

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

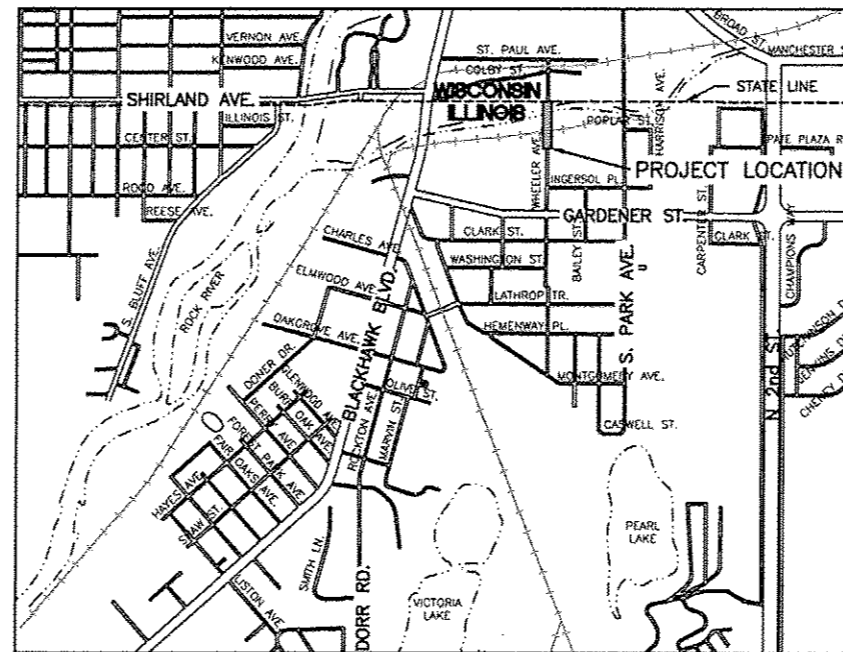
SOUTH BELOIT  
CITY CENTER BICYCLE LINK  
FOR  
CITY OF SOUTH BELOIT



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WINNEBAGO COUNTY  
SECTION: 13-00040-00-BT  
PROJECT No. TE-00D2 (155)  
JOB No. C-92-010-14  
ITEP No. 220007  
CONTRACT No. 85617



LOCATION MAP

NET LENGTH 449.63 FEET = 0.085 MILES

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL

ILLINOIS IOWA WISCONSIN

ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER: 184003525

STATE STANDARDS

- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 424001-08 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W 15' TO 24" FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-04 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS AND MARKERS)
- 780001-05 TYPICAL PAVEMENT MARKINGS

DISTRICT 2 STANDARDS

- 40.1 TRAFFIC CONTROL FOR ROAD CLOSURE
- 41.1 TYPICAL PAVEMENT MARKINGS

UTILITIES

UTILITY TYPE	COMMON NAME	CONTACT AND PHONE #
WATER	ILLINOIS AMERICAN WATER	MICHAEL SMYTH 630-739-8829
SEWER	SOUTH BELOIT PUBLIC WORKS	JEFF REININGER 815-389-3070
ELECTRIC	ROCK ENERGY CO-OP	CHRIS TOLLAR 866-752-4550
TELEPHONE	VERIZON, AT&T, TDS	CAROL ANASON 608-252-2385
GAS	ROCK ENERGY CO-OP	TOD BENSON 866-752-4550
CABLE	CHARTER	TOM PHILLIPS 608-209-4821
FIBER	WINDSTREAM KDL	MARK MILLS 217-876-7194

(CONTRACTOR TO BE RESPONSIBLE FOR ANY ADJUSTMENTS TO BE MADE.)



*Ben M. Bushman*  
SIGNATURE DATE  
3/27/15

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED	<i>Oliver Schanover</i> 3/27/15 CITY OF SOUTH BELOIT - MAYOR
PASSED	4/16/15 <i>Andy M. Baugh</i> DISTRICT 2 ENGINEER OF LOCAL ROADS AND STREETS
RELEASED FOR BID BASED ON LIMITED REVIEW	4/16/15 <i>Paul A. Foeter</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

SUMMARY OF QUANTITIES CONSTRUCTION TYPE CODE: 0028

NO.	S.P.	SPECIALTY ITEM	CODE	DESCRIPTION	UNIT	QUANTITY
1			21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	636
2			25000100	SEEDING, CLASS 1	ACRE	0.13
3			25000400	NITROGEN FERTILIZER NUTRIENT	POUND	12
4			25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	12
5			25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	12
6			25100630	EROSION CONTROL BLANKET	SQ YD	636
7			28000400	PERIMETER EROSION BARRIER	FOOT	154
8	*		28100713	STONE DUMPED RIPRAP, CLASS A7	SQ YD	141.2
9	*		31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	25
10	*		35101800	AGGREGATE BASE, TYPE B, 6-INCH	SQ YD	37
11	*		35102000	AGGREGATE BASE, TYPE B, 8-INCH	SQ YD	257
12	*		40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1033
13			40603387	HOT-MIX ASPHALT SURFACE COURSE, IL 9.5FG, N50	TON	83
14	*		42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 6-INCH	SQ FT	267
15			42400800	DETECTABLE WARNINGS	SQ FT	44
16	*		44000100	PAVEMENT REMOVAL	SQ YD	682
17			44000157	HMA SURFACE REMOVAL, 2"	SQ YD	323
18	*		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	90
19			44000600	SIDEWALK REMOVAL	SQ FT	56
20	*		44001114	HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ YD	290.2
21	*		50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
22			50300225	CONCRETE STRUCTURES	CU YD	2.8
23			50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
24			50700105	TREATED TIMBER	FBM	8568
25			50700305	HARDWARE	POUND	2360
26			50800105	REINFORCEMENT BARS	POUND	460
27			51500100	NAME PLATES	EACH	1
28	*	†	56108300	ADJUSTING WATER VALVES, 8-INCH	EACH	1
29	*	†	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	35
30	*	†	66900205	SPECIAL WASTE DISPOSAL	CU YD	60
31	*	†	66900210	HAZARDOUS WASTE DISPOSAL	CU YD	5
32	*	†	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1
33	*	†	66900530	SOIL ANALYSIS DISPOSAL	EACH	2
34			67100100	MOBILIZATION	L SUM	1
35			72000100	SIGN PANEL, TYPE 1	SQ FT	34
36			72400310	REMOVE SIGN PANEL, TYPE 1	SQ FT	19
37			72400320	REMOVE SIGN PANEL, TYPE 2	SQ FT	10
38	*		72900100	METAL POST, TYPE A	FOOT	61
39	*		72900200	METAL POST, TYPE B	FOOT	20
40			78000100	THERMOPLASTIC PAVEMENT MARKINGS, LETTERS & SYMBOLS	SQ FT	73
41		†	78000200	THERMOPLASTIC PAVEMENT MARKINGS, LINE - 4"	FOOT	335
42		†	78000400	THERMOPLASTIC PAVEMENT MARKINGS, LINE - 6"	FOOT	266
43		†	78005110	EPOXY PAVEMENT MARKINGS, LINE - 4"	FOOT	33
44		†	78005130	EPOXY PAVEMENT MARKINGS, LINE - 6"	FOOT	282
45	*	†	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
46		†	80400200	ELECTRICAL UTILITY SERVICE CONNECTION	L SUM	1
47	*		X7010216	TRAFFIC CONTROL AND PROTECTION, SPECIAL	L SUM	1
48	*		Z0004002	BOLLARD	EACH	6
49		†	Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1
50		†	Z0007114	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1
51	*		Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	119.7
52			Z0046665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
53	*	†	XX002063	LIGHTING SYSTEM, COMPLETE	L SUM	1
54	*		XX006821	CONCRETE TRUCK WASHOUT	L SUM	1

MIXTURE USES:	PATH	PARKING LOT
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS	3.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5 FG	IL 9.5 FG
FRICTION AGGREGATE	MIX C	MIX C
20 YEAR SEAL	0.0	0.0
QUALITY MANAGEMENT PROGRAM TO BE USED	QA/QC	QA/QC

NOTES:

- THE UNIT WEIGHT USED TO CALCULATE HOT-MIX ASPHALT MIXTURES IS 112 LBS/SY/IN.
- THE APPLICATION RATE TO CALCULATE BITUMINOUS MATERIALS (PRIME COAT) IS 3.08 LBS./SY ON AGGREGATE SUBBASE, AND 0.762 LBS./SY ON HOT-MIX SURFACE AND BINDER COURSE.
- THE APPLICATION RATE USED TO CALCULATE FERTILIZER NUTRIENT IS 90 LBS/ACRE.
- THE UNIT WEIGHT USED TO CALCULATE AGGREGATE BASE COURSE, TYPE B IS 2.05 TONS/CY.

SCHEDULE OF QUANTITIES

28000400  
PERIMETER EROSION BARRIER

LOCATION	FOOT
SW QUAD BRIDGE	33
SE QUAD BRIDGE	28
NE QUAD BRIDGE	47
NW QUAD BRIDGE	46
TOTAL	154

35101800  
AGGREGATE BASE, TYPE B, 6-INCH

LOCATION	SQ YD
138+82	10
139+57	13
140+28	14
TOTAL	37

35102000  
AGGREGATE BASE, TYPE B, 8-INCH

LOCATION	SQ YD
138+58 - 138+73	13
139+68 - 140+25	61
140+31 - 141+20	125
142+61 - 143+08	58
TOTAL	257

40603387  
HOT-MIX ASPHALT SURFACE COURSE, IL 9.5FG, N50

LOCATION	TON
138+58 - 138+73	2
139+69 - 140+25	6
140+31 - 141+20	11
142+61 - 143+08	6
PARKING LOT	58
TOTAL	83

42400200  
PORTLAND CEMENT CONCRETE SIDEWALK, 6-INCH

LOCATION	SQ FT
138+82	80
139+57	96
140+28	91
TOTAL	267

42400800  
DETECTABLE WARNINGS

LOCATION	SQ FT
138+82	16
139+57	16
140+28	12
TOTAL	44

44000100  
PAVEMENT REMOVAL

LOCATION	SQ YD
139+57 - 141+20	605
142+61 - 143+08	77
TOTAL	682

72000100  
SIGN PANEL, TYPE 1

LOCATION	SQ FT
WARNING CROSSBUCK, R15-1	1.36
WARNING CROSSBUCK, R15-1	1.36
LOOK SIGN, R15-8	0.5
LOOK SIGN, R15-8	0.5
DISMOUNT YOUR BIKE, CUSTOM	1.5
ADVANCE GRADE CROSSING SIGN, W10-1	3.14
ADVANCE GRADE CROSSING SIGN, W10-1	3.14
NO MOTOR VEHICLES SIGN, R5-3	4
NO MOTOR VEHICLES SIGN, R5-3	4
DEAD END SIGN, W14-1	6.25
END OF ROAD SIGN, OM4-2	6.25
ADA ACCESSIBLE PARKING SIGN, R7-8	1.5
TOTAL	34

72400310  
REMOVE SIGN PANEL, TYPE 1

LOCATION	SQ FT
END OF ROAD SIGN, OM4-2	6.25
END OF ROAD SIGN, OM4-2	6.25
END OF ROAD SIGN, OM4-2	6.25
TOTAL	19

72400320  
REMOVE SIGN PANEL, TYPE 2

LOCATION	SQ FT
ROAD CLOSED SIGN, R11-2	10
TOTAL	10

78000100  
THERMOPLASTIC PAVEMENT MARKINGS, LETTERS & SYMBOLS

LOCATION	SQ FT
THROUGH ARROW	6.5
THROUGH ARROW	6.5
THROUGH ARROW	6.5
THROUGH ARROW	6.5
BIKE SYMBOL	10.5
BIKE SYMBOL	10.5
BIKE SYMBOL	10.5
BIKE SYMBOL	10.5
BIKE SYMBOL	10.5
HANDICAP SYMBOL	4.6
TOTAL	73

78000200  
THERMOPLASTIC PAVEMENT MARKINGS, LINE - 4"

LOCATION	FOOT
139+69 - 141+00	30
142+81 - 143+08	6
PARKING LOT	299
TOTAL	335

78000400  
THERMOPLASTIC PAVEMENT MARKINGS, LINE - 6"

LOCATION	FOOT
CROSSWALK	102
SOUTH APPROACH DIAMOND	82
NORTH APPROACH DIAMOND	82
TOTAL	266

78005110  
EPOXY PAVEMENT MARKINGS, LINE - 4"

LOCATION	FOOT
BRIDGE CENTERLINE	33
TOTAL	33

78005130  
EPOXY PAVEMENT MARKINGS, LINE - 6"

LOCATION	FOOT
BRIDGE LANE, RIGHT	141
BRIDGE LANE, LEFT	141
TOTAL	282



ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:

CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:

CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

DRAWN BY: M.S.  
APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: HOR  
VERT

REVISIONS

REV. NO.	DESCRIPTION	DATE

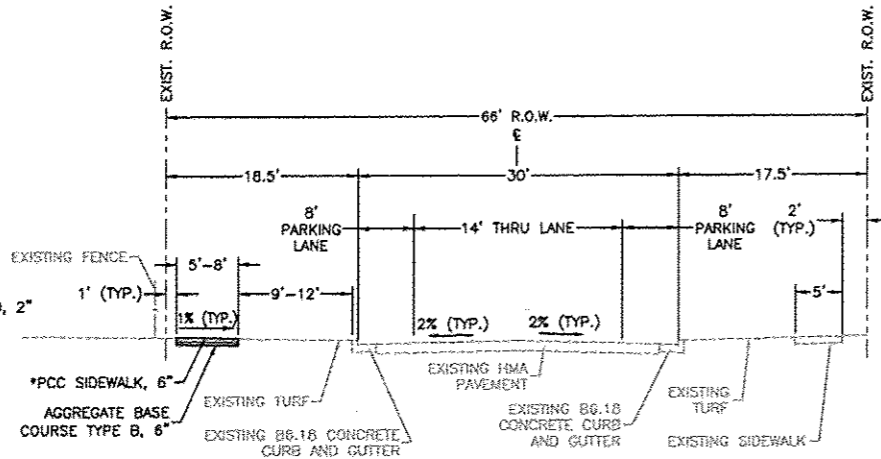
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QUANTITIES

JOB NUMBER:  
13-1031

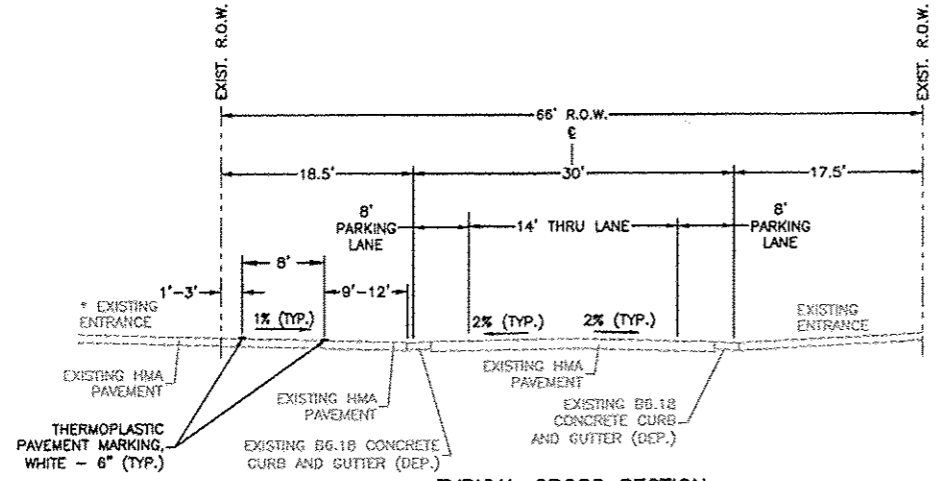
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NOTES:  
 \*HMA SURFACE COURSE, IL 9.5 FG, N50, 2"  
 STA 138+58.07 TO 138+73.13

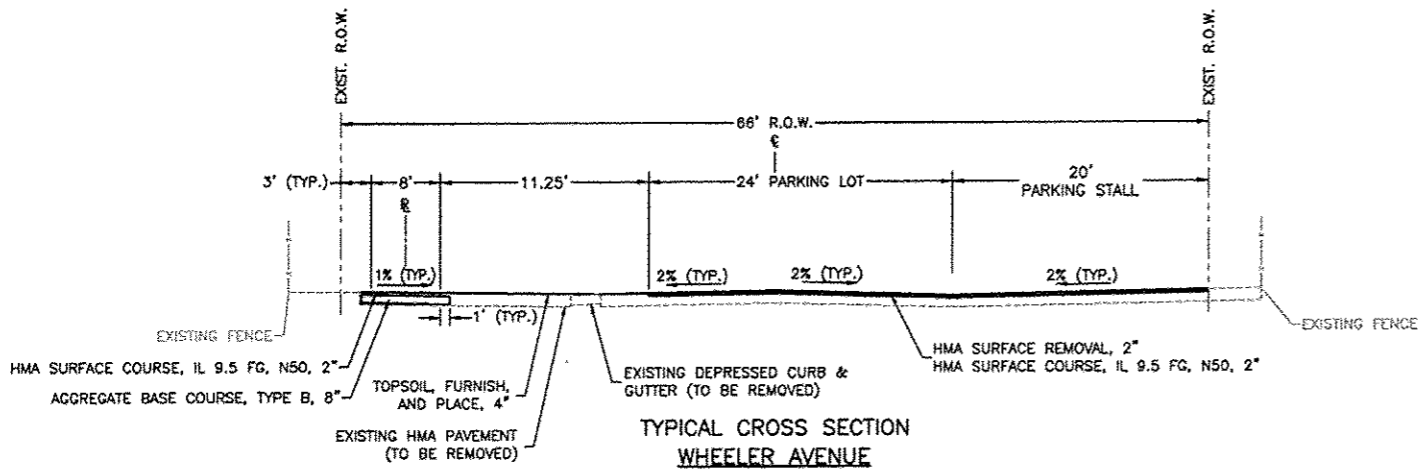


TYPICAL CROSS SECTION  
 WHEELER AVENUE  
 STA 138+58.07 TO 138+82.52  
 NOT TO SCALE

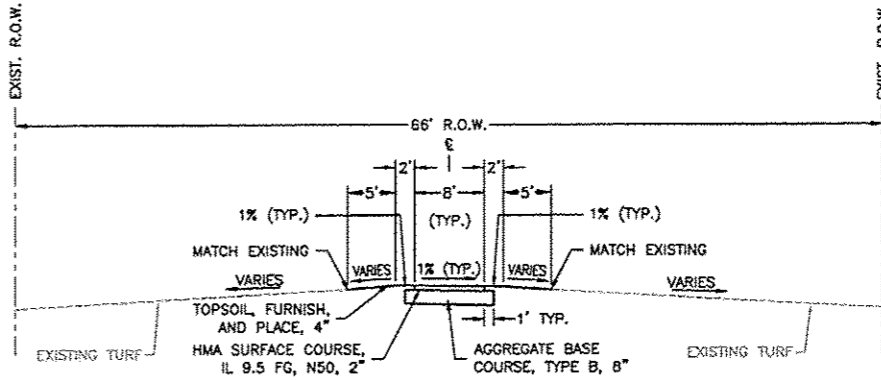
NOTES:  
 \*RAILROAD CROSSING  
 STA 139+26.05



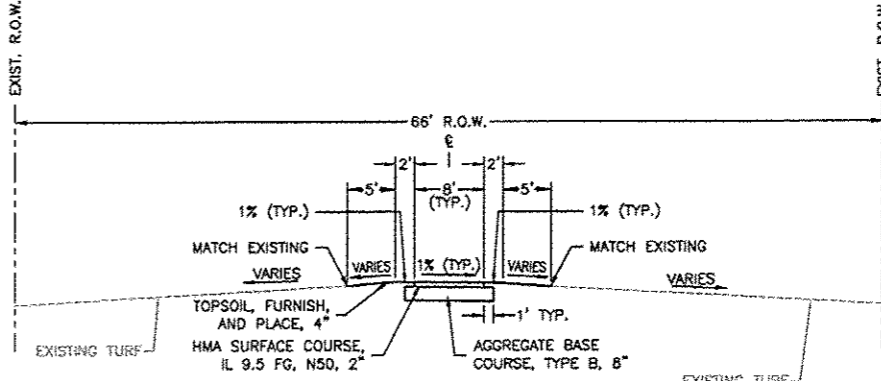
TYPICAL CROSS SECTION  
 WHEELER AVENUE  
 STA 138+82.52 TO 139+57.43  
 NOT TO SCALE



TYPICAL CROSS SECTION  
 WHEELER AVENUE  
 STA 139+57.43 TO 140+52.80  
 (PARKING LOT)  
 NOT TO SCALE



TYPICAL CROSS SECTION  
 STA 140+52.80 TO \*141+19.61  
 NOT TO SCALE



TYPICAL CROSS SECTION  
 STA \*142+61.40 TO 143+07.70  
 NOT TO SCALE

\*SEE BRIDGE PLANS FOR TYPICAL CROSS SECTIONS STA 141+19.61 TO 142+61.40

REVISIONS		
REV. NO.	DESCRIPTION	DATE

**GENERAL NOTES**

IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "ENGINEER", WHICH SHALL MEAN FEHR GRAHAM OF ROCKFORD, ILLINOIS OR THEIR DULY AUTHORIZED AGENT. IN THESE CONTRACT DOCUMENTS MENTION IS MADE OF THE "OWNER", WHICH SHALL MEAN CITY OF SOUTH BELOIT, OR THEIR DULY AWARDED AGENT.

IN THE FOLLOWING, THE ILLINOIS DEPARTMENT OF TRANSPORTATION WILL BE REFERRED TO AS IDOT.

AS PART OF THE BIDDING PROCEDURE, THE CONTRACTOR SHALL VERIFY THAT THE QUANTITIES FOR PAY ITEMS, AS PRESENTED IN THESE PLAN DOCUMENTS, ARE SUBSTANTIALLY CORRECT. IF DISCREPANCIES ARE DETECTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE DISCREPANCY PRIOR TO THE BID DATE.

QUANTITIES SHOWN ARE ESTIMATES FOR INFORMATION ONLY. PAYMENT WILL BE BASED ON ACTUAL QUANTITIES MEASURED IN THE FIELD OR ON PAYMENT LIMIT DETAILS.

THE CONTRACTOR SHALL BE PAID FOR MATERIALS AND EQUIPMENT SUCCESSFULLY INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AS MEASURED OR VERIFIED IN PLACE BY THE ENGINEER OR HIS AGENT.

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MUNICIPAL CODE, CITY OF SOUTH BELOIT, ILLINOIS, CURRENT EDITION, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" PREPARED BY IDOT, CURRENT EDITION, "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS," CURRENT EDITION, AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", CURRENT EDITION. SIGN CONSTRUCTION AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.

IN CASE OF CONFLICT BETWEEN THE ABOVE MENTIONED SPECIFICATIONS, THE ENGINEER SHALL DETERMINE WHICH OF THE SPECIFICATIONS SHALL GOVERN. THE ENGINEER'S DECISION SHALL BE FINAL AND NO ADDITIONAL COMPENSATION SHALL BE AWARDED UNLESS APPROVED BY THE ENGINEER.

THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE CITY OF SOUTH BELOIT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THESE PLANS MUST BE FOLLOWED BY THE CONTRACTOR. IMPROVEMENT REPRESENTATIONS AS SHOWN ON THESE PLANS, ARE AS ACCURATE AS POSSIBLE FROM THE INFORMATION AVAILABLE. HOWEVER, SOME FIELD REVISIONS MAY BE REQUIRED TO ACCOMMODATE UNFORESEEN CIRCUMSTANCES - THE ENGINEER SHALL BE ADVISED OF ANY NECESSARY REVISIONS WITH SUFFICIENT LEAD TIME ALLOWED TO PROPERLY CONSIDER AND ACT UPON SAID REQUESTS. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED IN CONSTRUCTING THOSE IMPROVEMENTS AS DETAILED IN THIS ENGINEERING PLAN. EXTREME CAUTION MUST BE EXERCISED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. CONTRACTORS ARE ADVISED THAT ALL MUD AND DEBRIS MUST BE CLEARED FROM ROADWAYS.

THE OWNER AND/OR ENGINEER SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE OR REJECT THE WORKMANSHIP AND/OR MATERIALS WHICH GO TO MAKE UP IMPROVEMENTS AS DETAILED IN THESE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY CITY OF SOUTH BELOIT AND THE ENGINEER AT LEAST 48 HOURS PRIOR TO PERFORMING ANY OF THE REQUIRED TESTS OR MATERIAL PLACEMENT, SO THAT A REPRESENTATIVE MAY BE PRESENT DURING ANY TESTING PROCEDURE OR MATERIAL PLACEMENT.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTING THE REQUIREMENTS OF ANY AND ALL EASEMENTS SECURED FOR THE PURPOSE OF PERFORMING THIS PROJECT; THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE REQUIREMENTS INCLUDED IN SAID EASEMENTS, AND INCORPORATING ANY COST ASSOCIATED WITH EXECUTING THESE REQUIREMENTS IN HIS BID - EXTRAS WILL NOT BE AWARDED AS A RESULT OF THE CONTRACTOR CLAIMING IGNORANCE OF THIS REQUIREMENT.

ANY AREAS DAMAGED OR DESTROYED DURING THE PROJECT AS A DIRECT OR INDIRECT RESULT OF CONTRACTOR OPERATIONS, SHALL BE RESTORED TO THAT CONDITION OR BETTER WHICH EXISTED PRIOR TO STARTING CONSTRUCTION. THE COST OF SAID RESTORATION OR REPAIR SHALL BE BORNE TOTALLY BY THE CONTRACTOR, WITH NO EXTRA COMPENSATION BEING AWARDED UNDER THIS CONTRACT. THE RESPONSIBILITY FOR THE REPAIR OR REPLACEMENT OF ANY UTILITY, STRUCTURE, LANDSCAPING, ETC. DAMAGED OR DESTROYED BY THE CONTRACTOR DURING MOBILIZATION OR CONSTRUCTION SHALL BE BORNE SOLELY BY THE CONTRACTOR, WITH NO EXPENSE BEING CHARGED TO THE ENGINEER OR OWNER. PRIOR TO ACCEPTANCE OF THIS REPAIR OR REPLACEMENT, THE CONTRACTOR SHALL PRESENT THE OWNER WITH A "SIGNOFF LETTER", SIGNED BY A RESPONSIBLE OFFICIAL OF THE OWNER OF THE DAMAGED UTILITY STATING THAT THE REPAIR OR REPLACEMENT IS ACCEPTABLE.

LOCATION OF PROPERTY LINES IS APPROXIMATE.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. HE WILL NOT BE ALLOWED TO BUILD FIRES ON THE SITE.

WHEN ARTIFICIAL LIGHTING IS UTILIZED DURING NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, AS WELL AS ADJOINING RESIDENTIAL AREAS.

THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO THE FULL SIZE (36" X 22") PLANS AND NOT REDUCED SIZE PLANS.

SCALE: DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT, SURFACE COURSE, TOP BACK OF CURB OR DITCHES, UNLESS OTHERWISE INDICATED.



ILLINOIS  
IOWA  
WISCONSIN

**OWNER/DEVELOPER:**

CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

**PROJECT AND LOCATION:**

CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

**DRAWN BY:** M.S.

APPROVED BY: B.M.B.

DATE: 02/27/15

SCALE: HOR  
VERT

**REVISIONS**

REV. NO.	DESCRIPTION	DATE

**DRAWING:**

GENERAL NOTES

SHEET NUMBER:  
4 of 32

**JOB NUMBER:**

13-1031

**SHEET NUMBER:**

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**SEEDING OF DISTURBED AREA**

DISTURBED AREAS ARE LOCATIONS WHERE THE CONTRACTOR'S OPERATIONS HAVE DAMAGED EXISTING GRASS COVER AND/OR TOPSOIL OUTSIDE OF THE PAY LIMITS OF THE PERMANENT SEEDING. SEEDING OF DISTURBED AREAS SHALL BE AT THE CONTRACTOR'S EXPENSE.

THE FINAL TOP 4 INCHES OF SOIL IN ANY DISTURBANCE AREA MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITH SEEDING, CLASS 1 AND EROSION CONTROL BLANKET IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS OR AS APPROVED BY THE ENGINEER.

EXTREME CAUTION SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT SOIL EROSION DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE PROVISIONS FOR EROSION AND SEDIMENT CONTROL. EROSION CONTROL SYSTEMS SHALL BE INSTALLED PRIOR TO ANY EARTHWORK ACTIVITIES ON SITE. EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLAN DETAILS AND THE ILLINOIS STANDARDS FOR URBAN SOIL EROSION AND SEDIMENT CONTROL AND THE ILLINOIS URBAN MANUAL, LATEST EDITION.

FABRIC FILTER FENCES SHALL BE PLACED AROUND ANY SOIL STOCK PILE WITH MORE THAN 10 CUBIC YARDS OF MATERIAL.

NO IN-STREAM WORK SHALL BE ALLOWED BETWEEN MARCH 15TH AND MAY 15TH OF ANY CONSTRUCTION SEASON, AND LIMITED TO A DISTANCE OF 50 YARDS UPSTREAM AND DOWNSTREAM OF THE STRUCTURE ANY TIME.

