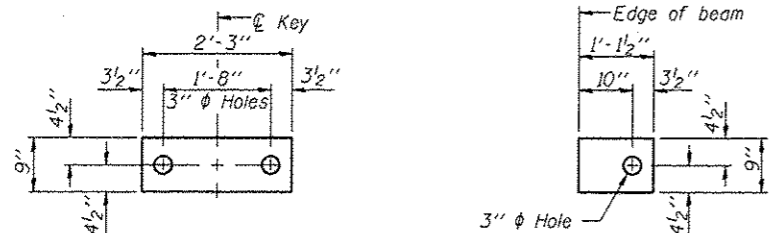
SHEET NO. 5 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	35

CONTRACT NO. ★

*** 93618**

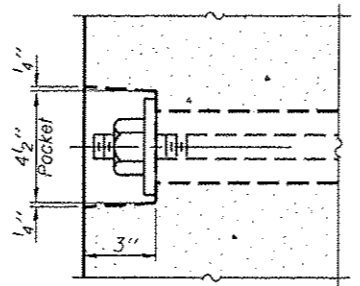
ILLINOIS FED. AID PROJECT



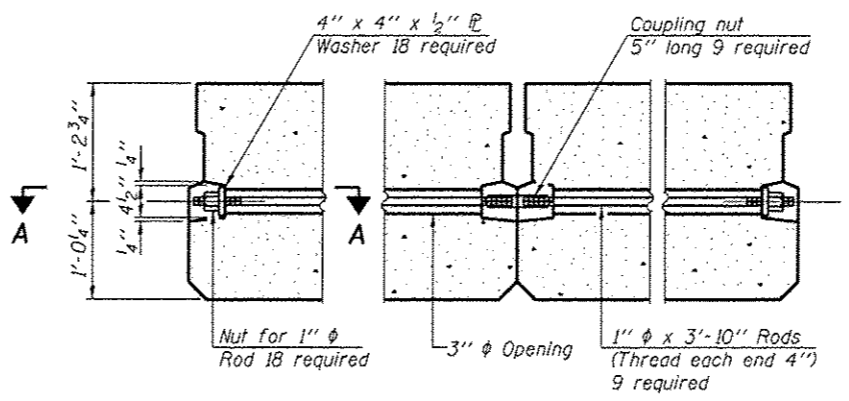
FABRIC BEARING PAD
(Interior) **FABRIC BEARING PAD**
(Exterior)

FIXED

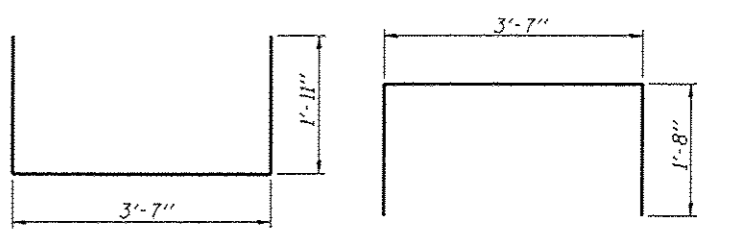
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



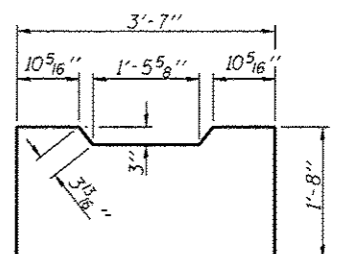
SECTION A-A



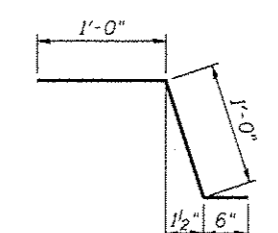
TYPICAL TRANSVERSE TIE ASSEMBLY



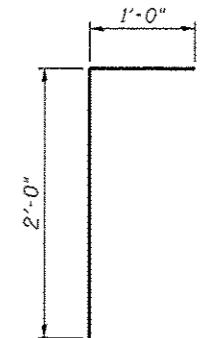
BAR S(E) **BAR S₁(E)**



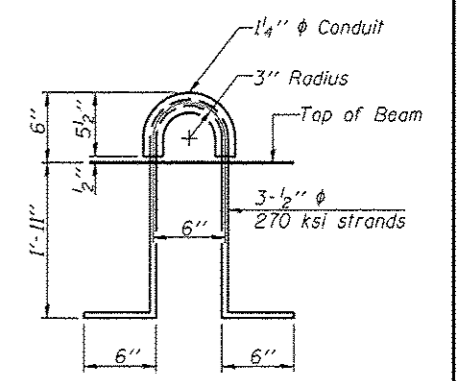
BAR U₁(E) **BAR S₂(E)**



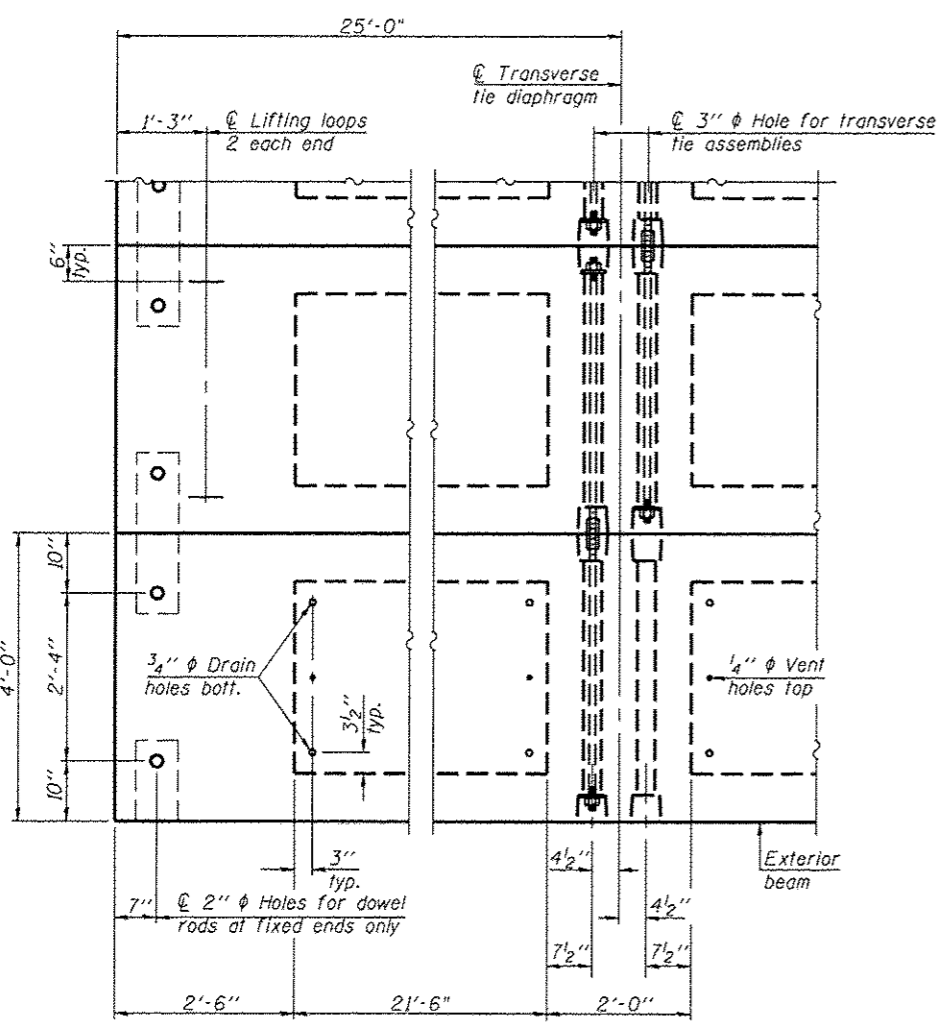
BAR C(E)



BAR D(E)

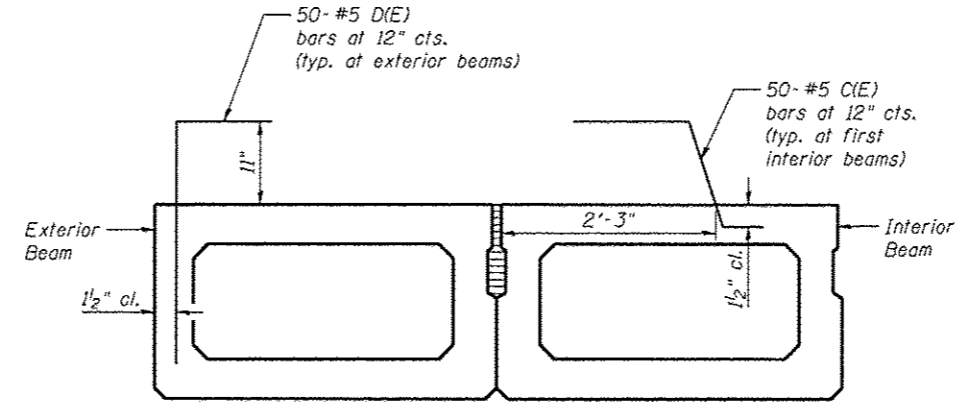


LIFTING LOOP DETAIL



PLAN VIEW

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



SECTION THRU EXTERIOR BEAMS

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Reinforcement bars shall conform to ASTM A 706, Grade 60. Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	2000
---	---------	------

PD-2748-0D 7-1-10



JOB	• 2284	DESIGNED	- AAN	REVISED	-
FILE	• 2284deckbeam.dgn	CHECKED	- MDC	REVISED	-
DATE	• 2/19/2014	DRAWN	- SJS	REVISED	-
		CHECKED	- MDC	REVISED	-

