

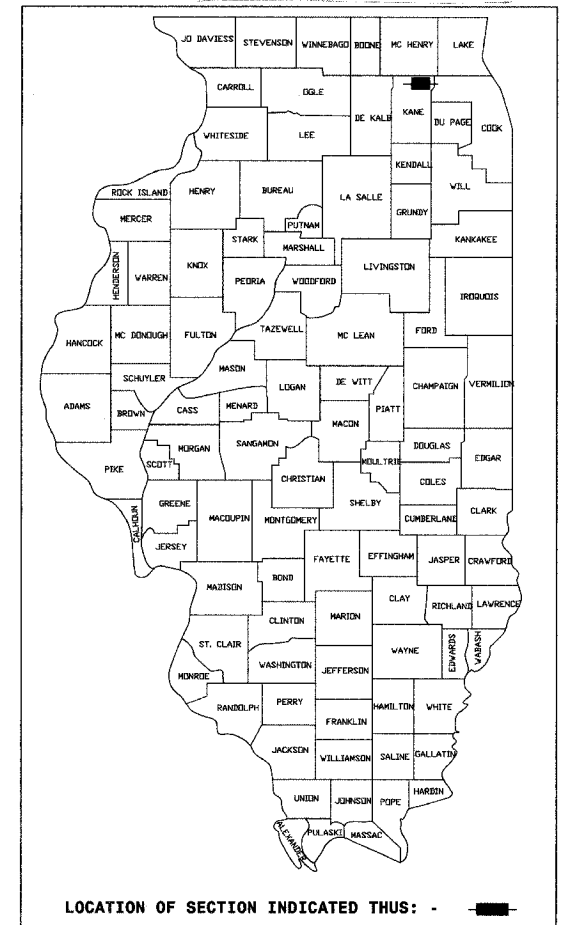
SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4600 PRIME PARKWAY, SUITE 201
 McHENRY, ILLINOIS 60050
 PH: 815-385-1776 FAX: 815-385-1781
 www.smithengineering.com E-MAIL: sec@smithengineering.com
 McHENRY HUNTLEY YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY**

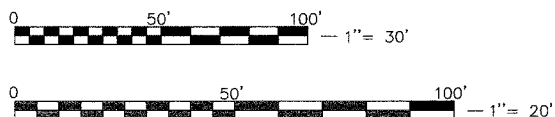
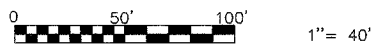
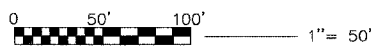
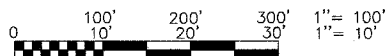
F.A.U. 1283 : MAIN STREET OVER THE FOX RIVER
 SECTION NO. 02-00059-00-BR
 ROADWAY RECONSTRUCTION, BRIDGE SUPERSTRUCTURE
 REPLACEMENT AND UTILITY REPLACEMENT
 PROJECT NO. BRM-8003 (179)
 S.N. 045-6150
 KANE COUNTY
 C-91-078-02

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	1
PROJECT NO. BRM-0003 (179)				
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT 1				
CONTRACT NO. 83783				



FOR INDEX OF SHEETS, SEE SHEET NO. 2

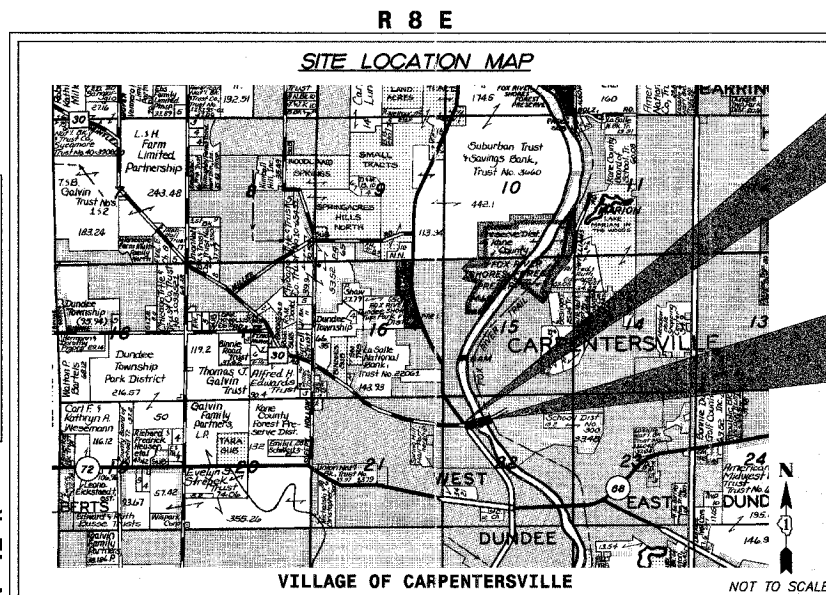
SCALES
 PLAN: 1" = 20'
 PROFILE HORIZ.: 1" = 20'
 PROFILE VERT.: 1" = 5'
 CROSS SECTIONS HORIZ.: 1" = 2'
 CROSS SECTIONS VERT.: 1" = 5'



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.

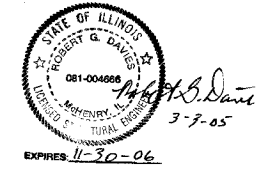
PROJECT LOCATED IN THE
 VILLAGE OF CARPENTERSVILLE

STRUCTURE INFORMATION
 EXISTING AND PROPOSED STRUCTURE IS FOUR SPANS (214'-0") REMOVE EXISTING CONCRETE DECK ON STEEL BEAM SUPERSTRUCTURE AND REPLACE WITH A 48' WIDE SUPERSTRUCTURE CONSISTING OF PPC DECK BEAMS. EXISTING SUBSTRUCTURE UNITS TO BE MODIFIED AND RE-USED.



MAIN STREET PROJECT BEGINS STA. 106+41

MAIN STREET PROJECT ENDS STA. 116+22



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

APPROVED January 7, 2005
Ronald L. Radd
 LOCAL AGENCY OFFICIAL

APPROVED March 2, 2005
Richard J. Radd
 LOCAL ROAD ENGINEER

APPROVED March 2, 2005
Dina O'Keefe/PP
 DISTRICT ENGINEER

DESIGN SPEED
 MAIN STREET: 30 MPH

SPEED LIMIT
 MAIN STREET: 25 MPH

TRAFFIC DATA
 MAIN STREET: 21,600 (1997)
 23,304 (2025)

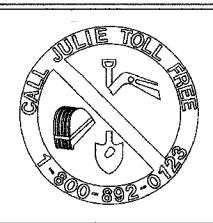
PROFESSIONAL ENGINEER'S SIGN & SEAL

Theodore E. Hamilton
 THEODORE E. HAMILTON P.E.
 DATE: January 8, 2005
 LICENSE EXPIRES: 11/30/05

DUNDEE TOWNSHIP

GROSS LENGTH OF PROJECT = 981 FEET = 0.186 MILES
 NET LENGTH OF PROJECT = 981 FEET = 0.186 MILES

FEDERAL AID DESIGN ENGINEER: CHAD RIDDLE (847) 705-4406



CALL JULIE 1-800-892-0123
 WITH THE FOLLOWING:
 COUNTY KANE
 CITY-TOWNSHIP CARPENTERSVILLE - DUNDEE
 SEC. & 1/4 SEC. NO. # 22

48 hours before you dig
 (Excluding Sat., Sun. & Holidays)

CONTRACT NO. 83783

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83783				

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS, GENERAL NOTES
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5-6	TYPICAL SECTIONS
7	PLAT OF HIGHWAYS
8	MAINTENANCE OF TRAFFIC DETAILS
9	DETOUR PLAN
10-11	ROADWAY PLAN AND PROFILE
12-13	DRAINAGE AND UTILITY PLAN AND PROFILE
14	SOIL BORINGS
15	EROSION CONTROL PLAN
16	PAVEMENT MARKING, SIGNING, AND LANDSCAPING PLAN
17-32	BRIDGE PLANS
33-44	LIGHTING PLANS AND DETAILS
45	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
46	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
47-48	STANDARD CONSTRUCTION DETAILS
49	EARTH EXCAVATION TABLE AND TEMPORARY EASEMENT DETAIL
50-51	CROSS SECTIONS

GENERAL NOTES

- 1 THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH BARRICADE USED. (TYPE I OR TYPE II (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS PER BARRICADE.
- 2 FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR WILL CALL J.U.L.T.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
- 3 THE CONTRACTOR SHALL CONTACT THE VILLAGE OF CARPENTERSVILLE AND I.D.O.T. AT LEAST 72 HOURS IN ADVANCE OF BEGINNING ANY WORK ON MAIN STREET.
- 4 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE VILLAGE OF CARPENTERSVILLE.
- 5 THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.10 GAL/SQ-YD. THE AGGREGATE PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 4 LBS/SQ YD.
- 6 UNLESS OTHERWISE NOTED ALL OFFSETS FOR THE DRAINAGE STRUCTURES LOCATED IN THE CURB AND GUTTER ARE TO THE BACK OF CURB. OFFSETS FOR ALL OTHER STRUCTURES ARE TO THE CENTER OF THE GRATE.
- 7 PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 8 THE CONTRACTOR SHALL ENSURE THAT ALL WATER SYSTEM VALVES, VALVE VAULTS, AND SANITARY SEWER MANHOLES REMAIN READILY ACCESSIBLE TO THE VILLAGE FOR EMERGENCY OPERATIONS. THE LOCATIONS OF ALL WATER AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
- 9 THE CONTRACTOR SHALL NOT OPERATE ANY OF THE EXISTING WATER SYSTEM. VILLAGE OF CARPENTERSVILLE FORCES MUST BE PRESENT TO OBSERVE AND OPERATE ALL VALVES, HYDRANTS, ETC. THE CONTRACTOR SHALL PROVIDE THE VILLAGE WITH 24 HOUR NOTICE PRIOR TO STARTING ANY WORK ON VILLAGE FACILITIES.
- 10 LOCATION OF SEGMENTAL CONCRETE BLOCK WALL SHOWN ON THE PLANS IS APPROXIMATE. THE FINAL LOCATIONS OF THIS WALL WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE CONTRACTOR SHALL RECEIVE APPROVAL FROM THE ENGINEER PRIOR TO INSTALLING ANY SEGMENTAL CONCRETE BLOCK WALL.
- 11 SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS BEFORE REMOVAL OF ANY UNSTABLE MATERIAL.
- 12 A SOILS REPORT HAS BEEN COMPLETED FOR THIS PROJECT AND IS AVAILABLE FOR CONTRACTOR REVIEW AT THE McHENRY, ILLINOIS OFFICE OF SMITH ENGINEERING CONSULTANTS, INC.
- 13 SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER. THE COST OF SAW CUTTING WILL BE INCLUDED IN THE COST OF ITEMS BEING REMOVED.
- 14 THIS PROJECT MAY REQUIRE UP TO 4 CHANGEABLE MESSAGE SIGNS.
- 15 THE PAY ITEM FOR STORM SEWER REMOVAL SHALL INCLUDE ANY TRENCH BACKFILL REQUIRED TO FILL AREA OF SEWER REMOVAL WHERE THERE IS NO REPLACEMENT. IF PROPOSED STORM SEWER IS REPLACED IN THE SAME TRENCH, THEN TRENCH BACKFILL SHALL BE PAID FOR SEPARATELY WITH THE QUANTITY SHOWN ON THE PLANS.
- 16 NO FILL SHALL BE PLACED WITHIN THE CHANNEL BELOW ELEVATION 713.00.
- 17 MECHANIZED EQUIPMENT IS NOT ALLOWED TO BE OPERATED OR MOVED ACROSS THE RIVER BOTTOM.
- 18 PAVEMENT MARKING TAPE, TYPE III SHALL BE PLACED ON THE FINAL SURFACE PRIOR TO PLACING FINAL STRIPING. COST SHALL BE INCLUDED WITH TRAFFIC CONTROL FOR TEMPORARY DETOUR.
- 19 5' LONG TRANSITIONS FOR PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER ARE INCLUDED AND SHALL BE INCIDENTAL TO COMBINATION CONCRETE CURB AND GUTTER, TYPE B-5.12.
20. THE WORK UNDER THIS CONTRACT SHALL CONFORM TO ALL REGULATIONS GIVEN IN THE REGIONAL PERMIT ISSUED FOR THE PROJECT AND THE IDNR/OWR PERMIT ISSUED FOR THE PROJECT. THE WORK SHALL ALSO CONFORM TO KANE-DUPAGE COUNTY SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) REQUIREMENTS. ANY FEES REQUIRED BY THE KDSWCD THROUGHOUT THE DURATION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

LIST OF STATE STANDARDS

STANDARD NO.	LIST OF DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420001-05	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
424001-03	CURB RAMPS FOR SIDEWALKS
515001-02	NAME PLATE FOR BRIDGES
542301	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311	GRATING FOR CONCRETE FLARED END SECTION FOR 24" THRU 54" PIPE
601001	SUB-SURFACE DRAINS
602001	CATCH BASINS, TYPE A
602011	CATCH BASIN, TYPE C
602301	INLET, TYPE A
602401	MANHOLE, TYPE A
602501	VALVE VAULT TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND LIDS, TYPE 1
604051-01	FRAME AND GRATE, TYPE 11
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701501-03	URBAN LANE CLOSURE 2L, 2W UNDIVIDED
701801-03	LANE CLOSURE, MULTILANE 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE FOR SPEEDS < 45 MPH
702001-05	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS
729001	APPLICATION OF TYPE A & B METAL POSTS
780001-01	TYPICAL PAVEMENT MARKINGS
805001	ELECTRIC SERVICE INSTALLATION DETAILS
878001-03	CONCRETE FOUNDATION DETAILS
BLR 22-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO LANE TWO WAY OVER ONE DAY

SYMBOL LEGEND

	EXISTING	PROPOSED
SANITARY MANHOLE	⊙	⊙
STORM MANHOLE	⊙	⊙
STORM CATCH BASIN	⊙	⊙
INLET	□	□
FLARED END SECTION	▷	▷
VALVE VAULT	⊙	⊙
FIRE HYDRANT	⋄	⋄
LIGHT POLE	✱	✱
STREET SIGN	+	+
REGULATORY SIGN	+	+
UTILITY POLE	⊙	⊙
UTILITY BOX	⊙	⊙
MAILBOX	⊙	⊙
WELL	⊙	⊙
SANITARY SEWER	—	—
STORM SEWER	—	—
CULVERT	—	—
WATER MAIN	—	—
WATER MAIN ENCASEMENT	—	—
STORM UNDERDRAIN	—	—
ELECTRIC LINE	—	—
TELEPHONE LINE	—	—
GAS LINE	—	—
CABLE TV LINE	—	—
TREELINE	—	—
TREE	—	—
FENCE	—	—
EROSION CONTROL FENCE	—	—
DITCH CHECK	—	—
DRAINAGE ARROW	—	—
100 YEAR OVERFLOW	—	—

STANDARD ABBREVIATIONS

- B-B - BACK TO BACK OF CURB
- B.C. - BACK OF CURB
- B.O.C. - BACK OF CURB
- B.S.L. - BUILDING SETBACK LINE
- C.B. - STORM CATCH BASIN
- C.E. - COMMONWEALTH EDISON CO.
- D.E. - DRAINAGE EASEMENT
- E-E - EDGE TO EDGE OF PAVEMENT
- E.O.P. - EDGE OF PAVEMENT
- E.O.S. - EDGE OF SHOULDER
- E.P. - EDGE OF PAVEMENT
- E.S. - EDGE OF SHOULDER
- F.E.S. - FLARED END SECTION
- I.B.T. - ILLINOIS BELL TELEPHONE CO.
- L.E. - LANDSCAPE EASEMENT
- M.H. - MANHOLE (TYPE SPECIFIED ON PLANS)
- R.O.W. - RIGHT OF WAY
- T.B.F. - TRENCH BACKFILL
- T.C. - TOP OF CURB
- T.C.E. - TEMPORARY CONSTRUCTION EASEMENT
- T.O.B. - TOP OF BERM
- T.O.C. - TOP OF CURB
- U.E. - UTILITY EASEMENT

SITE BENCHMARKS

BM 1:
CUT SQUARE IN CONCRETE WALL LOCATED AT THE NORTHWEST CORNER OF THE MAIN STREET BRIDGE OVER THE FOX RIVER. APPROXIMATELY 19.0' NORTHWEST OF THE CENTERLINE OF MAIN STREET. ELEVATION = 727.79

REVISIONS	
NO.	DATE
7.	
6.	
5.	
4.	
3.	
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1.	

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ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 INDEX OF SHEETS,
 LIST OF STATE STANDARDS,
 AND GENERAL NOTES

SCALE: "N"TS"
 DATE 02-25-2005

DRAWN BY: WJH
 CHECKED BY: TEH

PLOT FILE STANDARD
 COMP. FILE: D:\02\152\152.dwg

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	URBAN			CODE NO.	ITEM	UNIT	TOTAL QUANTITIES	URBAN			FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT	CONTRACT #	837B3
				ROADWAY	BRIDGE	LIGHTING					ROADWAY	BRIDGE	LIGHTING					
				80% FEDERAL 20% LOCAL 1000-2A	80% FEDERAL 20% LOCAL X080-2A	80% FEDERAL 20% LOCAL Y030-1E				80% FEDERAL 20% LOCAL 1000-2A	80% FEDERAL 20% LOCAL X080-2A	80% FEDERAL 20% LOCAL Y030-1E						
20101000	TEMPORARY FENCE	FOOT	430	430	-	-	55100400	STORM SEWER REMOVAL 10"	FOOT	20	20	-	-					
* 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	48	48	-	-	55100500	STORM SEWER REMOVAL 12"	FOOT	89	89	-	-					
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2,053	2,053	-	-	55100900	STORM SEWER REMOVAL 18"	FOOT	18	18	-	-					
20400800	FURNISHED EXCAVATION	CU YD	99	99	-	-	55101200	STORM SEWER REMOVAL 24"	FOOT	468	468	-	-					
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	909	909	-	-	△ 56103000	DUCTILE IRON WATER MAIN 6"	FOOT	77	77	-	-					
20800150	TRENCH BACKFILL	CU YD	334	334	-	-	△ 56103100	DUCTILE IRON WATER MAIN 8"	FOOT	412	412	-	-					
20900110	POROUS GRANULAR BACKFILL	CU YD	106	-	106	-	56103400	DUCTILE IRON WATER MAIN 16"	FOOT	23	23	-	-					
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	3,100	3,100	-	-	△ 56104900	WATER VALVES 6"	EACH	4	4	-	-					
* 21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	1,113	1,113	-	-	△ 56105000	WATER VALVES 8"	EACH	2	2	-	-					
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	21	21	-	-	56105300	WATER VALVES 16"	EACH	5	5	-	-					
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	21	21	-	-	△ 56200700	WATER SERVICE LINE 2"	FOOT	125	125	-	-					
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	21	21	-	-	△ 56201800	CORPORATION STOPS 2"	EACH	5	5	-	-					
* 25200110	SODDING, SALT TOLERANT	SQ YD	1,113	1,113	-	-	△ 56400500	FIRE HYDRANTS TO BE REMOVED	EACH	2	2	-	-					
28000400	PERIMETER EROSION BARRIER	FOOT	265	265	-	-	△ 56400820	FIRE HYDRANTS WITH AUXILIARY VALVE AND VALVE BOX	EACH	3	3	-	-					
28000500	INLET AND PIPE PROTECTION	EACH	11	11	-	-	58700200	BRIDGE SEAT SEALER	SQ FT	346	-	346	-					
28000510	INLET FILTERS	EACH	11	11	-	-	59000100	EPOXY CRACK SEALING	FOOT	107	-	107	-					
28100105	STONE RIP RAP, CLASS A3	SQ YD	33	-	33	-	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	39	-	39	-					
28200200	FILTER FABRIC	SQ YD	33	-	33	-	60100915	PIPE DRAINS, 6"	FOOT	196	-	196	-					
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	2,739	2,739	-	-	60201105	CATCH BASINS, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	EACH	4	4	-	-					
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	274	274	-	-	60207905	CATCH BASINS, TYPE C, 2'-DIA, TYPE 11 FRAME AND GRATE	EACH	3	3	-	-					
40600300	AGGREGATE (PRIME COAT)	TON	4	4	-	-	60218400	MANHOLES, TYPE A, 4'-DIA, TYPE 1 FRAME, CLOSED LID	EACH	1	1	-	-					
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	207	207	-	-	60221100	MANHOLES, TYPE A, 5'-DIA, TYPE 1 FRAME, CLOSED LID	EACH	6	6	-	-					
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	42	42	-	-	60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	4	4	-	-					
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	364	364	-	-	△ 60248700	VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	8	8	-	-					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	11,762	11,762	-	-	△ 60248900	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4	4	-	-					
44000100	PAVEMENT REMOVAL	SQ YD	3,753	3,753	-	-	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1	-	-					
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	193	193	-	-	△ 60265900	VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	6	6	-	-					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	567	567	-	-	△ 60266300	VALVE VAULTS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1	-	-					
44000600	SIDEWALK REMOVAL	SQ FT	6,065	6,065	-	-	△ 60266500	VALVE VAULTS TO BE REMOVED	EACH	4	4	-	-					
44200108	PAVEMENT PATCHING, TYPE II, 9 INCH	SQ YD	30	30	-	-	60500040	REMOVING MANHOLES	EACH	3	3	-	-					
50101600	REMOVAL OF EXISTING SUPERSTRUCTURES	L SUM	1	-	1	-	60500060	REMOVING INLETS	EACH	10	10	-	-					
50102400	CONCRETE REMOVAL	CU YD	94.7	-	94.7	-	60600605	CONCRETE CURB, TYPE B	FOOT	134	134	-	-					
50200100	STRUCTURE EXCAVATION	CU YD	204	-	204	-	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,858	1,858	-	-					
50300120	PREFORMED JOINT SEAL 2 1/2"	FOOT	96	-	96	-	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	15	15	-	-					
50300225	CONCRETE STRUCTURES	CU YD	199.7	-	199.7	-	72000100	SIGN PANEL - TYPE 1	SQ FT	45	45	-	-					
50300255	CONCRETE SUPERSTRUCTURE	CU YD	53.6	-	53.6	-	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	6	6	-	-					
50300260	BRIDGE DECK GROOVING	SQ YD	618	-	618	-	72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	1	1	-	-					
50300300	PROTECTIVE COAT	SQ YD	237	-	237	-	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	4	4	-	-					
50301245	FORMED CONCRETE REPAIR (<= 5" DEPTH)	SQ FT	7	-	7	-												
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	7,687	-	7,687	-												
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	64,100	-	64,100	-												
51500100	NAME PLATES	EACH	1	-	1	-												
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1	1	-	-												
54247150	GRATING FOR CONCRETE FLARED END SECTION 30"	EACH	1	1	-	-												
550A2320	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 12"	FOOT	53	53	-	-												
550A2330	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 15"	FOOT	12	12	-	-												
550A2340	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 18"	FOOT	18	18	-	-												
550A2380	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 1, 30"	FOOT	295	295	-	-												
550A2520	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 12"	FOOT	124	124	-	-												
550A2570	STORM SEWER, RUBBER GASKET, CLASS A, TYPE 2, 27"	FOOT	160	160	-	-												
55100300	STORM SEWER REMOVAL 8"	FOOT	68	68	-	-												

PLOT FILE: STANDARD
 USER: CLE-J
 COMP: FILE: 0401271.dwg

* SPECIALTY ITEM
 △ NON-PARTICIPATING ITEM - 100% LOCAL

REVISIONS	
NO.	DATE
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SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PRIME PARKWAY, SUITE 201
 McHENRY, ILLINOIS 60050
 PH: 815-385-1778 FAX: 815-385-1781
 www.smithengineering.com E-MAIL: seo@smithengineering.com
 McHENRY HUNTLEY YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 SUMMARY OF QUANTITIES
 SCALE: "NTS"
 DATE 02-25-2005
 DRAWN BY WJH
 CHECKED BY TEH

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN			
			TOTAL QUANTITIES	ROADWAY 80% FEDERAL 20% LOCAL 1000-2A	BRIDGE 80% FEDERAL 20% LOCAL X080-2A	LIGHTING 80% FEDERAL 20% LOCAL Y030-1E
72900200	METAL POST - TYPE B	FOOT	11	11	-	-
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	190	190	-	-
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	112	112	-	-
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	102	102	-	-
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	425	425	-	-
* 78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	60	60	-	-
* 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	-	-	1
* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	-	-	1
* 80700140	GROUND ROD, 1/2" DIA. x 10 FT	EACH	62	-	-	62
* 81000700	CONDUIT IN TRENCH, 2 1/2" DIA. GALVANIZED STEEL	FOOT	20	-	-	20
* 81000800	CONDUIT IN TRENCH, 3" DIA. GALVANIZED STEEL	FOOT	140	-	-	140
* 81001000	CONDUIT IN TRENCH, 4" DIA. GALVANIZED STEEL	FOOT	82	-	-	82
* 81018700	CONDUIT PUSHED, 3" DIA. GALVANIZED STEEL	FOOT	322	-	-	322
* 81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3,500	-	-	3,500
* 81702180	ELECTRIC CABLE IN CONDUIT 600V (XLP TYPE USE) 1/C NO. 3/0	FOOT	150	-	-	150
* 82102100	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 100 WATT	EACH	20	-	-	20
* XX006189	DECORATIVE LANTERN STYLE LUMINAIRE, SODIUM VAPOR, TENON MOUNT, 100 WATT	EACH	47	-	-	47
* 82500505	LIGHTING CONTROLLER, SPECIAL	EACH	1	-	-	1
* 83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	342	-	-	342
* 84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	6	-	-	6
* 84500110	REMOVAL OF EXISTING CONTROLLER	EACH	1	-	-	1
* 84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	-	-	1
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	200	200	-	-
X0322923	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	117	117	-	-
X0712400	TEMPORARY PAVEMENT	SQ YD	220	220	-	-
X3550700	BITUMINOUS BASE COURSE SUPERPAVE 10"	SQ YD	2,307	2,307	-	-
* X2800100	TEMPORARY DITCH CHECKS, ROLLED EXCELSIOR	EACH	16	16	-	-
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	8	8	-	-
X4023000	TEMPORARY ACCESS (ROAD)	EACH	2	2	-	-
X4066426	BITUMINOUS CONC. SURF. COURSE, SUPERPAVE, MIX "D", N70	TON	199	199	-	-
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL 19.0, N70	TON	331	331	-	-
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	1,141	-	1,141	-
* X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1	-	-
X7015000	CHANGEABLE MESSAGE SIGN	MONTH	12	12	-	-
△ XX000479	WATER MAIN REMOVAL 6 INCH	FOOT	427	427	-	-
△ XX001051	WATER SERVICE LINE RECONNECTED	EACH	1	1	-	-
△ XX002817	TEMPORARY LINE STOPPER, 6"	EACH	6	6	-	-
XX003067	CONCRETE BRIDGE RAIL, SPECIAL	FOOT	955	-	955	-
XX003991	BITUMINOUS DRIVEWAY PAVEMENT 3"	SQ YD	35	35	-	-
XX004007	BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	430	430	-	-
XX006188	REMOVE AND RE-ERECT SEGMENTAL BLOCK RETAINING WALL	SQ FT	117	117	-	-
XX004731	CONNECTION TO EXISTING WATER MAIN	EACH	5	5	-	-
XX004908	ABANDON EXISTING WATER MAIN AND FIRE HYDRANTS	L SUM	1	1	-	-
Z0003900	BICYCLE RAILING	FOOT	575	-	575	-
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5	-
Z0017400	DRAINAGE AND UTILITY STRUCTURE TO BE ADJUSTED	EACH	11	11	-	-
Z0047300	PROTECTIVE SHIELD	SQ YD	998	-	998	-
Z0076600	TRAINEES	HOUR	1000+	500	500	-

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO.	ITEM	UNIT	URBAN			
			TOTAL QUANTITIES	ROADWAY 80% FEDERAL 20% LOCAL 1000-2A	BRIDGE 80% FEDERAL 20% LOCAL X080-2A	LIGHTING 80% FEDERAL 20% LOCAL Y030-1E
XX006176	EXPLORATION TRENCH 120"	FOOT	600	600	-	-
* XX006177	WATERMAIN HIGH DENSITY POLYETHYLENE PRESSURE PIPE, DIRECTIONAL BORING, 16"	FOOT	700	700	-	-
* XX006178	TEMPORARY LINE STOPPER, 16"	EACH	4	4	-	-
△ XX006179	SANITARY MANHOLE REMOVAL AND REPLACEMENT	EACH	3	3	-	-
XX006180	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH), SPECIAL TYPE A	SQ FT	1,922	-	1,922	-
XX006181	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH), SPECIAL TYPE B	SQ FT	641	-	641	-
* XX006182	UNIT DUCT WITH 5-1/C NO. 6 AND 1/C NO. 6 GROUND 300 V (XHHW-2), 1 1/4" DIA. POLYETHYLENE	FOOT	4,500	-	-	4,500
* XX006183	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 6 1/C NO. 6	FOOT	540	-	-	540
* XX006184	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 5 1/C NO. 10	FOOT	660	-	-	660
* XX006185	DECORATIVE, LIGHT POLE, ALUMINUM, 16 FT MOUNTING HEIGHT, FLUTED SHAFT AND 2 PIECE BOLT ON DECORATIVE BASE	EACH	37	-	-	37
* XX006186	DECORATIVE, LIGHT POLE, ALUMINUM, 10 FT FLUTED SHAFT AND 2 PIECE BOLT ON DECORATIVE BASE	EACH	10	-	-	10
* XX005560	LIGHT POLE, ALUMINUM, 25 FT MOUNTING HEIGHT, 3 FT MAST ARM	EACH	20	-	-	20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	02-00059-00-BR	KANE	51	4
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT	CONTRACT # 837B3	

PLOT FILE STANDARD
 REV. OF 4
 COMP. FILE 040576x.dwg

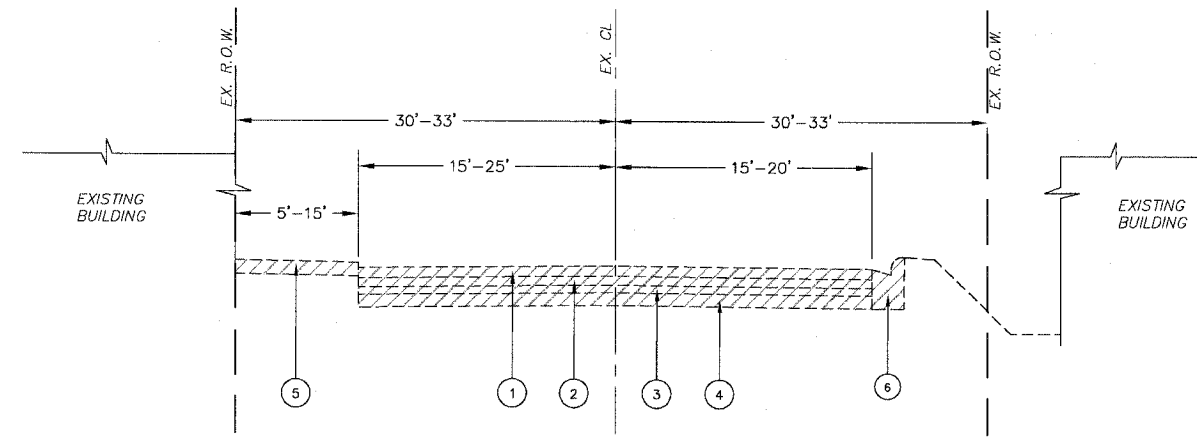
+ Y080
 * SPECIALTY ITEM
 △ NON-PARTICIPATING ITEM - 100% LOCAL
 Y060

REVISIONS	
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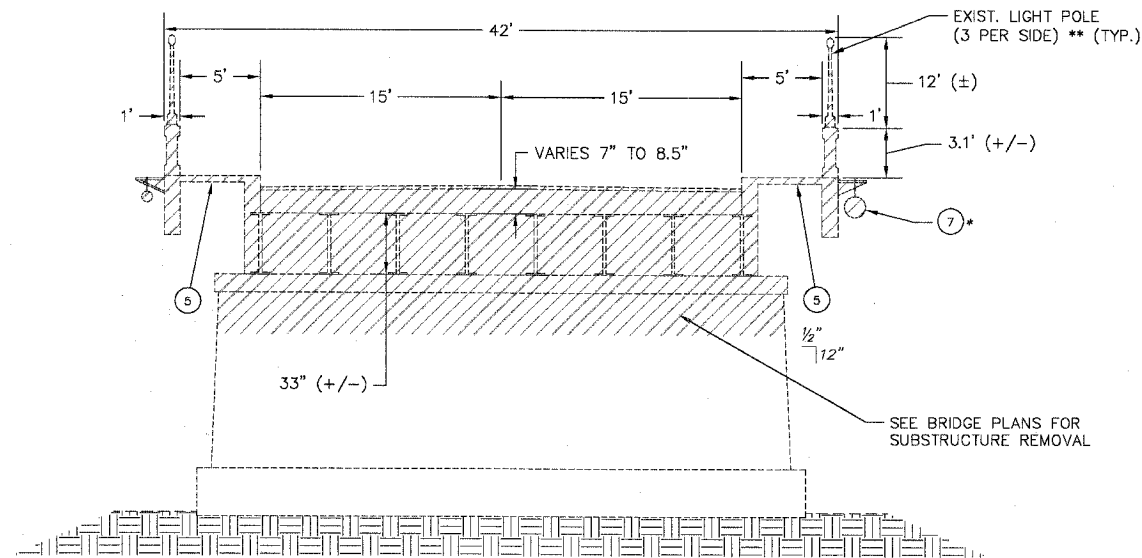
SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4600 PRIME PARKWAY, SUITE 801
 McHENRY, ILLINOIS 60050
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 www.smithengineering.com E-MAIL: eec@smithengineering.com
 * McHENRY * HUNTLEY * YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 SUMMARY OF QUANTITIES
 SCALE: "NTS"
 DATE 02-25-2005
 DRAWN BY WJH
 CHECKED BY TEH

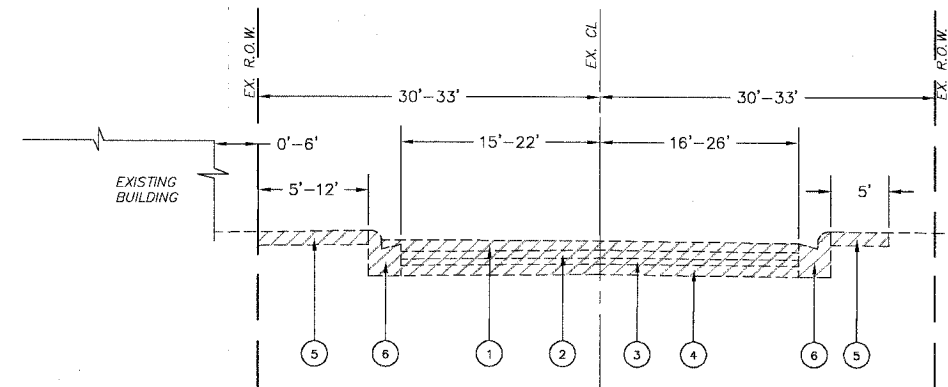
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	5
STA.	TO STA.			
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT #: 83783				



MAIN STREET - EXISTING TYPICAL SECTION
STA. 106+41 TO STA. 110+96



MAIN STREET BRIDGE - EXISTING TYPICAL SECTION
STA. 110+96 TO STA. 113+10

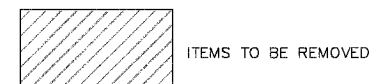


MAIN STREET - EXISTING TYPICAL SECTION
STA. 113+10 TO STA. 116+22

- LEGEND**
- 1 EXISTING BITUMINOUS PAVEMENT 4.25" - 8.5"
 - 2 EXISTING PAVING BRICKS, 3.5"
 - 3 EXISTING SAND BASE, 2" - 3"
 - 4 EXISTING CONCRETE BASE, 3" - 5"
 - 5 EXISTING PCC SIDEWALK
 - 6 EXISTING CONCRETE CURB AND GUTTER
 - 7 EXISTING WATERMAIN, 16" *
 - 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
 - 9 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
 - 10 PROPOSED CONCRETE WEARING SURFACE, 5"
 - 11 PROPOSED AGGREGATE BASE 2" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
 - 12 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5"
 - 13 PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 10"
 - 14 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
 - 15 PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
 - 16 PROPOSED CONCRETE BRIDGE RAIL, SPECIAL
 - 17 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH, SEE NOTE BELOW)
 - 18 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MINIMUM THICKNESS OF GUTTER FLAG SHALL BE 9". ADDITIONAL AGGREGATE UNDER GUTTER FLAG SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12)
 - 19 PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (SEE NOTE BELOW)
 - 20 PROPOSED CONCRETE SUPERSTRUCTURE (CLASS BD CONCRETE) 4" THICK

* EXISTING WATER MAIN TO REMAIN IN SERVICE UNTIL PROPOSED WATER MAIN HDPE PRESSURE PIPE, DIRECTIONAL BORING, 16" IS COMPLETED, TESTED, AND IN SERVICE.

** WORK TO REMOVE EXISTING LIGHT POLES, CONDUIT, ETC. WITH THE EXISTING SUPERSTRUCTURE SHALL BE PAID FOR UNDER "REMOVAL OF EXISTING SUPERSTRUCTURES."



REVISIONS	
NAME	DATE
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SMITH ENGINEERING CONSULTANTS, INC.
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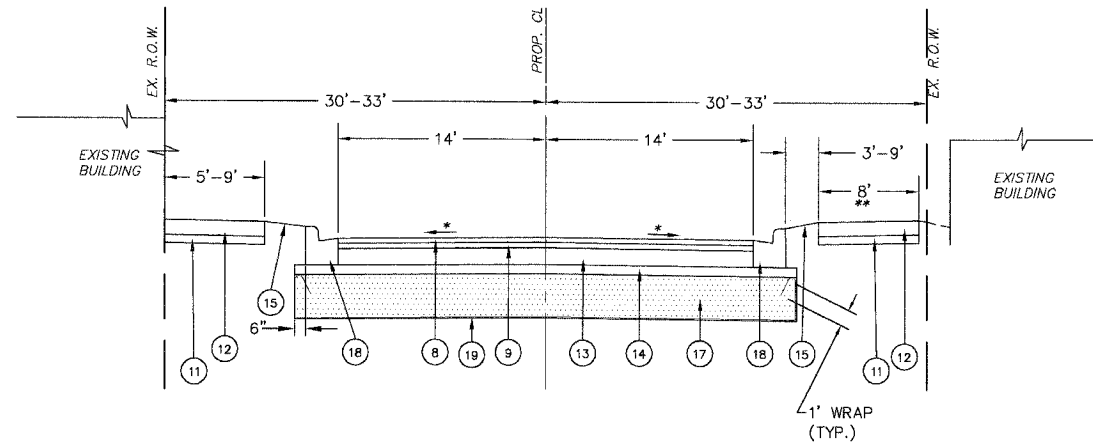
ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
EXISTING TYPICAL SECTIONS

SCALE: "NTS"
DATE 02-25-2005

DRAWN BY WJH
CHECKED BY TEH

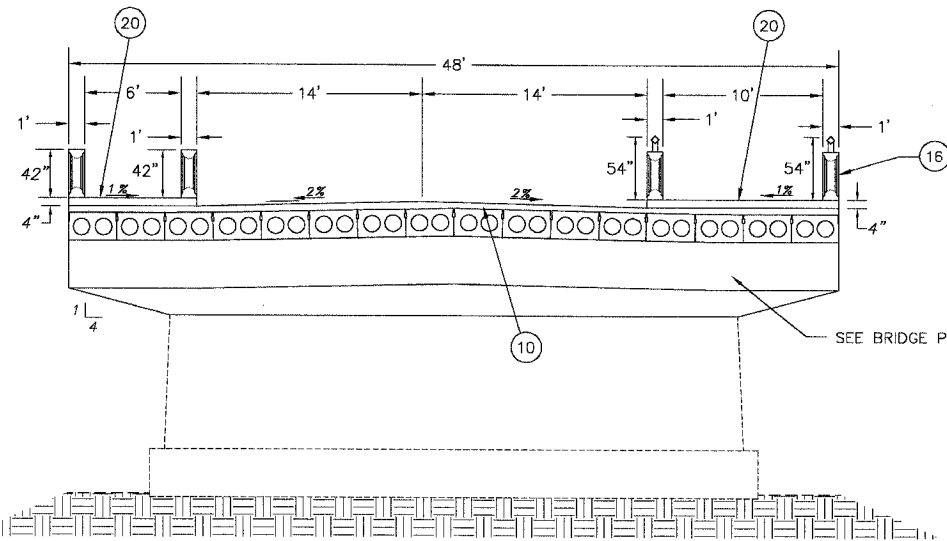
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MAIN STREET - PROPOSED TYPICAL SECTION

STA. 106+41 TO 110+96
STA. 113+10 TO 116+22

* SEE CROSS SECTIONS FOR SLOPES
** VARIES FROM STA. 109+66 TO STA. 110+95



MAIN STREET BRIDGE - PROPOSED TYPICAL SECTION

STA. 110+96 TO 113+10

BITUMINOUS MIXTURE REQUIREMENT

ITEM DESCRIPTION	AC TYPE	VOIDS	RAP %	THICKNESS
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 Gyr.	10%	1½"
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 Gyr.	15%	2½"
BITUMINOUS BASE COURSE, SUPERPAVE 10" (ROADWAY)	PG 58-22	2% @ 50 Gyr.	50%	10"

LEGEND

- 1 EXISTING BITUMINOUS PAVEMENT 4.25" - 8.5"
- 2 EXISTING PAVING BRICKS, 3.5"
- 3 EXISTING SAND BASE, 2" - 3"
- 4 EXISTING CONCRETE BASE, 3" - 5"
- 5 EXISTING PCC SIDEWALK
- 6 EXISTING CONCRETE CURB AND GUTTER
- 7 EXISTING WATERMAIN, 16" *
- 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
- 9 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
- 10 PROPOSED CONCRETE WEARING SURFACE, 5"
- 11 PROPOSED AGGREGATE BASE 2" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
- 12 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5"
- 13 PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 10"
- 14 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- 15 PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
- 16 PROPOSED CONCRETE BRIDGE RAIL, SPECIAL
- 17 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH, SEE NOTE BELOW)
- 18 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MINIMUM THICKNESS OF GUTTER FLAG SHALL BE 9". ADDITIONAL AGGREGATE UNDER GUTTER FLAG SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12)
- 19 PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (SEE NOTE BELOW)
- 20 PROPOSED CONCRETE SUPERSTRUCTURE (CLASS BD CONCRETE) 4" THICK

"POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES OVER GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR."

ALL RECOMMENDED UNDERCUTS ARE FROM 6" OUTSIDE THE EDGES OF CURB AND GUTTER. DEPTHS WILL BE DETERMINED BY A LICENSED SOILS ENGINEER. LIMITS ARE FROM STA 106+41 TO 110+96 AND 113+10 TO 116+22.

PAVEMENT STRUCTURAL DESIGN - MAIN STREET
DESIGN SPEED = 30 MPH

STRUCTURAL DESIGN TRAFFIC		DESIGN YEAR = 2023	
CLASSIFICATION:	CLASS II	ADT:	23,000
DESIGN PERIOD:	20 YEARS	PV:	22,654
TRAFFIC FACTOR:	4.74	SU:	231
ILLINOIS BEARING RATIO:	3	MU:	231
STRUCTURAL DESIGN #(Dt):	4.84		
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"		x .40 =	0.60
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"		x .33 =	0.83
BITUMINOUS BASE COURSE, SUPERPAVE, 10"		x .33 =	3.33
SUB-BASE GRANULAR MATERIAL, TYPE B-4"		x .11 =	0.44
			5.17

* EXISTING WATER MAIN TO REMAIN IN SERVICE UNTIL PROPOSED WATER MAIN HDPE PRESSURE PIPE, DIRECTIONAL BORING, 16" IS COMPLETED, TESTED, AND IN SERVICE.

REVISIONS	
NAME	DATE
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ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
PROPOSED TYPICAL SECTIONS

SCALE: "NTS"
DATE 02-25-2005

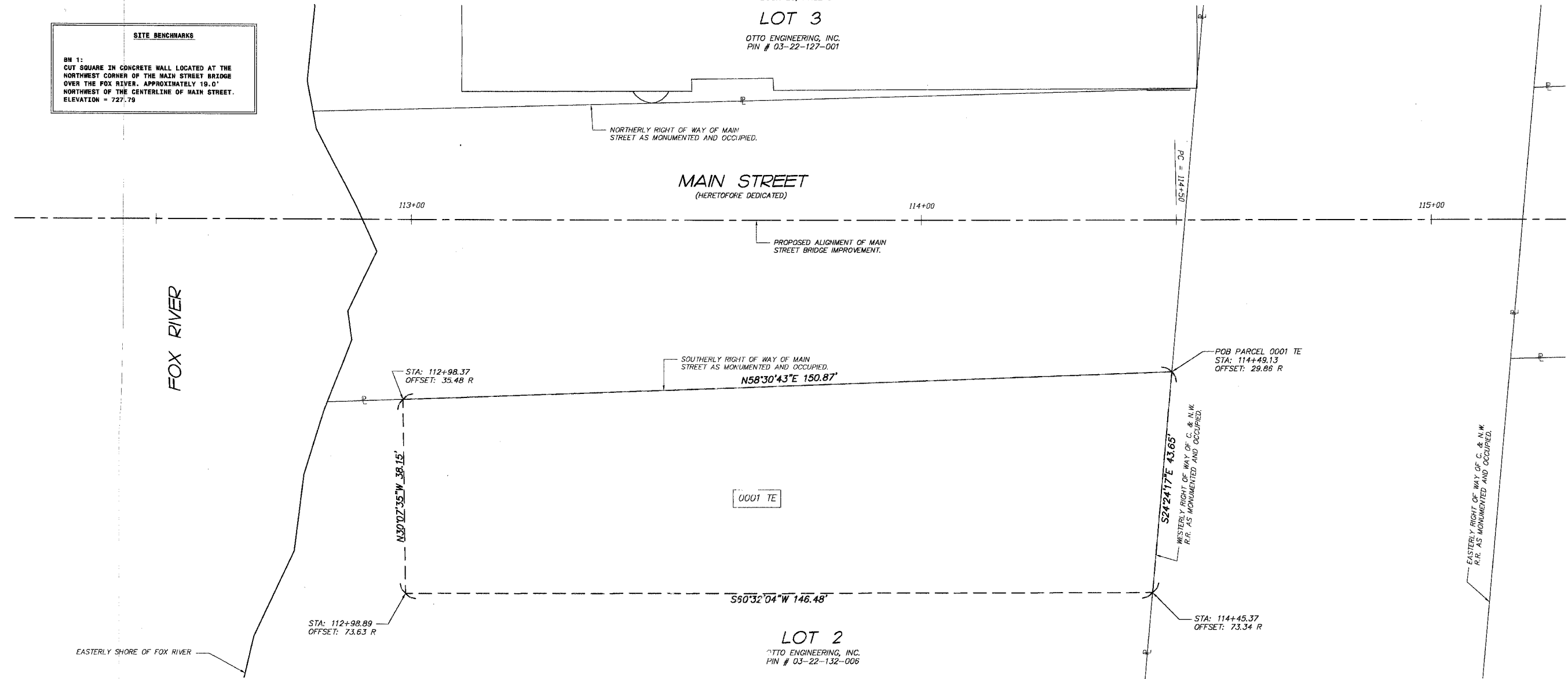
DRAWN BY W.JH
CHECKED BY TEH

PARCEL #	OWNER	P.I.N.	TOTAL HOLDING AREA	AREA TAKEN	PREV. DEED'D OR USED AREA	REMAINING AREA	EASEMENT AREA	EASEMENT PURPOSE	ACQUIRED BY:
0001 TE	OTTO ENGINEERING, INC.	03-22-132-006	0.679 AC.	0.000 AC.	0.000 AC.	0.679 AC.	0.139 AC.	TEMPORARY CONSTRUCTION	

**THAT PART OF SECTION 22
TWN 42N, R8E, OF THE
THIRD PRINCIPAL MERIDIAN
KANE COUNTY, ILLINOIS.**

SITE BENCHMARKS
BM 1:
CUT SQUARE IN CONCRETE WALL LOCATED AT THE
NORTHWEST CORNER OF THE MAIN STREET BRIDGE
OVER THE FOX RIVER. APPROXIMATELY 19.0'
NORTHWEST OF THE CENTERLINE OF MAIN STREET.
ELEVATION = 727.79

ILLINOIS IRON & BOLT
COMPANY'S SUBDIVISION REC.
OCTOBER 23, 1924 MAP
BOOK 25, PAGE 9
LOT 3
OTTO ENGINEERING, INC.
PIN # 03-22-127-001



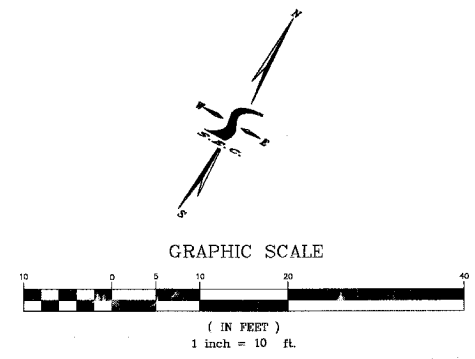
DRAWN BY: MRJ
CHECKED BY: EY
DATE: 12/9/04
BY: MRJ
MADE: []
CHECKED: []
NOTEBOOK: []
LINKED: []
IND: []

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORD DATA

STATE OF ILLINOIS }
COUNTY OF KANE } S.S.
THIS IS TO CERTIFY THAT I, ERIC J. HAGLUND, AN ILLINOIS REGISTERED LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 22, TOWNSHIP 42N, RANGE 8E OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.
DATED AT McHENRY ILLINOIS THIS ____ DAY OF _____, 20__ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. _____



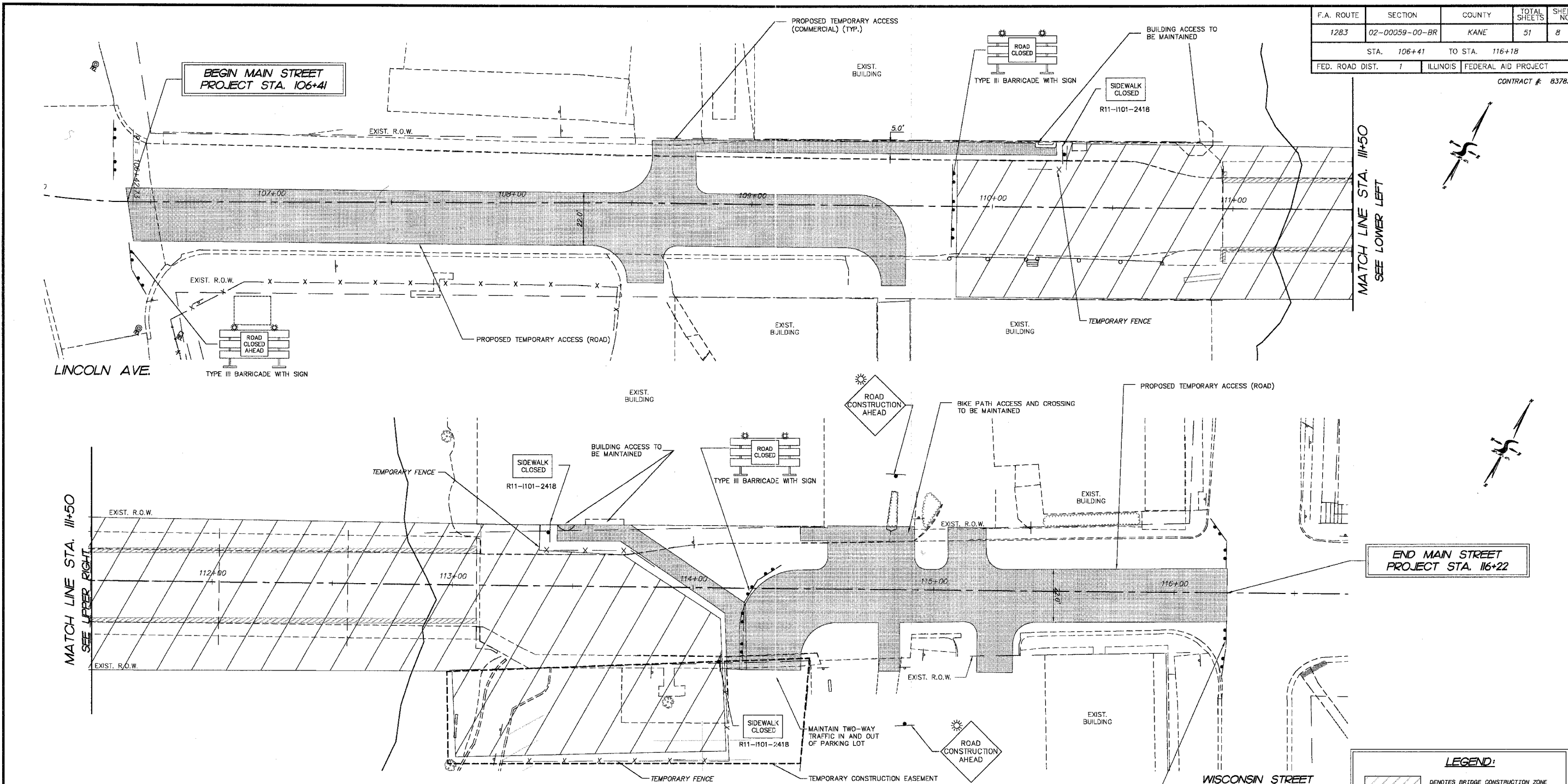
TEMPORARY EASEMENT DETAIL

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ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

**PLAT OF HIGHWAYS
DUNDEE TOWNSHIP
ROAD DISTRICT**
ROUTE: FAU 1283 (MAIN STREET)
SECTION: 02-00059-00-BR
COUNTY: KANE
PROJECT: MAIN STREET
JOB NO.: CIVIL-040157-4
STATION: 112+50 TO STATION: 115+00
SCALE: 1"=10'

SHEET 2 OF OF 2

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	8
STA. 106+41		TO STA. 116+18		
FED. ROAD DIST.	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT # 83783				



MATCH LINE STA. 111+50
SEE LOWER LEFT

LINCOLN AVE.

BEGIN MAIN STREET
PROJECT STA. 106+41

END MAIN STREET
PROJECT STA. 116+22

MATCH LINE STA. 111+50
SEE UPPER RIGHT

WISCONSIN STREET

THE CONTRACTOR WILL BE ALLOWED TO CLOSE MAIN STREET TO THROUGH TRAFFIC FOR TWO SEPARATE DURATIONS OF THE PROJECT AS DETAILED IN THE SPECIFICATIONS.

THE DETOUR ROUTE SHALL BE POSTED PRIOR TO THE ROAD CLOSURES. SEE DETOUR PLAN FOR DETAILS.