**UTILITIES**

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION OR HAVE THE POTENTIAL FOR CREATING FUTURE PROBLEMS SHALL BE DISPOSED OF OFF SITE AT AN APPROVED LOCATION OBTAINED BY THE CONTRACTOR, ACCORDING TO ARTICLE 202.03 OF THE IDOT STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR MUST VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT J.U.L.I.E. AT 1-800-892-0123 (OR 811) FOR EXACT FIELD LOCATION OF UTILITIES, DAMAGE, AND THE COST THEREOF. TO ANY AND ALL UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY AND ALL EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE. THE OWNER ENGINEER AND SURVEYOR ASSUME NO RESPONSIBILITY FOR THE LOCATION OF THE EXISTING UTILITIES SHOWN HEREON.

IF THERE ARE ANY UTILITIES WHICH ARE NOT MEMBERS OF THE J.U.L.I.E. SYSTEM, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THIS AND REQUESTING SAID UTILITIES TO FIELD VERIFY AND MARK PERTINENT UTILITY LOCATIONS.

UTILITIES SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND NO GUARANTEE OF THEIR ACCURACY IS MADE OR IMPLIED. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL-INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION INTO THE LOCATION, SIZE, DEPTH AND NATURE OF ANY AND ALL EXISTING UTILITIES THAT MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY AND ALL UTILITY COMPANIES REGARDING ADJUSTMENTS NECESSARY. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE AND CONSIDERED INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND, OVERHEAD, OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR THE OWNER OR REPLACED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS REQUIRED TO PROTECT THE VARIOUS BURIED UTILITIES THAT ARE CROSSED (I.E., WATER, SANITARY, STORM, GAS, TELEPHONE, ELECTRIC) DURING CONSTRUCTION. ANY DAMAGE THAT OCCURS TO THE VARIOUS BURIED UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ALL STORM SEWERS DAMAGED OR ENCOUNTERED DURING THE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED, REPLACED AND/OR CONNECTED IMMEDIATELY BY THE CONTRACTOR. COST FOR SAID REPAIRS, REPLACEMENT, AND/OR CONNECTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY FIELD TILES WHICH COMMENCE ON THE SUBJECT PROPERTY MAY BE REMOVED AND DO NOT NEED TO BE REPAIRED. IF A FIELD TILE SERVES AN UPSTREAM OFF SITE PROPERTY, THE FIELD TILE MUST BE REPAIRED, REPLACED, AND/OR CONNECTED IMMEDIATELY BY CONTRACTOR. THE COST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE MUNICIPALITY TO DETERMINE APPROVED METHODS OF UTILITY STRUCTURE ADJUSTMENT. UTILITY STRUCTURES MAY INCLUDE, BUT ARE NOT LIMITED TO, MANHOLES, WATER VALVES, HANDHOLES, ETC. ALL MATERIALS AND WORK NECESSARY TO COMPLETE ADJUSTMENTS PER MUNICIPALITY REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED ADJUSTMENT PAY ITEM.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN DRAINAGE FLOWS AT ALL TIMES DURING THE PERFORMANCE OF THE WORK. METHODS USED BY THE CONTRACTOR SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. COST OF MAINTAINING DRAINAGE FLOWS SHALL BE INCIDENTAL TO THE CONTRACT.

ANY FRAMES AND GRATES, SIGNS, FENCES, RETAINING WALLS, AND DELINEATORS DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED OR DISTURBED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS, MONUMENTS AND RIGHT-OF-WAY PINS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS. THE TYPE OF REPLACEMENT OF MONUMENTS WILL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATIONS OF THE BENCHMARKS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ALSO VERIFY HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, AND FIELD VERIFY LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES, AND VERIFY ELEVATIONS WHERE MATCHING INTO EXISTING WORK. THE CONTRACTOR SHALL FIELD NOTIFY ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH WORK.

THE CONTRACTOR SHALL REMOVE, STORE, AND RELOCATE TO THE SATISFACTION OF THE ENGINEER ALL EXISTING SIGNAGE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS, AND CONSIDER THIS AS INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING SIGNS OUTSIDE THE RIGHT-OF-WAY. ANY SIGNS REMOVED FOR CONSTRUCTION PURPOSES SHALL BE CAREFULLY REMOVED AND RE-ERECTED BY THE CONTRACTOR AT A LOCATION NEAREST TO THE ORIGINAL LOCATION, OR AT A LOCATION DETERMINED BY THE ENGINEER IN THE FIELD. REMOVAL AND RE-ERECTED SIGNS AND ANY DAMAGE DONE TO EXISTING SIGNS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.

ALL TREES/BUSHES/SHRUBS WITHIN THE LIMITS OF PROPOSED GRADING SHALL BE REMOVED OR GROUND TO A MINIMUM OF 4 INCHES BELOW THE PROPOSED FINISHED GRADE OR 18 INCHES BELOW THE PROPOSED FINISHED GRADE IF WITHIN THE LIMITS OF THE TRAIL. ALL VEGETATION SHALL BE HAULED OFFSITE AT THE EXPENSE OF THE CONTRACTOR. ALL VEGETATION CLEARING AND HAUL AWAY SHALL BE CONSIDERED INCIDENTAL TO TREE REMOVAL.

WHEELER AVENUE BRIDGE SHALL NOT BE USED TO MOVE CONSTRUCTION EQUIPMENT FROM ONE SIDE OF TURTLE CREEK TO THE OTHER.

PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

1. ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
2. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
3. THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
4. CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

CONSTRUCTION STAKING AND LAYOUT SHALL BE PROVIDED BY THE ENGINEER.

**TRAFFIC CONTROL AND PROTECTION**

THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION FOR THE TRAFFIC AS DIRECTED BY THE ENGINEER. ANY DROP-OFF GREATER THAN 3 INCHES ADJACENT TO THE EDGE OF PAVEMENT SHALL BE PROTECTED WITH BARRICADES, AND SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT. ALL SIGNS SHALL BE FURNISHED, INSTALLED AND MAINTAINED BY THE CONTRACTOR.

TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN CONDITIONS MAY REQUIRE THE ENGINEER TO MODIFY THE LOCATION OF THE TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES FROM THE TIME OF NOTIFICATION BY THE ENGINEER TO ANY REQUEST MADE BY THE ENGINEER FOR CORRECTION, IMPROVEMENT OR MODIFICATION OF THE MAINTENANCE OF TRAFFIC CONTROL DEVICES. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ADJACENT TRAFFIC LANES OPEN TO TRAFFIC FROM DEBRIS BEING BLOWN OR OTHERWISE REMOVED FROM THE CONSTRUCTION AREAS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR KEEPING DEBRIS OFF THE ADJACENT TRAVELED LANE SURFACE. COST INCIDENTAL TO THE PROJECT.

THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL TRAFFIC CONTROL ITEMS NECESSARY FOR THE CONSTRUCTION OF ITEMS WITHIN THE ROAD RIGHT-OF-WAY. ALL WORK PERFORMED SHALL HAVE TRAFFIC CONTROL IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS" (LATEST EDITION).

PROVIDE TO THE ENGINEER, AND THE CITY OF SOUTH BELOIT PUBLIC WORKS DIRECTOR THE NAME AND PHONE NUMBER OF INDIVIDUALS RESPONSIBLE FOR MAINTAINING TRAFFIC CONTROL MEASURES DURING CONSTRUCTION. THIS INDIVIDUAL SHALL BE AVAILABLE TO CORRECT TRAFFIC CONTROL PROBLEMS 24 HOURS PER DAY.

### ABBREVIATIONS

Table listing abbreviations for various engineering terms, including ANGLE, AGGREGATE BASE COURSE, AMERICAN CONCRETE INSTITUTE, etc.

Table listing abbreviations for materials and components, including POLYETHYLENE PIPE, POINT OF INTERSECTION, PLATE, etc.

HATCH PATTERNS table listing symbols for Earth - Fill, Brick, Steel, Insulation, etc.

### SYMBOLS

Table of symbols for CIVIL and SANITARY SEWER systems, showing existing and proposed states for items like RIGHT-OF-WAY LINE, PROPERTY LINE, SANITARY SEWER, etc.

Table of symbols for WATER and STORM SEWER systems, showing existing and proposed states for items like WATER SERVICE, WATER PIPE, STORM SEWER, etc.

Table of symbols for UTILITY and TRAFFIC RELATED systems, showing existing and proposed states for items like FIBER OPTIC LINE, UNDERGROUND TV CABLE, CONTROLLER, etc.

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL logo and contact information for Illinois, Iowa, and Wisconsin.

OWNER/DEVELOPER: CITY OF SOUTH BELOIT, 519 BLACKHAWK BOULEVARD, SOUTH BELOIT, IL 61080.

PROJECT AND LOCATION: CITY CENTER BICYCLE LINK, SOUTH BELOIT, IL.

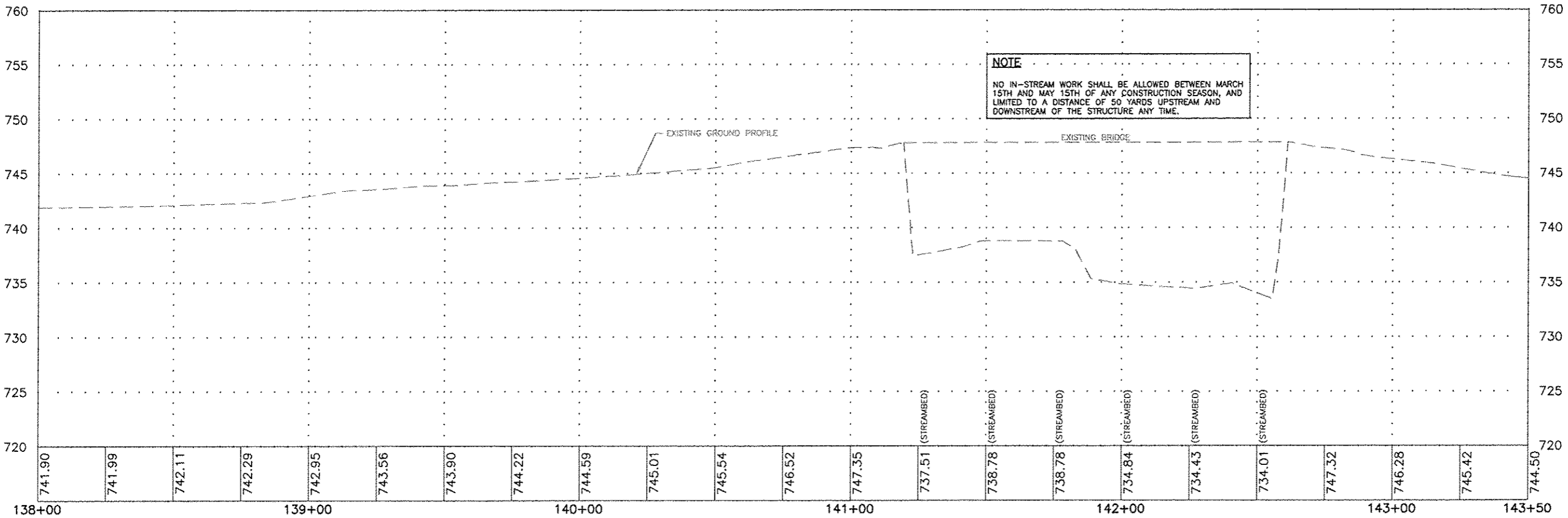
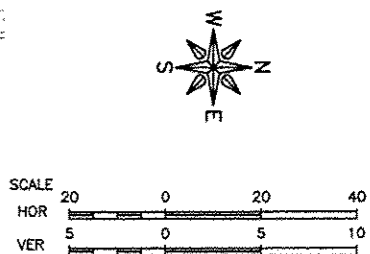
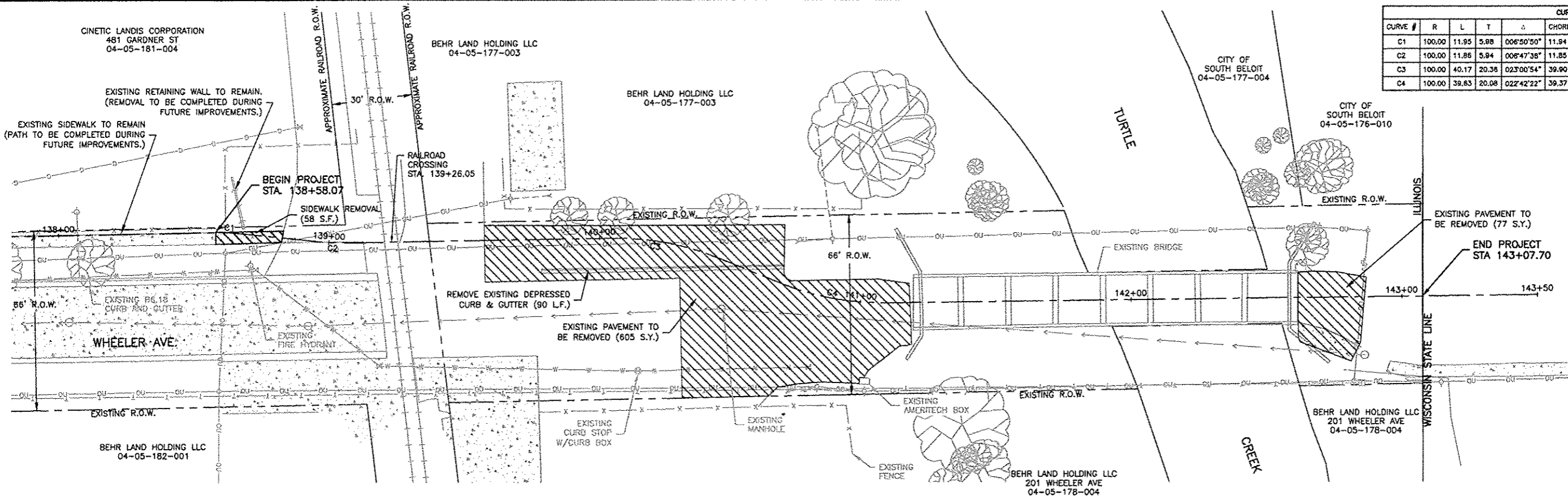
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REVISIONS table with columns for REV. NO., DESCRIPTION, and DATE.

DRAWING: STANDARD LEGEND with various symbols and their descriptions.

JOB NUMBER: 13-1031, SHEET NUMBER: 5 of 32.

CURVE TABLE										
CURVE #	R	L	T	Δ	CHORD	BEARING	E	PC STA	PT STA	PI STA
C1	100.00	11.95	5.98	006°50'50"	11.84	N02°24'51"E	0.18	138+58.84	138+62.82	138+68.79
C2	100.00	11.86	5.94	006°47'38"	11.85	N02°26'28"E	0.18	138+65.60	138+69.54	138+74.48
C3	100.00	40.17	20.38	023°00'54"	39.90	N10°33'07"E	2.01	140+04.83	140+24.99	140+44.80
C4	100.00	39.63	20.08	022°42'22"	39.37	N10°42'23"E	1.96	140+69.39	140+89.47	141+09.02



**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

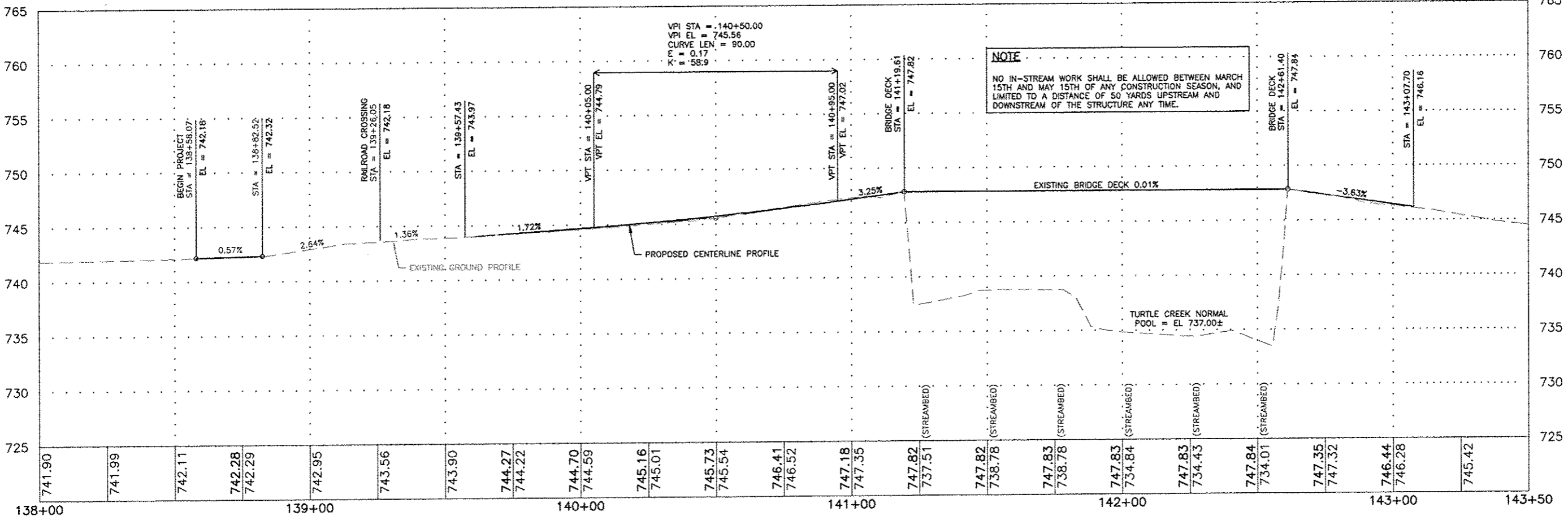
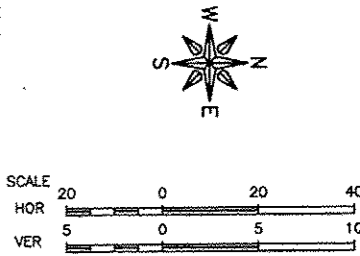
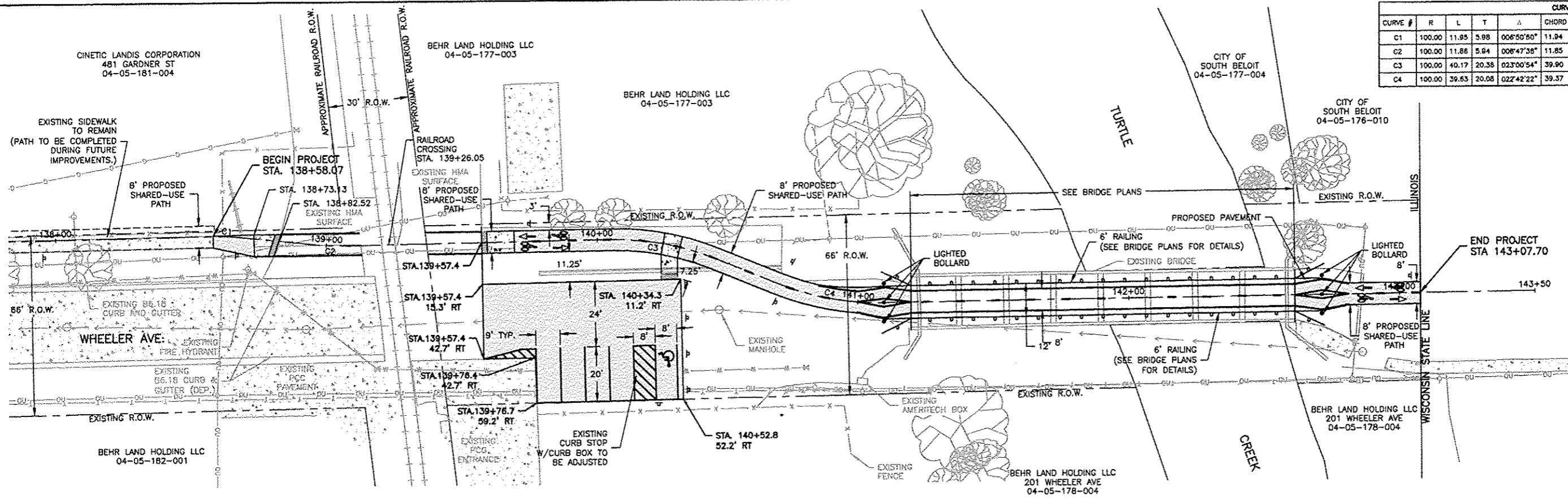
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APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: HOR  
VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
REMOVAL PLAN

JOB NUMBER:  
13-1031  
SHEET NUMBER:  
6 of 32

CURVE TABLE										
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C2	100.00	11.86	5.94	006°47'38"	11.85	N02°26'28"E	0.18	138+85.60	139+01.54	139+07.46
C3	100.00	40.17	20.08	023°00'54"	39.90	N10°33'07"E	2.01	140+04.83	140+24.99	140+44.80
C4	100.00	39.63	20.08	022°42'22"	39.57	N10°42'23"E	1.96	140+69.59	140+89.47	141+09.02



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519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

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CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

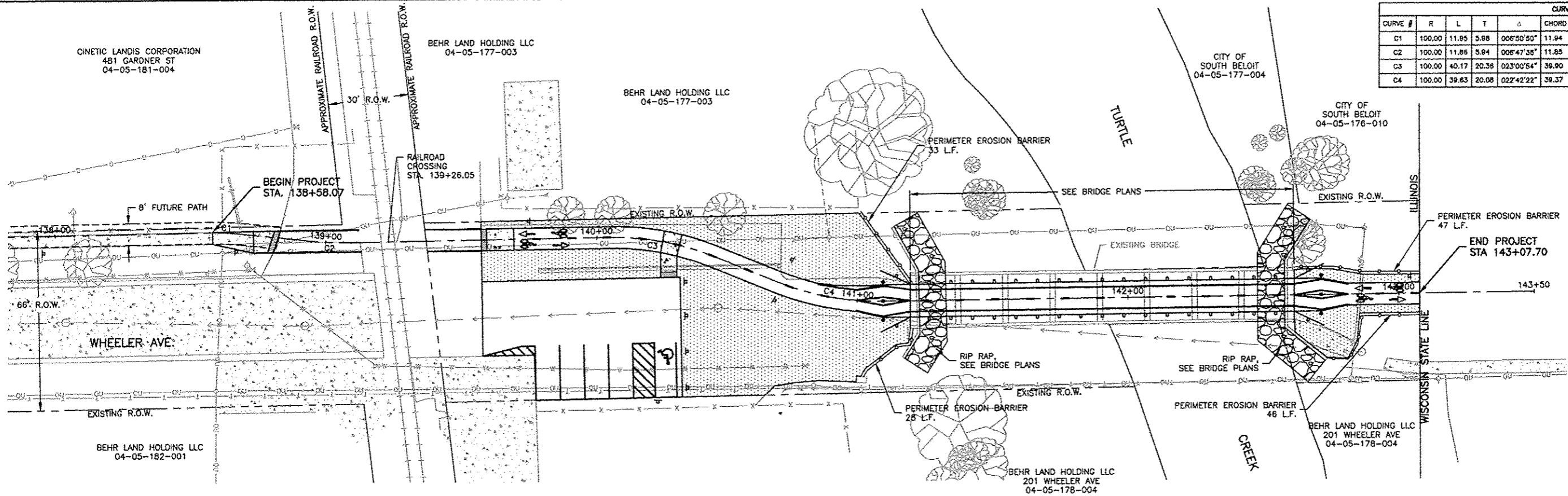
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APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: 1"=20'  
1"=5'

REVISIONS		
REV. NO.	DESCRIPTION	DATE

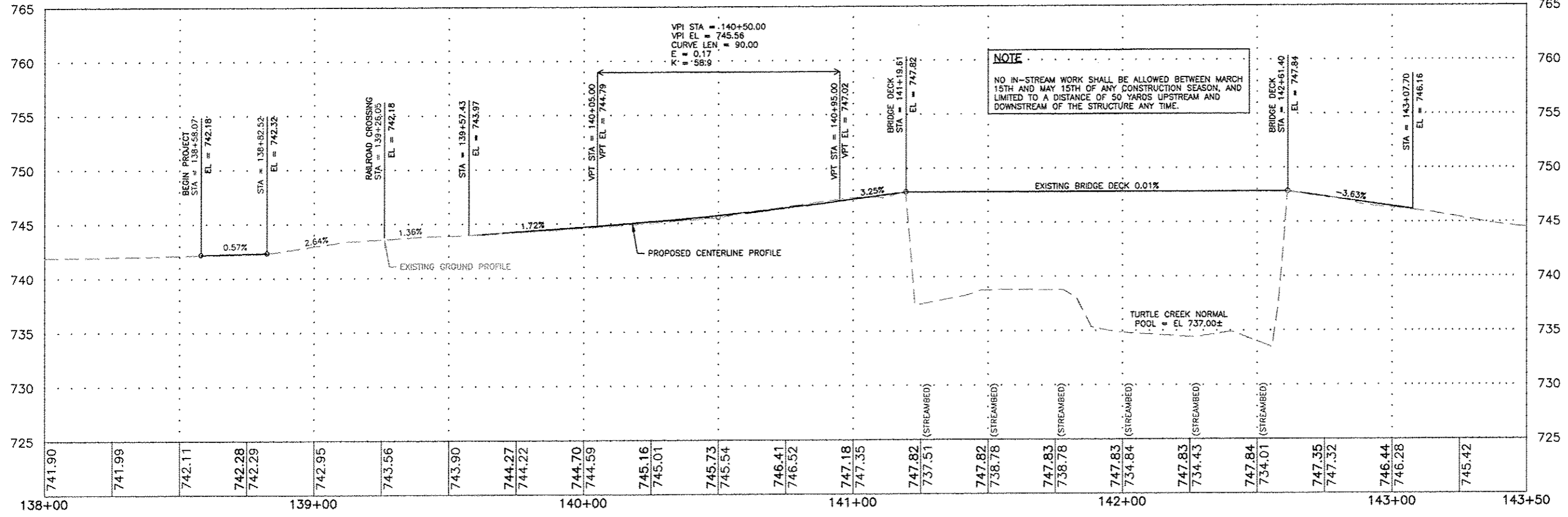
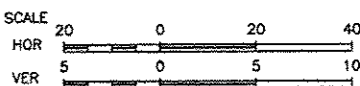
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PLAN AND PROFILE

JOB NUMBER:  
13-1031  
SHEET NUMBER:  
7 of 32

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C3	100.00	40.17	20.38	023°00'54"	39.00	N10°33'07"E	2.01	140+04.63	140+24.99	140+44.80
C4	100.00	39.63	20.08	022°42'22"	39.37	N10°42'23"E	1.96	140+69.39	140+89.47	141+09.02



TOPSOIL, FURNISH, AND PLACE, 4" EROSION CONTROL BLANKET SEEDING CLASS 1



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 SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
 CITY CENTER BICYCLE LINK  
 SOUTH BELOIT, IL

DRAWN BY: M.S.  
 APPROVED BY: B.M.B.  
 DATE: 02/27/15  
 SCALE: HOR  
 VERT

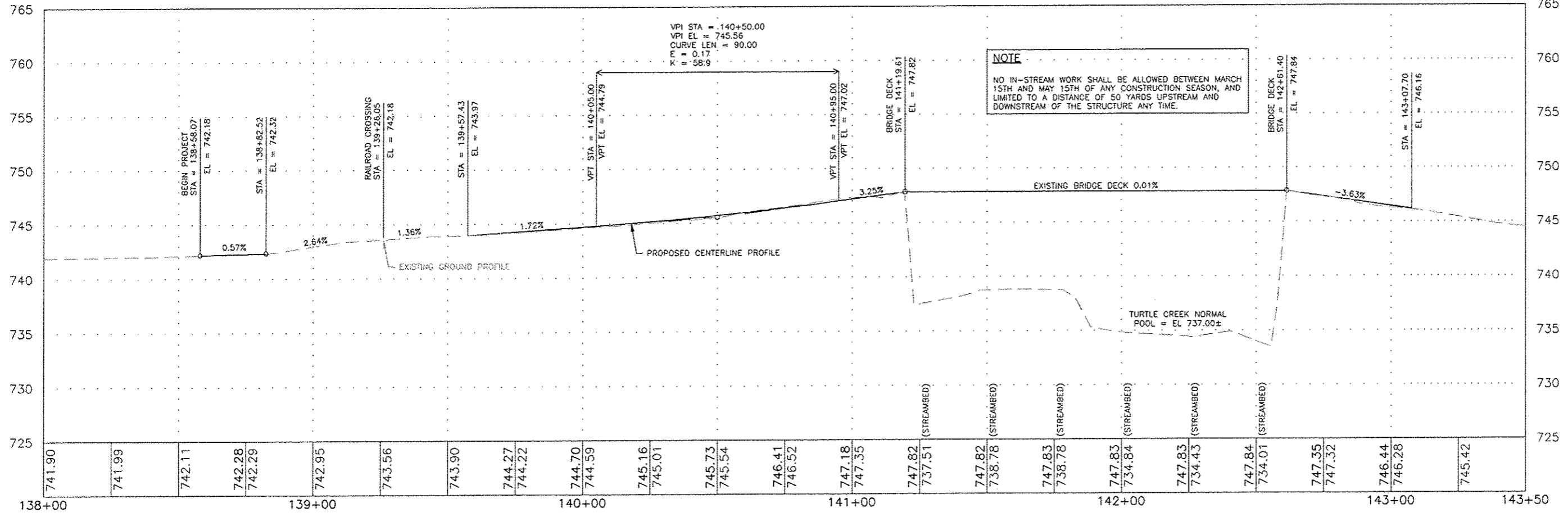
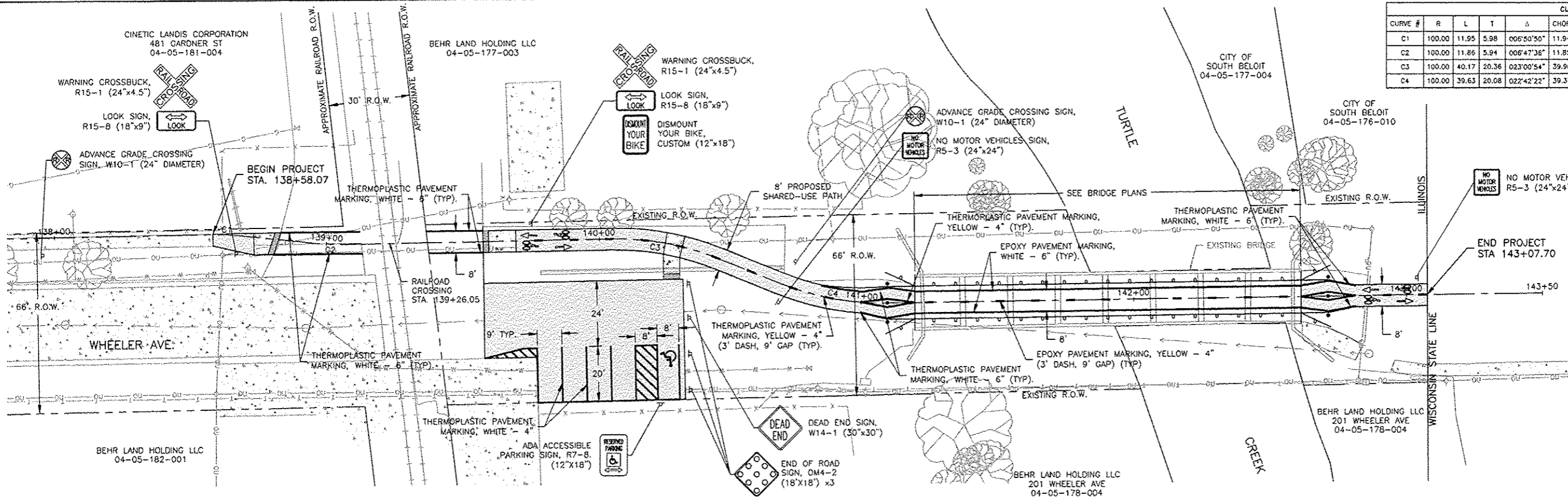
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REV. NO.	DESCRIPTION	DATE

DRAWING:  
 EROSION CONTROL PLAN

JOB NUMBER:  
 13-1031  
 SHEET NUMBER:  
 8 of 32



CURVE TABLE											
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C4	100.00	39.63	20.08	022°42'22"	39.37	N10°42'23"E	1.96	140+69.39	140+89.47	141+09.02	



**NOTE**  
NO IN-STREAM WORK SHALL BE ALLOWED BETWEEN MARCH 15TH AND MAY 15TH OF ANY CONSTRUCTION SEASON, AND LIMITED TO A DISTANCE OF 50 YARDS UPSTREAM AND DOWNSTREAM OF THE STRUCTURE ANY TIME.