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

**27" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 084-6020**

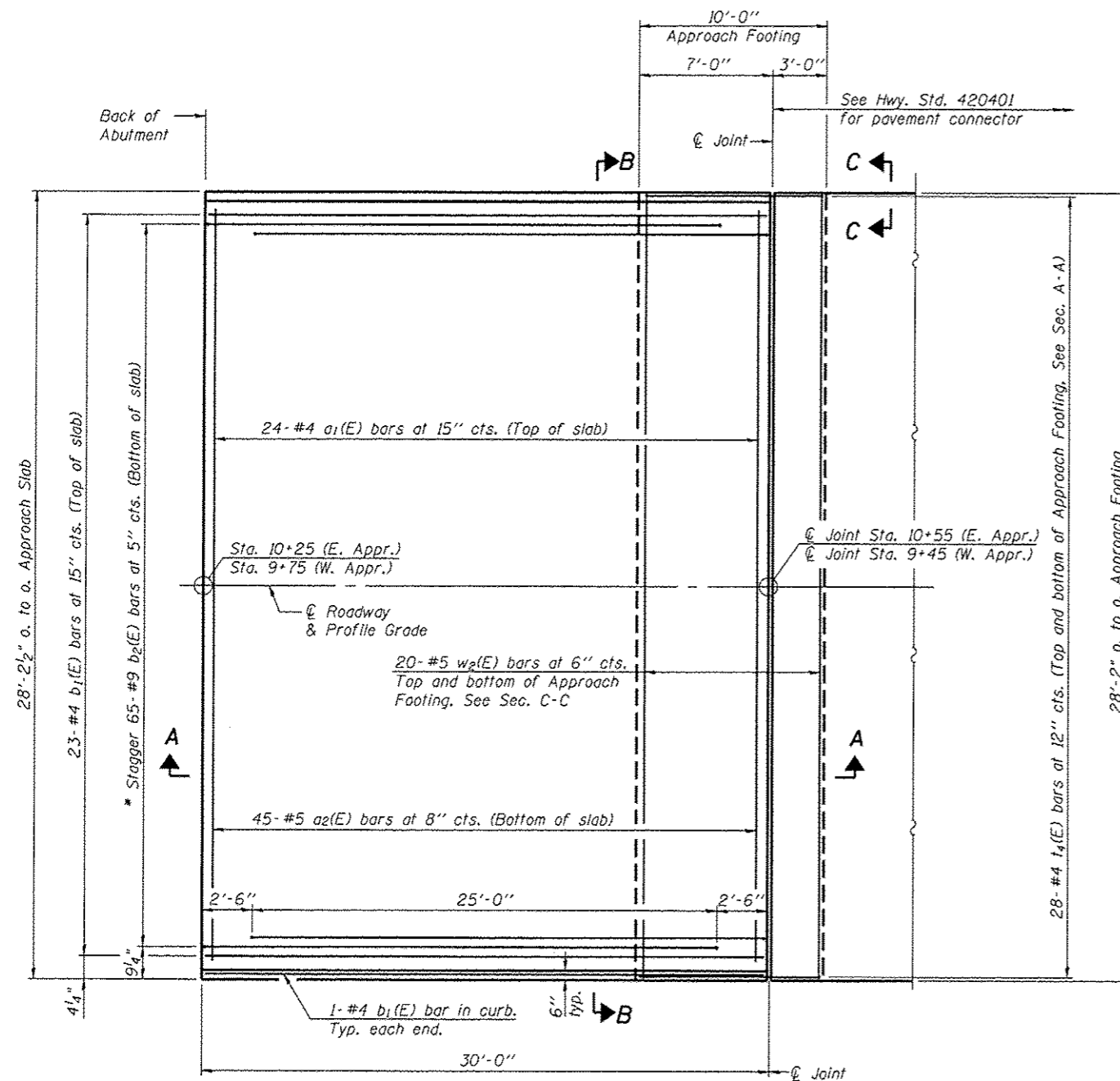
SHEET NO. 6 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	36
CONTRACT NO. *				

ILLINOIS FED. AID PROJECT

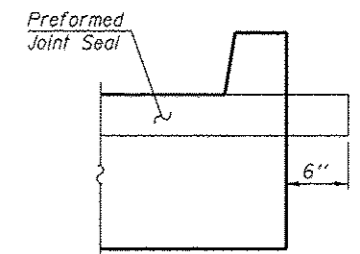
* 93618

Notes:
See sheet 8 of 12 for Sections A-A, B-B and Curb details.



PLAN

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



VIEW C-C

**TOP OF WEST APPROACH
SLAB ELEVATION**

Station	P.G. Elev.	Fc. Curb Elev.	T/Curb
9+45.00	562.94	562.66	563.33
9+55.00	562.80	562.52	563.19
9+65.00	562.70	562.42	563.09
9+75.00	562.64	562.36	563.03

**TOP OF EAST APPROACH
SLAB ELEVATION**

Station	P.G. Elev.	Fc. Curb Elev.	T/Curb
10+25.00	562.39	562.11	562.78
10+35.00	562.35	562.07	562.74
10+45.00	562.33	562.05	562.72
10+55.00	562.33	562.05	562.72

(Sheet 1 of 2)

* 93618

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB • 2284
FILE • 2284approach.dgn
DATE • 2/19/2014

DESIGNED - AAN
CHECKED - MDC
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

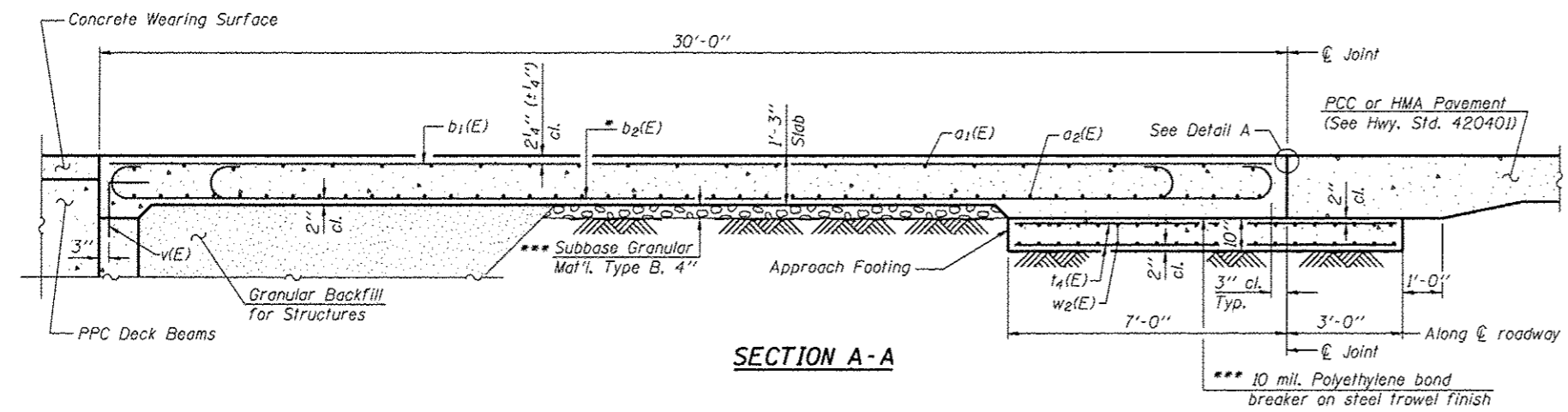
**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 084-6020**

SHEET NO. 7 OF 12 SHEETS

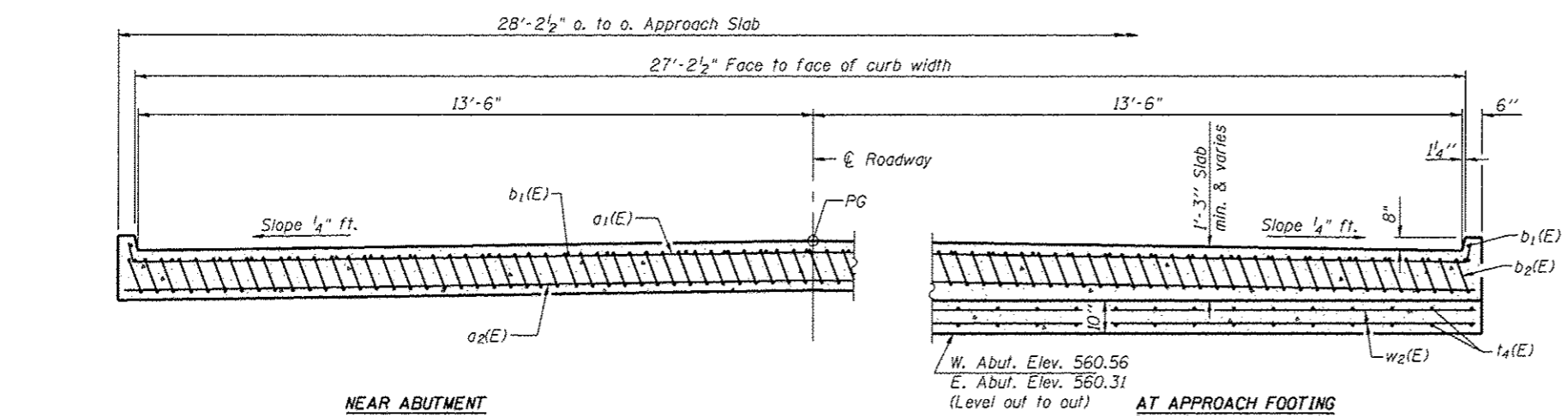
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	37

CONTRACT NO. *

ILLINOIS FED. AID PROJECT



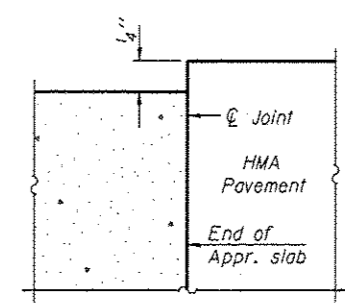
SECTION A-A



SECTION B-B

(See Plan for dimensions not shown)

Notes:
 Approach slab 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.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 11 of 12.

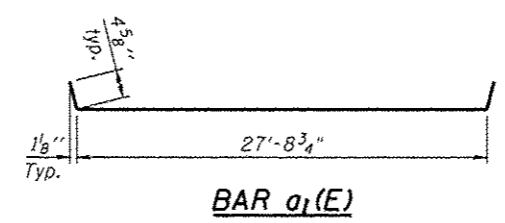


**FLEXIBLE PAVEMENT
 DETAIL A**

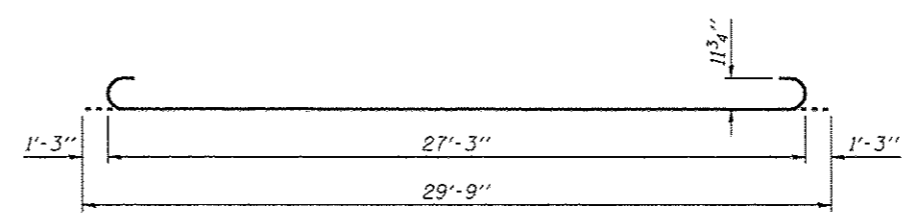
* Tilt #9 b2(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.