THE CONTRACTOR SHALL MAINTAIN VEHICULAR, PEDESTRIAN AND BICYCLE ACCESS TO ADJUTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OPERATIONS.

PEDESTRIAN AND BICYCLE TRAFFIC CROSSING MAIN STREET SHALL BE MAINTAINED DURING CONSTRUCTION. SIGNAGE AND TEMPORARY FENCING SHALL BE AS INSTALLED AS SHOWN AND AS DIRECTED BY THE ENGINEER.

ALL TRAFFIC CONTROL WORK ASSOCIATED WITH BOTH ROAD CLOSURES, SIGNING, AND BARRICADING, SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

TRAFFIC CONTROL GENERAL NOTES:

AT THE END OF EACH DAY OF CONSTRUCTION, THE CONTRACTOR SHALL PLACE (OR MAINTAIN PREVIOUSLY PLACED) SIGNING AND TEMPORARY FENCE OR TEMPORARY CONCRETE BARRIER TO PROHIBIT VEHICULAR AND PEDESTRIAN TRAFFIC IN THE BRIDGE CONSTRUCTION ZONE AREA. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE BRIDGE CONSTRUCTION AREA AT ALL TIMES. THIS WORK IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR AND TEMPORARY FENCE.

ALL SIGNING IS TO BE IN ACCORDANCE WITH THE FOLLOWING STATE STANDARDS: 701501, 701801, 702001, BLR-22 AND AS SHOWN IN THE PLANS.

THE WORK FOR THE TEMPORARY ACCESS SHALL BE IN ACCORDANCE WITH THE SPECIFICATION FOR AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS, AS DETAILED ON THE PLAN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AS TEMPORARY ACCESS (COMMERCIAL ACCESS), 8 EACH AND TEMPORARY ACCESS (ROAD), 2 EACH AND INCLUDE THAT NECESSARY WORK FOR BOTH CLOSURES. THE WORK FOR MAINTAINING THE PEDESTRIAN AND BICYCLE TRAFFIC SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF TEMPORARY ACCESS (ROAD).

DURING THE BORING OF THE WATER MAIN AND INSTALLATION OF OTHER WATER MAIN FACILITIES, THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN ACCESS TO THE ADJACENT PROPERTIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT BE INCLUDED IN THE COST OF THE ASSOCIATED WATER MAIN WORK.

THE EXISTING WATER MAIN ATTACHED TO THE BRIDGE MUST REMAIN IN SERVICE UNTIL THE PROPOSED WATER MAIN HIGH DENSITY POLYETHYLENE PRESSURE PIPE, DIRECTIONAL BORING, 16" IS COMPLETED AND PUT IN SERVICE.

REMOVAL OF ANY CONFLICTING PAVEMENT MARKINGS IN THE PARKING LOT SHALL BE INCLUDED IN THE COST OF THE TEMPORARY ACCESS (COMMERCIAL).

PAVEMENT MARKING TAPE, TYPE III REQUIRED PRIOR TO THE PLACEMENT OF PERMANENT STRIPING SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

THIS PROJECT MAY REQUIRE UP TO 4 CHANGEABLE MESSAGE SIGNS.

WORK THIS SHEET WITH THE EROSION CONTROL PLAN, BRIDGE PLANS, AND THE EARTH EXCAVATION TABLE AND TEMPORARY EASEMENT DETAIL.

GENERAL SEQUENCE OF CONSTRUCTION:

STAGE I

1. CLOSE MAIN STREET TO THROUGH TRAFFIC.
2. BORE AND CONNECT WATER MAIN 16" AND OTHER WATER MAIN WORK ON EAST SIDE OF BRIDGE.
3. OPEN MAIN STREET TO VEHICULAR AND PEDESTRIAN TRAFFIC.

STAGE II

1. CLOSE MAIN STREET TO THROUGH TRAFFIC
2. PERFORM BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE DEMOLITION. PERFORM ROADWAY REMOVALS.
3. INSTALL STORM SEWER, RETAINING WALL FOUNDATION AND PERFORM EXCAVATION FOR ABUTMENTS.
4. CONSTRUCT ABUTMENTS AND PIERS
5. PLACE BEAMS, WEARING SURFACE, SIDEWALKS, RAILINGS ETC.

STAGE III

1. OPEN MAIN STREET TO THROUGH VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC.
2. COMPLETE REMAINING ROADWAY, LIGHTING AND PUNCH LIST ITEMS.

LEGEND:

	DENOTES BRIDGE CONSTRUCTION ZONE
	DENOTES AREA OF SUGGESTED TEMPORARY AGGREGATE TO PROVIDE VEHICULAR AND PEDESTRIAN ACCESS TO ADJACENT PROPERTIES
	TYPE III BARRICADE
	SIGN
	TEMPORARY CONSTRUCTION FENCING

REVISIONS

1.	TEH	4-11-05
2.		
3.		
4.		
5.		
6.		
7.		
8.		

ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
MAINTENANCE OF TRAFFIC DETAILS

SCALE: VERT. N/A
HORIZ. 1" = 20'
DATE: 02-25-2005

DRAWN BY: WJH
CHECKED BY: TEH

F.A.P. R/E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	9
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

CONTRACT #: 83783

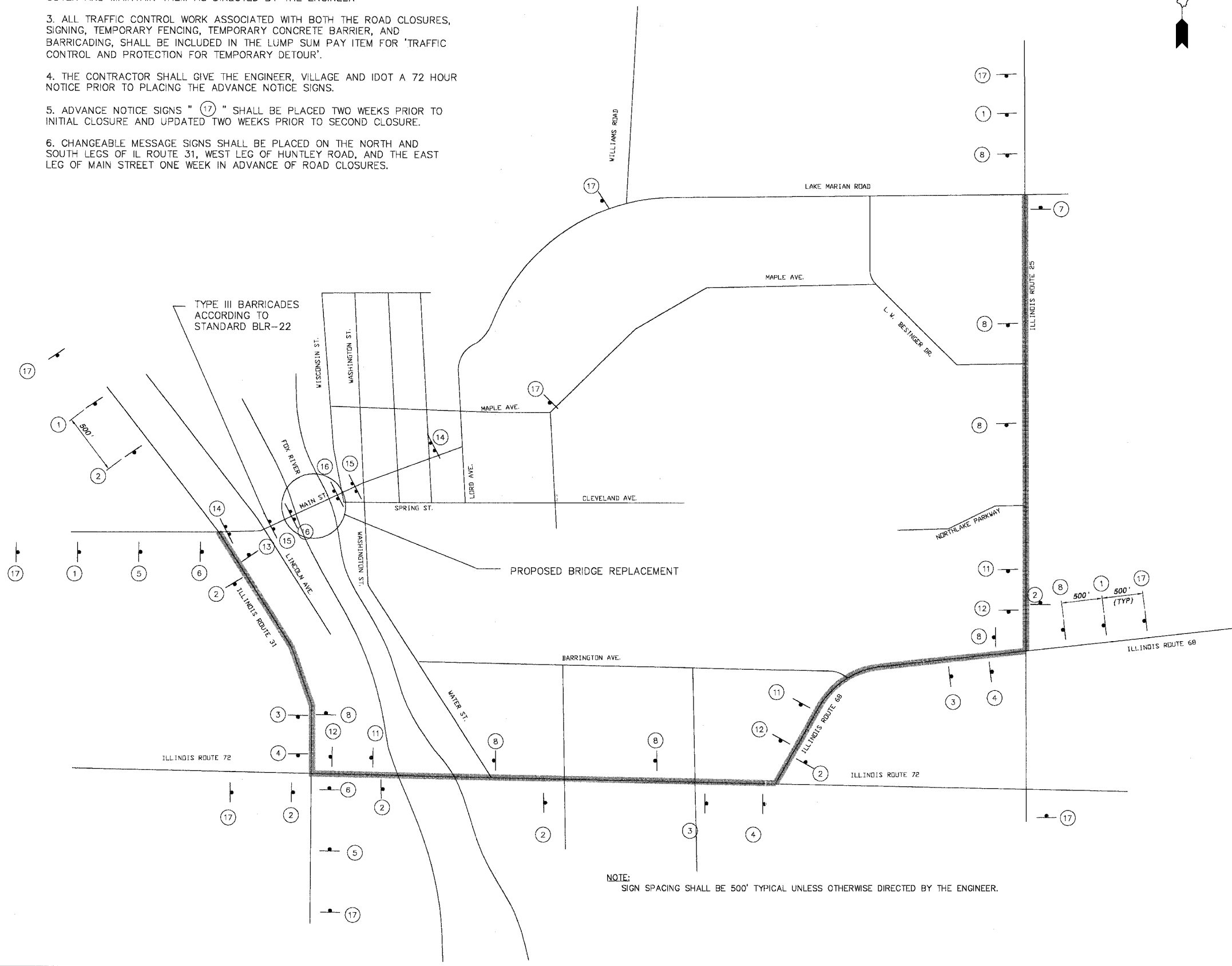
ROAD CLOSURE GENERAL NOTES

1. THE CONTRACTOR WILL BE ALLOWED TO CLOSE MAIN STREET FOR TWO SEPARATE DURATIONS AS DETAILED IN THE SPECIFICATIONS.
2. THE DETOUR ROUTE SHALL BE POSTED PRIOR TO THE ROAD CLOSURES. THE CONTRACTOR WILL BE ALLOWED TO LEAVE THE SIGNS IN PLACE BUT MUST COVER AND MAINTAIN THEM AS DIRECTED BY THE ENGINEER
3. ALL TRAFFIC CONTROL WORK ASSOCIATED WITH BOTH THE ROAD CLOSURES, SIGNING, TEMPORARY FENCING, TEMPORARY CONCRETE BARRIER, AND BARRICADING, SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR 'TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR'.
4. THE CONTRACTOR SHALL GIVE THE ENGINEER, VILLAGE AND IDOT A 72 HOUR NOTICE PRIOR TO PLACING THE ADVANCE NOTICE SIGNS.
5. ADVANCE NOTICE SIGNS " 17 " SHALL BE PLACED TWO WEEKS PRIOR TO INITIAL CLOSURE AND UPDATED TWO WEEKS PRIOR TO SECOND CLOSURE.
6. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON THE NORTH AND SOUTH LEGS OF IL ROUTE 31, WEST LEG OF HUNTLEY ROAD, AND THE EAST LEG OF MAIN STREET ONE WEEK IN ADVANCE OF ROAD CLOSURES.



SIGN LEGEND

- 1. DETOUR AHEAD
- 2. EB MAIN STREET DETOUR
- 3. EB MAIN STREET DETOUR
- 4. EB MAIN STREET DETOUR
- 5. EB MAIN STREET DETOUR
- 6. EB MAIN STREET DETOUR
- 7. EB MAIN STREET END DETOUR
- 8. WB MAIN STREET DETOUR
- 9. WB MAIN STREET DETOUR
- 10. WB MAIN STREET DETOUR
- 11. WB MAIN STREET DETOUR
- 12. WB MAIN STREET DETOUR
- 13. WB MAIN STREET END DETOUR
- 14. ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY
- 15. ROAD CLOSED AHEAD
- 16. ROAD CLOSED
- 17. EFFECTIVE [DATE]



NOTE: SIGN SPACING SHALL BE 500' TYPICAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

LEGEND
 PROPOSED DETOUR ROUTE

REVISIONS	
NO.	DATE
1	
2	
3	
4	
5	
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7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 FRANK PARKWAY, SUITE 201
 MCKENNA, ILLINOIS 60050
 PH: 815-385-1770 FAX: 815-385-1781
 www.smithengineering.com E-MAIL: nec@smithengineering.com
 *McHENNA *MCKENNA *MCKENNA
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
VILLAGE OF CARPENTERSVILLE
MAIN STREET DETOUR OVER THE FOX RIVER
PLAN

SCALE: "NTS"
 DATE 02-25-2005
 DRAWN BY WJH
 CHECKED BY TEH

PLOT FILE: STANDARD
 VIEW: CE-9
 COMP. FILE: 020107-DETOUR.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	11
STA. 111+50 TO STA. 116+22				
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

CONTRACT #: 83783

NOTES

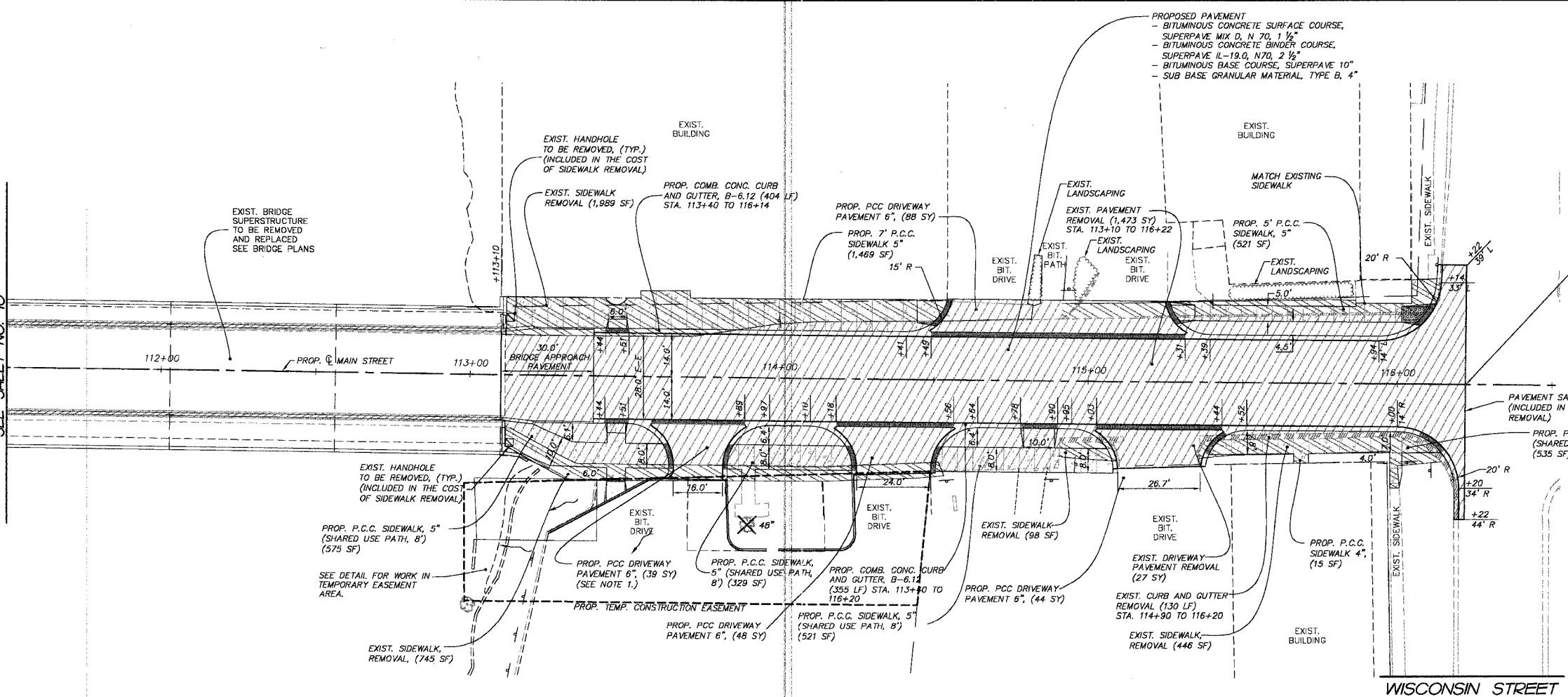
- ENGINEER TO CONFER WITH PROPERTY OWNER TO CONFIRM AND/OR SLIGHTLY ADJUST EXACT LOCATION AND CONFIGURATION OF DRIVEWAY AND ADJACENT LIGHT POLES PRIOR TO CONSTRUCTION. (REFER TO LIGHTING PLANS FOR AFFECTED LIGHT POLES)

END MAIN STREET PROJECT STA. 116+22



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

MATCH LINE STA. 111+50
SEE SHEET NO. 10

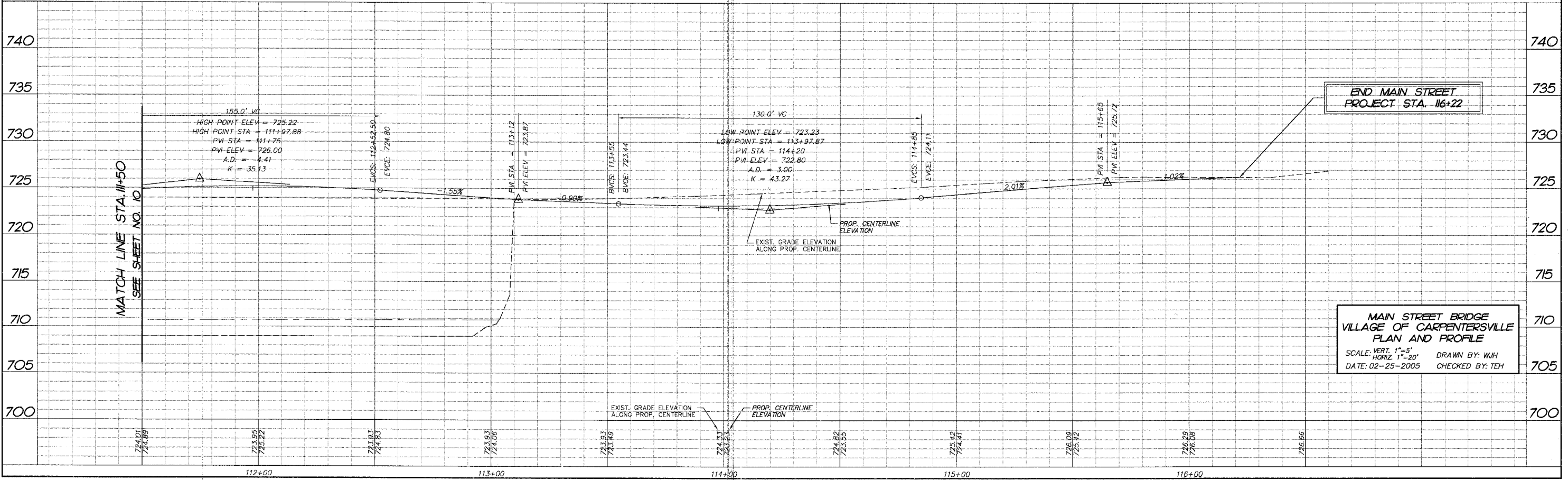


LEGEND:

- [Hatched box] DENOTES PROPOSED PCC CONCRETE SIDEWALK, 5" (QUANTITY ON PLANS)
- [Hatched box] DENOTES EXISTING CONCRETE SIDEWALK REMOVAL
- [Hatched box] DENOTES PAVEMENT REMOVAL OR DRIVEWAY PAVEMENT REMOVAL (QUANTITY ON PLANS)
- [Hatched box] DENOTES PROPOSED DEPRESSED CURB & GUTTER
- [Hatched box] DENOTES EXISTING COMBINATION CONCRETE CURB & GUTTER TO BE REMOVED
- [Symbol] DENOTES EXIST. TREE TO BE REMOVED SIZE AS INDICATED ON PLANS

MAIN STREET

WISCONSIN STREET



END MAIN STREET PROJECT STA. 116+22

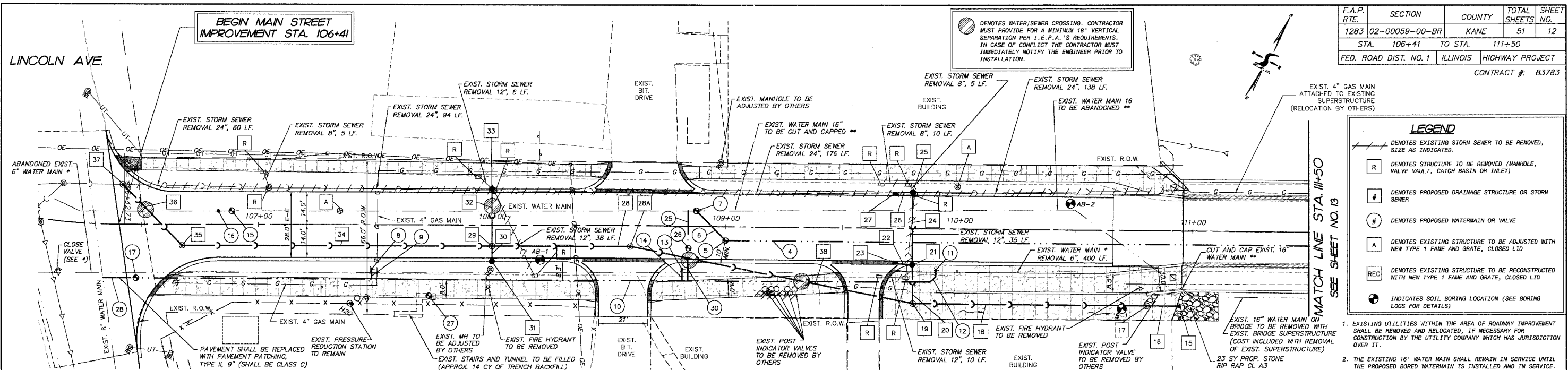
MAIN STREET BRIDGE
VILLAGE OF CARPENTERSVILLE
PLAN AND PROFILE
SCALE: VERT. 1"=5'
HORIZ. 1"=20'
DATE: 02-25-2005
DRAWN BY: WJH
CHECKED BY: TEH

COMP. FILE: 040757-pp01.dwg
PLOT FILE: WJH_C2-11

BEGIN MAIN STREET IMPROVEMENT STA. 106+41

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	12
STA. 106+41 TO STA. 111+50		FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT		

CONTRACT #: 83783



LEGEND

- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
- R DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN OR INLET)
- # DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
- ⊙ DENOTES PROPOSED WATERMAIN OR VALVE
- A DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LTD
- REC DENOTES EXISTING STRUCTURE TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LTD
- ⊙ INDICATES SOIL BORING LOCATION (SEE BORING LOGS FOR DETAILS)

BY DATE

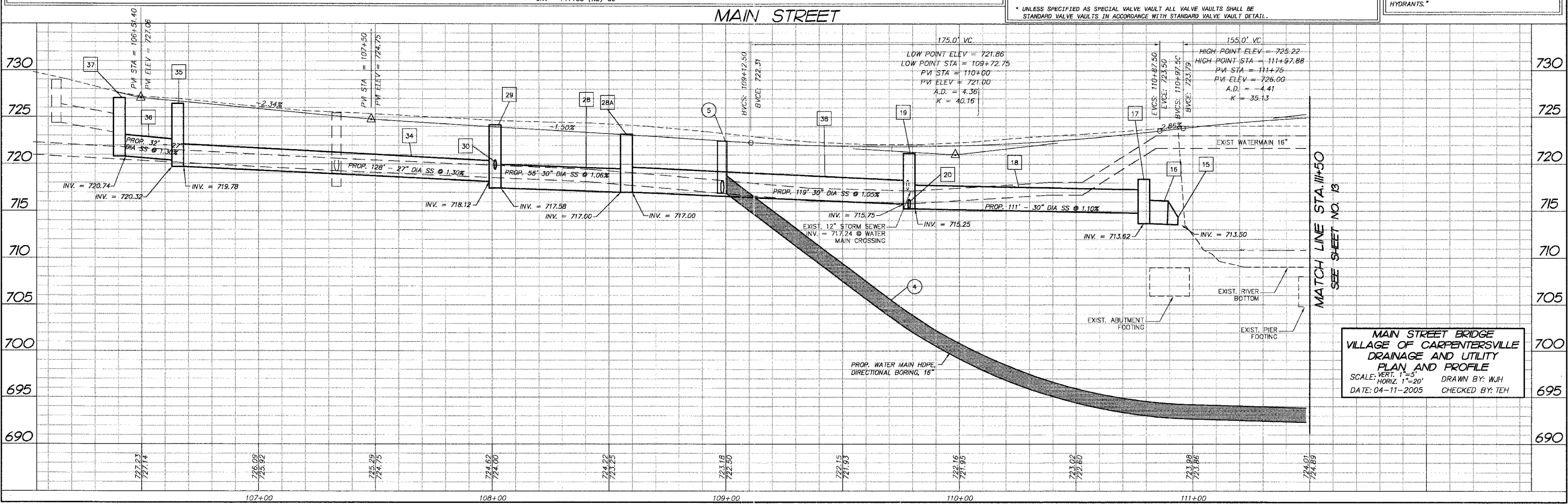
FINAL SURVEY PLOTTED

NOTE BOOK TEMPLATE

AREAS CHECKED

STORM SEWER:			WATER MAIN:		
15 PRC FLARED END SECTION, 30" STA. 110+95, 32' R INV = 713.50	19 MH TA 5' DIA T1F CL STA. 109+80, 32' R RIM = 720.18 INV = 717.67 (NW) 15" INV = 715.75 (SW) 30" INV = 715.25 (NE) 30"	23 INLET TA 2' DIA T11 F&G STA. 109+72.75 15.5' L T/C = 721.97 INV = 718.01 (NE) 12"	34 700 LF WATER MAIN HDPE, DIRECTIONAL BORING 16	10 342 LF WATER MAIN B	16 TEMPORARY LINE STOPPER 16"
16 6 LF STORM SEWER RG CLASS A, TYPE 1, 30 @ 1.00% (TBF= 2 CY)	20 12 LF STORM SEWER RG CLASS A, TYPE 1, 15 @ 1.0% (TBF= 2 CY)	24 28 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.0% (TBF= 4 CY)	5 VV TA 5' DIA T1F CL (* SPECIAL, SEE DETAIL) STA. 109+00, 6' R RIM = 722.41	11 FIRE HYDRANT STA. 109+90, 18.0' R BURY = 722.70	17 VV TA 4' DIA T1F CL STA. 106+48, 23' R RIM = 726.84
17 MH TA 5' DIA T1F CL STA. 110+80.5, 32' R RIM = 718.33 INV = 714.03 (SW) 30" INV = 713.62 (NE) 30"	21 CB TA 4' DIA T11 F&G STA. 109+80, 15.5' L T/C = 721.99 INV = 717.99 (SW) 12" INV = 717.79 (NW) 12" INV = 717.79 (SE) 15"	25 CB TC 2' DIA T11 F&G STA. 109+80, 15.5' L T/C = 721.99 INV = 718.05 (SW) 12" INV = 718.05 (SE) 12"	6 18 LF WATER MAIN 16"	12 8 LF WATER MAIN B	25 16 LF WATER MAIN B
18 111 LF STORM SEWER RG CLASS A, TYPE 1, 30 @ 1.10% (TBF 29 CY)	22 5 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 0.40% (TBF= 1 CY)	26 5 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.0% (TBF= 1 CY)	7 VV TA 5' DIA T1F CL STA. 108+87, 6.5' L RIM = 722.59	13 FIRE HYDRANT STA. 108+81, 18.5' R STA. 108+84, 9.5' R RIM = 722.60	26 VV TA 4' DIA T1F CL STA. 108+84, 9.5' R RIM = 722.60
19 MH TA 5' DIA T1F CL STA. 109+80, 32' R RIM = 720.18 INV = 717.67 (NW) 15" INV = 715.75 (SW) 30" INV = 715.25 (NE) 30"	23 INLET TA 2' DIA T11 F&G (DRIVEWAY GRATE) STA. 109+72.75 15.5' R T/C = 721.97 INV = 718.01 (NE) 12"	28 55 LF STORM SEWER RG CLASS A, TYPE 1, 30 @ 1.08% (TBF= 49 CY)	8 FIRE HYDRANT STA. 107+48, 18.5' R BURY = 724.89	14 8 LF WATER MAIN B	27 VV TA 4' DIA T1F CL STA. 107+72, 30' R RIM = 724.67
20 12 LF STORM SEWER RG CLASS A, TYPE 1, 15 @ 1.0% (TBF= 2 CY)	24 28 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.0% (TBF= 4 CY)	28A MH TA 5' DIA T1F CL STA. 109+59, 9' R RIM = 722.88 INV = 717.00 (SW) 30" INV = 717.00 (NE) 30"	9 7 LF WATER MAIN B	15 VV TA 4' DIA T1F CL STA. 106+89, 6' L RIM = 726.08	28 14 LF WATER MAIN B
21 CB TA 4' DIA T11 F&G STA. 109+80, 15.5' L T/C = 721.99 INV = 717.99 (SW) 12" INV = 717.79 (NW) 12" INV = 717.79 (SE) 15"	25 CB TC 2' DIA T11 F&G STA. 109+80, 15.5' L T/C = 721.99 INV = 718.05 (SW) 12" INV = 718.05 (SE) 12"	29 MH TA 5' DIA T1F CL STA. 108+00, 9' R RIM = 723.78 INV = 721.01 (SE) 12" INV = 721.05 (NW) 12" INV = 718.12 (SW) 27" INV = 717.58 (NE) 30"	30 3 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 1.00% (TBF= 1 CY)	32 20 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 1.0% (TBF= 4 CY)	30 17 LF WATER MAIN B
22 5 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 0.40% (TBF= 1 CY)	26 5 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.0% (TBF= 1 CY)	31 CB TC 2' DIA T11 F&G STA. 108+00, 15.5' R T/C = 724.09 INV = 721.04 (N) 12"	34 128 LF STORM SEWER RG CLASS A, TYPE 2, 27 @ 1.30% (TBF= 92 CY)	35 MH TA 5' DIA T1F CL STA. 108+87, 9' R RIM = 728.46 INV = 720.32 (NW) 27" INV = 719.78 (E) 27"	
		32 20 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 1.0% (TBF= 4 CY)	36 32 LF STORM SEWER RG CLASS A, TYPE 2, 27 @ 1.30% (TBF= 21 CY)	37 MH TA 5' DIA T1F CL STA. 106+42, 17' L RIM = 727.00 INV = 723.32 (SW) (EXIST INVERT) 24" INV = 720.74 (SE) 27"	
		33 CB TA 4' DIA T11 F&G STA. 108+00, 20.5' L T/C = 724.09 INV = 721.25 (SE) 12"	38 119 LF STORM SEWER RG CLASS A, TYPE 1, 30' @ 1.05% (TBF 73 CY)		

- EXISTING UTILITIES WITHIN THE AREA OF ROADWAY IMPROVEMENT SHALL BE REMOVED AND RELOCATED, IF NECESSARY FOR CONSTRUCTION BY THE UTILITY COMPANY WHICH HAS JURISDICTION OVER IT.
 - THE EXISTING 16" WATER MAIN SHALL REMAIN IN SERVICE UNTIL THE PROPOSED BORED WATERMAIN IS INSTALLED AND IN SERVICE.
 - ADAPTERS REQUIRED BETWEEN HOPE WATER MAIN AND DTP WATER MAIN SHALL BE INCIDENTAL TO WATER MAIN HOPE, DIRECTIONAL BORING 16"
- * LIMITS OF WATER MAIN REMOVAL 6" SHALL BE WITHIN THE PROPOSED IMPROVEMENTS STARTING AT STA. 106+41. WATER MAIN SHALL BE ABANDONED FROM THE EXISTING VALVE INDICATED TO BE CLOSED TO THE LIMITS OF THE PROPOSED IMPROVEMENTS. COST FOR ABANDONING EXISTING 6" WATER MAIN AND CLOSING VALVE SHALL BE INCIDENTAL TO THIS ITEM AND SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISION FOR "ABANDON EXISTING WATER MAIN AND FIRE HYDRANTS"
- ** CUTTING, CAPPING AND ABANDONING EXISTING 16" WATER MAIN SHALL BE PAID FOR UNDER "ABANDON EXISTING WATER MAIN AND FIRE HYDRANTS."



MAIN STREET BRIDGE VILLAGE OF CARPENTERSVILLE DRAINAGE AND UTILITY PLAN AND PROFILE

SCALE: VERT. 1"=5' HORIZ. 1"=20'

DATE: 04-11-2005 DRAWN BY: WJH CHECKED BY: TEH

COMP. FILE: 040157-up01.dwg

PLOT FILE: 04-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	13
STA. 111+50 TO STA. 116+22		ILLINOIS HIGHWAY PROJECT		
FED. ROAD DIST. NO. 1		CONTRACT # 83783		

NOTES:

- SANITARY MANHOLES TO BE REMOVED AND REPLACED SHALL BE REPLACED WITH MANHOLES, TYPE A, 4' DIA., TYPE 1 FRAME, CLOSED LID.
- EXISTING UTILITIES WITHIN THE AREA OF ROADWAY IMPROVEMENT SHALL BE REMOVED AND RELOCATED, IF NECESSARY FOR CONSTRUCTION BY THE UTILITY COMPANY WHICH HAS JURISDICTION OVER IT.
- THE EXISTING 16" WATER MAIN SHALL REMAIN IN SERVICE UNTIL THE PROPOSED BORED WATERMAIN IS INSTALLED AND IN SERVICE.
- REMOVING EXIST. VALVE SHALL BE PAID FOR UNDER VALVE VAULTS TO BE REMOVED.
- ADAPTORS REQUIRED BETWEEN HOPE WATER MAIN AND DIP WATER MAIN SHALL BE INCIDENTAL TO WATER MAIN HOPE, DIRECTIONAL BORING 16"

LEGEND

- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
- DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN OR INLET)
- DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
- DENOTES PROPOSED WATERMAIN OR VALVE
- DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
- DENOTES EXISTING STRUCTURE TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
- INDICATES SOIL BORING LOCATION (SEE BORING LOGS FOR DETAILS)

STORM SEWER:

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	12" OUTLET AT WINGWALL INTO RIVER STA. 113+19, 27' R INV = 718.30	6	CB TA 4' DIA T11 F&G STA. 113+97.87, 15.5' R T/C = 723.46 INV = 719.89 (NE) 12" INV = 718.89 (NW) 12" INV = 718.89 (S) 12"	11	CB TC 2' DIA T11 F&G STA. 113+97.87, 15.5' L T/C = 723.46 INV = 719.16 (NE) 12" INV = 719.16 (SE) 12"
2	10 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 1.00% (TBF= 7 CY)	7	7 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.00% (TBF= 1 CY)	12	8 LF STORM SEWER RG CLASS A, TYPE 1, 12 @ 1.00% (TBF= 2 CY)
3	M4 TA 4' DIA T1F CL STA. 113+26, 17.5' R RIM = 724.06 INV = 718.40 (SE) 12" INV = 718.40 (NE) 12"	8	18 LF STORM SEWER RG CLASS A, TYPE 1, 18 (TBF= 3 CY) (CONNECT EXIST. SEWER TO PROP. CB)	13	INLET TA 2' DIA T11 F&G STA. 114+07, 15.5' L T/C = 723.49 INV = 719.24 (SW) 12"
4	68 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 0.72% (TBF= 23 CY)	9	27 LF STORM SEWER RG CLASS A, TYPE 2, 12 @ 1.00% (TBF= 5 CY)	14	INLET TA 2' DIA T11 F&G STA. 114+07, 15.5' L T/C = 723.49 INV = 719.24 (SW) 12"

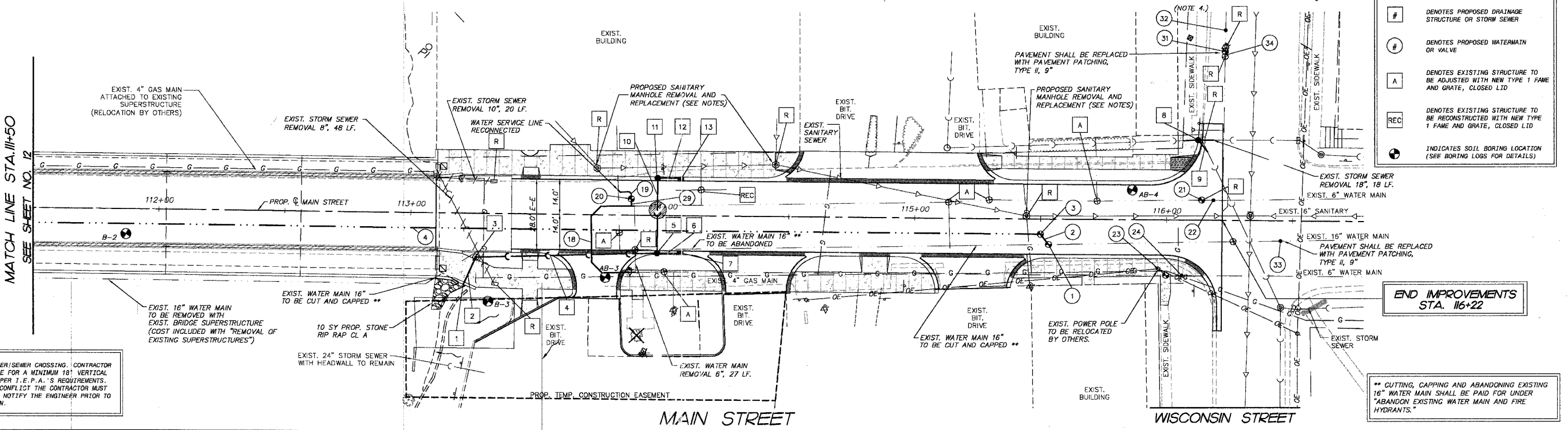
WATER MAIN:

NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
1	VV TA 5' DIA T1F CL STA. 115+53, 10' R RIM = 725.33	18	56 LF WATER MAIN 6"	23	VV TA 4' DIA T1F CL STA. 116+00, 22' R RIM = 725.49
2	5 LF WATER MAIN 16"	19	8 LF WATER MAIN 6"	24	TEMPORARY LINE STOPPER 6"
3	VV TA 5' DIA T1F CL (* SPECIAL, SEE DETAIL) STA. 115+50, 6' R RIM = 725.33	20	VV TA 4' DIA T1F CL STA. 113+88, 6.5' L RIM = 723.14	25	3 LF WATER MAIN 6"
4	700 LF WATER MAIN HOPE, DIRECTIONAL BORING 16"	21	VV TA 4' DIA T1F CL STA. 116+14, 8' L RIM = 725.10	26	TEMPORARY LINE STOPPER 6"
		22	TEMPORARY LINE STOPPER 6"	27	VV TA 4' DIA T1FCL STA. 116+22.69, 67.5' L RIM = MATCH EXIST.

* UNLESS SPECIFIED AS SPECIAL VALVE VAULT ALL VALVE VAULTS SHALL BE STANDARD VALVE VAULTS IN ACCORDANCE WITH STANDARD VALVE VAULT DETAIL.

NO.	DATE	BY

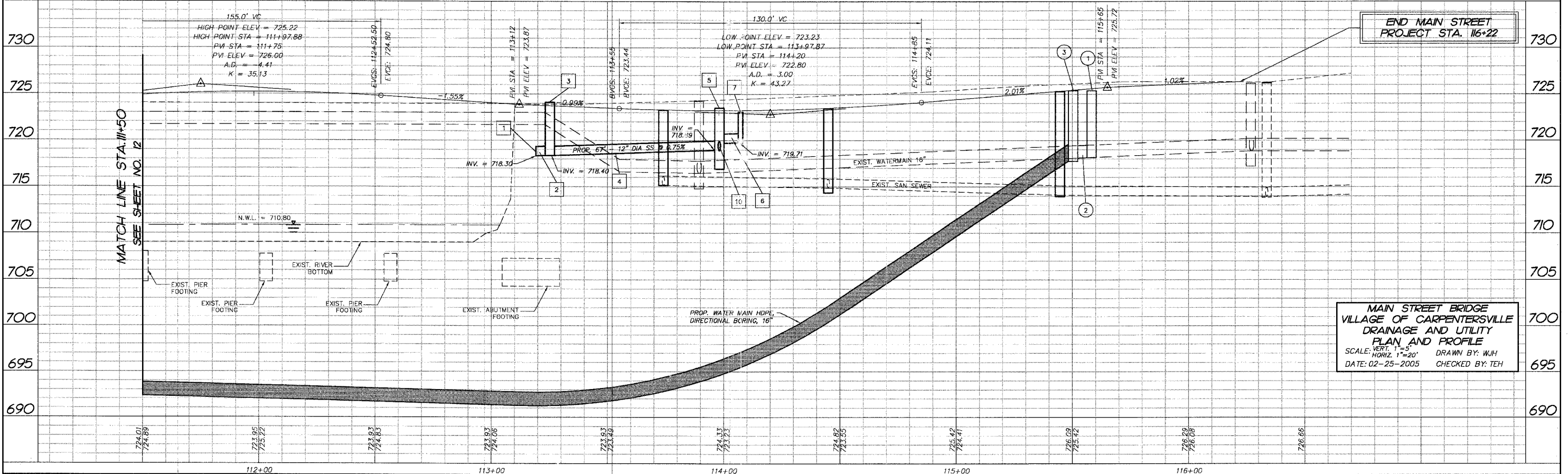
MATCH LINE STA. 111+50 SEE SHEET NO. 12



END IMPROVEMENTS STA. 116+22

** CUTTING, CAPPING AND ABANDONING EXISTING 16" WATER MAIN SHALL BE PAID FOR UNDER "ABANDON EXISTING WATER MAIN AND FIRE HYDRANTS."

DENOTES WATER/SEWER CROSSING. CONTRACTOR MUST PROVIDE FOR A MINIMUM 18" VERTICAL SEPARATION PER T.E.P.A.'S REQUIREMENTS. IN CASE OF CONFLICT THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO INSTALLATION.



END MAIN STREET PROJECT STA. 116+22

MAIN STREET BRIDGE VILLAGE OF CARPENTERSVILLE DRAINAGE AND UTILITY PLAN AND PROFILE
 SCALE: VERT. 1"=5' HORIZ. 1"=20'
 DATE: 02-25-2005 DRAWN BY: WJH CHECKED BY: TEH

COMP. FILE: 040157-PR01.dwg
 PLOT FILE: 040157-PR01.dwg
 VIEW: CE-13

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

RECORD OF SUBSURFACE EXPLORATION

BORING AB-1 PAGE 1 OF 1

PROJECT NAME: MAIN STREET BRIDGE
 DATE STARTED: 5/14/02
 DATE COMPLETED: 5/14/02
 DRILLER: SE BORING METHOD: CFA
 SITE LOCATION: CARPENTERSVILLE ILLINOIS
 275' West of Bridge Abutment
 12' South of Center Line

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	W	Remarks
8.12'	4 1/2" AC over 3" Brown GRAVEL, A-1 Base Course						
	Dark Brown SAND (f. trace Gravel, A-3 FILL		AU-1		11		
	Cinders and fine Sand, trace Brick, FILL		AU-2		11		
					9		
	Black Clay LOAM, A-7-6		AU-3		0.3	33	
	Grey CLAY, A-7-6		AU-4		0.75	26	
	End of Boring @ 13.0'						

SYMBOLS: N: STANDARD PENETRATION, BLOWSPIT. Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT. W: WATER CONTENT, % LL: LIQUID LIMIT, % PL: PLASTICITY INDEX, % DE: NATURAL DRY DENSITY, LBS./CU. FT. Qp: HAND PENETROMETER, TONS/SQ. FT. GW: GROUND WATER

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

RECORD OF SUBSURFACE EXPLORATION

BORING AB-2 PAGE 1 OF 1

PROJECT NAME: MAIN STREET BRIDGE
 DATE STARTED: 5/14/02
 DATE COMPLETED: 5/14/02
 DRILLER: SE BORING METHOD: CFA
 SITE LOCATION: CARPENTERSVILLE ILLINOIS
 48' West of Bridge Abutment
 12' North of Center Line

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	W	Remarks
	4 1/2" AC						
	4 1/2" x 8" Brick						
	8" x 10" Sand						
	10" x 12" PCC						
	RAP, trace Cinders						
	large slag						
	Adjacent Sanitary Sewer						
	Obstruction Terminated Bore Hole						
	Possible Utilities						
	End of Boring @ 5.5'						

SYMBOLS: N: STANDARD PENETRATION, BLOWSPIT. Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT. W: WATER CONTENT, % LL: LIQUID LIMIT, % PL: PLASTICITY INDEX, % DE: NATURAL DRY DENSITY, LBS./CU. FT. Qp: HAND PENETROMETER, TONS/SQ. FT. GW: GROUND WATER

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

RECORD OF SUBSURFACE EXPLORATION

BORING AB-3 PAGE 1 OF 1

PROJECT NAME: MAIN STREET BRIDGE
 DATE STARTED: 5/14/02
 DATE COMPLETED: 5/14/02
 DRILLER: SE BORING METHOD: CFA
 SITE LOCATION: CARPENTERSVILLE ILLINOIS
 87' East of Bridge Abutment
 25' South of Center Line

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	W	Remarks
	4 1/2" AC						
	4 1/2" x 8" Brick						
	7 3/4" x 10" Sand						
	10" x 12" PCC						
	13 1/2" x 30" SAND and GRAVEL, A-1						
	30" Brown Sandy LOAM, A-7-6 FILL						
	Black Clay LOAM, A-6 to A-7-6						
	grades to Dark Brown Clay LOAM @ 8.5'						
	End of Boring @ 10.0'						

SYMBOLS: N: STANDARD PENETRATION, BLOWSPIT. Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT. W: WATER CONTENT, % LL: LIQUID LIMIT, % PL: PLASTICITY INDEX, % DE: NATURAL DRY DENSITY, LBS./CU. FT. Qp: HAND PENETROMETER, TONS/SQ. FT. GW: GROUND WATER

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

RECORD OF SUBSURFACE EXPLORATION

BORING AB-4 PAGE 1 OF 1

PROJECT NAME: MAIN STREET BRIDGE
 DATE STARTED: 5/14/02
 DATE COMPLETED: 5/14/02
 DRILLER: SE BORING METHOD: CFA
 SITE LOCATION: CARPENTERSVILLE ILLINOIS
 275' East of Bridge Abutment
 12' North of Center Line

ELEV.	DESCRIPTION	DEPTH	SAMPLE	N	Qu	W	Remarks
	6 1/2" AC						
	4" Brown Grey GRAVEL, DOT CA-6						
	possible RAP or Cinders to 3.0'						
	Dark Brown SAND (f. trace Gravel, A-3						
	we: @ 7.0'						
	End of Boring @ 10.0'						

SYMBOLS: N: STANDARD PENETRATION, BLOWSPIT. Qu: UNCONFINED COMPRESSIVE STRENGTH, TONS/SQ. FT. W: WATER CONTENT, % LL: LIQUID LIMIT, % PL: PLASTICITY INDEX, % DE: NATURAL DRY DENSITY, LBS./CU. FT. Qp: HAND PENETROMETER, TONS/SQ. FT. GW: GROUND WATER

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

WATER MAIN BORING LOG

PROJECT: 84361 WATER MAIN CROSSING AT THE FOX RIVER
 ROUTE MAIN STREET - CARPENTERSVILLE, ILLINOIS
 SECTION MAIN STREET BRIDGE OVER FOX RIVER STATION 110+70 CHECKED BY WJW

COUNTY: KANE BORING: B-1 STATION: 110+70 OFFSET: 33' R of CL

Depth N/6"	Qu tsf	W %	Remarks
0			WATER SURFACE EL. 8.5'
0			GROUND WATER AT COMPLETION
1	2	16	Dolomitic Limestone
2	3	16	End of Boring @ 21.5'
3	3	23	
4	1	43	
5	2	16	
6	9	16	
7	15	16	
8	5	15	
9	5	15	
10	5	15	
11	4	16	
12	4	14	
13	4	14	

Run #1: 11.5'-16.5' Recovery 100% RQD = 15.8% Qu = 12,400 psi @ 13.0'

Run #2: 16.5'-21.5' Recovery 100% RQD = 20.8% Qu = 12,100 psi @ 21.0'

SYMBOLS: N: STANDARD PENETRATION TEST, BLOWSPIT PER FOOT TO DRIVE 2 INCH O.D. SPLIT SPOON SAMPLER 12 INCHES WITH 140 LBS. HAMMER FALLING 30 INCHES

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

WATER MAIN BORING LOG

PROJECT: 84361 WATER MAIN CROSSING AT THE FOX RIVER
 ROUTE MAIN STREET - CARPENTERSVILLE, ILLINOIS
 SECTION MAIN STREET BRIDGE OVER FOX RIVER STATION 111+87 CHECKED BY WJW

COUNTY: KANE BORING: B-2 STATION: 111+87 OFFSET: 10' S of CL

Depth N/6"	Qu tsf	W %	Remarks
0			WATER SURFACE EL. 13.0'
0			GROUND WATER AT COMPLETION
1	6	16	Dolomitic Limestone Bedrock
2	3	16	Run #1: 20'-30' Recovery 100% RQD = 64.6% Qu = 14,000 psi @ 22.0' Qu = 4,140 psi @ 28.0'
3	1	7	
4	2	9	
5	3	8	
6	3	8	
7	3	8	
8	3	8	
9	3	8	
10	3	8	
11	4	16	
12	4	14	
13	4	14	

Run #1: 20'-30' Recovery 100% RQD = 64.6% Qu = 14,000 psi @ 22.0' Qu = 4,140 psi @ 28.0'

Run #2: 35'-41' Recovery 100% RQD = 51.4% Qu = 6,400 psi @ 37.0'

SYMBOLS: N: STANDARD PENETRATION TEST, BLOWSPIT PER FOOT TO DRIVE 2 INCH O.D. SPLIT SPOON SAMPLER 12 INCHES WITH 140 LBS. HAMMER FALLING 30 INCHES

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

WATER MAIN BORING LOG

PROJECT: 84361 WATER MAIN CROSSING AT THE FOX RIVER
 ROUTE MAIN STREET - CARPENTERSVILLE, ILLINOIS
 SECTION MAIN STREET BRIDGE OVER FOX RIVER STATION 113+31 CHECKED BY WJW

COUNTY: KANE BORING: B-3 STATION: 113+31 OFFSET: 35' S of Main CL

Depth N/6"	Qu tsf	W %	Remarks
0			WATER SURFACE EL. 10.0'
0			GROUND WATER ENCOUNTERED AT 13.5'
1	6	16	Dolomitic Limestone Bedrock
2	3	16	Run #1: 20'-23' (Blockout) Recovery = 100% RQD = 15.2% Qu = 4,800 psi @ 23.0'
3	1	7	
4	2	9	Run #2: 23'-28' (Blockout) Recovery = 100% RQD = 42.5% Qu = 10,500 psi @ 25.0'
5	3	8	
6	3	8	
7	3	8	
8	3	8	
9	3	8	
10	3	8	
11	4	16	
12	4	14	
13	4	14	

Run #1: 20'-23' (Blockout) Recovery = 100% RQD = 15.2% Qu = 4,800 psi @ 23.0'

Run #2: 23'-28' (Blockout) Recovery = 100% RQD = 42.5% Qu = 10,500 psi @ 25.0'

Run #3: 28'-33' Recovery = 100% RQD = 22.6% Qu = 1,000 to 2,500 psi

Run #4: 35'-41' Recovery = 100% RQD = 51.4% Qu = 6,400 psi @ 37.0'

SYMBOLS: N: STANDARD PENETRATION TEST, BLOWSPIT PER FOOT TO DRIVE 2 INCH O.D. SPLIT SPOON SAMPLER 12 INCHES WITH 140 LBS. HAMMER FALLING 30 INCHES

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SCHLEEDE-HAMPTON ASSOCIATES, INC. CONSULTING ENGINEERS

WATER MAIN BORING LOG

BORING: B-3

Depth N/6"	Qu tsf	W %	Remarks
0			WATER SURFACE EL. 10.0'
0			GROUND WATER ENCOUNTERED AT 13.5'
1	6	16	Dolomitic Limestone Bedrock
2	3	16	Run #1: 20'-23' (Blockout) Recovery = 100% RQD = 15.2% Qu = 4,800 psi @ 23.0'
3	1	7	
4	2	9	Run #2: 23'-28' (Blockout) Recovery = 100% RQD = 42.5% Qu = 10,500 psi @ 25.0'
5	3	8	
6	3	8	
7	3	8	
8	3	8	
9	3	8	
10	3	8	
11	4	16	
12	4	14	
13	4	14	

Run #1: 20'-23' (Blockout) Recovery = 100% RQD = 15.2% Qu = 4,800 psi @ 23.0'

Run #2: 23'-28' (Blockout) Recovery = 100% RQD = 42.5% Qu = 10,500 psi @ 25.0'

Run #3: 28'-33' Recovery = 100% RQD = 22.6% Qu = 1,000 to 2,500 psi

Run #4: 35'-41' Recovery = 100% RQD = 51.4% Qu = 6,400 psi @ 37.0'

SYMBOLS: N: STANDARD PENETRATION TEST, BLOWSPIT PER FOOT TO DRIVE 2 INCH O.D. SPLIT SPOON SAMPLER 12 INCHES WITH 140 LBS. HAMMER FALLING 30 INCHES

NOTE: The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PRIME PARKWAY, SUITE 201
 MARIETTA, ILLINOIS 60090
 TEL: 815-885-1778 FAX: 815-885-1781
 www.smitheng.com E-MAIL: see@smitheng.com
 W: WOODRUFF H: HUNTLEY
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER

SCALE: VERT. N/A
 HORIZ. N/A
 DATE: 02-25-2005

DRAWN BY: WJH
 CHECKED BY: TEH

REVISIONS

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NEW: C-14
 PLOT FILE: STANDARD
 COMP. FILE: 040127a.dwg

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	15
STA. 106+41		TO STA. 116+18		
FED. ROAD DIST.	1	ILLINOIS	FEDERAL AID PROJECT	

CONTRACT #: 83783

LEGEND:

- DENOTES PROPOSED TOPSOIL FURNISH AND PLACE 6" AND SODDING, SALT TOLERANT
- DENOTES PERIMETER EROSION BARRIER
- DENOTES STONE RIP RAP
- DENOTES AREA FOR TEMPORARY ACCESS RAMP
- DENOTES ROLLED EXCELSIOR
- DENOTES FLOW DIRECTION
- DENOTES EXISTING TREE TO BE REMOVED

EROSION CONTROL NOTES:

THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

WORK SHALL BE DONE IN ACCORDANCE WITH HIGHWAY STANDARD 280001 AND DETAILS IN THE PLANS.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.

PERIMETER EROSION BARRIER MUST REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY OR AFTER A ONE-HALF INCH OR GREATER RAINFALL EVENT AND ANY REQUIRED REPAIRS WILL BE MADE.

WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL BE FILTERED AND A MEANS PROVIDED TO REDUCE EROSION.

ROLLED EXCELSIOR SHALL BE PLACED ALONG THE RIVER EDGE AS SHOWN. THE REMOVAL AND REINSTALLATION REQUIRED DUE TO CONSTRUCTION OPERATIONS SHALL BE INCLUDED IN COST OF THE ROLLED EXCELSIOR.

NO TEMPORARY OR PERMANENT FILL SHALL BE PLACED WITHIN THE CHANNEL BELOW ELEVATION 713.00.

MECHANIZED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED FROM OR MOVED ALONG THE RIVER BOTTOM.

ANY DISTURBED GROUND SHALL BE PROTECTED WITHIN 7 DAYS WITH EITHER PERMANENT OR TEMPORARY EROSION CONTROL MEASURES.