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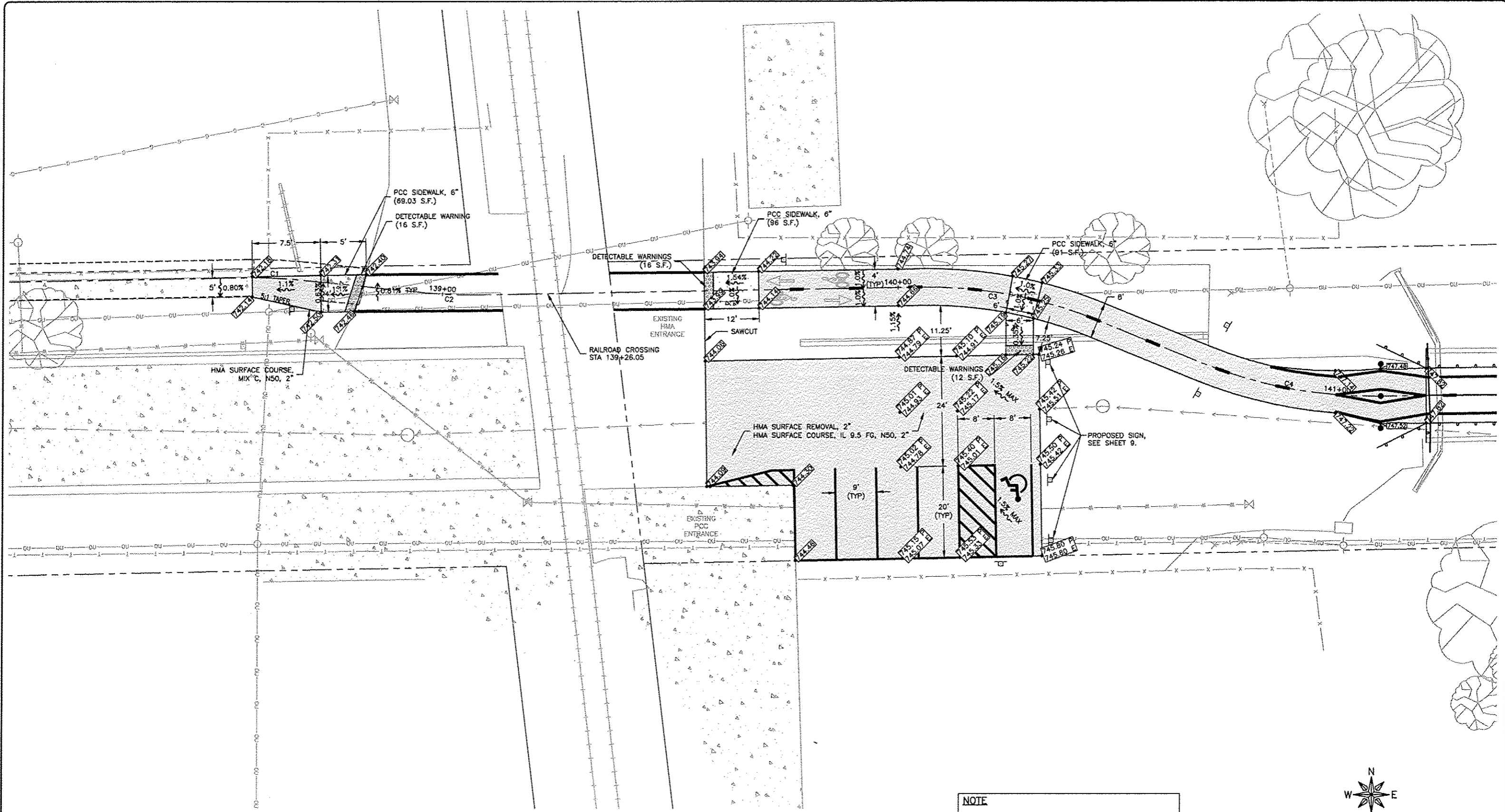
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SOUTH BELOIT, IL

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DATE: 02/27/15  
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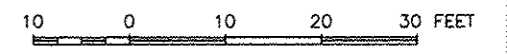
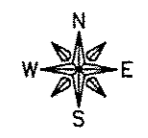
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REV. NO.	DESCRIPTION	DATE

DRAWING:  
STRIPING AND SIGNAGE PLAN

JOB NUMBER:  
13-1031  
SHEET NUMBER:  
9 of 32



**NOTE**  
 NO IN-STREAM WORK SHALL BE ALLOWED BETWEEN MARCH 15TH AND MAY 15TH OF ANY CONSTRUCTION SEASON, AND LIMITED TO A DISTANCE OF 50 YARDS UPSTREAM AND DOWNSTREAM OF THE STRUCTURE ANY TIME.



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PROJECT AND LOCATION:  
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 SOUTH BELOIT, IL

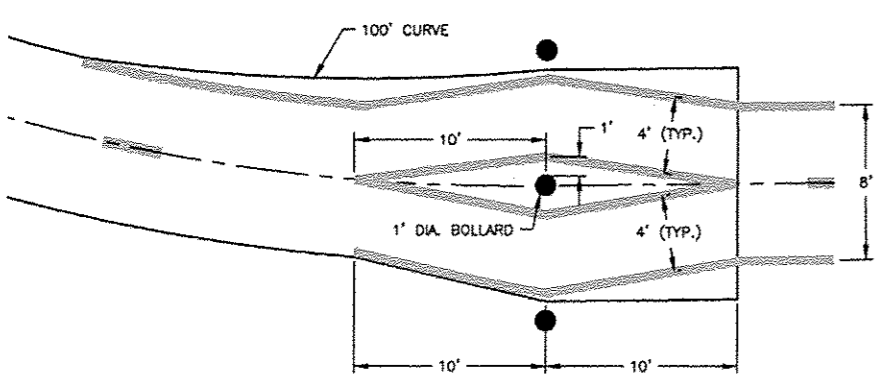
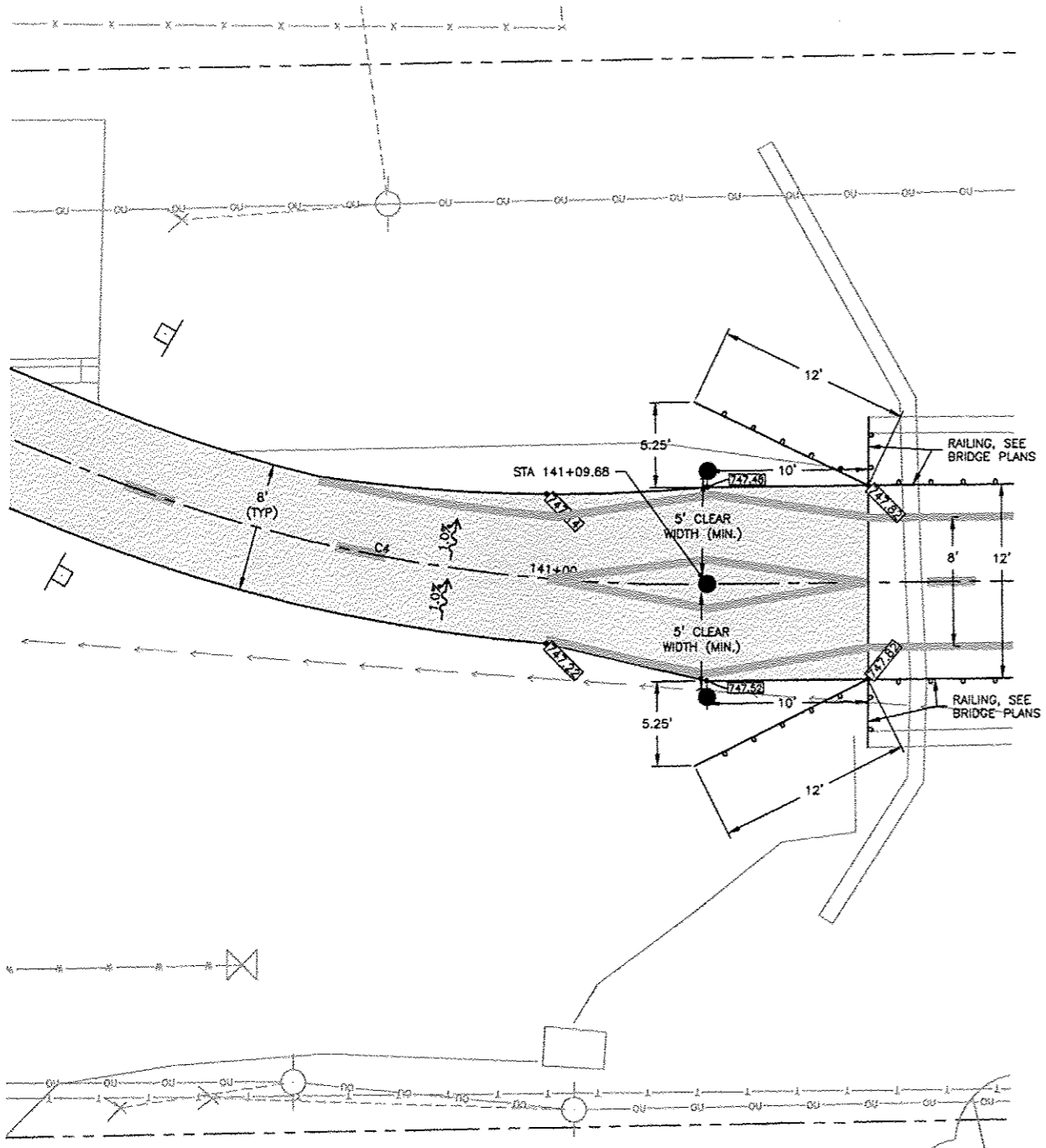
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 SCALE: HOR VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

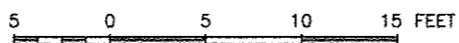
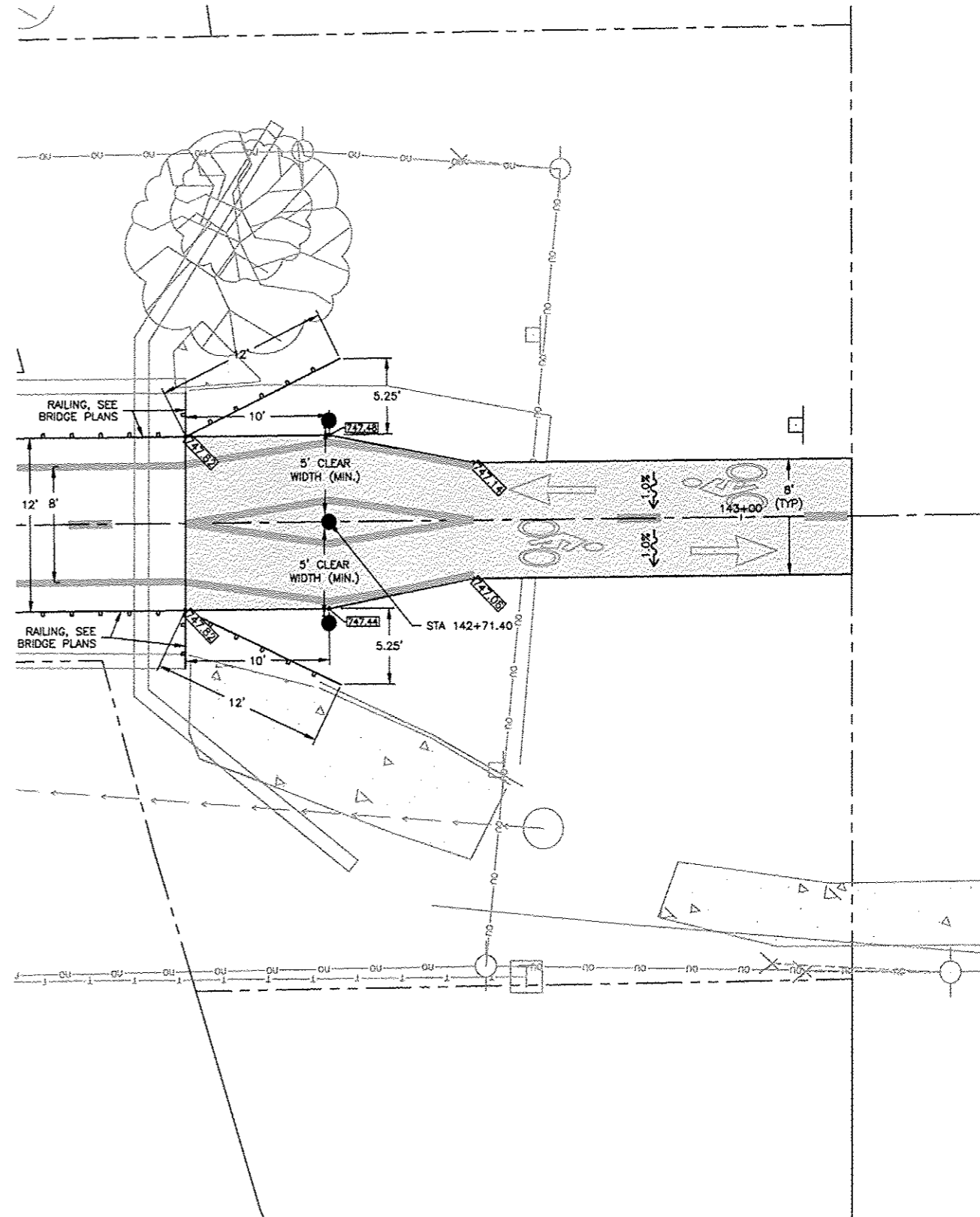
DRAWING:  
 RAMP DETAILS

JOB NUMBER:  
 13-1031

SHEET NUMBER:  
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BOLLARD STRIPPING DETAIL  
N.T.S.



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CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

DRAWN BY: M.S.  
APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: HOR  
VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
APPROACH DETAILS

JOB NUMBER:  
13-1031

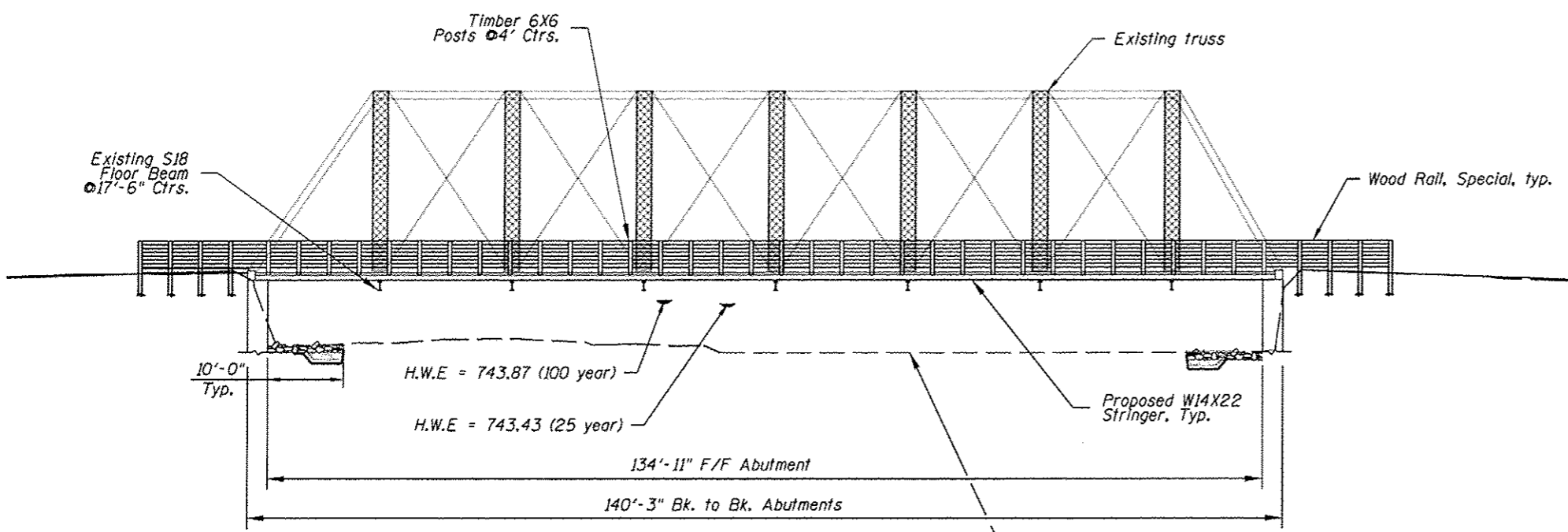
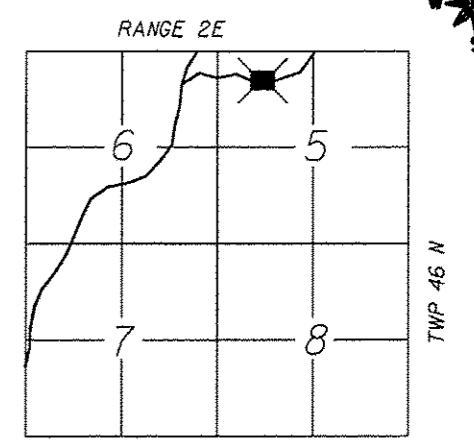
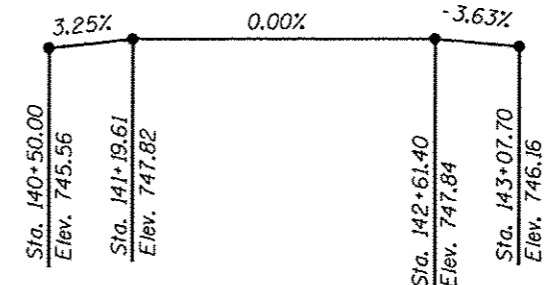
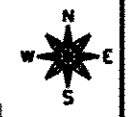
SHEET NUMBER:  
11 of 32

**BENCHMARK DATA:**

BM #1 - 5/8" RB with Caps Sta. 141+08.67 26.75' LT.  
 BM #2 - 5/8" RB with Caps Sta. 132+45.24 51.66' RT.  
 BM #3 - 5/8" RB with Caps Sta. 131+45.49 10.75' RT.

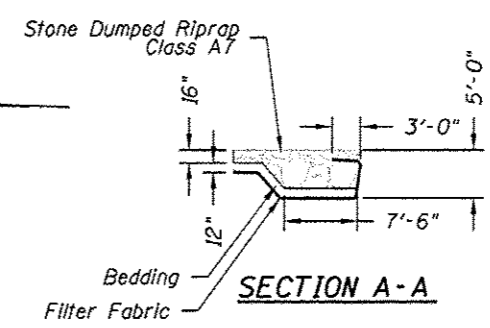
**EXISTING STRUCTURE DESCRIPTION:**

Existing bridge STR. NO. 101-6301, is a single span pratt truss 140'-3" long, back to back abutments, with a 18'-8" roadway surface, a pratt style truss and wooden deck on simple span steel stringers bearing upon floor beams concrete deck beams, supported on concrete abutments supported by precast concrete piles. Built at Sta. 141+20.27 at unknown date. The contractor shall remove the deck, stringers and bearings of existing structure as shown on plans. These shall be replaced with new decking, stringers and bearings. The Contractor shall reinforce existing floor beams and repair existing abutments as shown on the plans.



**PROFILE GRADE**  
(along Centerline Roadway)

**LOCATION SKETCH**



**DESIGN STRESSES**  
 f'c = 3,500 psi (Concrete)  
 fy = 60,000 psi (Reinforcement)  
 fy = 50,000 psi (M270 GRADE 50W)

**TIMBER**  
 2X6 Treated Members = S.P.#1  
 Fb min. = 1,650 psi  
 2X8 Treated Members = S.P.#2  
 Fb min. = 1,250 psi  
 6X6 Treated Members = S.P.#2  
 Fb min. = 1,250 psi  
 3X12 Treated Members = S.P.#1  
 Fb min. = 1,250 psi

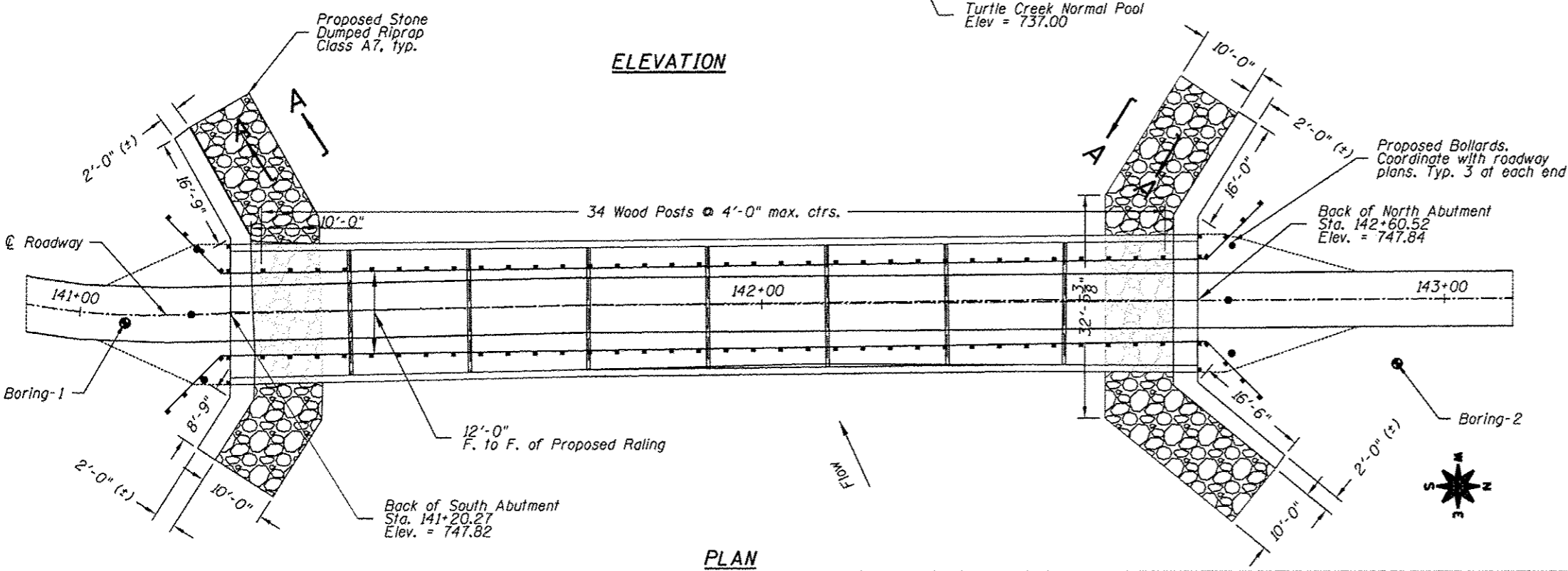
**DESIGN LOADING**  
 90 psf Pedestrian Live Load  
 3000# Axle Truck

**DESIGN SPECIFICATIONS**  
 2012 AASHTO LFRD 6th Edition

**WATERWAY DATA**

Drainage Area	246.0	Sq. Mi.
Existing Opening (25 Year)	961.0	Sq. Ft.
Proposed Opening (25 Year)	961.0	Sq. Ft.
Design Discharge (25 Year)	7430	C.F.S.
Computed Discharge (100 Year)	9980	C.F.S.

Note: Field verify all dimensions before ordering materials



**PLAN**

*Keith E. Brandau*  
 KEITH E. BRANDAU  
 Illinois Licensed Structural Engineer Number 4905  
 License Expires 11/30/16  
 01/09/2015  
 DATE



**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
 ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
 IOWA  
 WISCONSIN

OWNER/DEVELOPER:  
 CITY OF SOUTH BELOIT  
 519 BLACKHAWK BOULEVARD  
 SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
 WHEELER AVENUE BRIDGE REHAB  
 CITY CENTER BICYCLE LINK  
 200 WHEELER AVENUE  
 SOUTH BELOIT, IL 61080

DRAWN BY: GM  
 APPROVED BY: KEB  
 DATE: 01/09/2015  
 SCALE: N/A

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 GENERAL PLAN AND ELEVATION

JOB NUMBER:  
 13-1031  
 SHEET NUMBER:  
 12 of 32

## BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Polymer Modified Portland Cement Mortar	Sq. Ft.		119.7	119.7
Removal of Existing Superstructures	Each	1.0		1.0
Stone Dumped Riprap, Class A7	Sq. Yd.		141.2	141.2
Furnishing and erecting structural steel	L. Sum	1.0		1.0
Treated Timber	F.B.M.	8,567		8,567
Hardware	Lbs	2,360		2,360
Concrete Structures	Cu. Yd.	2.8		2.8
Reinforcement bars	Lbs	460		460
Name Plates	Each	1		1
Hot-Mix Asphalt Surface Removal (Asbestos)	Sq. Yd.	290.2		290.2

### GENERAL NOTES

**1. STANDARD SPECIFICATIONS**

Wherever the term "standard specifications" is used, it shall mean "Standard Specifications for Road and Bridge Construction", 2012 edition by the Illinois Department of Transportation.

**2. SHOP DRAWINGS**

Contractor shall submit shop drawings for review (sufficient copies for the contractor's use plus 5 copies for retention by Fehr Graham and government agencies, minimum: 8 and/or samples as required in each section of the specifications. Shop drawings shall be clearly identified, legible and with equipment selections marked. Submittal of shop drawing shall certify that contractor has verified all measurements, sizes, requirements, and connections for compatibility with other aspects of the project.

**3. REPAIR OF DAMAGE**

The contractor shall repair, at contractor's own expense, any public or private property, including all utilities, which are damaged or disturbed by construction operations.

