

004

01-18-2019 LETTING ITEM 004

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 62F03		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION
WINNETKA ROAD: URBAN COLLECTOR

TRAFFIC DATA
2014 ADT = 9,650 (W. OF I-94)
2014 ADT = 8,950 (E. OF I-94)
2020 ADT = 10,000
DESIGN SPEED = 35 MPH

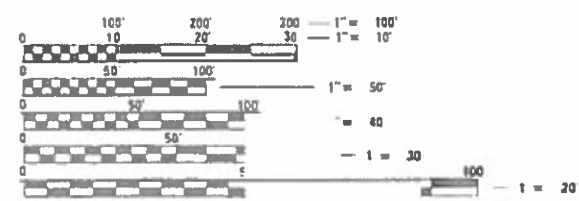
IMPROVEMENT LOCATED IN
THE VILLAGE OF NORTHFIELD
AND FOREST PRESERVE DISTRICT
OF COOK COUNTY

PROPOSED HIGHWAY PLANS

FAU 1291: WINNETKA ROAD
OVER SKOKIE RIVER
BRIDGE REHABILITATION
AND RELATED WORK
COOK COUNTY
SECTION 2017-005BR
FEDERAL PROJECT NO. STP-W4JY(526)
C-91-187-17



COLLINS ENGINEERS
123 N. WACKER DR., SUITE 900
CHICAGO, IL 60606
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-009933

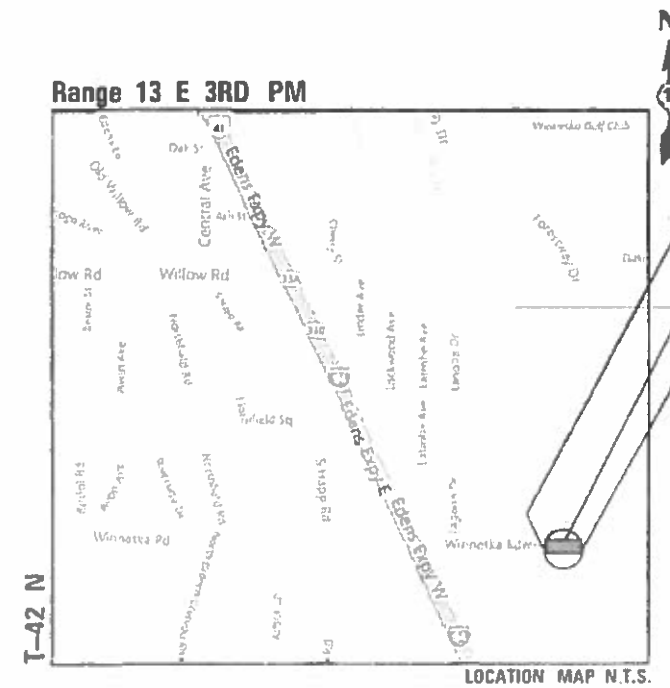


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: MR. ALIX BRICE, (847) 705-4552
PROJECT MANAGER: MR. MATTHEW ROTHENBERG, P.E. (847) 705-4230

CONTRACT NO. 62F03



NEW TRIER TOWNSHIP
GROSS LENGTH = 400 FT. = 0.08 MILE
NET LENGTH = 400 FT. = 0.08 MILE

BEGIN PROJECT
STA. 23 + 70
STRUCTURE NO. 016-1162
STA. 25 + 50.00
END PROJECT
STA. 27 + 70



COLLINS ENGINEERS, INC.
ZACHARY TANNER, P.E.
NO. 062 068582
EXPIRES 11/30/2019



COLLINS ENGINEERS, INC.
EWA MROCZEK, P.E., S.E.
NO. 091-006067
EXP.: 11/30/2020

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED October 16, 2018
Anthony J. Dunphy REGISTERED PROFESSIONAL ENGINEER
Dec 7 2018
EA. ETK
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 7 2018
DIRECTOR OF HIGHWAYS & PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
515001	NAME PLATE FOR BRIDGES
630001	STEEL PLATE BEAM GUARDRAIL
631031	TRAFFIC BARRIER TERMINAL, TYPE 6
630301	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
664001	CHAIN LINK FENCE
701006	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE
701011	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701106	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701301	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701321	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701501	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901	TRAFFIC CONTROL DEVICES
704001	TEMPORARY CONCRETE BARRIER
720001	SIGN PANEL MOUNTING DETAILS
725001	OBJECT AND TERMINAL MARKERS
780001	TYPICAL PAVEMENT MARKINGS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
812001	RACEWAY EMBEDDED IN STRUCTURE
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCE

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF NORTHFIELD AND THE FOREST PRESERVE DISTRICT OF COOK COUNTY.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS, AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40MM) WHERE THE SPEED LIMIT IS 40 MPH (80 KM/HR) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80KM/HR). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- ALL PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR, AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, DON CHIARUGI AT DON.CHIARUGI@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)" SHOWN ON THE PLANS.
- PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON FINAL SURFACES.
- THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED WITH THE EXCEPTION OF COFFERDAMS WHICH WILL BE PAID FOR AS COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK) WITH A BASIS OF PAYMENT OF EACH.
- THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.
- DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

FILE NAME = \$FILES



USER NAME = oseiber	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100.0000 ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 12/11/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WINNETKA ROAD			
INDEX OF SHEETS, LIST OF HIGHWAY STANDARDS, AND GENERAL NOTES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	2
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

GENERAL NOTES (CONTINUED)

18. THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER, WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM ALL THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE, INCLUDING PAVEMENT. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. COORDINATION WITH ALL AGENCIES INVOLVED IS REQUIRED.
19. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF NORTHFIELD MANAGER, AT (848) 441-3852 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
22. THE CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES TO THE PUMP STATION LOCATED DIRECTLY EAST OF THE SKOKIE RIVER BRIDGE. NO PARKING OF PERSONNEL VEHICLES OR CONTRACTOR EQUIPMENT SHALL BE PLACED AT ENTRANCE OR ON THE GRAVEL DRIVEWAY AREA.

EROSION CONTROL GENERAL NOTES:

1. THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION.
2. DIRECT OR INDIRECT PUMPING OF SEDIMENT -LADEN WATER INTO A STORMWATER FACILITY WITHOUT FILTRATION IS PROHIBITED.
3. RUNOFF FROM EXCAVATED AREAS SHALL LEAVE THE SITE THROUGH SEDIMENT CONTROL DEVICES SHOWN IN IDOT STD. 280001-05, AND/OR NRCS DETAILS FROM THE MOST RECENT VERSION OF THE ILLINOIS URBAN MANUAL.
4. SILT FENCING WILL BE PLACED AT THE TOES OF SLOPE AND UTILIZED AS A PERIMETER EROSION BARRIER FOR THE SITE. PERIMETER ROLLED BARRIERS SHALL BE USED AS MID-SLOPE PROTECTION (IF NEEDED), AND IN AREAS OF CONCENTRATED/CHANNELIZED FLOW.
5. THE CONTRACTOR SHALL SURROUND ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.
6. ALL ESC MEASURES SHOULD BE CHECKED WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED AFTER EACH SNOWMELT.
7. THE REVISED PERMIT REQUIRES THAT STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF TEMPORARY OR PERMANENT CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NO LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION OF WORK IN AN AREA.
8. STOCKPILES OF SOIL OR ANY OTHER BUILDING MATERIALS SHALL NOT BE LOCATED IN SPECIAL MANAGEMENT AREAS SUCH AS WETLANDS.
9. ALL WASTE GENERATED AS A RESULT OF THE PROJECT INCLUDING DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER, SANITARY WASTE, OR ANY OTHER WASTE SHALL BE PROPERLY DISPOSED OF AND BE PREVENTED FROM BEING CARRIED OFF THE SITE BY EITHER WIND OR WATER.
10. HEAVY DUTY EROSION CONTROL BLANKET SHALL BE USED FOR COVERING SLOPES STEEPER THAN 3H:1V.
11. ALL EXPOSED IDLE EARTH, INCLUDING EARTH STOCKPILES WILL BE SEEDED WITH TEMPORARY EROSION CONTROL SEEDING. THE APPLICATION RATE FOR TEMPORARY EROSION CONTROL SEEDING IS 100 POUNDS PER ACRE FOR THREE APPLICATIONS.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF ACHIEVING PERMANENT SOIL STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF, AND THE AREA PERMANENTLY STABILIZED.
13. WETLAND EXCLUSION FENCING AND "WETLAND, NO INTRUSION" SIGNAGE SHALL BE PROVIDED AT THE BOUNDARY OF ALL UN-IMPACTED WETLANDS WITHIN/IMMEDIATELY ADJACENT THE ROW. "WETLAND, NO INTRUSION" SIGNS ARE AVAILABLE FOR THE CONTRACTOR'S USE FROM THE BUREAU OF MAINTENANCE. SIGNS ARE TO BE RETURNED UNDAMAGED TO IDOT AT THE END OF THE CONTRACT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS MIXTURE TYPE	AIR VOIDS at Ndes	QMP
RESURFACING:		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL 9.5mm), 1 1/2"	4% @ 70 GYR.	QC/OA
LEVELING BINDER (MACHINE METHOD), N70 (IL 9.5mm), VAR DP	4% @ 70 GYR.	QC/OA
PAVEMENT CONNECTOR:		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/OA
HMA BINDER COURSE, IL-19.0, N70, VAR DP	4% @ 70 GYR.	QC/OA
TEMPORARY PAVEMENT:		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 2"	4% @ 70 GYR.	QC/OA
HMA BINDER COURSE, IL-19.0, N70, 8"	4% @ 70 GYR.	QC/OA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

- 1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SOYD/IN
- 2) THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS"
- 3) FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.
- 4) THE CONTRACTOR HAS THE OPTION TO USE PCC TEMPORARY PAVEMENT. PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ART. 1020 OF THE STANDARD SPECIFICATIONS; PCC PAVEMENT 8" THICK.
- 5) TEMPORARY PCC PAVEMENT DOES NOT REQUIRE DOWEL BARS.
- 6) ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER 4" SUBBASE GRANULAR MATERIAL.
- 7) QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

FILE NAME = \$FILES



USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100.0000 ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WINNETKA ROAD			
INDEX OF SHEETS, LIST OF HIGHWAY STANDARDS, AND GENERAL NOTES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	3
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				ROADWAY	BRIDGE
				0013	0013
				URBAN	SN 016-1162
* 20101400	NITROGEN FERTILIZER NUTRIENT	POUND	23	23	
* 20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23	23	
* 20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	23	23	
20200100	EARTH EXCAVATION	CU YD	12	12	
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	85	85	
* 25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25	
* 25000312	SEEDING, CLASS 4A	ACRE	0.25	0.25	
* 25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	192	192	
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100	100	
* 28000400	PERIMETER EROSION BARRIER	FOOT	191	191	
* 28001200	TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	192	192	
* 28200200	FILTER FABRIC	SQ YD	328	328	
28400100	GABIONS	CU YD	27.7	27.7	
28401000	SLOPE MATTRESS 12"	SQ YD	296	296	

* - SPECIALTY ITEM

FILE NAME = 0FILE*

COLLINS ENGINEERS INC.

USER NAME = ztanner
 PLOT SCALE = 100 ft / in.
 PLOT DATE = 10/22/2018

DESIGNED - ZJT 9/17/2018
 DRAWN - ZJT 9/17/2018
 CHECKED - EKM 9/17/2018
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD
 SUMMARY OF QUANTITIES**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	4
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE ROADWAY 0013 URBAN	80% FEDERAL 20% STATE BRIDGE 0013 SN 016-1162
				URBAN	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	476	476	
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	102	102	
35300500	PORTLAND CEMENT CONCRETE BASE COURSE 10"	SQ YD	42	42	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	112	112	
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	9	9	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	142	142	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	14	14	
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	87	87	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	554	554	
44000100	PAVEMENT REMOVAL	SQ YD	369	369	
44000600	SIDEWALK REMOVAL	SQ FT	606	606	
48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	425	425	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	29.8		29.8

* - SPECIALTY ITEM

FILE NAME = 09FILES



USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD SUMMARY OF QUANTITIES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	5
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE ROADWAY	80% FEDERAL 20% STATE BRIDGE
				0013	0013
				URBAN	SN 016-1162
50200100	STRUCTURE EXCAVATION	CU YD	88.3		88.3
50300225	CONCRETE STRUCTURES	CU YD	76.5		76.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	239.1		239.1
50300260	BRIDGE DECK GROOVING	SQ YD	491		491
50300300	PROTECTIVE COAT	SQ YD	894		894
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	125.2		125.2
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	166,420		166,420
50800515	BAR SPLICERS	EACH	387		387
50901720	BICYCLE RAILING	FOOT	239		239
50901750	PARAPET RAILING	FOOT	239		239

* - SPECIALTY ITEM

FILE NAME = 05FILES*



USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100 Ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WINNETKA ROAD SUMMARY OF QUANTITIES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	6
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80 % FEDERAL	80 % FEDERAL
				20 % STATE	20 % STATE
				ROADWAY	BRIDGE
0013	0013				
URBAN	SN 016-1162				
51500100	NAME PLATES	EACH	1		1
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	27		27
52100520	ANCHOR BOLTS, 1"	EACH	54		54
52200010	TEMPORARY SHEET PILING	SQ FT	233		233
59000200	EPOXY CRACK INJECTION	FOOT	48		48
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	70		70
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	20	20	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
63800920	MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	275	275	
64300240	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	180	180	

* - SPECIALTY ITEM

FILE NAME = 015118.DWG



USER NAME = ztanner
 PLOT SCALE = 100 ft / in.
 PLOT DATE = 10/22/2018

DESIGNED - ZJT 9/17/2018
 DRAWN - ZJT 9/17/2018
 CHECKED - EKM 9/17/2018
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD
 SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	7

CONTRACT NO. 62F03
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE ROADWAY 0013 URBAN	80% FEDERAL 20% STATE BRIDGE 0013 SN 016-1162
				URBAN	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	300	300	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	100	100	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	2591	2591	
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	43	43	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	387.5	387.5	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	275	275	
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4	
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	
* 72400320	REMOVE SIGN PANEL - TYPE 2	SQ FT	22.5	22.5	
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2110	2110	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	50	50	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	165	165	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	750	750	

* - SPECIALTY ITEM

FILE NAME = 0FILE*



USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100 ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/22/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD SUMMARY OF QUANTITIES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	8
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL ROADWAY	80% FEDERAL BRIDGE
				20% STATE 0013	20% STATE 0013
				URBAN	SN 016-1162
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4	
* 78100300	REPLACEMENT REFLECTOR	EACH	10	10	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	62	62	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	6	6
* 81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	240		240
	89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1
* A2002914	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	4	4	
	X0326243	SEDIMENT CONTROL, SILT CURTAIN	L SUM	1	1
	X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	1
	X0325154	MASONRY RERECONSTRUCTION	SQ YD	176	176
	X0327064	ELASTOMERIC CHECK VALVE 24" DIAMETER	EACH	1	1
	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	924	924
	X0900075	COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK)	EACH	4	
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	92.6	92.6
	X6330705	RUB RAIL	FOOT	25	25

* - SPECIALTY ITEM

FILE NAME = 09FILE*



USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100 Ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/22/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD SUMMARY OF QUANTITIES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	9
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL ROADWAY	80% FEDERAL BRIDGE
				20% STATE 0013 URBAN	20% STATE 0013 SN 016-1162
				URBAN	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	942	942	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	117	117	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	226		226
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	193	193	
Z0055905	TEMPORARY CONSTRUCTION FENCE	FOOT	208	208	
Z0062456	TEMPORARY PAVEMENT	SQ YD	476	476	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	
** Z0076600	TRAINEES	HOUR	500	500	
** Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

** =0042

* - SPECIALTY ITEM

FILE NAME = 0FILE*



USER NAME = ztanner
 PLOT SCALE = 100 ft / in.
 PLOT DATE = 10/22/2018

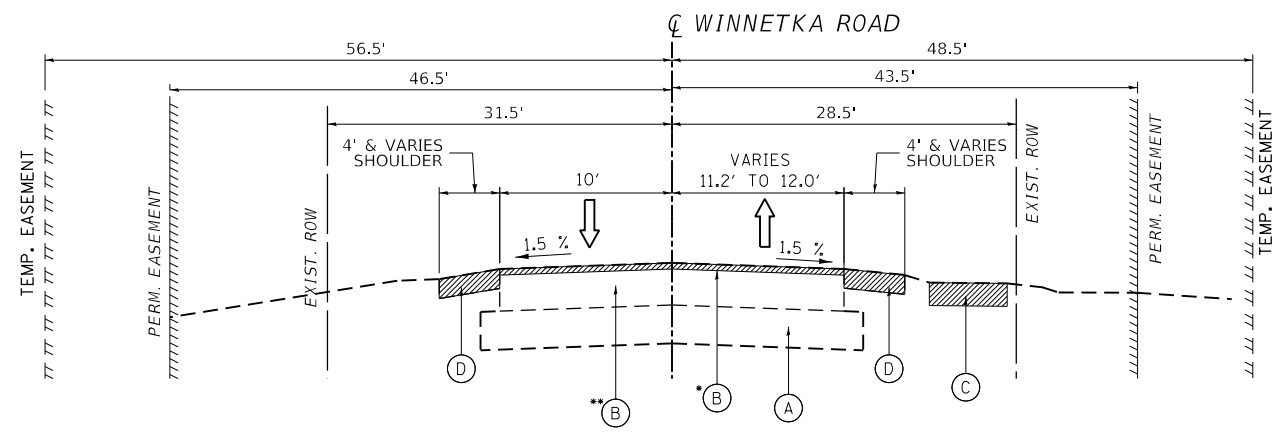
DESIGNED - ZJT 9/17/2018
 DRAWN - ZJT 9/17/2018
 CHECKED - EKM 9/17/2018
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD
 SUMMARY OF QUANTITIES
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