ROLLED EXCELSIOR SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SHALL BE A MINIMUM OF 12' IN LENGTH.

CONTRACTOR SHALL NOT DISTURB GROUND OUTSIDE THE PERIMETER EROSION BARRIER. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREA OTHER THAN INDICATED ON THESE PLANS, A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE VILLAGE OF CARPENTERSVILLE FOR REVIEW BY THE KDSWCD.

WORK THIS SHEET WITH THE BRIDGE PLANS AND THE 'EARTH EXCAVATION TABLE AND TEMPORARY EASEMENT DETAIL' SHEET.

AT ALL TIMES, PERIMETER EROSION BARRIER SHALL BE INSTALLED BETWEEN ALL DISTURBED AREAS AND THE RIVER. PERIMETER BARRIERS SHALL BE INSPECTED AT THE END OF EACH WORK DAY AND PRIOR TO ANY RAIN EVENTS.

ALL INLETS ON AND ADJACENT TO THE SITE MUST HAVE A SEDIMENT TRAPPING OR CONTAINMENT DEVICE INSTALLED DURING CONSTRUCTION ACTIVITIES. STRAW BALES ARE NOT ALLOWED.

BUILDING MATERIAL STOCKPILES SHALL BE LOCATED IN AREAS THAT DO NOT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS TO THE RIVER OR STORMWATER STRUCTURES.

CONTRACTOR IS NOT PERMITTED TO ALLOW THE EXISTING DECK MATERIAL, OR OTHER CONSTRUCTION DEBRIS TO FALL INTO THE RIVER DURING DEMOLITION OR CONSTRUCTION.

- SEQUENCE OF CONSTRUCTION**
1. INSTALL PERIMETER EROSION BARRIER AND ROLLED EXCELSIOR.
 2. INSTALL UNDERGROUND UTILITIES.
 3. PERFORM BRIDGE SUPERSTRUCTURE DEMOLITION AND RECONSTRUCTION CONCURRENTLY WITH ROADWAY RECONSTRUCTION.
 4. COMPLETE BRIDGE AND ROADWAY RECONSTRUCTION AND ESTABLISH SODDING, SALT TOLERANT.

END MAIN STREET PROJECT STA. 116+22

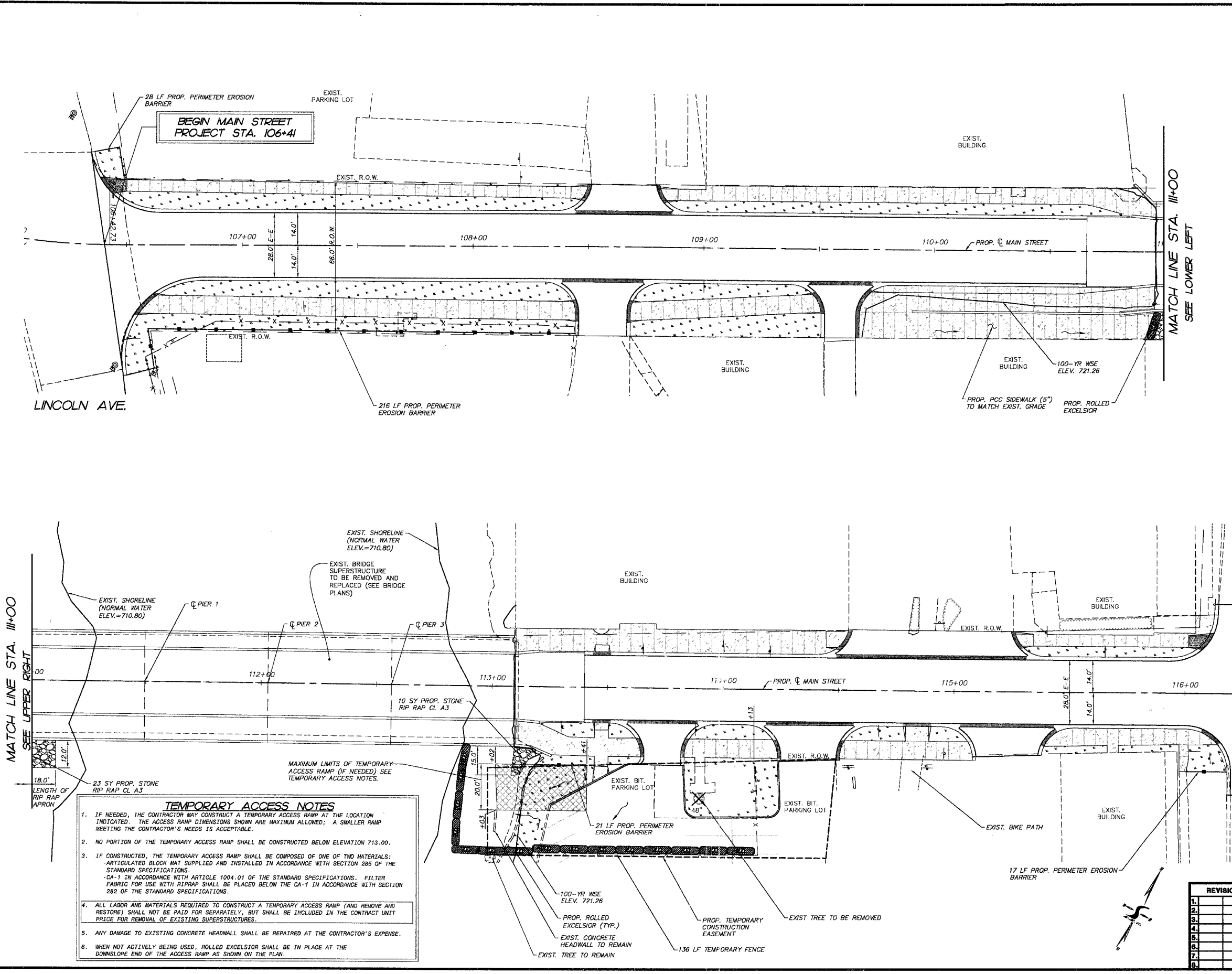
ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
EROSION CONTROL PLAN

SCALE: VERT. N/A
HORIZ. 1" = 20'
DATE: 02-25-2005

DRAWN BY: WJH
CHECKED BY: TEH

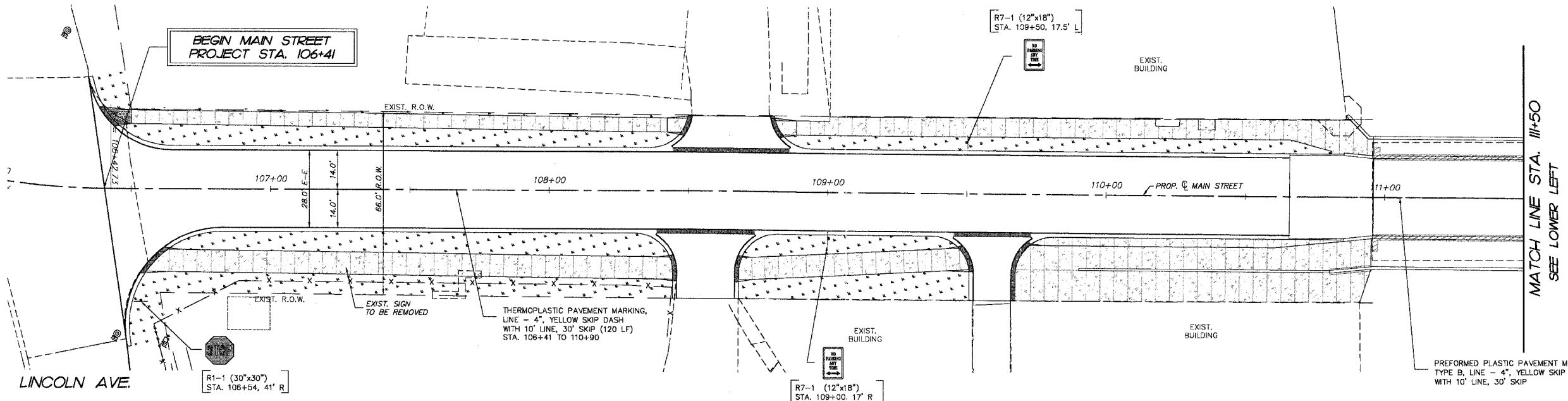
NO.	DATE	REVISIONS
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- TEMPORARY ACCESS NOTES**
1. IF NEEDED, THE CONTRACTOR MAY CONSTRUCT A TEMPORARY ACCESS RAMP AT THE LOCATION INDICATED. THE ACCESS RAMP DIMENSIONS SHOWN ARE MAXIMUM ALLOWED; A SMALLER RAMP MEETING THE CONTRACTOR'S NEEDS IS ACCEPTABLE.
 2. NO PORTION OF THE TEMPORARY ACCESS RAMP SHALL BE CONSTRUCTED BELOW ELEVATION 713.00.
 3. IF CONSTRUCTED, THE TEMPORARY ACCESS RAMP SHALL BE COMPOSED OF ONE OF TWO MATERIALS:
 - ARTICULATED BLOCK MAT SUPPLIED AND INSTALLED IN ACCORDANCE WITH SECTION 285 OF THE STANDARD SPECIFICATIONS.
 - CA-1 IN ACCORDANCE WITH ARTICLE 1004.01 OF THE STANDARD SPECIFICATIONS. FILTER FABRIC FOR USE WITH RIPSAP SHALL BE PLACED BELOW THE CA-1 IN ACCORDANCE WITH SECTION 282 OF THE STANDARD SPECIFICATIONS.
 4. ALL LABOR AND MATERIALS REQUIRED TO CONSTRUCT A TEMPORARY ACCESS RAMP (AND REMOVE AND RESTORE) SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR REMOVAL OF EXISTING SUPERSTRUCTURES.
 5. ANY DAMAGE TO EXISTING CONCRETE HEADWALL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 6. WHEN NOT ACTIVELY BEING USED, ROLLED EXCELSIOR SHALL BE IN PLACE AT THE DOWNSLOPE END OF THE ACCESS RAMP AS SHOWN ON THE PLAN.

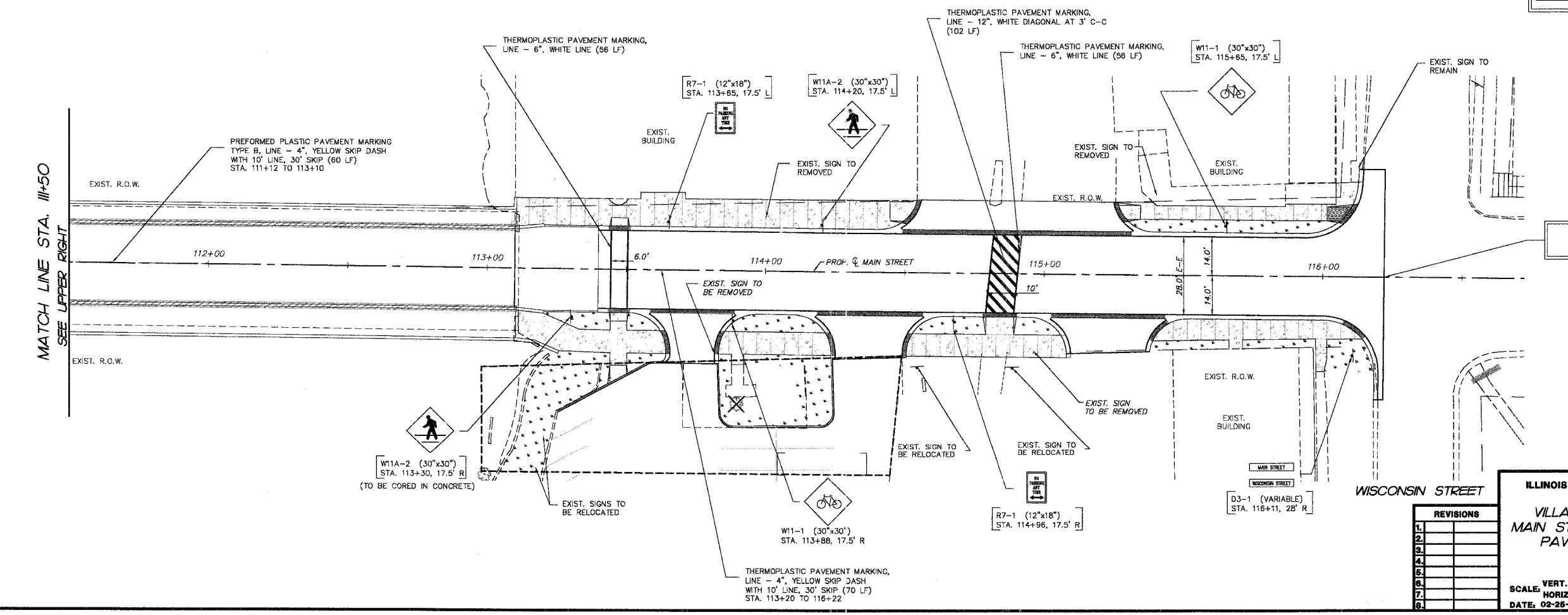
MEET. OF THE STANDARD
COMP. FILE: 040157-00.dwg

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	16
STA. 106+41		TO STA. 116+18		
FED. ROAD DIST.	1	ILLINOIS	FEDERAL AID PROJECT	
CONTRACT #: B3783				



LEGEND:

 DEMOTES PROPOSED TOPSOIL FURNISH AND PLACE 6" AND SODDING, SALT TOLERANT



END MAIN STREET PROJECT STA. 116+22

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 PAVEMENT MARKING, SIGNING
 AND LANDSCAPING

SCALE: VERT. N/A
 HORIZ. 1" = 20'
 DATE: 02-25-2005

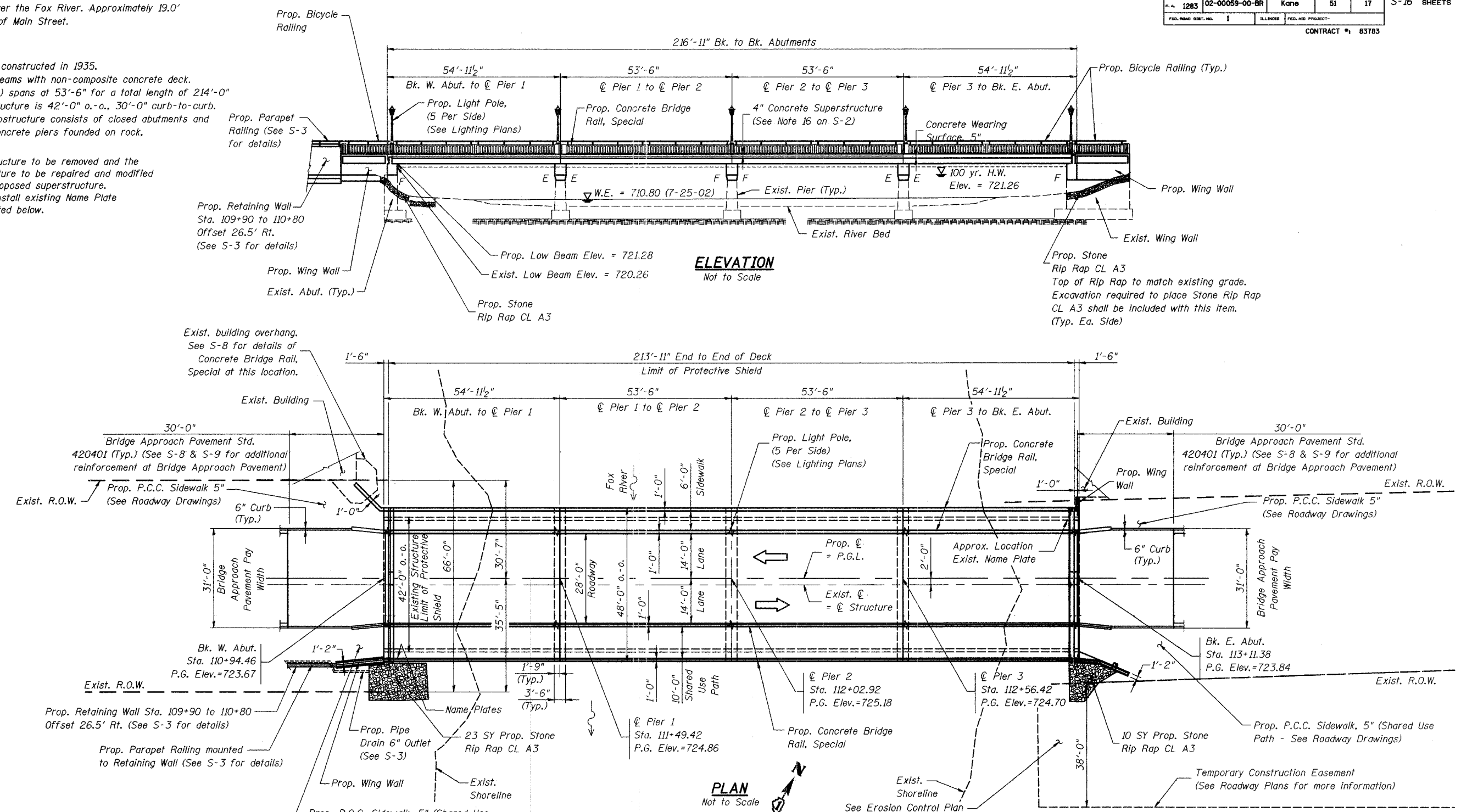
DRAWN BY: WJH
 CHECKED BY: TEH

REV. 02-16
 PLOT FILE: STANDARD
 COMP. FILE: 040157-SS1.dwg

BM 1:
Cut square in concrete wall located at the Northwest corner of the Main Street Bridge over the Fox River. Approximately 19.0' Northwest of the centerline of Main Street.
Elevation = 727.79

Existing Structure - Bridge constructed in 1935.
Steel Beams with non-composite concrete deck.
Four (4) spans at 53'-6" for a total length of 214'-0"
The structure is 42'-0" o.-o., 30'-0" curb-to-curb.
The substructure consists of closed abutments and solid concrete piers founded on rock.

Salvage - Existing Superstructure to be removed and the existing substructure to be repaired and modified to accommodate proposed superstructure.
Salvage and re-install existing Name Plate at location indicated below.



DESIGN SPECIFICATIONS
2002 AASHTO with 2003, & 2004 Interims

LOADING HS20-44
65#/sq. ft. for wearing surface (included in contract)
25#/sq. ft. for future wearing surface.

DESIGN STRESSES

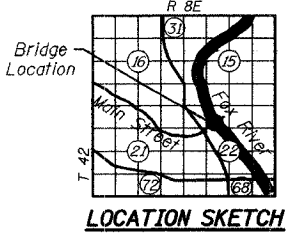
FIELD UNITS
 $f'_c = 3,500$ psi (Class SI)
 $f'_c = 4,000$ psi (Class BD)
 $f_y = 60,000$ psi (Reinforcement Bars)

PRESTRESS UNITS
 $f'_c = 5,000$ psi
 $f'_ci = 4,000$ psi
 $f_{si} = 201,960$ psi (1/2" ϕ Strands)
 $f_s = 270,000$ psi (1/2" ϕ Strands)

SEISMIC DATA
 Seismic Performance Category (SPC) = "A"
 Bedrock Acceleration Coefficient (A) = 0.04g
 Site Coefficient (S) = 1.0

FOX RIVER
 BUILT 2005 BY
 VILLAGE OF CARPENTERSVILLE
 SEC. 02-00059-00-BR
 LOADING HS20
 STR. NO. 045-6150

LETTERING FOR NAME PLATE
 Proposed and Existing Name Plates to be placed at Corner of South West Parapet (See Std. 515001) (Salvage Existing Name Plate)
 (Cost to salvage and re-install existing name plate shall be included under Name Plates)



WATERWAY INFORMATION

Drainage Area = 1,425 Sq. Mi.

Flood	Freq. Yr.	Q c.f.s.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head-Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Base	100	10,015	2,352	2,500	*721.50	0	0	*721.50	*721.50

* Elevation given in FEMA datum. To convert to survey datum, Subtract 0.24'.

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

Robert S. Davis
 Structural Engineer
 Smith Engineering Consultants, Inc.



DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

General Plan and Elevation
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County

DATE 02-25-2005

INDEX OF SHEETS

- S-1. General Plan and Elevation
- S-2. General Notes, Bill of Material, and Index of Sheets
- S-3. Retaining Wall Details
- S-4. Deck Plan and Cross Section
- S-5. Deck Joint Details
- S-6. PPC Deck Beam Details
- S-7. Concrete Bridge Rail, Special - Elevation and Details
- S-8. Concrete Bridge Rail, Special - Details
- S-9. Concrete Bridge Rail, Special - Details
- S-10. West Abutment Plan and Elevation
- S-11. West Abutment Details
- S-12. East Abutment Plan and Elevation
- S-13. East Abutment Details
- S-14. Pier 1 Details
- S-15. Pier 2 Details
- S-16. Pier 3 Details

TOTAL BILL OF MATERIAL

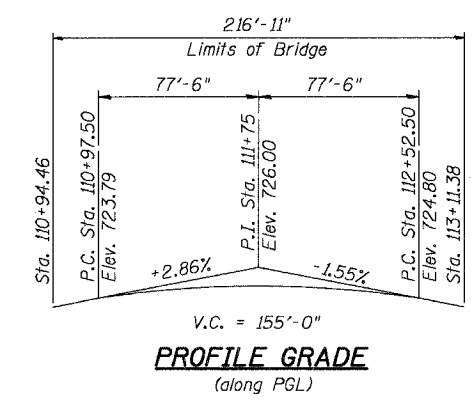
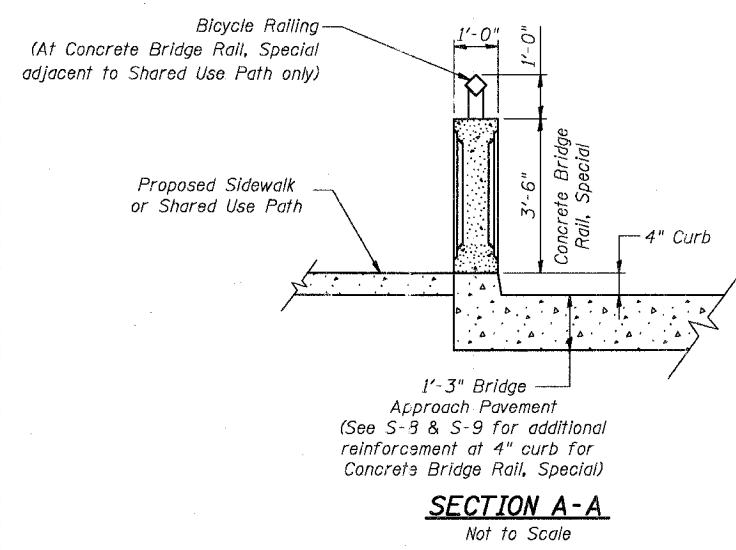
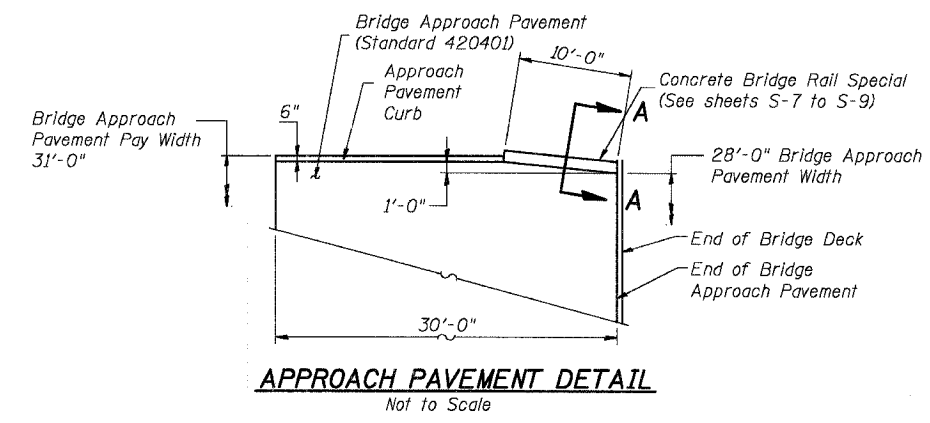
ITEM	UNIT	TOTAL
Porous Granular Backfill	Cu. Yds.	106
Stone Rip Rap, Class A3	Sq. Yds.	33
Filter Fabric	Sq. Yds.	33
Removal of Existing Superstructures	L. Sum	1
Concrete Removal	Cu. Yds.	94.7
Structure Excavation	Cu. Yds.	204
Preformed Joint Seal, 2 1/2"	Foot	96
Concrete Structures	Cu. Yds.	199.7
Concrete Superstructure	Cu. Yds.	53.6
Bridge Deck Grooving	Sq. Yds.	618
Protective Coat	Sq. Yds.	237
Formed Concrete Repair (<= 5" Depth)	Sq. Ft.	7
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	7,687
Reinforcement Bars, Epoxy Coated	Pound	64,100
Name Plates	Each	1
Bridge Seat Sealer	Sq. Ft.	346
Epoxy Crack Sealing	Foot	107
Geocomposite Wall Drain	Sq. Yd.	39
Pipe Drain, 6"	Foot	196
Concrete Wearing Surface, 5"	Sq. Yds.	1,141
Concrete Bridge Rail, Special	Foot	955
Bicycle Railing	Foot	575
Protective Shield	Sq. Yds.	998
Precast Prestressed Concrete Deck Beams (21" Depth), Special Type A	Sq. Ft.	1,922
Precast Prestressed Concrete Deck Beams (21" Depth), Special Type B	Sq. Ft.	641

GENERAL NOTES

1. A Calcium Nitrite Corrosion inhibitor as covered in the Special Provisions (Check Sheet #36) shall be used in the concrete for prestressed concrete deck beams.
2. Reinforcement bars shall conform to the requirements of AASHTO M 31, M 42, or M 53 Grade 60.
3. Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
4. Plan dimensions and details relative to existing structures have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
5. Bridge Seat Sealer shall be applied to the seat area of Piers 1 and 3.
6. All construction joints shall be bonded.
7. Expansion guards which are not cast in the precast unit shall be fabricated and erected according to Article 503.10(c) of the Standard Specifications and are included in quantity of structural steel.
8. Expansion Joint plates and attached bars shall be AASHTO M 270 Grade 50
9. Expansion Joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
10. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
11. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
12. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources, Office of Water Resources for any temporary construction activity placed in the water not shown herein.
13. Cover from the face of concrete to reinforcement bars shall be 3" for surfaces formed against earth and 2" for all other surfaces unless otherwise shown.
14. Reinforcement bending details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 315, latest edition.
15. Reinforcement bar splices shall be in accordance with the following table unless shown otherwise on the drawings.

Size	Basic Lap	Top Bars Lap
#4	1'-8"	2'-5"
#5	2'-2"	3'-0"
#6	2'-7"	3'-7"
#7	3'-5"	4'-10"
#8	4'-6"	6'-4"
#9	5'-9"	8'-1"

16. Concrete for Shared Use Path and Sidewalk on bridge shall be paid for as Concrete Superstructure.
17. Excavation behind existing abutment walls shall be done before removing the existing superstructure

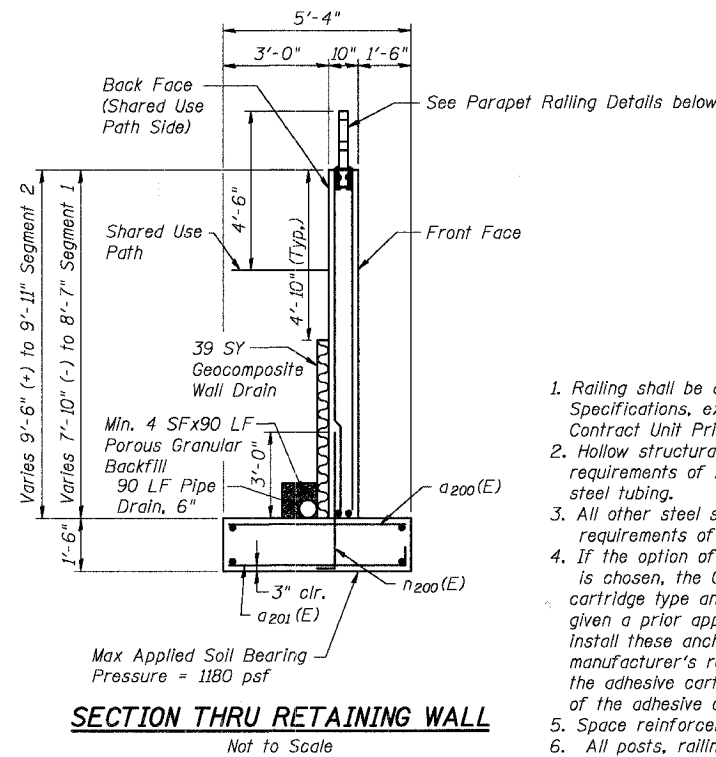
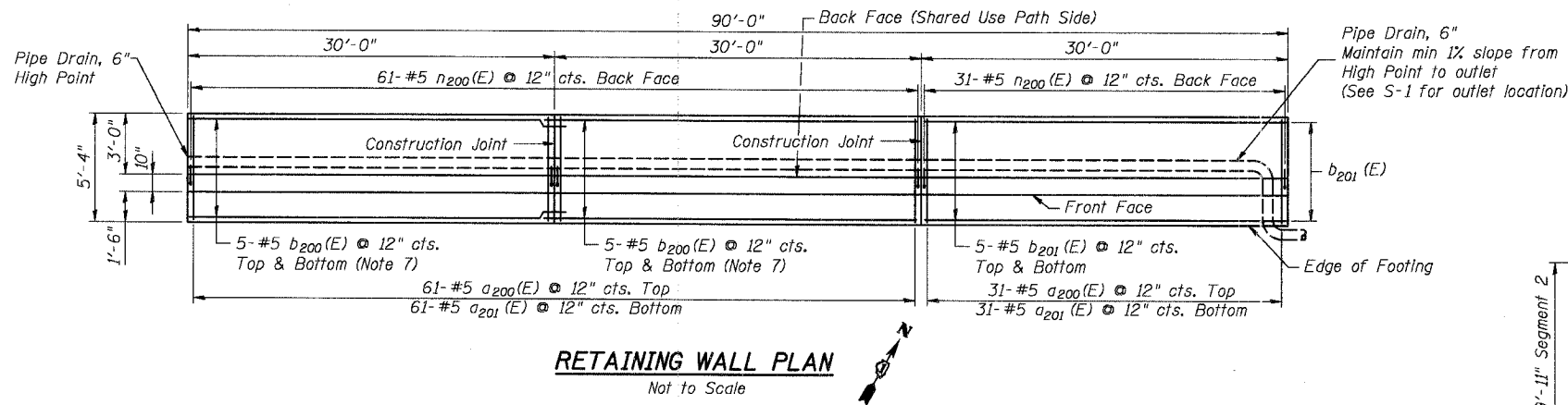


DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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Chicago, IL 60601

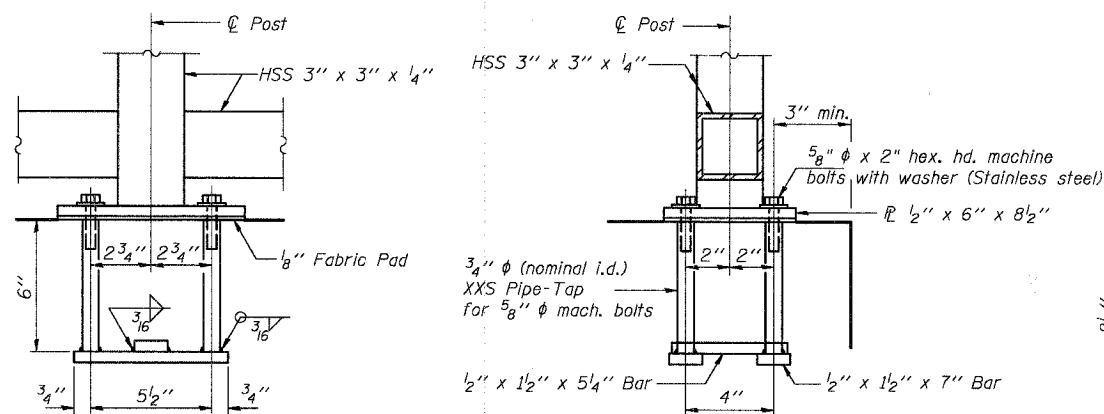
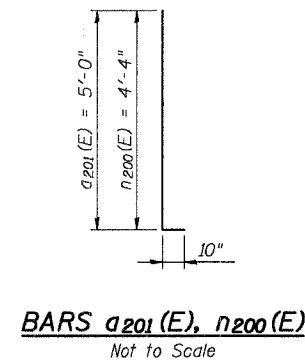
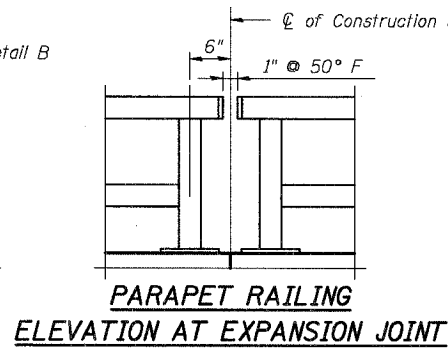
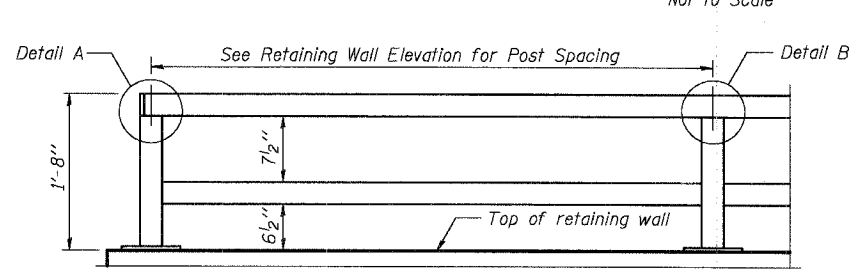
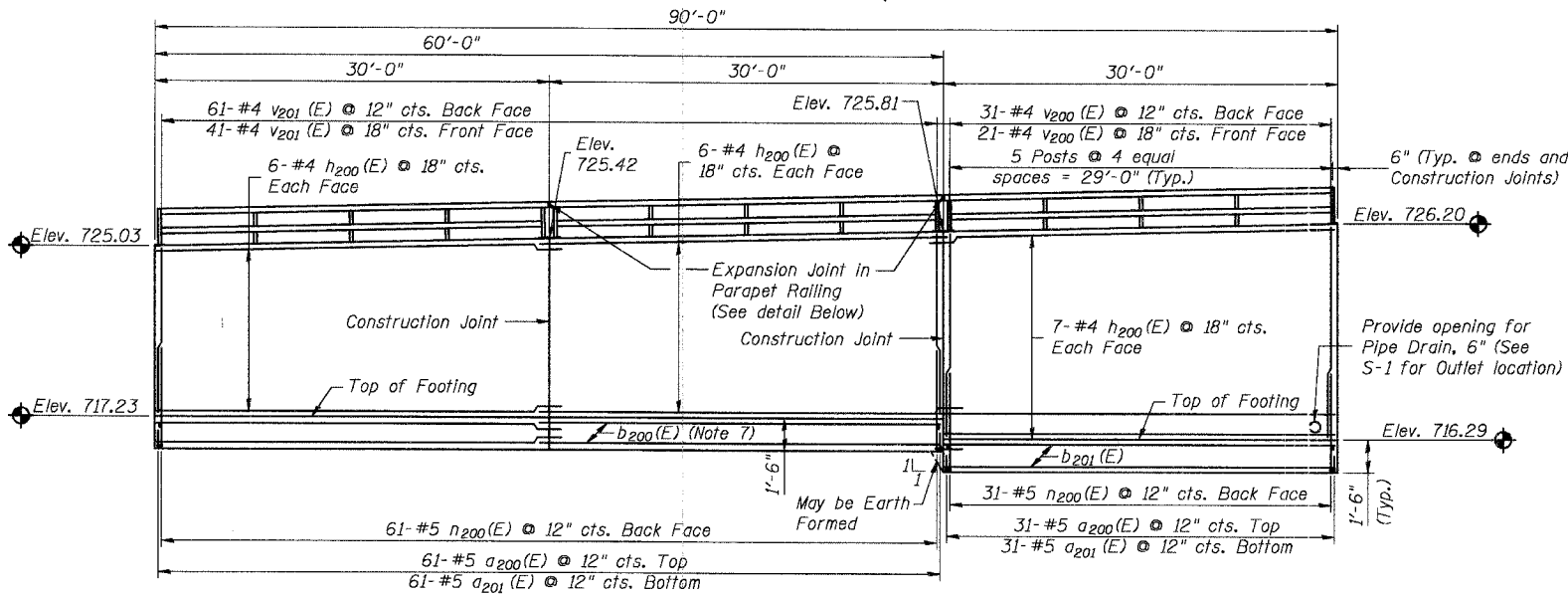
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
General Notes, Bill of Material, and Index of Sheets
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
DATE 02-25-2005 Kane County

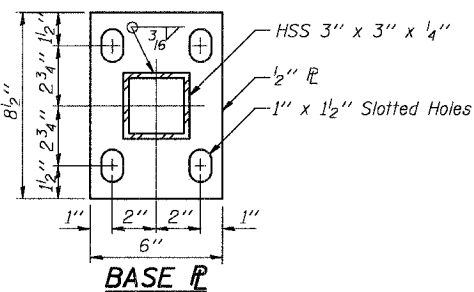
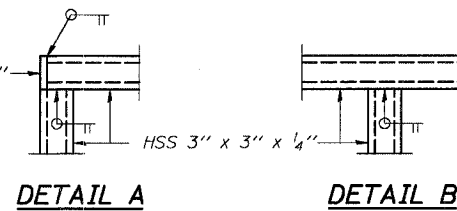


NOTES

- Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing.
- Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.
- All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.
- If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.
- Space reinforcement to miss anchor rods.
- All posts, railing, splices, anchor devices, and bent plates shall be painted using the organic zinc rich primer/epoxy/polyurethane (OZ/E/U) paint system as outlined in "Organic Zinc-Rich Paint System (BDE)". The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color and finish shall closely match the texture, gloss, and color of the Proposed Light Poles (Black Gloss). The Engineer shall be provided with a 4" x 4" sample for comparison and acceptance.
- Increase Lap for b200(E) bars at the top of footing to maintain clear cover as described in General Notes, on S-2.
- Reinforcement Bar bending dimensions are out to out.
- The Parapet railing shall be paid for as Bicycle Railing.



In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting 5/8" φ anchor rods. Embedment shall be according to the manufacturer's specifications.



BILL OF MATERIAL

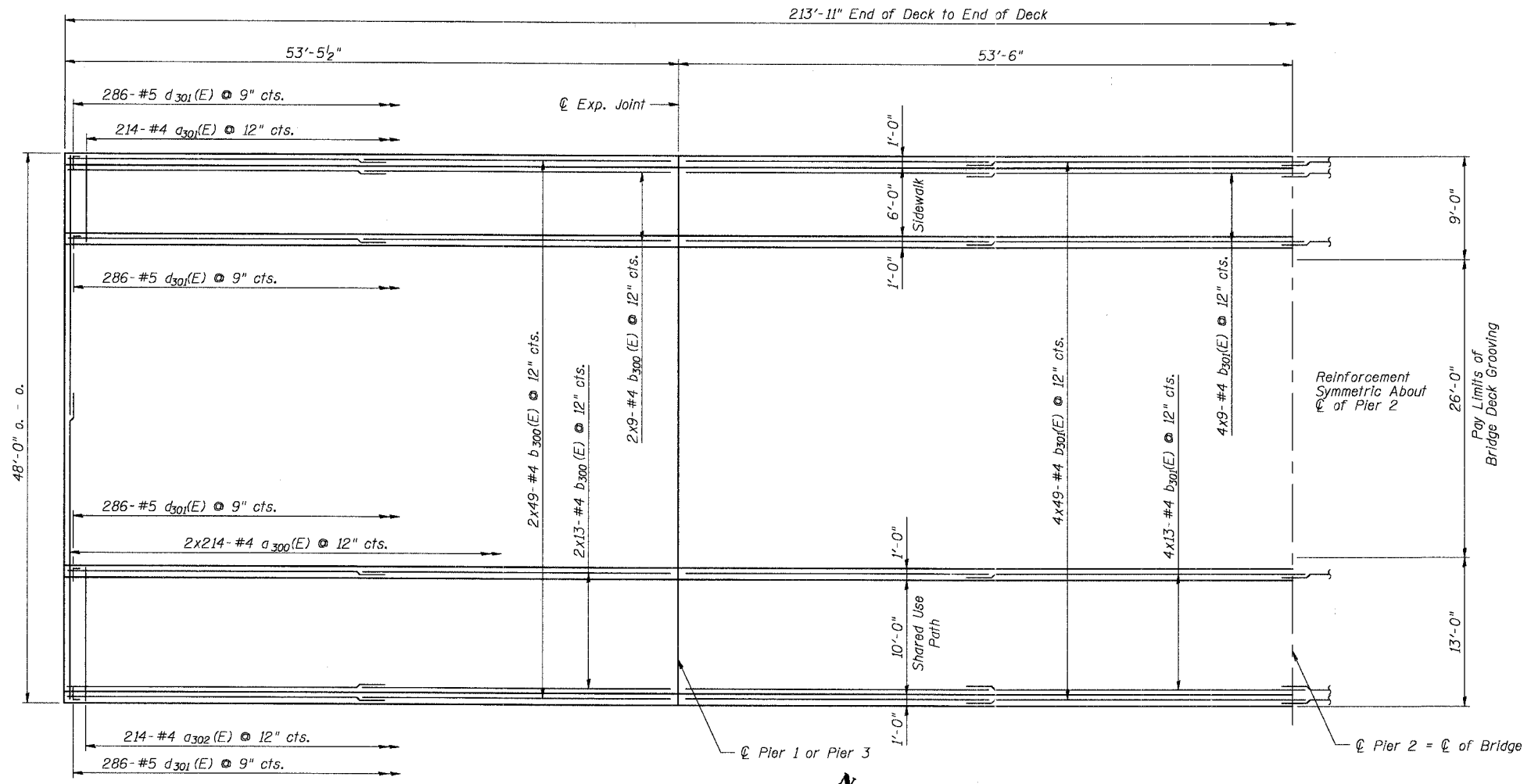
Bar	No.	Size	Length (FT)	Shape
a 200(E)	92	# 5	5'-0"	
a 201(E)	92	# 5	5'-10"	
b 200(E)	10	# 5	31'-11"	
b 201(E)	5	# 5	29'-8"	
h 200(E)	19	# 4	31'-4"	
n 200(E)	92	# 5	5'-2"	
v 200(E)	52	# 4	9'-2"	
v 201(E)	102	# 5	7'-6"	
Structure Excavation			Cu. Yds.	134
Reinforcement Bars, Epoxy Coated			Pound	3,250
Concrete Structures			Cu. Yds.	42.9
Pipe Drain, 6"			Foot	100
Geocomposite Wall Drain			Sq. Yds.	39
Porous Granular Backfill			Cu. Yd.	35
Bicycle Railing			Foot	90

Reinforcement Bars designated (E) shall be Epoxy Coated

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

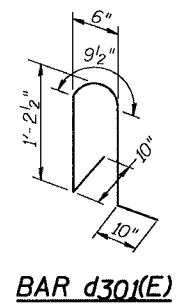
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 Retaining Wall Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County
 DATE 02-25-2005

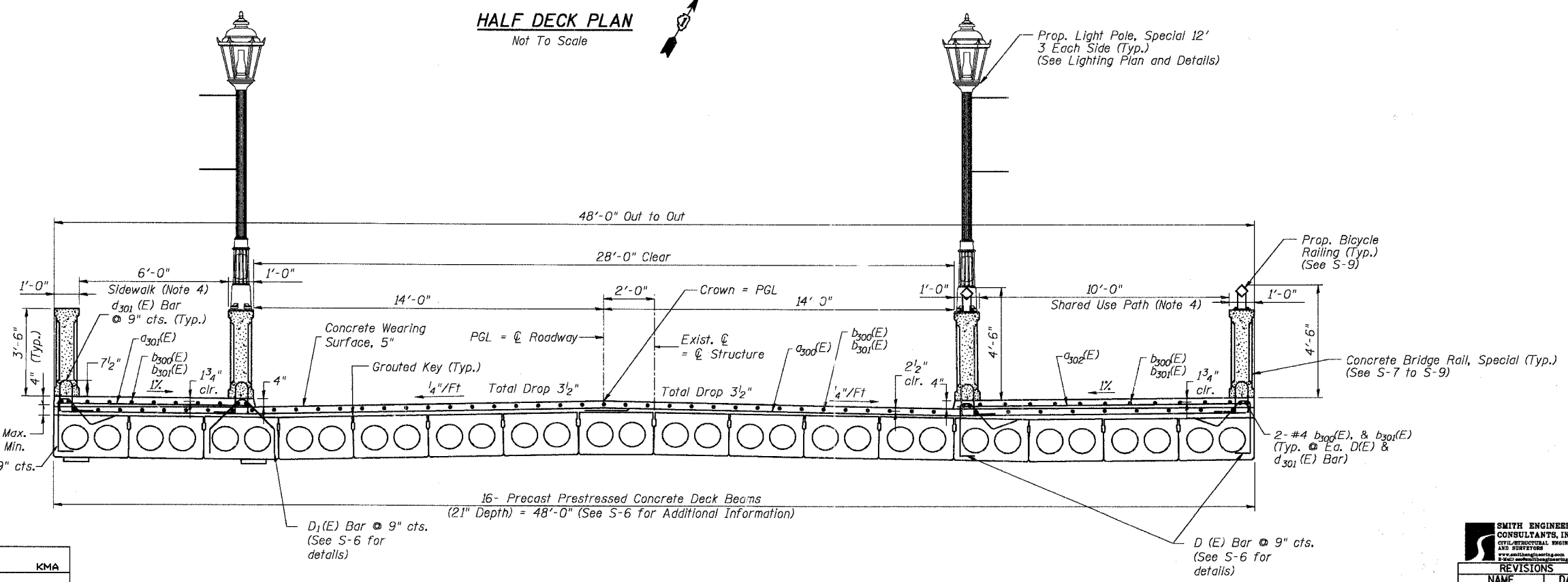


NOTES

1. Reinforcement Bar bending dimensions are out to out.
2. Lap lengths for Reinforcement Bars, Epoxy Coated shall conform to General Notes on S-2.
3. Bars indicated thus, 2 x 9-#5 indicates 9 lines of bars with 2 lengths per line.
4. 4" sidewalk and shared use path shall be paid for as Concrete Superstructure



HALF DECK PLAN
Not To Scale



CROSS SECTION
Not To Scale

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a ₃₀₁ (E)	428	# 4	24'-8"	—	
a ₃₀₁ (E)	214	# 4	7'-8"	—	
a ₃₀₁ (E)	214	# 4	11'-8"	—	
b ₃₀₁ (E)	316	# 4	27'-5"	—	
b ₃₀₁ (E)	316	# 4	27'-11"	—	
d ₃₀₁ (E)	1144	# 5	4'-1"	⌒	
Reinforcement Bars, Epoxy Coated				Pound	26,370
Concrete Wearing Surface, 5"				Sq. Yds.	1,141
Concrete Superstructure				Cu. Yds.	53.6
Bridge Deck Grooving				Sq. Yds.	618

Reinforcement Bars designated (E) shall be Epoxy Coated

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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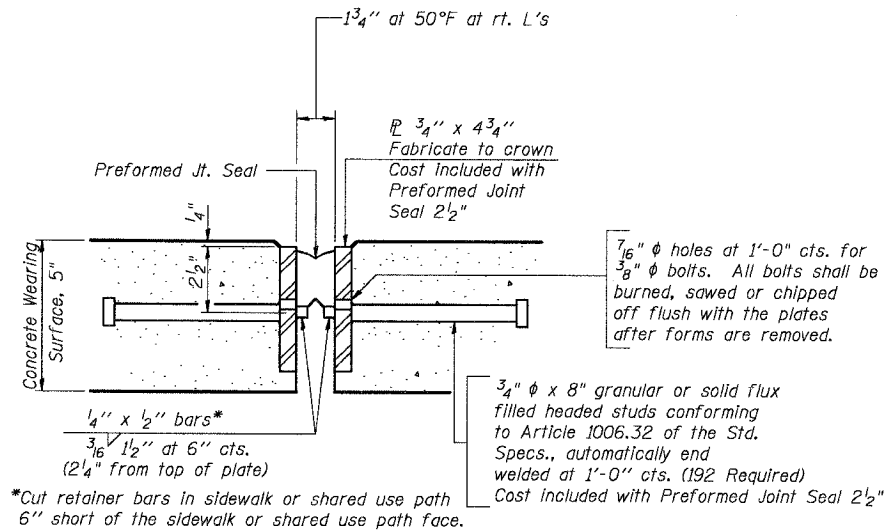
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
Deck Plan and Cross Section
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County
DATE 02-25-2005

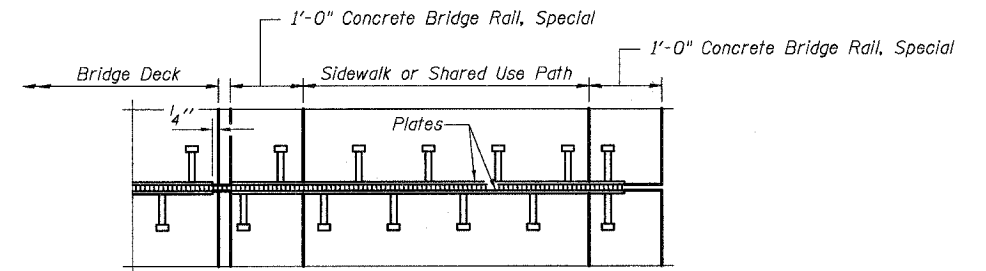
GENERAL NOTES

Furnish steel plates in segments of 20 feet maximum length. Maximum space between installed segments shall be 3/16". Seal space with silicone sealant suitable for structural steel.