**4. PUBLIC SAFETY**

The contractor shall protect the public from all open holes and other safety hazards. The contractor shall comply with all applicable safety laws and ordinances. The contractor shall conduct operations to minimize safety hazards and inconvenience to the public.

**5. AS-BUILT RECORD DRAWINGS**

During the progress of the work, the contractor shall record all changes or deviations in the work as installed from the original drawings, and, at completion of project, the contractor shall submit for engineer's review: one 22"x34" set of clean as-built record drawings with all changes clearly marked in red. Indicate underground conduit positions by providing horizontal and vertical measurements (plus or minus 6 inches) to prominent and permanent landmarks at a minimum of every 20 feet.

**6. ADDITIONAL REQUIREMENTS**

See special provisions and appropriate technical specifications for additional requirements. All electrical drawings are to be read in conjunction with the project specifications and all other drawings related to the performance of the work. The contractor responsible for the execution of this work shall become thoroughly familiar with the project specifications before commencing any work. The project specifications and drawings form the basis of this contract requirements and include the type and grade of materials to be used, equipment to be furnished, the manner by which to be installed and where to be located. In the event of a conflict between the project specifications and drawings, specifications govern unless the Engineer directs otherwise. The contractor is responsible for confirming and correlating quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating work with that of all other trades, preserving existing structures, performing his work in a safe and satisfactory manner and for all other liability under the contract.

7. Plan dimensions and details relative to existing structure are subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction 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 work, however the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

8. Wheeler Avenue bridge shall not be used to move construction equipment from one side of Turtle Creek to the other.

9. The existing Bridge deck wearing surface contains asbestos. See Special Provisions for Asbestos Waterproofing Membrane Asbestos hot-mix asphalt surface removal. Cost included with Removal of Existing Superstructures, Special.

10. No in stream work shall be allowed between March 15th and May 15th of any construction season, and for a distance greater than 50 yards upstream & downstream of the structure at any time.

11. Boring Data is shown only as a guide to bidders in estimating soil conditions which may be encountered during construction.

12. Riprap required to meet the limits shown on the plan shall be paid as Stone Dumped Riprap, Class A7.

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

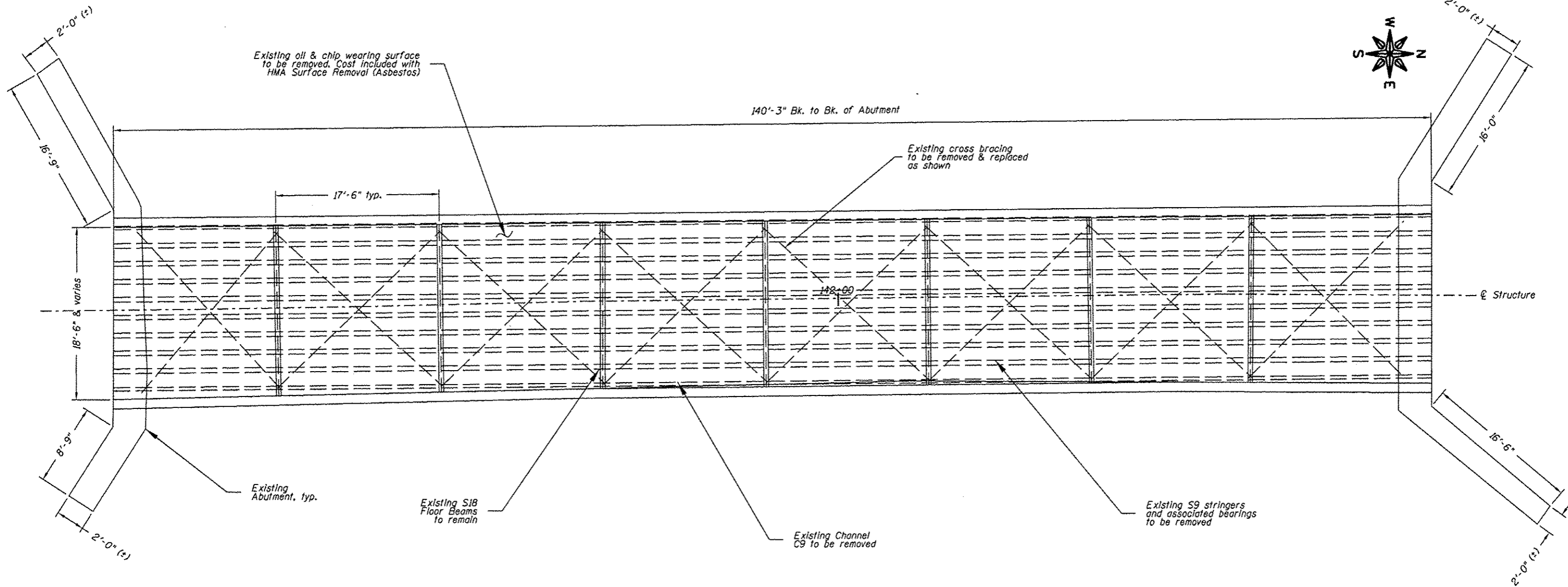
14. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

### STRUCTURAL NOTES

- No field welding is permitted except as specified in the contract documents. No field welding to existing steel is permitted.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Fasteners for steel connectors shall be ASTM A325 Type 1, mechanically galvanized bolts 3/4" dia., holes 1/2" dia., unless otherwise noted.
- Calculated weight of Structural steel = 26,843 lbs
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope or work, however, the Contractor will be paid for the quantity actually furnished at the unit bid price for work.
- The Contractor shall provide and install all necessary steel shims to construct a level deck surface.
- All structural timber shall be treated to conform to Section 507 of the Standard Specifications.
- The Contractor shall remove the required debris from the project. The cost of this work shall be included in the cost for "Removal of Existing Superstructures".
- It shall be the responsibility of the Contractor to verify all dimensions and elevations of the existing structure in the field prior to construction and ordering materials. Do not scale dimensions from the drawings for construction purposes.
- If, during the performance of the work, the Contractor finds a conflict or discrepancy related to existing details and dimensions of the existing structure, the Contractor shall report such discrepancies to the Engineer in writing at once and before proceeding with the work affected thereby. The Contractor shall obtain written interpretation or clarification of such discrepancies.
- Anchor bolts shall be ASTM F1554 all thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM 307 Grade C anchor bolts may be used in lieu of ASTM F1554.
- Timber deck planks shall be placed with the grain such that cupping shall not cause water to sit on a plank.
- All lumber dimensions given are nominal dimensions. The minimum surface areas of timbers shall be as follows:

NOMINAL SIZE	DRESSED
2 X 6	1 1/2" X 5 1/2"
2 X 8	1 1/2" X 7 1/4"
2 X 12	1 1/2" X 11 1/4"
3 X 12	2 1/2" X 11 1/4"
6 X 6	5 1/2" X 5 1/2"
8 X 8	7 1/2" X 7 1/2"

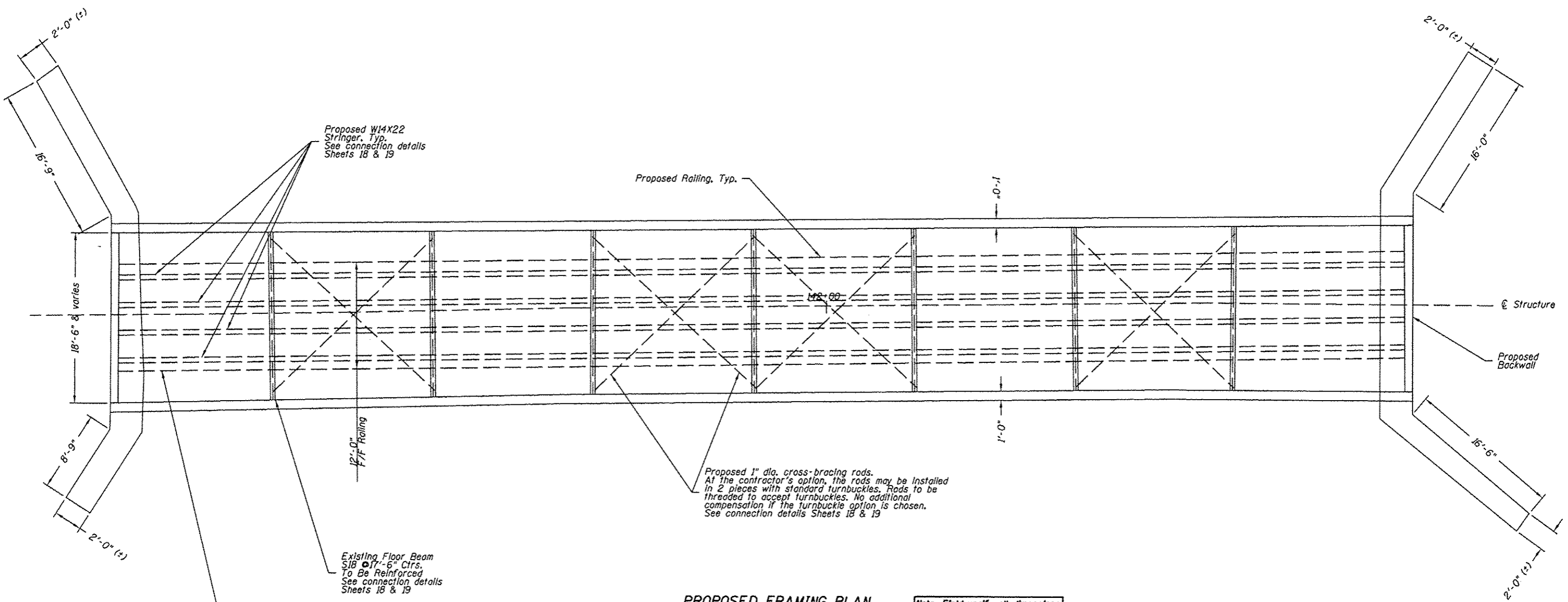
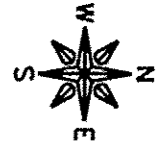
- All holes to be drilled into the existing steel shall be magnetically drilled. Torchng holes is prohibited.
- All bolts, nuts washers and screws shall be steel, hot dipped galvanized in accordance with article 1006.29(d) of the Standard Specifications. Bolt holes in lumber shall be as specified in the specifications.
- Rolling screws shall be steel, hot dipped galvanized and shall have flat heads with a square drive. Pre-drill holes to receive deck screws.
- All lumber sizes shown are nominal dimensions.
- All lumber shall be treated and surfaced on all four sides.
- All treated lumber members shall meet the requirements of Article 1007.05 of the Standard Specifications and have a preservative treatment in accordance with Article 1007.12 of the Standard Specifications. Rails shall have a minimum retention of 0.25 pounds per cubic foot and post shall have a minimum retention of 0.40 pounds per cubic foot. Each member shall carry a grade stamp and quality assurance stamp indicating class of timber and chemical retention.



**FRAMING REMOVAL PLAN**

Note: Field verify all dimensions before ordering materials

REVISIONS		
REV. NO.	DESCRIPTION	DATE

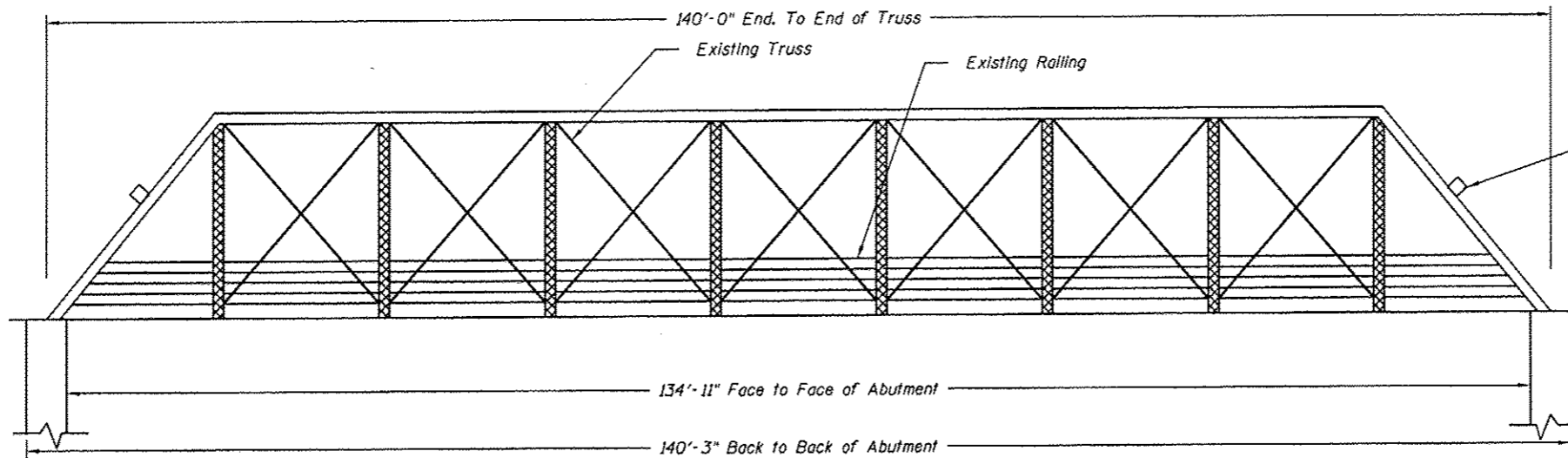


**PROPOSED FRAMING PLAN**

Note: Proposed 3X12 timber decking and timber railing not shown for clarity

Note: Field verify all dimensions before ordering materials

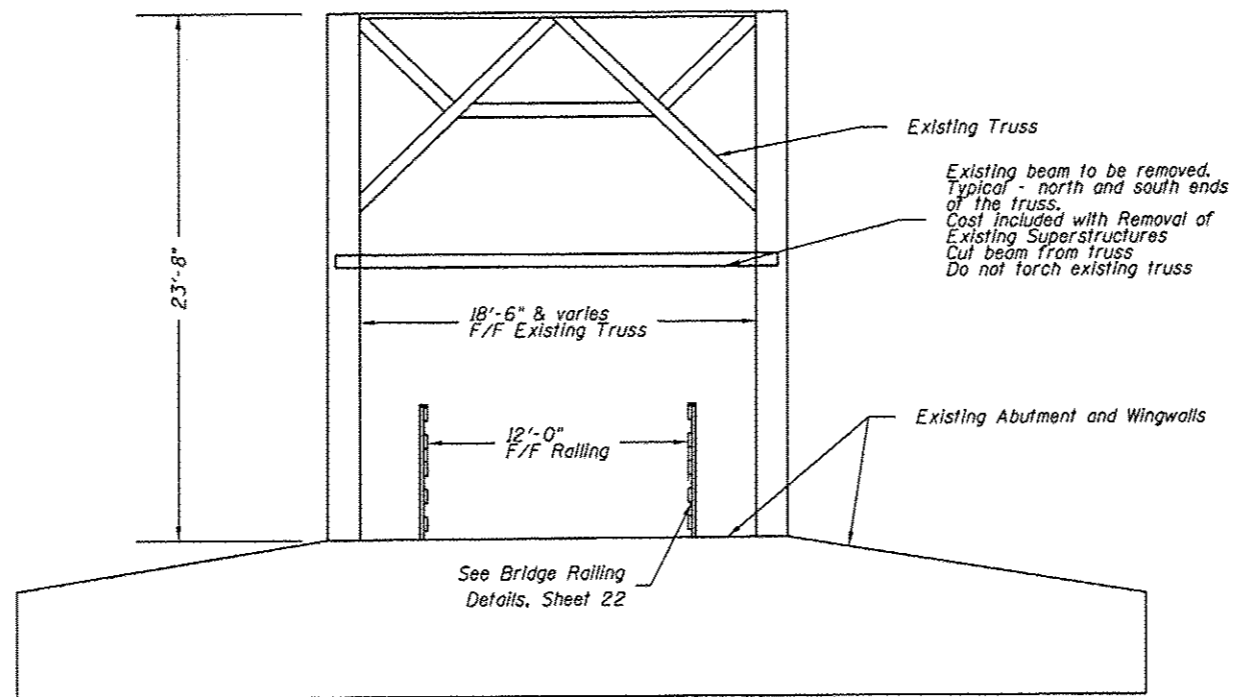
REVISIONS		
REV. NO.	DESCRIPTION	DATE



Existing beam to be removed.  
 Typical - north and south ends  
 of the truss.  
 Cost included with Removal of  
 Existing Superstructures  
 Cut beam from truss  
 Do not torch existing truss

**EXISTING BRIDGE ELEVATION**  
 Not to Scale

Note: Field verify all dimensions  
 before ordering materials



Existing beam to be removed.  
 Typical - north and south ends  
 of the truss.  
 Cost included with Removal of  
 Existing Superstructures  
 Cut beam from truss  
 Do not torch existing truss

**TYPICAL BRIDGE CROSS SECTION**  
 STA 141+19.61 TO 142+61.40  
 Not to Scale

**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
 ILLINOIS IOWA WISCONSIN  
 ILLINOIS DESIGN FIRM NO. 184-003325

OWNER/DEVELOPER:  
 CITY OF SOUTH BELOIT  
 519 BLACKHAWK BOULEVARD  
 SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
 WHEELER AVENUE BRIDGE REHAB  
 CITY CENTER BICYCLE LINK  
 200 WHEELER AVENUE  
 SOUTH BELOIT, IL 61080

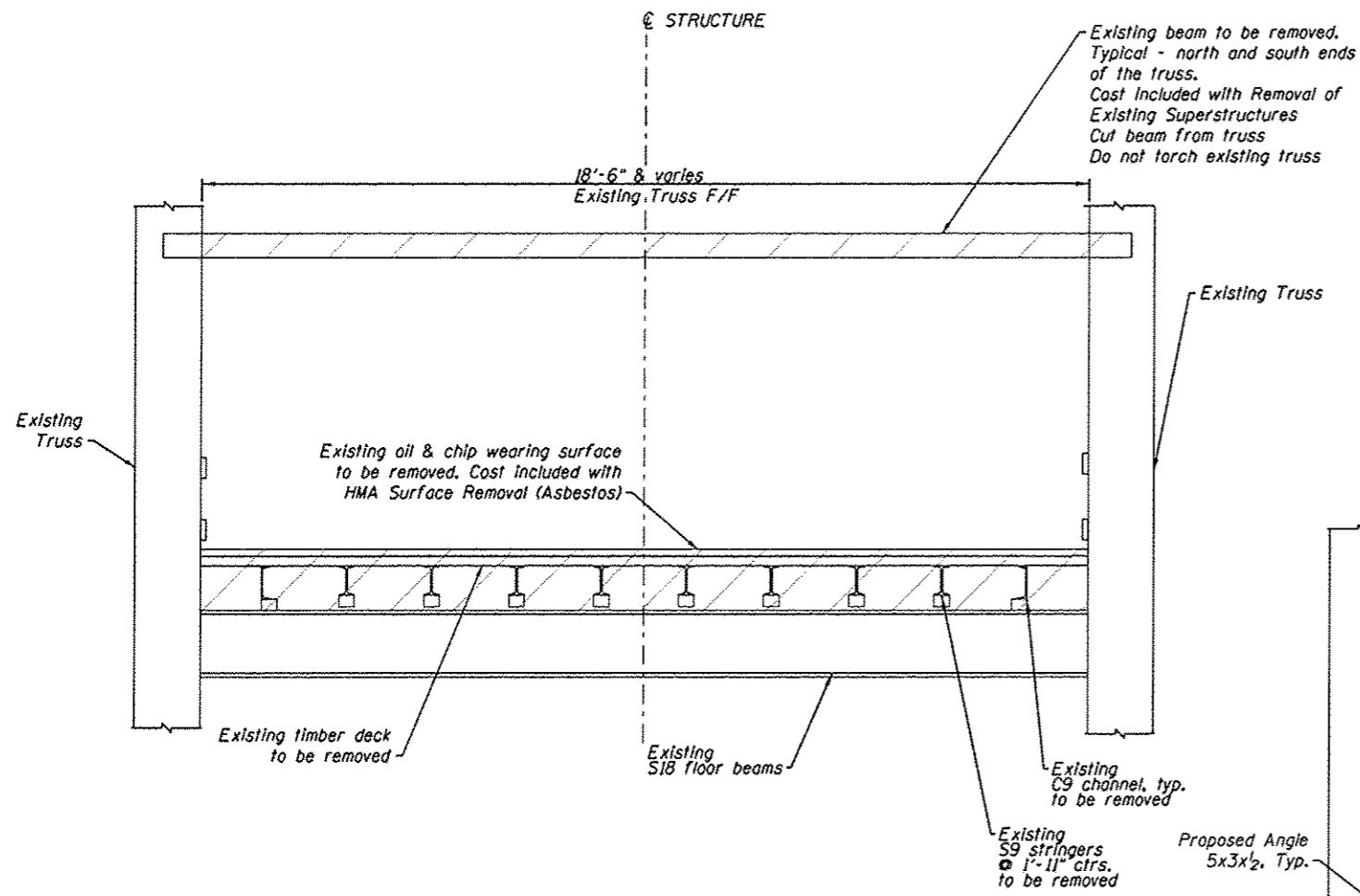
DRAWN BY: CM  
 APPROVED BY: KEB  
 DATE: 01/09/2015  
 SCALE: NTS

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 BRIDGE TYPICAL SECTIONS  
 C:\Projects\13-1031\Plans\13-1031\_S - Structural - Typical sections.dgn

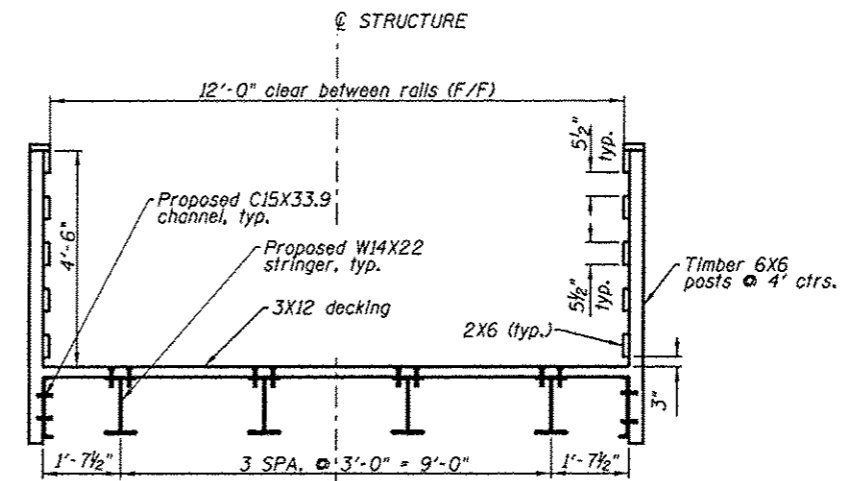
JOB NUMBER:  
 13-1031  
 SHEET NUMBER:  
 16 of 32



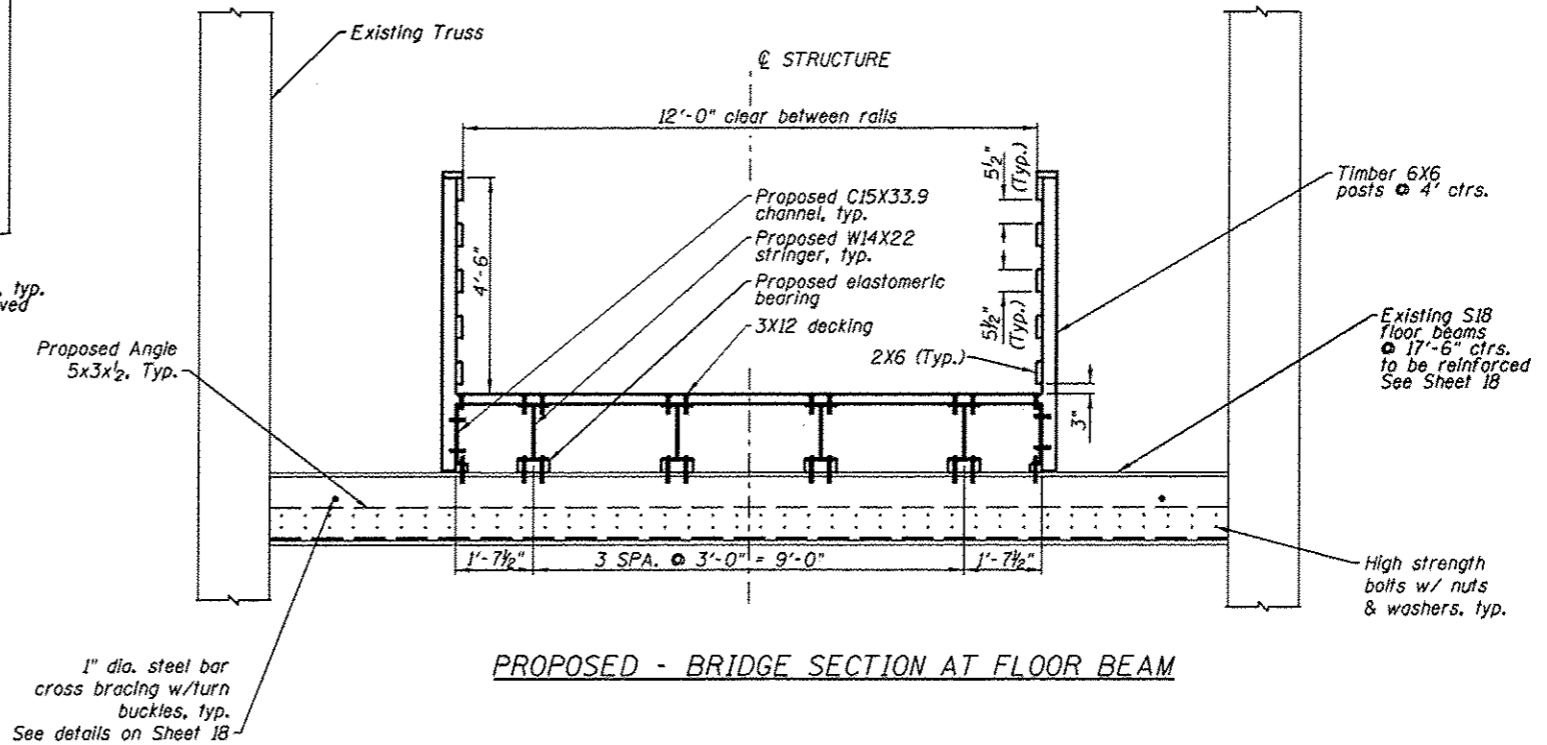


EXISTING TYPICAL BRIDGE SECTION

Note: Field verify all dimensions before ordering materials

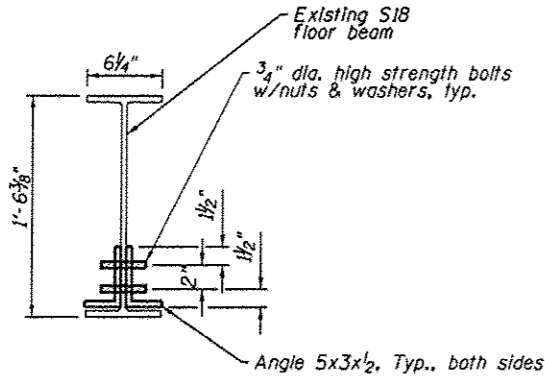


PROPOSED - BRIDGE SECTION

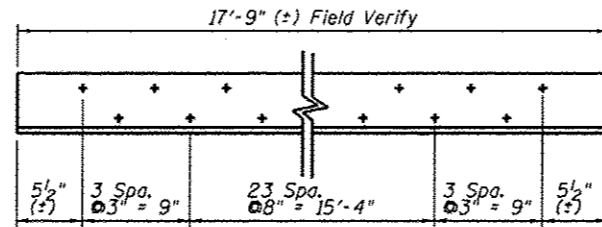


PROPOSED - BRIDGE SECTION AT FLOOR BEAM

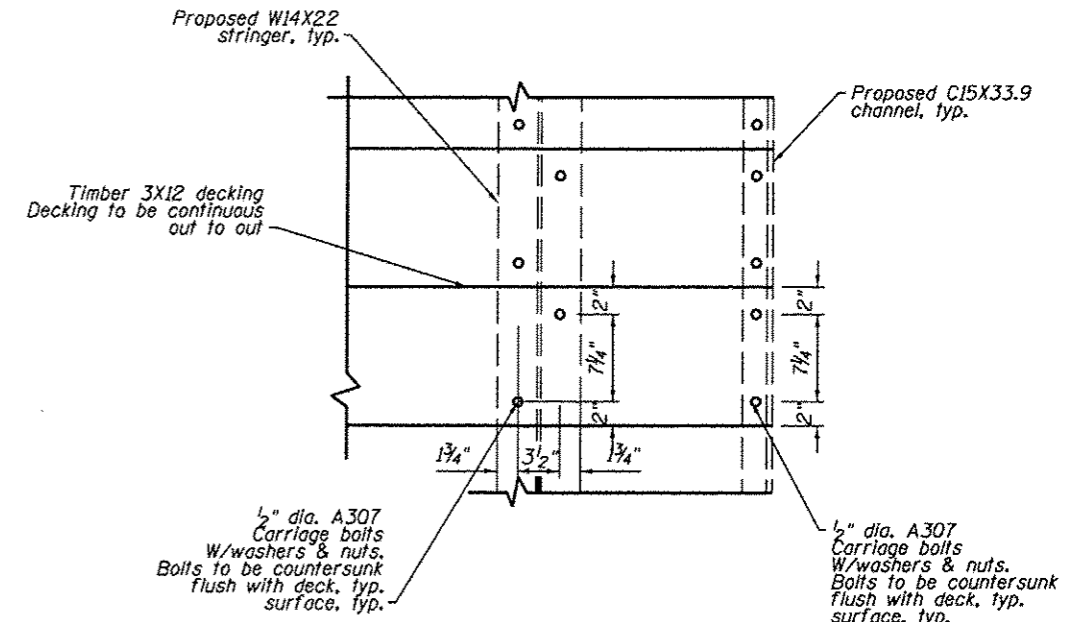
REVISIONS		
REV. NO.	DESCRIPTION	DATE



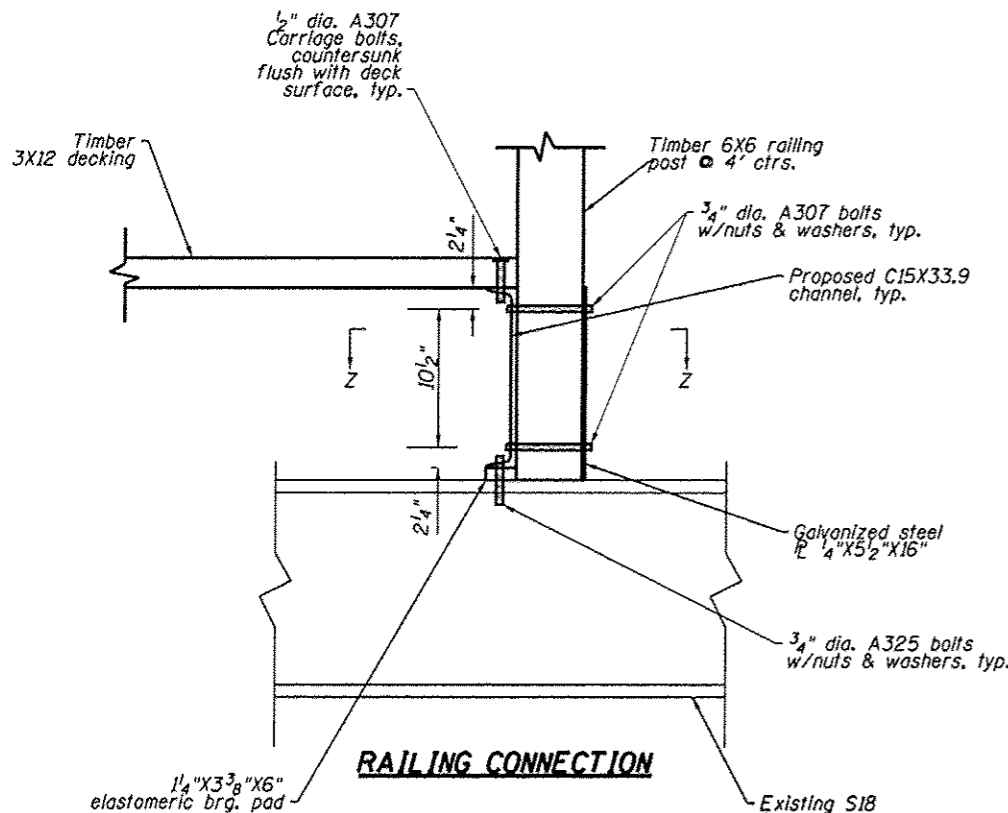
**FLOOR BEAM REINFORCEMENT**  
(Typical 7 locations)