**TWO APPROACHES
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a1(E)	48	#4	28'-6"	—	
a2(E)	90	#5	27'-8"	—	
b1(E)	50	#4	29'-8"	—	
b2(E)	130	#9	29'-9"	—	
t4(E)	112	#4	9'-8"	—	
w2(E)	80	#5	27'-8"	—	
Concrete Superstructure				Cu. Yd.	83.5
Concrete Structures				Cu. Yd.	17.4
Reinforcement Bars, Epoxy Coated				Pound	20,690



BAR a1(E)



BAR b2(E)

(Sheet 2 of 2)

*** 93618**



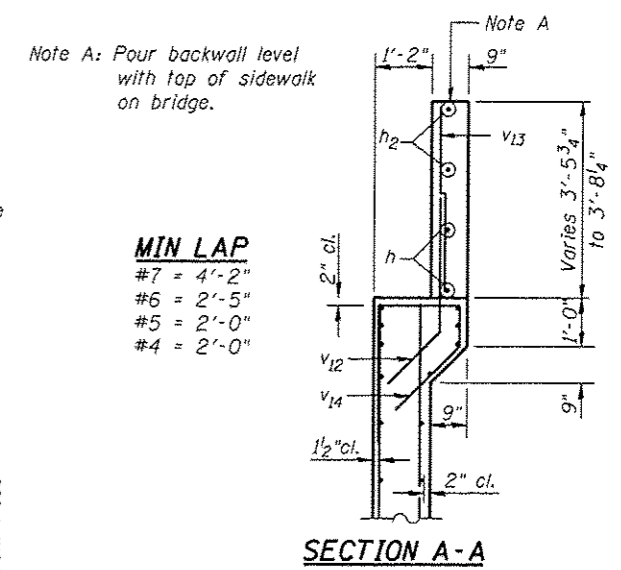
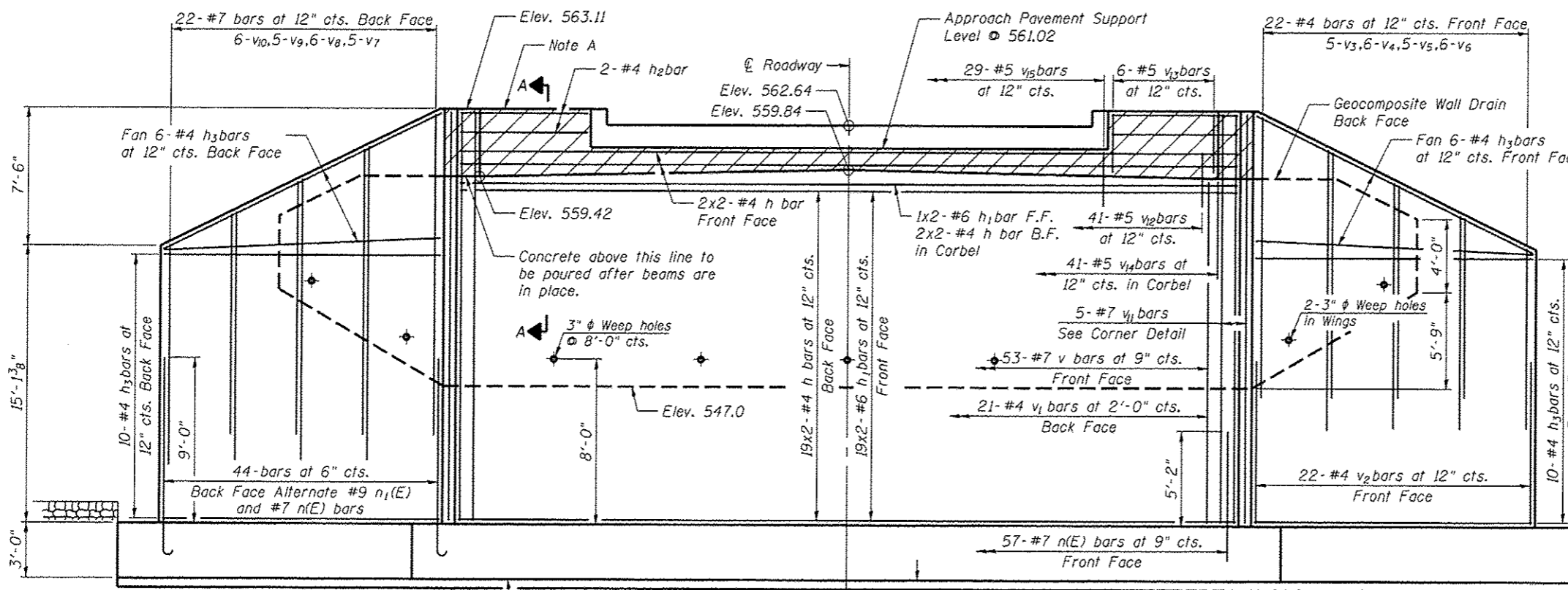
Cummins Engineering Corporation
 JOB # 2284
 FILE # 2284approach.dgn
 DATE # 2/19/2014

DESIGNED - AAN
 CHECKED - MDC
 DRAWN - SJS
 CHECKED - MDC
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 084-6020**

F.A.U. RTE. 7987	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 38
CONTRACT NO. *			ILLINOIS FED. AID PROJECT	

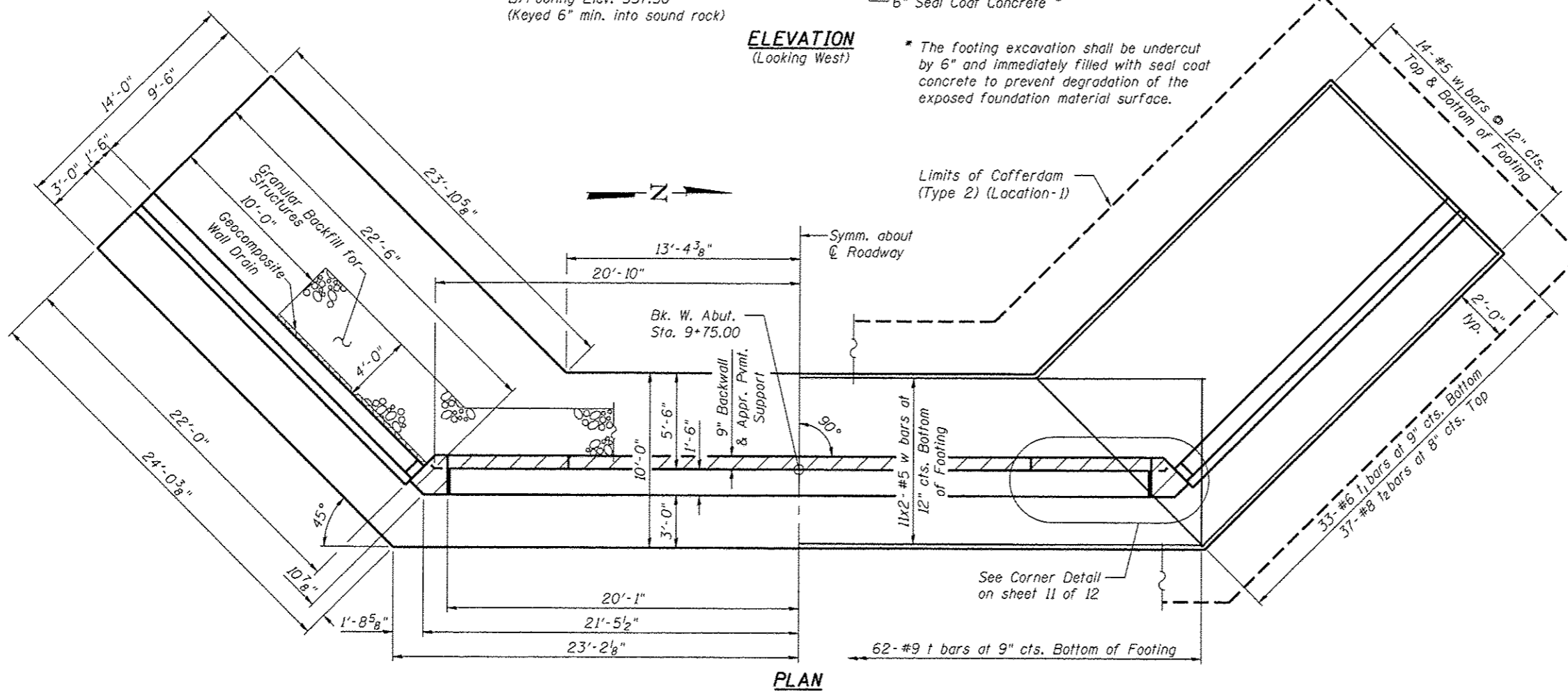


* The footing excavation shall be undercut by 6" and immediately filled with seal coat concrete to prevent degradation of the exposed foundation material surface.

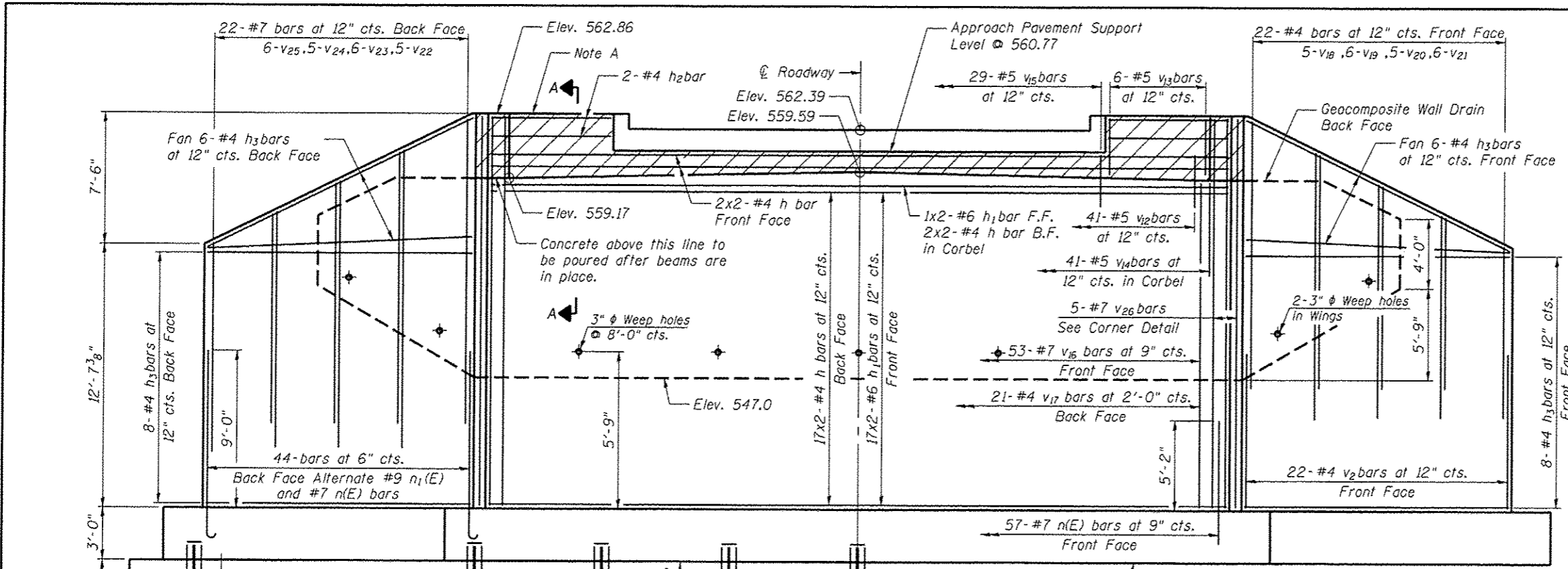
WEST ABUTMENT BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h	46	#4	21'-10"	—
h1	40	#6	22'-8"	—
h2	4	#4	6'-0"	—
h3	64	#4	21'-8"	—
n(E)	101	#7	7'-11"	—
n(E)	44	#9	13'-0"	—
t	62	#9	12'-2"	—
t1	66	#6	13'-8"	—
t2	74	#8	13'-8"	—
v	53	#7	18'-2"	—
v1	21	#4	18'-7"	—
v2	44	#4	9'-0"	—
v3	10	#4	15'-1"	—
v4	12	#4	13'-4"	—
v5	10	#4	11'-3"	—
v6	12	#4	9'-6"	—
v7	10	#7	17'-6"	—
v8	12	#7	15'-9"	—
v9	10	#7	13'-8"	—
v10	12	#7	11'-11"	—
v11	10	#7	22'-3"	—
v12	41	#5	3'-5"	—
v13	12	#5	3'-0"	—
v14	41	#5	7'-0"	—
v15	29	#5	3'-9"	—
w	22	#5	24'-2"	—
w1	56	#5	23'-8"	—
Concrete Structures			Cu. Yd.	202.7
Reinforcement Bars, Epoxy Coated			Pound	3,580
Reinforcement Bars			Pound	16,750
Granular Backfill for Structures			Cu. Yd.	100
Geocomposite Wall Drain			Sq. Yd.	75
Rock Excavation for Structure			Cu. Yd.	270
Seal Coat Concrete			Cu. Yd.	19
Cofferdam Excavation			Cu. Yd.	643

Note: Reinforcement bars designated (E) shall be Epoxy Coated
 Hatched areas to be poured after beams are in place.
 Maximum Soil Pressure Under Footing Q Max = 4,000 psf

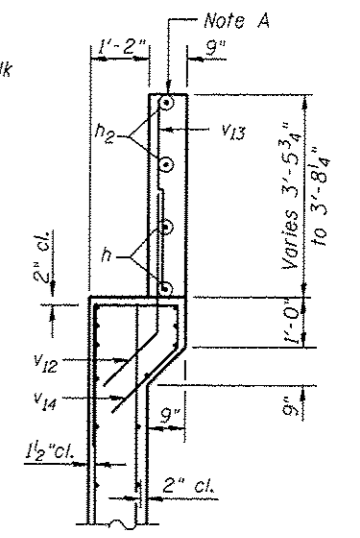


93618



Note A: Pour backwall level with top of sidewalk on bridge.