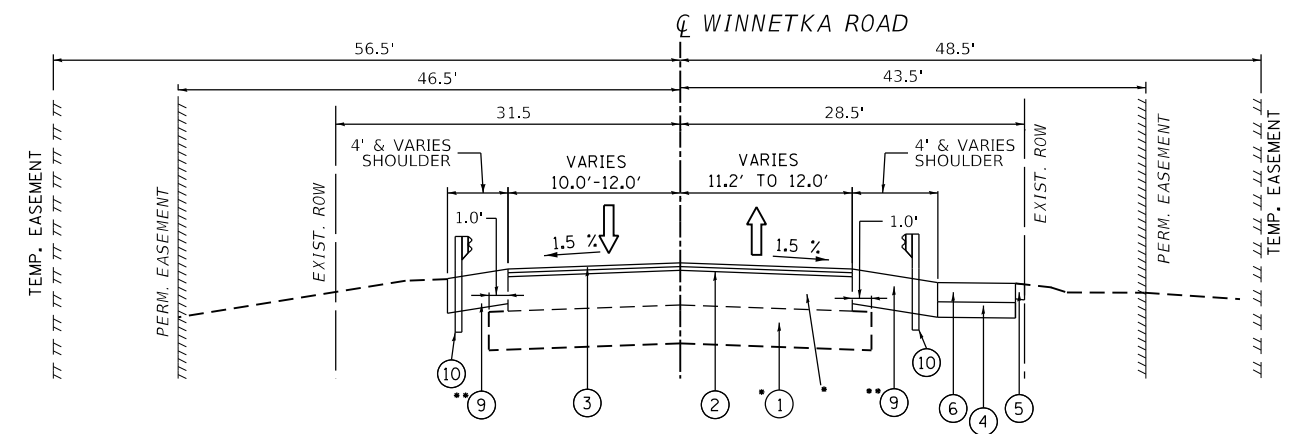
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	10
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**EXISTING TYPICAL SECTION
WINNETKA ROAD**

STA. 23+72 TO STA. 24+90.09

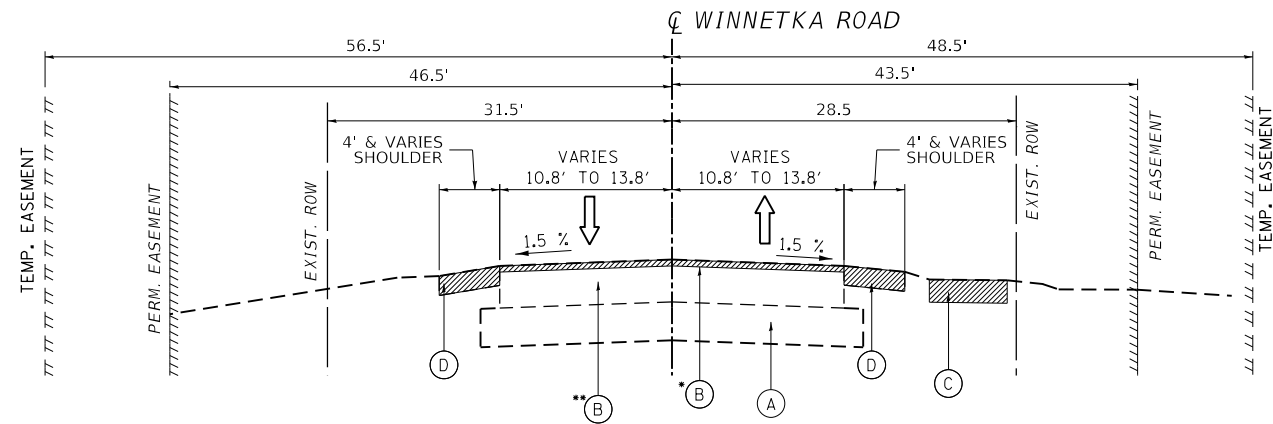
- HMA SURF REM BUTT JT OCCURS FROM STA. 24+50.09 TO STA. 24+80.09
- PAVEMENT REMOVAL OCCURS FROM STA. 24+80.09 TO STA. 24+90.09.



**PROPOSED TYPICAL SECTION
WINNETKA ROAD**

STA. 23+72 TO STA. 24+90.09

- PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB AND AGGREGATE SUBGRADE IMPROVEMENT 12" FROM STA. 24+80.09 TO STA. 24+90.09.
- COMBINATION CURB AND GUTTER SHALL BE INSTALLED FROM STA. 24+80.09 RT/LT TO STA. 24+90.09 RT/LT. COMBINATION CURB AND GUTTER IS NOT SHOWN ABOVE.



**EXISTING TYPICAL SECTION
WINNETKA ROAD**

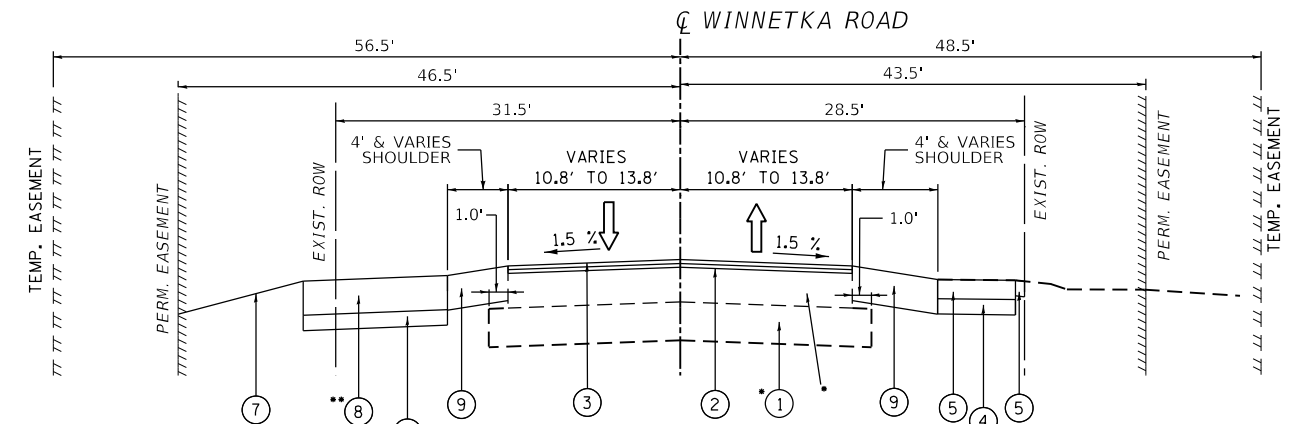
STA. 26+9.80 TO STA. 27+50.5

- PAVEMENT REMOVAL OCCURS FROM STA. 26+9.80 TO STA. 26+19.80.
- HMA SURF REM BUTT JT OCCURS FROM STA. 26+19.80 TO STA. 26+49.80

EXISTING LEGEND:

- (A) EXIST. AGGREGATE SUBGRADE
- (B) EXIST. HMA PAVEMENT
- (C) EXIST. SIDEWALK
- (D) EXIST. AGGREGATE SHOULDER

TO BE REMOVED



**PROPOSED TYPICAL SECTION
WINNETKA ROAD**

STA. 26+9.80 TO STA. 27+50.5

- PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB AND AGGREGATE SUBGRADE IMPROVEMENT 12" OCCURS FROM STA. 26+9.80 TO STA. 26+19.80.
- PROP. BASE COURSE 10" OCCURS FROM STA. 26+9.80 TO STA 26+24.80 LEFT AND RIGHT OF CENTERLINE. RIGHT OF CENTERLINE PROP. BASE COURSE 10" IS NOT SHOWN ABOVE.

PROPOSED LEGEND:

- (1) PROP. AGG SUBGRADE IMP 12
- (2) PROP. P LEVELING BINDER, (VAR)
- (3) PROP. P HMA SURFACE COURSE, 1 1/2"
- (4) PROP. AGGREGATE BASE COURSE, TYPE B 4"
- (5) PROP. SEEDING CLASS 2A
PROP. TOPSOIL FURNISH AND PLACE, 4"
- (6) PROP. PCC CONCRETE SIDEWALK 5 INCH
- (7) PROP. SEEDING 4
- (8) PCC BASE COURSE 10"
- (9) AGGREGATE SHOULDERS B 10"
- (10) PROP. TRAFFIC BARRIER TERMINALS

FILE NAME = SFILES

COLLINS ENGINEERS INC

USER NAME = ztaner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100.0000 ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

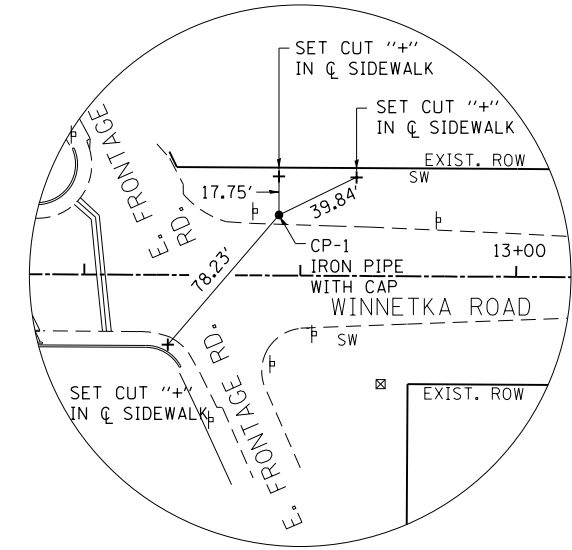
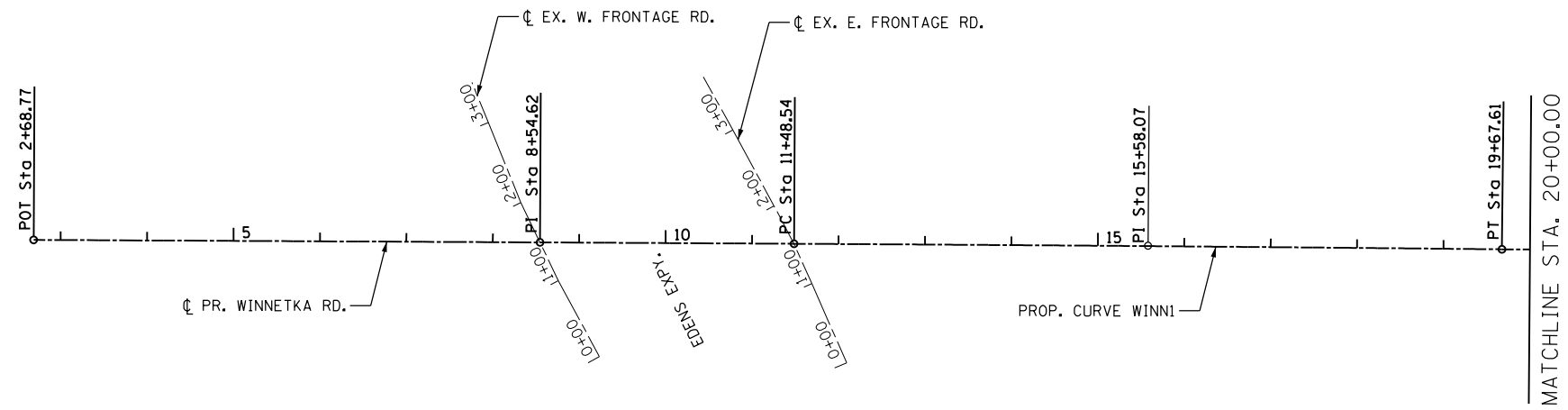
**WINNETKA ROAD
TYPICAL SECTIONS**

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

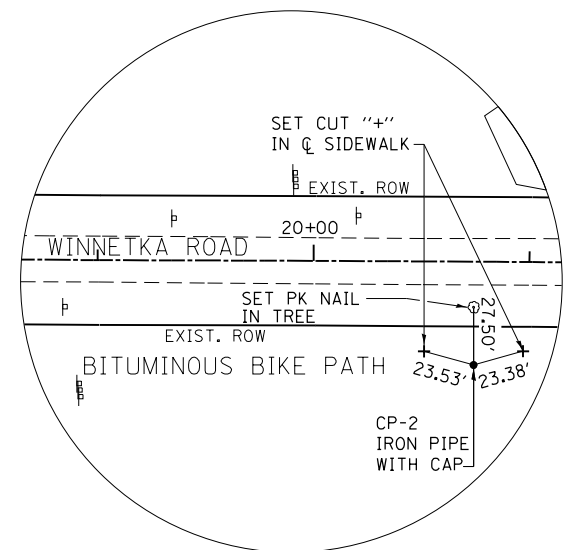
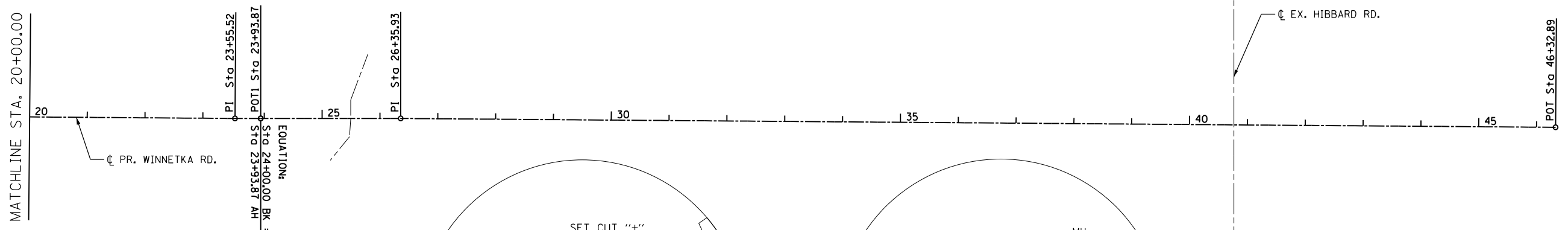
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	11
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

BENCHMARKS

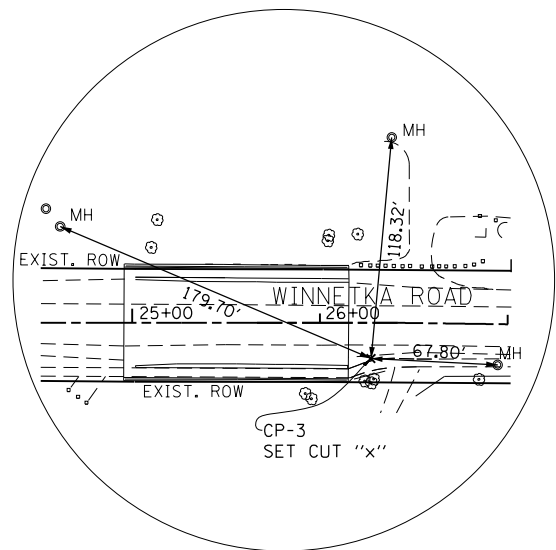
1. TAGGED BOLT ON 3RD FIRE HYDRANT WEST OF SKOKIE RIVER (MARKED 115C 10 NORTH SIDE OF WINNETKA ROAD AT STATION 16+97, ELEV. = 624.97
2. TAGGED BOLT ON 1ST FIRE HYDRANT WEST OF SKOKIE RIVER (MARKED 115E 10 NORTH SIDE OF WINNETKA ROAD AT STATION 23+01, ELEV. = 622.86



CONTROL POINT #1
 STA. 11+88.89, 28.54' LT.
 N 1977410.746
 E 1139260.766
 ELEV. 628.00



CONTROL POINT #2
 STA. 20+71.41, 48.17' RT.
 N 197327.079
 E 1140142.733
 ELEV. 621.97



CONTROL POINT #3
 CUT X
 STA. 26+27.22, 19.97' RT.
 N 1977354.177
 E 1140699.289
 ELEV. 626.39

ALIGNMENT COORDINATES - WINNETKA RD.