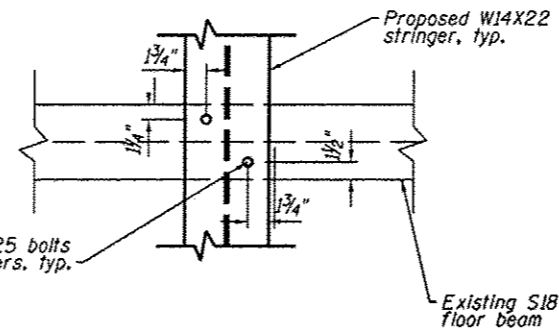
**FLOOR BEAM REINFORCEMENT**



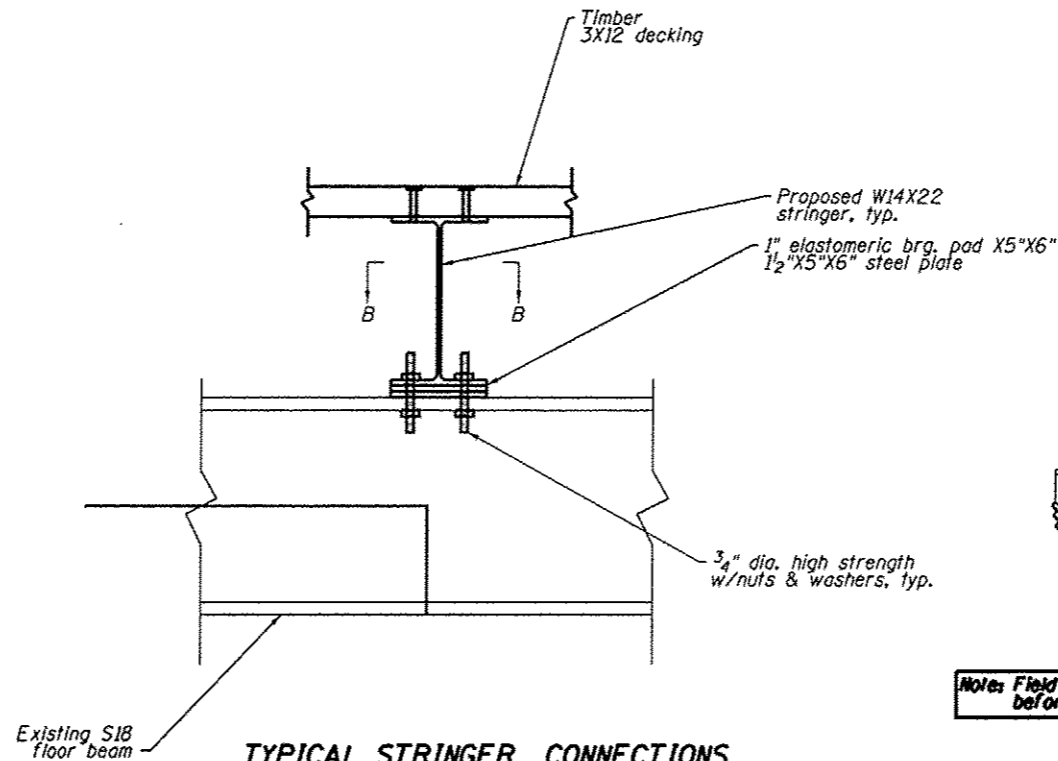
**DETAIL - TIMBER DECK ANCHORAGE**



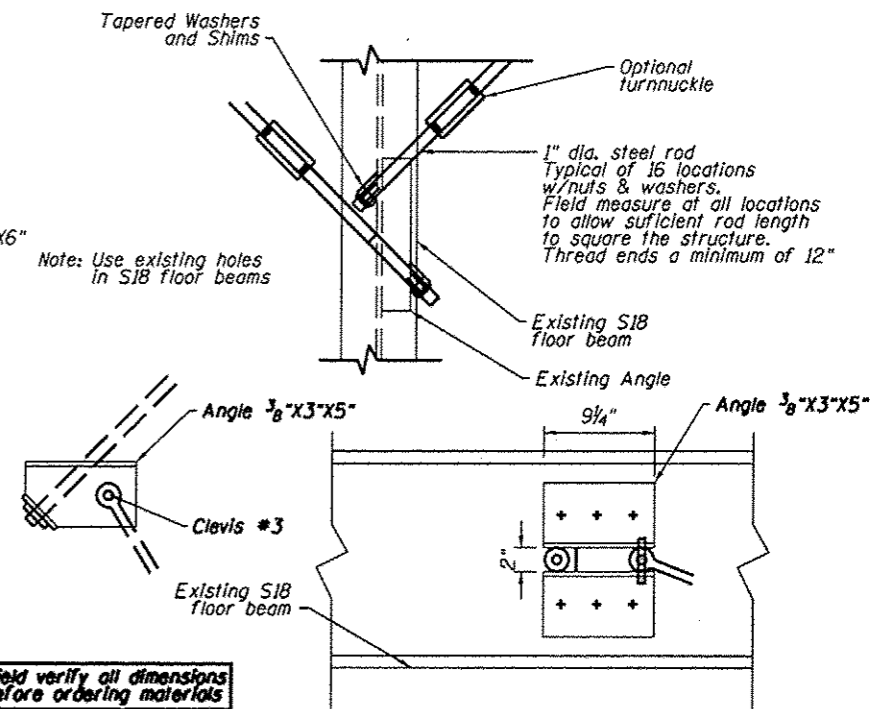
**RAILING CONNECTION**



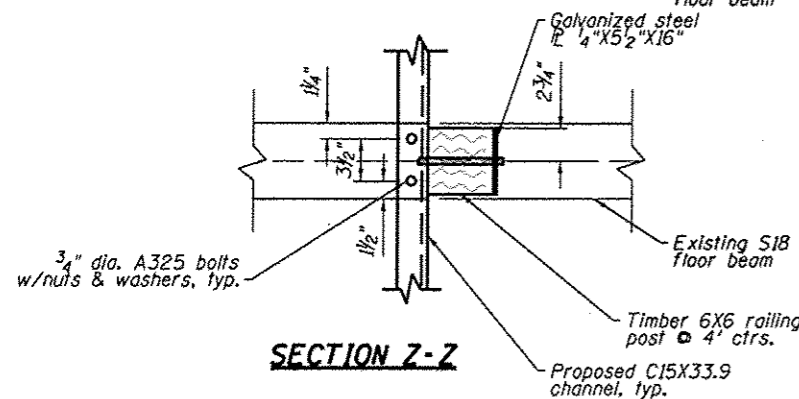
**SECTION B-B**



**TYPICAL STRINGER CONNECTIONS**



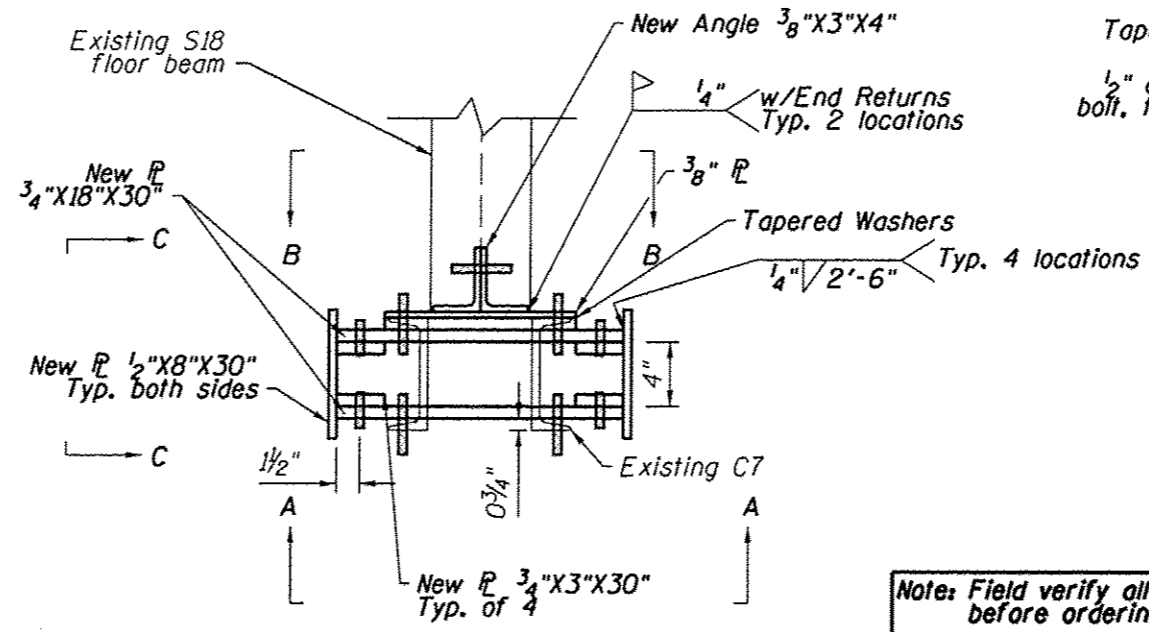
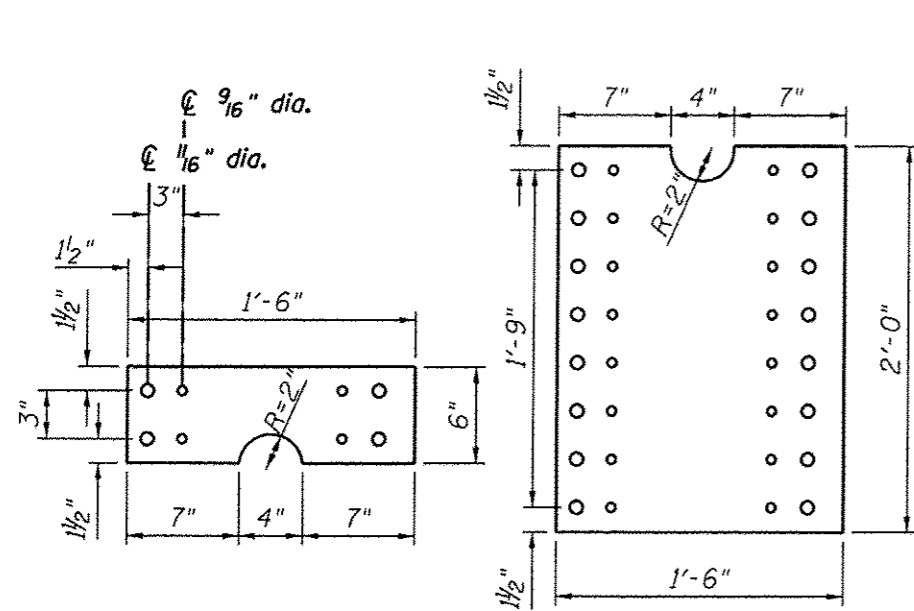
**DETAIL - FLOOR BEAM CROSS BRACING**



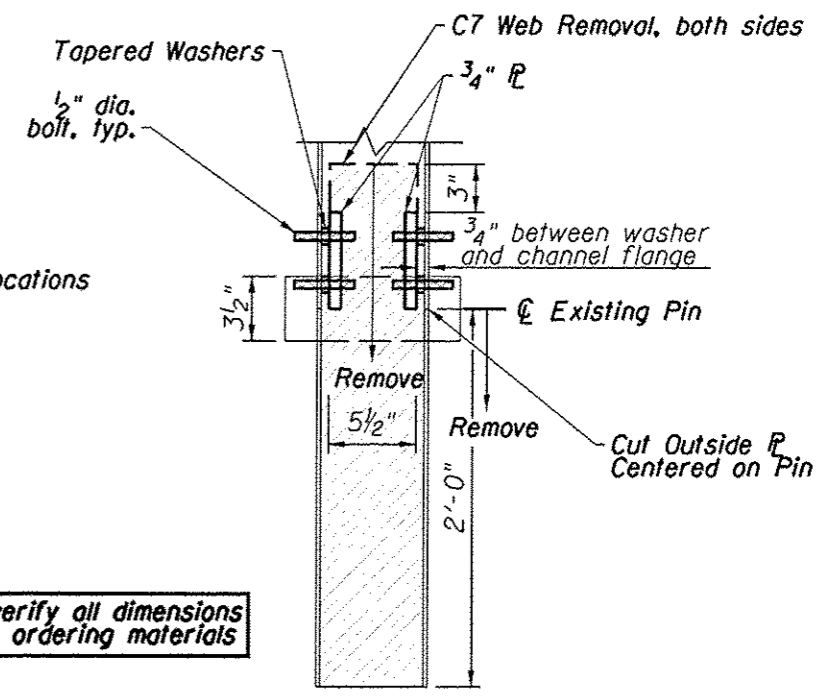
**SECTION Z-Z**

Notes: Field verify all dimensions before ordering materials

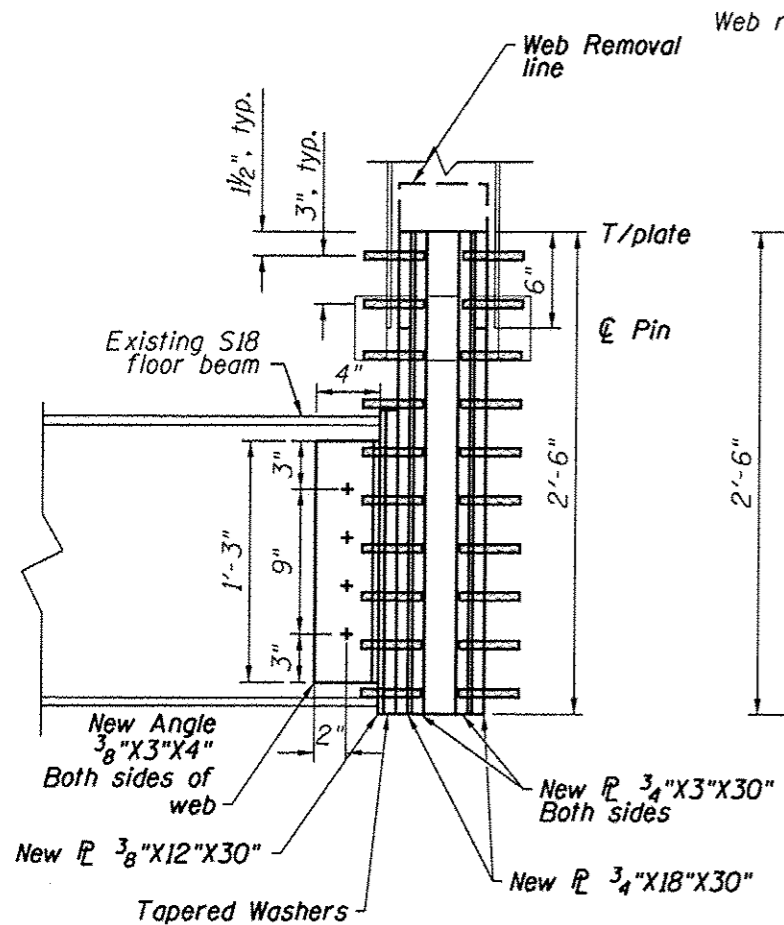
REVISIONS		
REV. NO.	DESCRIPTION	DATE



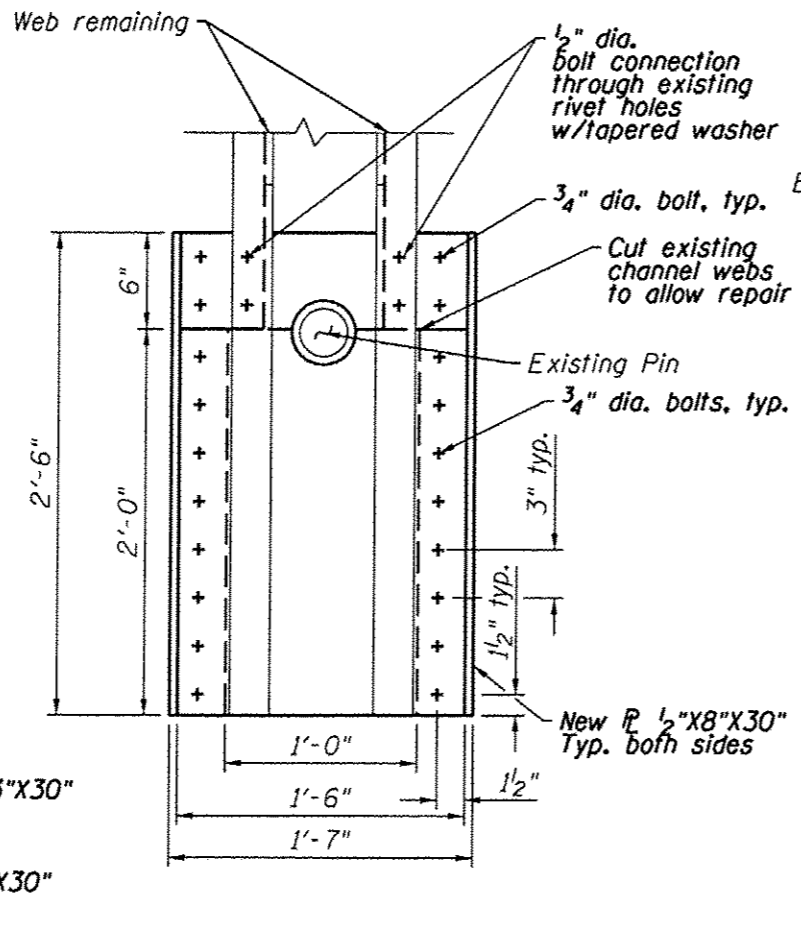
Note: Field verify all dimensions before ordering materials



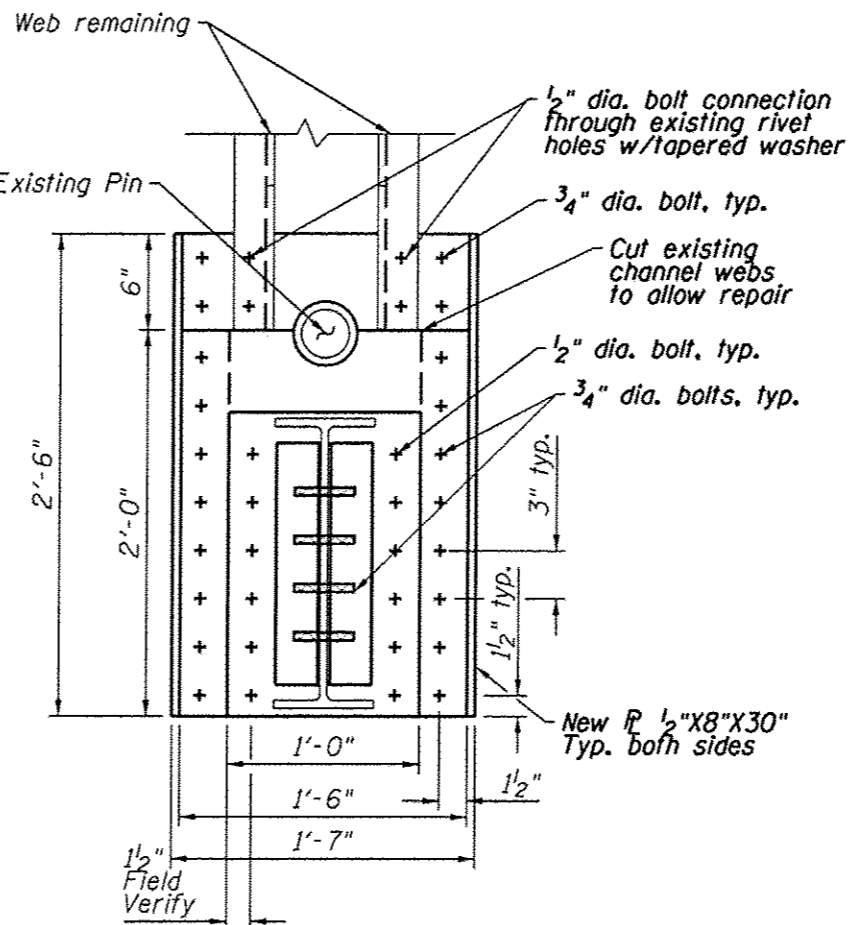
**NEW 3/4" P'S**



**SECTION C-C**



**SECTION A-A**



**SECTION B-B**

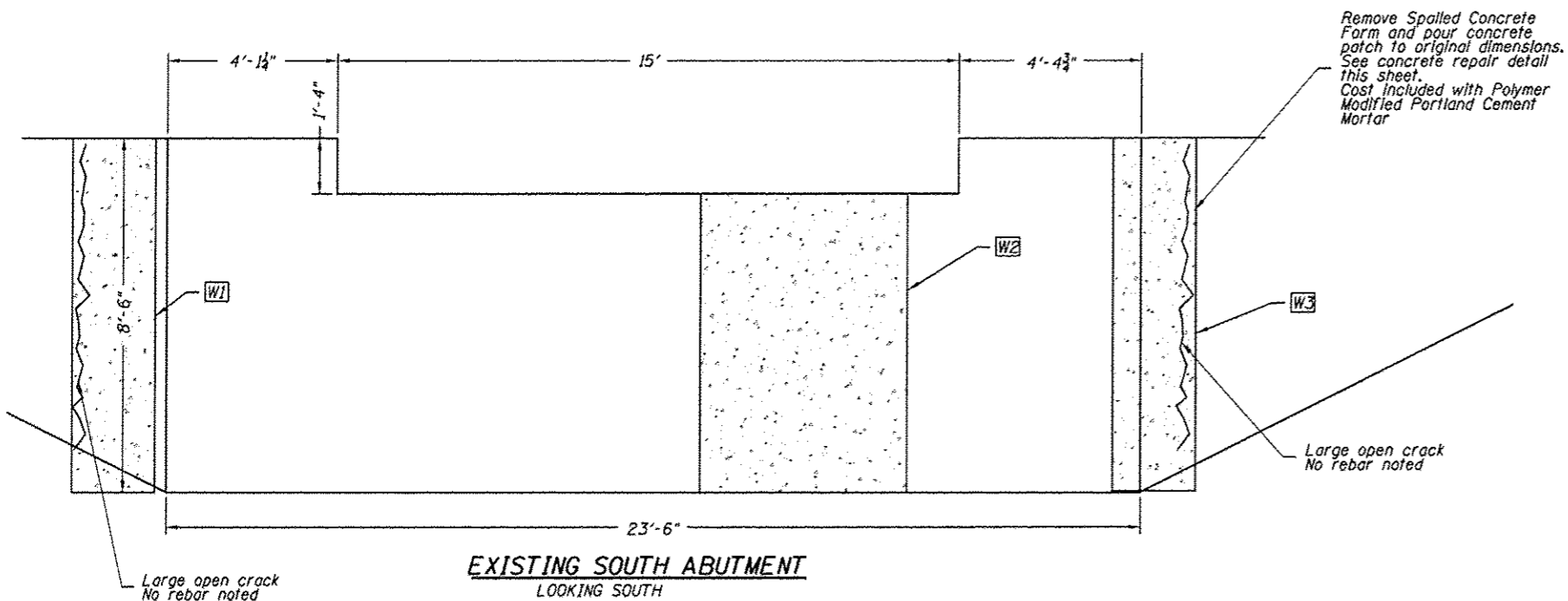
**UPPER PLATE CONNECTION STAGE**

**SEQUENCE OF WORK**

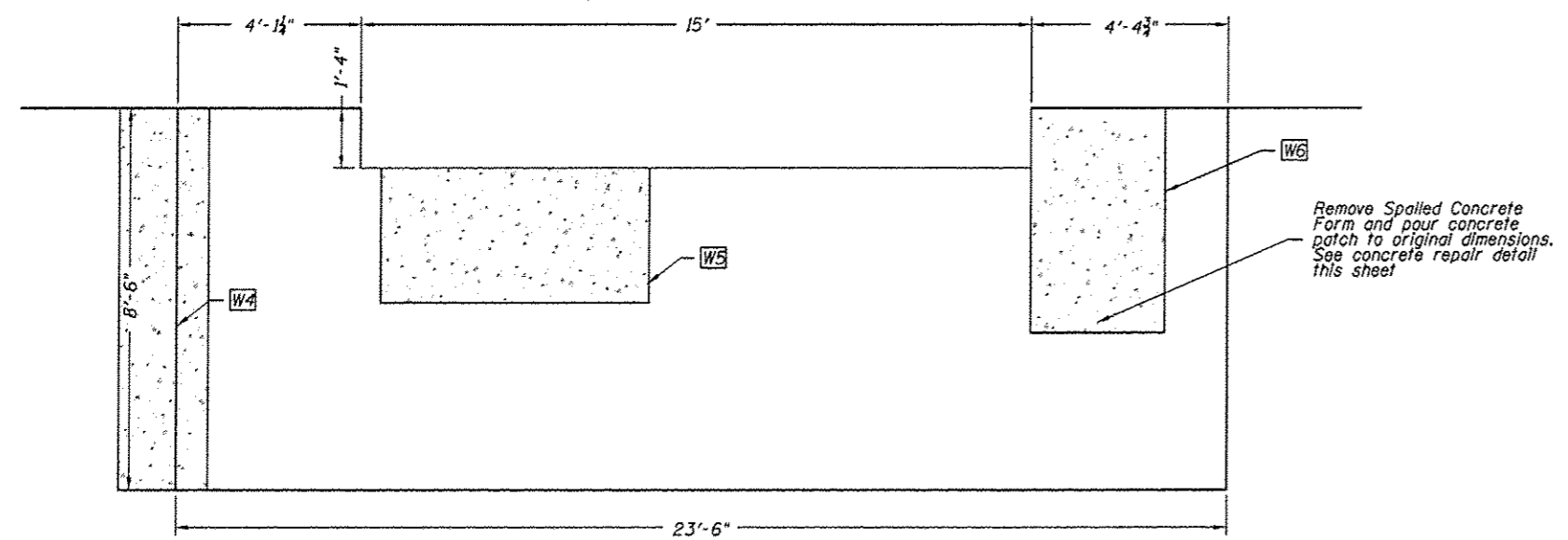
1. All work to be complete at one location before beginning at next location.
2. Shore truss at all east truss verticals prior to beginning work.
3. Remove deck.
4. Disconnect floor beams at east end.
5. Cut vertical plates at truss pin and cut existing channel webs. See upper PL connection stage detail.
6. Shore up vertical from above deck. Jack up vertical so that pin lines up with location shown in details. Remove lacing as needed and replace when complete.
7. Bolt both upper 3/4" plates w/tapered washers.
8. Bolt in bottom plates sections w/3/4"X3" PL's.
9. Weld 1/2"X8"X30" external plates.
10. Snug up all bolts from previous phases.
11. Connect floor beam.