MIN LAP
 #7 = 4'-2"
 #6 = 2'-5"
 #5 = 2'-0"
 #4 = 2'-0"



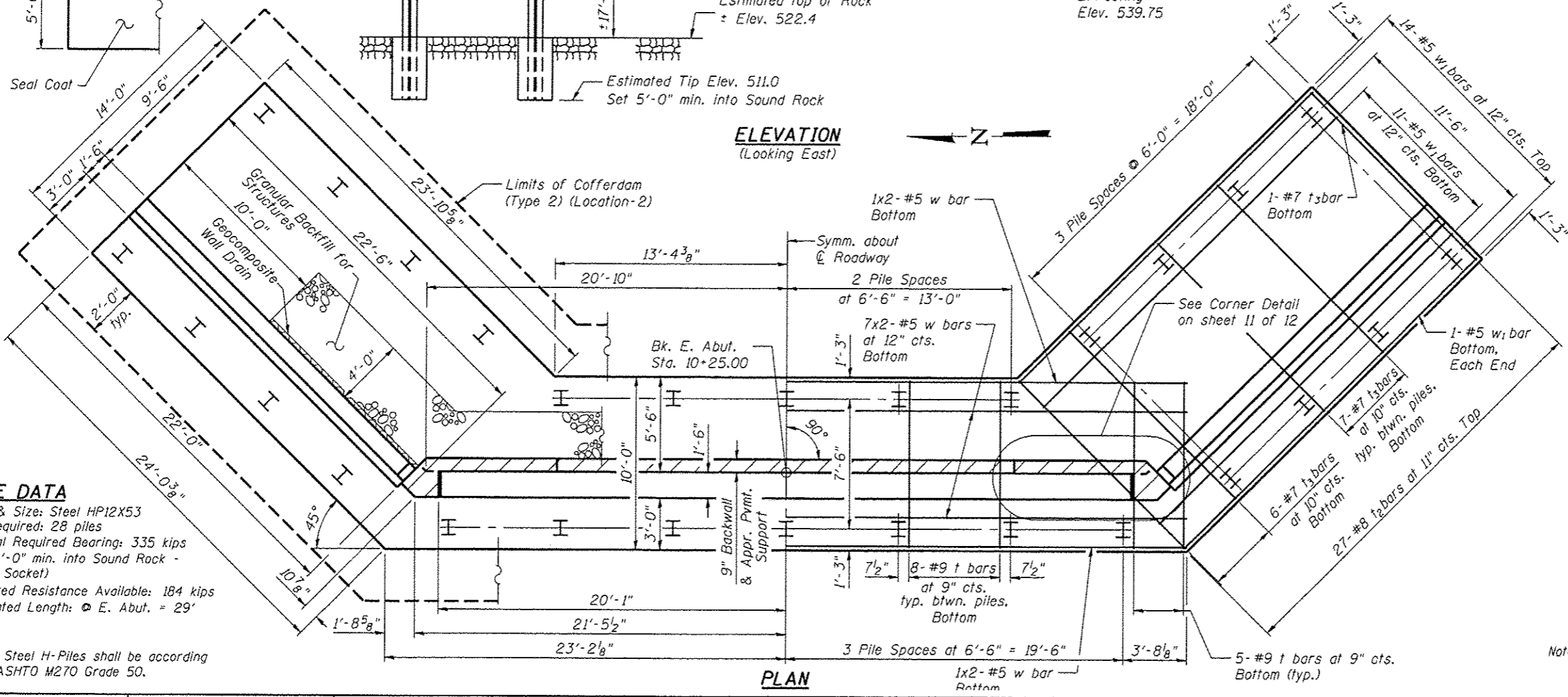
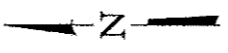
SECTION A-A

**EAST ABUTMENT
 BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE	
h	46	#4	21'-10"	—	
h1	40	#6	22'-8"	—	
h2	4	#4	6'-0"	—	
h3	64	#4	21'-8"	—	
n(E)	101	#7	7'-11"	—	
n(R)	44	#9	13'-0"	—	
t	58	#9	12'-2"	—	
t2	54	#8	13'-8"	—	
t3	56	#7	13'-8"	—	
v2	44	#4	9'-0"	—	
v12	41	#5	3'-5"	—	
v13	12	#5	3'-0"	—	
v14	41	#5	7'-0"	—	
v15	29	#5	3'-9"	—	
v16	53	#7	15'-8"	—	
v17	21	#4	16'-1"	—	
v18	10	#4	12'-7"	—	
v19	12	#4	12'-10"	—	
v20	10	#4	8'-9"	—	
v21	12	#4	7'-0"	—	
v22	10	#7	15'-0"	—	
v23	12	#7	13'-3"	—	
v24	10	#7	11'-2"	—	
v25	12	#7	9'-5"	—	
v26	10	#7	19'-9"	—	
w	18	#5	24'-2"	—	
w1	54	#5	23'-8"	—	
Concrete Structures				Cu. Yd.	191.5
Reinforcement Bars, Epoxy Coated				Pound	3,580
Reinforcement Bars				Pound	15,070
Granular Backfill for Structures				Cu. Yd.	100
Geocomposite Wall Drain				Sq. Yd.	75
Seal Coat Concrete				Cu. Yd.	268
Setting Piles in Rock				Each	28
Furnishing Steel Piles				Foot	812
Cofferdam Excavation				Cu. Yd.	967

Note: Reinforcement bars designated (E) shall be Epoxy Coated. Hatched areas to be poured after beams are in place.

**ELEVATION
 (Looking East)**



PLAN

PILE DATA

Type & Size: Steel HP12X53
 No. Required: 28 piles
 Nominal Required Bearing: 335 kips
 (Set 5'-0" min. into Sound Rock - 24" ϕ Socket)
 Factored Resistance Available: 184 kips
 Estimated Length: ϕ E. Abut. = 29'

Note:
 The Steel H-Piles shall be according to AASHTO M270 Grade 50.



JOB # 2284
 FILE # 2284EastAbutments.dgn
 DATE # 2/26/2014

DESIGNED - AAN
 CHECKED - MDC
 DRAWN - SJS
 CHECKED - MDC

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 REVISED -
 REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

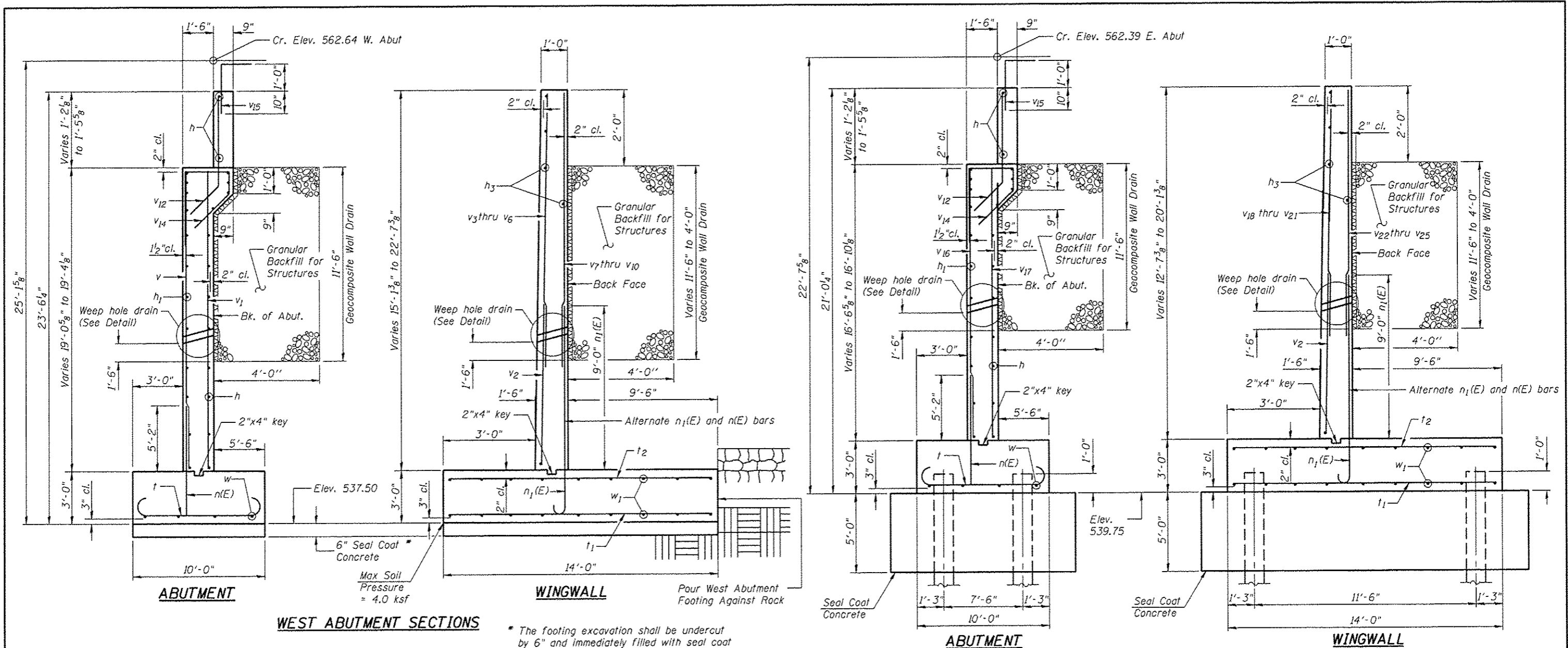
**EAST ABUTMENT
 STRUCTURE NO. 084-6020**

SHEET NO. 10 OF 12 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7987	11-00472-00-BR	SANGAMON	51	40

CONTRACT NO. *

* 93618



WEST ABUTMENT SECTIONS

ABUTMENT

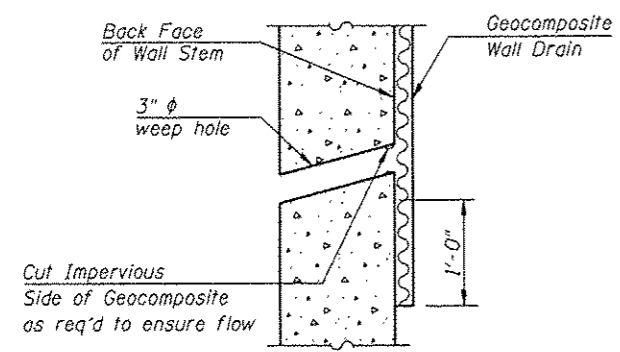
WINGWALL

EAST ABUTMENT SECTIONS

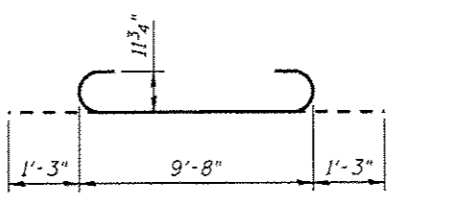
ABUTMENT

WINGWALL

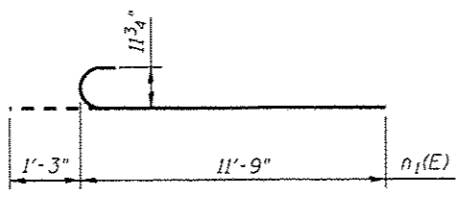
* The footing excavation shall be undercut by 6" and immediately filled with seal coat concrete to prevent degradation of the exposed foundation material surface.