WINNETKA	STATION	N	E
POT	2+68.77	1977386.9361	1138340.4949
PI	8+54.62	1977384.0370	1138926.3347
PC	11+48.54	1977382.4310	1139220.2467
PI	15+58.07	1977380.1933	1139629.7776
PT	19.67.61	1977376.0214	1140039.2935
PI	23+55.52	1977373.1446	1140427.1978
POT1	23+93.87	1977373.1446	1140471.6729
PI	26+35.93	1977373.1446	1140713.7337
POT	46+32.89	1977357.8658	1142710.6387

PROP. CURVE WINNI
 PI STA. = 15+58.07
 $\Delta = 0^\circ 16' 14''$ (RT)
 $D = 0^\circ 01' 59''$
 $R = 173,419.35'$
 $T = 409.54'$
 $L = 819.07'$
 $E = 0.48'$
 $\epsilon = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. RUN = \text{-----}$
 $P.C. STA. = 11+48.54$
 $P.T. STA. = 19+67.61$

FILE NAME = SFILES



USER NAME = ztanner
 PLOT SCALE = 200.000' / in.
 PLOT DATE = 10/19/2018

DESIGNED -	ZJT 9/17/2018	REVISED -	
DRAWN -	ZJT 9/17/2018	REVISED -	
CHECKED -	EKM 9/17/2018	REVISED -	
DATE -		REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

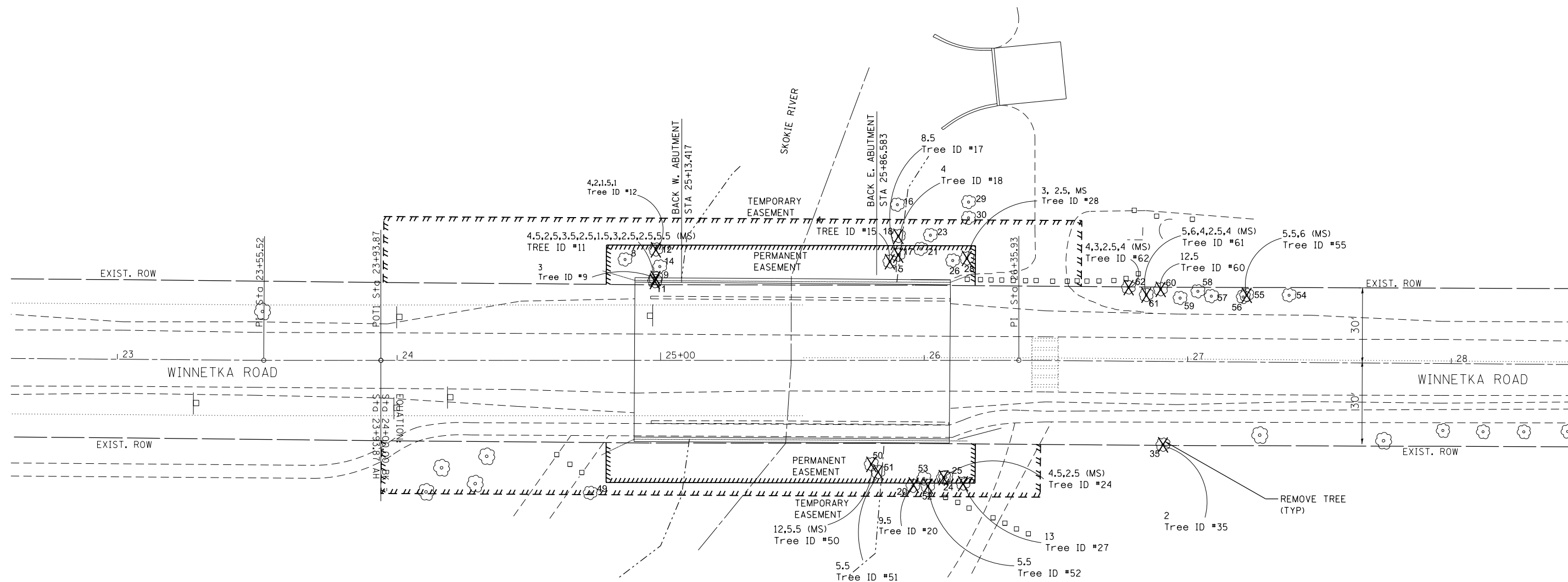
**WINNETKA ROAD
 ALIGNMENT, TIES & BENCHMARKS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	12
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

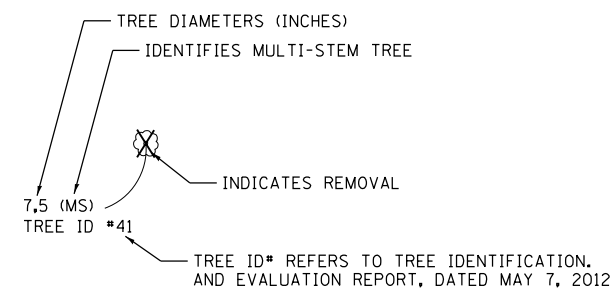
NOTES:

1. THE CONSTRUCTION LIMITS WILL BE STAKED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE CONSTRUCTION LIMITS MAY BE ADJUSTED BY THE ENGINEER TO PRESERVE TREES AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR CHANGED CONSTRUCTION LIMITS.
2. PERIMETER EROSION BARRIER SHALL BE ERECTED ADJACENT TO TEMPORARY CONSTRUCTION FENCE, THE RESIDENT ENGINEER SHALL HAVE FINAL DETERMINATION OF THE PLACEMENT AND LOCATION OF THE PERIMETER EROSION BARRIER. SEE EROSION CONTROL PLANS.
3. SEE SCHEDULE OF QUANTITY SHEETS FOR SUMMARY OF TREE REMOVAL.



FOR INFORMATION ONLY
TREE REMOVAL DONE BY OTHERS

TREE REMOVAL LEGEND



FILE NAME = \$FILES

COLLINS ENGINEERS INC

USER NAME = ztaner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -




**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

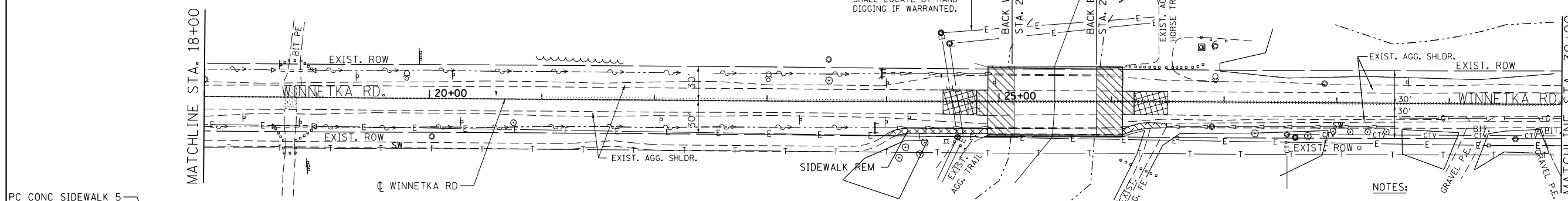
**WINNETKA ROAD
TREE REMOVAL PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	71	13
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

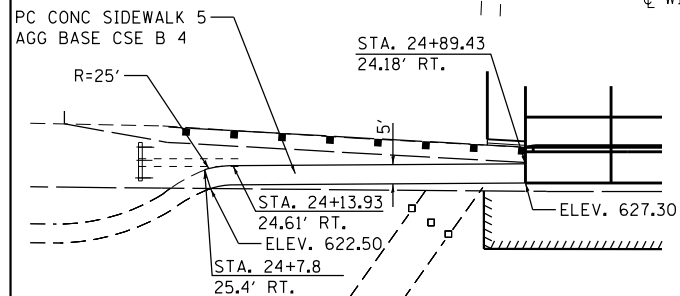
-  SURFACE REMOVAL - BUTT JOINT
-  PAVEMENT REMOVAL
-  SIDEWALK REMOVAL



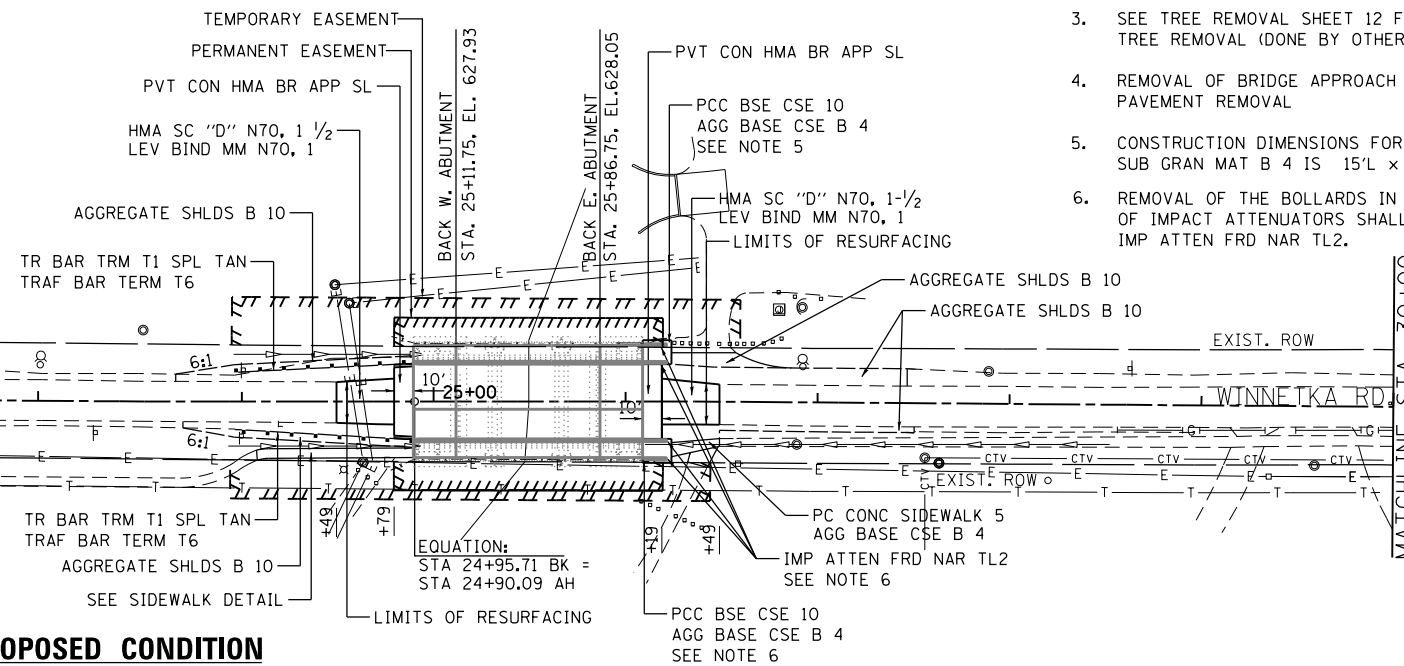
EXISTING CONDITION

NOTES:

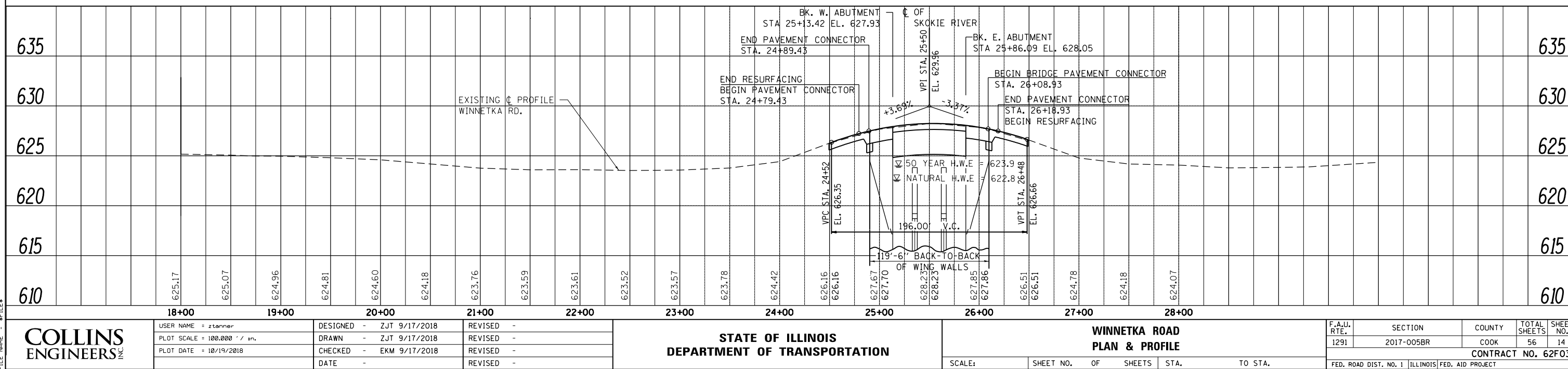
1. SEE DRAINAGE SHEET 21 FOR DRAINAGE ITEMS
2. SEE BD-32 FOR ADDITIONAL DETAILS FOR HMA BUTT JOINT
3. SEE TREE REMOVAL SHEET 12 FOR LOCATIONS AND DETAILS OF TREE REMOVAL (DONE BY OTHERS)
4. REMOVAL OF BRIDGE APPROACH SLABS WILL BE PAID FOR AS PAVEMENT REMOVAL
5. CONSTRUCTION DIMENSIONS FOR PCC BSE CSE 10 & SUB GRAN MAT B 4 IS 15'L x 12.5'W
6. REMOVAL OF THE BOLLARDS IN CONFLICT WITH INSTALLATION OF IMPACT ATTENUATORS SHALL BE INCLUDED IN THE COST OF IMP ATTEN FRD NAR TL2.



SIDEWALK DETAIL



PROPOSED CONDITION



COLLINS ENGINEERS INC.

USER NAME = ztanzer
 PLOT SCALE = 100.000' / in.
 PLOT DATE = 10/19/2018

DESIGNED - ZJT 9/17/2018
 DRAWN - ZJT 9/17/2018
 CHECKED - EKM 9/17/2018
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

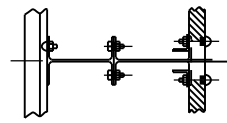
**WINNETKA ROAD
 PLAN & PROFILE**

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

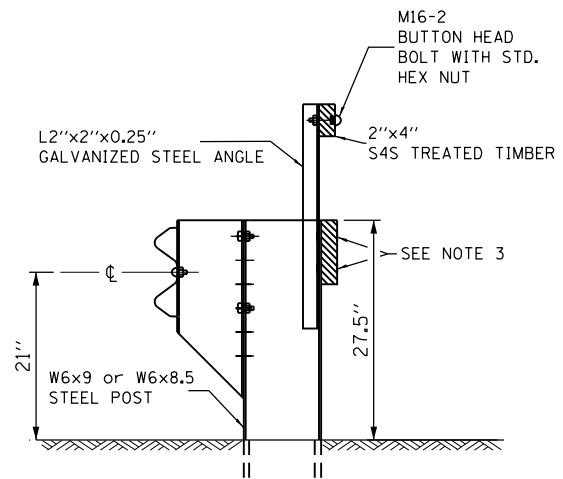
F.A.U. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	14

CONTRACT NO. 62F03
 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

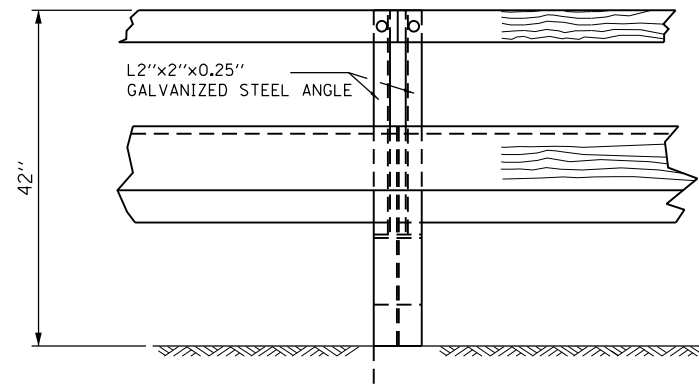
FILE NAME = \$FILES



PLAN



CROSS SECTION



ELEVATION
(BIKE PATH SIDE)

DETAIL

STEEL PLATE BEAM GUARDRAIL
42" HEIGHT EXTENSION (RUB RAIL)
STA 24+64.5 (RT) TO STA 24+89.5 (RT)

NOTES:

1. FOR ADDITIONAL GUARDRAIL DETAILS, SEE STANDARDS 630001 AND 631031 AS APPLICABLE.
2. THE COST OF FABRICATION, FURNISHING, AND INSTALLATION OF ALL ANGLES, TIMBER, AND HARDWARE REQUIRED TO CONSTRUCT THE GUARDRAIL EXTENSION, AS SHOWN IN THE DETAIL SHALL BE INCLUDED IN THE COST OF RUB RAIL.
3. WELDING OR DRILLING OF TERMINAL POSTS WILL NOT BE ALLOWED. CONNECTION OF THE RUB RAIL EXTENSION TO THE TERMINAL POSTS SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.

FILE NAME = \$FILES

COLLINS ENGINEERS INC.