**NOTES**

1. Field verify all dimensions before ordering materials.
2. Fasteners for steel connectors shall be ASTM A325 Type 1, mechanically galvanized bolts 3/4" dia., holes 13/16" dia., and 1/2" dia., holes 1/16" dia. unless otherwise noted.
3. All structural steel used shall be M270W Gr 50 weathering steel.
4. All existing rivets shall be removed by drilling or by shearing the heads and punching. Torching of rivets is prohibited.



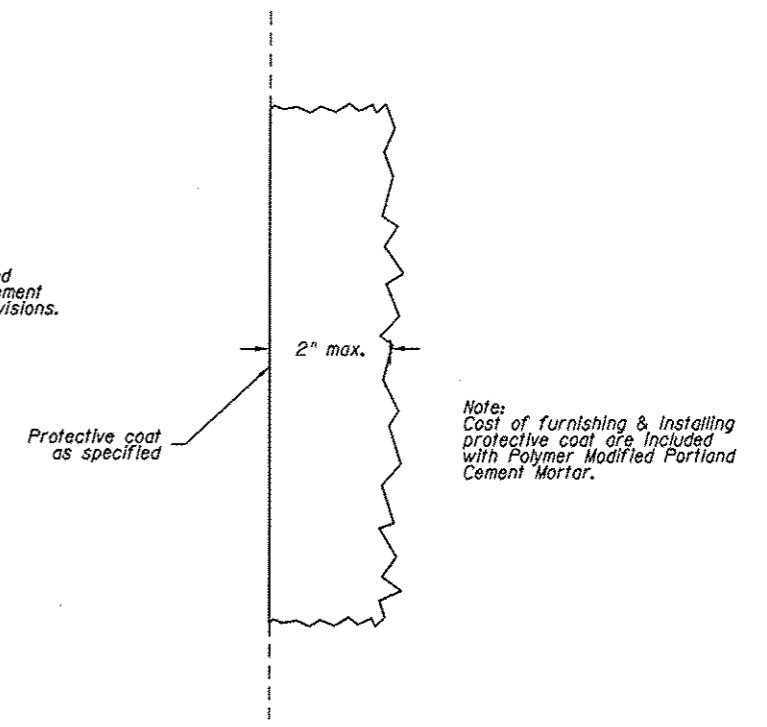
**EXISTING SOUTH ABUTMENT**  
LOOKING SOUTH



**EXISTING NORTH ABUTMENT**  
LOOKING NORTH

**REPAIR NOTES:**

1. Cracks on abutments to be filled by forming and pouring concrete.
2. Loose concrete to be removed and replaced with polymer modified cement concrete mortar. See special provisions.



**SECTION A-A**

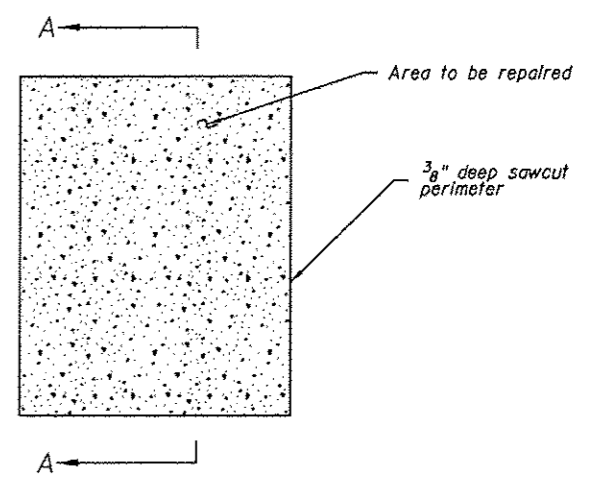
**LEGEND**

**WXX** Area to be repaired on wall  
See this sheet for details

SCHEDULE OF WALL AREAS			
AREA NUMBER	WIDTH (FT)	HEIGHT (FT)	AREA (SF)
<b>SOUTH ABUTMENT</b>			
W1	2'-0"	8'-6"	17.0
W2	5'-0"	7'-2"	35.8
W3	3'-1"	8'-6"	16.9
			TOTAL SF= 69.7
<b>NORTH ABUTMENT</b>			
W4	2'-0"	8'-6"	17.0
W5	6'-0"	3'-0"	18.0
W6	3'-0"	5'-0"	15.0
			TOTAL SF= 50.0

Note: Abutment areas are approximate. Adjustments to areas in the field may be approved by the Engineer.

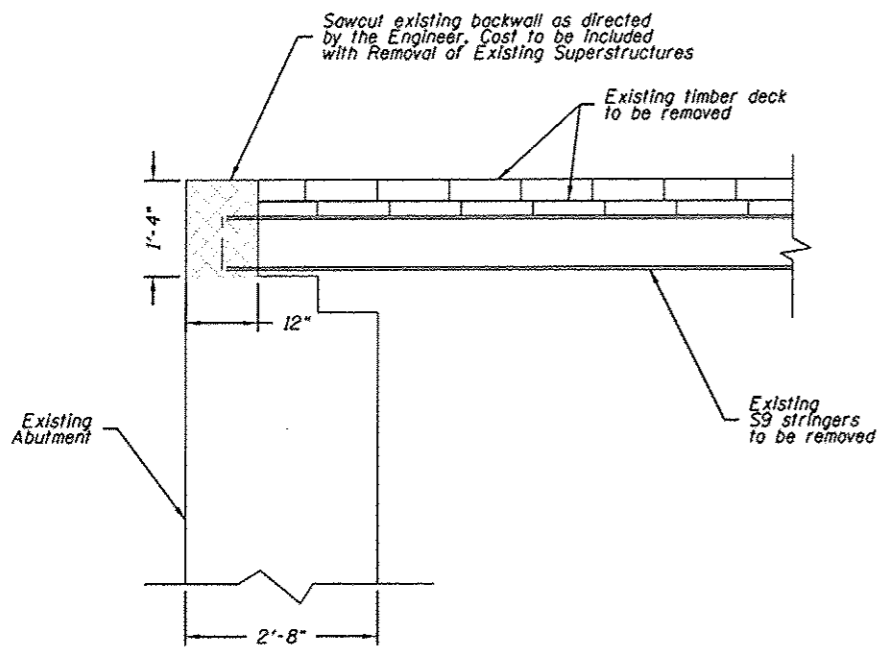
Note: Field verify all dimensions before ordering materials



**ELEVATION**

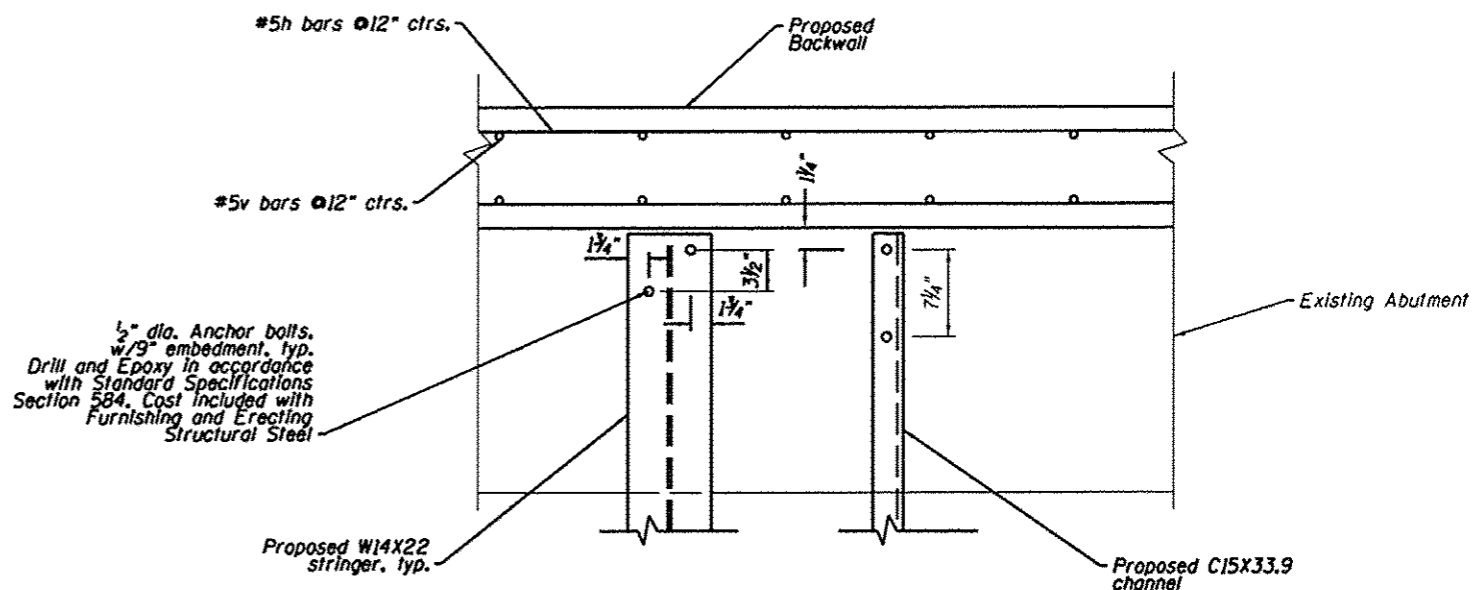
Note: Repair detail to be applied to abutment wall areas only.

**REPAIR DETAIL**  
Not to Scale



**EXISTING ABUTMENT**

Scale: 3/4"=1'-0"



**SECTION Y-Y**

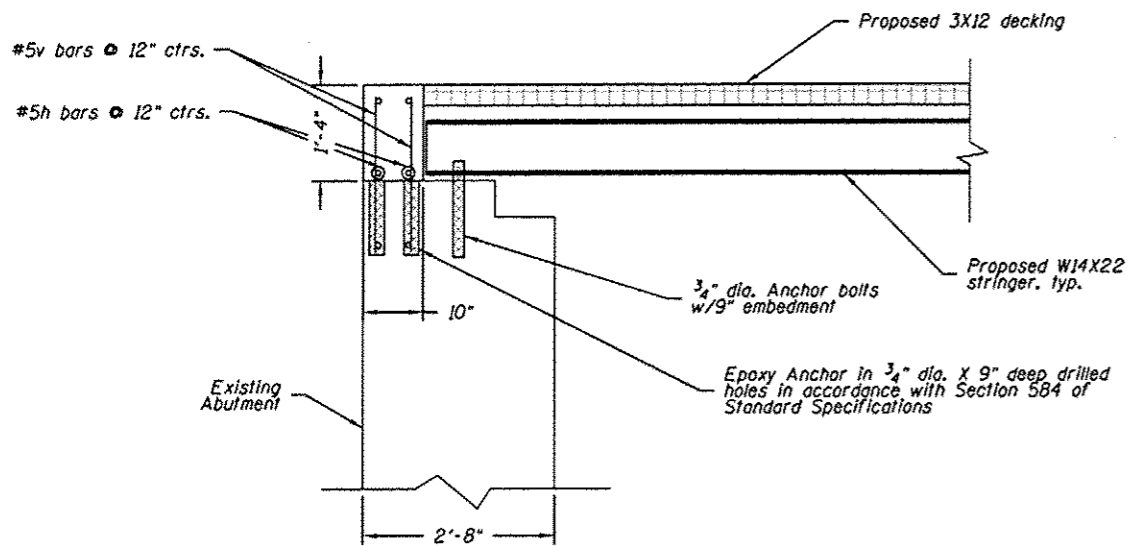
Scale: 1/2"=1'-0"

**BILL OF MATERIAL**

Both Abutments

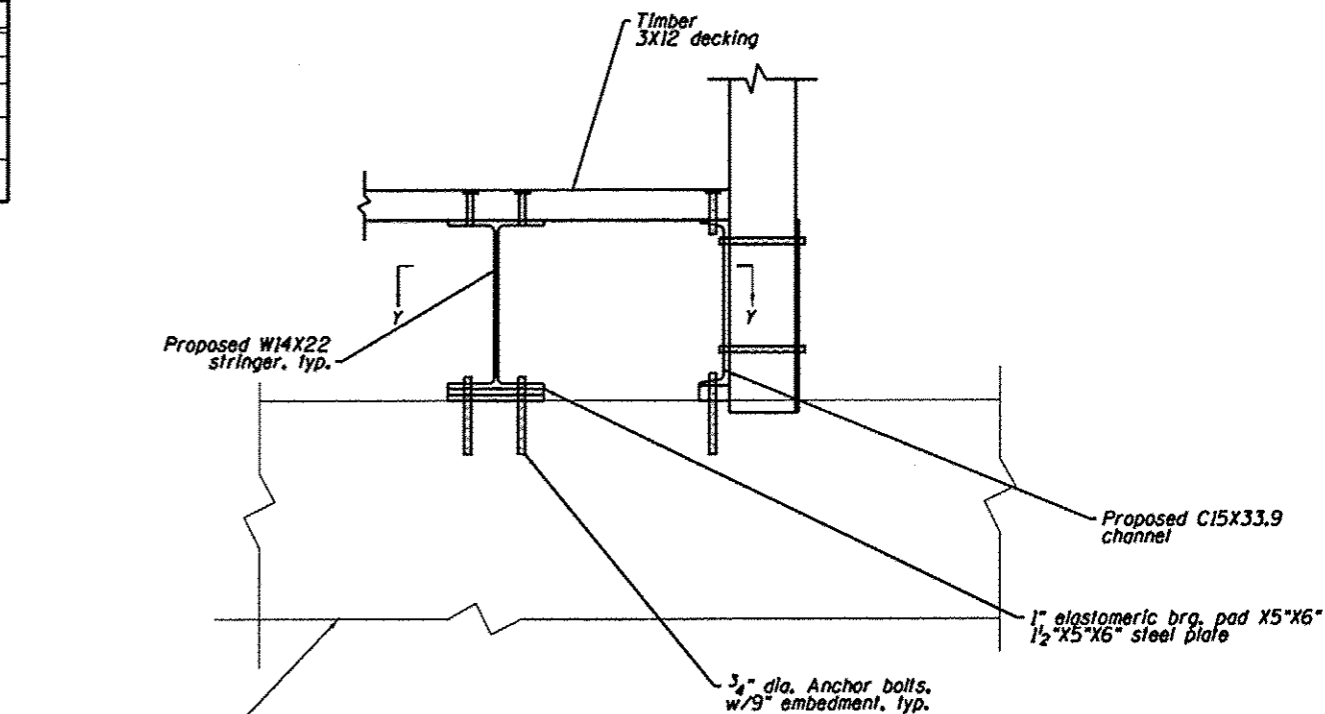
Bar	No.	Size	Length	Shape
h	12	#5	21'-11"	————
v	92	#5	1'-11"	————
Concrete Structures			Cu. Yd.	2.0
Reinforcement Bars			Pound	460

Note: Field verify all dimensions before ordering materials



**PROPOSED ABUTMENT**

Scale: 3/4"=1'-0"

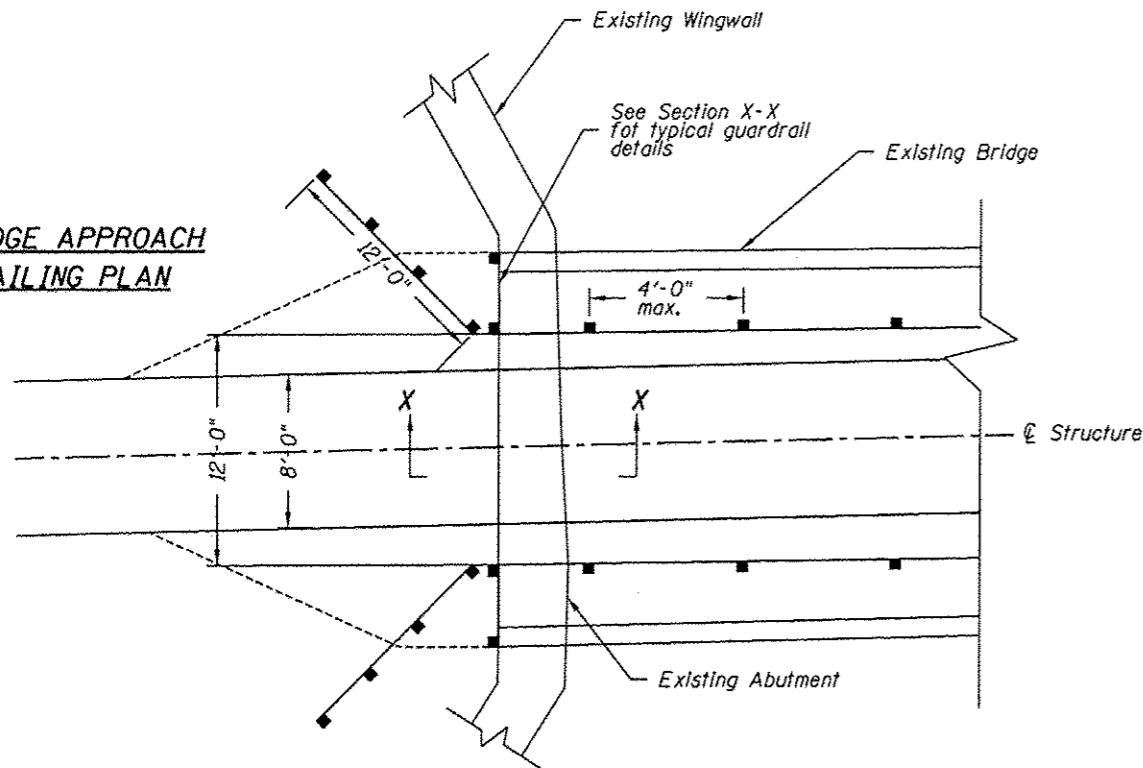


**STRINGER CONNECTIONS - ABUTMENT**

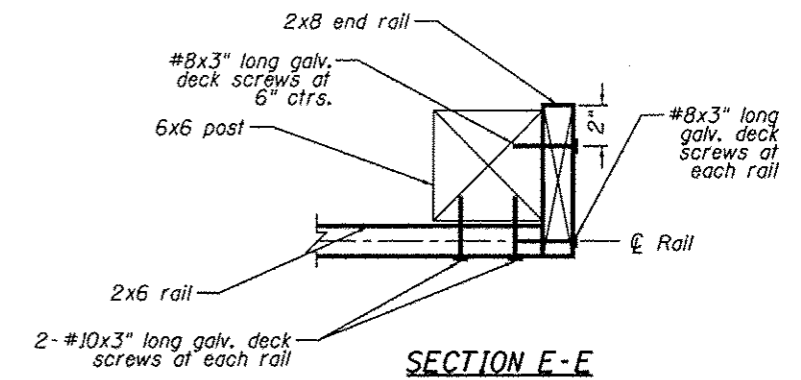
Scale: 1/2"=1'-0"

REVISIONS		
REV. NO.	DESCRIPTION	DATE

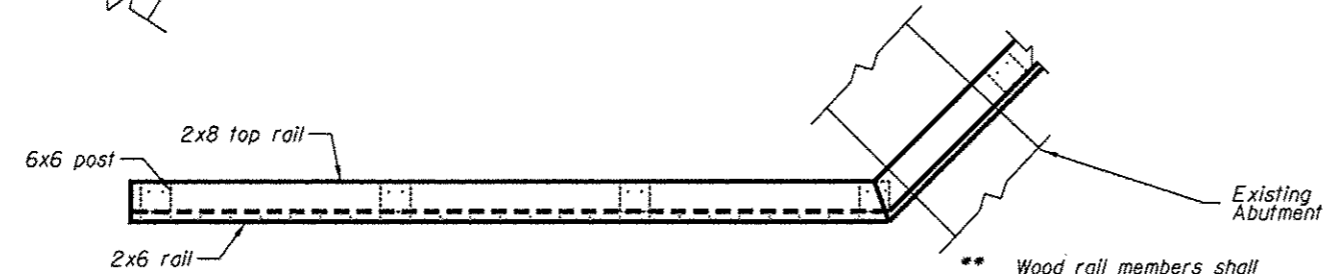
**BRIDGE APPROACH  
RAILING PLAN**



Note: Field verify all dimensions before ordering materials



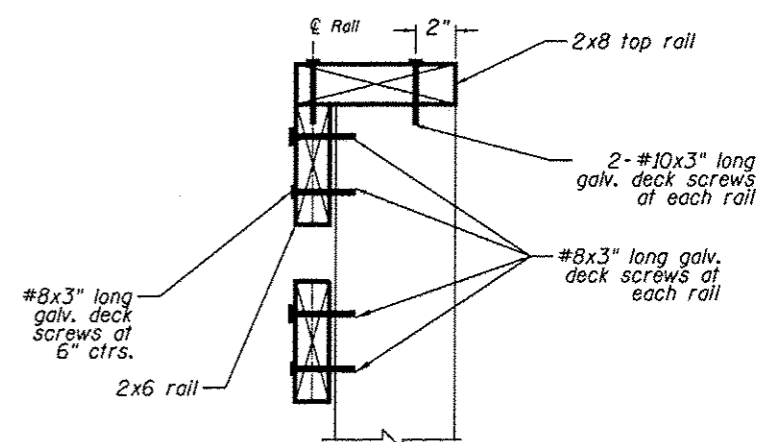
**SECTION E-E**



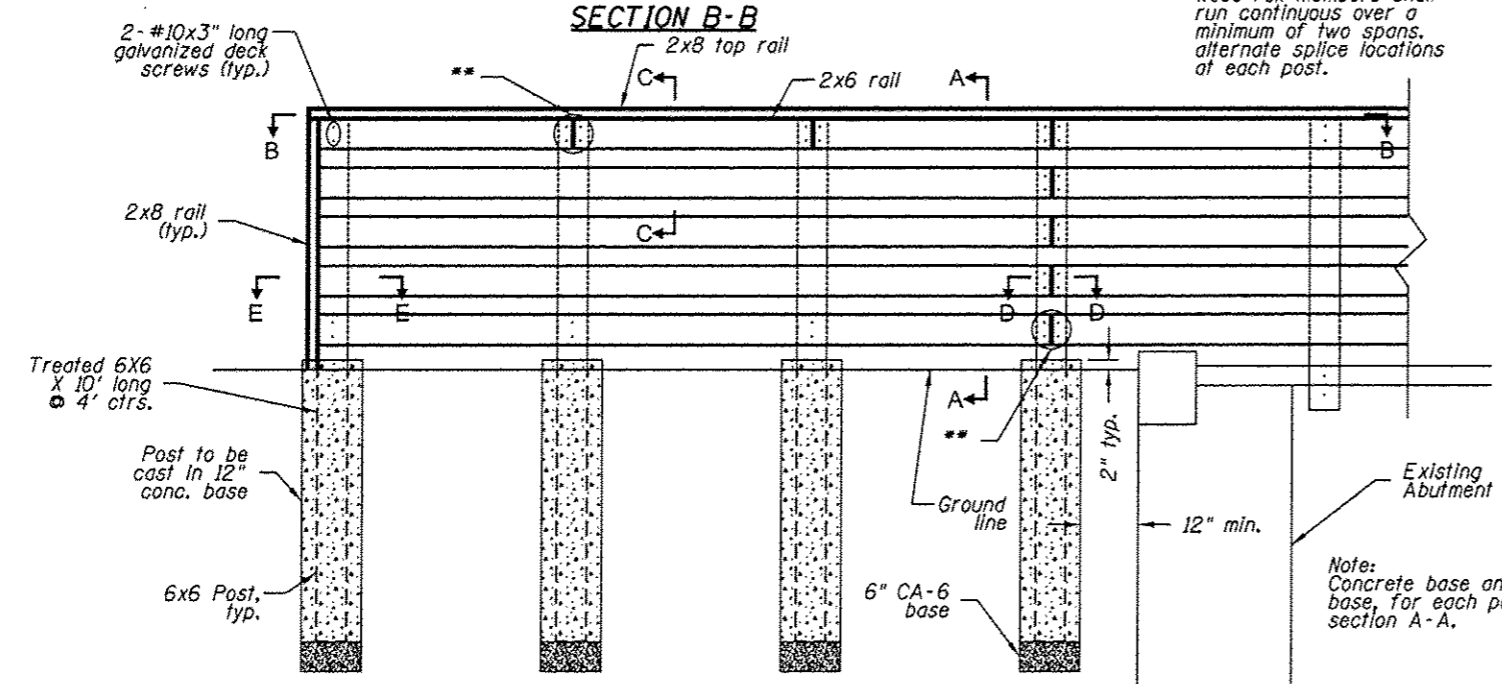
**SECTION B-B**

Note: All 2x8, 2x6 and 6x6 railing members will be paid for as "Treated Timber". Concrete and CA-6 Base of the railing shall be paid for as "Concrete Structures". All galv. deck screws used in the railing shall be paid for as "Hardware".

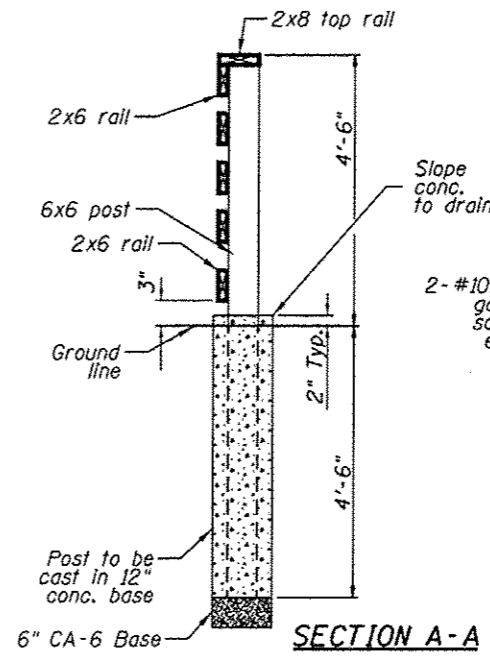
\*\* Wood rail members shall run continuous over a minimum of two spans, alternate splice locations at each post.



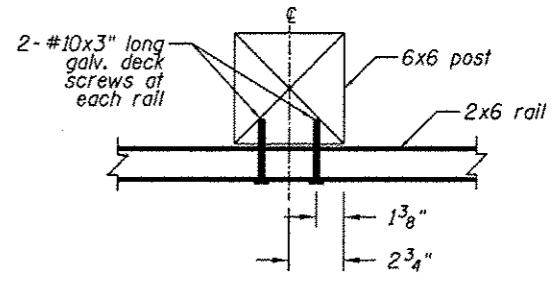
**SECTION C-C**



**SECTION X-X**



**SECTION A-A**



**SECTION D-D**

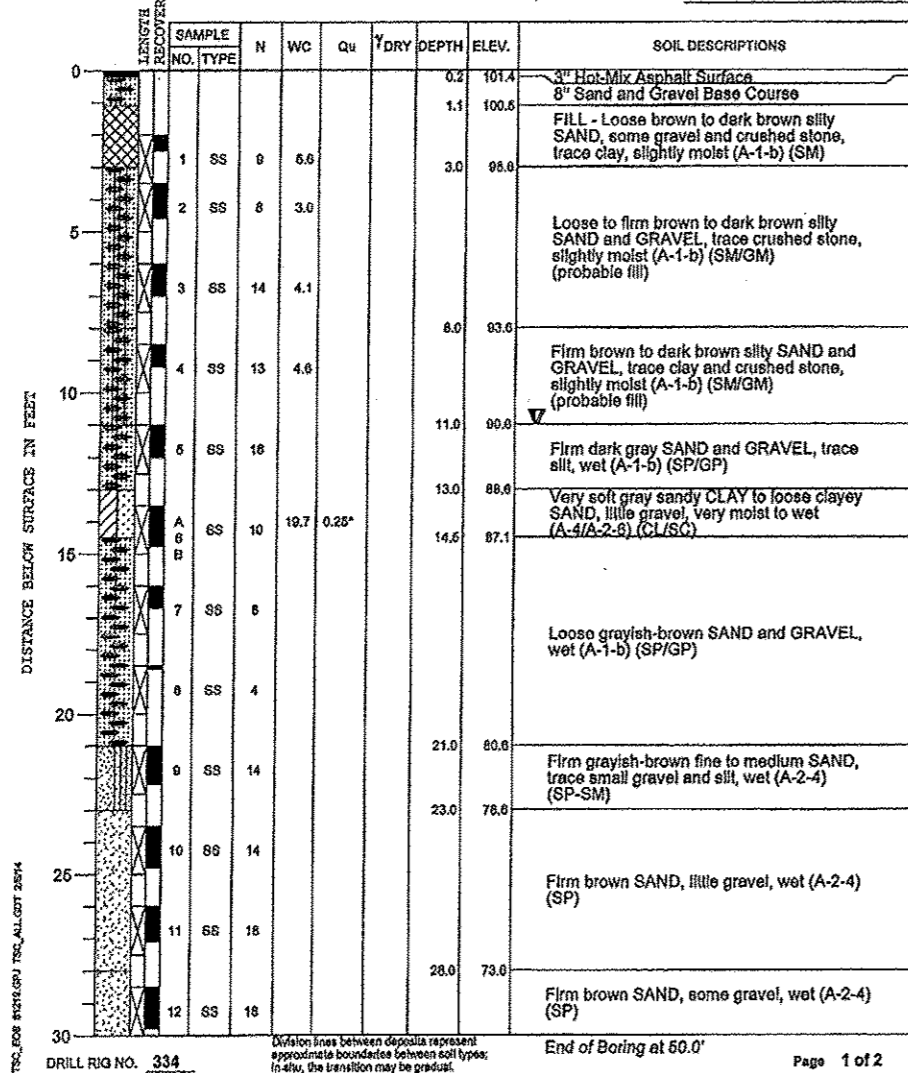
REVISIONS		
REV. NO.	DESCRIPTION	DATE

PROJECT Wheeler Avenue Bridge over Turtle Creek, South Beloit, Illinois

CLIENT Fehr Graham, Freeport, Illinois

BORING 1 DATE STARTED 1-31-14 DATE COMPLETED 1-31-14 JOB L-81,219

ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 101.6 WHILE DRILLING 11.0'  
 END OF BORING 61.6 AT END OF BORING 11.0'  
 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in situ, the transition may be gradual.