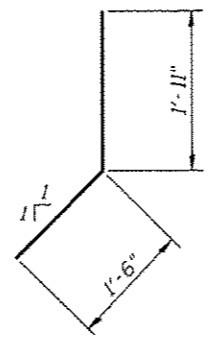
WEEP HOLE DRAIN DETAIL



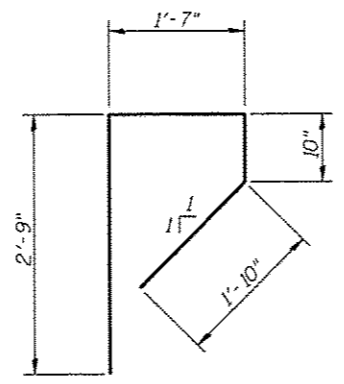
BAR t



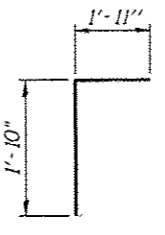
BAR n₁(E)



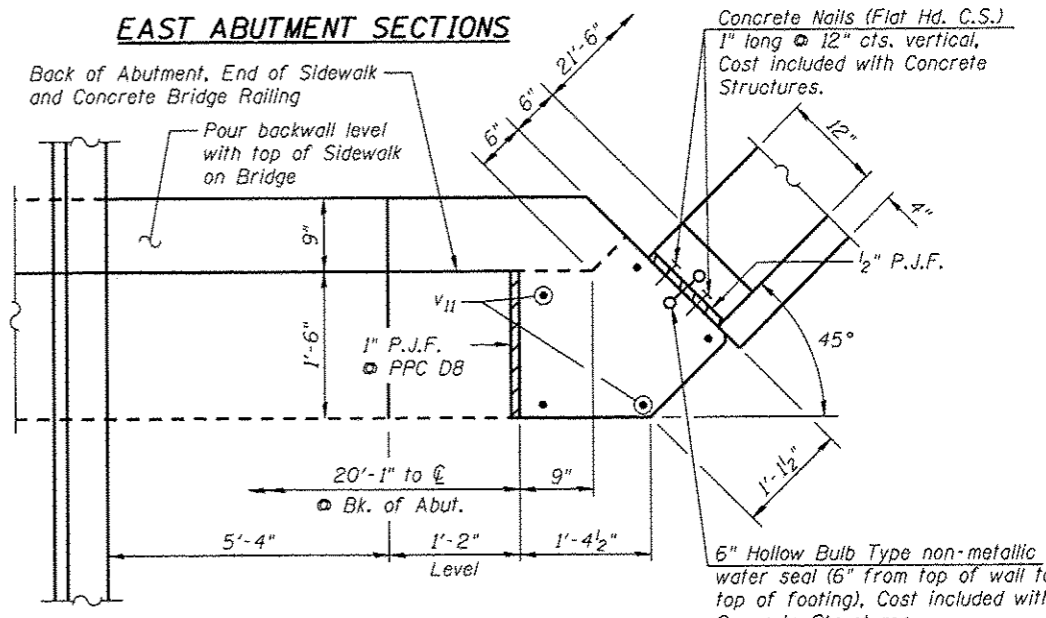
BAR v₁₂



BAR v₁₄

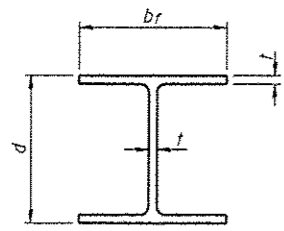


BAR v₁₅



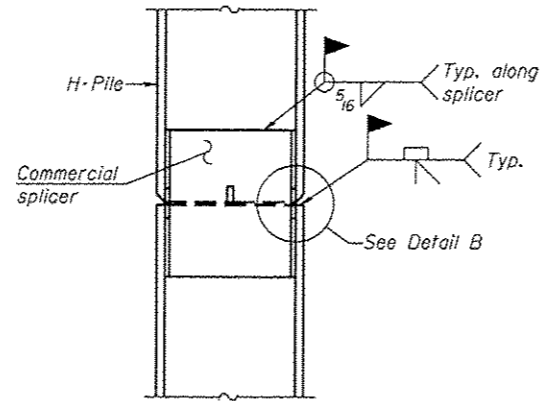
CORNER DETAIL

CEC Civil and Structural Engineering	Cummins Engineering Corporation	JOB # 2284	DESIGNED - AAN	REVISED -	CITY OF SPRINGFIELD FAYETTE AVE IMPROVEMENTS	ABUTMENT DETAILS STRUCTURE NO. 084-6020	F.A.U. RTE. 7987	SECTION 11-00472-00-BR	COUNTY SANGAMON	TOTAL SHEETS 51	SHEET NO. 41
	FILE # 2284abutdetail.dgn	CHECKED - MDC	REVISED -	CONTRACT NO. *							
	DATE # 2/26/2014	DRAWN - SJS	REVISED -								
		CHECKED - MDC	REVISED -								

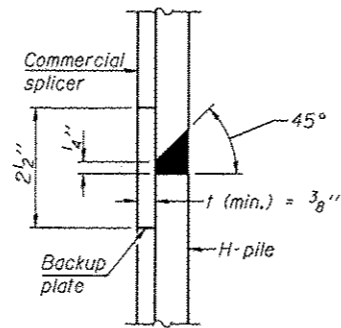


STEEL PILE TABLE

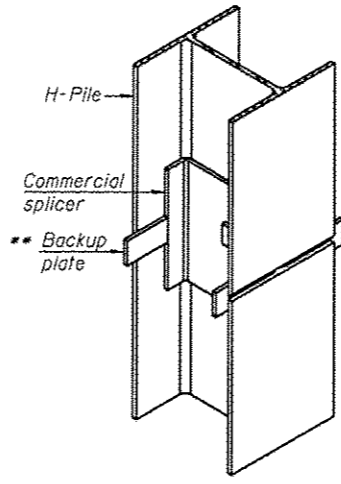
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11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

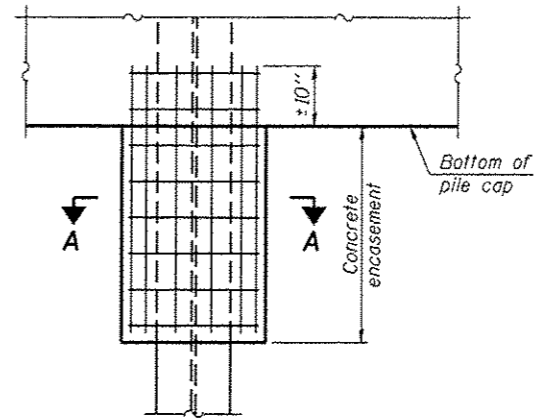


DETAIL "B"



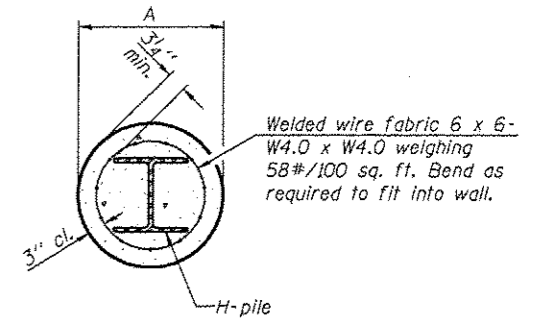
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



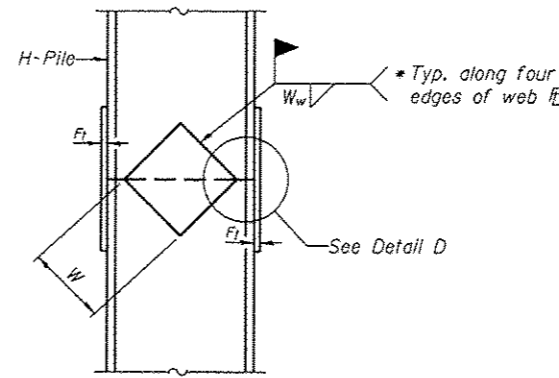
ELEVATION

PILE ENCASEMENT

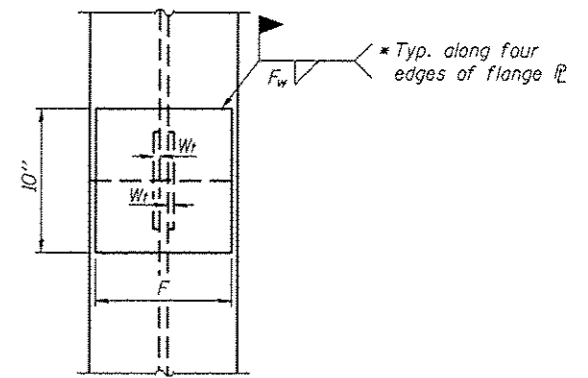


SECTION A-A

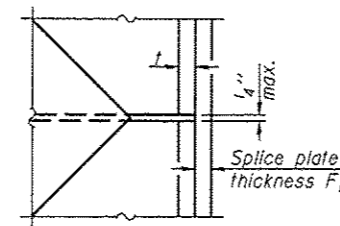
Note: Forms for encasement may be omitted when soil conditions permit.