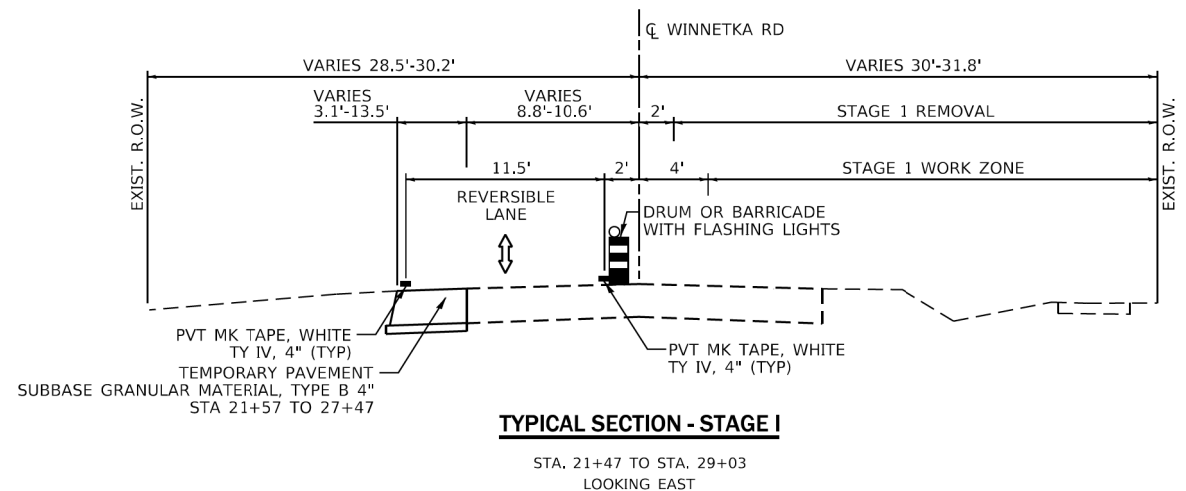
USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD
RUB RAIL DETAIL**

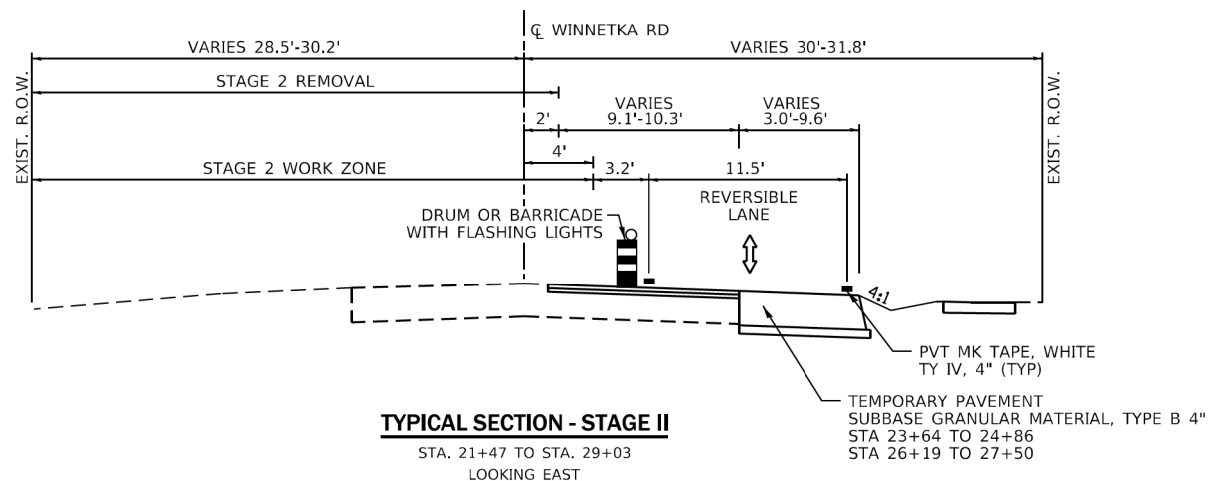
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	15
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL SECTION - STAGE I

STA. 21+47 TO STA. 29+03
LOOKING EAST



TYPICAL SECTION - STAGE II

STA. 21+47 TO STA. 29+03
LOOKING EAST

STAGE I

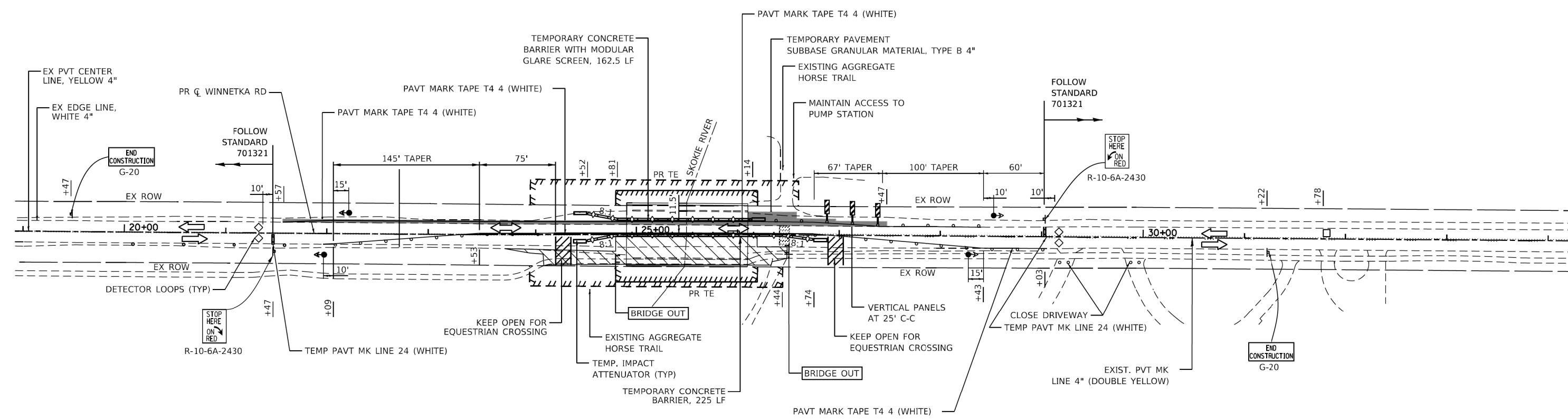
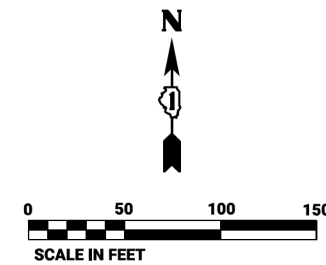
1. ESTABLISH TRAFFIC CONTROL AS SHOWN ON THE TRAFFIC CONTROL PLAN
2. PERFORM STAGE I ACTIVITIES ON BRIDGE STRUCTURE OVER SKOKIE RIVER (STA. 25+50) AS SHOWN ON STRUCTURAL PLANS.

STAGE II

1. ESTABLISH TRAFFIC CONTROL AS SHOWN ON THE TRAFFIC CONTROL PLAN
2. PERFORM STAGE II ACTIVITIES ON BRIDGE STRUCTURE OVER SKOKIE RIVER (STA. 25+50) AS SHOWN ON STRUCTURAL PLANS.

USER NAME = lin	DESIGNED - RC	REVISED -
	DRAWN - RC	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 10/18/2018	DATE - 9/2018	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62F03	



LEGEND

- WORK AREA
- SIGN
- DRUM WITH TY III BARRICADE
- TRAFFIC SIGNAL
- INDUCTION LOOP DETECTOR
- TYPE C BIDIRECTIONAL REFLECTOR
- IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
- DIRECTION OF TRAFFIC
- REVERSIBLE TRAFFIC
- TYPE III BARRICADE
- ARROW BOARD

NOTE:

1. THE CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES TO THE PUMP STATION LOCATED DIRECTLY EAST OF THE SKOKIE RIVER BRIDGE. NO PARKING OF PERSONNEL VEHICLES OR CONTRACTOR EQUIPMENT SHALL BE PLACED AT THE ENTRANCE OR ON THE GRAVEL DRIVEWAY AREA.

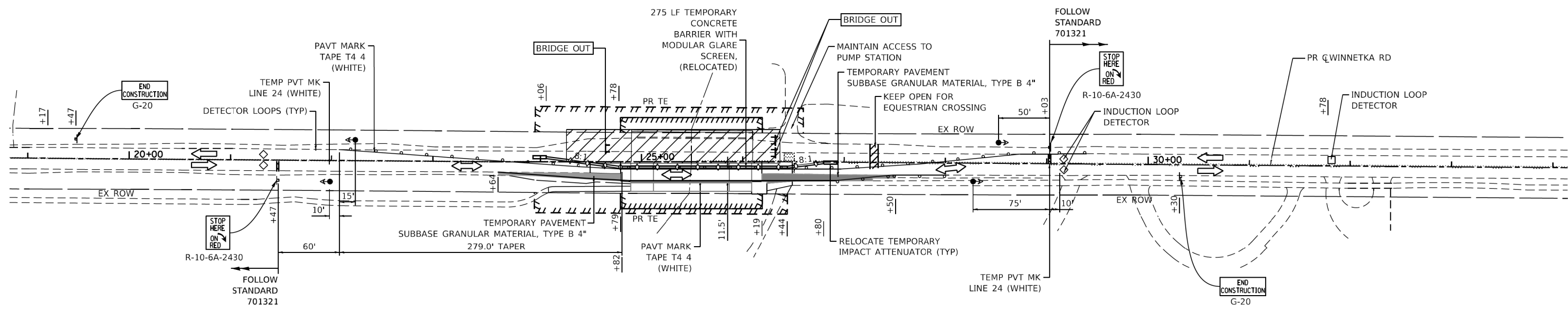
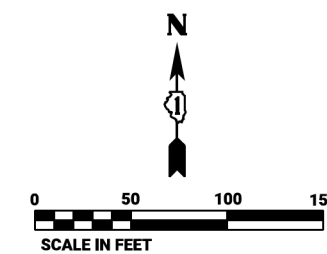


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PLOT SCALE = 100,0000' / in.	DRAWN - RC	REVISED -
PLOT DATE = 10/18/2018	CHECKED - ST	REVISED -
	DATE - 9/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WINNETKA ROAD MAINTENANCE OF TRAFFIC - STAGE I	
SCALE: 1"=50'	SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.U. RTE. 1291	SECTION 2017-005BR	COUNTY COOK	TOTAL SHEETS 56	SHEET NO. 17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62F03	



LEGEND

- WORK AREA
- SIGN
- DRUM WITH TY III BARRICADE
- TRAFFIC SIGNAL
- INDUCTION LOOP DETECTOR
- TYPE C BIDIRECTIONAL REFLECTOR
- IMPACT ATTENUATOR, TEST LEVEL 2 (TEMPORARY)
- DIRECTION OF TRAFFIC
- REVERSIBLE TRAFFIC
- TYPE III BARRICADE

NOTE:

1. THE CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES TO THE PUMP STATION LOCATED DIRECTLY EAST OF THE SKOKIE RIVER BRIDGE, NO PARKING OF PERSONNEL VEHICLES OR CONTRACTOR EQUIPMENT SHALL BE PLACED AT THE ENTRANCE OR ON THE GRAVEL DRIVEWAY AREA.






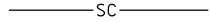
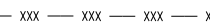
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	DRAWN - RC	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 10/18/2018	DATE - 9/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WINNETKA ROAD MAINTENANCE OF TRAFFIC - STAGE II	
SCALE: 1"=50'	SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	18
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				

LEGEND

-  SLOPE MATTRESS (12" THICK)
-  SEEDING, CLASS 4A
EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  FLOATING SILT CURTAIN
-  TEMPORARY FENCE

Erosion and Sediment Control Notes:

1. Perimeter erosion barrier with wire support shall be placed at the toe of the proposed slopes.
2. Erosion control blanket shall only be used for permanent seeding conditions.
3. Soil disturbance shall be conducted in such a manner as to minimize erosion. Soil disturbance shall be allowed within Existing ROW only.
4. Soil erosion and sediment control features shall be constructed prior to the commencement of hydrological disturbance of upland areas.
5. Disturbed areas shall be stabilized with temporary or permanent measures within seven (7) calendar days following the end of active hydrologic disturbance.
6. If dewatering services are used, adjoining properties and discharge locations shall be protected from erosion. Discharges shall be routed through sediment filter bag or other device as approved by the Engineer.

7. All temporary soil erosion and sediment control measures shall be removed within thirty (30) days after final site stabilization is achieved or after the temporary measures are no longer needed. Trapped sediment and other disturbed soil areas shall be permanently stabilized.
8. Soil stockpiles shall not be placed on site.
9. The Contractor shall provide adequate receptacles for the deposition of all construction material debris generated during the development process. The Contractor shall not cause or permit the dumping, depositing, dropping, throwing, discarding or leaving of construction material debris upon or into any development site, channel, waters of the U.S. or isolated waters of Cook County. The Contractor shall maintain the development site free of construction material debris.
10. All temporary and permanent sediment control measures shall be maintained in an effective working condition.

11. All in-stream work including but not limited to excavation shall be done in dry stream bed conditions.
12. Access to the site is limited. The contractor shall only access this site by raising and/or lowering all equipment and material over the sides of the bridge. The contractor will not be allowed other access without written permission from the engineer. This work will not be paid for separately, but shall be considered as included in the contract unit prices for the construction items involved and no additional compensation will be allowed.
13. In stream work shall be done when water is at or below normal surface elevation or as approved by the Engineer.

14. The contractor shall take all necessary precautions when excavating around footings at bridge abutments and piers.

15. The contractor shall prepare in-stream work plans (all cofferdams, work pads, and erosion and sediment control, etc.) and submit to the engineer and the U.S. Army Corp of Engineers for review and approval. The contractor should expect to have to attend meetings at the USACE office to discuss their work plan in order to secure their permit. The cost of all in-stream work items will not be paid for separately, but shall be considered as included in the unit bid prices of the contract, and no additional compensation will be allowed with the exception of cofferdams which will be paid for as cofferdam (type 1) (in-stream/wetland work) with a basis of payment of each..

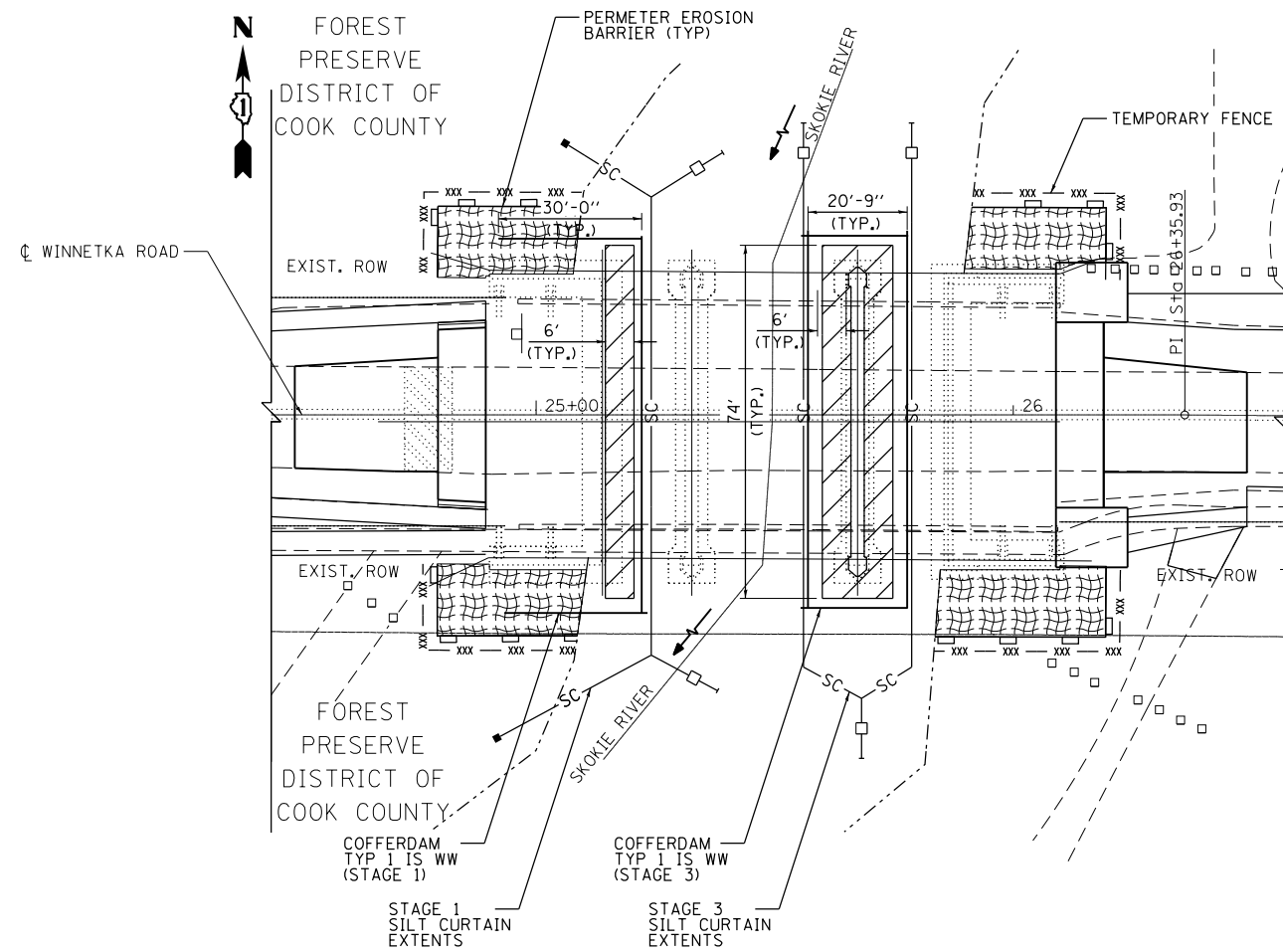
16. Cofferdam or other approved means of diverting water from work area shall be constructed to pass the 2 year flow elevation of 619'.