End of Boring at 60.0'

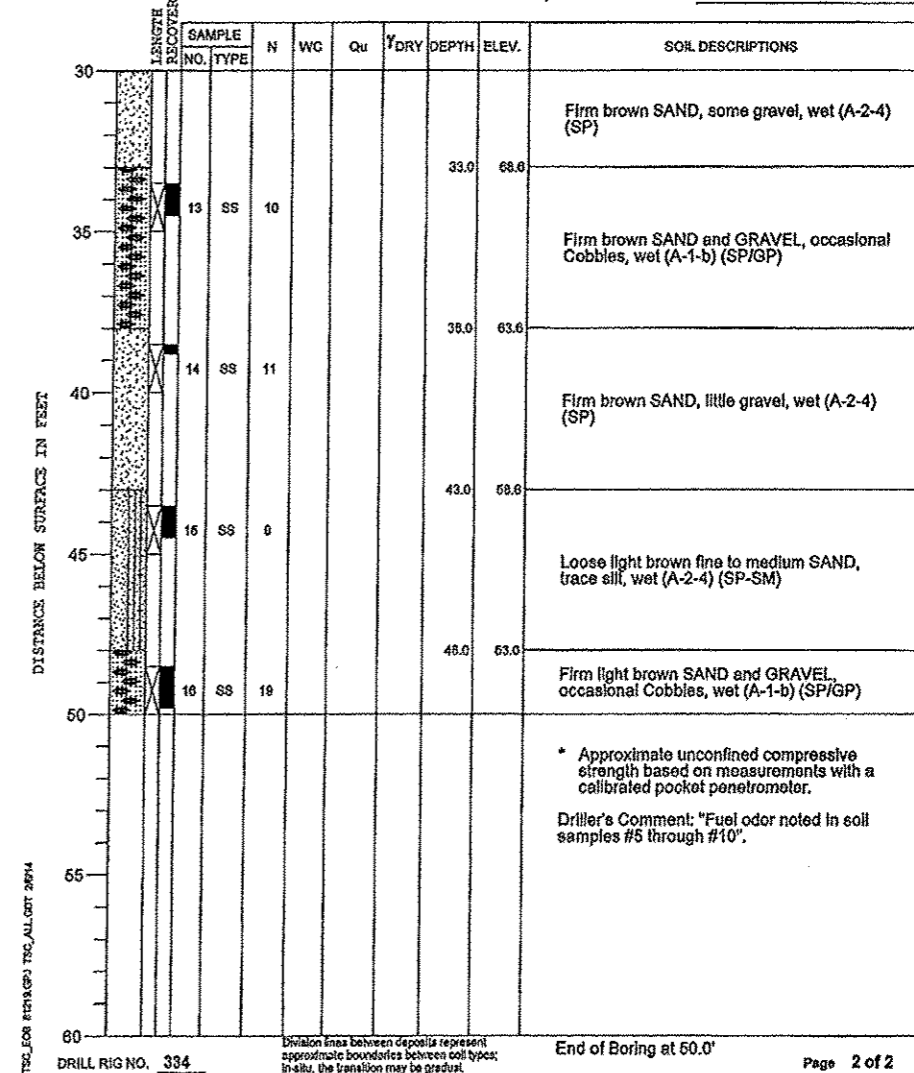
Page 1 of 2

PROJECT Wheeler Avenue Bridge over Turtle Creek, South Beloit, Illinois

CLIENT Fehr Graham, Freeport, Illinois

BORING 1 DATE STARTED 1-31-14 DATE COMPLETED 1-31-14 JOB L-81,219

ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 101.6 WHILE DRILLING 11.0'  
 END OF BORING 61.6 AT END OF BORING 11.0'  
 24 HOURS



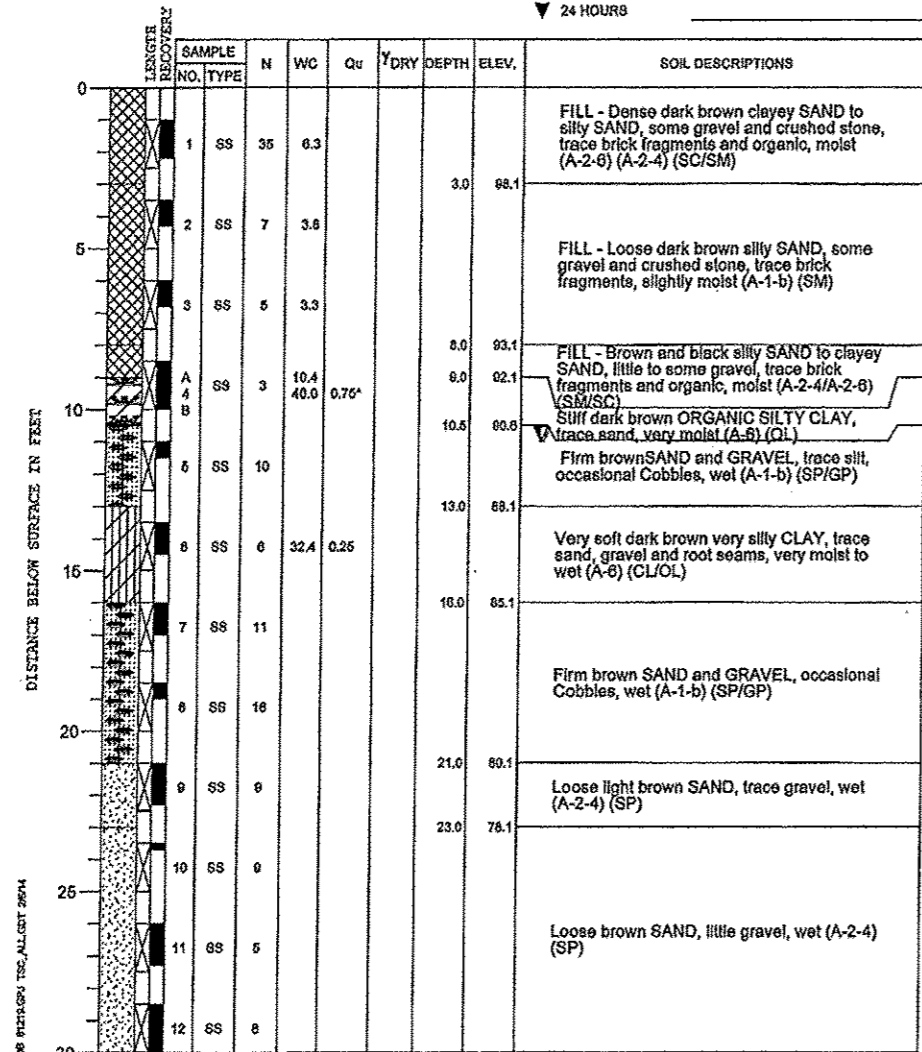
Division lines between deposits represent approximate boundaries between soil types; in situ, the transition may be gradual.

End of Boring at 60.0'

Page 2 of 2

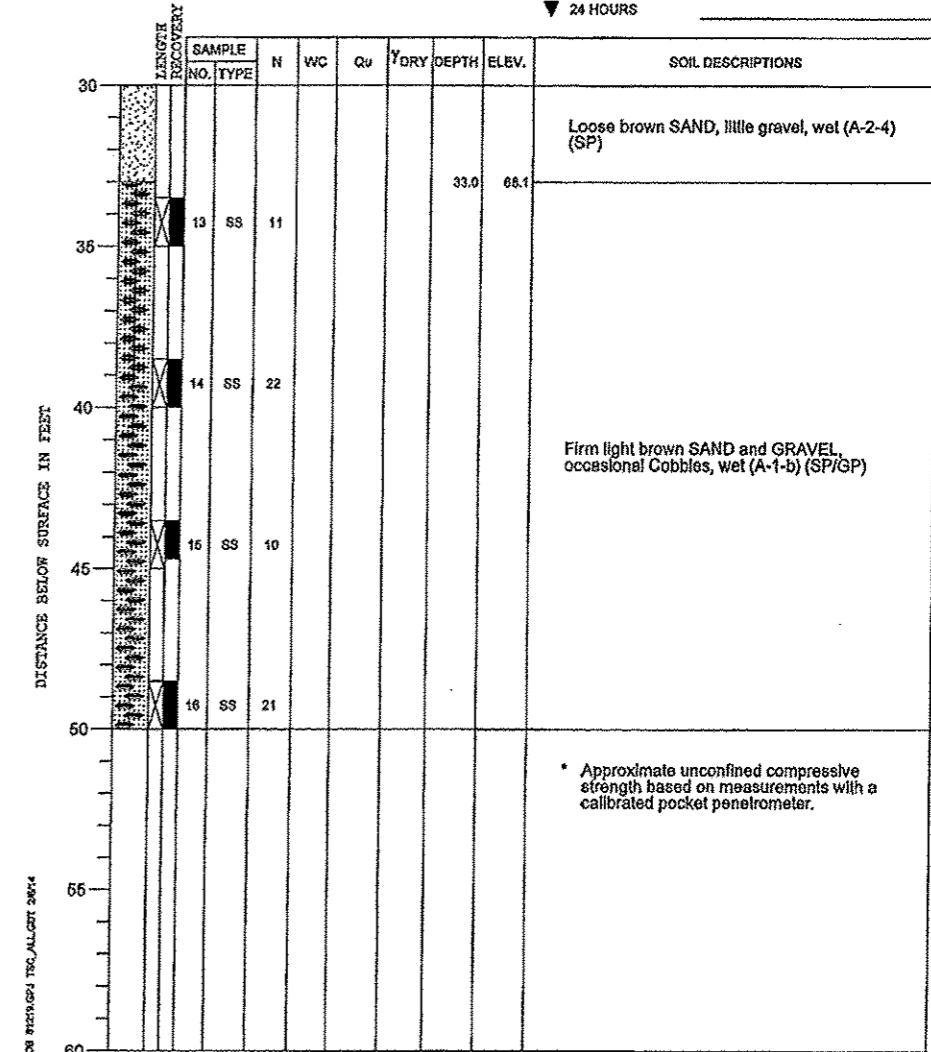
REVISIONS		
REV. NO.	DESCRIPTION	DATE

PROJECT Wheeler Avenue Bridge over Turtle Creek, South Beloit, Illinois  
 CLIENT Fehr Graham, Freeport, Illinois  
 BORING 2 DATE STARTED 1-30-14 DATE COMPLETED 1-30-14 JOB L-81,218  
 ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 101.1 WHILE DRILLING 11.0'  
 END OF BORING 61.1 AT END OF BORING 11.0'  
 24 HOURS



DRILL RIG NO. 334 End of Boring at 60.0' Page 1 of 2

PROJECT Wheeler Avenue Bridge over Turtle Creek, South Beloit, Illinois  
 CLIENT Fehr Graham, Freeport, Illinois  
 BORING 2 DATE STARTED 1-30-14 DATE COMPLETED 1-30-14 JOB L-81,218  
 ELEVATIONS WATER LEVEL OBSERVATIONS  
 GROUND SURFACE 101.1 WHILE DRILLING 11.0'  
 END OF BORING 61.1 AT END OF BORING 11.0'  
 24 HOURS



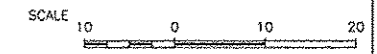
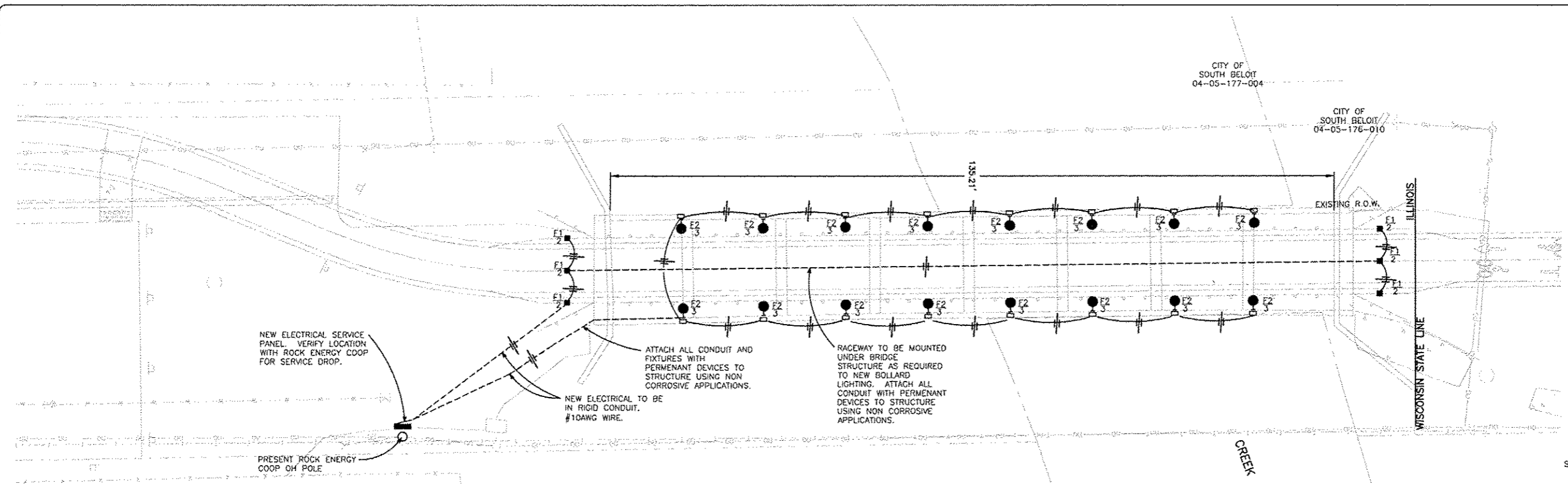
DRILL RIG NO. 334 End of Boring at 60.0' Page 2 of 2

REVISIONS		
REV. NO.	DESCRIPTION	DATE



CITY OF SOUTH BELOIT  
04-05-177-004

CITY OF SOUTH BELOIT  
04-05-176-010

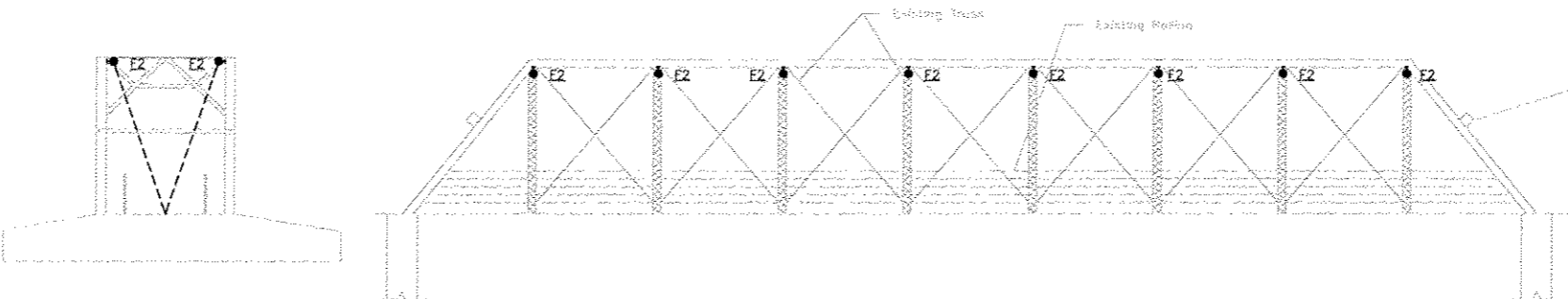


NEW ELECTRICAL SERVICE PANEL. VERIFY LOCATION WITH ROCK ENERGY COOP FOR SERVICE DROP.

ATTACH ALL CONDUIT AND FIXTURES WITH PERMANENT DEVICES TO STRUCTURE USING NON CORROSIVE APPLICATIONS.

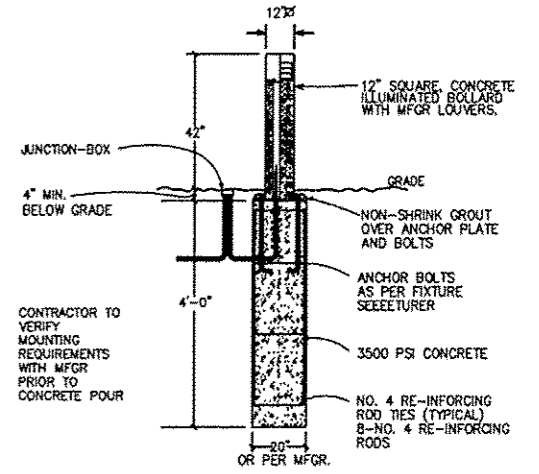
RACEWAY TO BE MOUNTED UNDER BRIDGE STRUCTURE AS REQUIRED TO NEW BOLLARD LIGHTING. ATTACH ALL CONDUIT WITH PERMANENT DEVICES TO STRUCTURE USING NON CORROSIVE APPLICATIONS.

NEW ELECTRICAL TO BE IN RIGID CONDUIT, #10AWG WIRE.

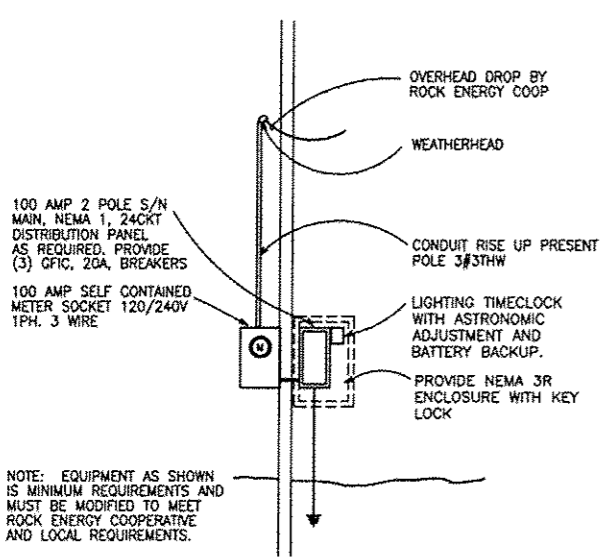


TYPICAL BRIDGE CROSS SECTION  
STA 141+27.92 TO 142+63.86  
Not to Scale

EXISTING BRIDGE ELEVATION  
Not to Scale



DETAIL OF BOLLARD BASE(F1)  
NO SCALE



ELECTRIC SERVICE DETAIL  
NO SCALE

1.1	2.7	3.2	5.1	3.4	4.1	5.5	6.6	7.0	7.6	8.2	8.1	8.5	8.8	8.6	8.7	9.0	8.7	8.8	9.1	8.7	8.7	8.4	8.1	8.2	7.5	6.7	6.6	6.0	4.7	4.2	6.0	5.6	2.2	1.2
1.3	3.6	6.9	6.4	4.0	4.7	6.3	7.5	8.0	8.6	9.2	9.5	9.9	9.6	9.7	10.1	9.8	9.8	10.0	9.7	9.6	9.8	9.3	9.0	9.0	8.2	7.4	7.3	6.6	5.2	4.8	7.0	6.7	2.7	1.3
1.4	3.6	6.8	6.2	3.9	4.7	6.2	7.4	7.9	8.5	9.1	9.1	9.4	9.7	9.5	9.6	9.9	9.6	9.8	9.5	9.4	9.5	9.0	8.7	8.0	7.2	7.0	6.4	5.0	4.6	7.0	6.7	2.5	1.2	
1.1	2.8	2.8	4.9	3.3	4.0	5.4	6.4	6.7	7.3	7.9	7.8	8.1	8.4	8.1	8.2	8.5	8.2	8.2	8.1	8.0	8.1	7.7	7.4	7.4	6.8	6.0	5.4	4.2	3.6	4.9	4.4	1.9	1.0	

PROPOSED PHOTOMETRIC LIGHT LEVEL PLAN  
Scale 1" = 10'0"

CONTRACTOR SHALL PROVIDE LUMINAIRE PHOTOMETRIC PLAN WITH LUMINAIRE SHOPDRAWING SUBMITTAL INDICATING APPROXIMATE LIGHT LEVELS AS SHOWN TO PROVIDE SIMILAR PERFORMANCE.

STATE OF ILLINOIS  
ROGER A. LOESON  
Professional Engineer  
No. 124278  
12/26/15  
EXR 11/30/15

Legacy Designs, Inc.  
8116 Mulford Village Drive  
Rockford, Illinois 61107  
Professional Design Firm No. 184-003483  
815-464-4708 Phone 815-464-4710 Fax  
www.legacydesigns.com

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003529

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

DRAWN BY: LEGACY  
APPROVED BY: R.A.L.  
DATE: 12/10/14  
SCALE: HOR VERT

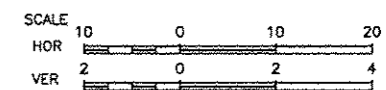
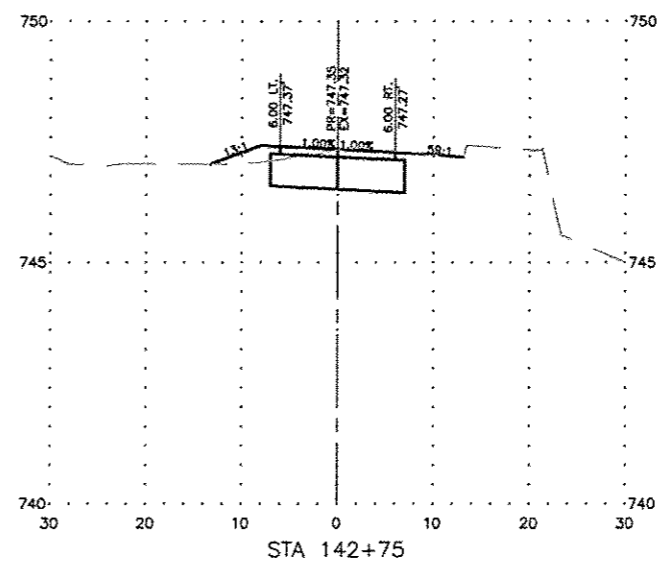
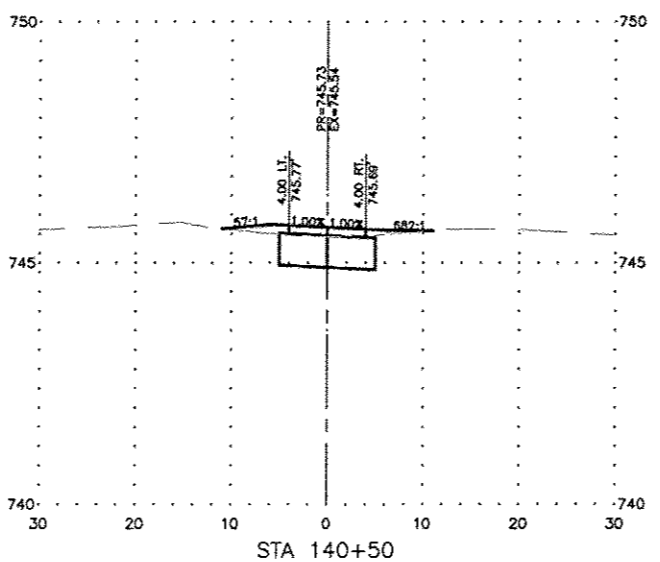
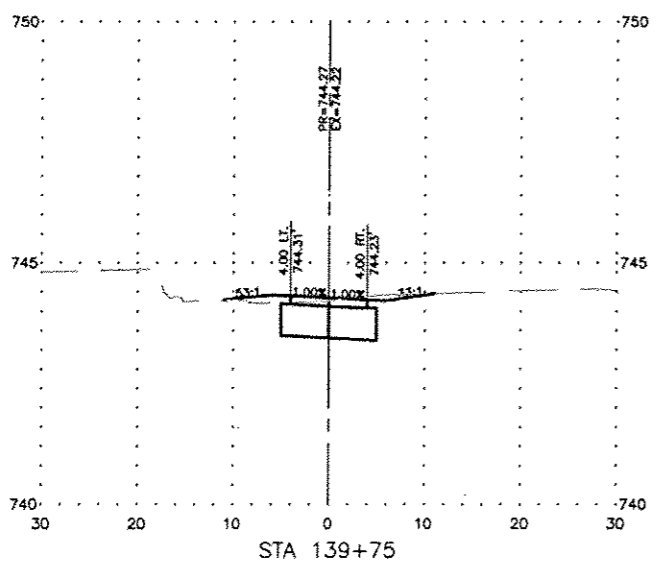
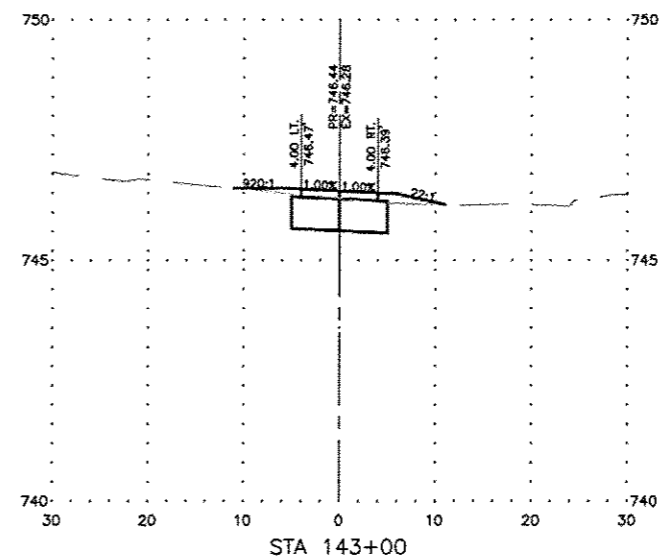
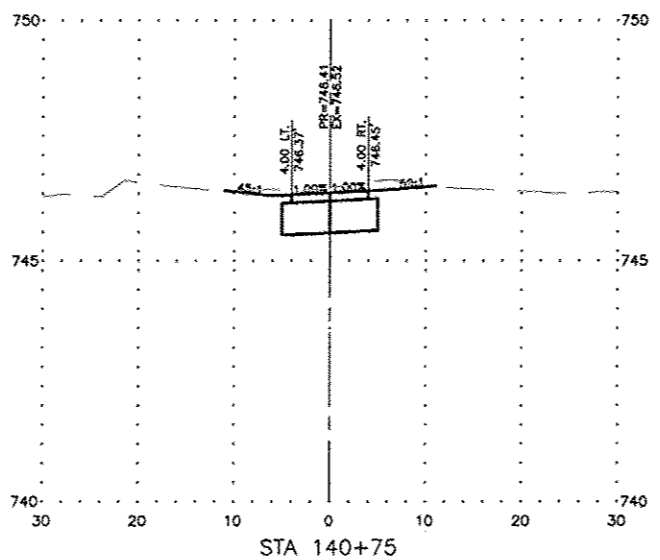
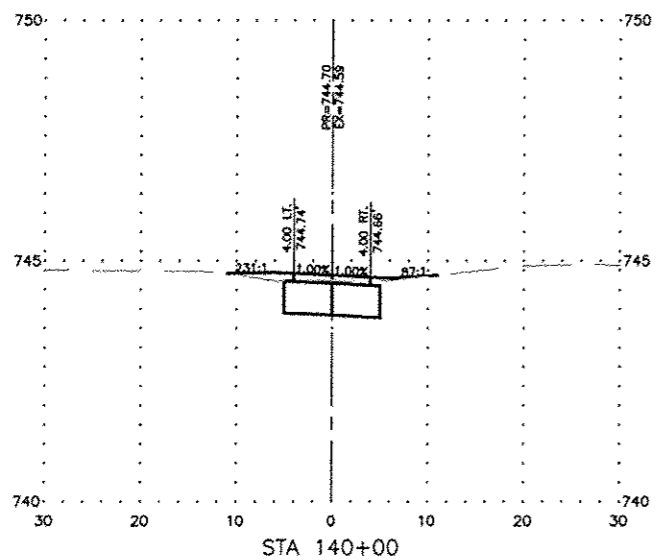
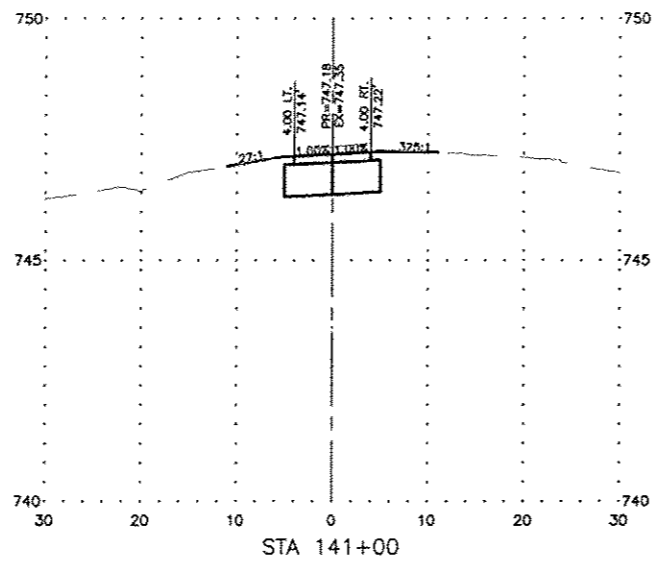
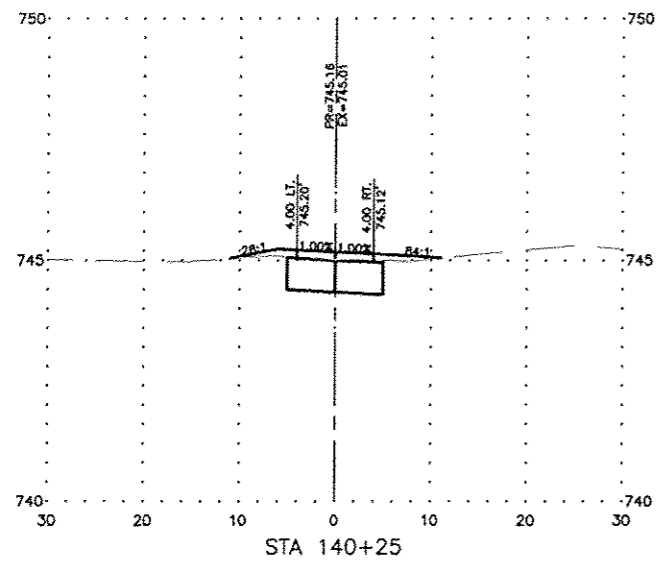
REV. NO.	DESCRIPTION	DATE