ELEVATION



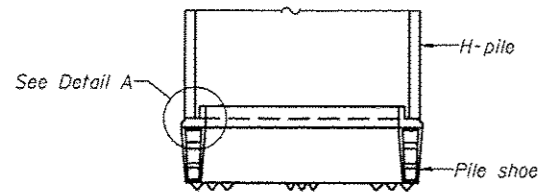
END VIEW



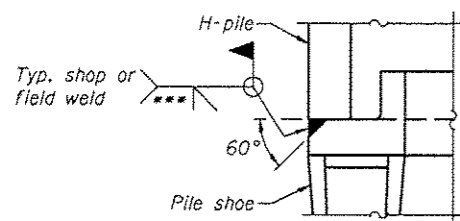
DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F ₁	F _w	W	W ₁	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 8/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 8/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 8/8"	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"

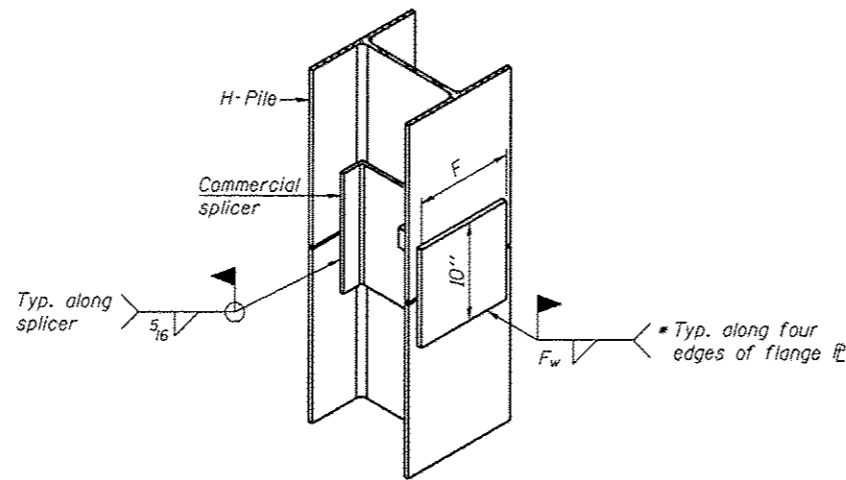


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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.).

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

F-HP 1-27-12

CEC Cummins Engineering Corporation
Civil and Structural Engineering

JOB • 2284
FILE • 2284pile.dgn
DATE • 2/19/2014

DESIGNED - AAN
CHECKED - MDC
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

**HP PILE DETAILS
STRUCTURE NO. 084-6020**

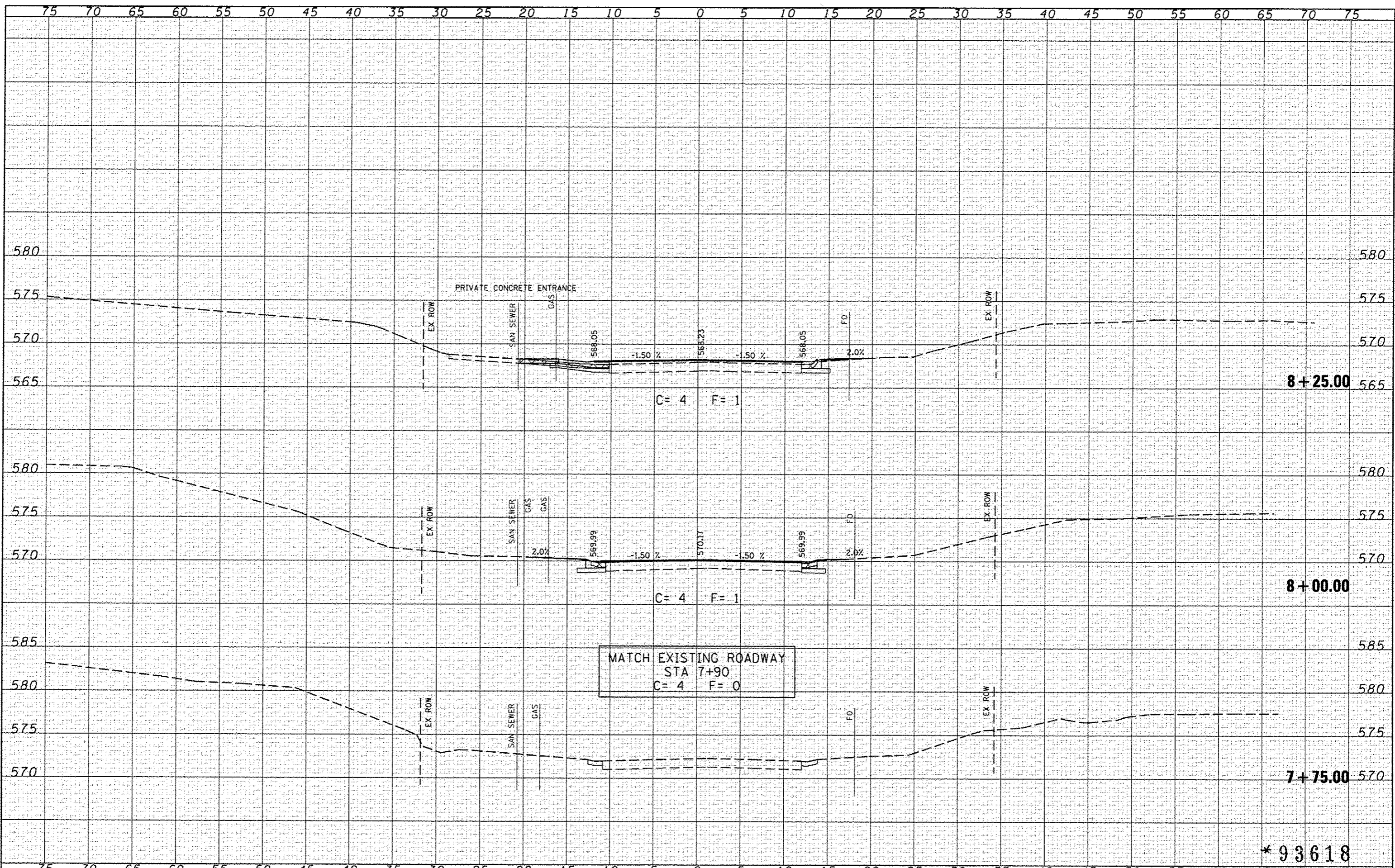
SHEET NO. 12 OF 12 SHEETS

F.A.U. SECTION COUNTY TOTAL SHEETS SHEET NO.
RTE. 7987 11-00472-00-BR SANGAMON 51 42
CONTRACT NO. * 93618

ILLINOIS FED. AID PROJECT

FINAL SURVEY	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	



*93618



JOB # 2284
 FILE NAME = 2284-ahf-wsp.dgn
 PLOT SCALE = 1/8" = 1'-0"
 PLOT DATE = 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 2/19/2013

REVISED -
 REVISED -
 REVISED -
 REVISED -

CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS

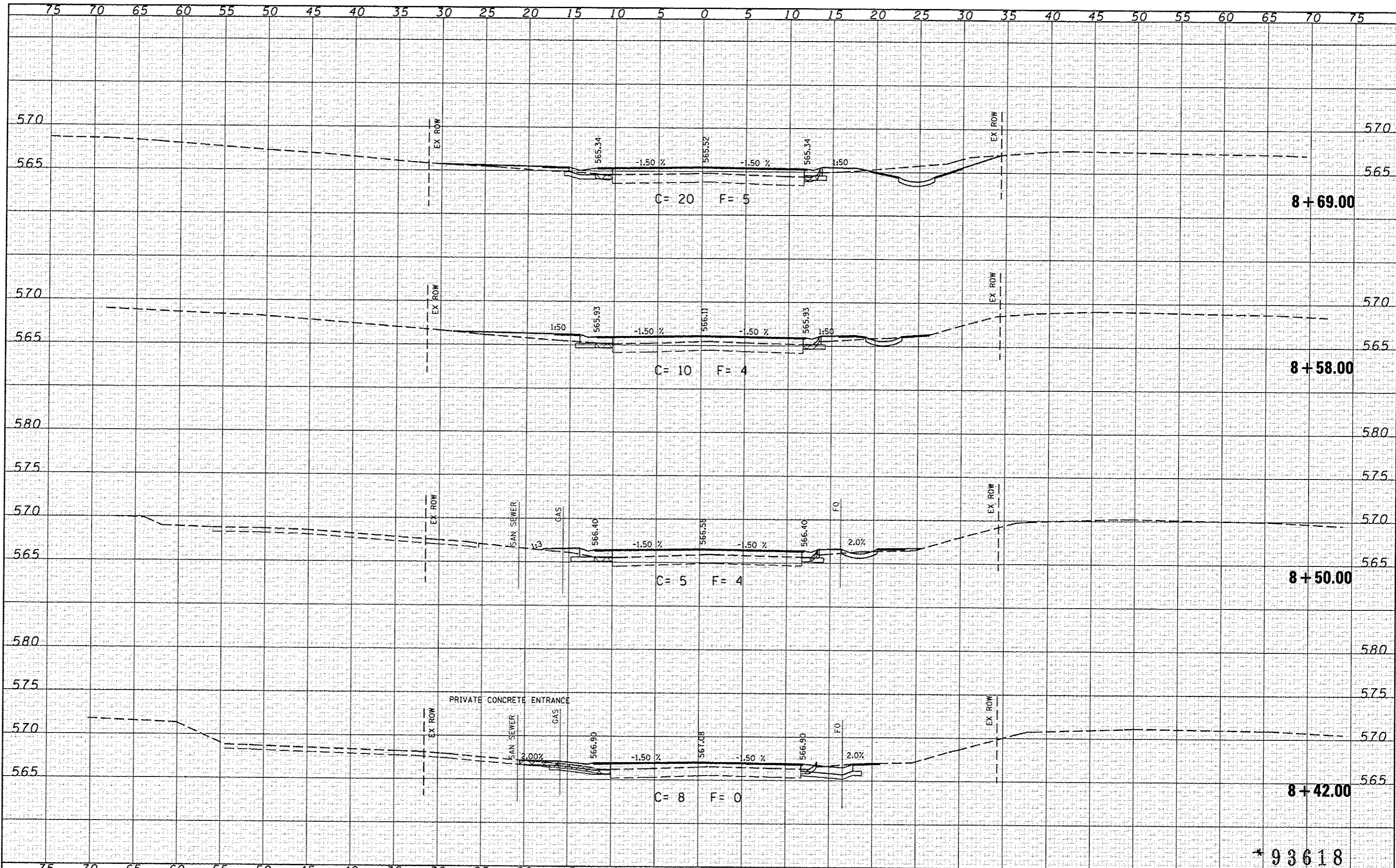
FAYETTE AVE CROSS SECTIONS

SCALE: SHEET NO. OF SHEETS STA. 7+75.00 TO STA. 8+25.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	43
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. *		