17. See Floating Silt Detail Sheet for layout and connection details.

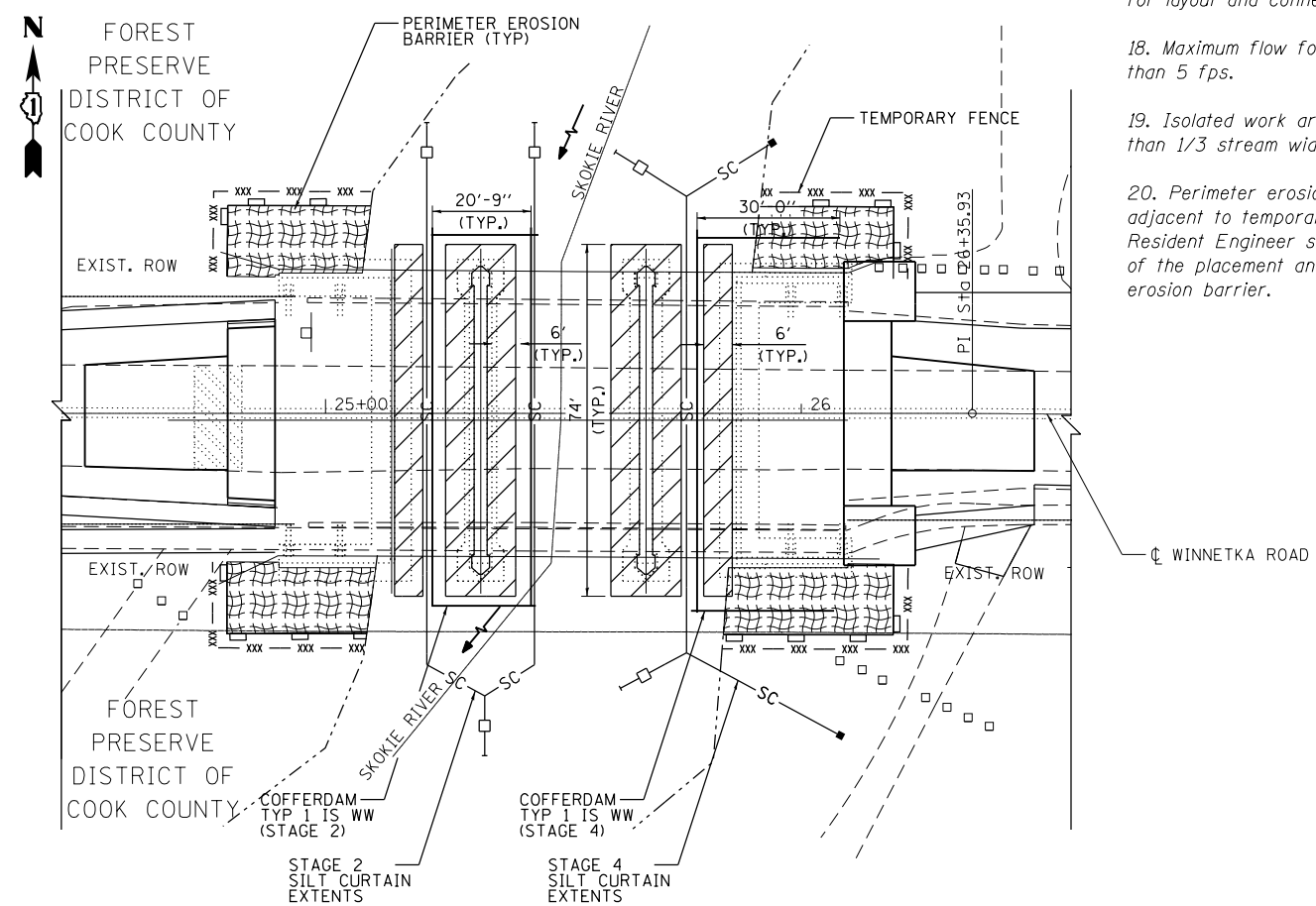
18. Maximum flow for waterbody shall be less than 5 fps.

19. Isolated work area shall not exceed more than 1/3 stream width.

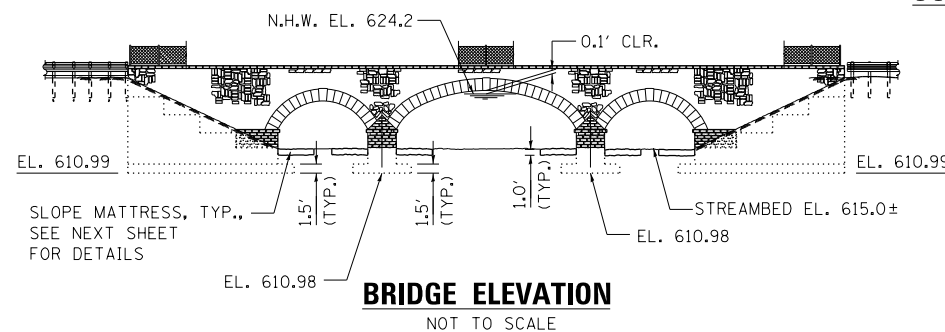
20. Perimeter erosion barrier shall be erected adjacent to temporary construction fence, the Resident Engineer shall have final determination of the placement and location of the perimeter erosion barrier.



SUGGESTED STAGE 1 & 3



SUGGESTED STAGE 2 & 4



BRIDGE ELEVATION

NOT TO SCALE

NOTE:

1. SEE SHEETS 19-20 FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DURING IN-STREAM CONSTRUCTION

FILE NAME = SFILES

COLLINS ENGINEERS INC.

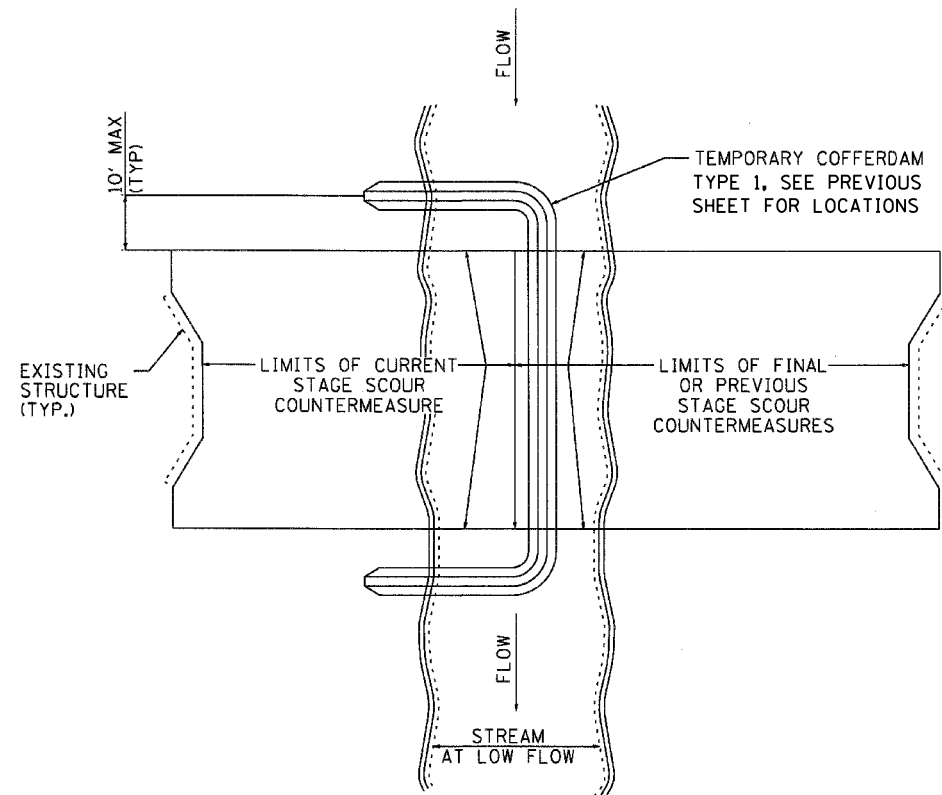
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PLOT SCALE = 40.0000' / 1"	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 12/11/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD OVER SKOKIE RIVER
EROSION AND SEDIMENT CONTROL PLAN**

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

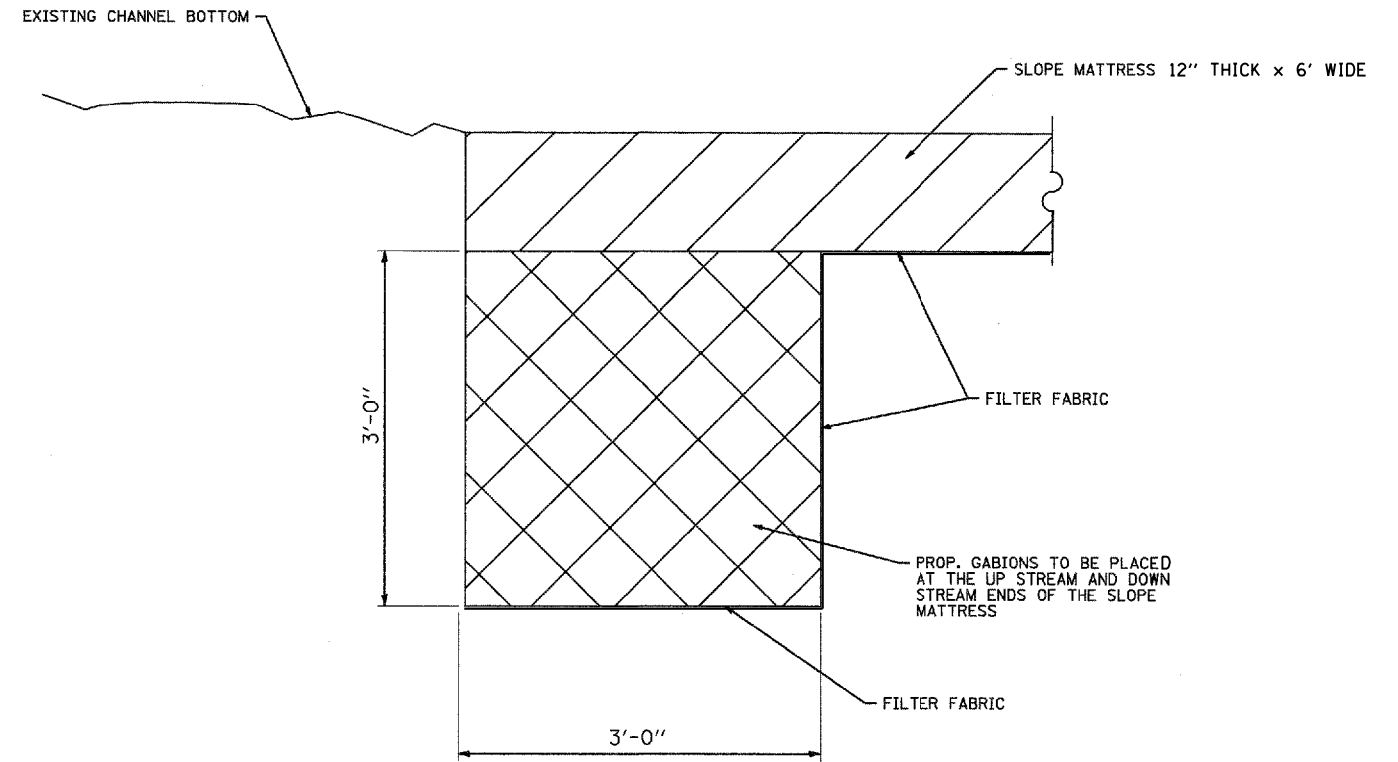
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	19
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



STAGED IN-STREAM COFFERDAM DIVERSION

COFFERDAM OR OTHER APPROVED MEANS OF DIVERTING WATER FROM WORK AREA SHALL BE CONSTRUCTED TO PASS THE 2 YEAR FLOW ELEVATION OF 619'.

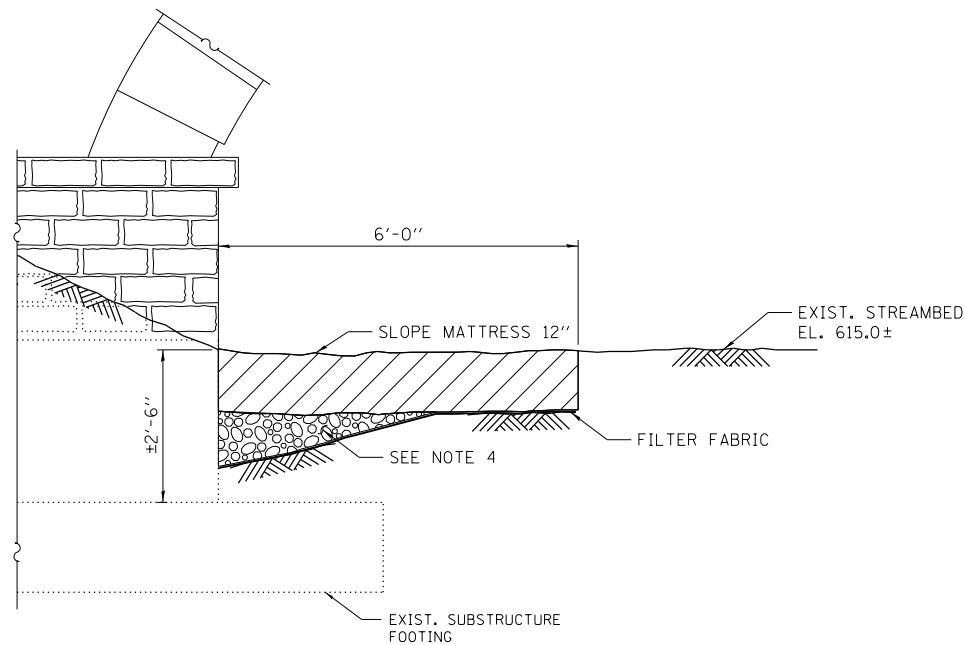
NOTE: DEWATERING SYSTEM DETAILS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIAL PROVISIONS.



MATTRESS ANCHORING DETAIL

SUBSTRUCTURE PROTECTION QUANTITIES

ITEM	UNIT	QUANTITY
FITER FABRIC	SO. YD.	328
SLOPE MATTRESS 12"	SO. YD.	296
GABIONS	CU. YD.	27.2
COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK)	EACH	4



TYPICAL SECTION

NOTES:

- SLOPE MATTRESSES TO BE INSTALLED AT SUBSTRUCTUE UNITS AS SHOWN ON PREVIOUS SHEET. THE FINAL TOP OF THE SLOPE MATTRESS ELEVATION SHALL MATCH THE EXISTING STREAMBED ELEVATION. SLOPE MATTRESS ASSEMBLY, INSTALLATION, FILLING AND LID-CLOSING SHALL BE IN ACCORDANCE WITH SECTION 284 OF THE STANDARD SPECIFICATIONS.
- WHERE A COMPLETE SLOPE MATTRESS UNIT CANNOT BE INSTALLED, THE BASKET UNIT SHALL BE CUT, FOLDED AND WIRED TOGETHER TO SUIT SITE CONDITIONS.
- ALL WIRE FABRIC, BASKET ASSEMBLIES, AND TIE WIRES SHALL BE VINYL COATED ALL NON-ALUMINUM MATERIAL SHALL BE GALVANIZED PRIOR TO VINYL COATING.
- STONE FOR EROSION CONTROL, AS SPECIFIED IN SECTION 284 OF THE STANDARD SPECIFICATIONS, SHALL BE USED IN FILL AREAS UNDER THE SLOPE MATTRESS AS NEEDED TO BRING THE SLOPE MATTRESS TO FINISH GRADE. THE COST OF THIS WORK AND MATERIAL SHALL BE INCLUDED WITH THE SLOPE MATTRESS PAY ITEM. THE FILTER FABRIC SHALL BE PLACED BELOW THIS STONE.
- COFFERDAM EXCAVATION, IF REQUIRED, WILL NOT BE PAID SEPERATELY, BUT WILL BE INCLUDED WITH THE COST OF THE SLOPE MATTRESS, 12".