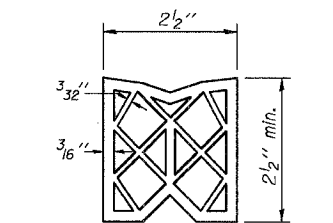
Bridge Joint System (Expansion)		
Design Movement	Required Preformed Joint Seal Size	Required Strip Seal Rated movement
1"	2 1/2"	1"



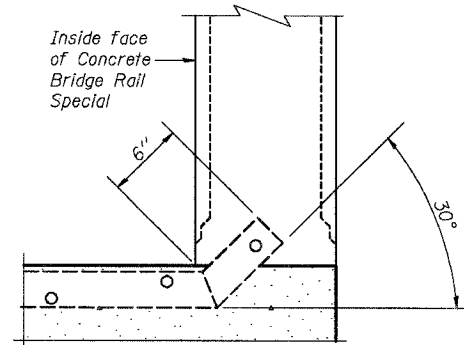
SECTION THRU EXPANSION JOINT



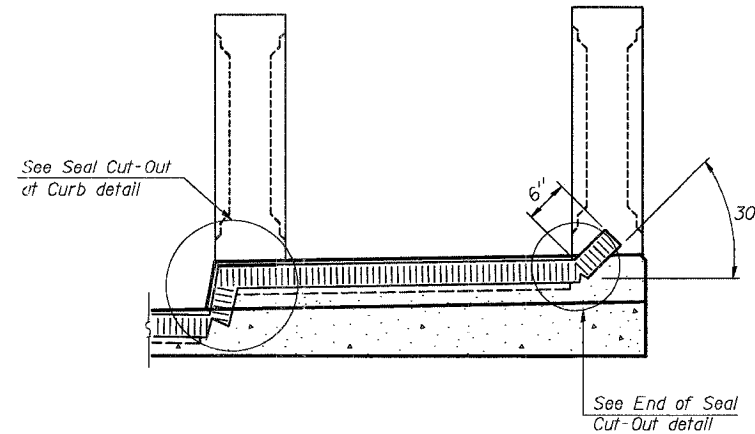
PLAN AT SIDEWALK OR SHARED USE PATH



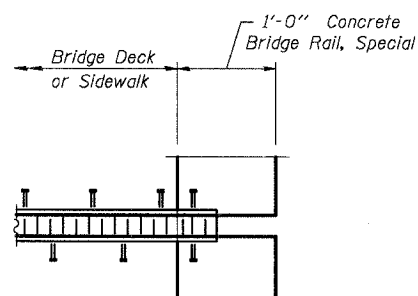
PREFORMED JOINT SEAL



AT CURB, PARAPET, OR WALL
(Showing plate)

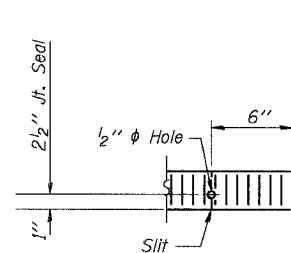


AT SIDEWALK OR SHARED USE PATH
(Showing plate and seal)

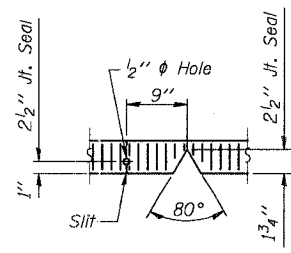


PLAN AT PARAPET

TYPICAL END TREATMENTS



END OF SEAL CUT-OUT



SEAL CUT-OUT AT CURB

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Seal 2 1/2"	Foot	96

**BRIDGE JOINT SYSTEM - EXPANSION
(PREFORMED JOINT SEAL)**

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

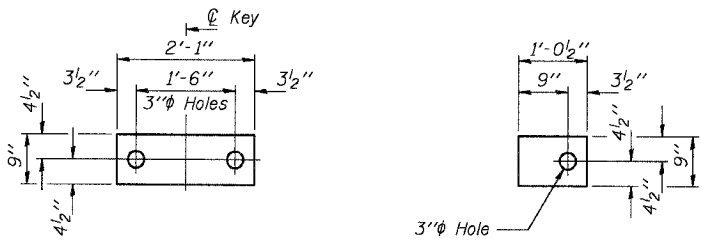
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REVISIONS	
NAME	DATE

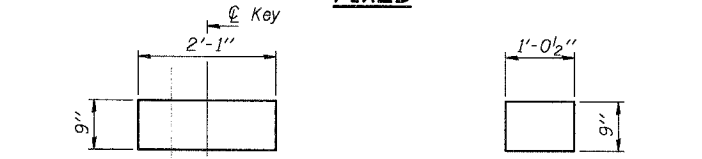
ILLINOIS DEPARTMENT OF TRANSPORTATION

Deck Joint Details
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

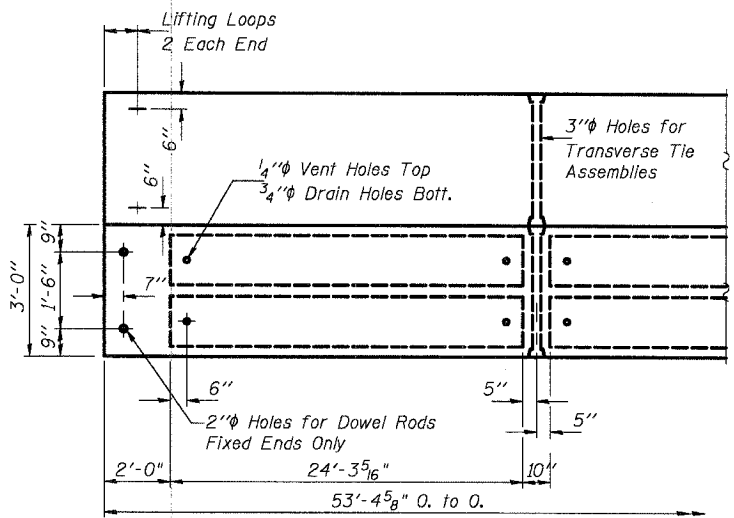
DATE 02-25-2005



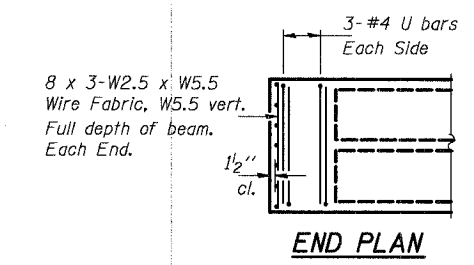
FABRIC BEARING PAD
 (Interior - 60 Required) **FABRIC BEARING PAD**
 (Exterior - 8 Required)



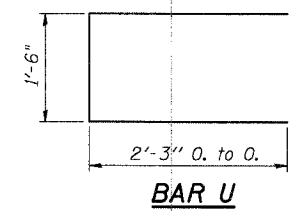
FABRIC BEARING PAD
 (Interior - 60 Required) **FABRIC BEARING PAD**
 (Exterior - 8 Required)



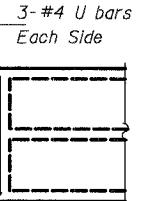
PLAN



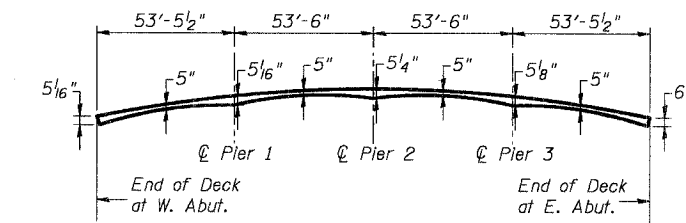
END PLAN



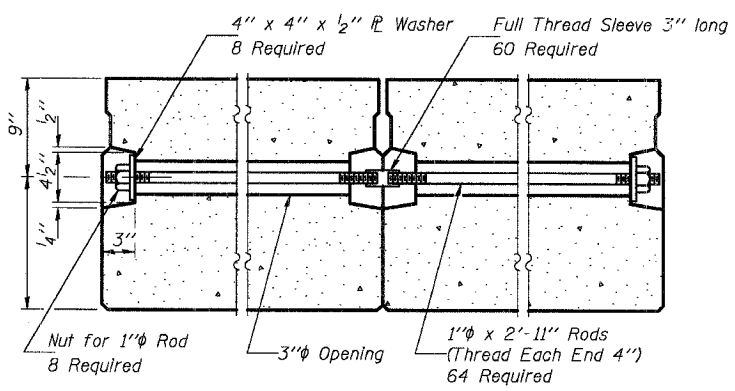
BAR U



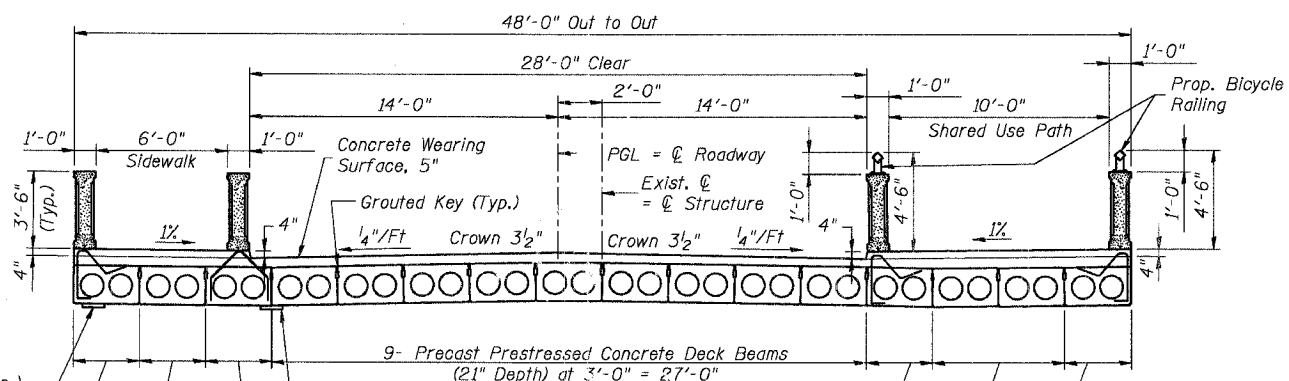
BAR D (E)



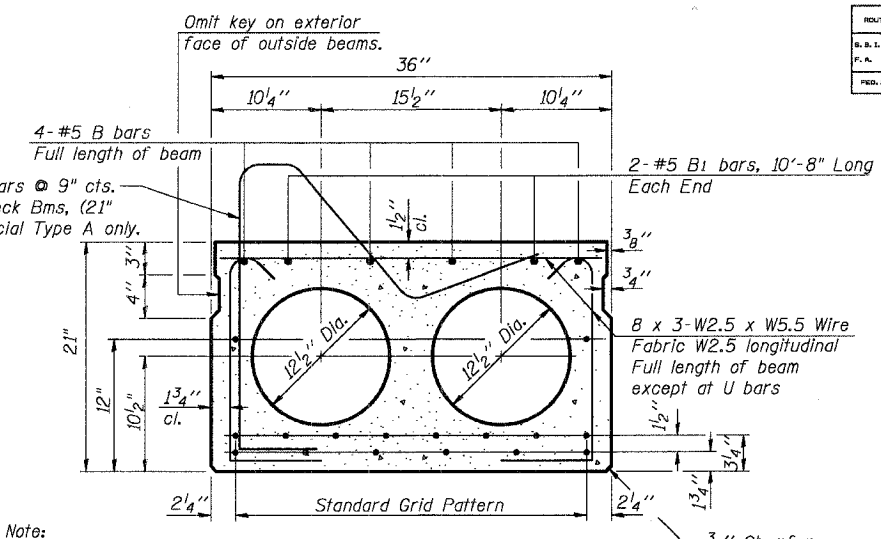
OVERLAY THICKNESS DETAIL
 Theoretical Thickness at PGL (Note 12)



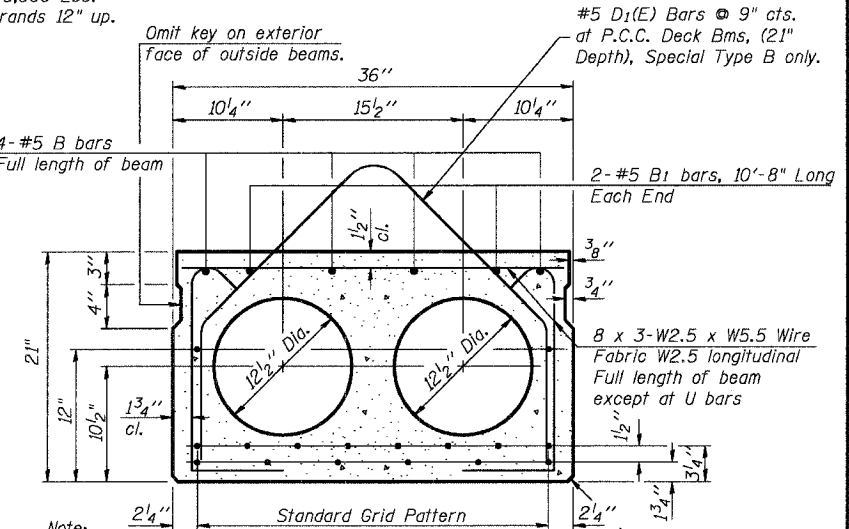
TYPICAL TRANSVERSE TIE ASSEMBLY



CROSS SECTION



TYPICAL SECTION



TYPICAL SECTION

Note: Place strands symmetrically about \bar{C} of beam.
 16-1/2" ϕ Strands, Each Strand Stressed to 28,900 Lbs.
 6-Strands 1 3/4" up, 8-Strands 3/4" up, 2-Strands 12" up.

Note: Place strands symmetrically about \bar{C} of beam.
 16-1/2" ϕ Strands, Each Strand Stressed to 28,900 Lbs.
 6-Strands 1 3/4" up, 8-Strands 3/4" up, 2-Strands 12" up.

NOTES

1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
3. Lifting loops shall be two (2) - 1/2" ϕ - 270 ksi strands, as shown.
4. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
5. Non prestressing steel shall conform to AASHTO M-31, M-42 or M-53 Grade 60.
6. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
7. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
8. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
9. Required Release Strength, f'cl, shall be 4000 p.s.i.
10. Reinforcement Bar bending dimensions are out to out
11. D (E) and D1(E) Bars shall not be paid for separately, but shall be included in the cost for Precast Prestressed Concrete Deck Beams (21" Depth), Special Type A and Type B respectively.
12. Thickness is based on calculated camber and deflection of PPC Deck Beams. Actual camber of individual units may vary up to +/- 1/2". Adjust thickness to match PGL and cross slope.

BILL OF MATERIAL

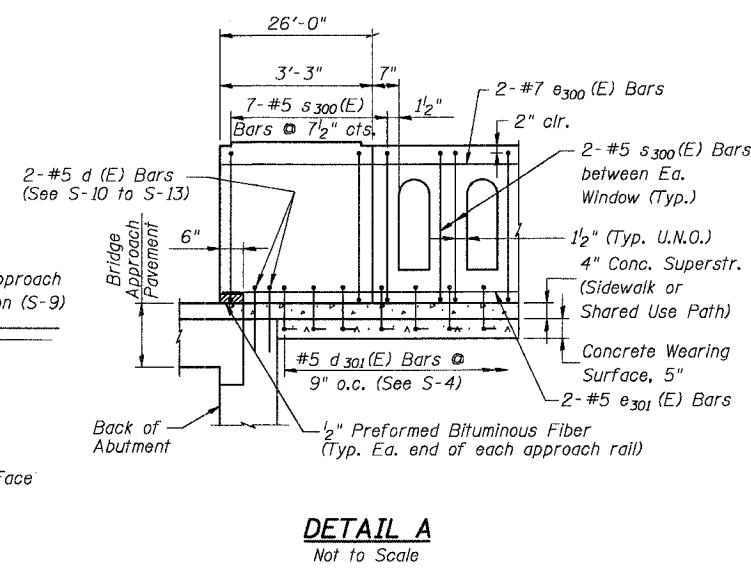
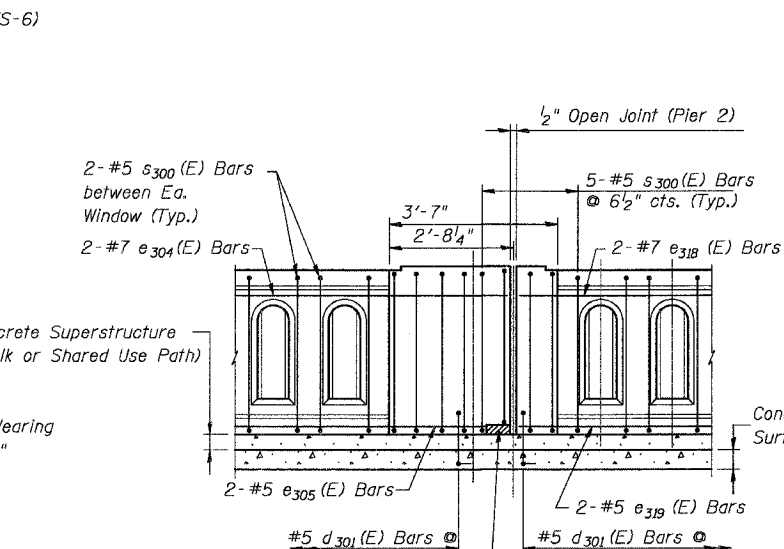
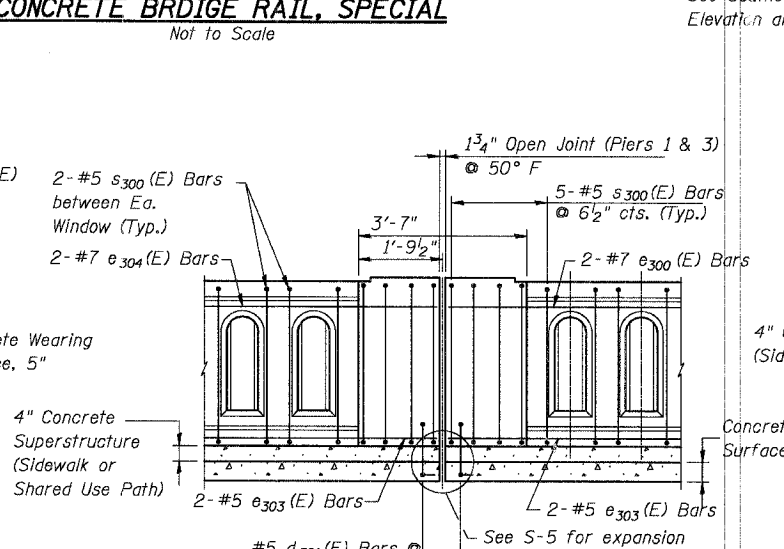
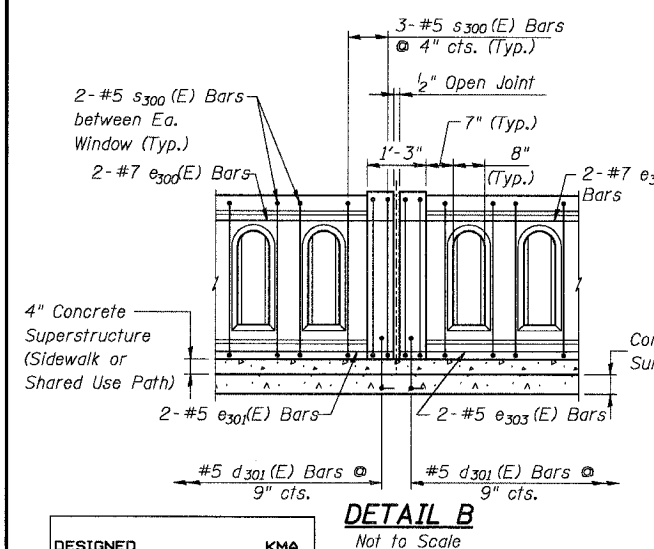
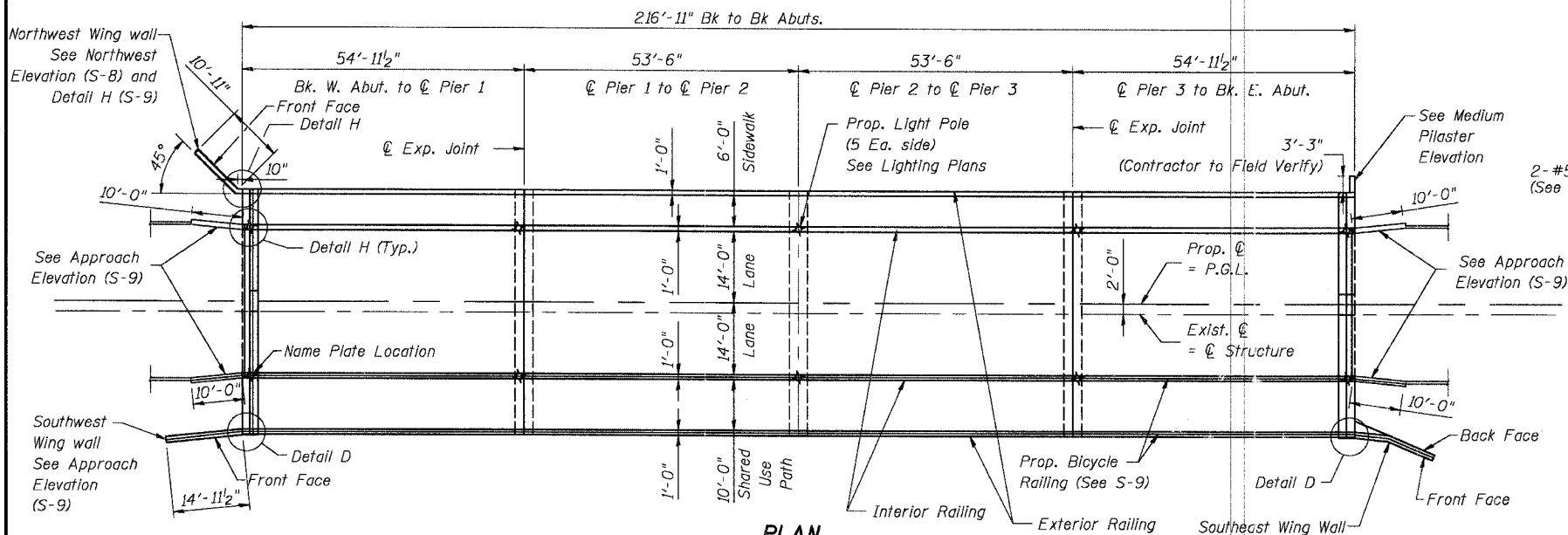
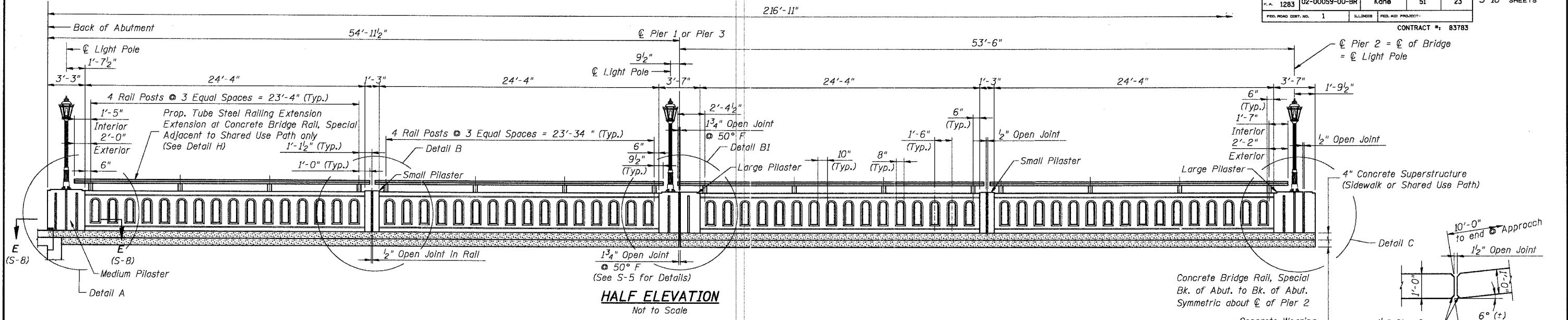
Bar	No.	Size	Length	Shape
B	192	#5	53'-0"	—
B1	288	#5	10'-8"	—
D(E)	636	#5	5'-2"	⤴
D1(E)	212	#5	5'-7"	⤴
U	768	#4	7'-0"	—
Precast Prestressed Concrete Deck Beams, (21" Depth)		Sq. Ft.		7,687
Precast Prestressed Concrete Deck Beams, (21" Depth), Special Type A		Sq. Ft.		1,922
Precast Prestressed Concrete Deck Beams, (21" Depth), Special Type B		Sq. Ft.		641

PD-3-S 3-1-94

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



ILLINOIS DEPARTMENT OF TRANSPORTATION
 PPC Deck Beam Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County
 DATE 02-25-2005



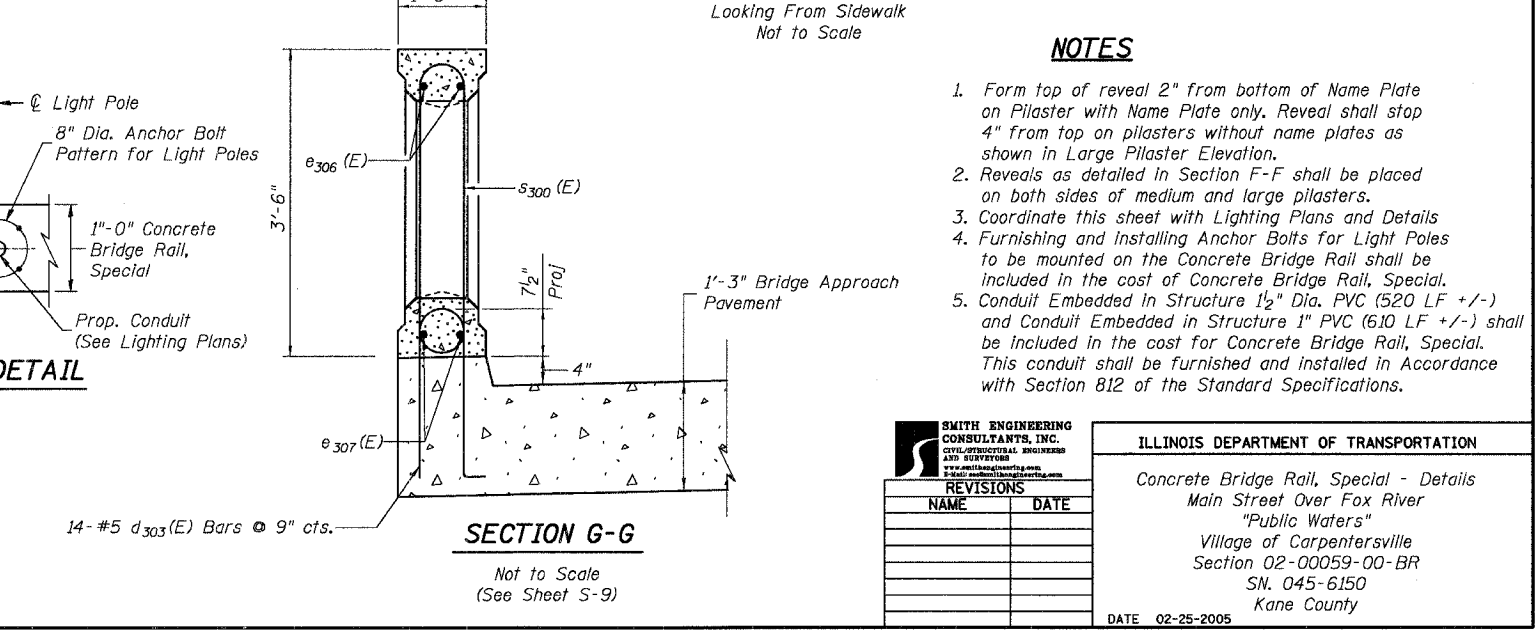
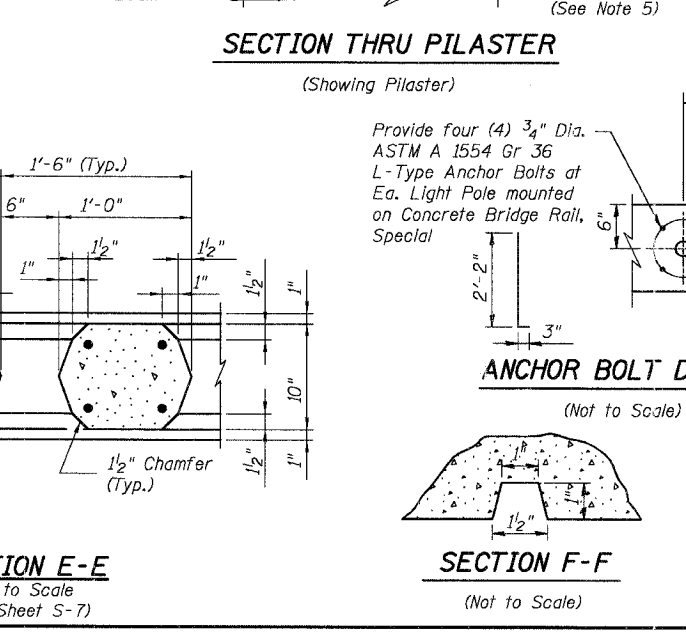
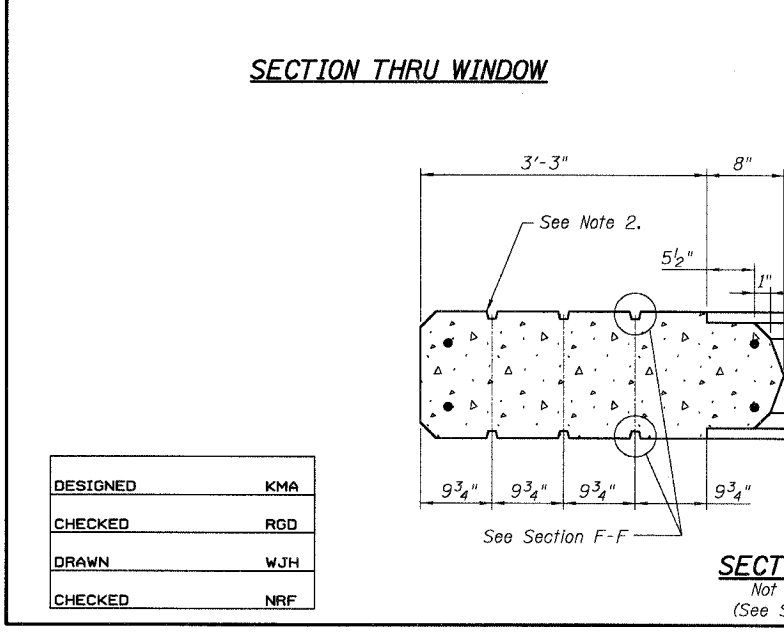
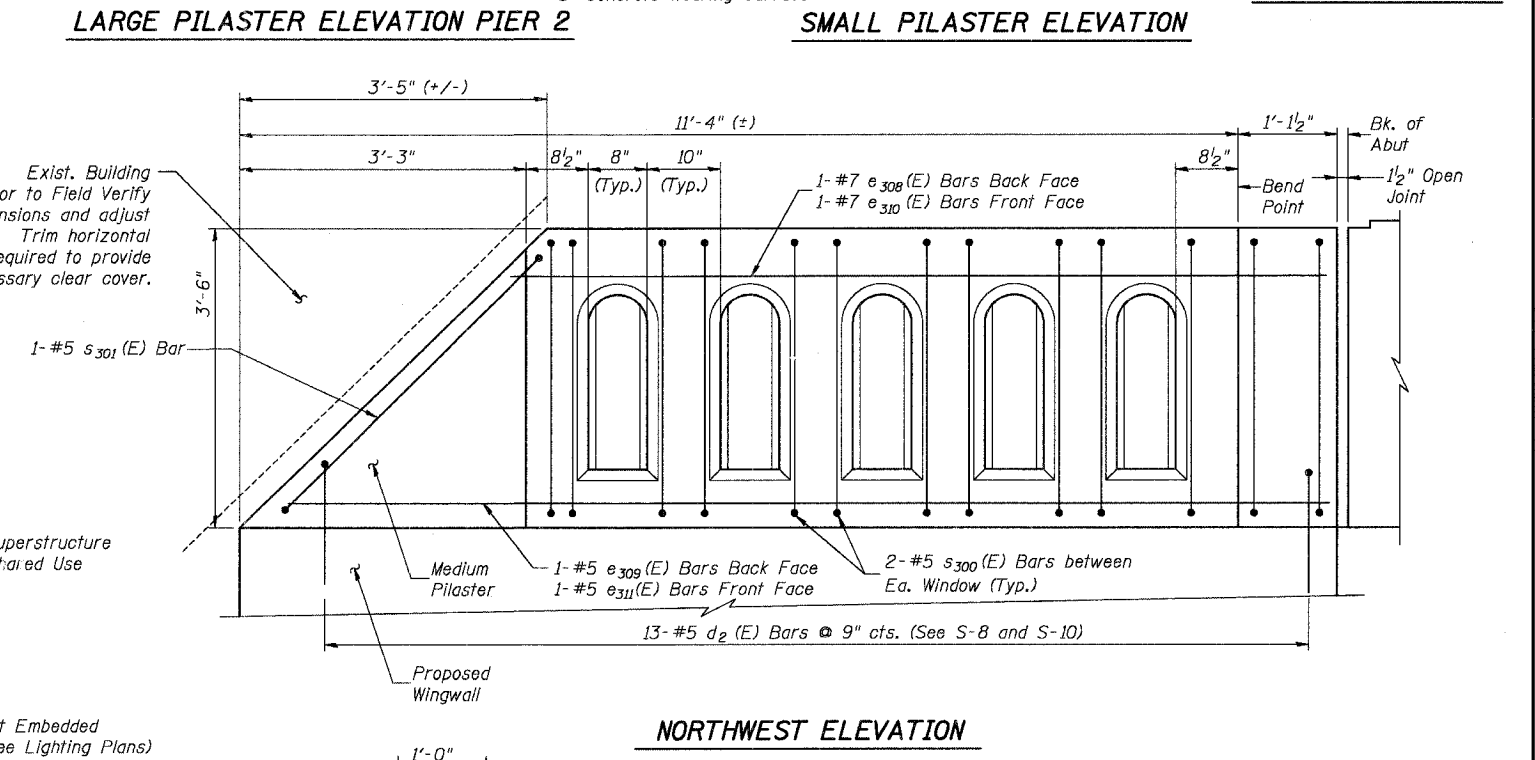
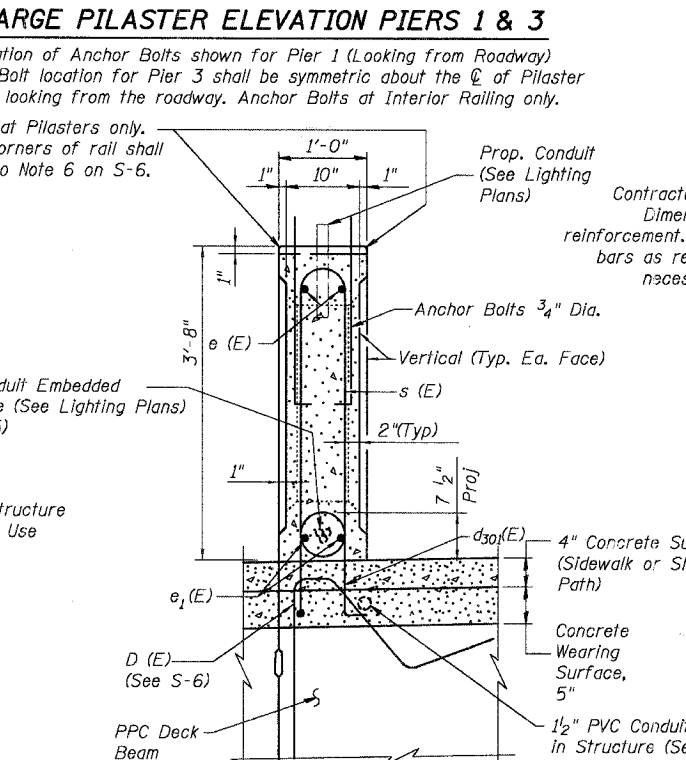
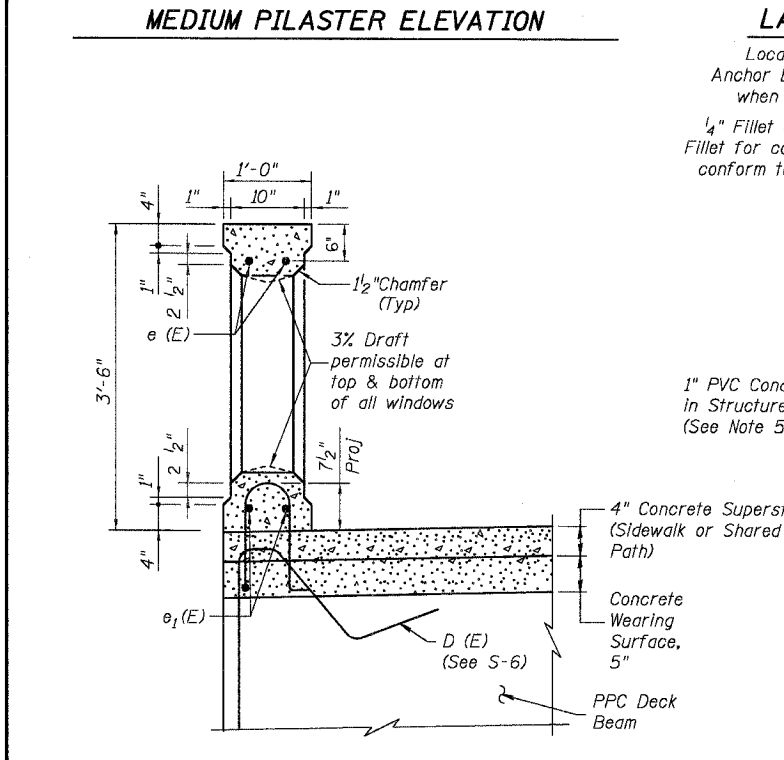
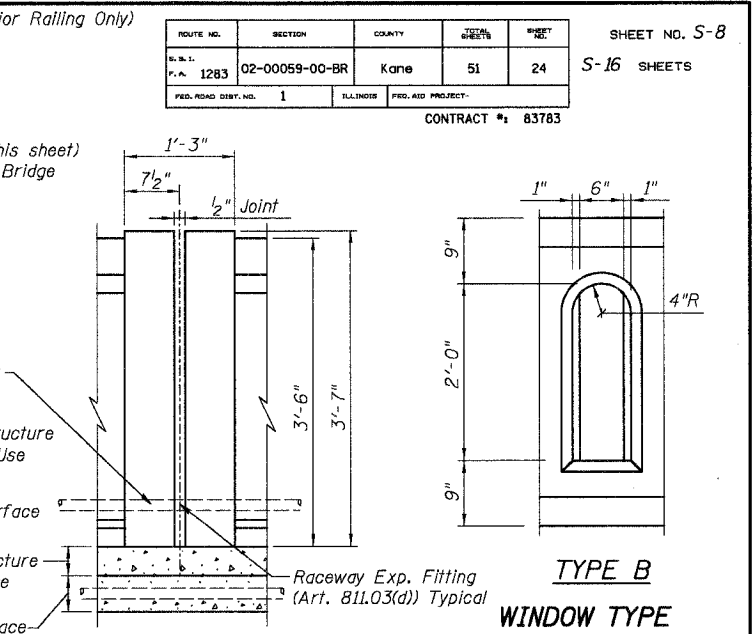
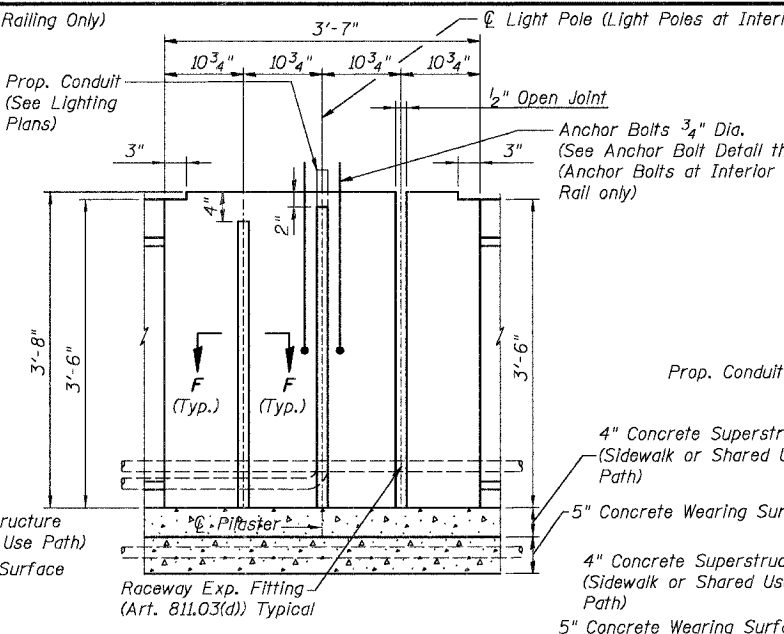
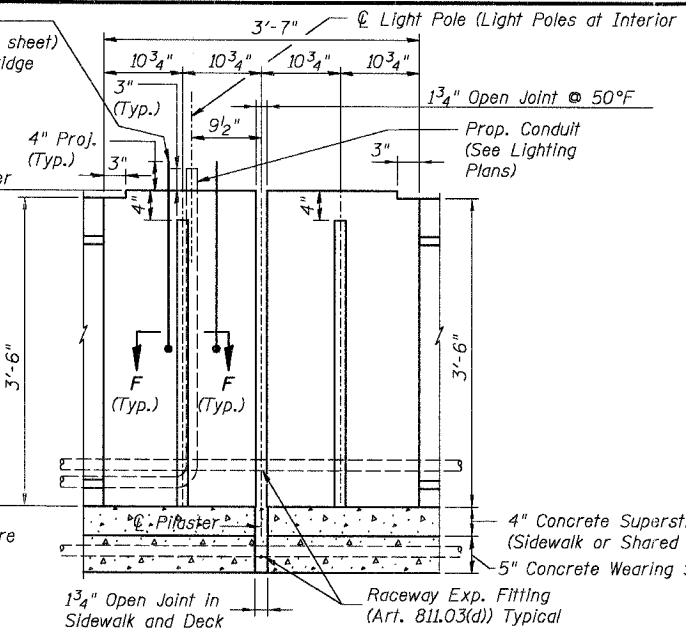
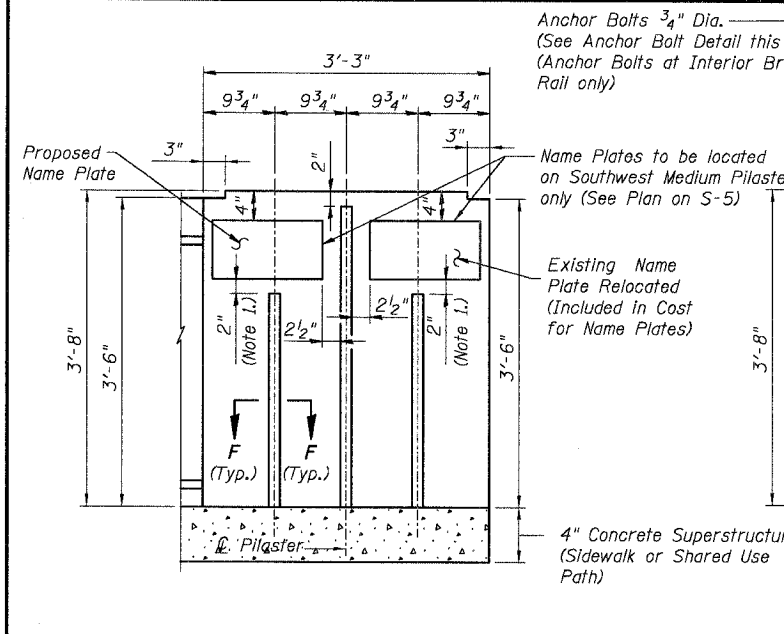
- GENERAL NOTES**
- Face of rail and parapet shall be vertical transversely unless otherwise approved by the engineer.
 - Concrete Bridge Rail, Special shall be constructed in accordance with Article 503 of the Standard Specifications except for the following:
 - All concrete for railing shall be Class BD concrete with coarse aggregate gradation CA-14.
 - All concrete for railing shall have a Rubbed Finish in accordance with Art. 503.16 of the Standard Specifications. Cost for rubbed Finish shall be included with Concrete Bridge Rail, Special.
 - Only top and roadway face of railings adjacent to roadway (Interior Railings) shall be treated with Protective Coat in accordance with Art. 503.19 of Standard Specifications.
 - All parts of the railing including concrete, and preformed bituminous fiber are included in the price bid per linear foot of Concrete Bridge Rail, Special.
 - Reinforcement in Concrete Bridge Rail, Special will be paid for under Reinforcement Bars, Epoxy Coated
 - Average weight of railing (without pilasters) is 350 plf.
 - Material used in rail joints may be left in place if it is compressible and light in color such as the following materials: styrofoam, molded cork granules, sponge rubber sheet, etc. If forming mat'l is not left in place, the bottom 7" shall be plugged with slab joint sealing compound.
 - Shop drawings will not be required for this rail.
 - Corners shall be bevelled/chamfered in accordance with Article 503.06/ Article 503.17(e) unless noted otherwise.
 - Coordinate this sheet with Lighting Plans and Details
 - Work this sheet with S-4 & S-8 through S-13

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL, MECHANICAL, ELECTRICAL AND SURVEYING ENGINEERS
 1000 N. W. 10th St., Ft. Lauderdale, FL 33304
 (954) 546-1000
 www.smith-engineering.com

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 Concrete Bridge Rail, Special Elevation & Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County
 DATE 02-25-2005



- NOTES**
- Form top of reveal 2" from bottom of Name Plate on Pilaster with Name Plate only. Reveal shall stop 4" from top on pilasters without name plates as shown in Large Pilaster Elevation.
 - Reveals as detailed in Section F-F shall be placed on both sides of medium and large pilasters.
 - Coordinate this sheet with Lighting Plans and Details
 - Furnishing and installing Anchor Bolts for Light Poles to be mounted on the Concrete Bridge Rail shall be included in the cost of Concrete Bridge Rail, Special.
 - Conduit Embedded in Structure 1" PVC (520 LF +/-) and Conduit Embedded in Structure 1 1/2" PVC (610 LF +/-) shall be included in the cost for Concrete Bridge Rail, Special. This conduit shall be furnished and installed in accordance with Section 812 of the Standard Specifications.

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

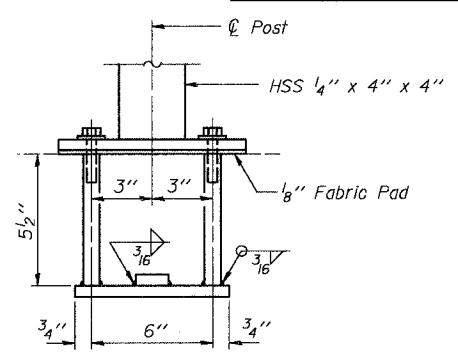
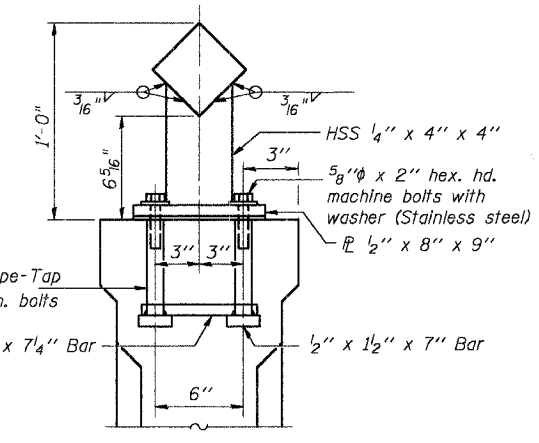
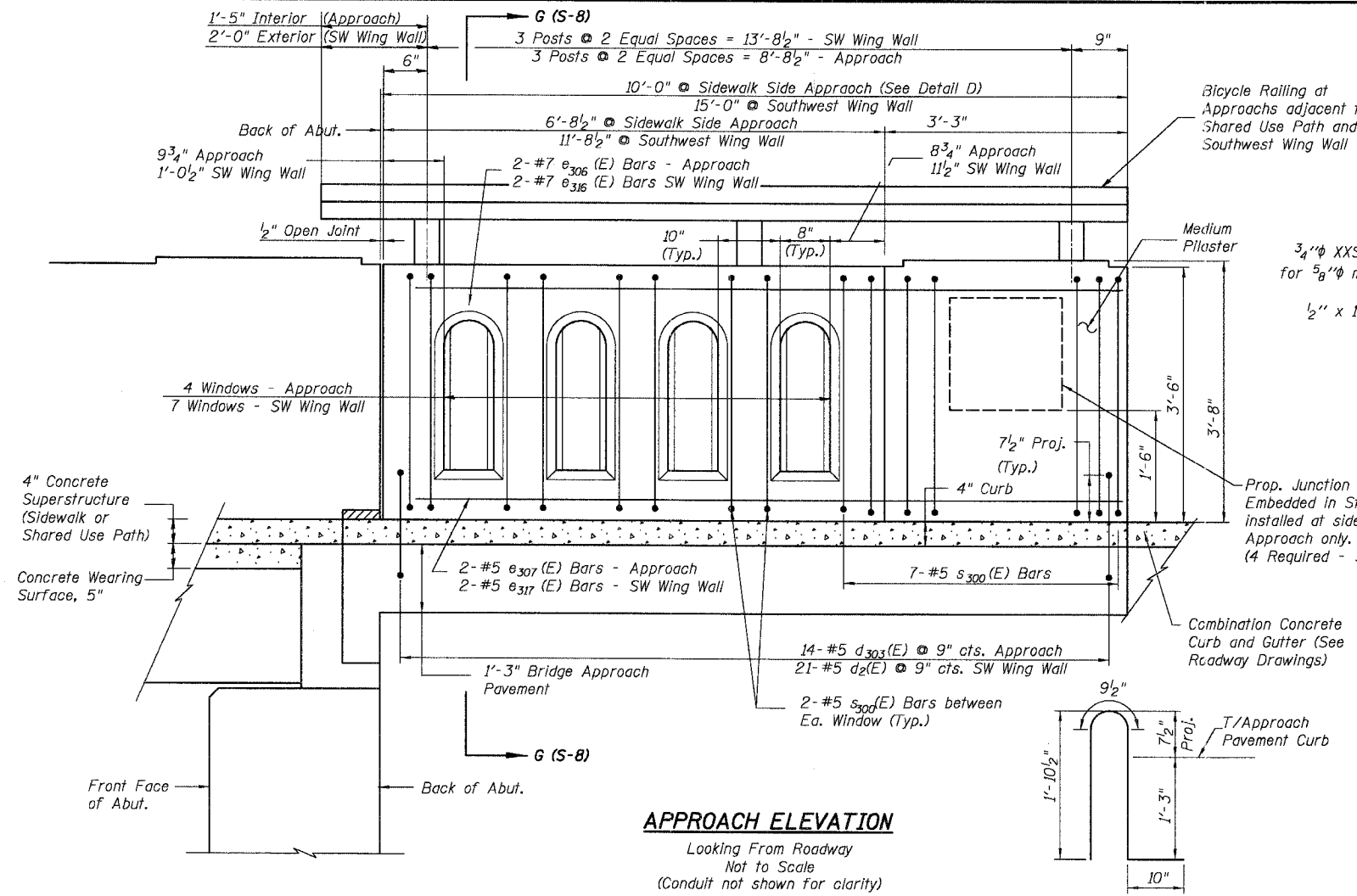
REVISIONS	
NAME	DATE

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CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS
1000 W. WASHINGTON ST., SUITE 200
CHICAGO, ILL. 60607
TEL: 312.467.1000
FAX: 312.467.1001
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ILLINOIS DEPARTMENT OF TRANSPORTATION

Concrete Bridge Rail, Special - Details
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

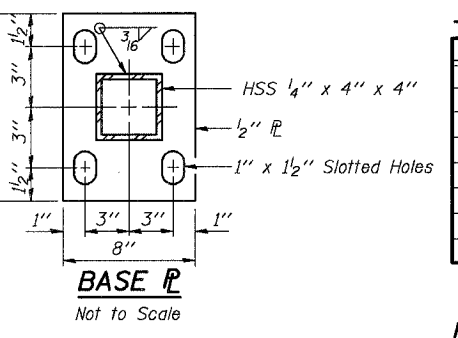
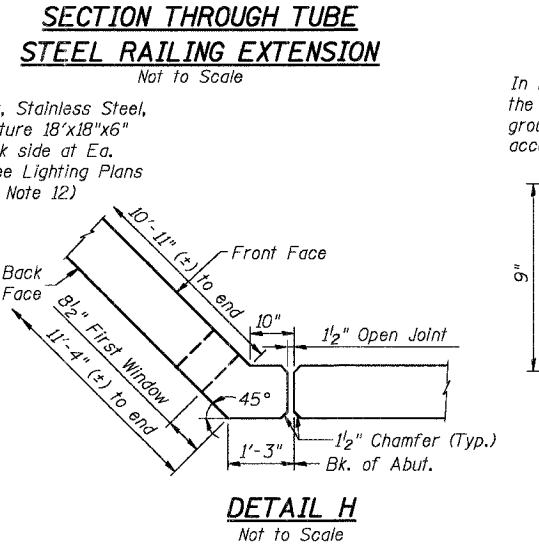
DATE 02-25-2005



BARS e 308 (E), e 309 (E), e 310 (E), e 311 (E), e 312 (E), e 313 (E), e 314 (E), e 315 (E)

A, B, & C DIMENSIONS

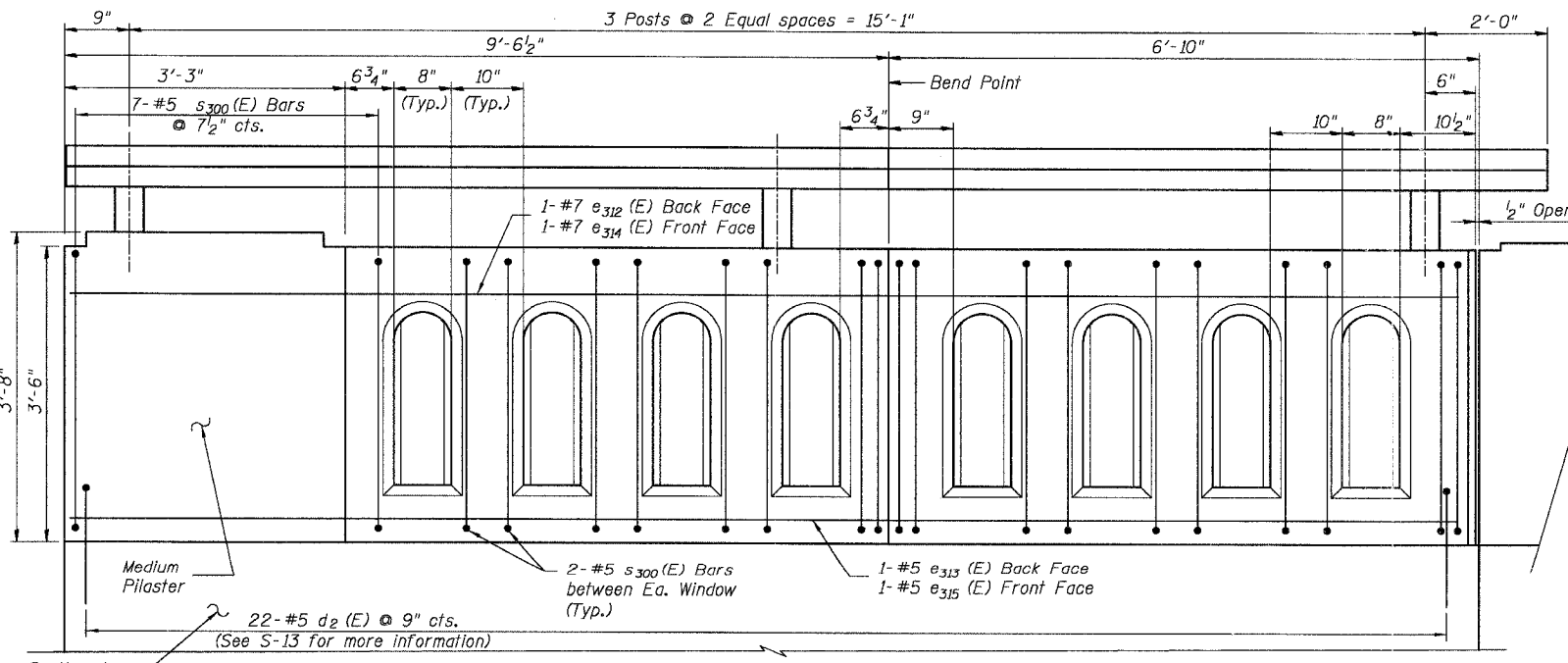
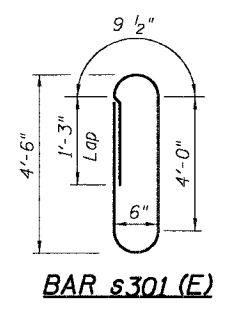
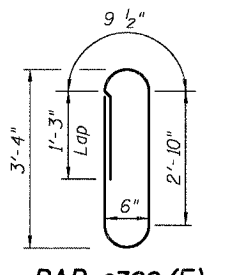
Bar	A	B	C
e 308 (E)	6"	10'-9"	45°
e 309 (E)	6"	10'-9"	45°
e 310 (E)	11"	11'-2"	45°
e 311 (E)	11"	11'-2"	45°
e 312 (E)	6'-9"	9'-4"	17°
e 313 (E)	6'-9"	9'-4"	17°
e 314 (E)	6'-6"	9'-2"	17°
e 315 (E)	6'-6"	9'-2"	17°



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d 303(E)	56	# 5	4'-11"	U
e 300(E)	16	# 7	27'-9"	
e 301(E)	16	# 5	27'-9"	
e 302(E)	32	# 7	26'-3"	
e 303(E)	32	# 5	26'-3"	
e 304(E)	8	# 7	27'-3"	
e 305(E)	8	# 5	27'-3"	
e 306(E)	8	# 7	9'-8"	
e 307(E)	8	# 5	9'-8"	
e 308(E)	1	# 7	11'-3"	
e 309(E)	1	# 5	11'-3"	
e 310(E)	1	# 7	12'-1"	
e 311(E)	1	# 5	12'-1"	
e 312(E)	1	# 7	15'-5"	
e 313(E)	1	# 5	15'-5"	
e 314(E)	1	# 7	15'-10"	
e 315(E)	1	# 5	15'-10"	
e 316(E)	2	# 7	14'-6"	
e 317(E)	2	# 5	14'-6"	
e 318(E)	8	# 7	25'-6"	
e 319(E)	8	# 5	25'-6"	
s 300(E)	1366	# 5	8'-6"	
s 301(E)	1	# 5	10'-10"	
Reinforcement Bars, Epoxy Coated		Pound		18,170
Concrete Bridge Rail, Special		Foot		955
Protective Coat		Sq. Yd.		237
Bicycle Railing		Foot		485

- NOTES**
- Reinforcement Bar bending dimensions are out-to-out.
 - Reinforcement Bars shall conform to the requirements of AASHTO M31, M42, or M53 Grade 60.
 - Reinforcement Bending Details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures", ACI 315, Latest Edition.
 - Work this sheet with S-2 and S-4
 - Coordinate d 303(E) Bar with Bridge Approach Pavement (Std. 42040)
 - Rolling shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing.
 - Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.
 - All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.
 - If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.
 - Space reinforcement to miss anchor rods.
 - All posts, railing, splices, anchor devices, and bent plates shall be painted using the organic zinc rich primer/epoxy/polyurethane (OZ/E/U) paint system as outlined in "Organic Zinc-Rich Paint System (BDE)." The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color shall closely match the texture, gloss, and color of the proposed Light Poles (Black Gloss). The Engineer shall be provided with a 4" x 4" samples for comparison and acceptance. shall be TNEMEC (or equal) colors: Black
 - Junction Box, Stainless Steel, Embedded in Structure 18"x18"x6" shall be included in the cost of Concrete Bridge Rail, Special. Junction Box Stainless Steel, Embedded in Structure 18"x18"x6" shall be furnished and installed in accordance with Section 813 of the Standard Specifications. (NEMA 4X)



Item	Unit	Total Quantity
* Conduit Embedded in Structure 1" Dia. PVC	Foot	610 +/-
* Conduit Embedded in Structure 1 1/2" Dia. PVC	Foot	520 +/-
** Junction Box, Stainless Steel, Embedded in Structure 18" x 18" x 6"	Each	4
*** Anchor Bolts	Each	40

* See Note 5 on Sheet S-08.
 ** See Note 12 this sheet.
 *** See Note 4 on S-08.