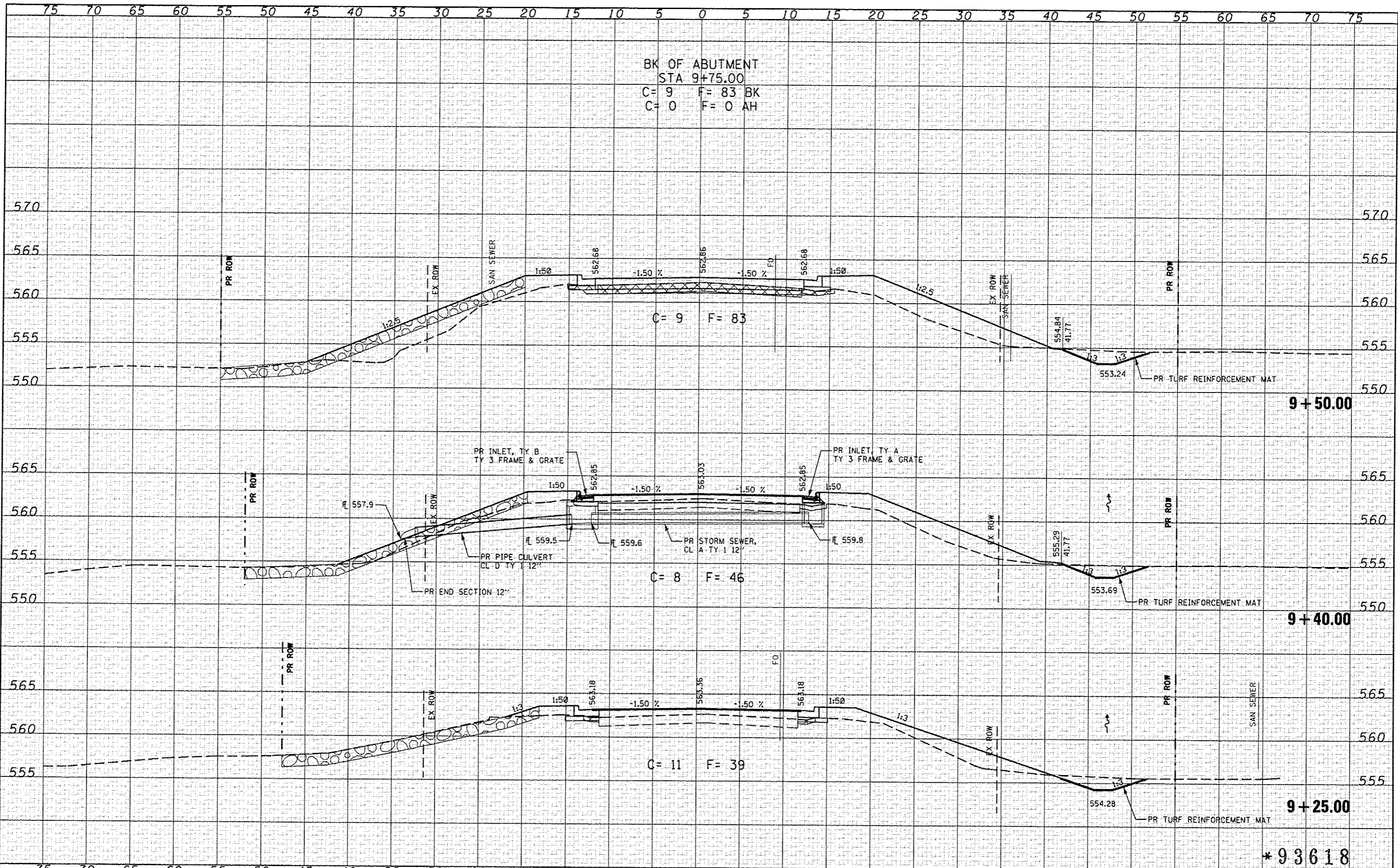
DATE	
BY	
REVISED	
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	
BY	
REVISED	
DESIGNED	
DRAWN	
CHECKED	
DATE	

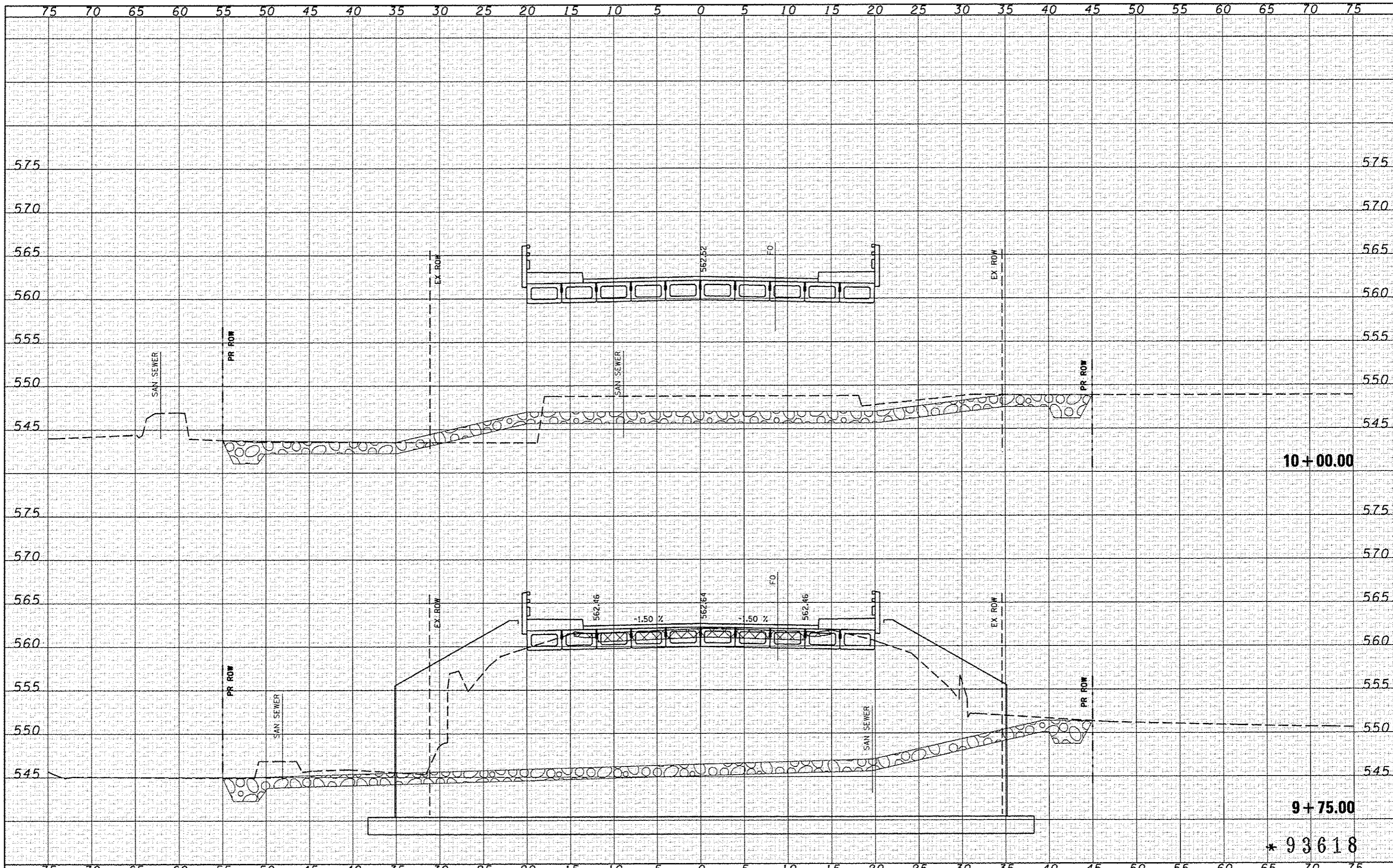


DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



CEC Cummins Engineering Corporation Civil and Structural Engineering	JOB # 2284 FILE NAME = 2284-shs-wsac.dgn PLOT SCALE = 10.0000" / IN. PLOT DATE = 2/19/2014	DESIGNED - NAK DRAWN - SJS CHECKED - NAK DATE - 2/19/2013	REVISED - REVISED - REVISED - REVISED -	CITY OF SPRINGFIELD FAYETTE AVE IMPROVEMENTS	FAYETTE AVE CROSS SECTIONS SCALE: SHEET NO. OF SHEETS STA. 9+25.00 TO STA. 9+50.00	F.A.U. RTE. 7978 SECTION 11-00472-00-BR COUNTY SANGAMON TOTAL SHEETS 51 SHEET NO. 46 CONTRACT NO. *
	FEDERAL ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

CEC Cummins
Engineering Corporation
Civil and Structural Engineering

JOB = 2284
FILE NAME = 2284-sht-1000.dgn
PLOT SCALE = 10.0000' / IN.
PLOT DATE = 2/19/2014

DESIGNED - NAK
DRAWN - SJS
CHECKED - NAK
DATE - 2/19/2013

REVISED -
REVISED -
REVISED -
REVISED -

**CITY OF SPRINGFIELD
FAYETTE AVE IMPROVEMENTS**

FAYETTE AVE CROSS SECTIONS

SCALE: SHEET NO. OF SHEETS STA. 9+75.00 TO STA. 10+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	47
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. *	

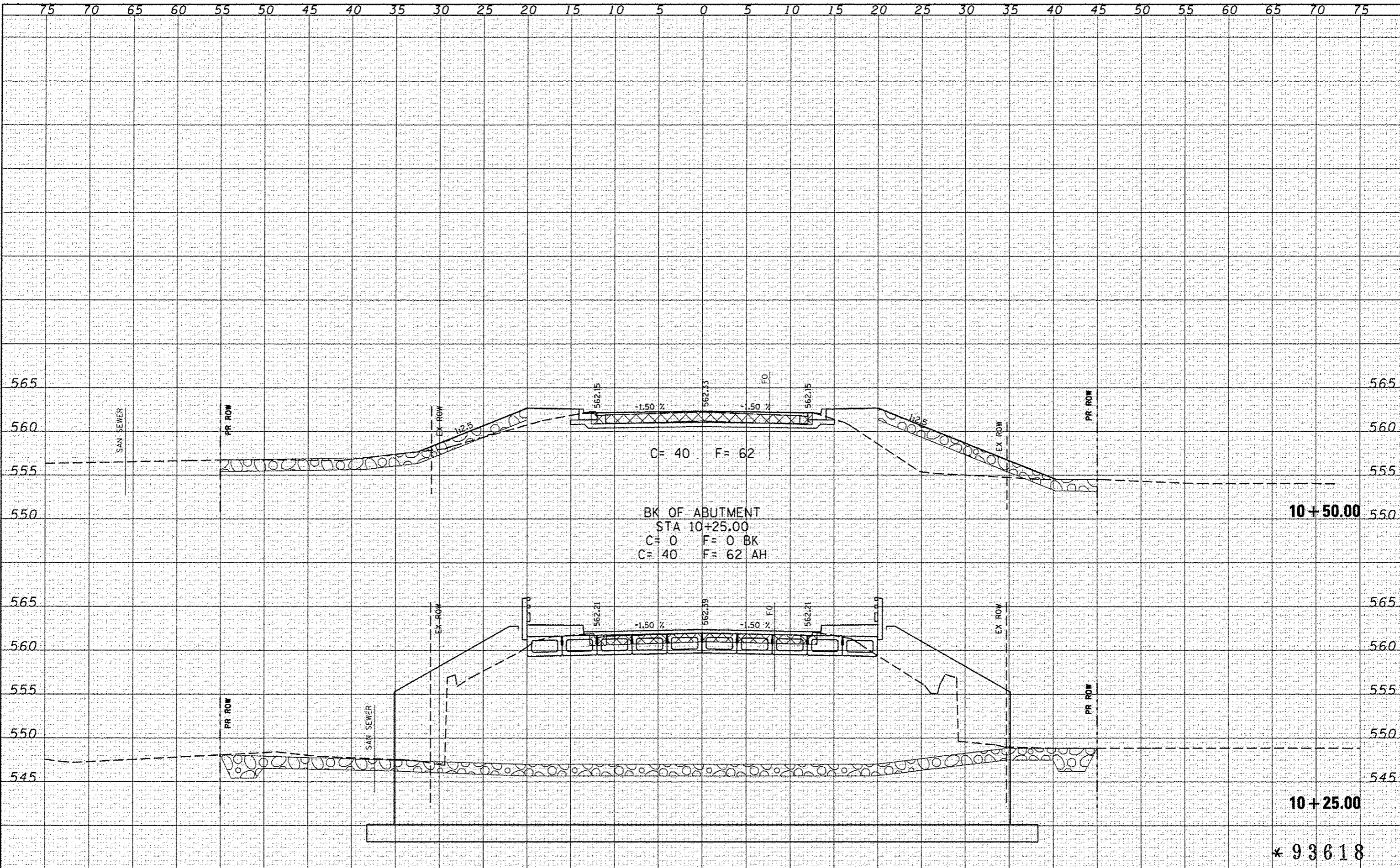
10+00.00

9+75.00

* 93618

DATE	
BY	
SAVED	
FINAL SURVEY	
NOTE BOOK	
NO.	