FILE NAME = \$FILES

COLLINS ENGINEERS INC

USER NAME = oseiber	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 12/11/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

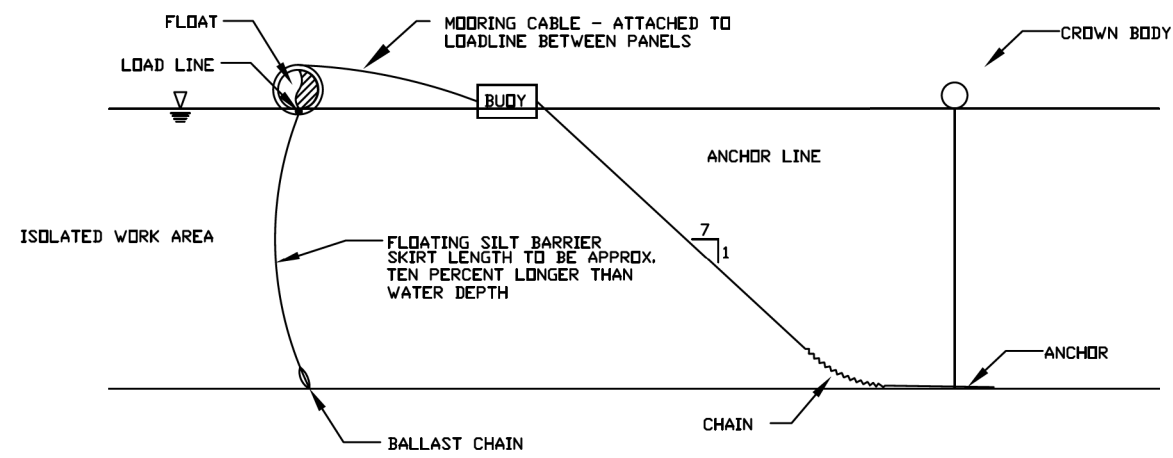
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD OVER SKOKIE RIVER
COFFERDAM DIVERSION AND MATTRESS ANCHORING DETAILS**

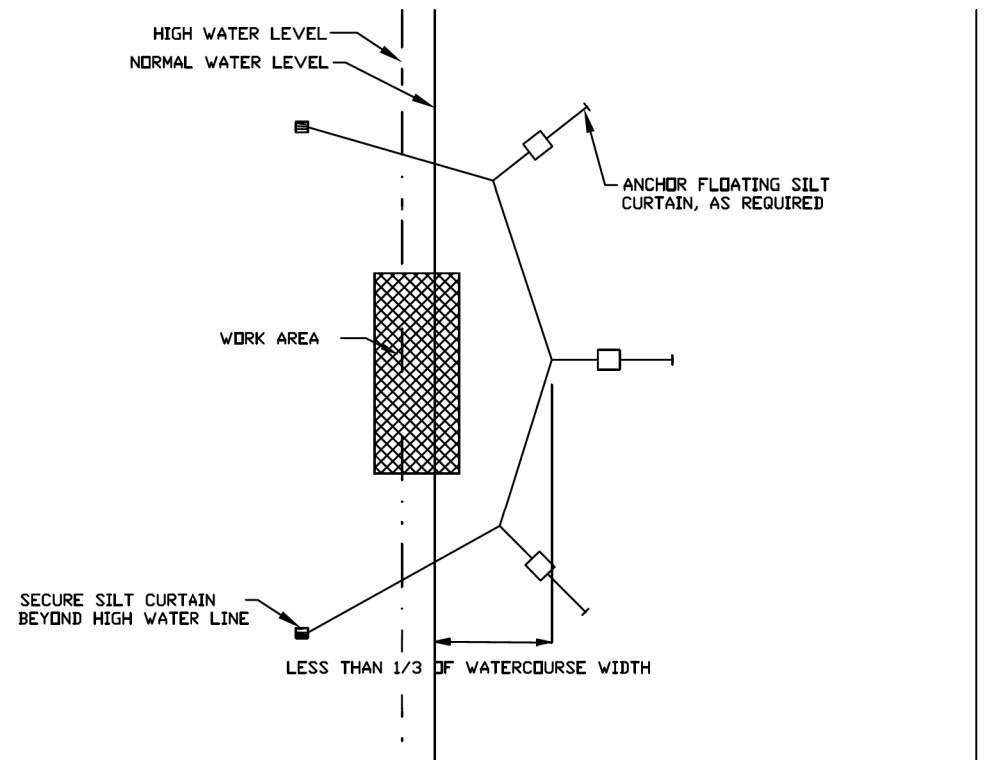
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	20
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FLOATING SILT CURTAIN - TYPICAL LAYOUT



TYPICAL COMPONENTS/ANCHORAGE SYSTEM

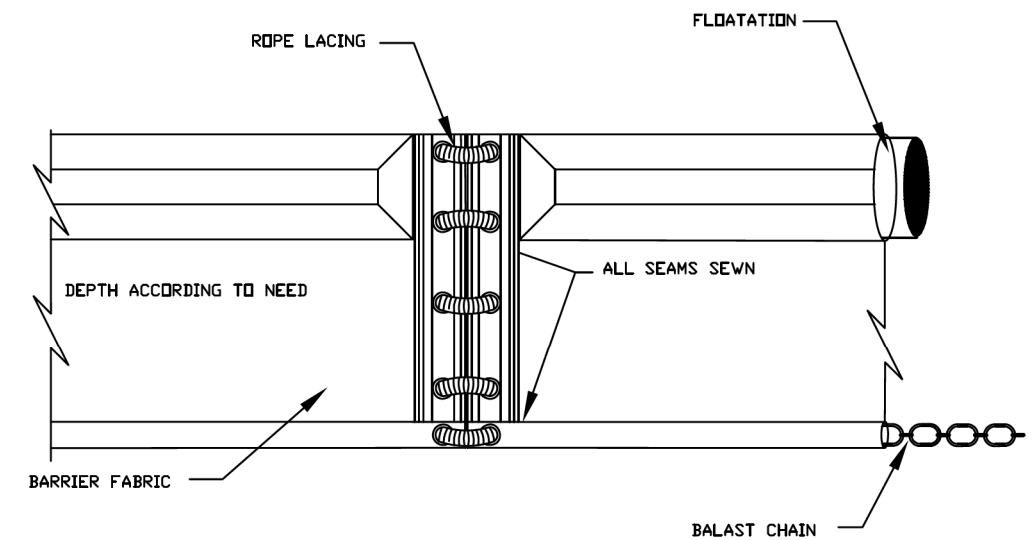
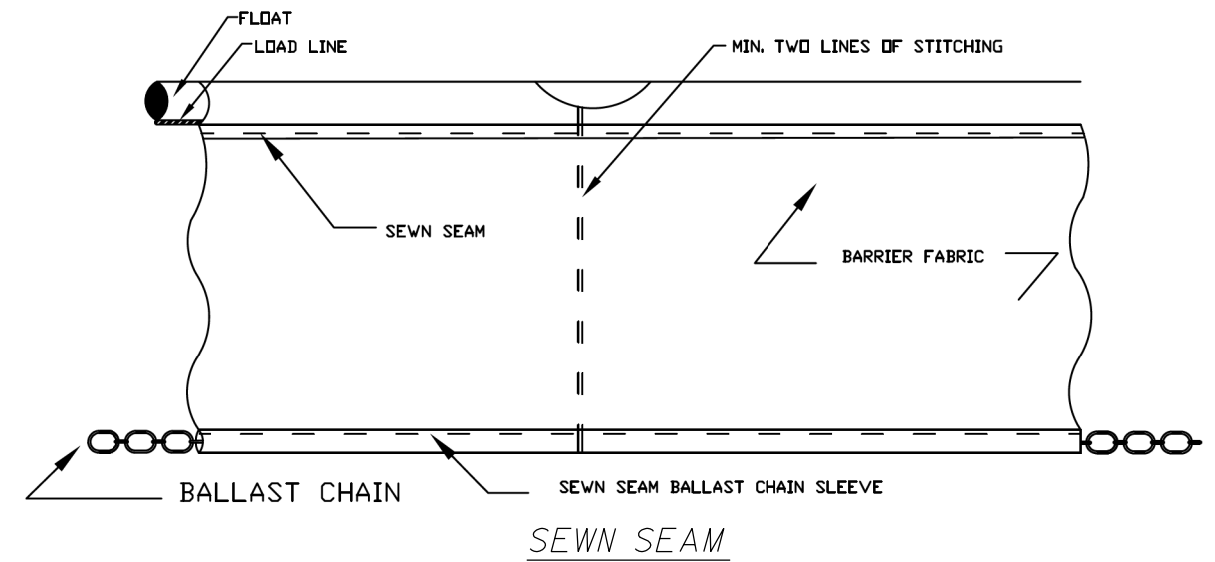


TYPICAL PLAN VIEW

NOTES:

1. MAXIMUM FLOW FOR WATERBODY SHOULD BE LESS THAN 5 FPS.
2. ISOLATED WORK AREA SHALL NOT EXCEED MORE THAN 1/3 STREAM WIDTH.
3. SILT CURTAIN SHOULD BE PLACED PARALLEL TO STREAM FLOW

FLOATING SILT CURTAIN - PANEL CONNECTORS



GROMMETED HOLES WITH ROPE LACING

FILE NAME = \$FILES

COLLINS ENGINEERS INC.

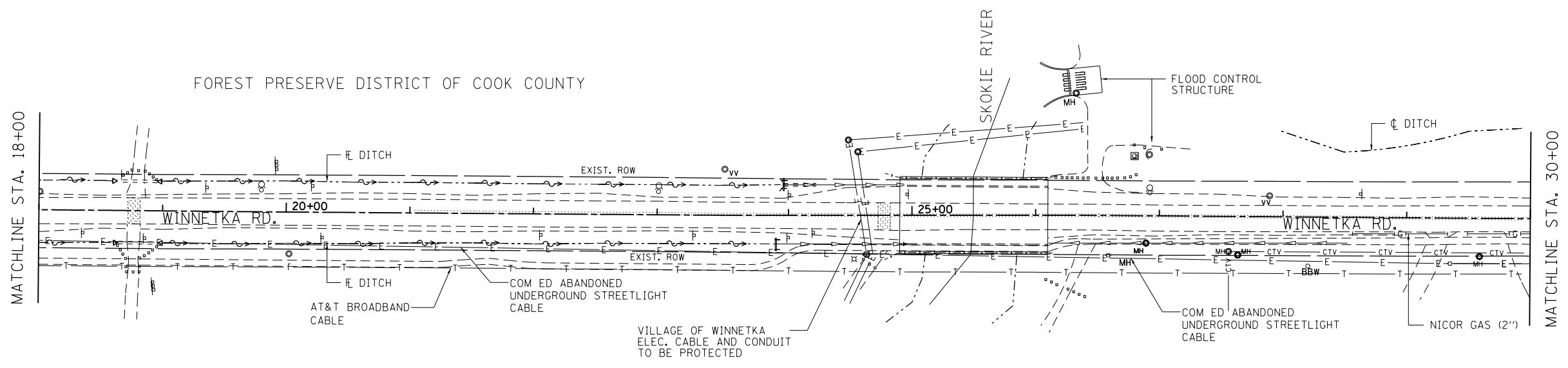
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PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

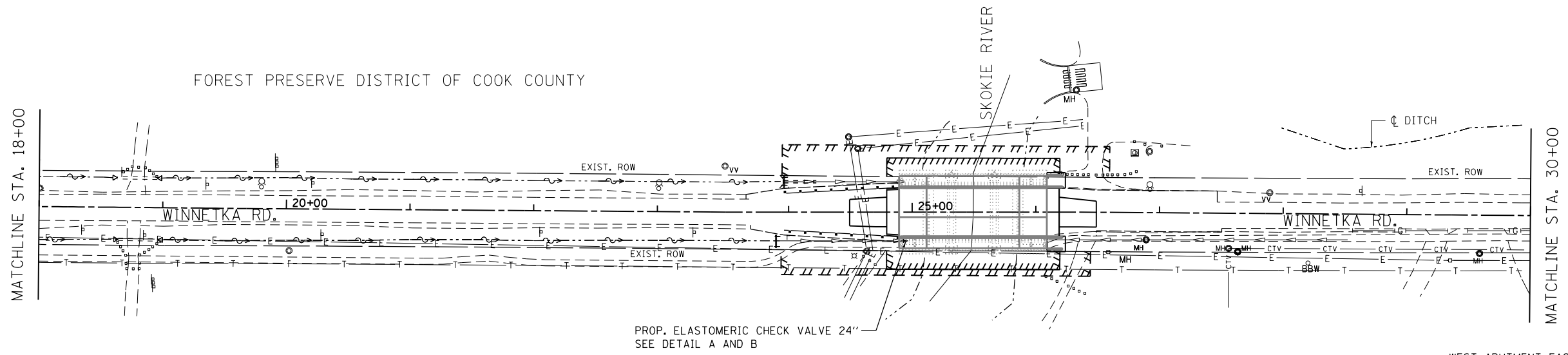
**WINNETKA ROAD
FLOATING SILT CURTAIN LAYOUT AND CONNECTION DETAILS**

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

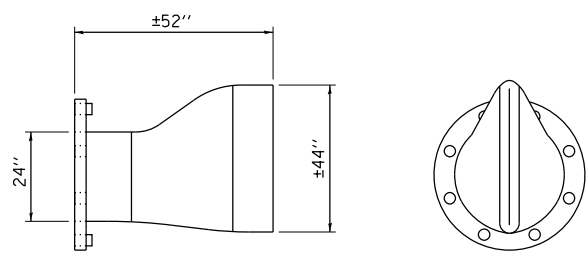
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	21
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



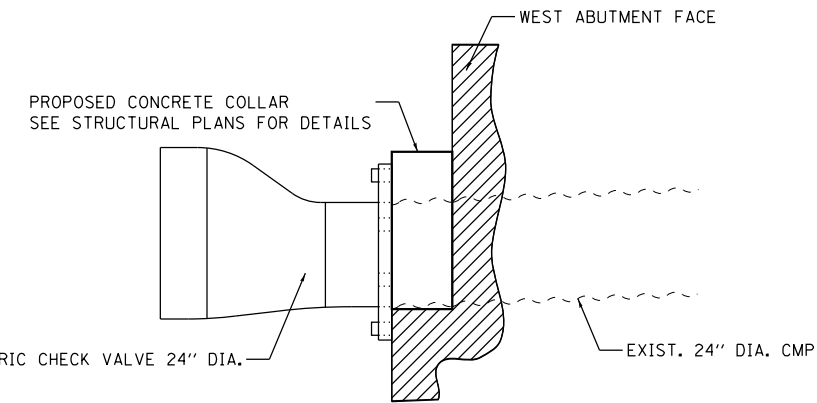
EXISTING CONDITIONS



PROPOSED CONDITIONS



DETAIL A
FLANGED ELASTOMERIC CHECK VALVE (N.T.S.)



DETAIL B
CHECK VALVE SETUP (N.T.S.)

FILE NAME = SFILES

COLLINS ENGINEERS INC.

USER NAME = ztanner
PLOT SCALE = 100.000' / in.
PLOT DATE = 10/19/2018

DESIGNED - ZJT 9/17/2018
DRAWN - ZJT 9/17/2018
CHECKED - EKM 9/17/2018
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD
DRAINAGE PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	22
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PART SEC. 30, T. 42 N., R. 13 & SEC. 19, T. 42 N., R. 13 EAST OF THE 3rd P.M., NORTHFIELD TOWNSHIP, IN COOK COUNTY, ILLINOIS.

LEGEND

SECTION CORNER: 9 10 16 15

QUARTER SECTION CORNER: 16 15

SECTION LINE: ---

QUARTER SECTION LINE: - - - -

PLATTED LOT LINE: ———

PROPERTY (DEED) LINE: ———

APL: ———

APPARENT PROPERTY LINE: ———

CENTERLINE: ———

EXISTING RIGHT OF WAY LINE: ———

PROPOSED RIGHT OF WAY LINE: ———

PROPOSED EASEMENT: ———

MEASURED DIMENSION: ()

COMPUTED DIMENSION: ()

RECORD DATA: ()

ENGLISH EQUIVALENT: ()

EXISTING BUILDING: [Hatched Box]

IRON ROD SET: ○

CUT CROSS FOUND OR SET: +

T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSHED WITH FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

T2 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

T3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY: SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

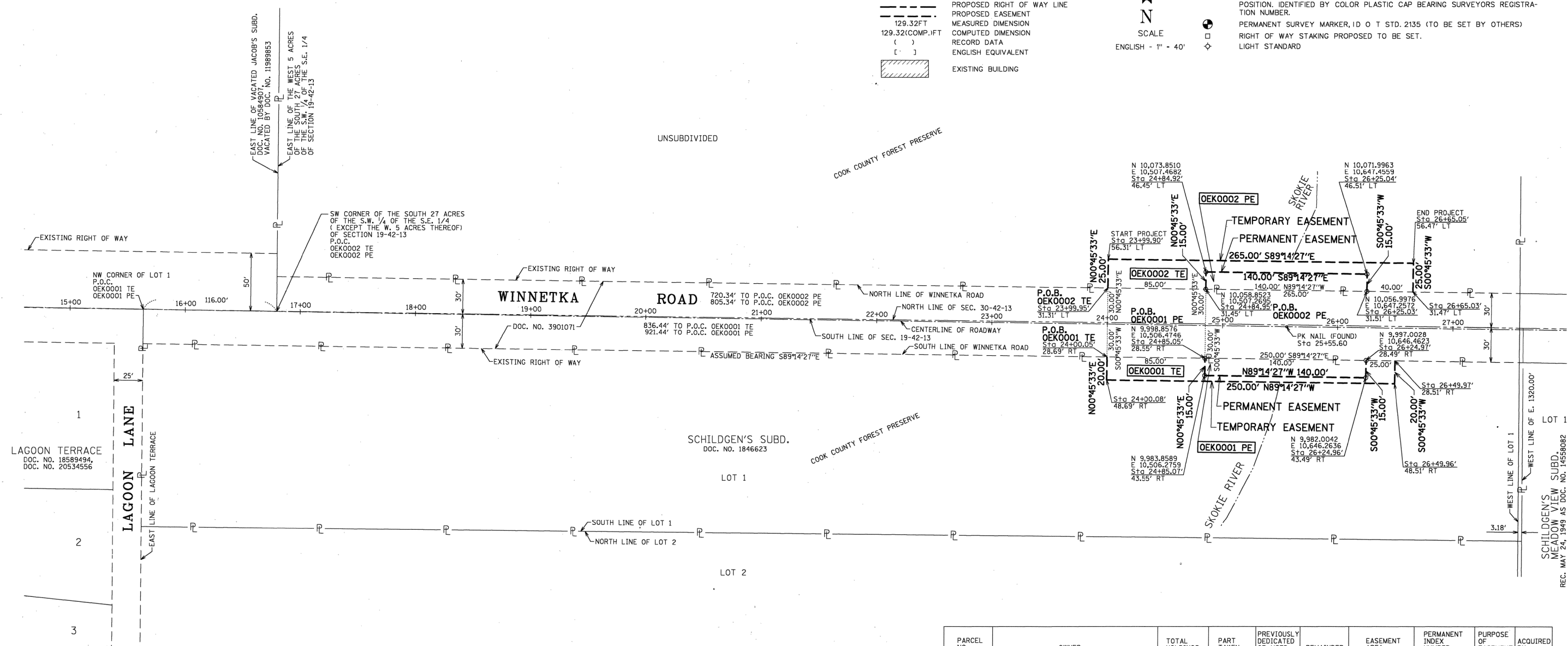
M STAKING OR PROPOSED RIGHT OF WAY IN CULTIVATED AREAS: BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLOR PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

PERMANENT SURVEY MARKER, 1/4" O.D. STD. 2135 (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET.