SOUTHEAST ELEVATION
 Looking From Shared Use Path
 Not to Scale

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

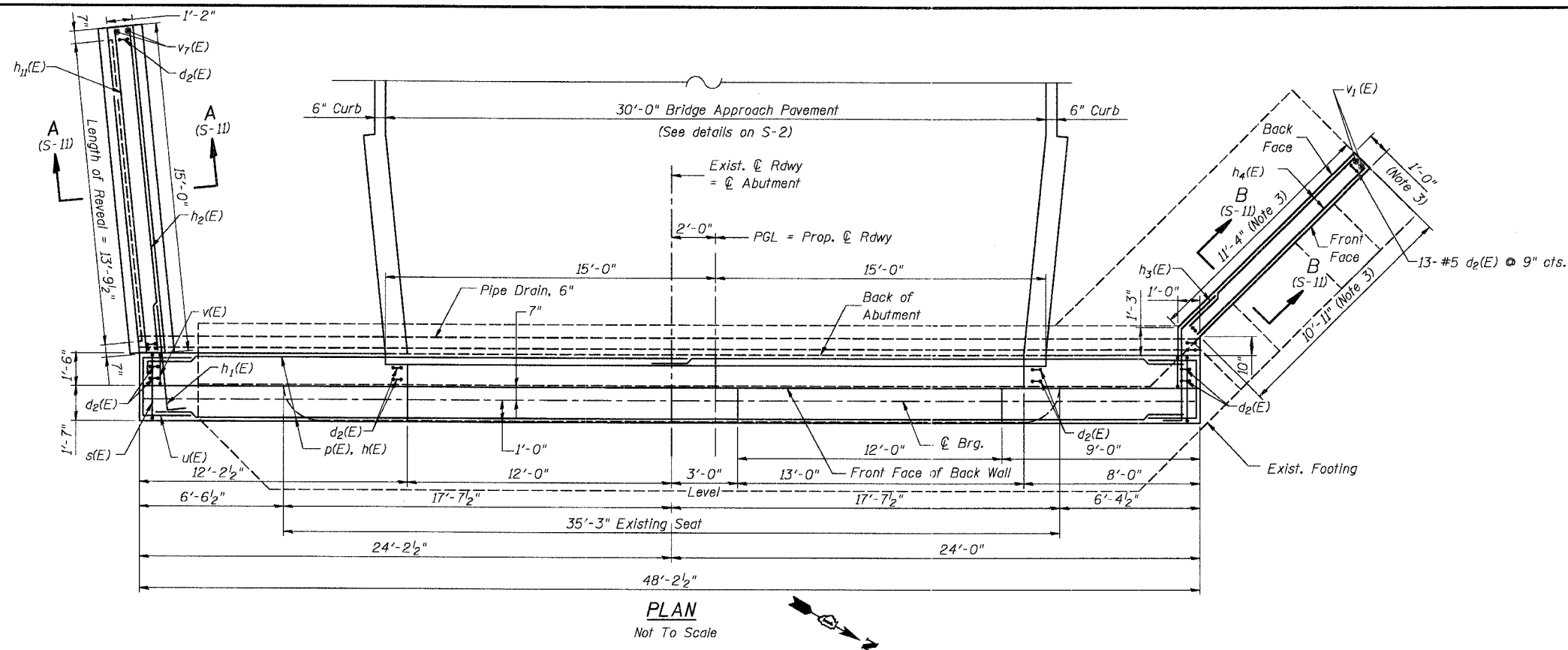
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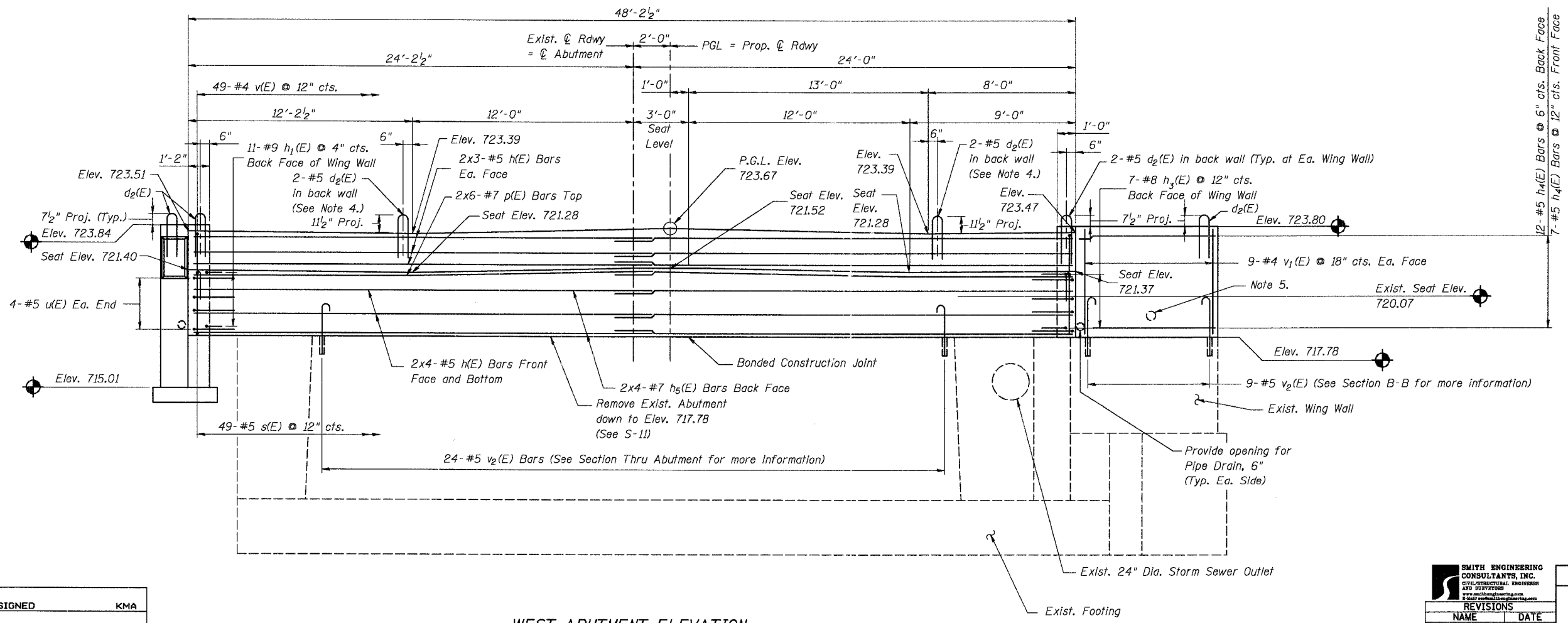
ILLINOIS DEPARTMENT OF TRANSPORTATION
 Concrete Bridge Rail, Special - Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County
 DATE 02-25-2005

GENERAL NOTES

1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Space reinforcement in abutment seat to miss anchor bolts.
3. Contractor to field verify dimensions of existing wing wall.
4. Coordinate placement of $d_2(E)$ Bars with Concrete Bridge Rail. Special details on sheets S-7, S-8, and S-9.
5. Provide opening for Exist. 4" Gas Main if line is to be attached to proposed superstructure. Contractor to coordinate with the Utility Company responsible for line.



PLAN
Not To Scale



WEST ABUTMENT ELEVATION
Looking West (Not To Scale)

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

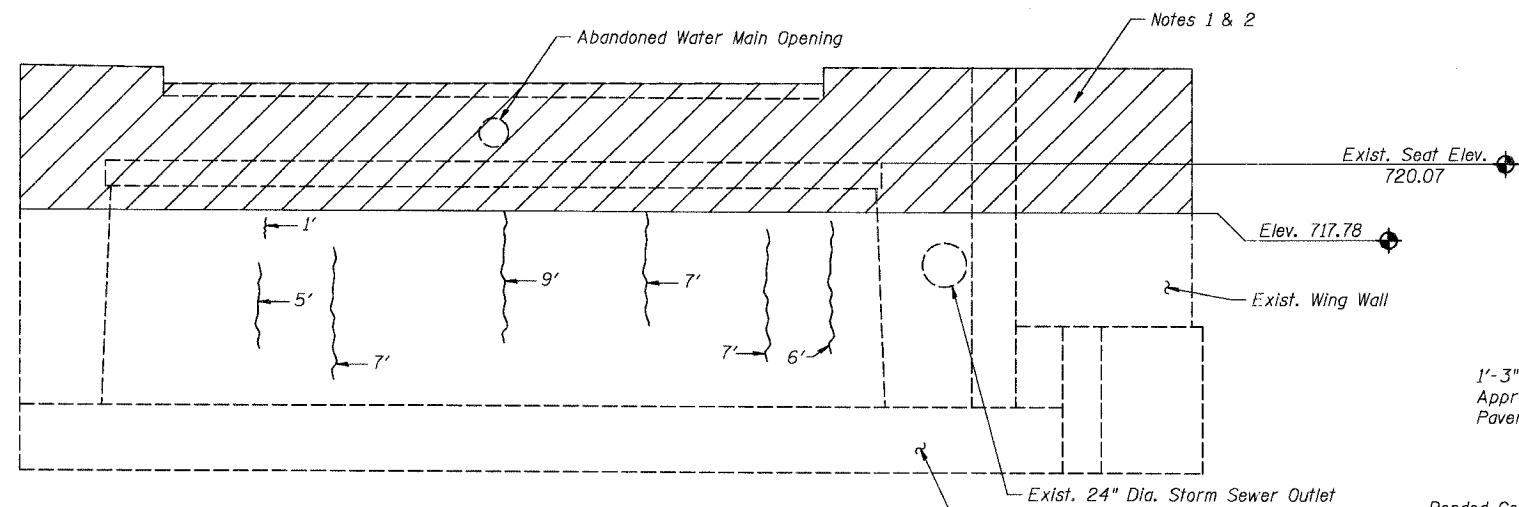


REVISIONS	
NAME	DATE

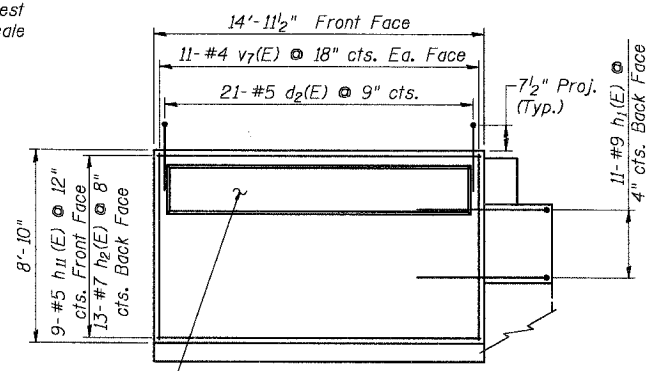
ILLINOIS DEPARTMENT OF TRANSPORTATION

West Abutment Plan and Elevation
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

DATE 02-25-2005



WEST ABUTMENT ELEVATION
Looking West
Not To Scale

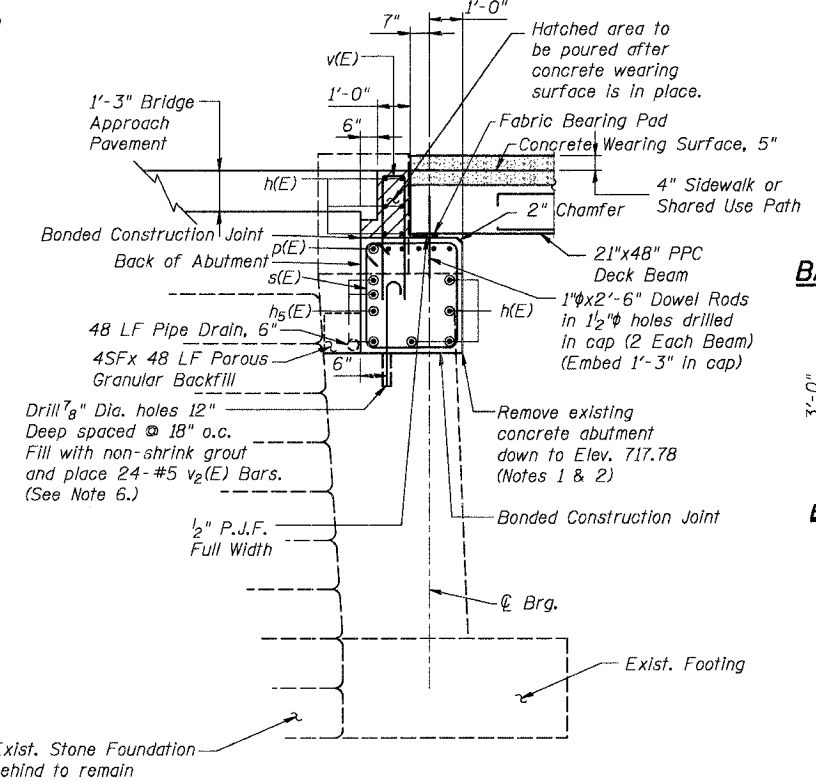


SOUTHWEST WING WALL ELEVATION
Not To Scale

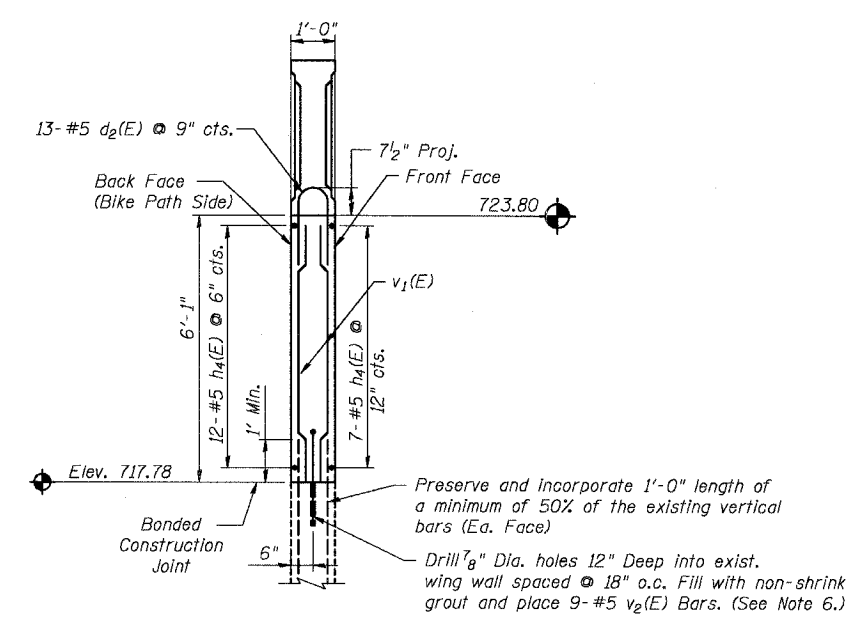
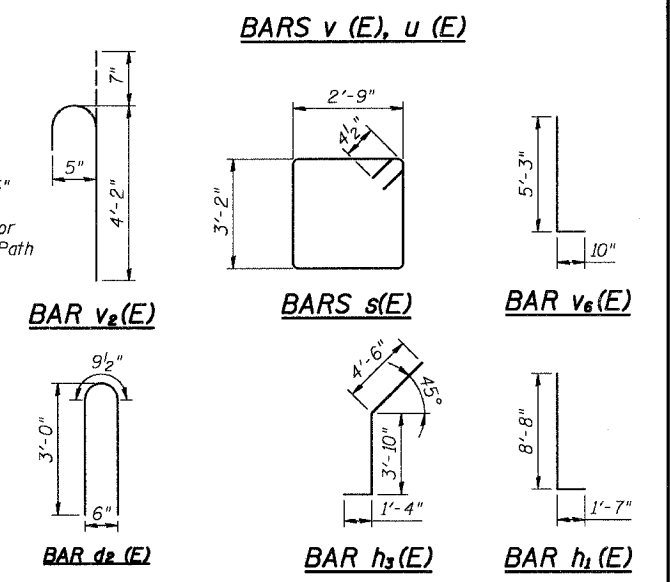
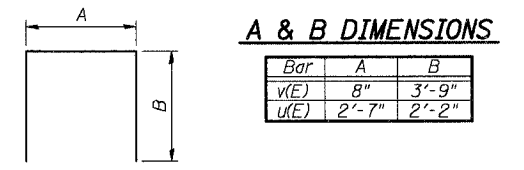
LEGEND

	Indicates Concrete Removal Area
	Indicates Epoxy Crack Sealing

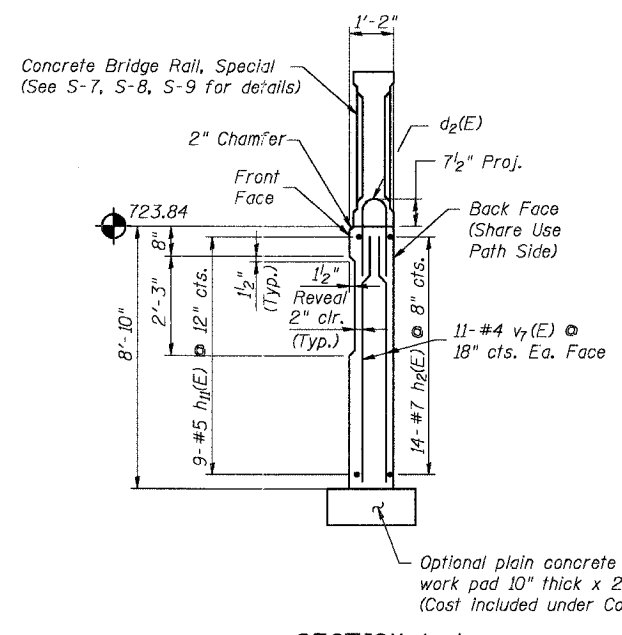
Prop. Reveal
(See Abutment Plan
and Section A-A
for dimensions) (Note 7.)



SECTION THRU ABUTMENT
(Looking North)
Not To Scale



SECTION B-B
Not To Scale
(See S-10)



SECTION A-A
Not To Scale
(See S-10)

GENERAL NOTES

1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Preserve and incorporate 1'-0" length of a minimum of 50% of existing vertical reinforcement in removal area.
3. Space reinforcement in abutment seat to miss anchor bolts.
4. Reinforcement Bar Bending dimensions are out to out.
5. Coordinate placement of d2(E) Bars with Concrete Bridge Rail, Special details on sheets S-7, S-8, and S-9.
6. Cost for Drilling and Grouting v2(E) Bars shall be included in Reinforcement Bars, Epoxy Coated.
7. Cost for Reveal shall be included in Concrete Structures.

BILL OF MATERIAL

Bar	No.	Size	Length (FT)	Shape
d2(E)	42	# 5	6'-3"	
h1(E)	20	# 5	25'-0"	
h2(E)	11	# 9	10'-3"	
h3(E)	14	# 7	14'-8"	
h4(E)	7	# 8	9'-10"	
h5(E)	19	# 5	11'-2"	
h6(E)	8	# 7	25'-8"	
h7(E)	9	# 5	14'-8"	
p(E)	12	# 7	25'-8"	
s(E)	49	# 5	12'-7"	
u(E)	8	# 5	6'-11"	
v(E)	49	# 4	8'-2"	
v1(E)	18	# 4	5'-9"	
v2(E)	33	# 5	4'-9"	
v7(E)	22	# 4	8'-6"	
Reinforcement Bars, Epoxy Coated		Pound	4,510	
Concrete Removal		Cu. Yds.	34	
Concrete Structures		Cu. Yds.	33.5	
Structure Excavation		Cu. Yds.	30	
Epoxy Crack Sealing		Foot	42	
Pipe Drain, 6"		Foot	48	
Porous Granular Backfill		Cu. Yds.	30	

Reinforcement Bars designated (E) shall be Epoxy Coated

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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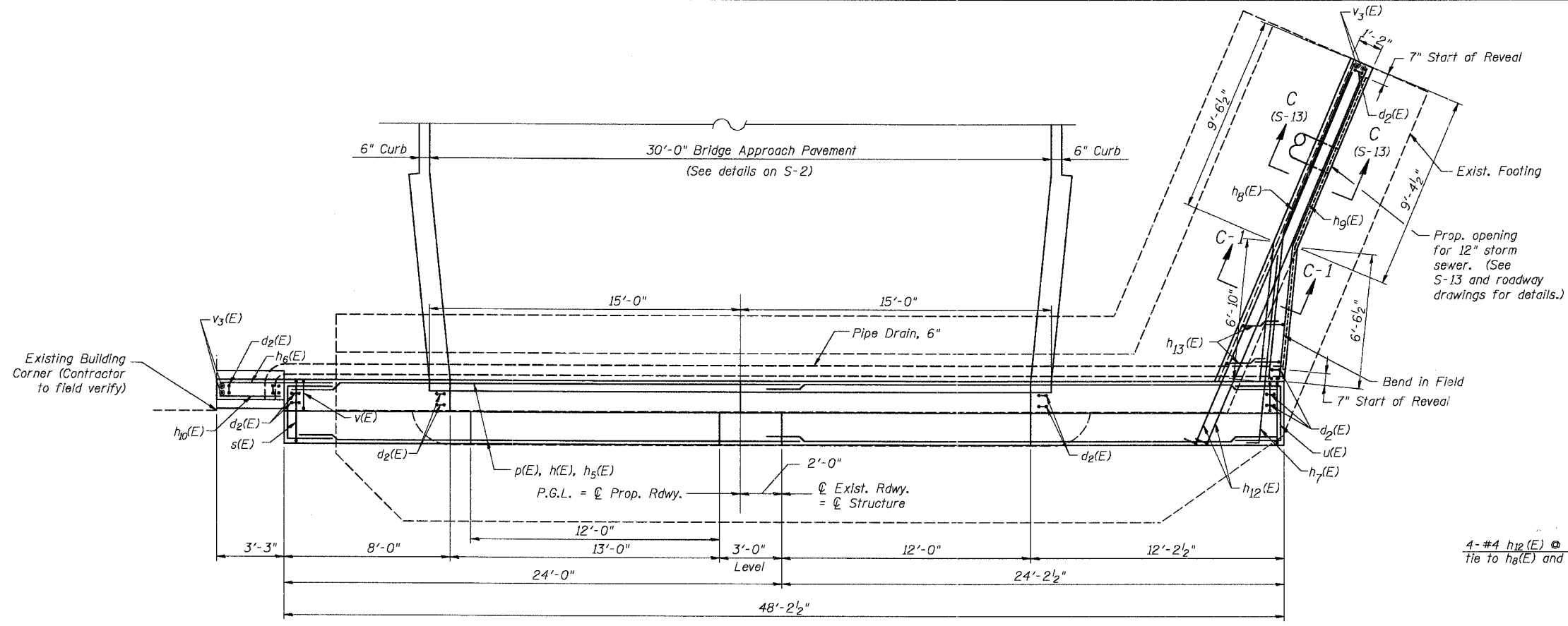
ILLINOIS DEPARTMENT OF TRANSPORTATION

West Abutment Details
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

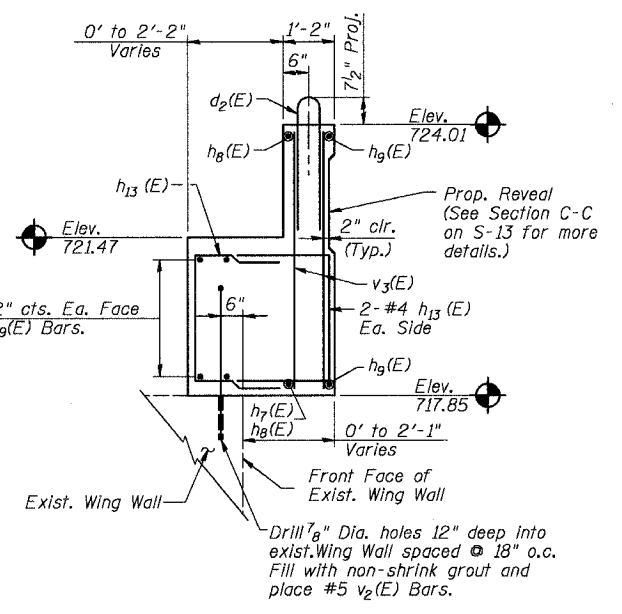
DATE 02-25-2005

GENERAL NOTES

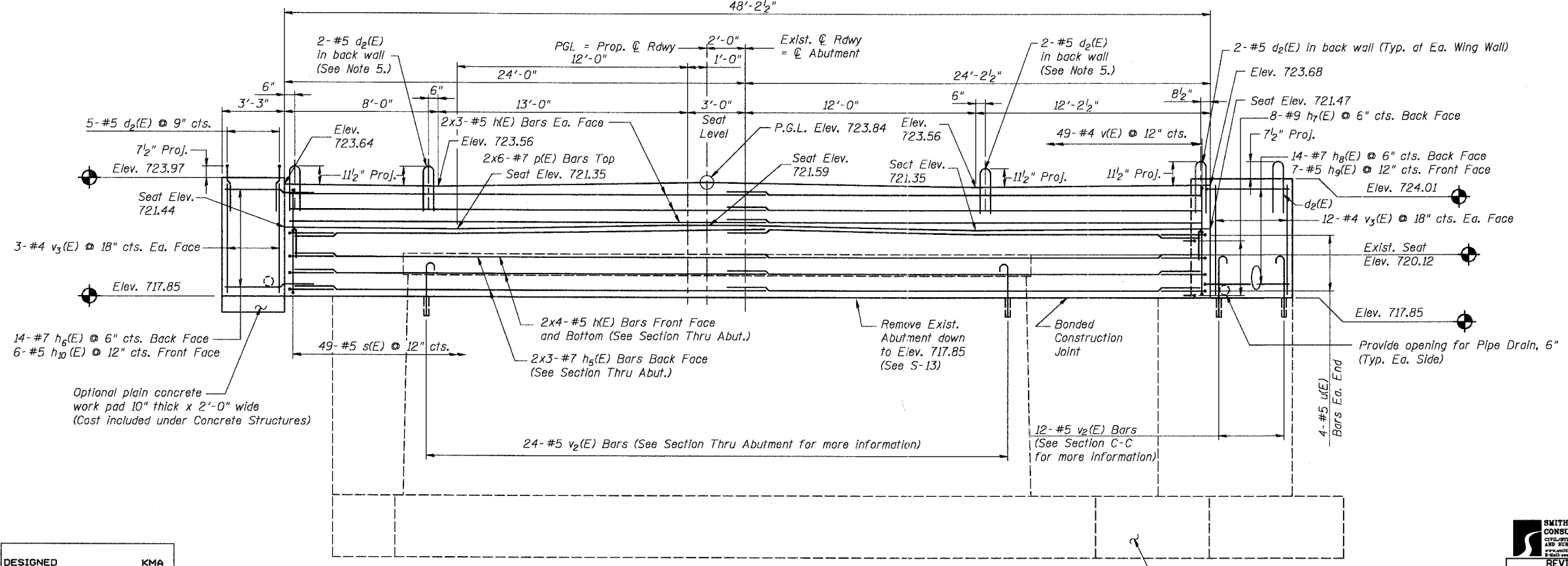
1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Space reinforcement in abutment seat to miss anchor bolts.
3. Contractor to field verify dimensions of existing wing wall.
4. See S-12 for Section Thru Abutment
5. Coordinate placement of $d_2(E)$ Bars with Concrete Bridge Rail. Special details on sheets S-7, S-8, and S-9.



PLAN
Not To Scale



SECTION C1-C1
Not To Scale



EAST ABUTMENT ELEVATION
Looking East (Not To Scale)

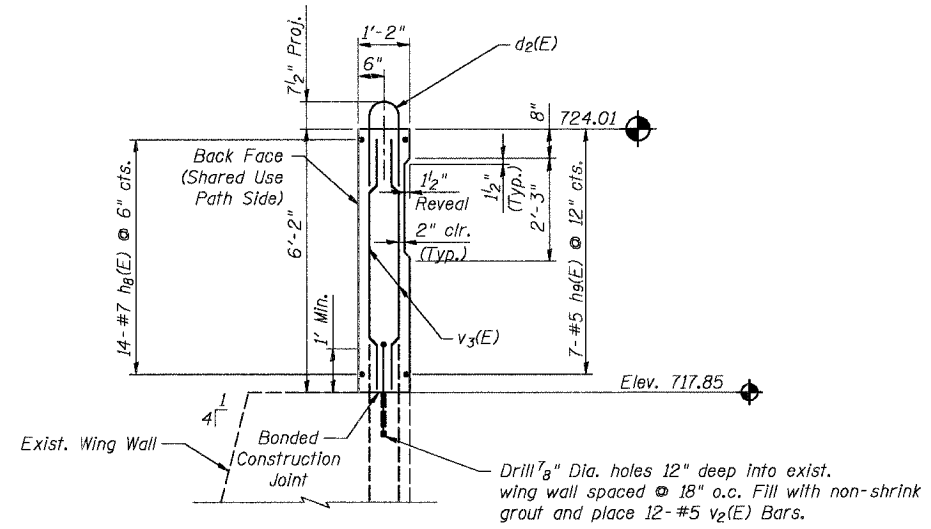
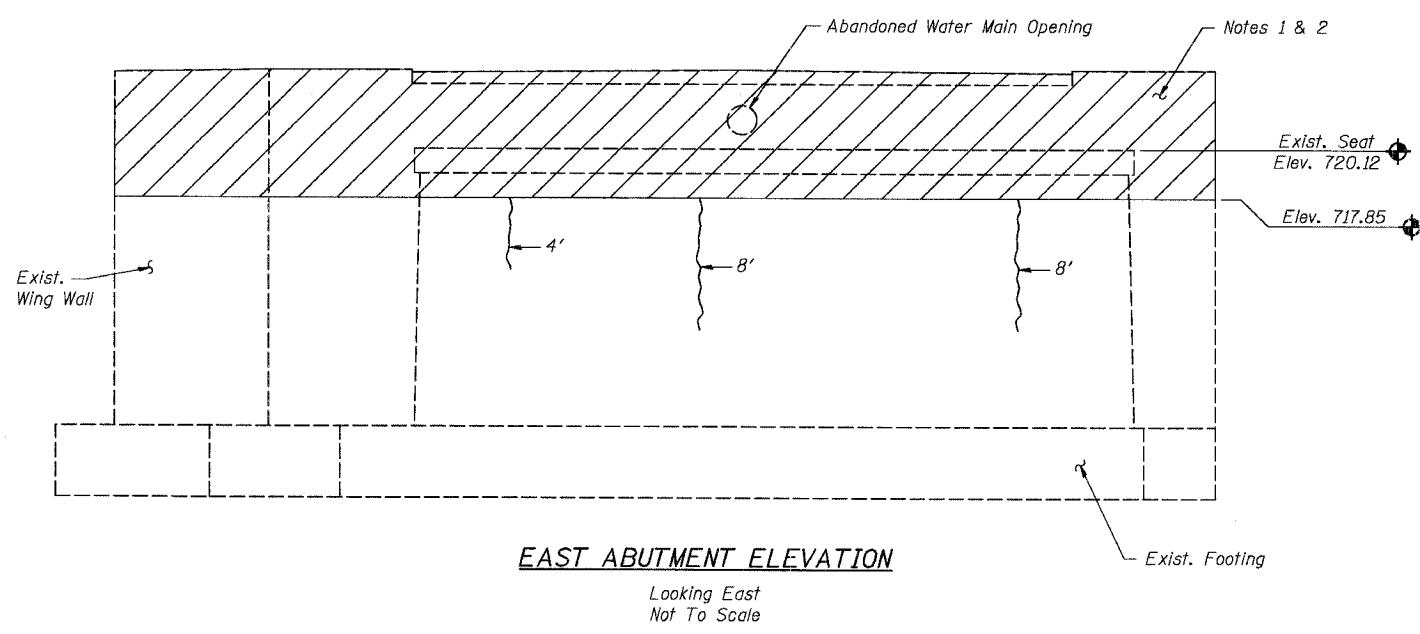
DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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ILLINOIS DEPARTMENT OF TRANSPORTATION
East Abutment Plan and Elevation
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County
DATE 02-25-2005

GENERAL NOTES

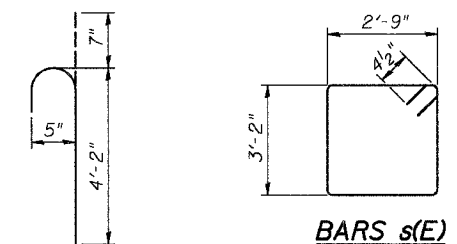
1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Preserve and incorporate 1'-0" length of a minimum of 50% of existing vertical reinforcement in removal area.
3. Space reinforcement in abutment seat to miss anchor bolts.
4. Reinforcement Bar Bending dimensions are out to out.
5. Coordinate placement of $d_2(E)$ Bars with Concrete Bridge Rail, Special details on sheets S-7, S-8, and S-9.
6. Cost for Drilling and Grouting $v_2(E)$ Bars shall be included in Reinforcement Bars, Epoxy Coated.
7. Cost for Reveal shall be included in Concrete Structures.



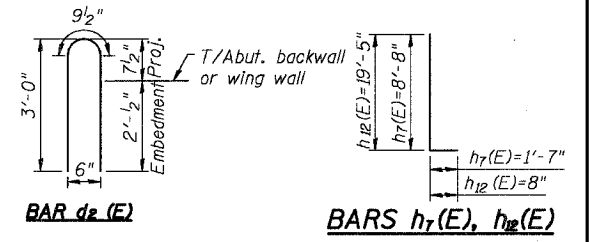
A & B DIMENSIONS

Bar	A	B
$h_3(E)$	3'-3"	2'-4"
$u(E)$	2'-7"	2'-2"
$v(E)$	8"	3'-9"

BARS $h_3(E)$, $u(E)$, $v(E)$



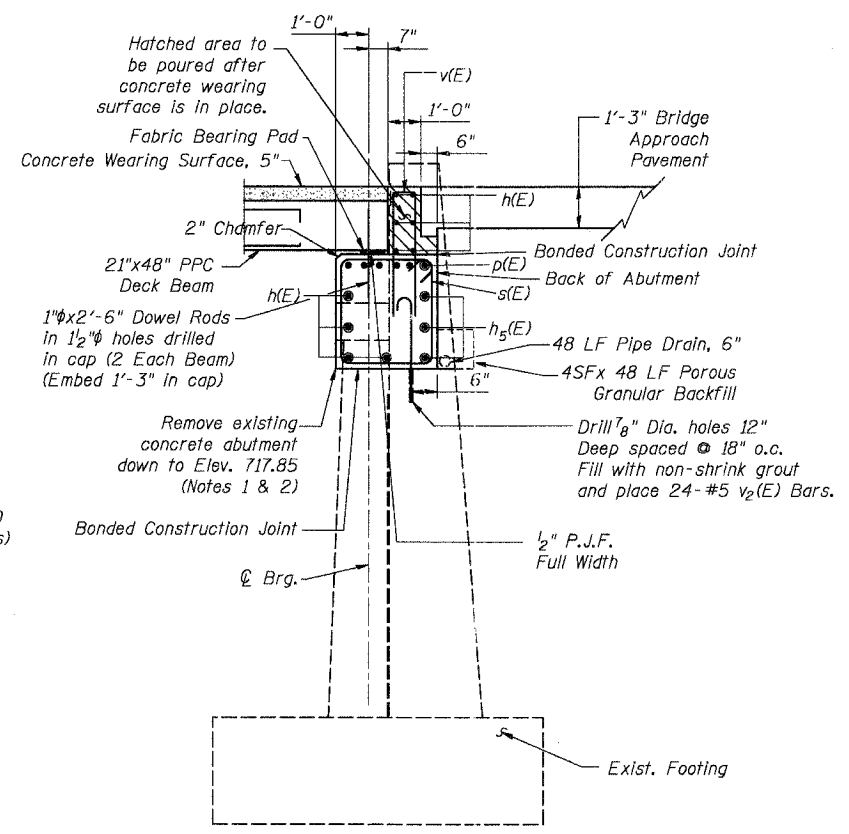
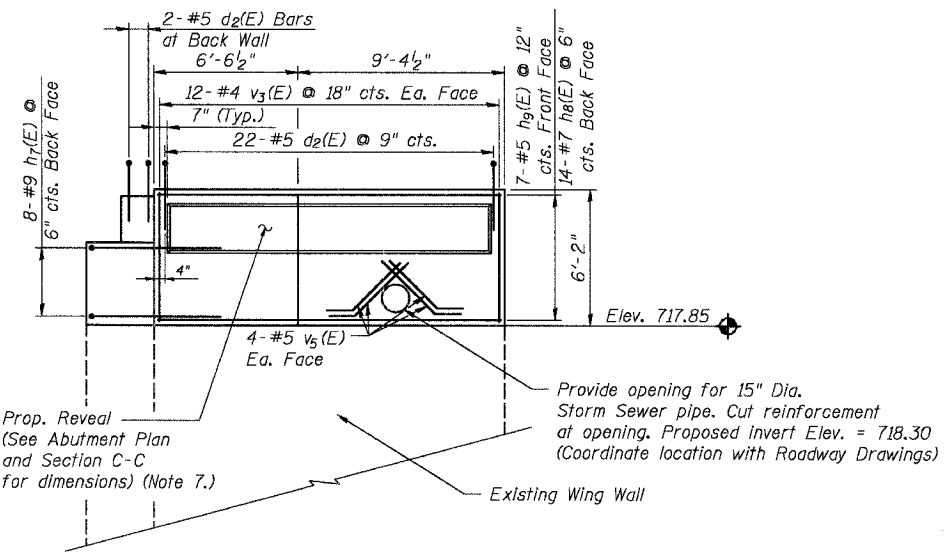
BAR $v_2(E)$



LEGEND

Indicates Concrete Removal Area

Indicates Epoxy Crack Sealing



BILL OF MATERIAL

Bar	No.	Size	Length (FT)	Shape
$d_2(E)$	35	# 5	6'-3"	□
$h(E)$	20	# 5	25'-0"	□
$h_3(E)$	6	# 7	25'-8"	□
$h_4(E)$	14	# 5	6'-6"	□
$h_7(E)$	8	# 9	10'-3"	□
$h_8(E)$	14	# 7	16'-2"	□
$h_9(E)$	7	# 5	15'-8"	□
$h_{10}(E)$	6	# 5	2'-11"	□
$h_{11}(E)$	8	# 4	20'-1"	□
$h_{12}(E)$	4	# 4	7'-11"	□
$p(E)$	12	# 7	25'-8"	□
$s(E)$	49	# 5	12'-7"	□
$u(E)$	8	# 5	6'-11"	□
$v(E)$	49	# 4	8'-2"	□
$v_2(E)$	36	# 4	4'-9"	□
$v_3(E)$	30	# 4	5'-10"	□
$v_4(E)$	8	# 5	4'-7"	□
Reinforcement Bars, Epoxy Coated		Pound	4,030	
Porous Granular Backfill		Cu. Yd.	41	
Concrete Removal		Cu. Yd.	28.4	
Concrete Structures		Cu. Yd.	30.6	
Structure Excavation		Cu. Yd.	41	
Pipe Drain, 6"		Foot	48	
Epoxy Crack Sealing		Foot	20	

Reinforcement Bars designated (E) shall be Epoxy Coated

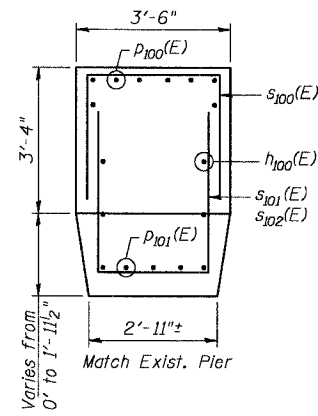
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CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



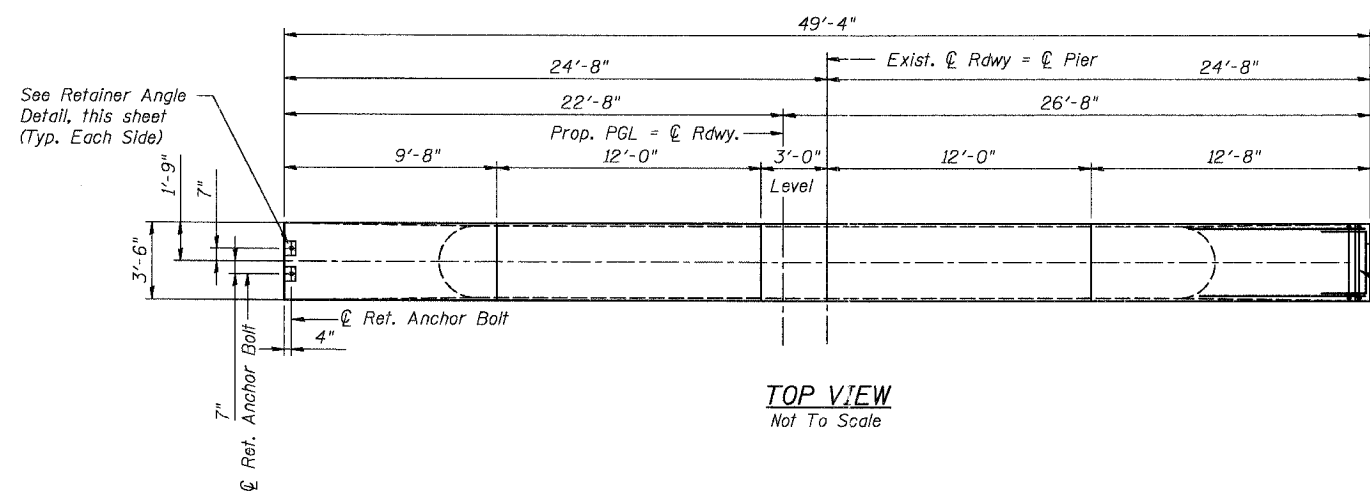
ILLINOIS DEPARTMENT OF TRANSPORTATION

East Abutment Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County

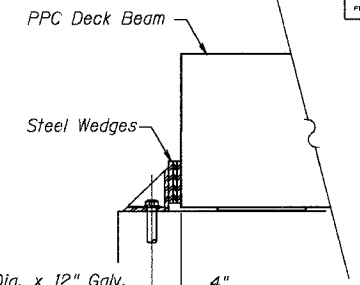
DATE 02-25-2005



SECTION A-A
Not To Scale



TOP VIEW
Not To Scale

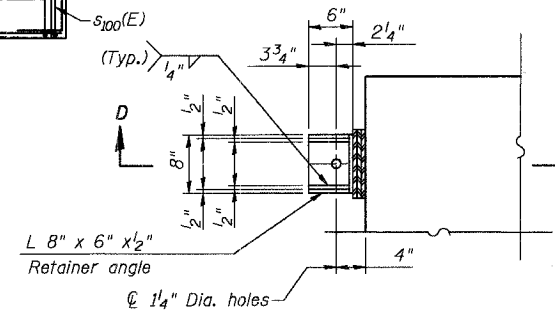


SECTION D-D
Not To Scale

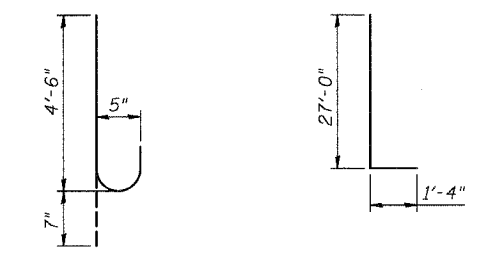
A & B DIMENSIONS

Bar	A	B
s100(E)	3'-2"	3'-2"
s101(E)	2'-7"	3'-2"
s102(E)	2'-7"	3'-8"
u100(E)	3'-0"	2'-2"

BAR s100(E), s101(E), u100(E)

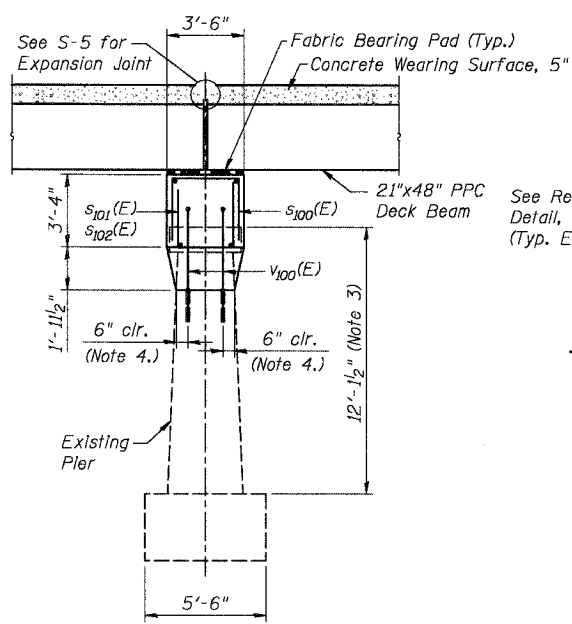


SIDE RETAINER ANGLE DETAIL
Not To Scale

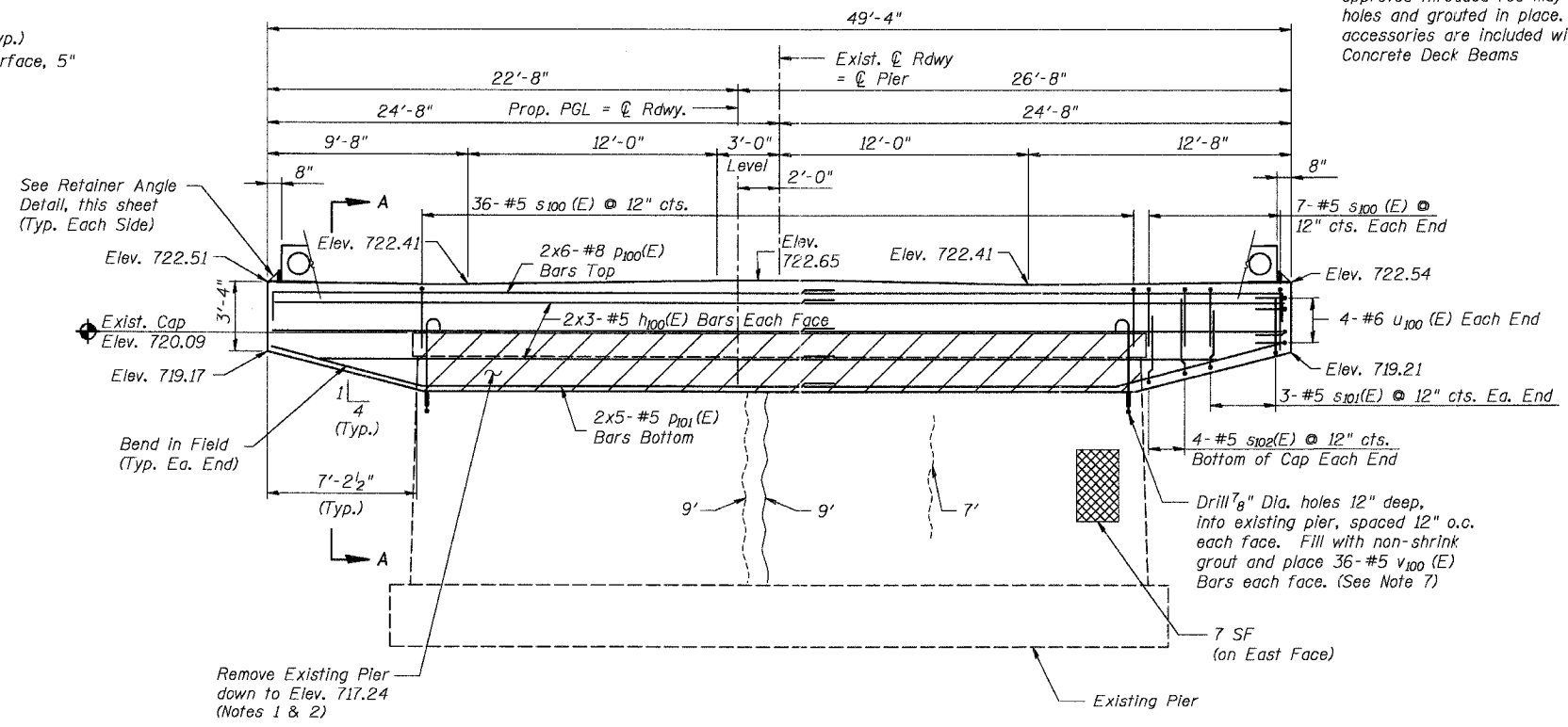


BAR v100(E)

BAR p100(E)



END VIEW
Not To Scale



PIER 1 ELEVATION
West Side Looking East
Not To Scale

LEGEND

	Indicates Epoxy Crack Sealing (Far Face)
	Indicates Epoxy Crack Sealing (Near Face)
	Indicates Concrete Removal Area
	Indicates Formed Concrete Repair < 5"

BILL OF MATERIAL

Bar	No.	Size	Length (FT)	Shape
h100(E)	12	# 5	25'-7"	
p100(E)	12	# 8	29'-0"	
p101(E)	10	# 5	25'-7"	
s100(E)	50	# 5	9'-6"	
s101(E)	6	# 5	8'-11"	
s102(E)	8	# 5	9'-11"	
u100(E)	8	# 5	7'-4"	
v100(E)	72	#5	5'-1"	
Reinforcement Bars, Epoxy Coated			Pound	2,590
Concrete Removal			Cu. Yds.	11
Concrete Structures			Cu. Yds.	30.9
Formed Concrete Repair, <= 5"			Sq. Ft.	7
Epoxy Crack Sealing			Foot	25
Bridge Seat Sealer			Sq. Ft.	173

Reinforcement Bars designated (E) shall be Epoxy Coated

GENERAL NOTES

1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Preserve and incorporate 1'-0" length of a minimum of 50% of existing vertical reinforcement in removal area.
3. Existing Pier Dimensions based on existing design drawings.
4. Maintain 2" clear distance between existing vertical reinforcement and proposed drilled holes for v100(E) bars.
5. Space reinforcement in cap to miss anchor bolts
6. Reinforcement Bar Bending dimensions are out to out.
7. Cost for Drilling and Grouting v100(E) Bars shall be included in Reinforcement Bars, Epoxy Coated.