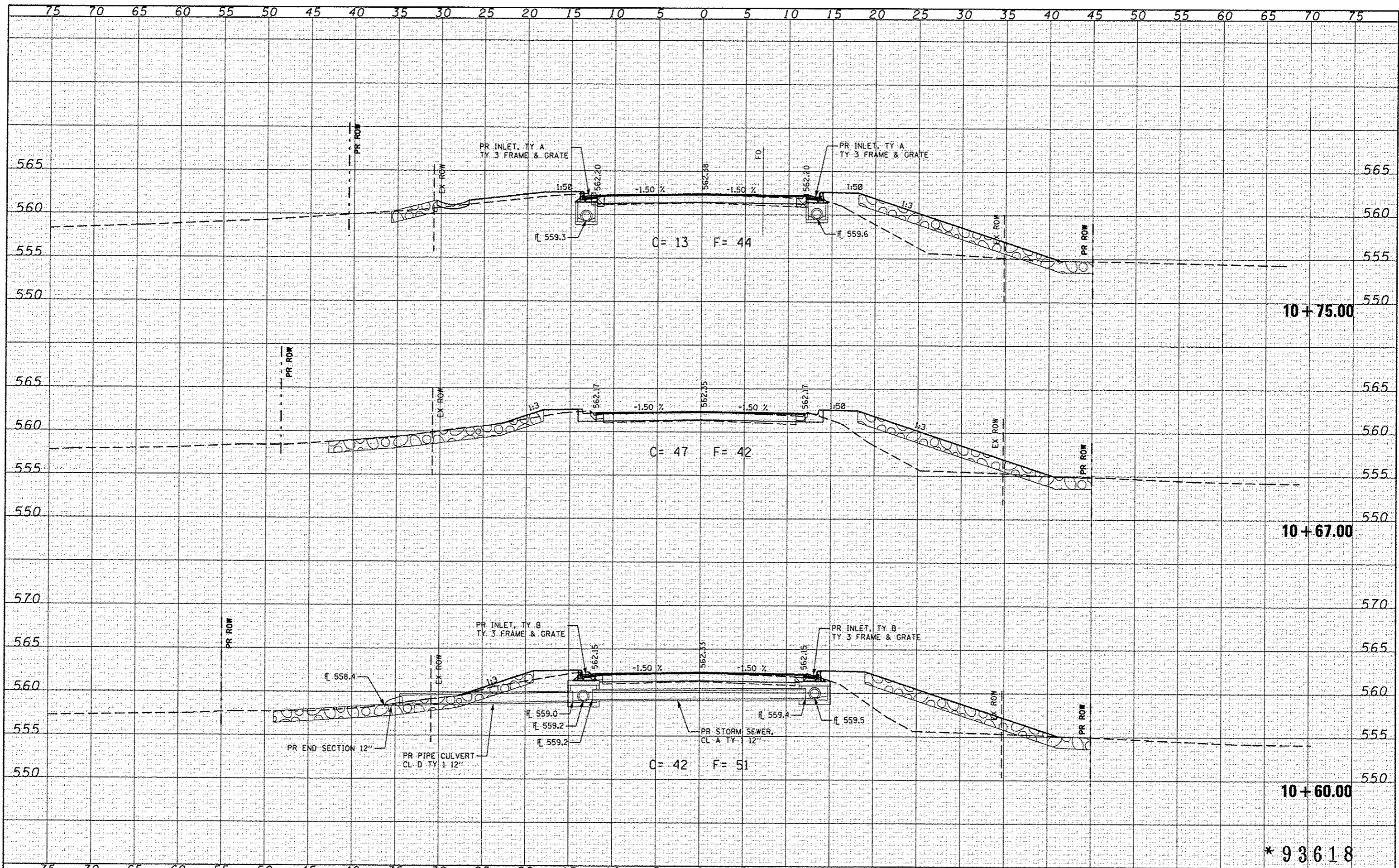
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CEC Cummins Engineering Corporation Civil and Structural Engineering	JOB # 2284 FILE NAME = 2284-ahs-k480.dgn PLOT SCALE = 10.0000' / IN. PLOT DATE = 2/19/2014	DESIGNED - NAK DRAWN - SJS CHECKED - NAK DATE - 2/19/2013	REVISED - REVISED - REVISED - REVISED -	CITY OF SPRINGFIELD FAYETTE AVE IMPROVEMENTS	FAYETTE AVE CROSS SECTIONS SCALE: _____ SHEET NO. OF SHEETS STA. 10+25.00 TO STA. 10+50.00	F.A.U. RTE. 7978 SECTION 11-00472-00-BR COUNTY SANGAMON TOTAL SHEETS 51 SHEET NO. 48 CONTRACT NO. * 93618 FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT
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DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

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



* 93618



JOB # 2284
 FILE NAME = 2284-shs-xsec.dgn
 PLOT SCALE = 10.0000' / IN.
 PLOT DATE = 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 2/19/2013

REVISED -
 REVISED -
 REVISED -
 REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

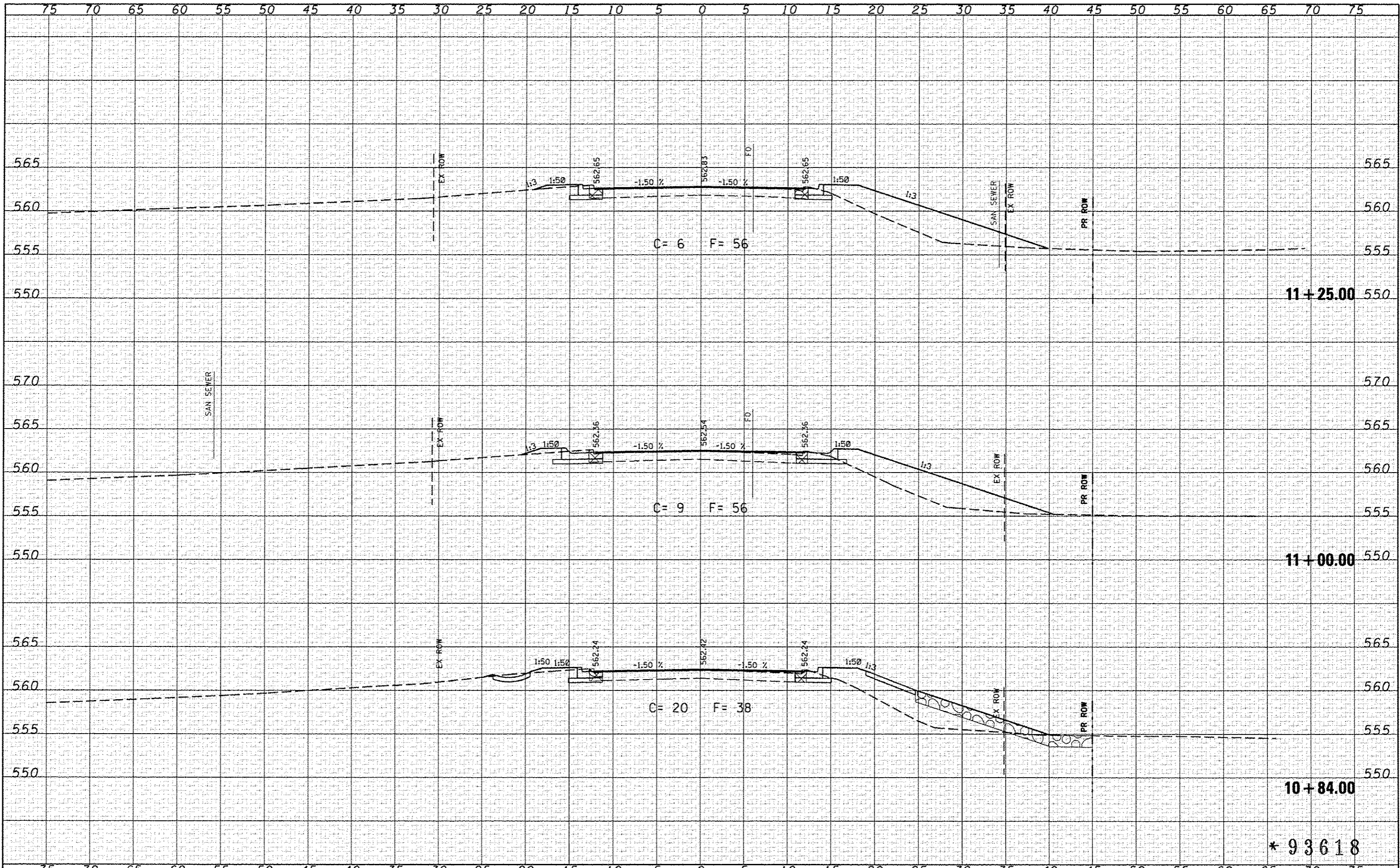
FAYETTE AVE CROSS SECTIONS

SCALE: SHEET NO. OF SHEETS STA. 10+60.00 TO STA. 10+75.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	49
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. *	

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
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NOTE BOOK	
AREAS CHECKED	
NO.	



JOB # 2284
 FILE NAME = 2204-ahf-ssss.dgn
 PLOT SCALE = 10,0000' / 1" = 1000000
 PLOT DATE = 2/19/2014

DESIGNED - NAK
 DRAWN - SJS
 CHECKED - NAK
 DATE - 2/19/2013

REVISED -
 REVISED -
 REVISED -
 REVISED -

**CITY OF SPRINGFIELD
 FAYETTE AVE IMPROVEMENTS**

FAYETTE AVE CROSS SECTIONS

SCALE: SHEET NO. OF SHEETS | STA. 10+84.00 TO STA. 11+25.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7978	11-00472-00-BR	SANGAMON	51	50
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

* 93618