LIGHT STANDARD: ◇

SCALE: ENGLISH - 1" = 40'



PARCEL NO.	OWNER	TOTAL HOLDINGS	PART TAKEN	PREVIOUSLY DEDICATED OR USED	REMAINDER	EASEMENT AREA	PERMANENT INDEX NUMBER	PURPOSE OF EASEMENT	ACQUIRED BY
OEK0001 PE	THE FOREST PRESERVE DISTRICT OF COOK COUNTY, ILLINOIS	NA	NA	NA	NA	PE 2100 SQ. FT. TE 2900 SQ. FT.	05-30-200-002	CONSTR.	
OEK0002 PE	THE FOREST PRESERVE DISTRICT OF COOK COUNTY, ILLINOIS	NA	NA	NA	NA	PE 2100 SQ. FT. TE 4525 SQ. FT.	05-19-414-001	CONSTR.	

STATE OF ILLINOIS)
COUNTY OF COOK)
DO HEREBY DECLARE THAT WE HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTIONS 19 AND 30, TOWNSHIP 42 N, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF OUR 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 ROSEMONT, ILLINOIS THIS 15th DAY OF August, A.D., 2001.

C. Brian Lounsbury
C. BRIAN LOUNSBURY I.P.L.S. No. 035-284
LICENSE EXPIRES: 11-30-2002
(VVALID ONLY IF EMBOSSED SEAL AFFIXED)



SPACECO INC.

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,
Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

DATE: 8/15/01
JOB NO: H1552
FILENAME: 022SUR01.DGN

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FAH:1291 (WINNETKA ROAD)

SECTION OVER SKOKIE RIVER COOK COUNTY
PROJECT FAH:1291 (WINNETKA ROAD) JOB NO. R-90-030-01
STATION 23+99.90 TO STATION 26+65.05
SCALE: 1"=40' SHEET 2 OF 2

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAMBURG, ILLINOIS 60196

FAU: 1291 (WINNETKA ROAD) SECTION OVER SKOKIE RIVER COUNTY: COOK JOB NO. R-90-030-01 RECORDING: RECORDED ON AS DOCUMENT NO.

USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 80 Ft / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

COLLINS ENGINEERS INC.

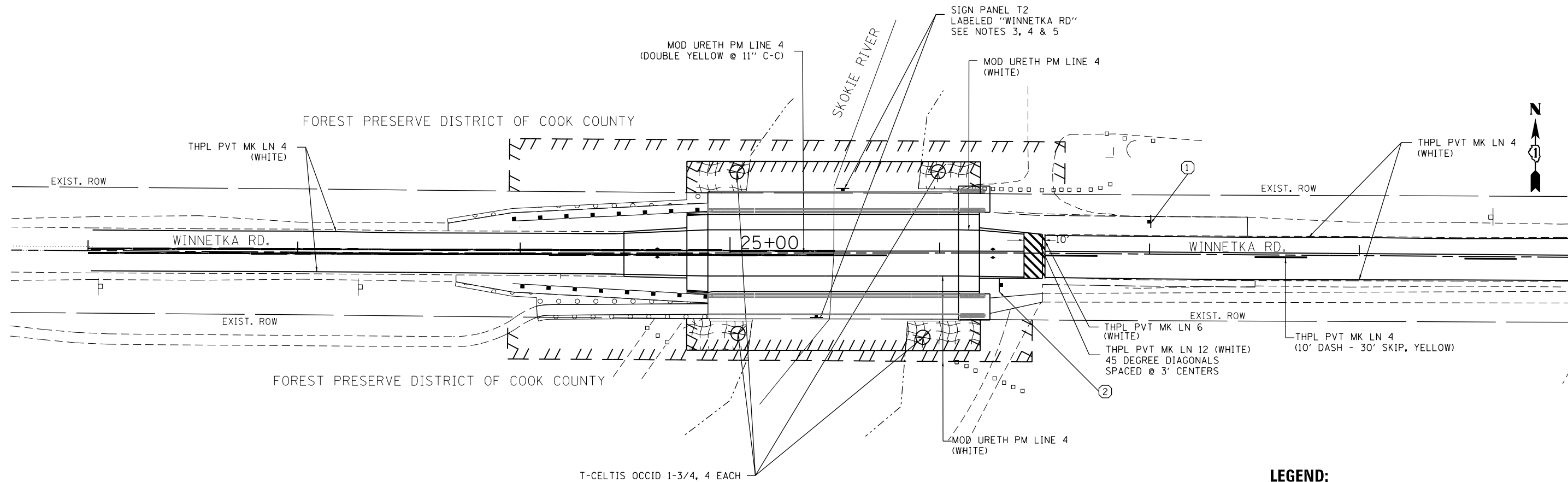
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

WINNETKA ROAD PLAT OF HIGHWAYS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	23

CONTRACT NO. 62F03
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



T-CELTIS OCCID 1-3/4, 4 EACH

LEGEND:

- SEEDING, CLASS 2A
TOPSOIL FURNISH AND PLACE, 4"
- SEEDING, CLASS 4A
- RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER)
- RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL)
- SIGN NUMBER
- EVERGREEN TREE

SIGN RELOCATION SCHEDULE			
SIGN NO.	PROPOSED RELOCATION		
	STATION	OFFSET	DESCRIPTION
1	27+00.00	16.00' LT	EQUESTRIAN CROSSING (W11-7) DOWNWARD DIAGONAL ARROW (W16-7P)
2	26+25.00	16.00' RT	EQUESTRIAN CROSSING (W11-7) DOWNWARD DIAGONAL ARROW (W16-7P)

NOTES:

1. COST OF SIGN AND POLE ASSEMBLY RELOCATION IS INCLUDED IN THE COST OF RELOCATE SIGN PANEL ASSEMBLY - TYPE A PAY ITEM.
2. IF ANY EXISTING PAVEMENT MARKING AND/OR SIGNAGE ARE/IS DISTURBED DUE TO THE CONSTRUCTION OF PROPOSED IMPROVEMENTS ALONG WINNETKA ROAD, THE CONTRACTOR SHALL REPLACE THE DISTURBED TRAFFIC CONTROL DEVICES PER IDOT AND IDOT-DISTRICT 1 STANDARDS FOR PAVEMENT MARKING AND SIGNAGE.
3. PROPOSED SIGN PANELS SHALL ONLY BE ATTACHED TO PROPOSED BICYCLE RAILING. SIGN PANELS SHALL NOT BE ATTACHED TO THE BRIDGE'S STONE MASONRY FACADE.
4. MOUNTING SIGN PANELS TO BICYCLE RAILING AND ALL MOUNTING HARDWARE SHALL BE INCLUDED IN THE PAY ITEM SIGN PANEL TYPE 2.
5. SEE SHEET 73 FOR SIGN DETAILS.

PAVEMENT MARKING NOTES:

1. PROPOSED PAVEMENT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH HIGHWAY STANDARD 780001-03 AND DISTRICT ONE STANDARDS TC 11 & TC 13.
2. MODIFIED URETHANE PAVEMENT MARKINGS ARE TO BE INSTALLED ON THE BRIDGE AND BRIDGE APPROACH SLABS.
3. REFLECTIVE PAVEMENT MARKING SPACING SHALL BE INSTALLED IN ACCORDANCE WITH HIGHWAY STANDARD 781001-04

FILE NAME = \$FILES

COLLINS ENGINEERS INC.

USER NAME = ztanner	DESIGNED - ZJT 9/17/2018	REVISED -
PLOT SCALE = 100.000' / in.	DRAWN - ZJT 9/17/2018	REVISED -
PLOT DATE = 10/19/2018	CHECKED - EKM 9/17/2018	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WINNETKA ROAD
PAVEMENT MARKING AND LANDSCAPING PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	24
CONTRACT NO. 62F03				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

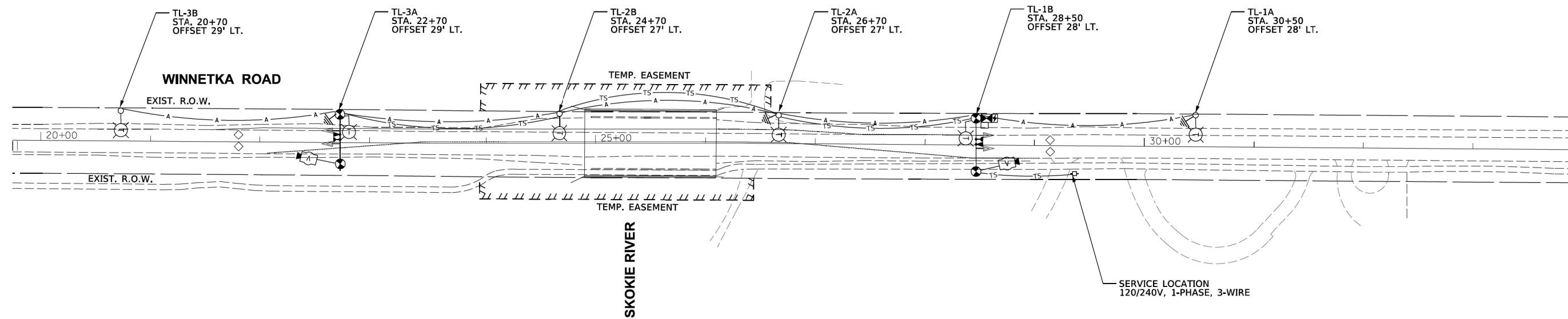
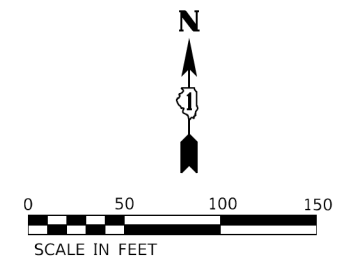
TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		 	SYSTEM ITEM	S	SP	FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM	I	IP	GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM		R			
SIGNAL HEAD			RELOCATE ITEM		RL			
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM		A			
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF			
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF			
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF			
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

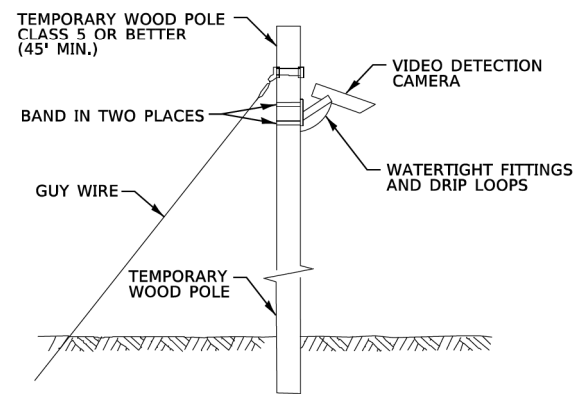
TS SHT NO. 1

FILE NAME =	USER NAME = plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS	DISTRICT ONE	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT DATE = 6/10/2016	DATE - 6/8/2016	REVISED -		SCALE: NONE	SHEET 1	OF 7 SHEETS	STA.	TO STA.		
						ILLINOIS		FED. AID PROJECT			



NOTES FOR TEMPORARY LIGHTING

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

TEMPORARY LIGHTING LEGEND

- 400 W. 120V, MCIII HPS, WITH PHOTO CELL 15' M.A. 50' MH ON WOOD POLE CLASS 4
- 3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TEMPORARY LIGHTING UNIT NUMBER-ONE CIRCUIT A
- GROUND ROD 5/8" DIA. X 10'
- COMBINATION LIGHTING TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED

MODEL: SMODELNAMES
FILE NAME: SFILES

USER NAME = \$USERS	DESIGNED - MG	REVISED -
	CHECKED - KP	REVISED -
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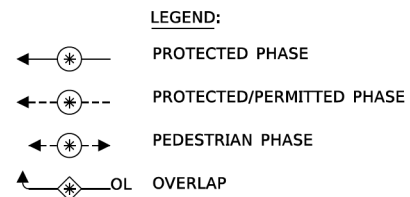
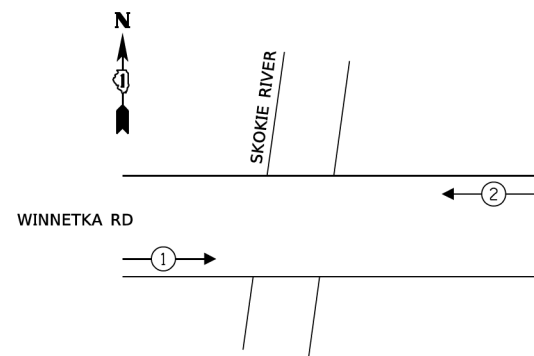
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING ANG SIGNAL
WINNETKA ROAD OVER SKOKIE**

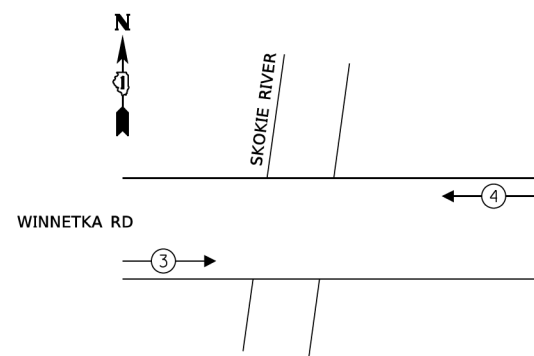
SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62F03	

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

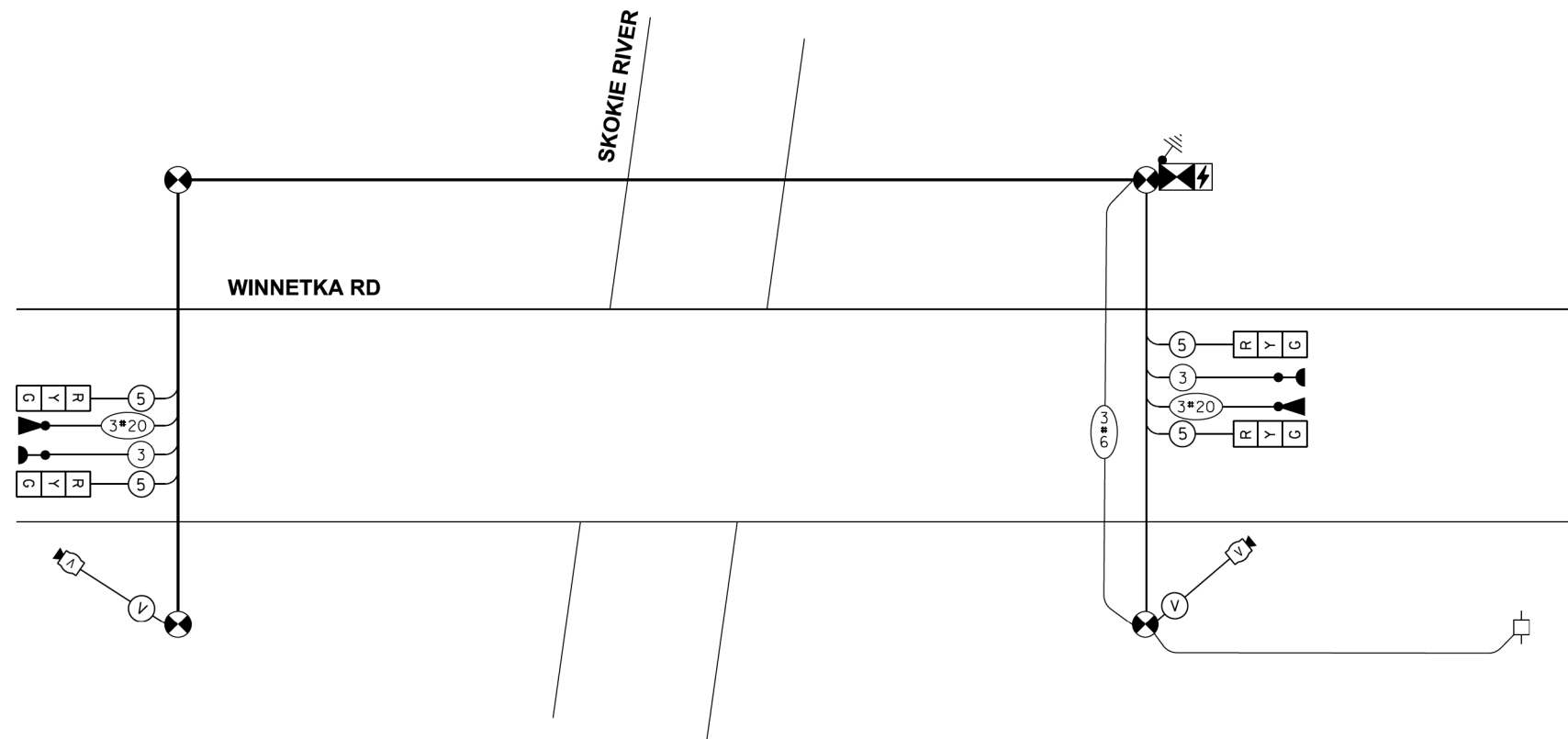


SCHEDULE OF QUANTITIES FOR TEMPORARY LIGHTING

QUANTITY	UNIT	ITEM
1020	FOOT	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE
6	EACH	REMOVAL OF TEMPORARY LIGHTING UNITS
1	EACH	REMOVAL OF ELECTRIC SERVICE INSTALLATION
1	EACH	TEMPORARY ELECTRIC SERVICE CONNECTION
1	EACH	TEMPORARY ELECTRIC SERVICE INSTALLATION
6	EACH	TEMPORARY WOOD POLE, 60 FT. CLASS 4, 15 FT. MAST ARM
1	EACH	COMBINATION POLE MOUNTED ELECTRIC SERVICE BOX
6	EACH	TEMPORARY LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 W. TYPE II DISTRIBUTION
6	EACH	GROUND ROD, 3/4" DIA. X 10 FEET

NOTE: THESE QUANTITIES ARE FOR ESTIMATING PURPOSE ONLY THESE ITEMS WILL BE PAID UNDER "TEMPORARY LIGHTING FOR SINGLE LANE STAGING". THE TEMPORARY TRAFFIC SIGNAL ITEMS NOT INCLUDED IN THE PAY ITEM "TEMPORARY LIGHTING FOR SINGLE LANE STAGING" SHALL BE PART OF PAY ITEM "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION".