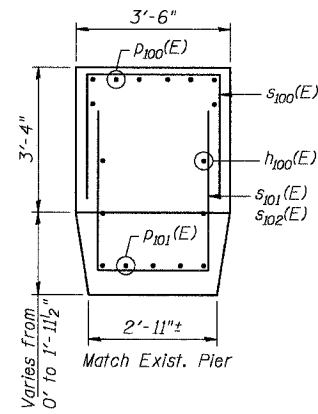
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 CHICAGO, ILL. 60606
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 FAX: 312.467.1001
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REVISIONS

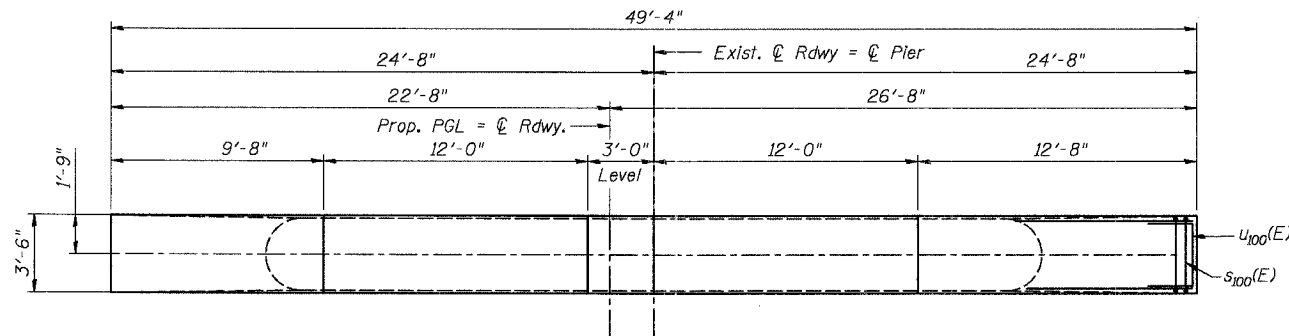
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 Pier 1 Details
 Main Street Over Fox River
 "Public Waters"
 Village of Carpentersville
 Section 02-00059-00-BR
 SN. 045-6150
 Kane County
 DATE 02-25-2005

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



SECTION A-A
Not To Scale

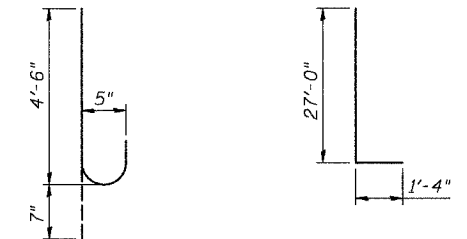


TOP VIEW
Not To Scale

A & B DIMENSIONS

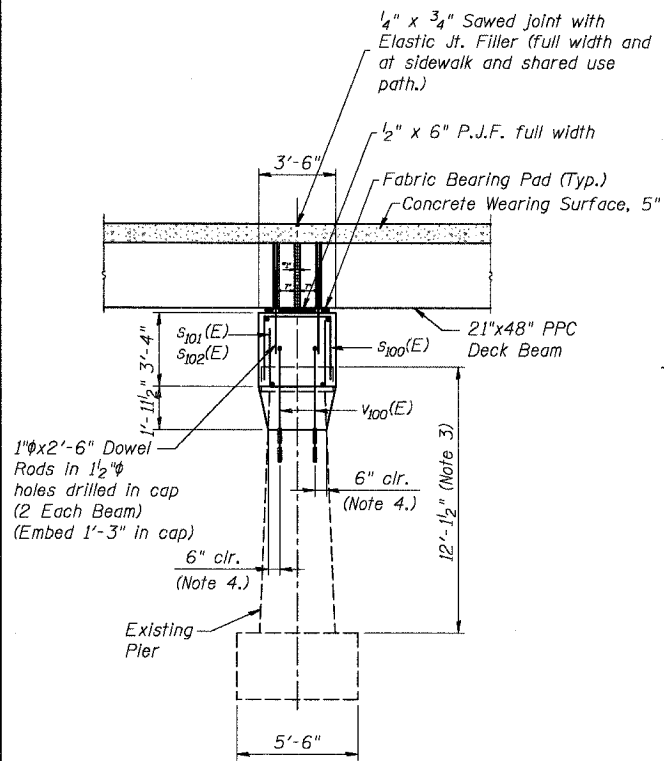
Bar	A	B
s100(E)	3'-2"	3'-2"
s101(E)	2'-7"	3'-2"
s102(E)	2'-7"	3'-8"
u100(E)	3'-0"	2'-2"

BAR s100(E), s101(E), u100(E)



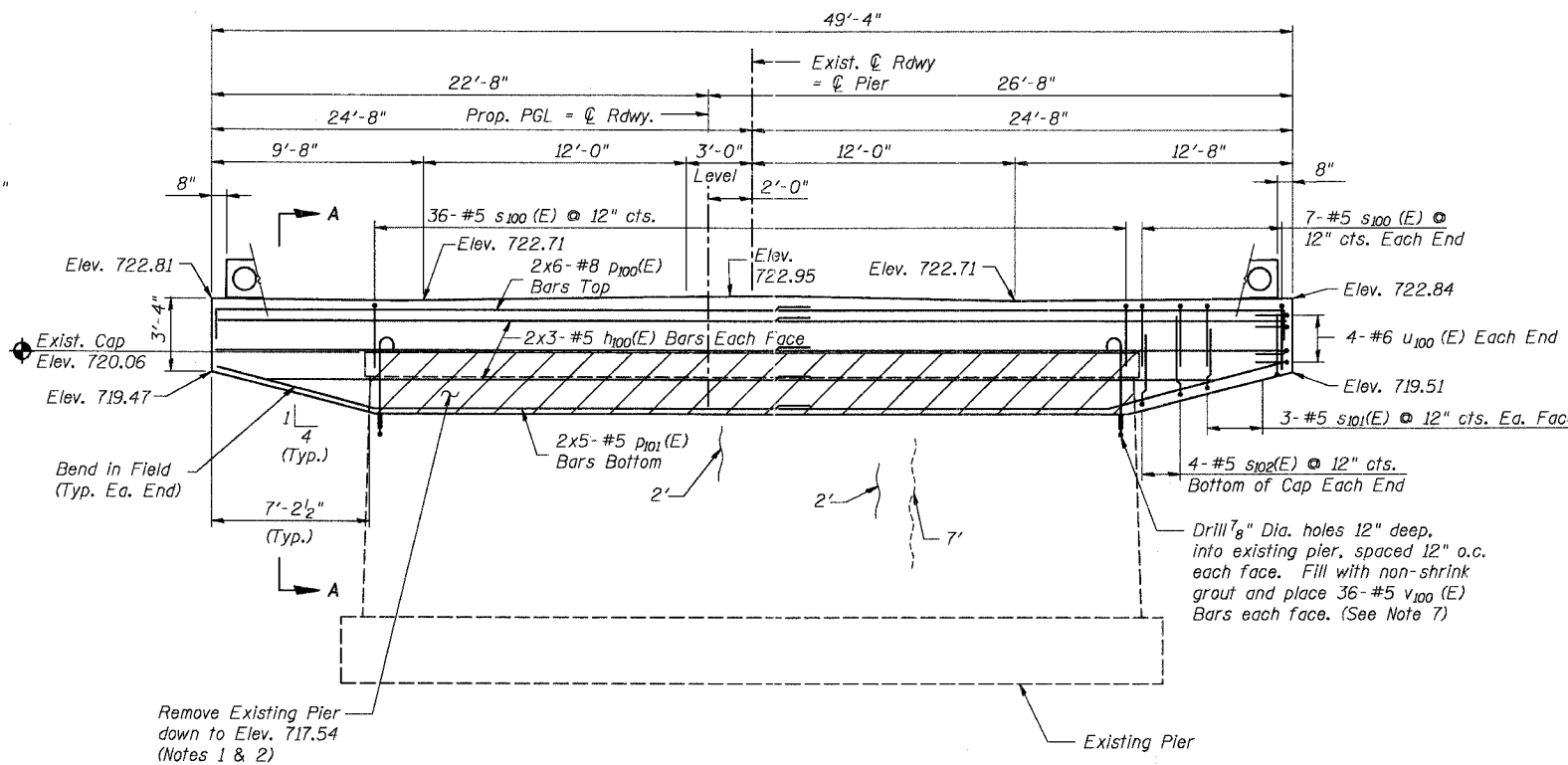
BAR v100(E)

BAR p100(E)



END VIEW
Not To Scale

* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



PIER 2 ELEVATION
West Side Looking East
Not To Scale

BILL OF MATERIAL

Bar	No.	Size	Length (FT)	Shape
h100(E)	12	# 5	25'-7"	—
p100(E)	12	# 8	29'-0"	—
p101(E)	10	# 5	25'-7"	—
s100(E)	50	# 5	9'-6"	□
s101(E)	6	# 5	8'-11"	□
s102(E)	8	# 5	9'-11"	□
u100(E)	8	# 5	7'-4"	□
v100(E)	72	#5	5'-1"	U
Reinforcement Bars, Epoxy Coated			Pound	2,590
Concrete Removal			Cu. Yds.	9.7
Concrete Structures			Cu. Yds.	30.9
Epoxy Crack Sealing			Foot	11

Reinforcement Bars designated (E) shall be Epoxy Coated

GENERAL NOTES

- Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
- Preserve and incorporate 1'-0" length of a minimum of 50% of existing vertical reinforcement in removal area.
- Existing Pier Dimensions based on existing design drawings.
- Maintain 2" clear distance between existing vertical reinforcement and proposed drilled holes for v100(E) bars.
- Space reinforcement in cap to miss anchor bolts
- Reinforcement Bar Bending dimensions are out to out.
- Cost for Drilling and Grouting v100(E) Bars shall be included in Reinforcement Bars, Epoxy Coated.

LEGEND

	Indicates Epoxy Crack Sealing (Far Face)
	Indicates Epoxy Crack Sealing (Near Face)
	Indicates Concrete Removal Area
	Indicates Formed Concrete Repair ≤ 5"

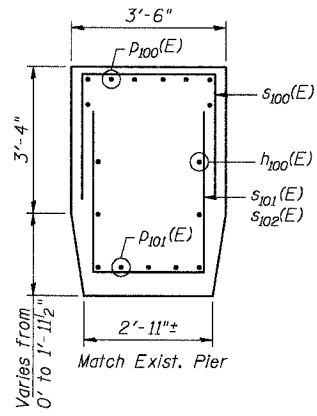
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CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



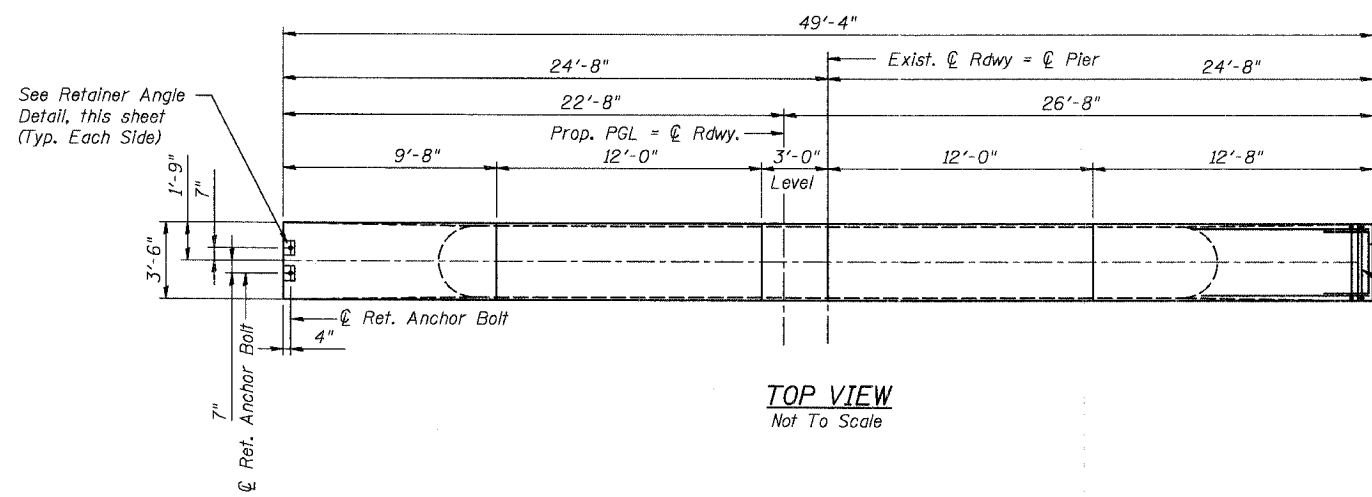
ILLINOIS DEPARTMENT OF TRANSPORTATION

Pier 2 Details
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

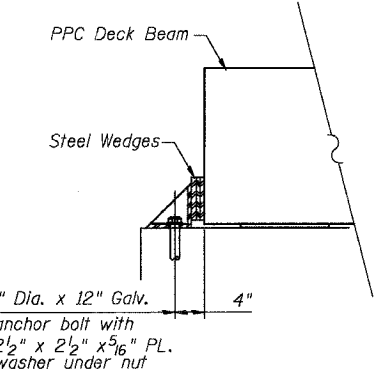
DATE 02-25-2005



SECTION A-A
Not To Scale



TOP VIEW
Not To Scale

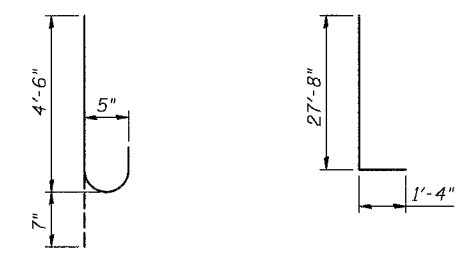


SECTION D-D
Not To Scale

A & B DIMENSIONS

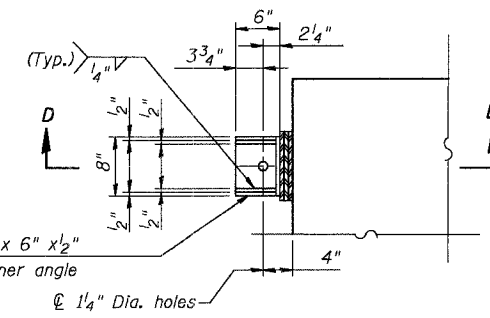
Bar	A	B
S100(E)	3'-2"	3'-2"
S101(E)	2'-7"	3'-2"
S102(E)	2'-7"	3'-8"
U100(E)	3'-0"	2'-2"

BAR S100(E), S101(E), U100(E)



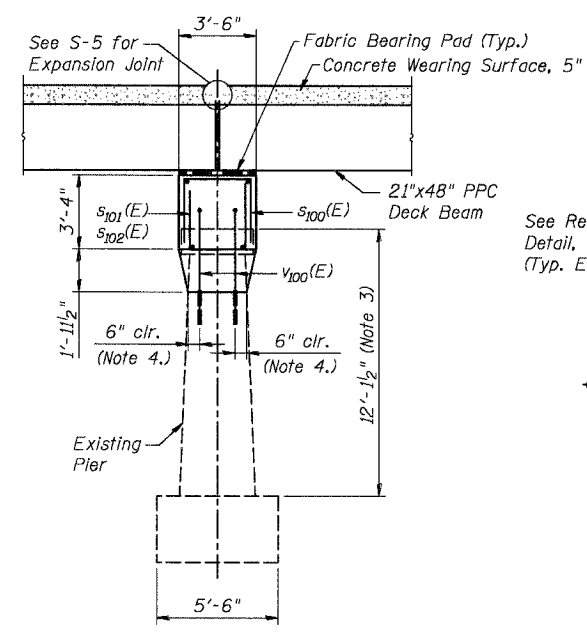
BAR V100(E)

BAR D100(E)

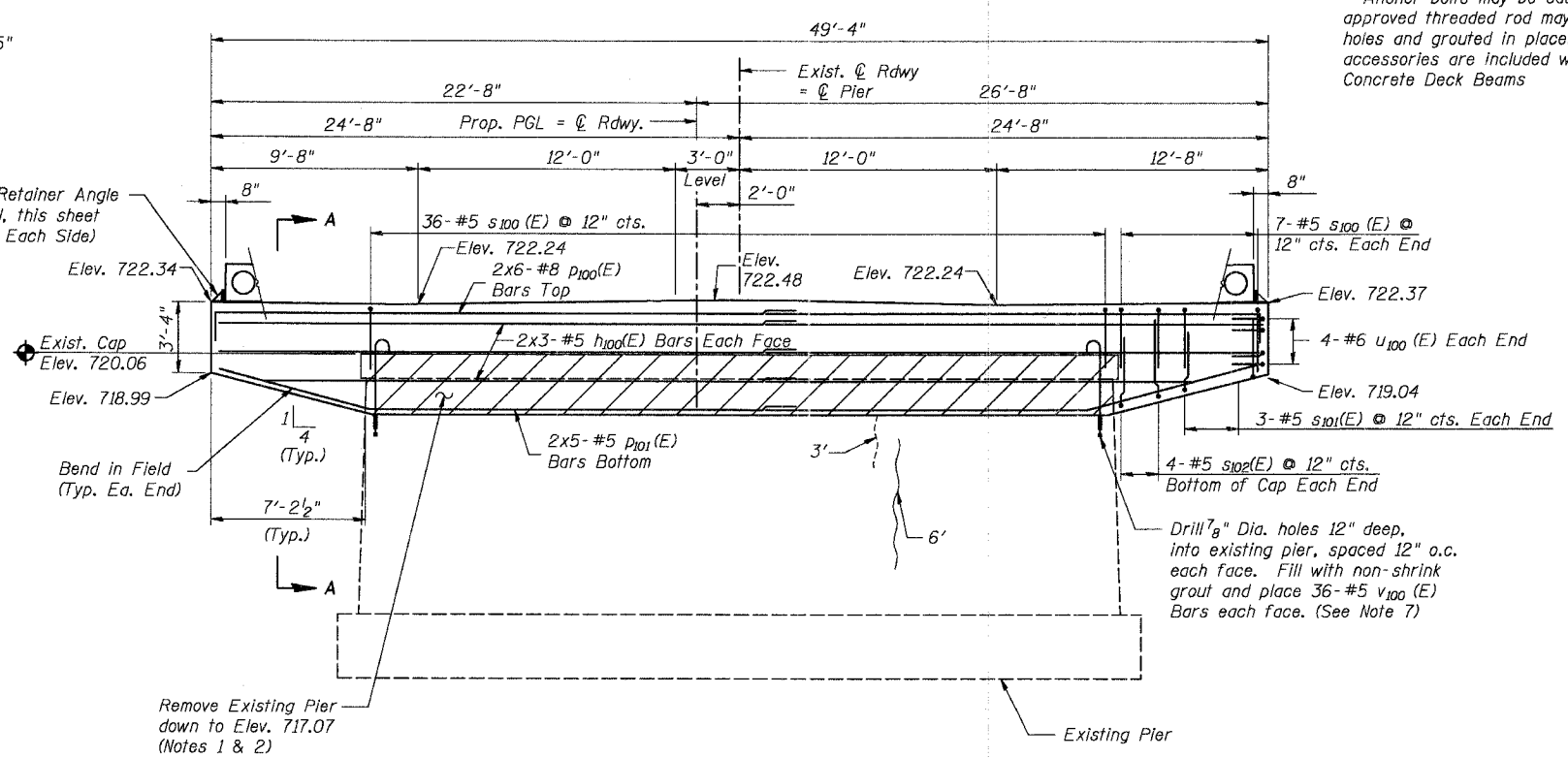


SIDE RETAINER ANGLE DETAIL
Not To Scale

* Anchor bolts may be cast into the masonry or approved threaded rod may be placed in drilled holes and grouted in place. Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams



END VIEW
Not To Scale



PIER 3 ELEVATION
West Side Looking East
Not To Scale

BILL OF MATERIAL

Bar	No.	Size	Length (FT)	Shape
h100(E)	12	# 5	25'-7"	—
P100(E)	12	# 8	29'-0"	—
P101(E)	10	# 5	25'-7"	—
S100(E)	50	# 5	9'-6"	□
S101(E)	6	# 5	8'-11"	□
S102(E)	8	# 5	9'-11"	□
U100(E)	8	# 5	7'-4"	□
V100(E)	72	#5	5'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	2,590	
Concrete Removal		Cu. Yds.	11.6	
Concrete Structures		Cu. Yds.	30.9	
Epoxy Crack Sealing		Foot	9	
Bridge Seat Sealer		Sq. Ft.	173	

Reinforcement Bars designated (E) shall be Epoxy Coated

GENERAL NOTES

1. Removal of existing concrete shall conform to Article 501.03 of the Standard Specifications.
2. Preserve and incorporate 1'-0" length of a minimum of 50% of existing vertical reinforcement in removal area.
3. Existing Pier Dimensions based on existing design drawings.
4. Maintain 2" clear distance between existing vertical reinforcement and proposed drilled holes for V100(E) bars.
5. Space reinforcement in cap to miss anchor bolts
6. Reinforcement Bar Bending dimensions are out to out.
7. Cost for Drilling and Grouting V100(E) Bars shall be included in Reinforcement Bars, Epoxy Coated.

LEGEND

	Indicates Epoxy Crack Sealing (Far Face)
	Indicates Epoxy Crack Sealing (Near Face)
	Indicates Concrete Removal Area
	Indicates Formed Concrete Repair <= 5"

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.	
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS	
2111 W. WASHINGTON ST. CHICAGO, ILL. 60612	
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

Pier 3 Details
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

DATE 02-25-2005

BILL OF MATERIALS

PAY CODE	ITEM	UNIT	QUAN
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
80700140	GROUND ROD, 5/8" DIA. x 10 FT	EACH	62
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
81001000	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	140
81000700	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	82
81018700	CONDUIT PUSHED, 3" DIA. GALVANIZED STEEL	FOOT	322
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3,500
82102100	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 100 WATT	EACH	20
82102400	DECORATIVE LANTERN STYLE LUMINAIRE, SODIUM VAPOR, TENON MOUNT, 100 WATT	EACH	47
82500505	LIGHTING CONTROLLER, SPECIAL	EACH	1
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	342
84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	6
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
	UNIT DUCT WITH 5-1/2" NO.6 AND 1/2" NO.6 GROUND 600 V (XHHW-2), 1/4" DIA POLYETHYLENE	FOOT	4,500
81702180	ELECTRIC CABLE IN CONDUIT 600 V(XLP TYPE USE) 1/2" NO. 3/0	FOOT	150
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 6 1/2" NO. 6	FOOT	540
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 5 1/2" NO. 10	FOOT	660
	DECORATIVE, LIGHT POLE, ALUMINUM, 16 FT MOUNTING HEIGHT, FLUTED SHAFT AND 2 PIECE BOLT ON DECORATIVE BASE	EACH	37
	DECORATIVE, LIGHT POLE, ALUMINUM, 10 FT FLUTED SHAFT AND 2 PIECE BOLT ON DECORATIVE BASE	EACH	10
	LIGHT POLE, ALUMINUM, 25 FT MOUNTING HEIGHT, 6 FT MAST ARM	EACH	20

THE FOLLOWING LISTED ITEMS ARE EMBEDDED IN BRIDGE STRUCTURE:

- a. ANCHOR BOLTS IN CONCRETE BRIDGE RAIL FOR LIGHTING UNIT FOUNDATION.
- b. JUNCTION BOX WITH COVER STAINLESS STEEL, ELECTRIC PANEL WITH DISTRIBUTION BLOCKS AND FUSE.
- c. 1 1/2" DIA PVC CONDUIT (SCHEDULE 40)
- d. 1" DIA PVC CONDUIT (SCHEDULE 40)

IN A BRIDGE STRUCTURAL JOINTS, EXPANSION FITTINGS SHALL BE INSTALLED FOR ALL ELECTRICAL RACEWAY RUNS.

COST OF FURNISHING AND INSTALLATION THESE MATERIAL SHALL BE INCLUDED WITH BRIDGE STRUCTURE MATERIALS AND WILL NOT BE PAID SEPERATELY.

GENERAL NOTES

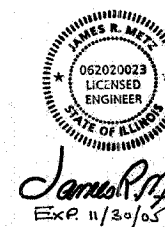
- WHERE SEPARATE CIRCUIT RUNS ARE TO BE INSTALLED PARALLEL WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED AND SHALL BE MEASURED ONLY ONCE FOR PAYMENT, AS TRENCH AND BACKFILL FOR ELECTRICAL WORK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE EXACT LOCATIONS OF ALL OTHER ROADWAY LIGHTING ITEMS, INCLUDING THE LIGHTING CONTROLLER(S), SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
- THE RESPONSIBILITY FOR COORDINATING FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL BE REMAIN WITH THE CONTRACTOR.
- THE CONTRACTOR SHALL SUBMIT FOR THE RESIDENT ENGINEER APPROVAL, WITHIN 30 DAYS AFTER CONTRACT EXECUTION, EIGHT (8) COPIES OF APPROVABLE MANUFACTURER'S PRODUCT DATA AND DETAIL SHOP DRAWINGS TO THE ATTENTION OF SMITH ENGINEERING, 4500 PRIME PARKWAY McHENRY, IL 60050, PH. 815-385-1778 THE FOLLOWING:
 - a. TRENCH: ELECTRICAL WARNING TAPE
 - b. FOUNDATION: CLASS "SI" CONCRETE, REINFORCEMENT, RACEWAYS. ANCHOR BOLTS WITH NUTS & WASHERS.
 - c. CONDUIT: CONDUIT AND CONDUIT FITTINGS.
 - d. GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
 - e. UNIT DUCT/CABLES: UNIT DUCT, CABLES
 - f. ELECTRIC CABLES: ELECTRIC CABLES
 - g. LIGHT POLE/ARM: POLE DETAILS, SHOP DRAWING, & WIND LOAD CALCULATIONS, POLE WIRE
 - h. LUMINAIRE: ROADWAY LUMINAIRE WITH BALLAST ASSEMBLY.
 - i. ELECTRICAL ITEMS: ELECTRIC TAPES, QUICK DISCONNECT WITH FUSE, LAMPS.
 - j. LIGHTING CONTROLLER: CIRCUITRY DETAIL, CATALOG ON MATERIALS, PAINT.
 - k. JUNCTION BOX: CATALOG CUTS.
- UNIT DUCT SHALL BE 1 1/4" DIA. DUCT WITH 5-1/2" NO.6 (BLACK-RED, BLUE-ORANGE, WHITE) 1/2" NO.6 (GREEN) GROUND SOLID COLOR CODED INSULATED CONDUCTOR.
- THE CONTRACTOR SHALL SUBMIT FOUR (4) SET FULL SIZED COMPLETE, NEAT AND ACCURATE "RECORD DRAWINGS" PLAN SETS TO THE ENGINEER FOR REVIEW AND COMMENT, AS SPECIFIED. THE "RECORD DRAWINGS" SHALL BE UPDATED ON REGULAR BASIS AND DEPICT ALL ROADWAY LIGHTING MATERIAL INSTALLATIONS WITH ANY CHANGES INDICATED IN RED. "RECORD DRAWINGS" SHALL BE SUBMITTED AT LEAST 7 DAYS BEFORE SCHEDULING A FINAL INSPECTION.
- THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL GIVE IN WRITING TO THE ENGINEER FOR REVIEW, CONSTRUCTION STAGING FOR THE PROPOSED ROADWAY LIGHTING WORK, AND THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER.
- THE LIGHT POLE SETBACK SHALL BE 6' FROM THE BACK OF CURB TO THE FACE OF FOUNDATION.
- RESTORATION OF PARKWAY AND PROJECT SITE SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES.
- THE PROPOSED TRENCH SHALL BE 36 INCH BELOW FINISHED GRADE
- BALLAST LOSSES SHALL NOT EXCEED 37% FOR A 100 WATT HPS, 55V LAMP LUMINAIRE.

SYMBOLS

- LIGHT POLE, ALUMINUM, 25 FT MOUNTING HEIGHT, 6 FT MAST ARM, 1 1/2" DIA BOLT CIRCLE, LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 100 WATT CLEAR LAMP, 240 VOLT BALLAST, MEGNETIC REGULATOR
- DECORATIVE, LIGHT POLE, ALUMINUM, 16FT MOUNTING HEIGHT, 12 1/2" DIA BOLT CIRCLE, 2 PIECE BOLT ON DECORATIVE CAST ALUMINUM BASE, WITH BANNER ARMS AND FESTOON GFCI OUTLET, DECORATIVE LANTERN STYLE LUMINAIRE TENON MOUNT, 100 WATT CLEAR LAMP, 240 VOLT BALLAST CWA.
- DECORATIVE LIGHT POLE, ALUMINUM, MOUNTED ON BRIDGE CONCRETE RAIL, 16 FT MOUNTING HEIGHT, 6 3/4" DIA BOLT CIRCLE, 2 PIECE BOLT ON DECORATIVE CAST ALUMINUM BASE, WITH BANNER ARMS AND FESTOON GFCI OUTLET, DECORATIVE LANTERN STYLE LUMINAIRE - TENON MOUNT, 100 WATT CLEAR LAMP, 240 VOLT BALLAST CWA
- STA 19+42 — STATION NUMBER (TYP)
- A13-F17 — NUMBER OF LOAD ON CIRCUIT BREAKER
- FESTOON CIRCUIT BREAKER DESIGNATION
- POLE NUMBER (TYP)
- LIGHTING CIRCUIT BREAKER DESIGNATION
- REM EXISTING LIGHTING POLE TO BE REMOVED, FROM BRIDGE RAIL
- UTILITY SERVICE POLE, MOUNTED TRANSFORMER
- REM EXISTING LIGHTING CONTROLLER, TO BE REMOVED
- GROUND ROD, 5/8" DIA. x 10 FT
- T/P CONDUIT IN TRENCH (T) CONDUIT, PUSHED (P) RIGID GALVANIZED STEEL (RGSC) CONDUIT DIA. x LENGTH
- ELECTRIC CABLE IN UNIT DUCT, NUMBER OF CONDUCTORS AND DIAMETER OF CONDUIT AS SHOWN IN DETAILS
- UNIT DUCT WITH 5-1/2" NO. 6 AND 1-1/2" NO.6 GROUND, 600 V (XHHW-2), 1/4" POLYETHYLENE
- LIGHTING CONTROLLER, SPECIAL
- JB JUNCTION BOX STAINLESS STEEL EMBEDDED IN STRUCTURE 18" L x 18" H x 6" D
- CONDUITS EMBEDDED IN STRUCTURE

NOTE:

- THE MATERIALS AND WORK FOR THIS PROJECT SHALL CONFORM TO THE LATEST APPLICABLE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, ISSUED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. SPECIAL PROVISIONS CHECK LIST IS ATTACHED WITH THIS PROJECT.



James R. Metz
Exp. 11/30/05

PROJECT DRAWINGS *E-1 TO *E-12
ARE PREPARED BY SUNJOY INC.

REVISION 02-26-05

Sunjoy Inc.
Area Lighting

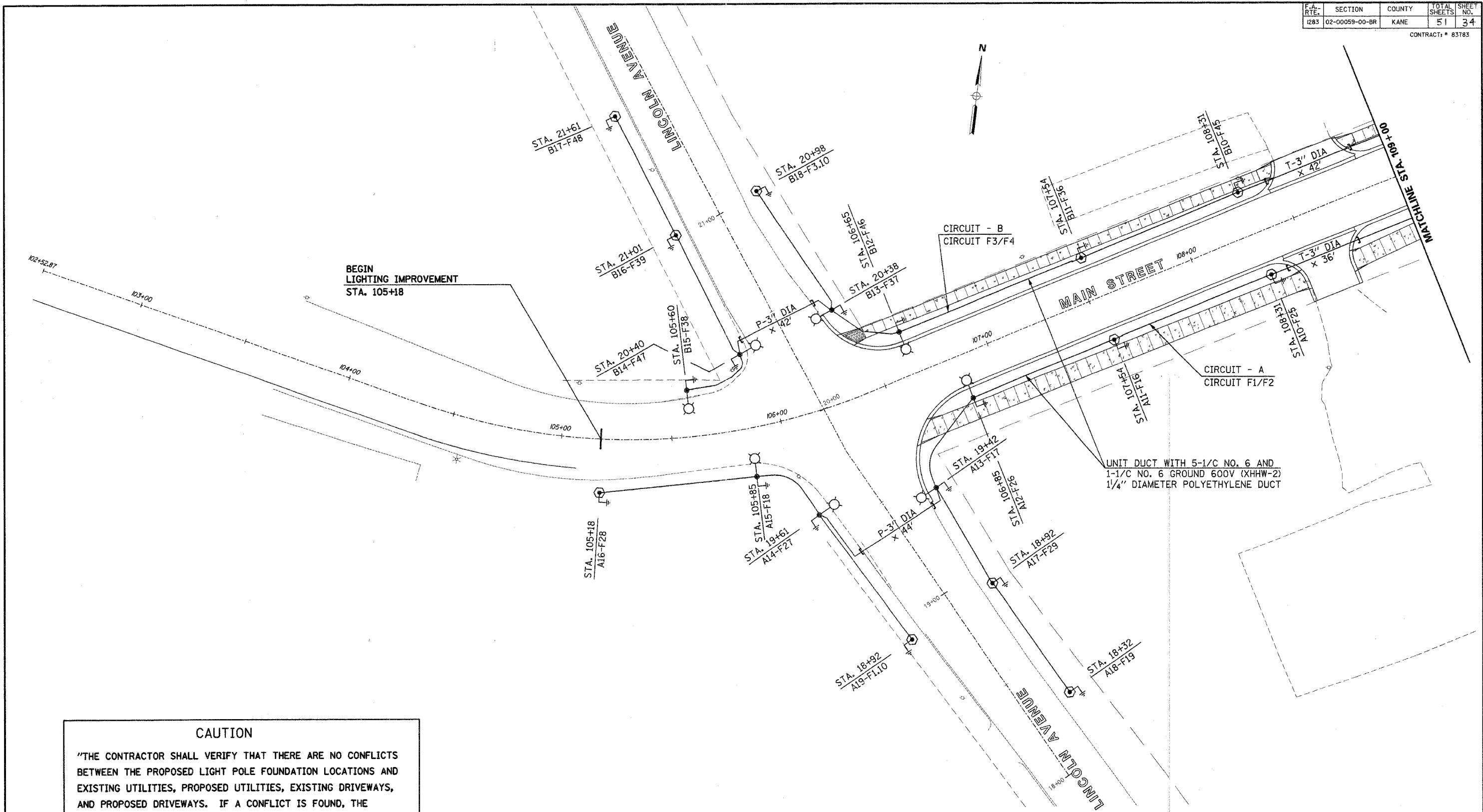
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

**BILL OF MATERIALS, SYMBOLS
& GENERAL NOTES**

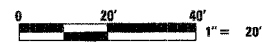
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CHECKED BY: JS



CAUTION

"THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."



REVISION 02-26-05

Sunjoy Inc.
Area Lighting
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

PROPOSED LIGHTING IMPROVEMENT
STA. 105+18 TO STA. 109+00

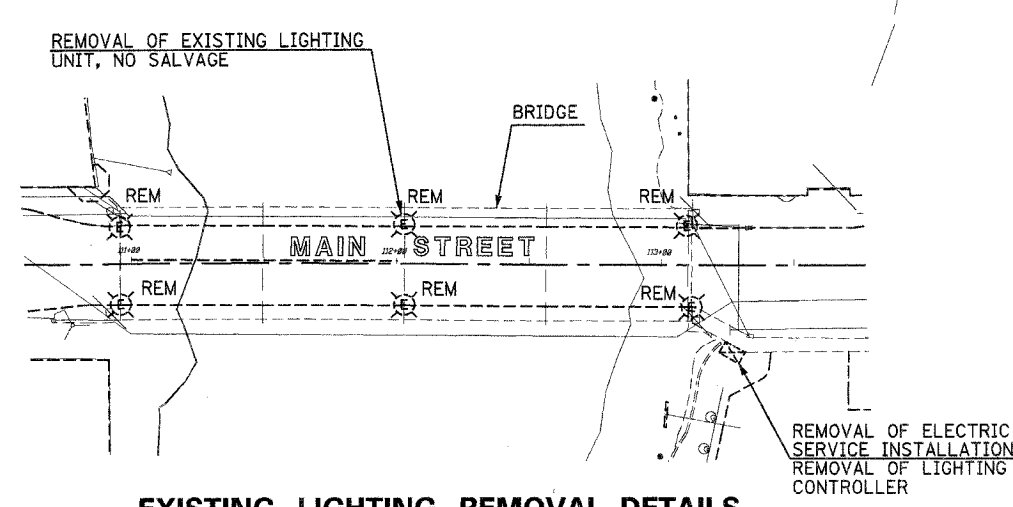
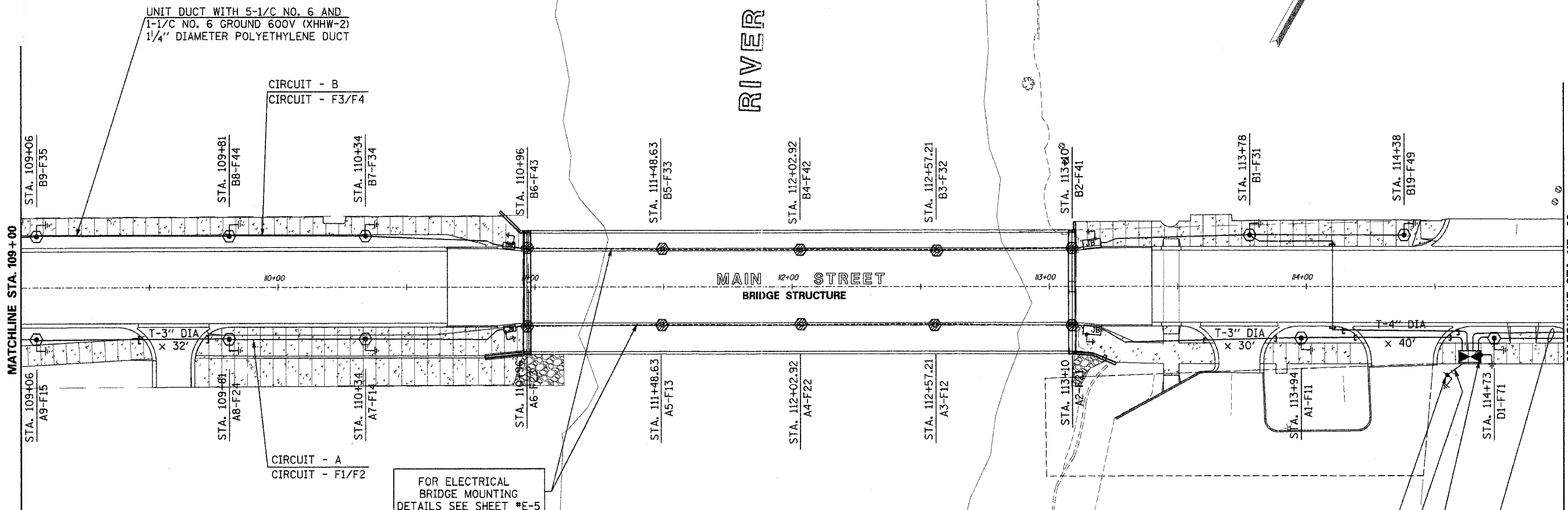
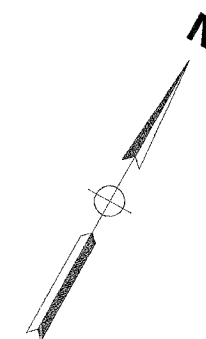
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DATE: 02-05-05

DRAWN BY: HMQ
CHECKED BY: JS

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NOTE:

PROVIDE 8'-0" CLEARANCE BETWEEN THE FACE OF THE RETAINING WALL AND CENTER OF THE LIGHT POLE FOUNDATIONS AT STA.109+81 RT AND STA. 110+34 RT ONLY.



FOR ELECTRICAL BRIDGE MOUNTING DETAILS SEE SHEET #E-5

CAUTION

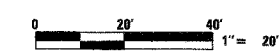
"THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."

UTILITY SERVICE, POLE MOUNTED
TRANSFORMER 120/240 VOLT,
1 PHASE, 3 WIRE - 50 KVA

ELECTRIC CABLE IN CONDUIT
600 (XLP - TYPE USE), 3 1/C NO. 3/0
2 1/2" DIA. CONDUIT IN TRENCH

LIGHTING CONTROLLER, SPECIAL
200 AMPERE - 120/240 VOLT,
1 PHASE, 3 WIRE

2 - UNIT DUCT WITH 5-1/C NO. 6 AND
1-1/C NO. 6 GROUND 600V (XHHW-2)
1 1/4" DIAMETER POLYETHYLENE DUCT

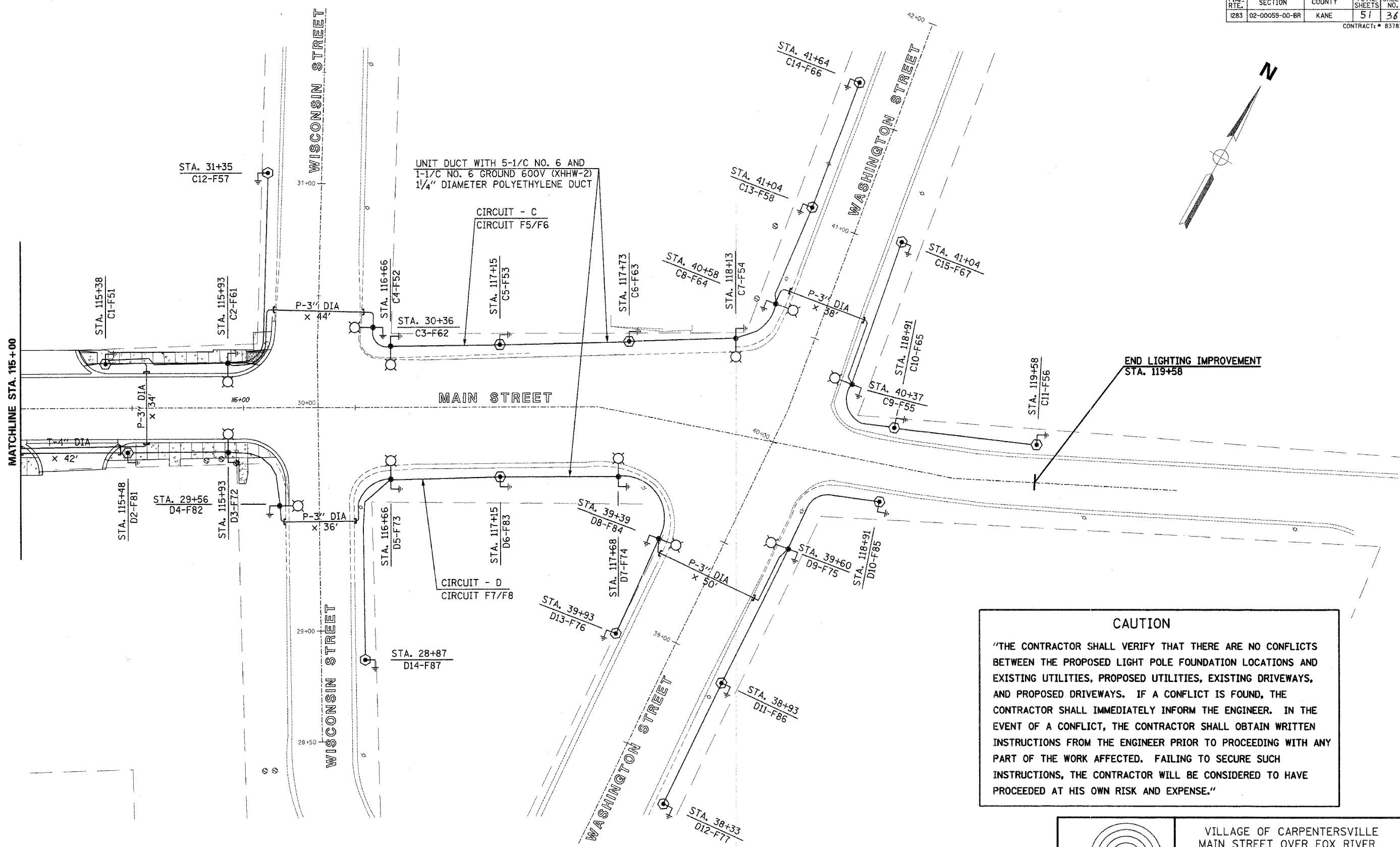
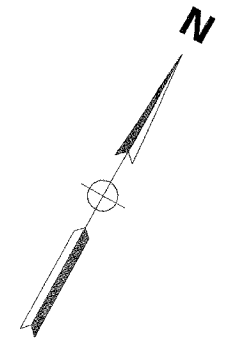


Sunjoy Inc.
Area Lighting
212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER
PROPOSED LIGHTING IMPROVEMENT
STA. 109+00 TO STA. 115+00

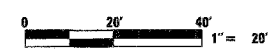
SCALE: 1"=20'
DATE: 02-05-05
DRAWN BY: HMO
CHECKED BY: JS

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CAUTION

"THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, PROPOSED DRIVEWAYS, AND EXISTING DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE."



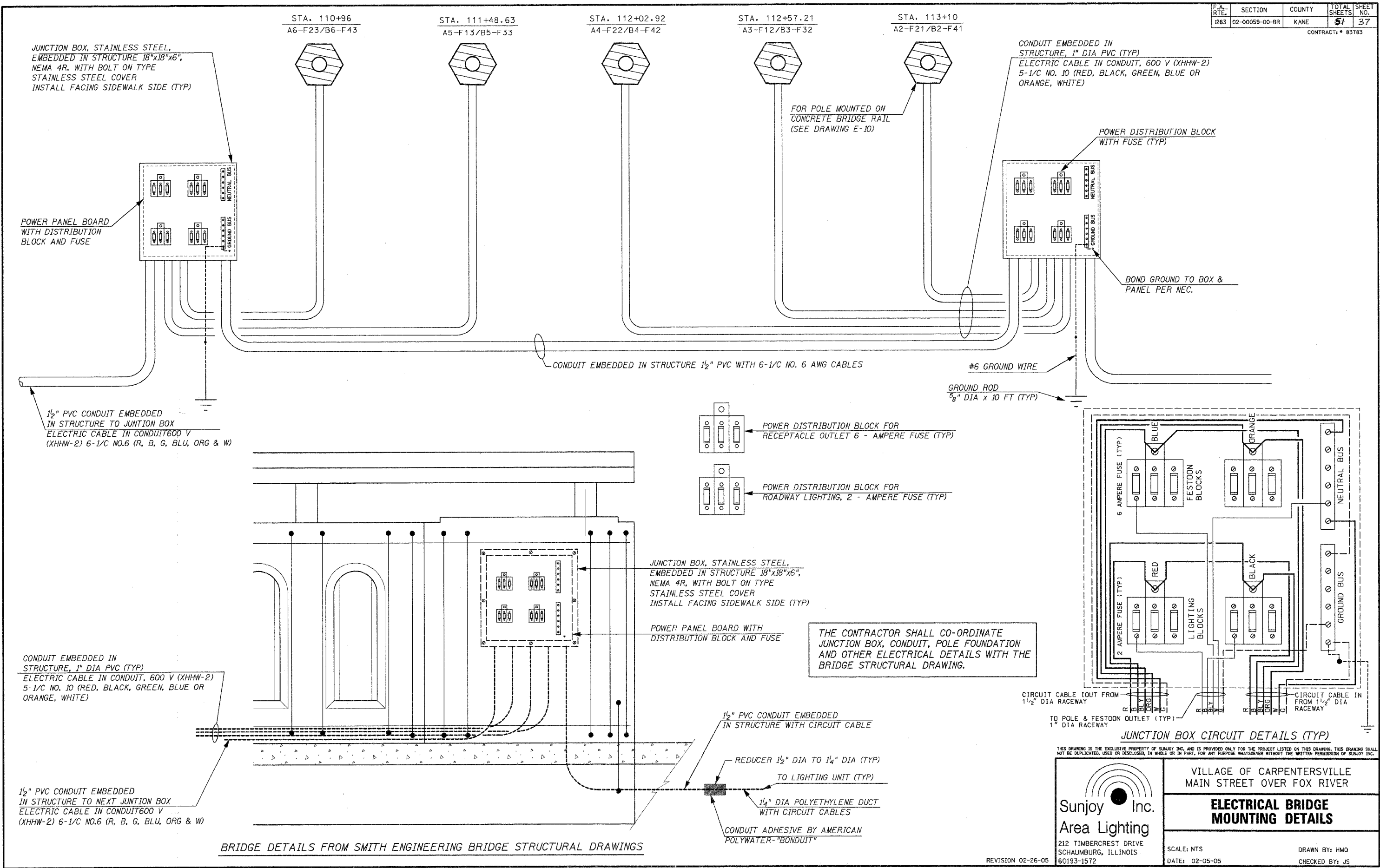
VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER FOX RIVER

PROPOSED LIGHTING IMPROVEMENT
STA. 115+00 TO STA. 119+58

SCALE: 1"=20'
 DATE: 02-05-05

DRAWN BY: HMO
 CHECKED BY: JS

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Sunjoy Inc.
Area Lighting

212 TIMBERCREST DRIVE
SCHAUMBURG, ILLINOIS
60193-1572

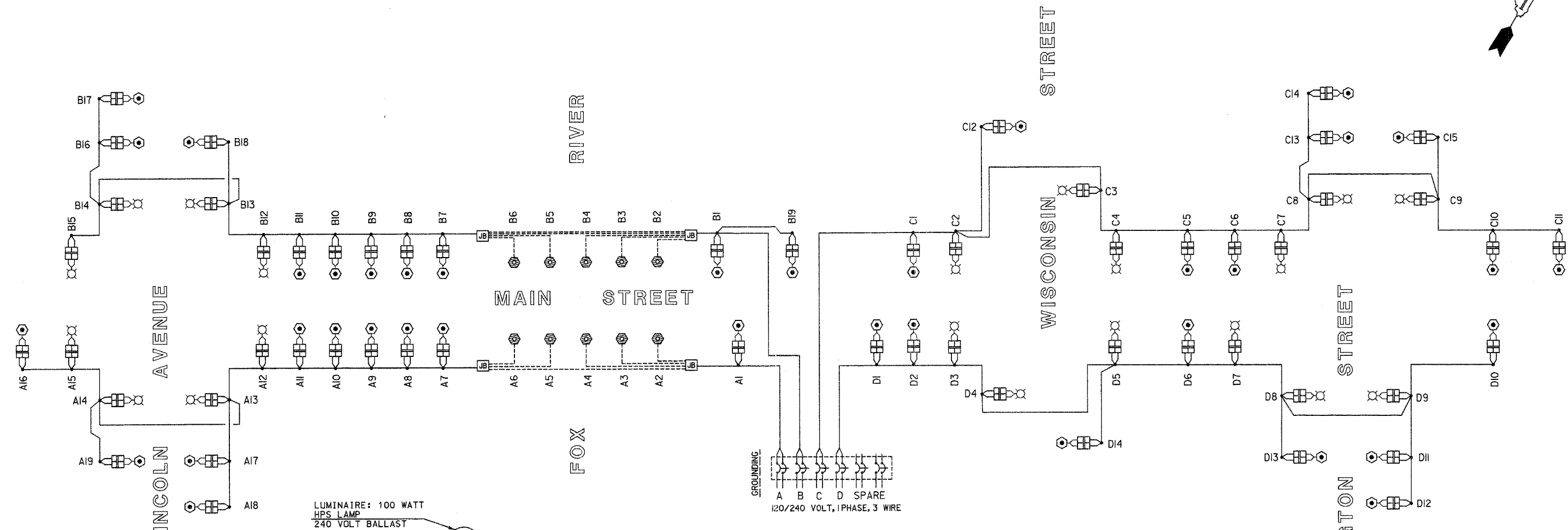
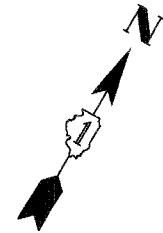
VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

ELECTRICAL BRIDGE MOUNTING DETAILS

SCALE: NTS
DATE: 02-05-05

DRAWN BY: HMQ
CHECKED BY: JS

REVISION 02-26-05



LUMINAIRE: 100 WATT
HPS LAMP
240 VOLT BALLAST

2-POLE QUICK DISCONNECT
WITH 2-2 AMPERE FUSE
LITTLE FUSE LEB-AA-S

20 AMP - RECEPTACLE DUPLEX GFCI
COMMERCIAL GRADE

2-POLE QUICK DISCONNECT
WITH SOLID NEUTRAL SLUG AND
1-6 AMP FUSE
LITTLE FUSE LEB-AA-S

#10 600 V (XHHW-2)
SOLID COLOR CABLE (TYP)

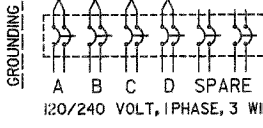
GROUND LUG ON POLE

#6-600 V (XHHW-2)

- RED
- BLACK
- GREEN
- BLUE
- ORANGE
- WHITE

5/8" DIA x 10' GROUND ROD

1 1/4" DIA POLYETHYLENE
DUCT



CIRCUIT LOAD

CIRCUIT	240 VOLT	
	AMPERE	WATTS
A	11.4	2,434
B	11.4	2,434
C	9.0	1,950
D	8.4	1,824
E	—	—
F	—	—
TOTAL	40.2	8,642

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VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

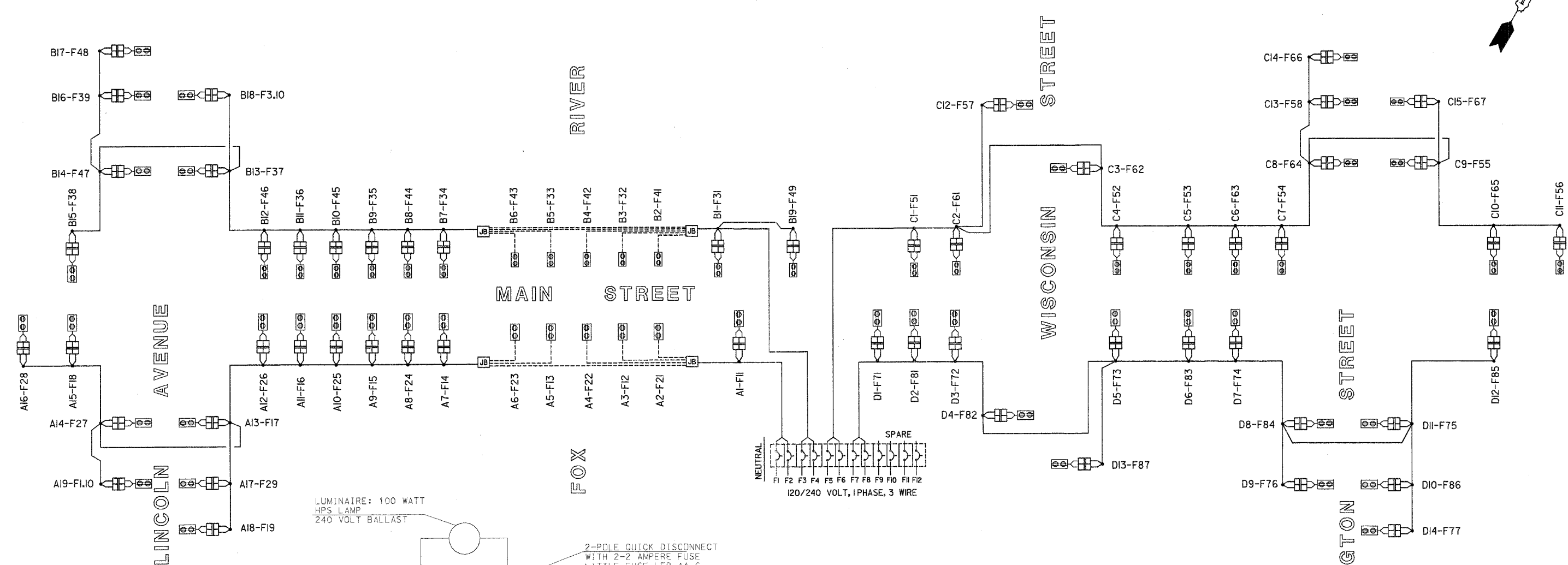
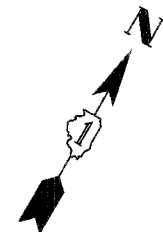
**ONE LINE CIRCUIT DIAGRAM
LIGHTING PANEL**

SCALE: NTS
DATE: 02-05-05

DRAWN BY: HMO
CHECKED BY: JS

REVISION 02-26-05

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LUMINAIRE: 100 WATT
HPS LAMP
240 VOLT BALLAST

2-POLE QUICK DISCONNECT
WITH 2-2 AMPERE FUSE
LITTLE FUSE LEB-AA-S

20 AMP - RECEPTACLE DUPLEX GFCI
COMMERCIAL GRADE

2-POLE QUICK DISCONNECT
WITH SOLID NEUTRAL SLUG AND
1-6 AMP FUSE
LITTLE FUSE LEB-AA-S

#10 600 V (XHHW-2)
SOLID COLOR CABLE (TYP)

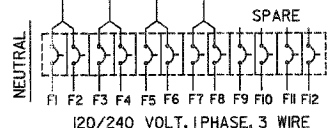
GROUND LUG ON POLE

#6-600 V (XHHW-2)

- RED
- BLACK
- GREEN
- BLUE
- ORANGE
- WHITE

5/8" DIA x 10' GROUND ROD

1 1/4" DIA POLYETHYLENE
DUCT



120/240 VOLT, 1PHASE, 3 WIRE

CIRCUIT LOAD

CIRCUIT	120 VOLT-PHASE BLUE		CIRCUIT	120 VOLT-PHASE ORANGE	
	AMPERE	WATTS		AMPERE	WATTS
F1	30.0	3,600	F2	27.0	3,240
F3	30.0	3,600	F4	27.0	3,240
F5	24.0	2,880	F6	21.0	2,520
F7	21.0	2,520	F8	21.0	2,520
F9	—	—	F10	—	—
F11	—	—	F12	—	—
TOTAL	105.0	12,600	TOTAL	96.0	11,520