DRAWING:  
ELECTRICAL PLAN

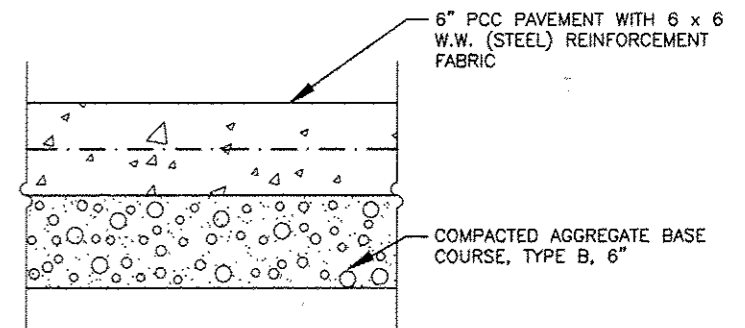
JOB NUMBER:  
13-1031

SHEET NUMBER:  
25 of 32





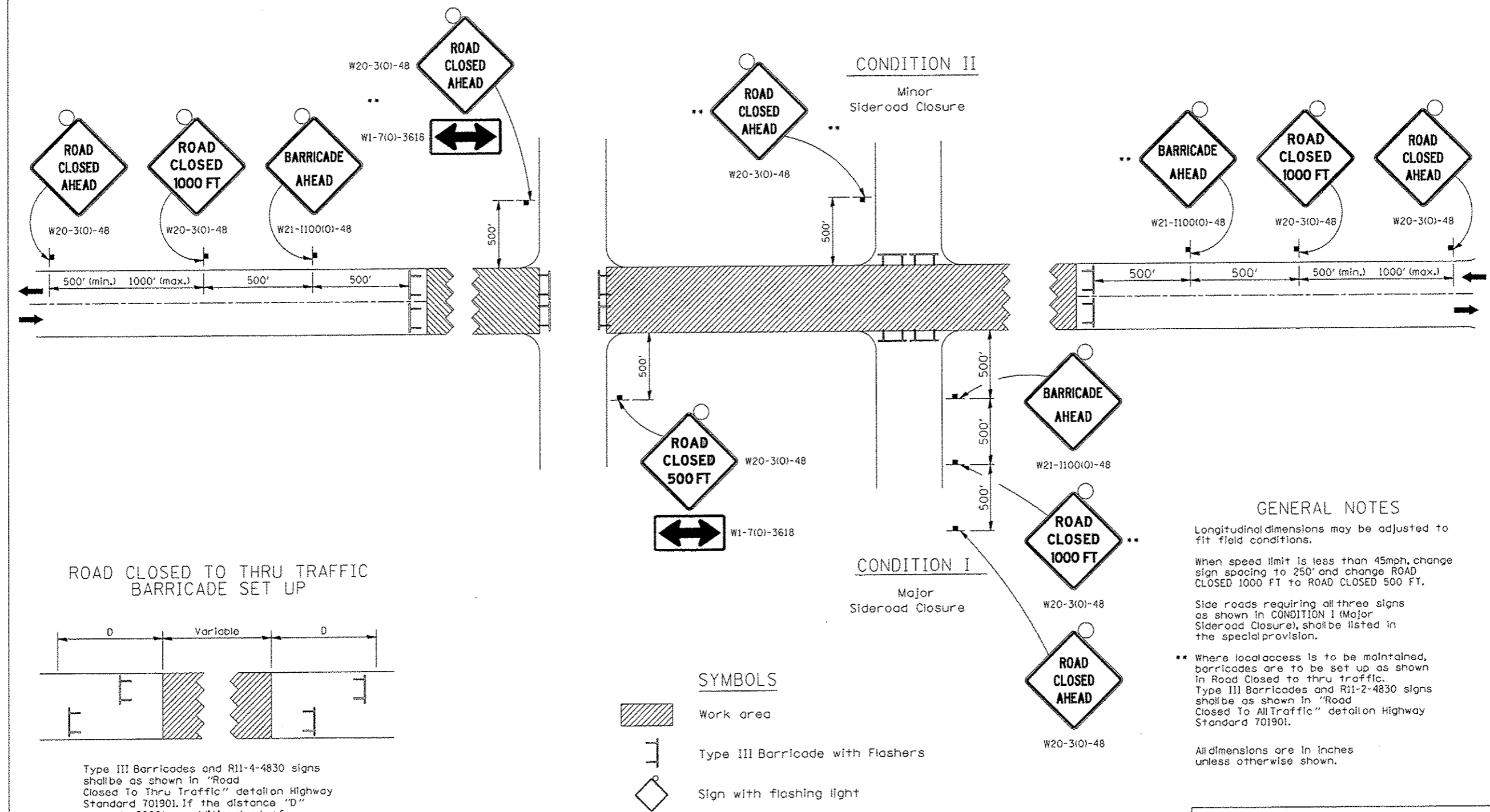
REVISIONS		
REV. NO.	DESCRIPTION	DATE



**PCC SIDEWALK DETAIL**  
N.T.S.

REVISIONS		
REV. NO.	DESCRIPTION	DATE

# TRAFFIC CONTROL FOR ROAD CLOSURE



### GENERAL NOTES

Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250' and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

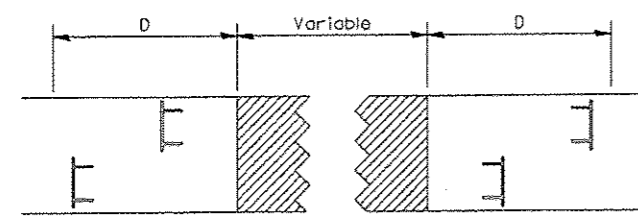
\*\* Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic. Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

All dimensions are in inches unless otherwise shown.

### SYMBOLS

- Work area
- Type III Barricade with Flashers
- Sign with flashing light

### ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 2000' an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

### TYPICAL APPLICATION FOR ROAD CLOSURE

FILE NAME: District 2 Standard	USER NAME: IDOT/District 2	DESIGNED - DRAWN -	REVISED - 8-27-13 REVISED - 10-17-11	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE: 1/8" = 1' / in.	CHECKED -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO.		
	PLOT DATE: Tue Sep 03 09:37:30 2013	DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

### TRAFFIC CONTROL FOR ROAD CLOSURE 40.1

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

DRAWN BY: M.S.  
APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: HOR VERT

REVISIONS		
REV. NO.	DESCRIPTION	DATE

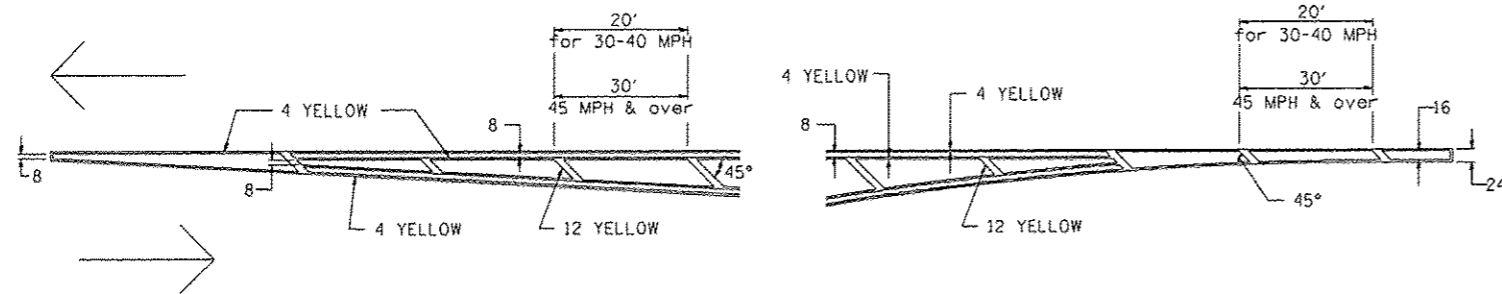
DRAWING:  
DISTRICT 2 STANDARD DETAILS

JOB NUMBER:  
13-1031

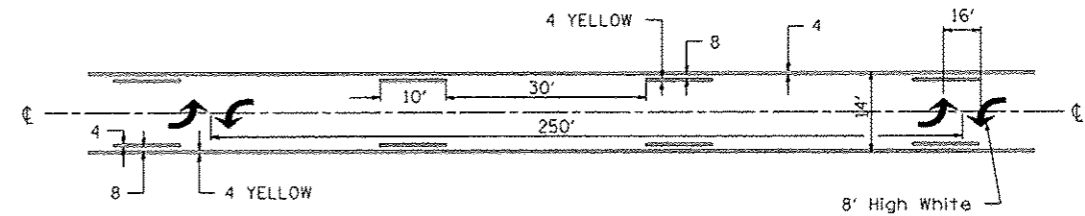
SHEET NUMBER:  
29 of 32

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

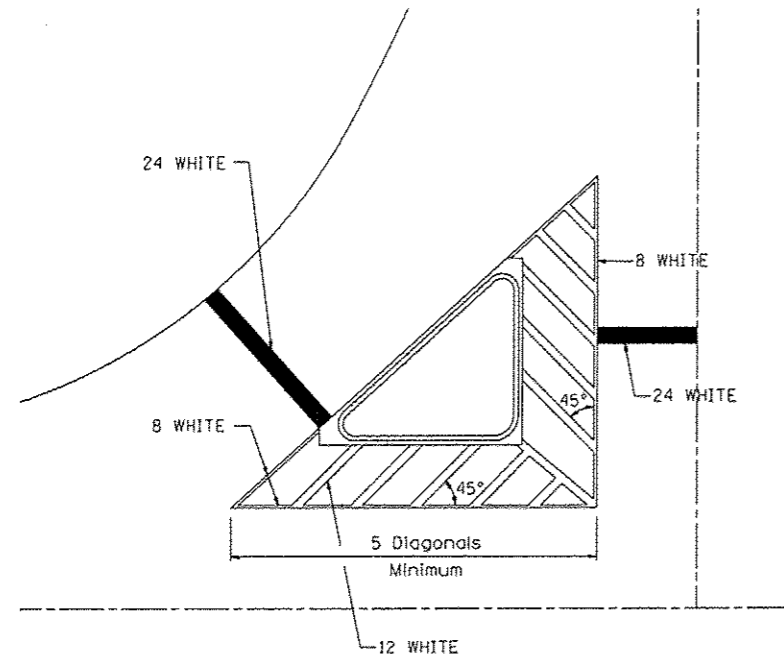


## MEDIAN PAVEMENT MARKING



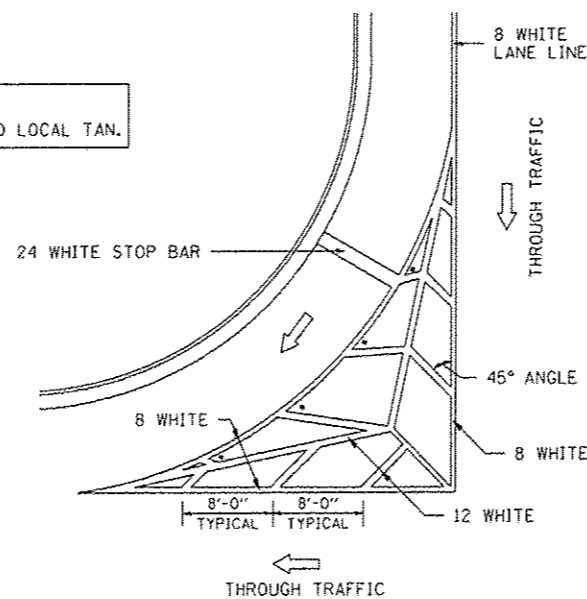
•• ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH



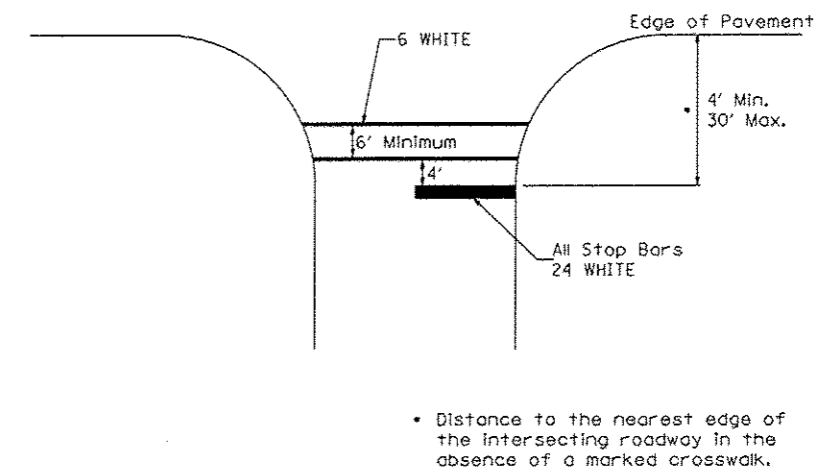
## TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:  
\* 45° TO LOCAL TAN.



## STANDARD CROSSWALK MARKING

See Schedules for Locations



• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

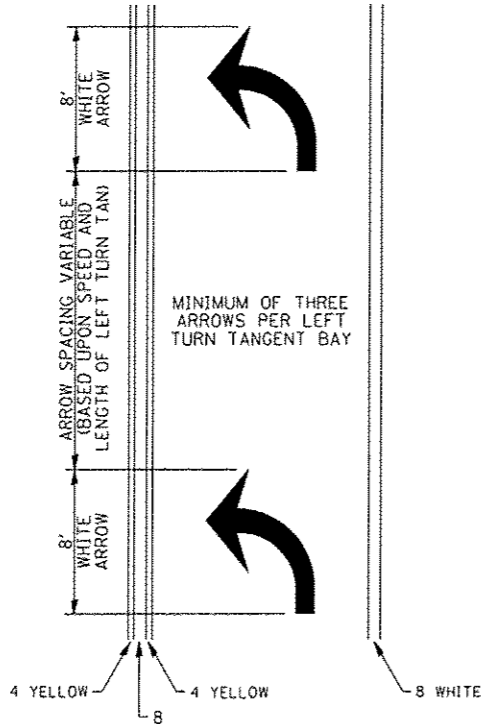
FILE NAME • District 2 Standard	USER NAME • J00T/District 2	DESIGNED -	REVISED - 6-27-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. RYE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		DRAWN -	REVISED - 3-05-12			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO.			
		CHECKED -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT						
		DATE -	REVISED -									

TYPICAL PAVEMENT MARKINGS SHEET 1 OF 3 41.1

REVISIONS		
REV. NO.	DESCRIPTION	DATE

# TYPICAL PAVEMENT MARKINGS

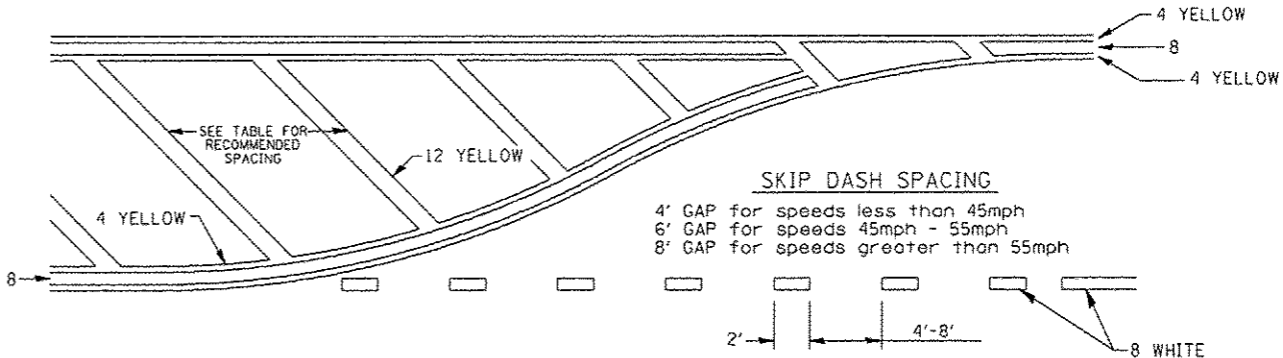
## ARROW LAYOUT



- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

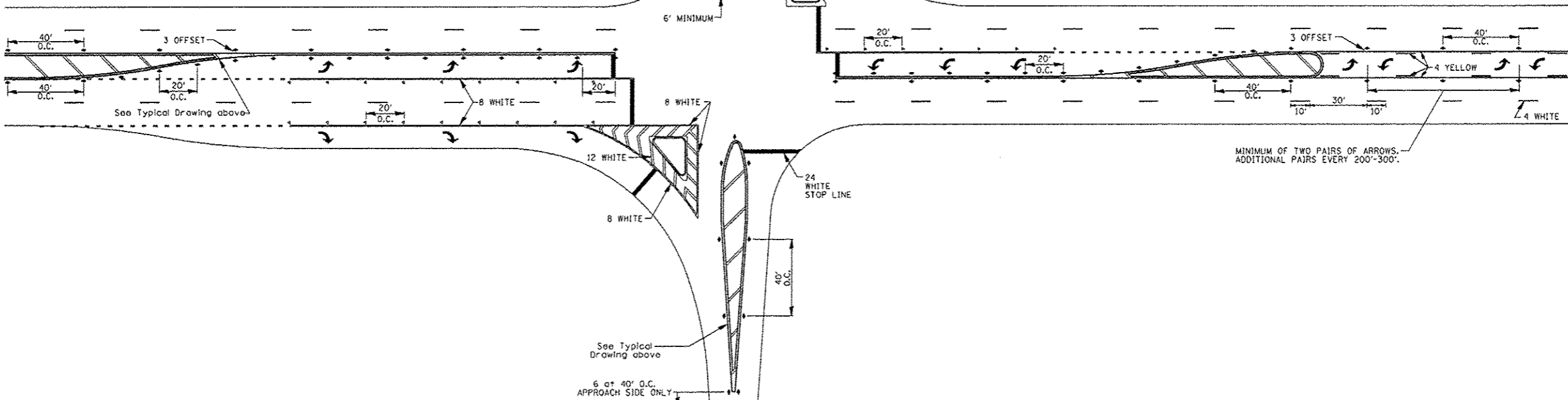
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



### RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



FILE NAME	USER NAME	DESIGNED	REVISED
District 2 Standard	JDD1/District 2	-	6-27-14
		DRAWN	REVISED
		-	3-05-12
		CHECKED	REVISED
		-	-
		DATE	REVISED
		-	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

TYPICAL PAVEMENT MARKINGS SHEET 2 OF 3 41.1

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
CITY OF SOUTH BELOIT  
519 BLACKHAWK BOULEVARD  
SOUTH BELOIT, IL 61080

PROJECT AND LOCATION:  
CITY CENTER BICYCLE LINK  
SOUTH BELOIT, IL

DRAWN BY: M.S.  
APPROVED BY: B.M.B.  
DATE: 02/27/15  
SCALE: HOR VERT

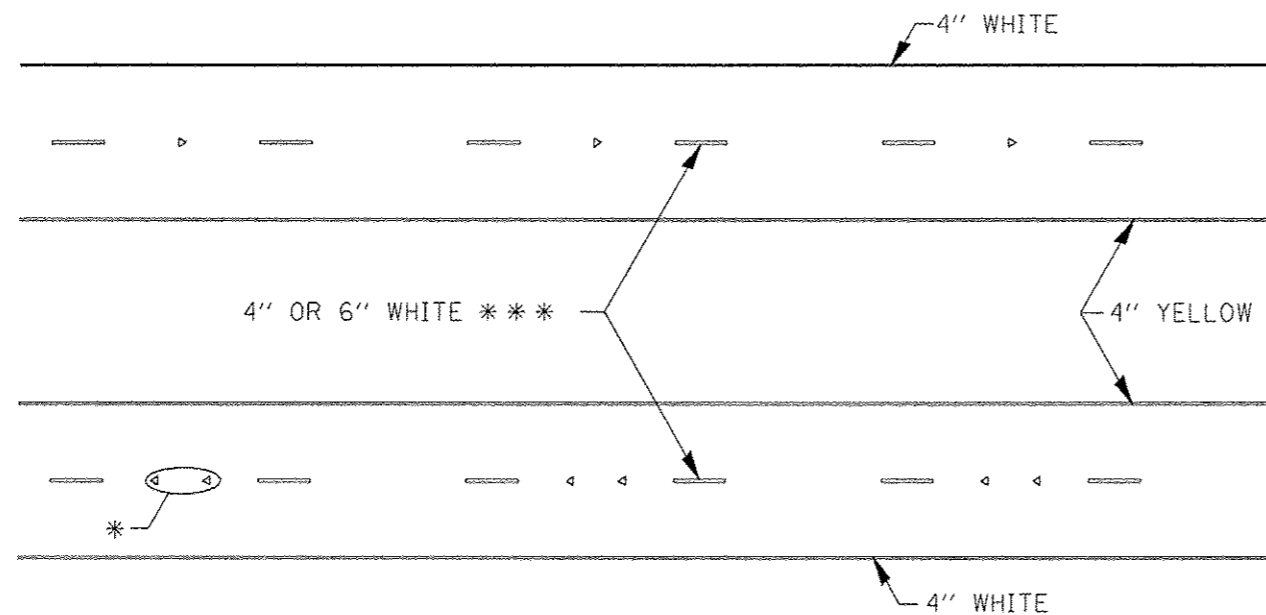
REV. NO.	REVISIONS DESCRIPTION	DATE

DRAWING:  
DISTRICT 2 STANDARD DETAILS

JOB NUMBER:  
13-1031

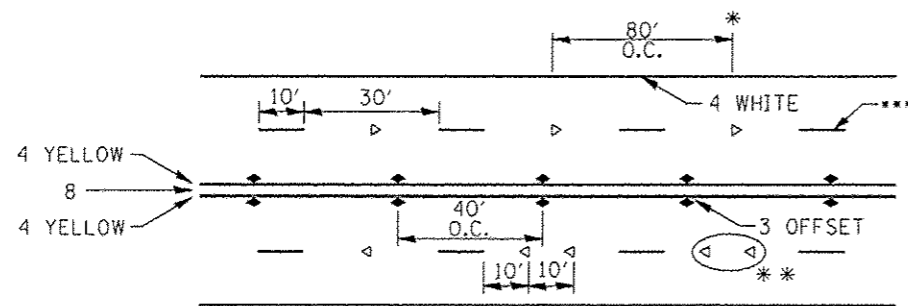
SHEET NUMBER:  
31 of 32

# TYPICAL PAVEMENT MARKINGS



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT > 20,000.

## MULTI-LANE / DIVIDED

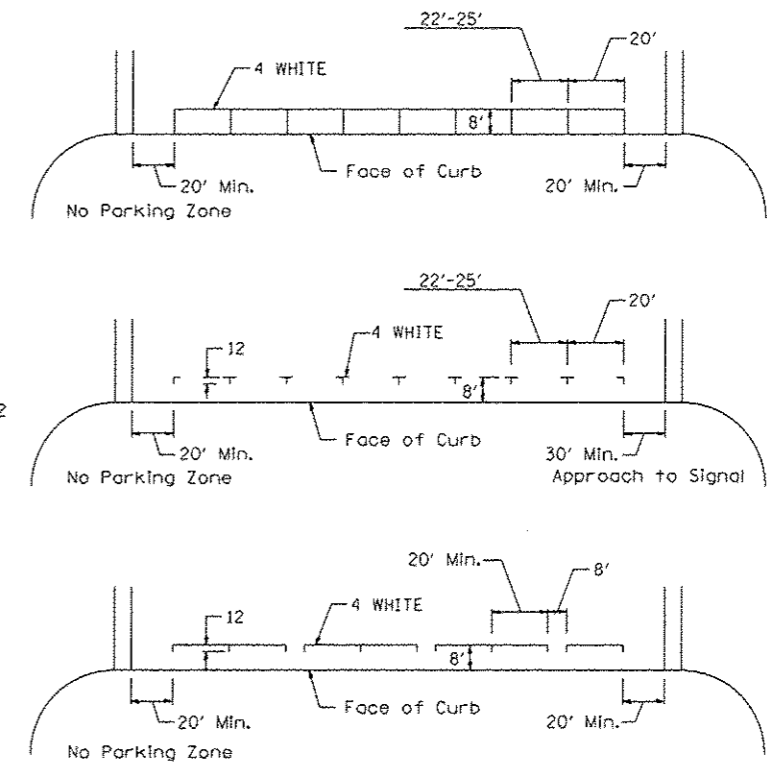


- \* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- \*\* USE DOUBLE MARKERS WHEN ADT ≥ 20,000
- \*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

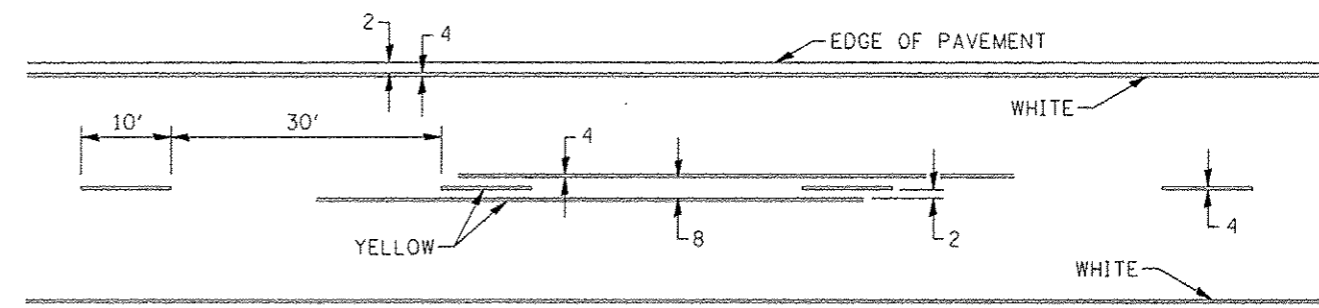
## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS  
DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PARKING SPACING



## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



FILE NAME * District 2 Standard	USER NAME * ID07/District 2	DESIGNED - DRAWN -	REVISED - 6-27-14 REVISED - 8-27-13	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE * 1/8" = 1' / in.	CHECKED -	REVISED - 11-28-12		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO.				
	PLOT DATE * Thu Nov 13 11:29:11 2014	DATE -	REVISED -		<b>TYPICAL PAVEMENT MARKINGS SHEET 3 OF 3 41.1</b>							

REVISIONS		
REV. NO.	DESCRIPTION	DATE