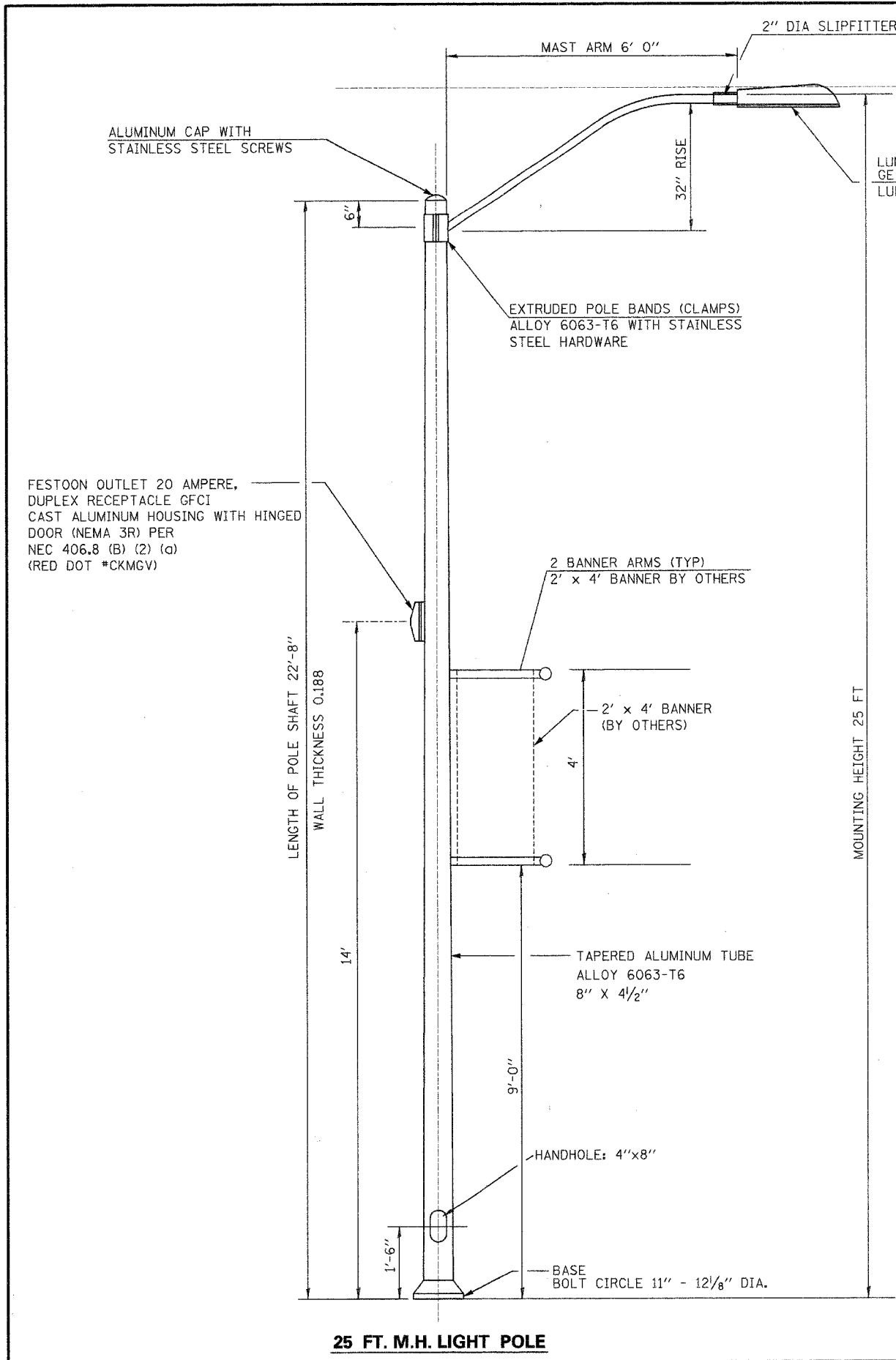
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VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER
**ONE LINE CIRCUIT DIAGRAM
FESTOON PANEL**

SCALE: NTS
DATE: 02-05-05
DRAWN BY: HMO
CHECKED BY: JS

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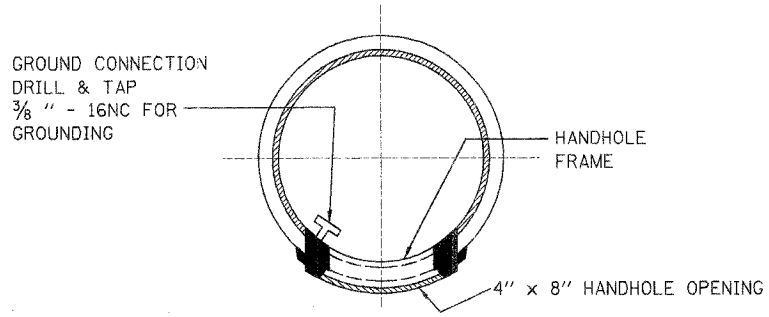
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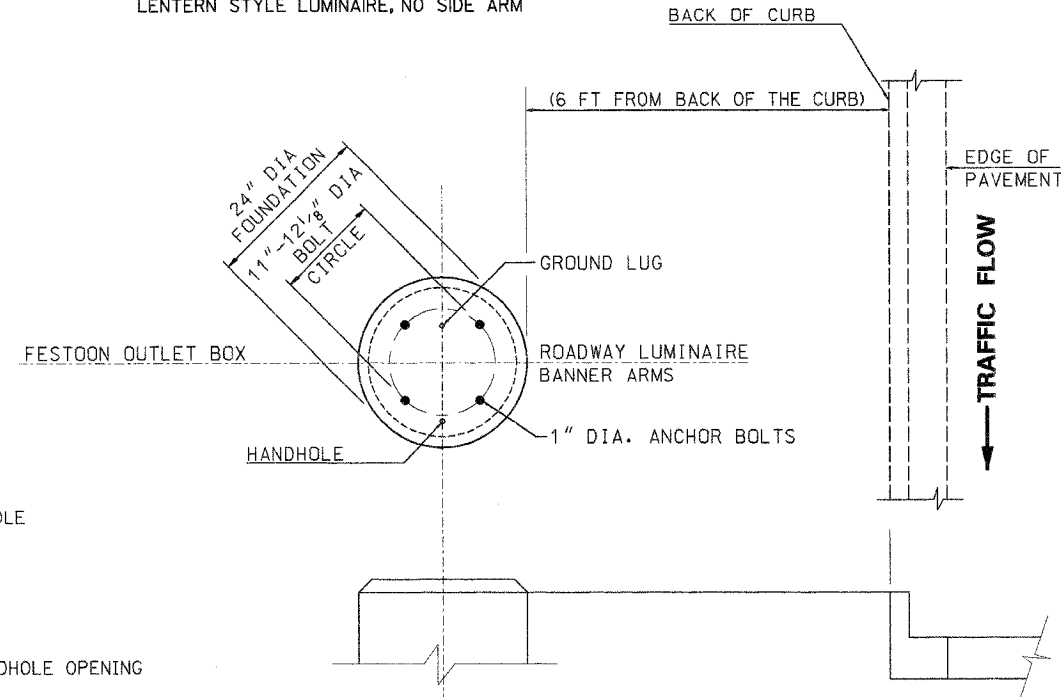
LUMINAIRE SODIUM VAPOR HORIZONTAL MOUNT 100 WATT
 GE M-250A2 POWER/DOOR, PHOTOMETRIC #GE7285
 LUMINAIRE - LUMEC OR APPROVED EQUAL

NOTE:
 16' POLE HAS A TENON MOUNT HEXAGONAL LANTERN STYLE LUMINAIRE, NO SIDE ARM

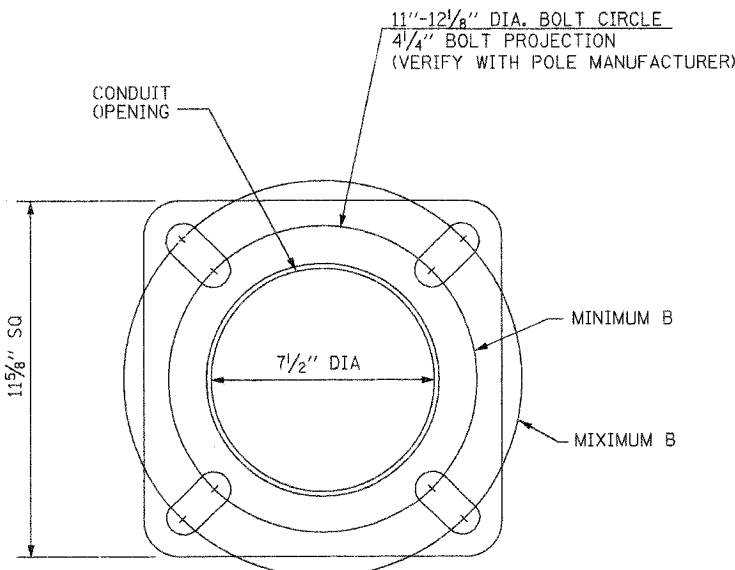
GROUND CONNECTION
 DRILL & TAP
 3/8" - 16NC FOR
 GROUNDING



SECTION THROUGH HANDHOLE



POSITION OF ANCHOR BOLTS AND POLE ATTACHMENT (TYP)



NOTES

1. THE POLE RECEPTACLE HOUSING, AND LUMINAIRE SHALL BE PAINTED IN POLEYSTER POWDER COATED TEXTURED BLACK COLOR FINISH.
2. ANCHOR BOLT CIRCLE AND BOLT SLOTS IN POLE BASE PLATE, SHALL BE VARIFIED WITH POLE MANUFACTURED.
3. LUMINAIRES ARE TO BE INSTALLED AS SOON AS POSSIBLE AFTER POLE ERECTED PER MANUFACTURER RECOMMENDATIONS. THE POLE WILL NOT BE PAID FOR UNTIL THE LUMINAIRE IS INSTALLED.
4. THE LIGHT POLE SHALL MEET 80 MPH WIND SPEED AASHTO DESIGN CRITERIA. THE CONTRACTOR SHALL FURNISH WIND LOAD CALCULATIONS MEETING AASHTO DESIGN CRITERIA.
5. THE DUCT SHALL EXTEND INTO POLE A MINIMUM OF 304.8 mm (12") ABOVE THE BASE.

25 FT. M.H. LIGHT POLE

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VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER FOX RIVER

**LIGHT POLE ALUMINUM
 25 FT MOUNTING HEIGHT**

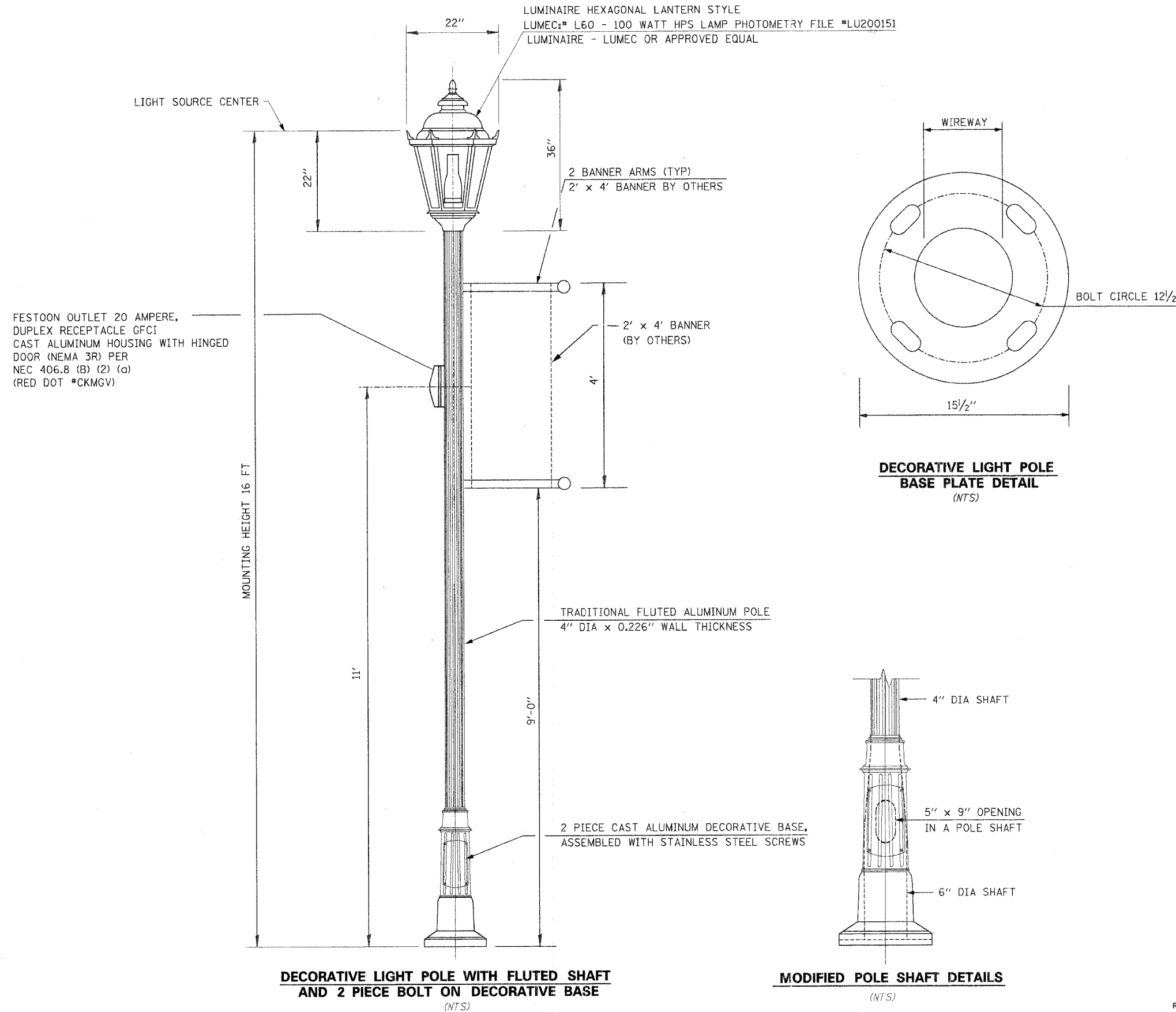
SCALE: NTS
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NOTES

1. THE POLE RECEPTACLE HOUSING, AND LUMINAIRE SHALL BE PAINTED IN POLESTER POWDER COATED TEXTURED BLACK COLOR FINISH.
2. ANCHOR BOLT CIRCLE AND BOLT SLOTS IN POLE BASE PLATE, SHALL BE VARIFIED WITH POLE MANUFACTURED.
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5. THE DUCT SHALL EXTEND INTO POLE A MINIMUM OF 304.8 mm (12") ABOVE THE BASE.



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VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

**DECORATIVE POLE 16 FT
MOUNTING HEIGHT**

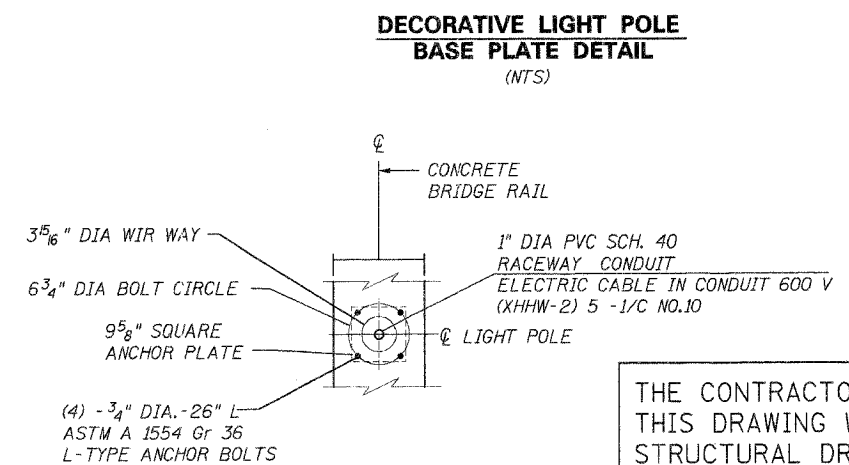
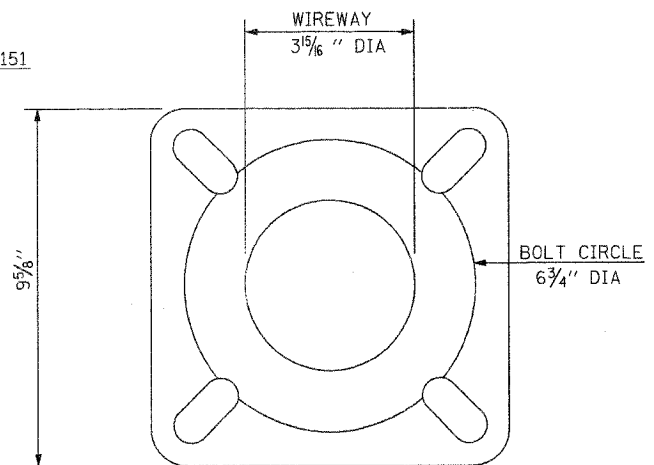
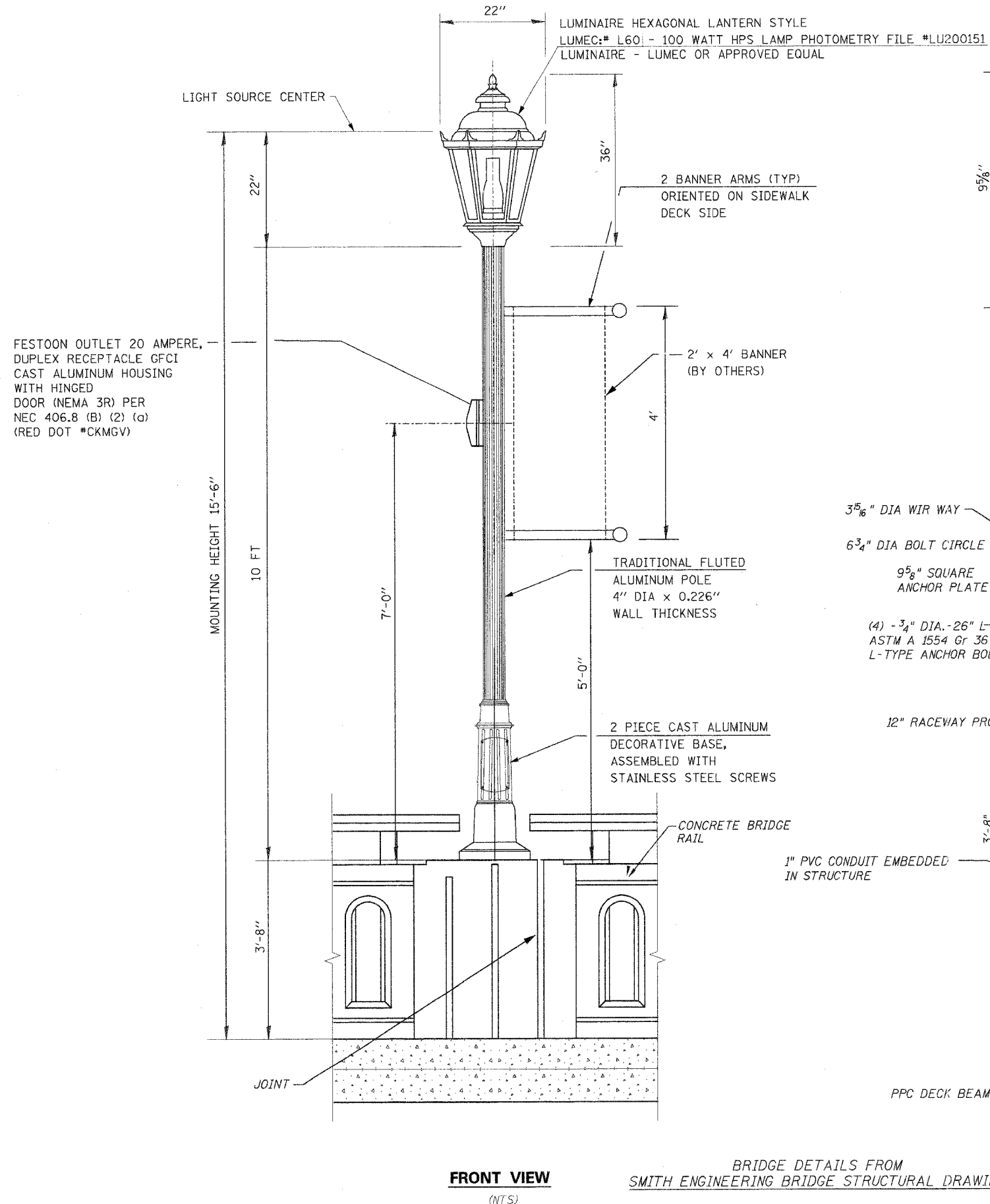
SCALE: NTS
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NOTES

1. THE POLE RECEPTACLE HOUSING, AND LUMINAIRE SHALL BE PAINTED IN POLEYSTER POWDER COATED TEXTURED BLACK COLOR FINISH.
2. ANCHOR BOLT CIRCLE AND BOLT SLOTS IN POLE BASE PLATE, SHALL BE VARIFIED WITH POLE MANUFACTURED.
3. LUMINAIRES ARE TO BE INSTALLED AS SOON AS POSSIBLE AFTER POLE ERECTION PER MANUFACTURER RECOMMENDATIONS. THE POLE WILL NOT BE PAID FOR UNTIL THE LUMINAIRE IS INSTALLED.
4. THE LIGHT POLE SHALL MEET 80 MPH WIND SPEED AASHTO DESIGN CRITERIA. THE CONTRACTOR SHALL FURNISH WIND LOAD CALCULATIONS MEETING AASHTO DESIGN CRITERIA.
5. THE DUCT SHALL EXTEND INTO POLE A MINIMUM OF 304.8 mm (12") ABOVE THE BASE.



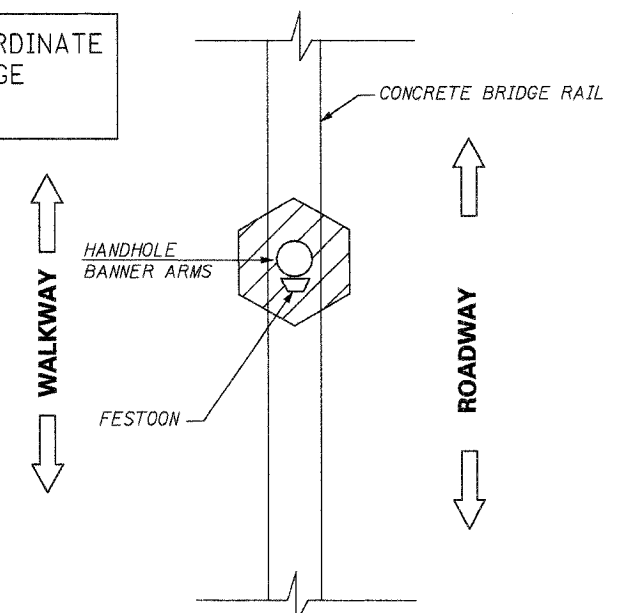
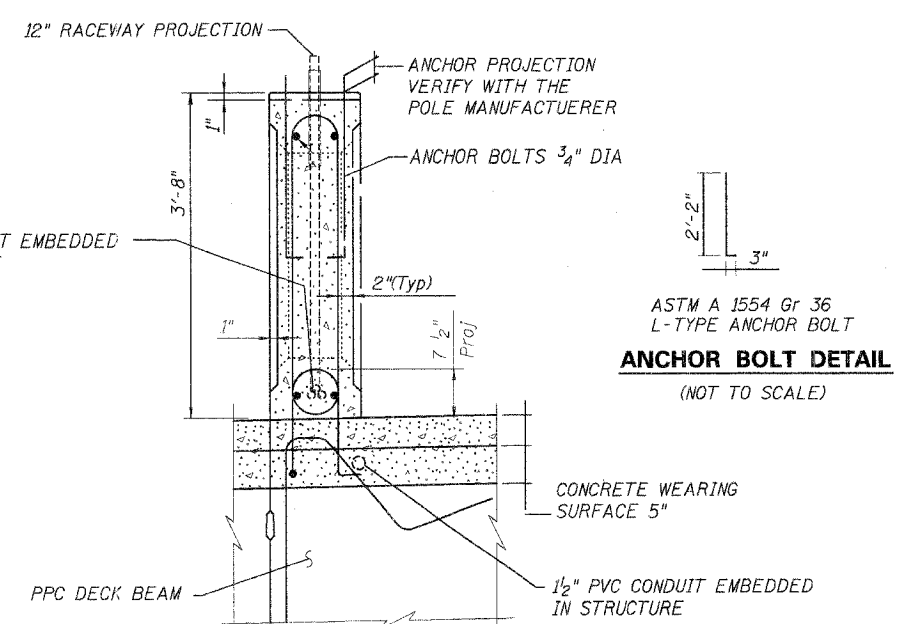
THE FOLLOWING LISTED ITEMS ARE EMBEDDED IN BRIDGE STRUCTURE:

- a. ANCHOR BOLTS IN CONCRETE BRIDGE RAIL FOR LIGHTING UNIT FOUNDATION.
- b. JUNCTION BOX WITH COVER STAINLESS STEEL, ELECTRIC PANEL WITH DISTRIBUTION BLOCKS AND FUSE.
- c. 1 1/2" DIA PVC CONDUIT (SCHEDULE 40)
- d. 1" DIA PVC CONDUIT (SCHEDULE 40)

IN A BRIDGE STRUCTURAL JOINTS, EXPANSION FITTINGS SHALL BE INSTALLED FOR ALL ELECTRICAL RACEWAY RUNS.

COST OF FURNISHING AND INSTALLATION THESE MATERIAL SHALL BE INCLUDED WITH BRIDGE STRUCTURE MATERIALS AND WILL NOT BE PAID SEPERATELY.

THE CONTRACTOR SHALL CO-ORDINATE THIS DRAWING WITH THE BRIDGE STRUCTURAL DRAWING



FRONT VIEW
(NTS)

BRIDGE DETAILS FROM
SMITH ENGINEERING BRIDGE STRUCTURAL DRAWINGS

SECTION THRU PILASTER
(SHOWING PILASTER) (NTS)

ANCHOR BOLT DETAIL
(NOT TO SCALE)

POLE MOUNTING DETAIL
(NOT TO SCALE)

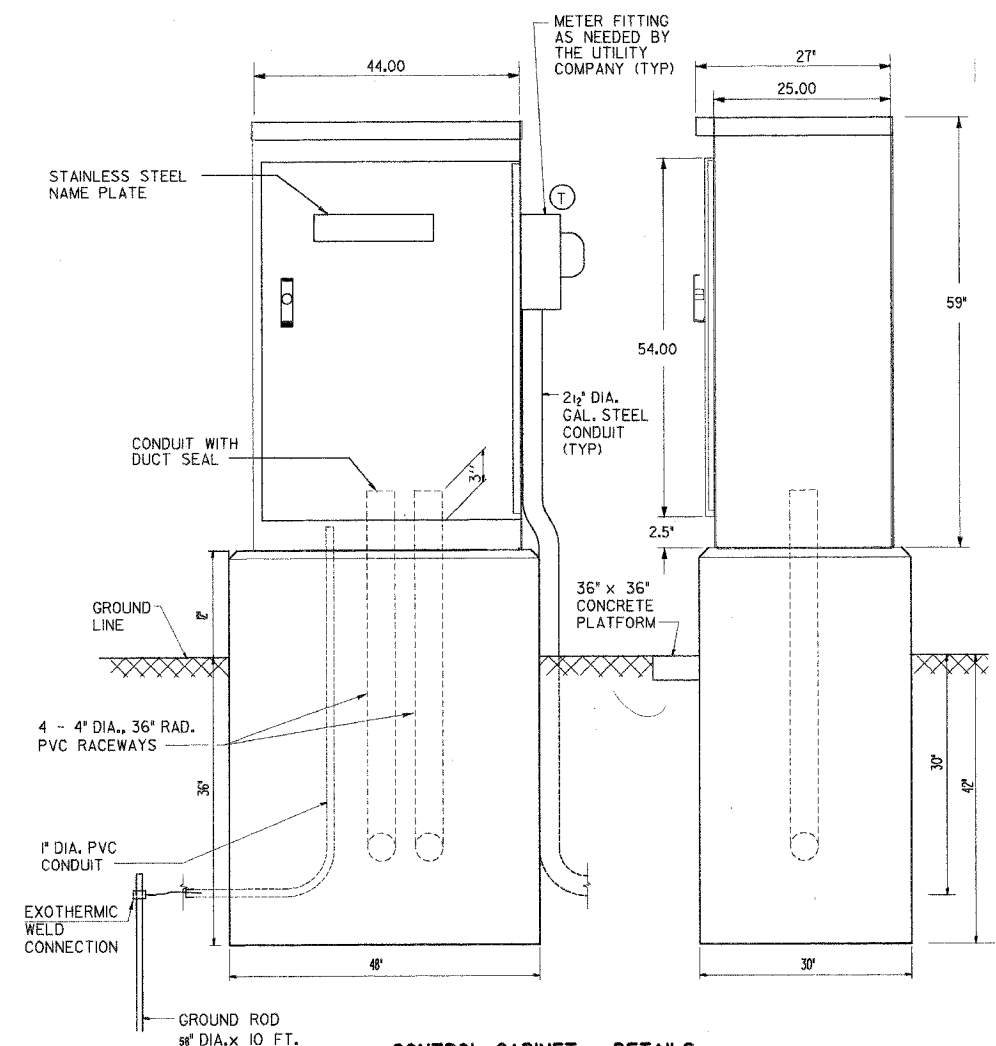
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VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

**DECORATIVE POLE MOUNTED
ON CONCRETE BRIDGE RAIL**

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CONTROL CABINET - DETAILS

NOTES

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3R CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET, A PRECAST PAD, 36"x36"x3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTROL CABINET.

CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "MTW" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.

THE ELECTRIC METER BOX SHALL BE MOUNTED ON THE SIDE OF THE CONTROL CABINET, NEAR TO THE SERVICE POLE AND/OR AS DIRECTED BY THE ENGINEER.

ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.

ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
 R = RED BL = BLUE W = WHITE
 B = BLACK Y = YELLOW G = GREEN

PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.

THE CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED. THE OUTSIDE SURFACE OF THE CONTROL CABINET SHALL HAVE A BLACK COAT POWDER FINISH.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

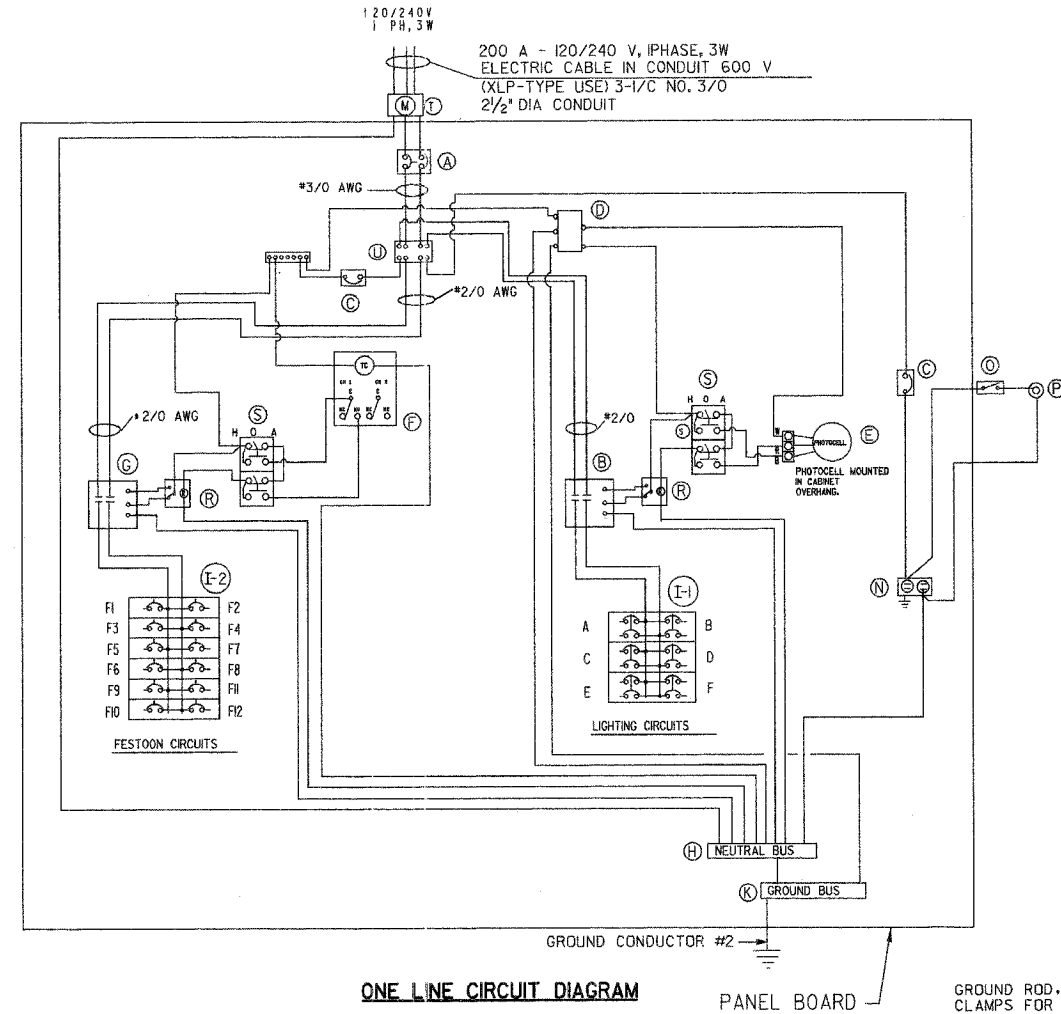
THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH A LAMINATED THE APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".

THE CONTRACTOR SHALL OBTAIN ANCHOR BOLTS LOCATION TEMPLATE FROM THE FABRICATOR OF LIGHTING CONTROLLER

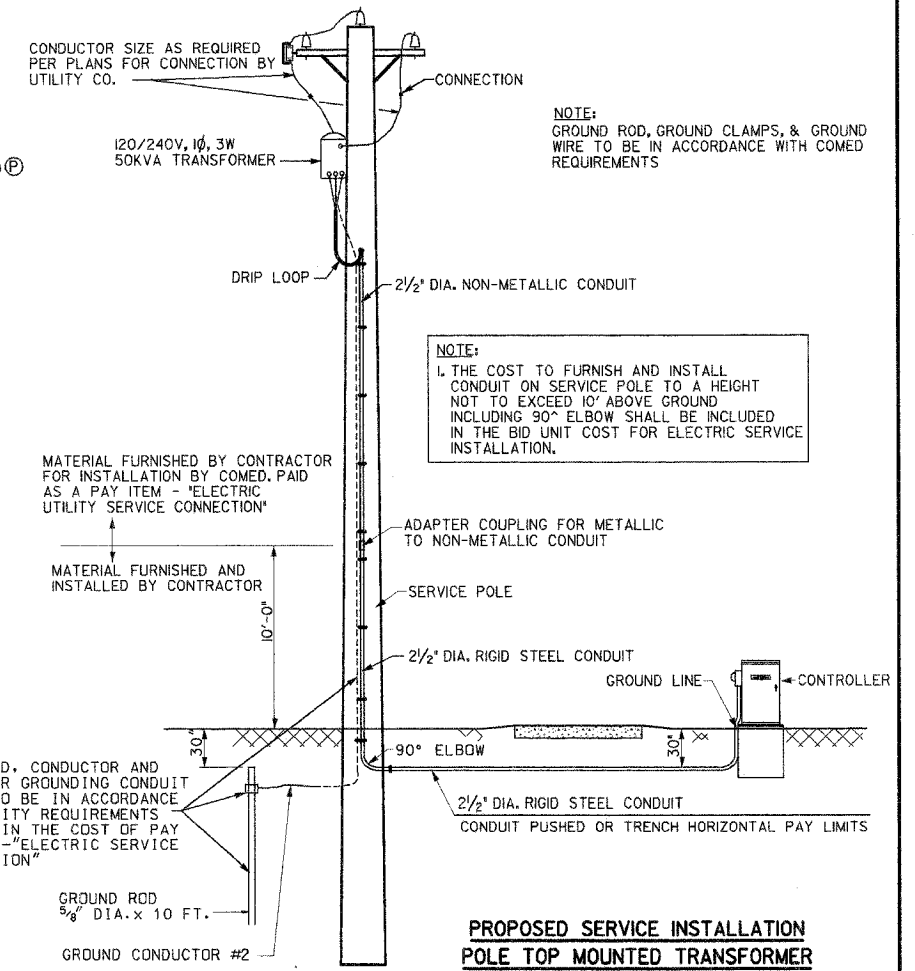
THE CONTROLLER FABRICATION SHALL COMPLY TO ARTICLE 1068.01 OF THE STANDARD SPECIFICATIONS

THE CONTROLLER CABINET DOOR SHOULD OPEN AWAY FROM THE STREET



ONE LINE CIRCUIT DIAGRAM

BILL OF MATERIALS		
ITEM	QTY	DESCRIPTION
A	1	MAIN BREAKER 2P/225A C/H ED2225L
B	2	CONTACTOR 2P/100A SQ.D8903PBQ10V38
C	2	BREAKER 1P/15A C/H EHD1015
D	1	SURGE ARRESTOR EDCO SHA2403
E	1	PHOTOCELL FISHER PIERCE FA105M
F	1	ASTRONOMICAL TIME CLK. TORQ DZS200A
G	1	CONTACTOR 2P/150A SQ.D8903PBR10V38
H	1	NEUTRAL BUS
I1	6	BREAKER 2P/30A C/H EHD2030L
I2	12	BREAKER 1P/40A C/H EHD1040L
J		RESERVED
K	1	GROUND BUS
N	1	GFCI RECEPTACLE 20A LEVITON 8899
O	1	DOOR SWITCH MICRO BA2RQ1-A2
P	1	LIGHT FIXTURE LEVITON 29816C
R	2	RELAY MAGNECRAFT W389ACX-9
S	2	H-O-A SWITCH SQ.D 9001 KYK-111
T	1	MILBANK U-4363 METER FITTING
U	1	MARATHON 1452129 SPLICE BLOCK



NOTE:
GROUND ROD, GROUND CLAMPS, & GROUND WIRE TO BE IN ACCORDANCE WITH COMED REQUIREMENTS

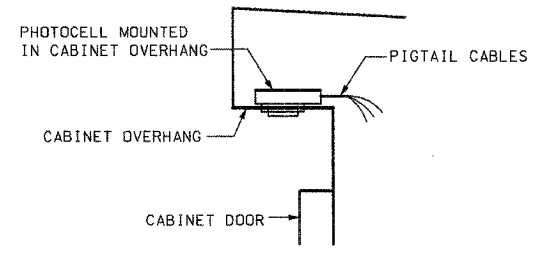
NOTE:
1. THE COST TO FURNISH AND INSTALL CONDUIT ON SERVICE POLE TO A HEIGHT NOT TO EXCEED 10' ABOVE GROUND INCLUDING 90° ELBOW SHALL BE INCLUDED IN THE BID UNIT COST FOR ELECTRIC SERVICE INSTALLATION.

MATERIAL FURNISHED BY CONTRACTOR FOR INSTALLATION BY COMED, PAID AS A PAY ITEM - "ELECTRIC UTILITY SERVICE CONNECTION"

MATERIAL FURNISHED AND INSTALLED BY CONTRACTOR

GROUND ROD, CONDUCTOR AND CLAMPS FOR GROUNDING CONDUIT ON POLE TO BE IN ACCORDANCE WITH UTILITY REQUIREMENTS INCLUDED IN THE COST OF PAY ITEM AS "ELECTRIC SERVICE INSTALLATION"

PROPOSED SERVICE INSTALLATION POLE TOP MOUNTED TRANSFORMER



PHOTOCELL IN CABINET OVERHANG DETAIL

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 DETAILS FROM EXCEL LTD - (847) 543-9138

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VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER FOX RIVER

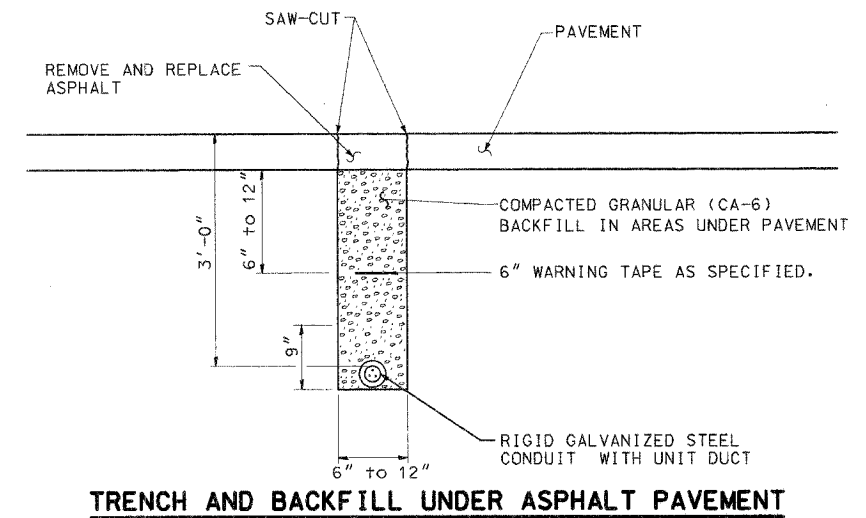
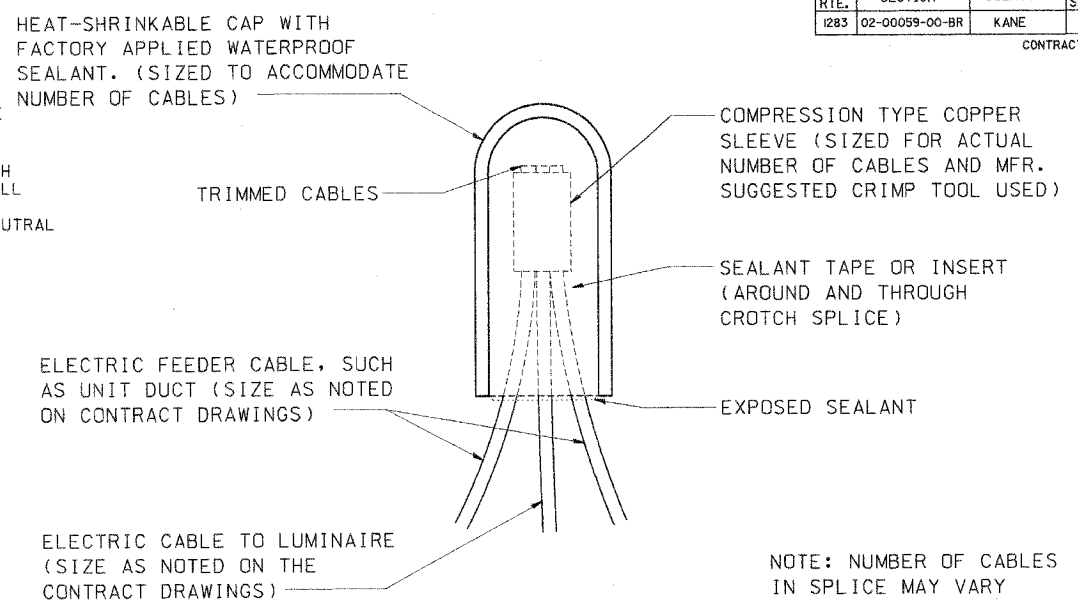
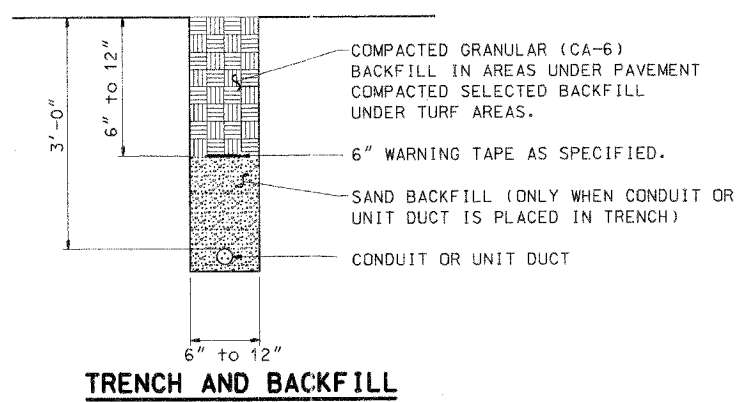
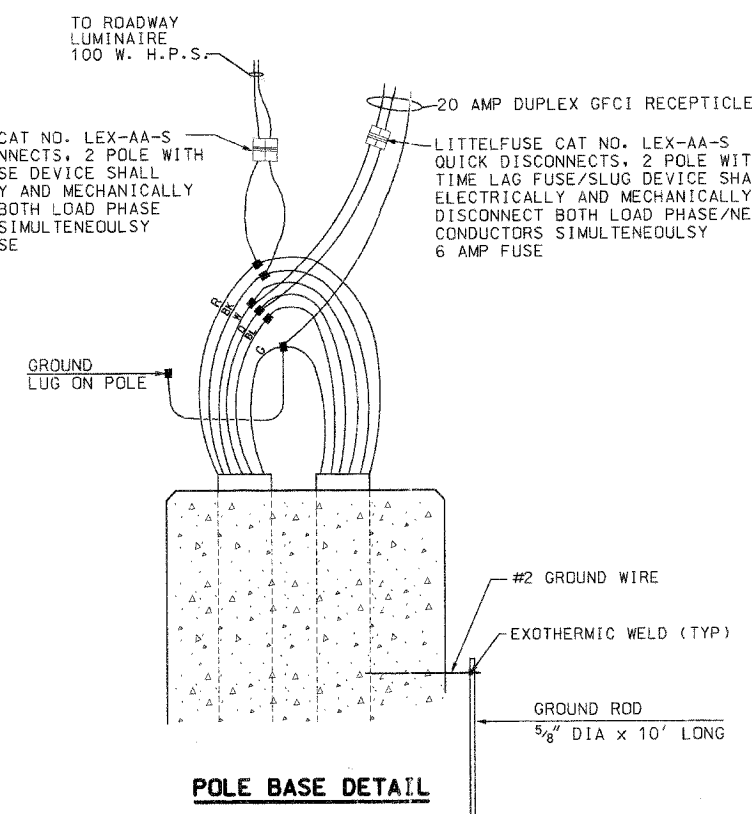
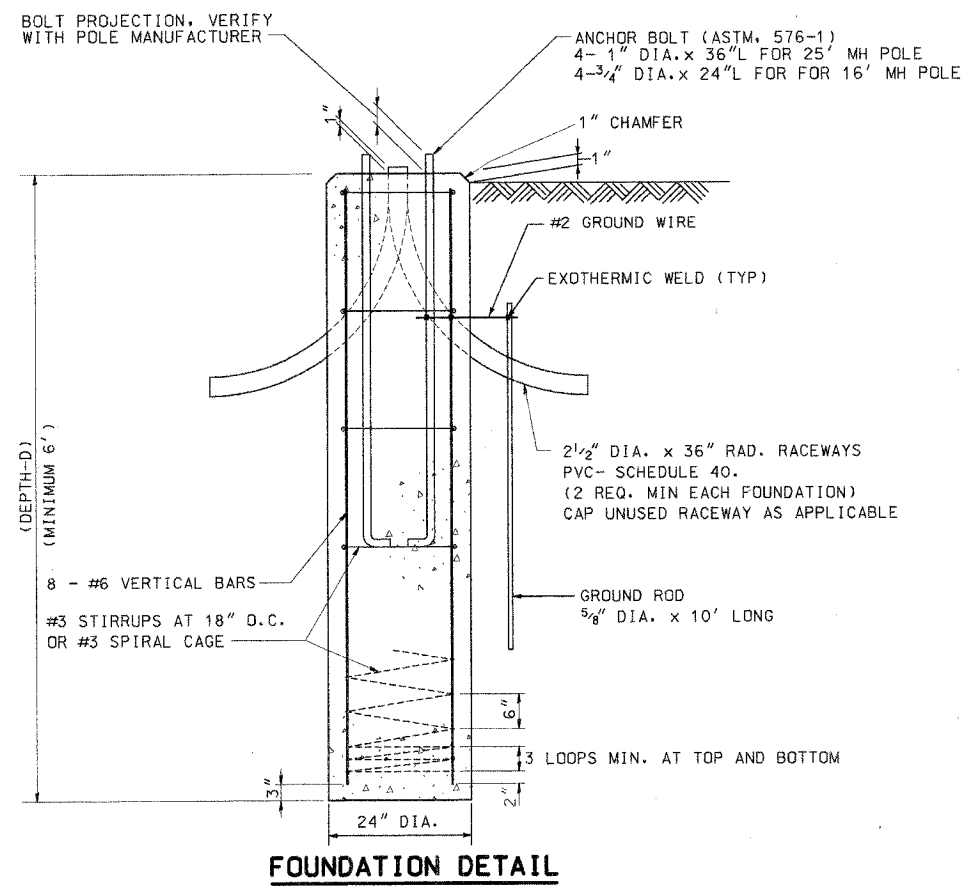
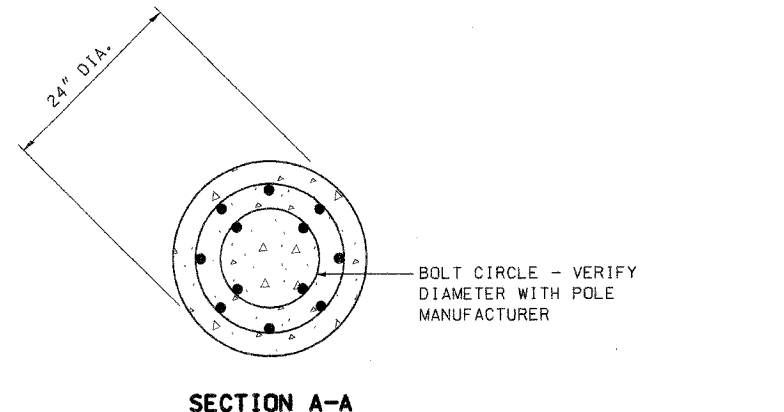
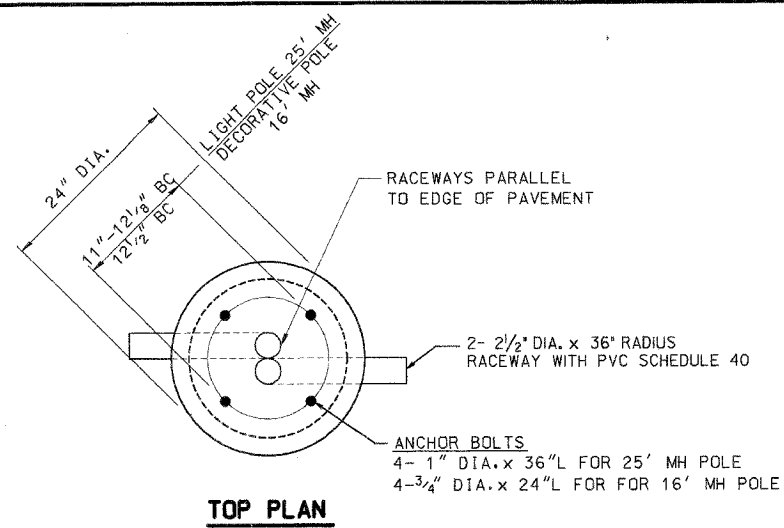
LIGHTING CONTROLLER, SPECIAL

SCALE: NTS
 DATE: 02-05-05

DRAWN BY: HMG
 CHECKED BY: JS

REVISION 02-26-05

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NOTES: FOUNDATION

1. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
2. THE DESIGN DEPTH "D" OF FOUNDATION SHALL BE ACCORDING TO FIELD CONDITIONS.
3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 24" IN DIAMETER.
4. THE CONTRACTOR SHALL USE #3 SPIRAL AT 6" PITCH OR AT HIS OPTION MAY SUBSTITUTE #3 TIES AT 12" O.C.
5. THE ANCHOR BOLTS TIED WITH REINFORCEMENT AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
6. CONCRETE SHALL BE CLASS "S1". CONCRETE FOUNDATION MUST BE CURED FOR (10) TEN DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
7. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT POLE IS ERECTED.
8. ANCHOR BOLTS PROJECTION ABOVE THE TOP OF THE FOUNDATION SHALL BE ACCORDING TO THE REQUIREMENTS OF POLE MANUFACTURER.
9. RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
10. REINFORCEMENT BARS SHALL COMPLY WITH ARTICLE 1006.10 OF THE STANDARD SPECIFICATION.
11. THE GROUND ROD, REINFORCING BAR AND ANCHOR BOLT SHALL BE TIED WITH #2 COPPER WIRE AND CONNECTION SHALL BE EXOTHERMIC WELD.

FOUNDATION DESIGN TABLE

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
	SINGLE ARM D	TWIN ARM D	SINGLE ARM		TWIN ARM	
			VERT BARS	SPIRAL	VERT BARS	SPIRAL
SOFT CLAY	13'-0"	15'-0"	8-#6 X 12'-6"	*3 X 122'	8-#6X14'X3'	*3 X 141'
MEDIUM CLAY	9'-6"	10'-9"	8-#6 X 9'-0"	*3 X 90'	8-#6 X 10'-0"	*3 X 100'
STIFF CLAY	7'-0"	8'-0"	8-#6 X 6'-6"	*3 X 66'	8-#6 X 7'-6"	*3 X 76'
LOOSE SAND	9'-0"	10'-0"	8-#6 X 8'-6"	*3 X 85'	8-#6 X 9'-6"	*3 X 94'
MEDIUM SAND	8'-3"	9'-0"	8-#6 X 8'-0"	*3 X 78'	8-#6 X 8'-6"	*3 X 85'
DENSE SAND	7'-9"	9'-0"	8-#6 X 7'-6"	*3 X 73'	8-#6 X 8'-6"	*3 X 85'
ROCK OR SOLIDIFIED SLAG	5'-0"	5'-0"	NONE	NONE	NONE	NONE

(FROM IDOT STANDARD FOUNDATION DRAWING)
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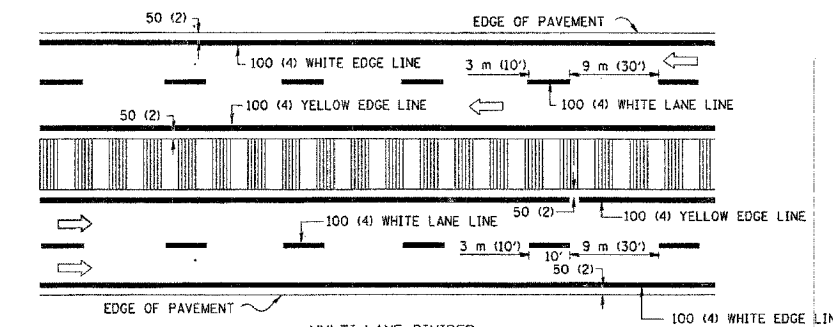
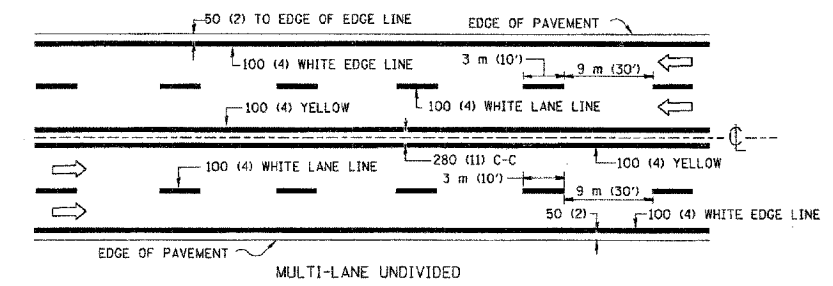
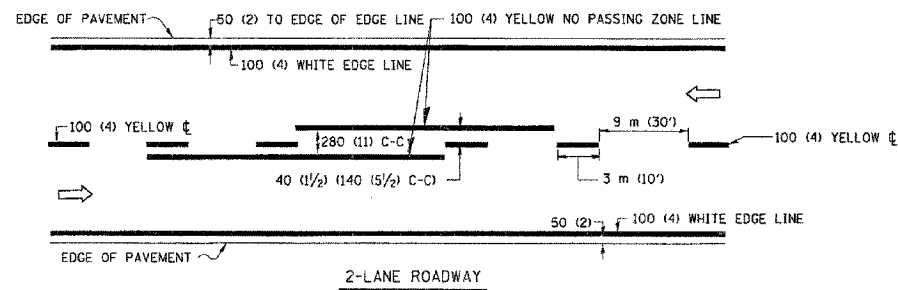
VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER FOX RIVER

ELECTRICAL DETAILS

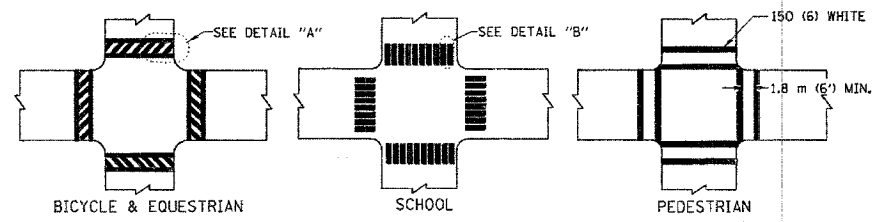
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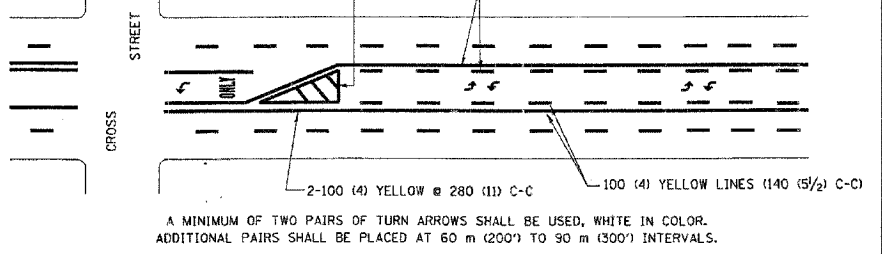
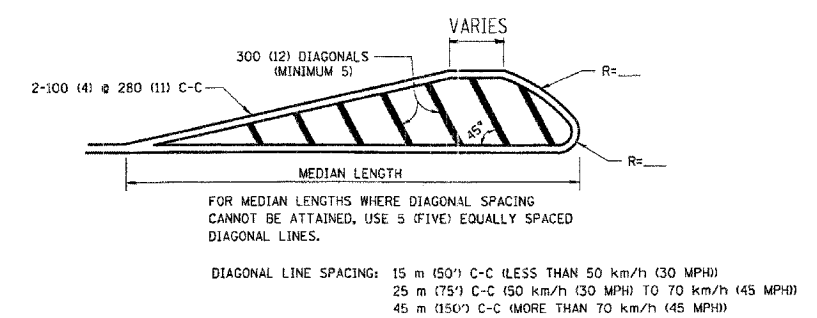
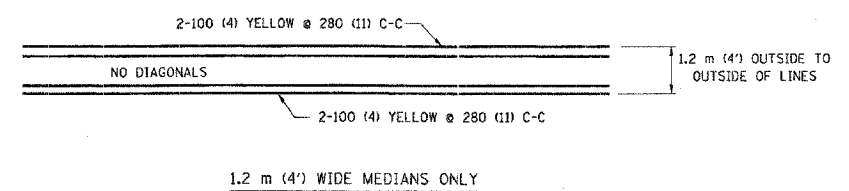
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1283	02-00059-00-BR	KANE	51	45
STA.	TO STA.		FED. AID PROJECT	
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT # 83783		



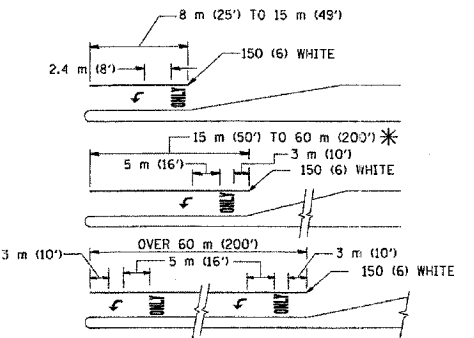
TYPICAL LANE AND EDGE LINE MARKING



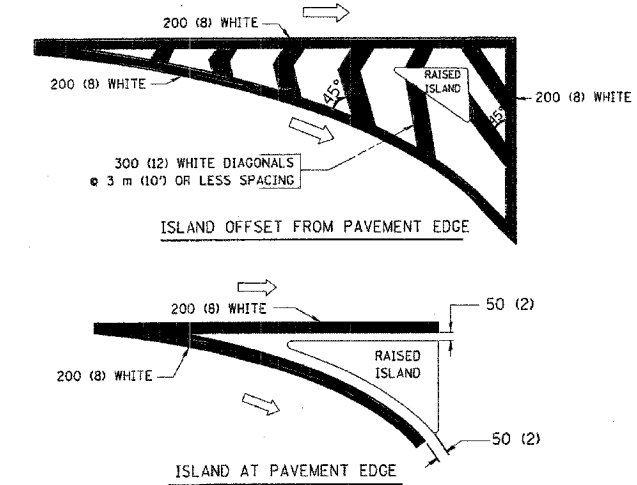
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4)	SKIP-DASH	WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

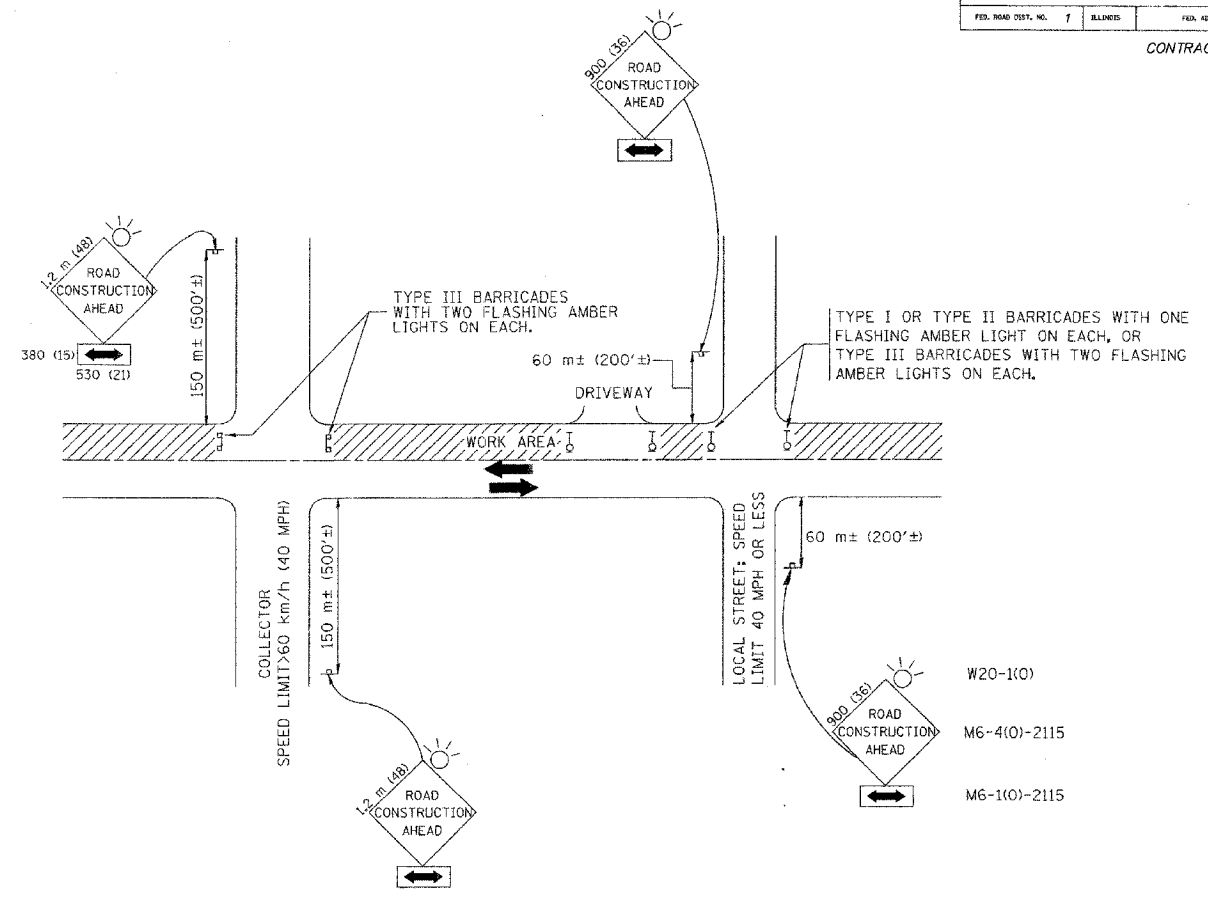
SCALE: NONE
DATE 11/20/01

DRAWN BY CADD
CHECKED BY

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	46
STA.	TO STA.			
FED. ROAD DIST. NO.	1	BLINKS	FED. AID PROJECT	

CONTRACT # 83783



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

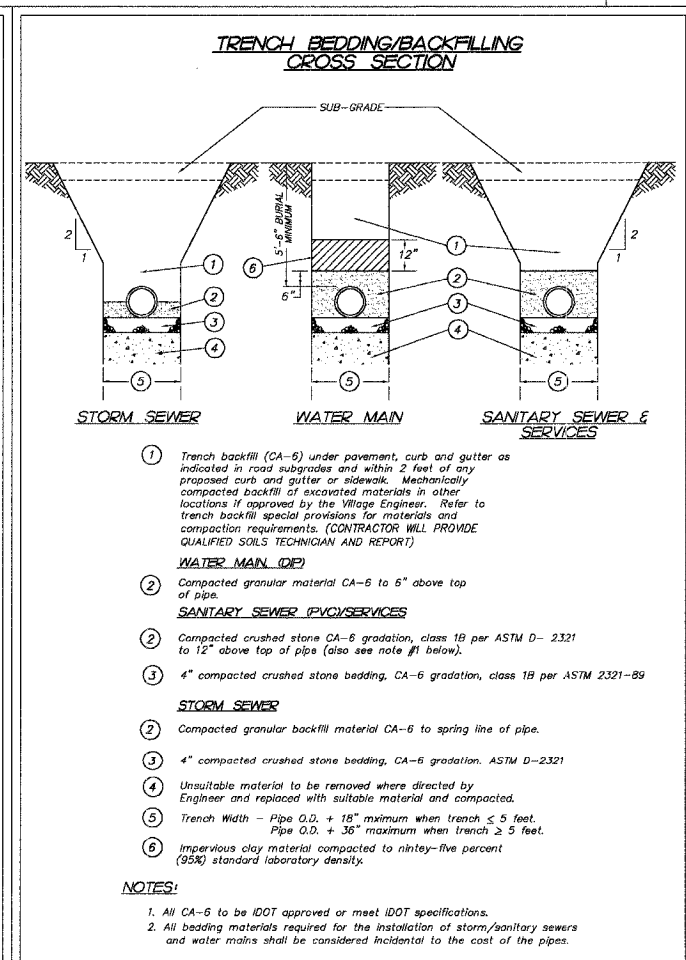
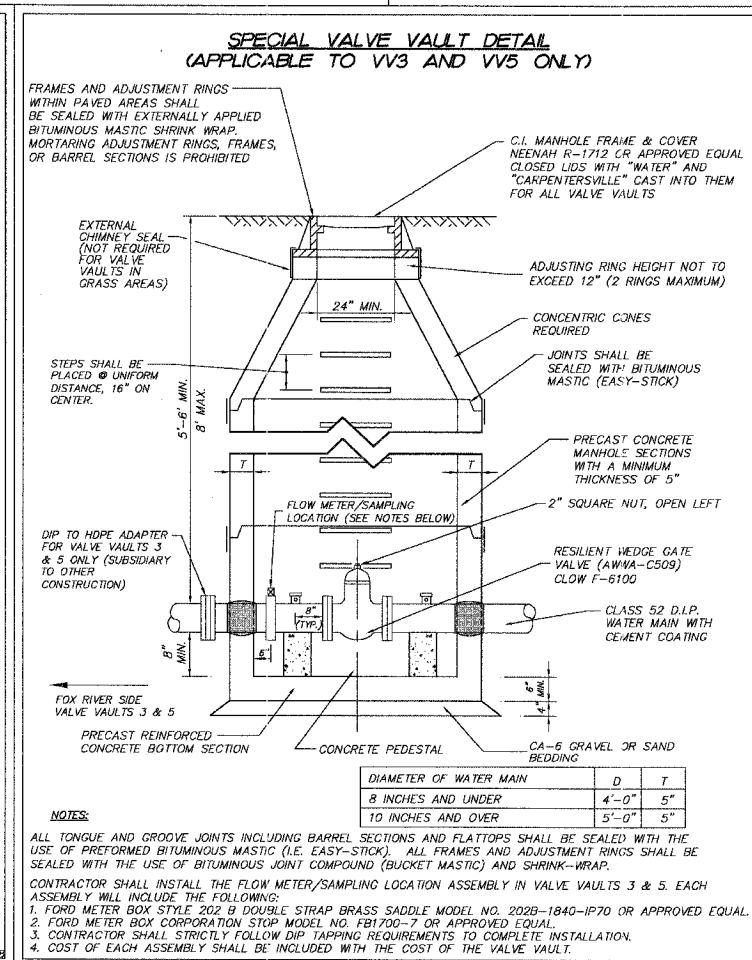
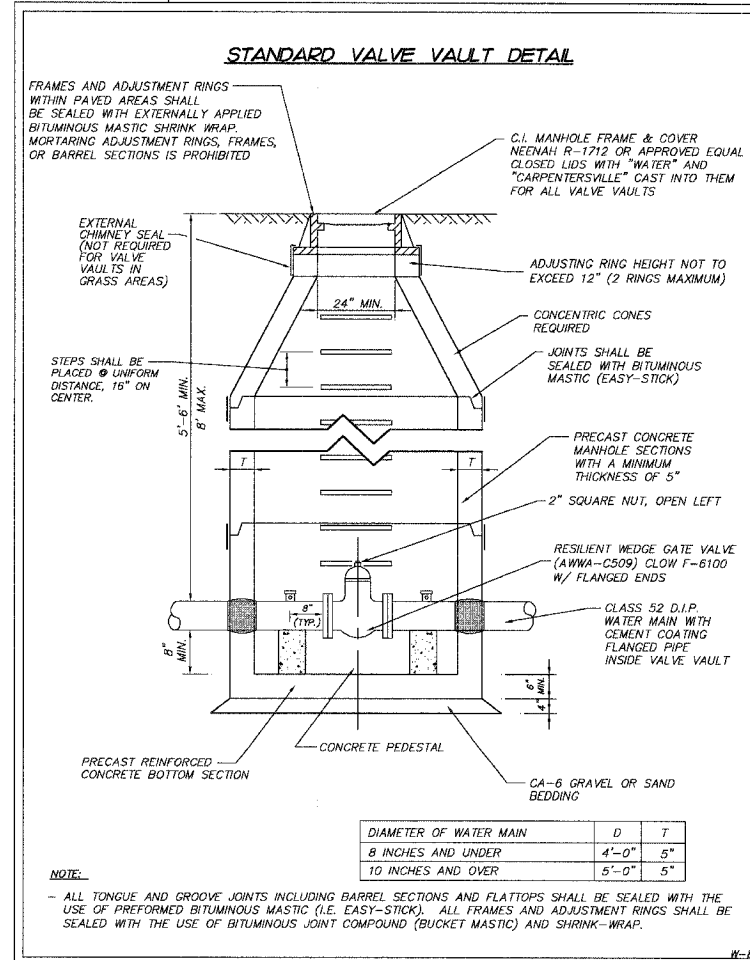
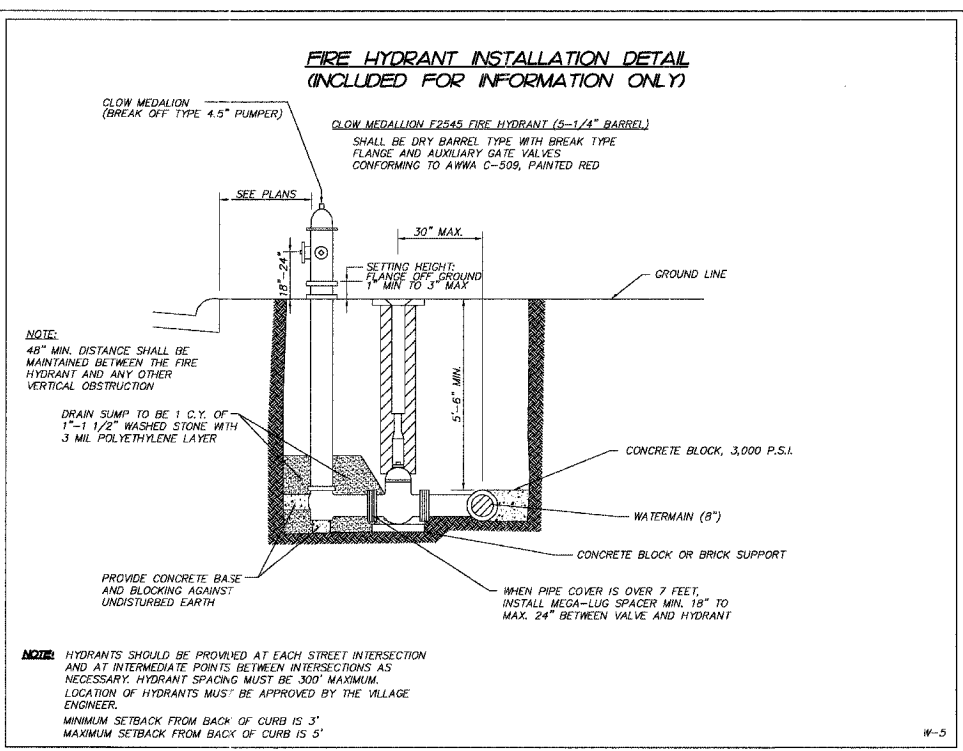
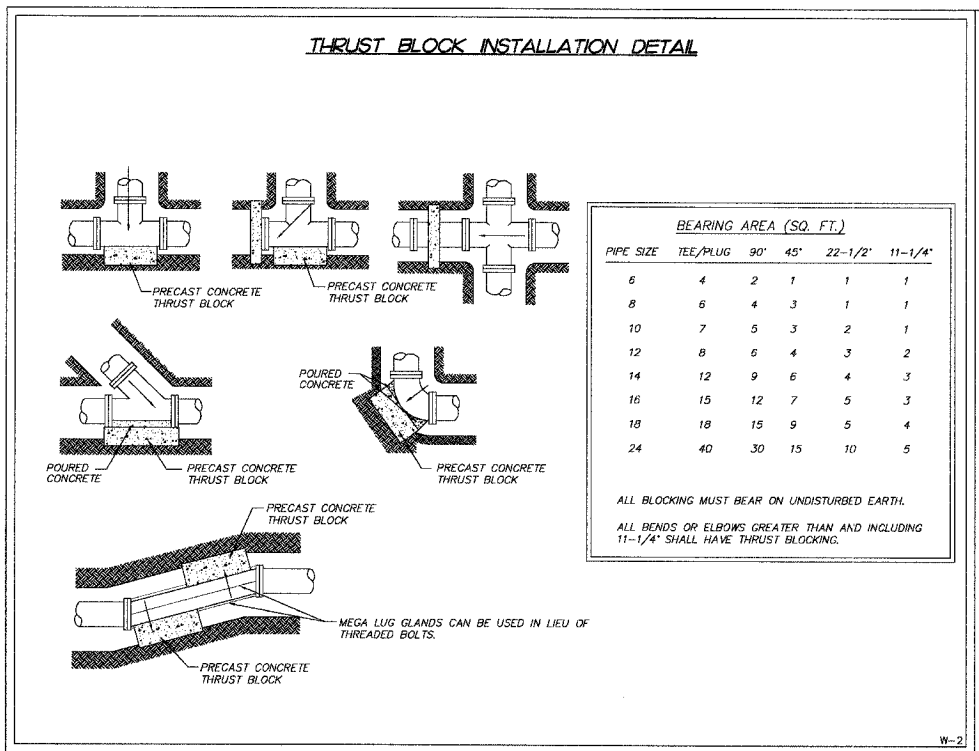
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

SCALE: NONE
DATE: 11/20/01
DRAWN BY
CHECKED BY



SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
4000 PRIME PARKWAY, SUITE 201
MORNINGVIEW, ILLINOIS 60060
PH: 815-305-1770 FAX: 815-305-1781
www.smithengineering.com B-MAIL: sec@smithengineering.com
McHENRY • HUNTERDON • YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

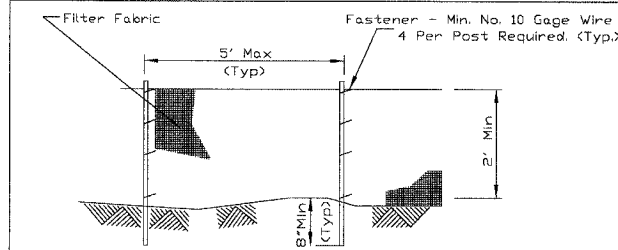
ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
STANDARD CONSTRUCTION DETAILS

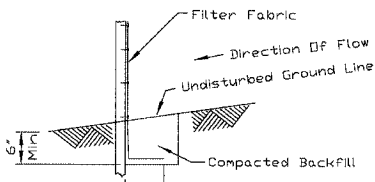
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NAME	DATE
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SCALE: "NTS"
DATE 02-25-2005
DRAWN BY WJH
CHECKED BY TEH

SILT FENCE PLAN



ELEVATION

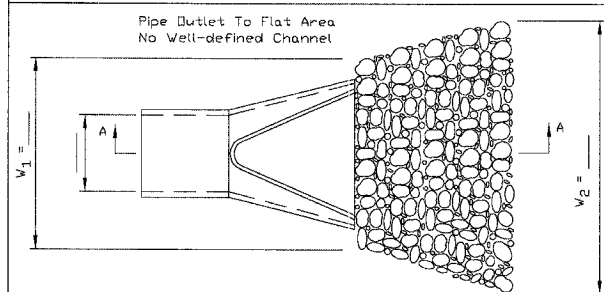


FABRIC ANCHOR DETAIL

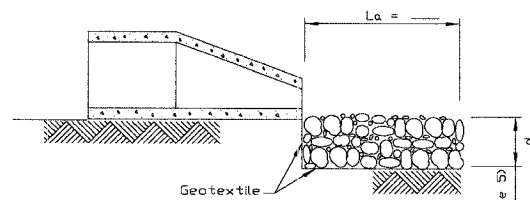
- NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
 2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
 3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE Project	DATE		STANDARD DWG. NO. IL-620
Designed	DATE		
Checked	DATE		
Approved	DATE		

PIPE OUTLET TO FLAT AREA



PLAN

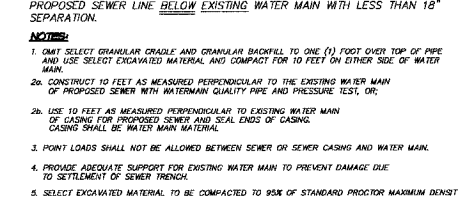
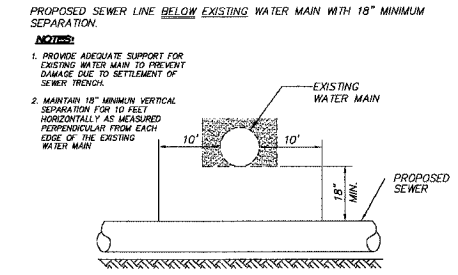
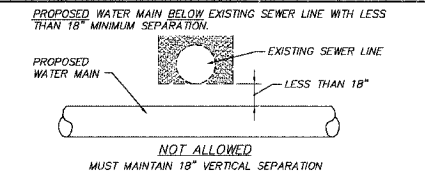
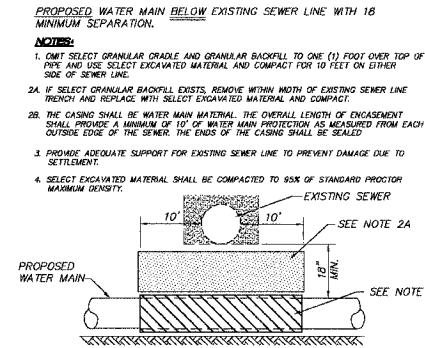


SECTION A-A

- NOTES:
1. The filter fabric shall meet the requirements in material specifications 592 GEOTEXTILE Table 1 or 2, class I, II or III.
 2. The rock riprap shall meet the IDDT requirements for the following gradation RR Quality
 3. The riprap shall be placed according to construction specification 61 LOOSE ROCK RIPRAP. The rock may be equipment placed.
 4. Riprap shall be placed in accordance with Section 281 of the IDDT Standard Specifications
 5. The type, size, and location of the stone rip rap are shown on the Erosion Control Plan. The depth d shall conform to Section 281 of the IDDT Standard Specifications

REFERENCE Project	DATE		STANDARD DWG. NO. IL-610
Designed	DATE		
Checked	DATE		
Approved	DATE		

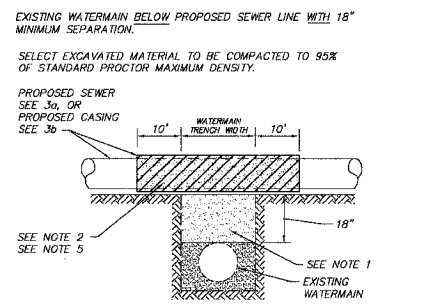
WATER AND SEWER SEPARATION REQUIREMENTS DETAIL



PER THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS

DW-UT-8

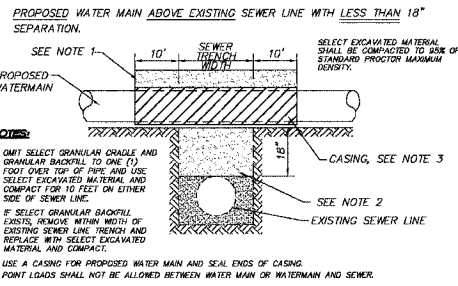
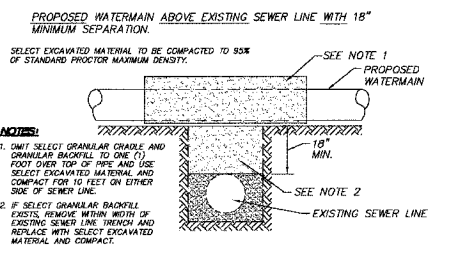
WATER AND SEWER SEPARATION REQUIREMENTS DETAIL



- NOTES:
1. IF SELECT GRANULAR BACKFILL EXISTS REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL AND COMPACT.
 2. OBT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL AND COMPACT FOR 10 FEET AS MEASURED PERPENDICULAR TO EXISTING WATER MAIN ON EITHER SIDE OF WATER MAIN.
 3. a. CONSTRUCT 10 FEET AS MEASURED PERPENDICULAR TO EXISTING WATER MAIN OF PROPOSED SEWER WITH WATERMAIN QUALITY PIPE AND PRESSURE TEST, OR:
 3. b. USE 10 FEET AS MEASURED PERPENDICULAR TO EXISTING WATER MAIN OF CASING FOR PROPOSED SEWER AND SEAL ENDS OF CASING. CASING SHALL BE WATER MAIN MATERIAL.
 4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN.
 5. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATERMAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

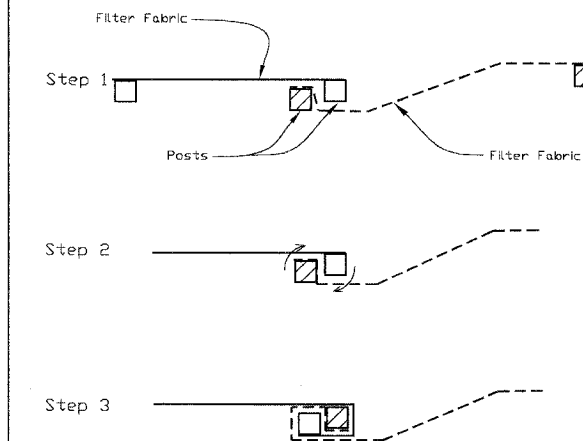
PER THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS

DW-UT-9



- NOTES:
1. OBT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE.
 2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL AND COMPACT.
 3. USE A CASING FOR PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
 4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATERMAIN AND SEWER.

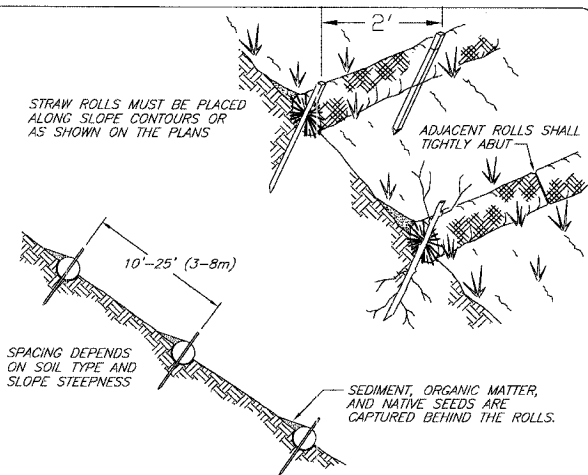
SILT FENCE



ATTACHING TWO SILT FENCES

- NOTES:
1. Place the end post of the second fence inside the end post of the first fence.
 2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
 3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

REFERENCE Project	DATE		STANDARD DWG. NO. IL-620(W)
Designed	DATE		
Checked	DATE		
Approved	DATE		



- NOTES:
- INSTALLATION OF TEMPORARY DITCH CHECKS, ROLLED EXCELSIOR SHALL CONFORM TO SECTION 280 OF THE IDDT STANDARD SPECIFICATIONS.
 - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
 - WOOD STAKES SHALL BE A MINIMUM OF 1" SQUARE
 - METAL STAKES SHALL BE A MINIMUM OF 1" DIA.
 - STAKES SHALL BE A MINIMUM OF 48" LONG.

TEMPORARY DITCH CHECKS, ROLLED EXCELSIOR NOT TO SCALE

PLT FILE: STANDARD VIEW: CE-48 COMP. FILE: 040157.DWG

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PERRY PARKWAY, SUITE 201
 McHENRY, ILLINOIS 60050
 P.O. BOX 1770 P.O. BOX 1770
 HUNTSVILLE, ALABAMA 35894
 WWW.SMITHENGINEERING.COM E-MAIL: seo@smithengineering.com
 MCHEMRY HUNTSVILLE YORREVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 STANDARD CONSTRUCTION DETAILS

SCALE: "NTS" DRAWN BY WJH
 DATE 02-25-2005 CHECKED BY TEH

REVISIONS	
NO.	DATE
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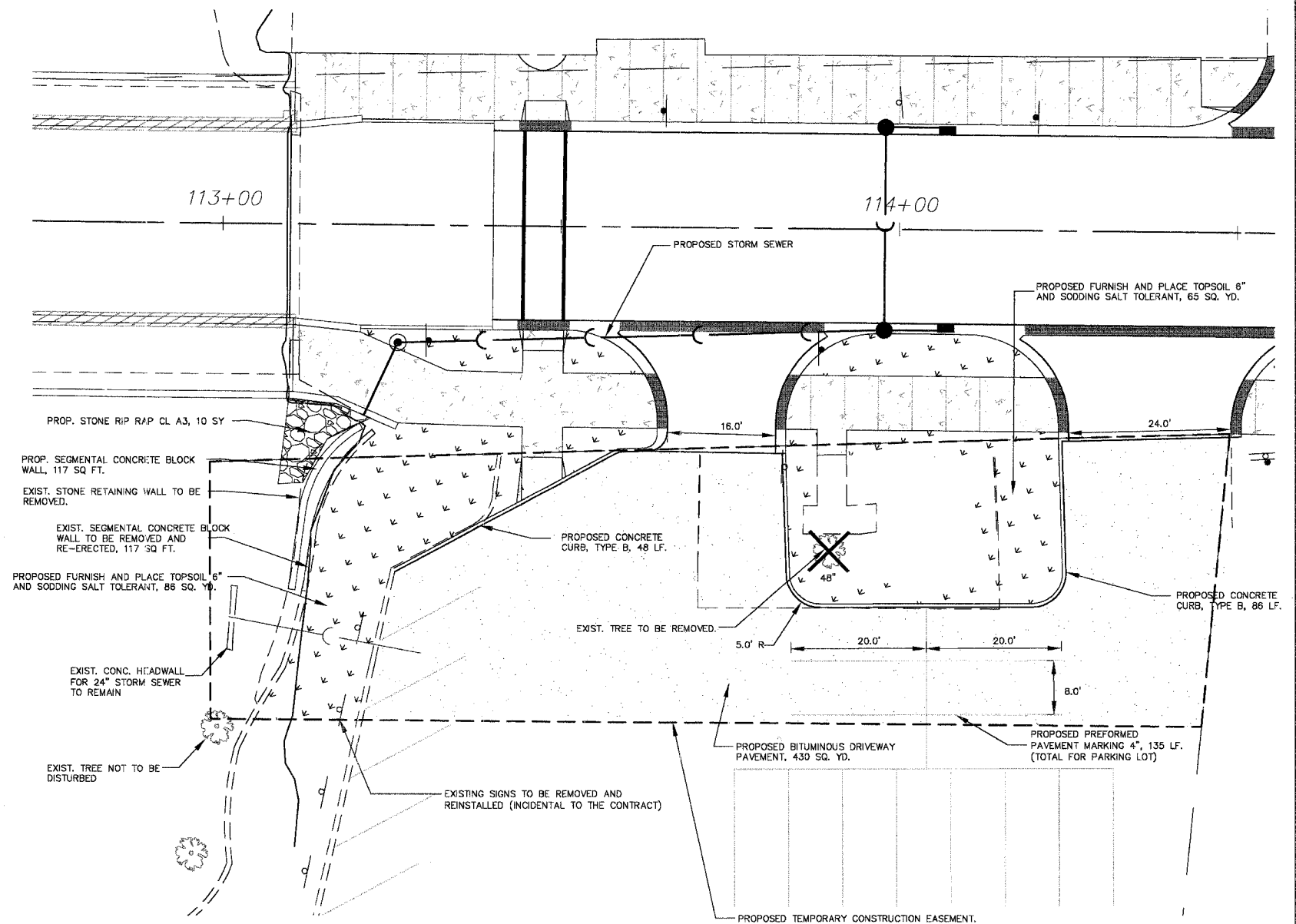
F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	49
STA. 106+41		TO STA. 116+18		
FED. ROAD DIST.	1	ILLINOIS	FEDERAL AID PROJECT	

CONTRACT #: 83783

EARTHWORK TABLE

MAIN STREET CUT & FILL STAGE 2										
END AREAS SQ. FT.				SUM END AREAS SQ. FT.			SECTION TOTAL CU. YD.			
WEST OF BRIDGE	CUT	UNDERCUT	FILL	DISTANCE	CUT	UNDERCUT	FILL	CUT	UNDERCUT	FILL
10641	0		0							
10650	63.35	31	2.65	9	63.35	31	2.65	11	5	0
10700	37.95	31	8.12	50	101.3	62	10.77	94	57	10
10750	50.15	31	7.24	50	88.1	62	15.36	82	57	14
10800	57.2	31	5.96	50	107.35	62	13.2	99	57	12
10850	72.1	31	1.16	50	129.3	62	7.12	120	57	7
10856	70.65	31	1.04	6	142.75	62	2.2	16	7	0
10865	71.8	31	5.64	9	142.45	62	6.68	24	10	1
10900	56.1	31	2.64	35	127.9	62	8.28	83	40	5
10950	30.35	31	2.76	50	86.45	62	5.4	80	57	5
10959	27.3	31	8.16	9	57.65	62	10.92	10	10	2
11000	27.75	31	8.28	41	55.05	62	16.44	42	47	12
11050	37.1	31	0	50	64.85	62	8.28	60	57	8
11096	0		0	46	37.1	31	0	32	26	0
EAST OF BRIDGE										
11310	0	0	0							
11350	48.45	31	1.86	40	48.45	31	1.86	36	23	1
11356	52.75	31	1.8	6	101.2	62	3.66	11	7	0
11400	70.05	31	2.46	44	122.8	62	4.26	100	51	3
11432	52.5	31	2.24	32	122.55	62	4.7	73	37	3
11450	56.55	31	0.82	18	109.05	62	3.06	36	21	1
11468	49.45	31	1.74	18	106	62	2.56	35	21	1
11500	60.15	31	1.88	32	109.6	62	3.62	65	37	2
11509	56.5	31	1.02	9	116.65	62	2.9	19	10	0
11523	48.7	31	1.36	14	105.2	62	2.38	27	16	1
11550	45.9	31	3.06	27	94.6	62	4.42	47	31	2
11600	9.65	31	4.42	50	55.55	62	7.48	51	57	7
								CUT =	1253	
								UNDERCUT =	801	
								FILL =		99
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL =								2053		
FURNISHED EXCAVATION =										99

TEMPORARY EASEMENT DETAIL



NOTES:
 QUANTITIES FOR WORK IN THE TEMPORARY EASEMENT AREA HAVE BEEN ESTIMATED. THE CONTRACTOR WILL BE PAID FOR ACTUAL WORK COMPLETED AS APPROVED BY THE ENGINEER. ANY INCREASES OR DEDUCTIONS TO THE QUANTITIES SHOWN SHALL NOT BE CAUSE FOR ANY COMPENSATION TO THE CONTRACTOR.

ANY IMPACTS TO ITEMS NOT SHOWN OR OUTSIDE OF THE EASEMENT AREA SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

ANY EARTH WORK (CUT OR FILL) REQUIRED TO PROVIDE ACCESS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

REMOVAL OF THE EXISTING STONE RETAINING WALL SHALL BE CONSIDERED AS EARTH WORK AND NOT PAID FOR SEPARATELY.

THE EXISTING SEGMENTAL CONCRETE BLOCK WALL SHALL BE REMOVED, STORED AND RE-ERECTED BY THE CONTRACTOR. THIS WORK SHALL BE PAID FOR PER SQUARE FOOT OF REMOVE AND RE-ERECT SEGMENTAL BLOCK RETAINING WALL. ANY WALL DAMAGED BY THE CONTRACTOR SHALL BE REPLACE AT THEIR EXPENSE.

THE PROPOSED SEGMENTAL CONCRETE BLOCK WALL SHALL MATCH THE EXISTING WALL IN TERMS OF COLOR AND STYLE.

THE TEMPORARY EASEMENT AREA SHALL BE RESTORED TO EXISTING CONDITIONS AT THE CONCLUSION OF CONSTRUCTION.

WORK THIS SHEET WITH THE EROSION CONTROL PLAN AND THE BRIDGE PLANS.

REVISIONS	
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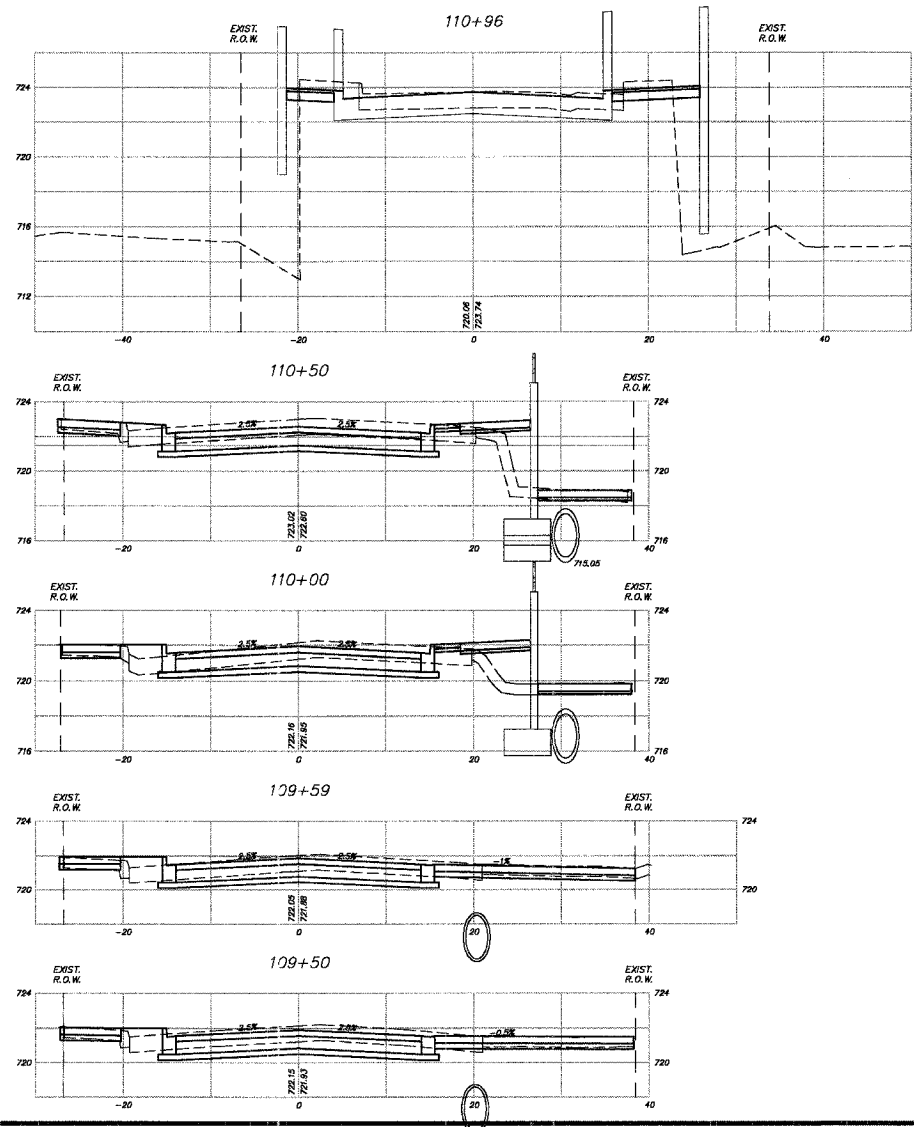
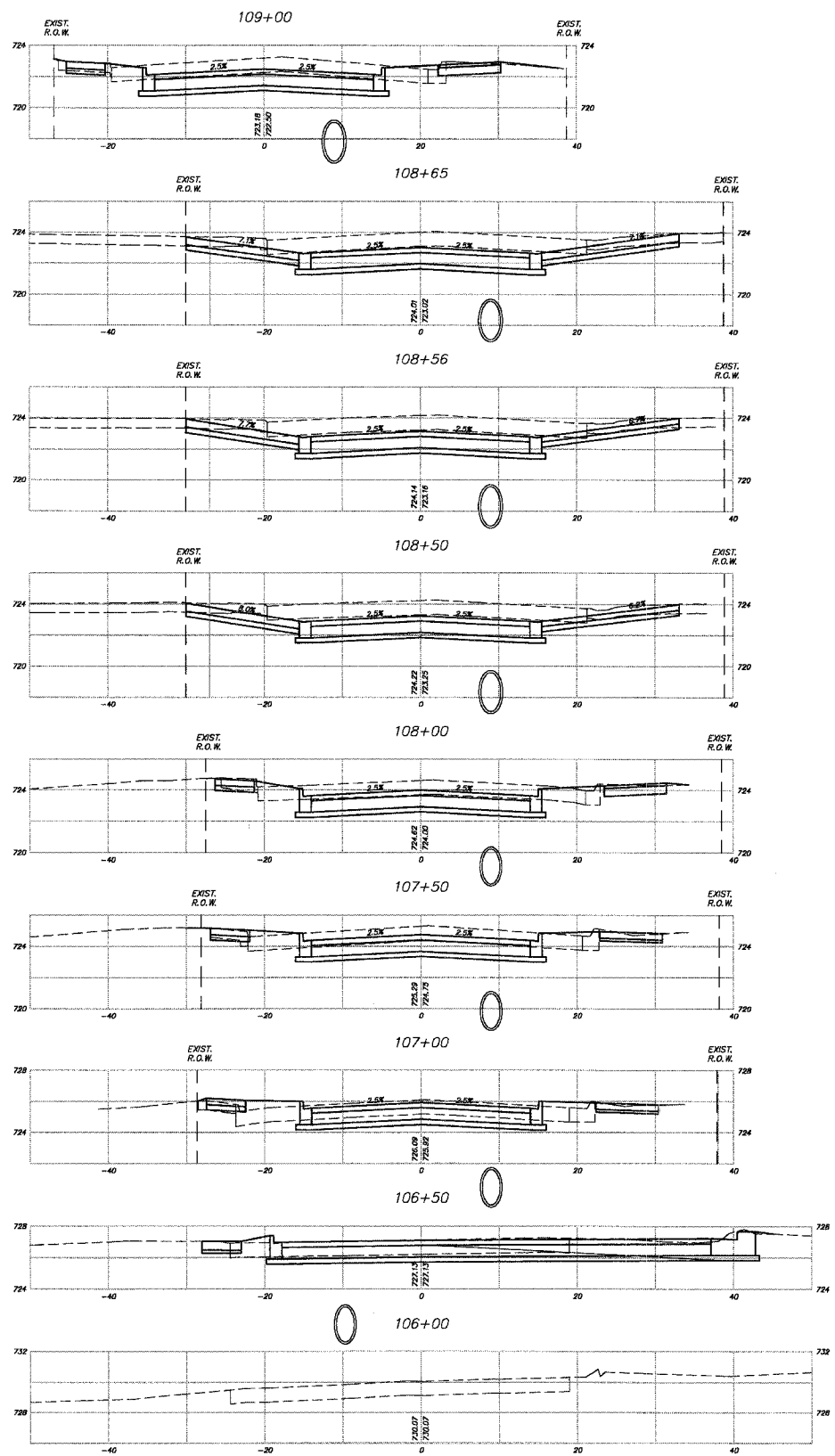
ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 EARTHWORK TABLE AND
 TEMPORARY EASEMENT DETAIL

SCALE: VERT. N/A
 HORIZ. 1" = 10'
 DATE: 02-25-2005

DRAWN BY: WJH
 CHECKED BY: TEH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	50
STA. 105+50		TO STA. 110+96		
FED. ROAD DIST.	1	ILLINOIS	HIGHWAY PROJECT	

CONTRACT #: 83783



LWF, 02-25-2005
 PLOT FILE: STANDARD
 COMP. FILE: A-sec54.dwg

REVISIONS	
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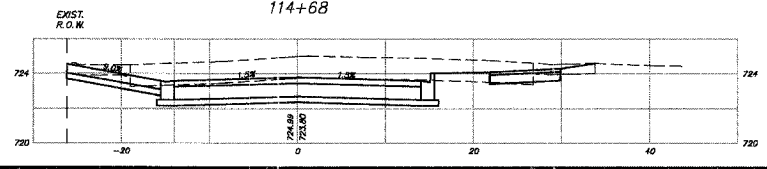
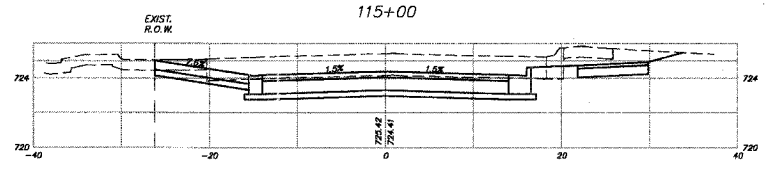
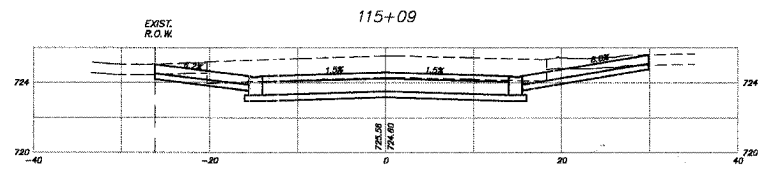
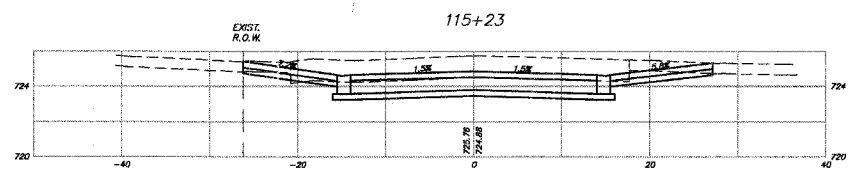
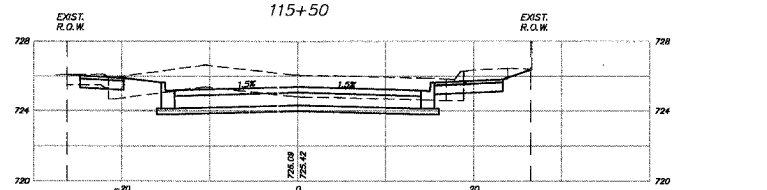
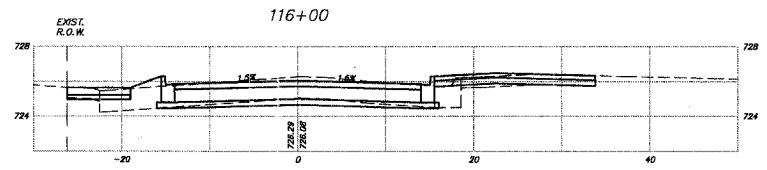
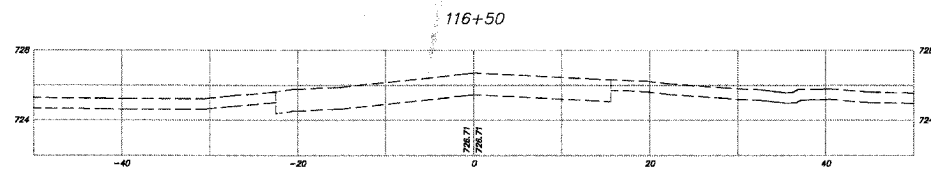
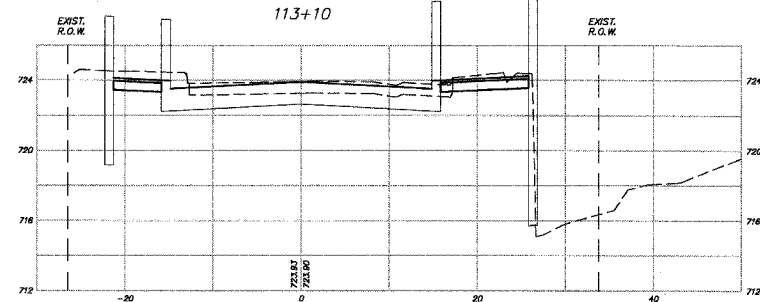
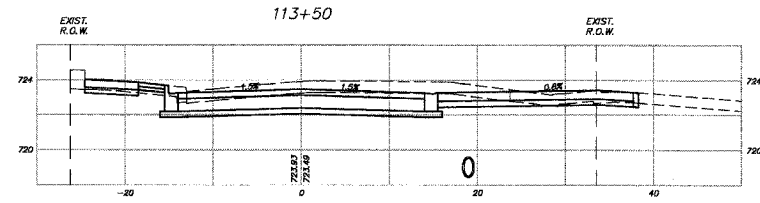
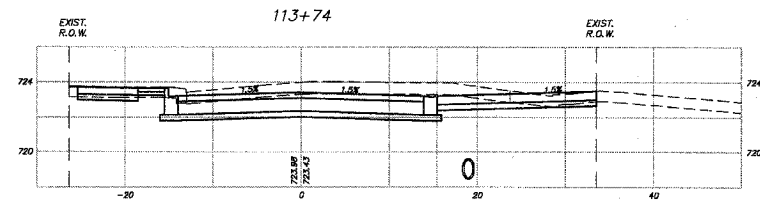
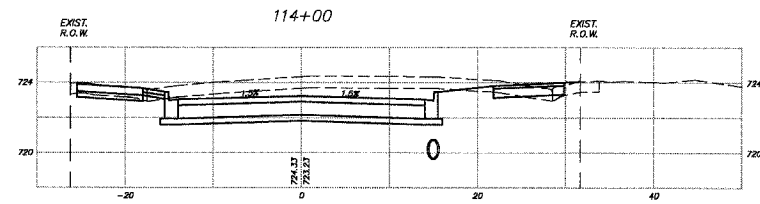
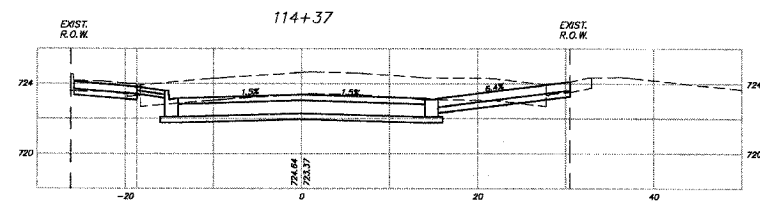
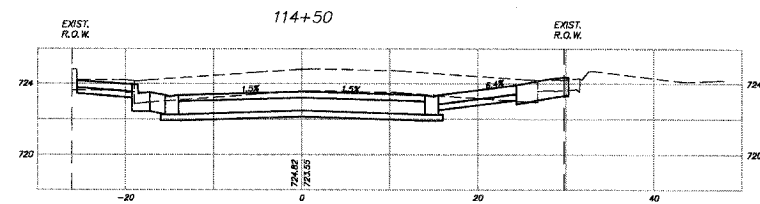
SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PRIME PARKWAY, SUITE 201
 MCKENNA, ILLINOIS 60050
 PH: 815-395-1778 FAX: 815-395-1781
 www.smithengineering.com E-MAIL: sec@smithengineering.com
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 VILLAGE OF CARPENTERSVILLE
 MAIN STREET OVER THE FOX RIVER
 CROSS SECTIONS

SCALE: VERT. 1"=5'
 HORIZ. 1"=10'
 DATE: 02-25-2005
 DRAWN BY: WJH
 CHECKED BY: TEH

F.A. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1283	02-00059-00-BR	KANE	51	51
STA. 113+10		TO STA. 116+50		
FED. ROAD DIST.	ILLINOIS	HIGHWAY PROJECT		

CONTRACT # 83783



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 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PRIME PARKWAY, SUITE 201
 McHENRY, ILLINOIS 60050
 PH: 815-350-1770 FAX: 815-350-1781
 www.smithengineering.com E-MAIL: seo@smithengineering.com
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REVISIONS	
1	
2	
3	
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8	

VIEW: C1-51
 PLOT FILE: STANDARD
 COMP. FILE: P-section.dwg