ENERGY SUPPLY: CONTACT: MIGDALIA RIVERA
 PHONE: (847) 929-2302
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 2673107029



CABLE PLAN
N.T.S.

SCHEDULE OF QUANTITIES FOR TEMPORARY TRAFFIC SIGNALS

QUANTITY	UNIT	ITEM
1	EACH	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT D1 STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

MODEL: SMODELNAMES
FILE NAME: SFILES

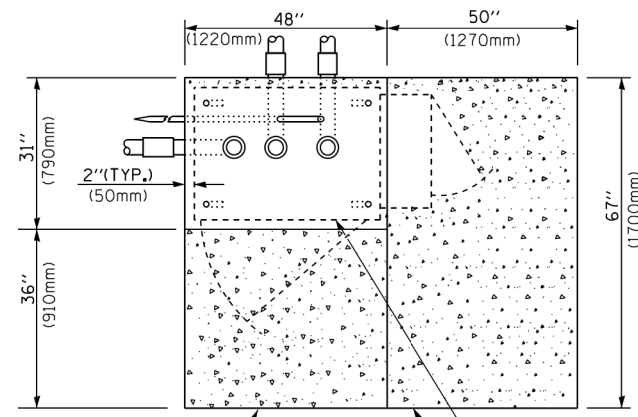
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

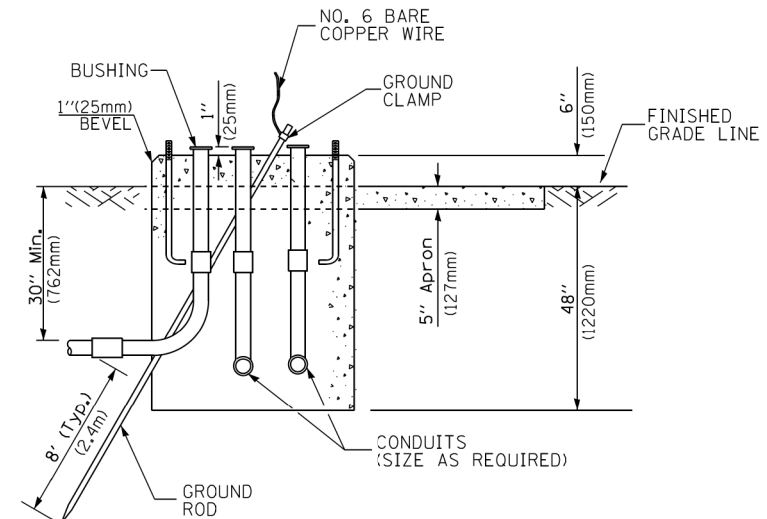
**TEMPORARY CABLE PLAN AND
TEMPORARY PHASE DESIGNATION DIAGRAM
WINNETKA ROAD OVER SKOKIE RIVER**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

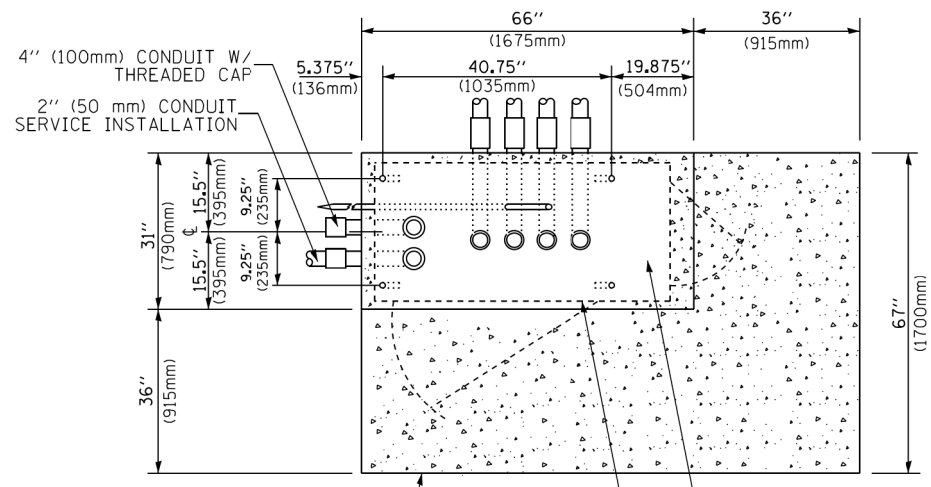
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	27
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62F03	



TOP VIEW

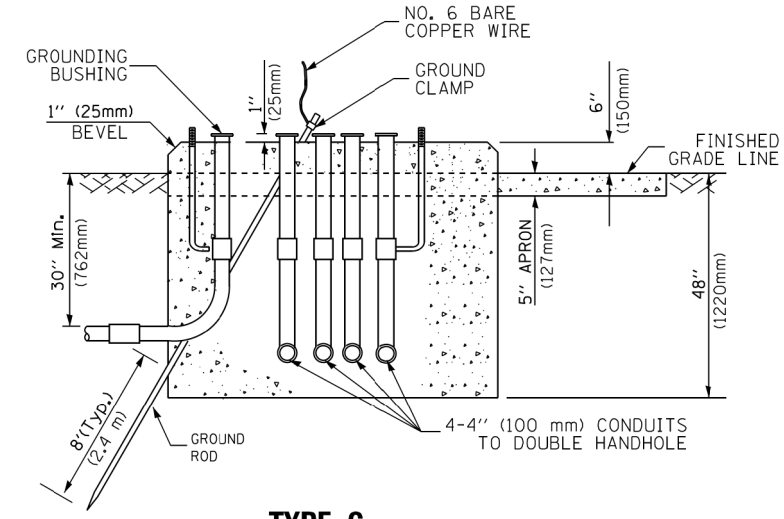


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

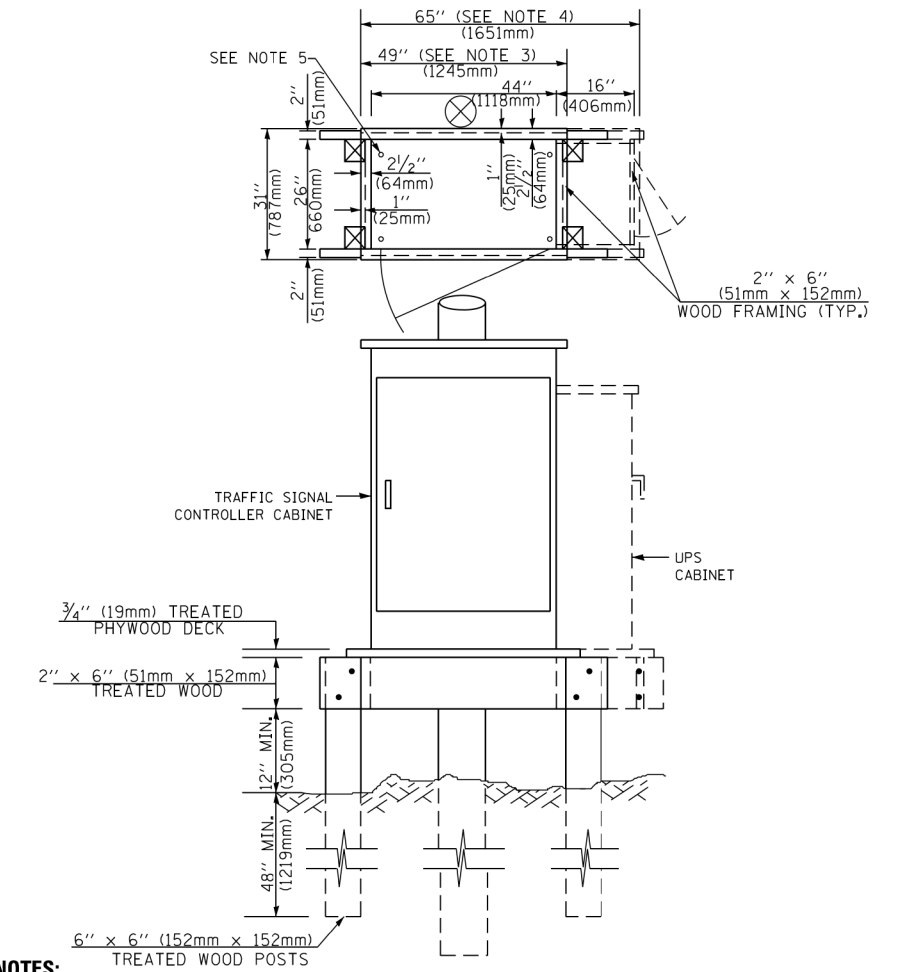


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

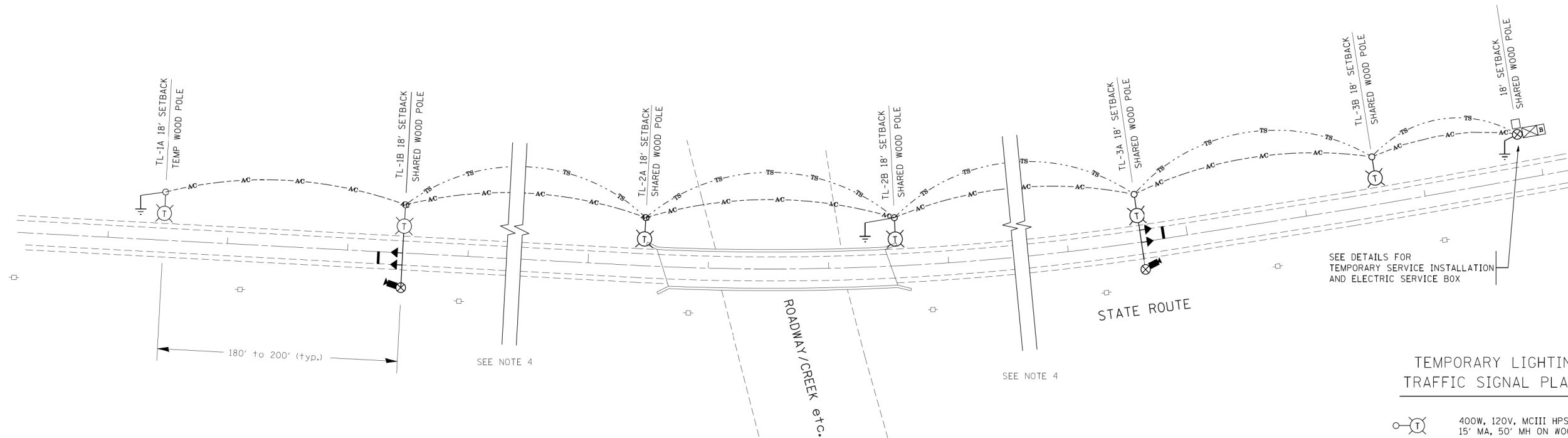
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TS SHT NO. 5



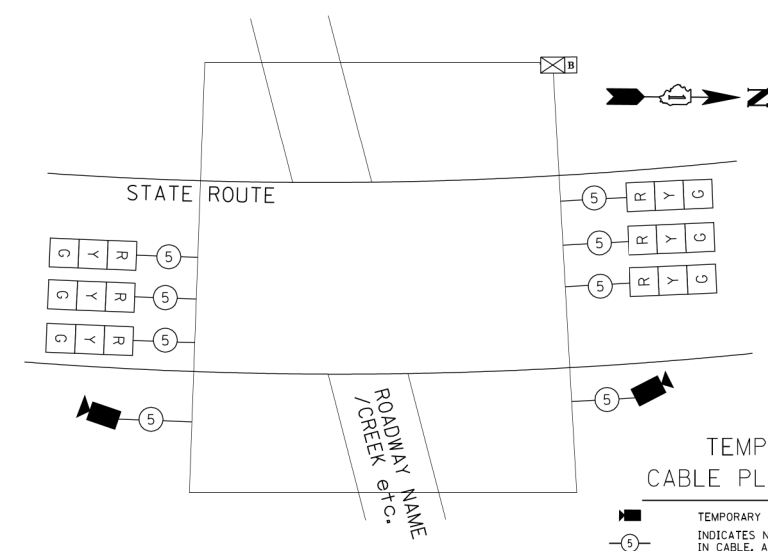
TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS
NOT TO SCALE

GENERAL NOTES:

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE, DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
- THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
- 3-1/2" C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A
- GROUND ROD 5/8" DIA. x 10'
- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR

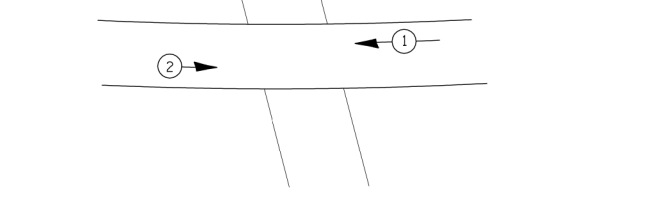


TEMPORARY CABLE PLAN (TYPICAL)
NOT TO SCALE

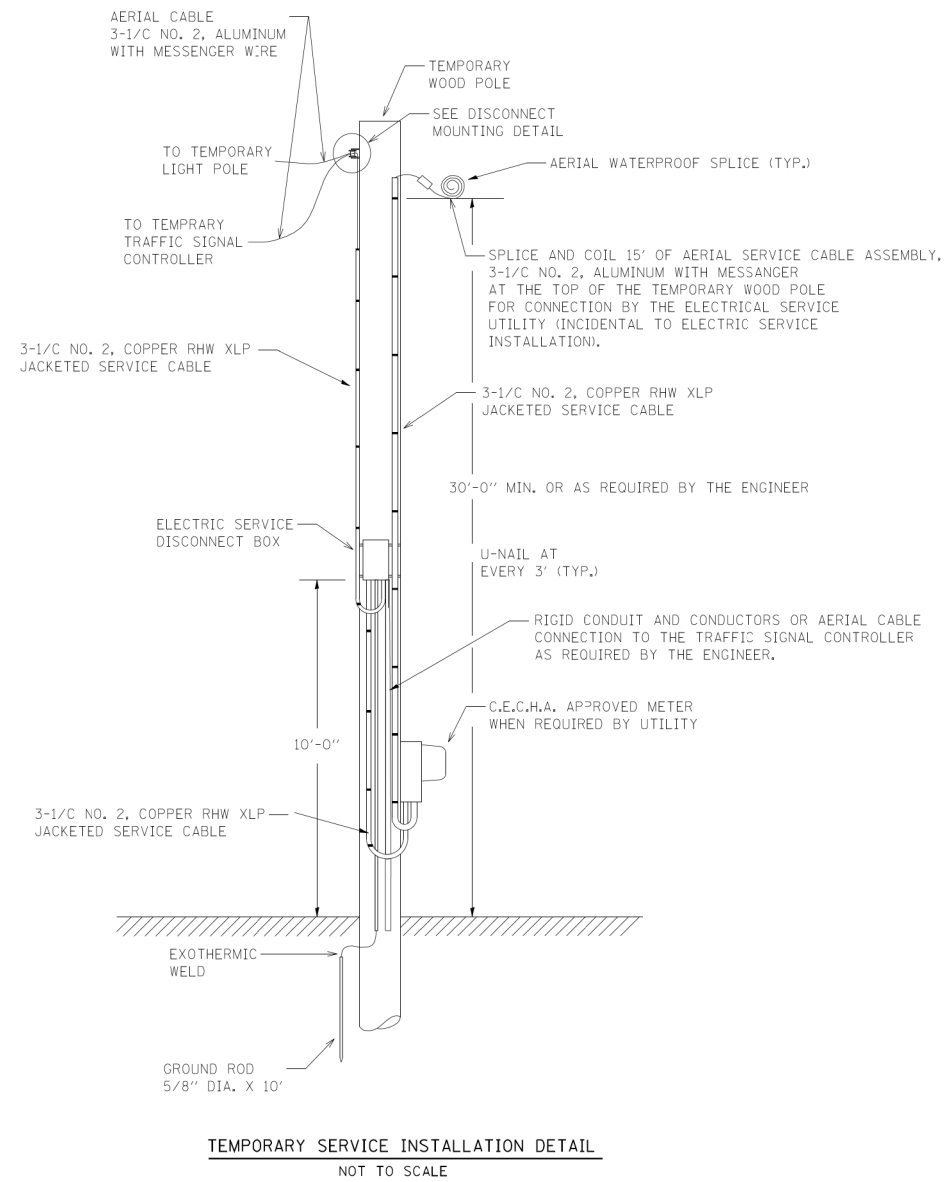
- TEMPORARY CABLE PLAN LEGEND
- TEMPORARY VIDEO DETECTOR
 - INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
 - TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)

TEMPORARY PHASE DESIGNATION DIAGRAM LEGEND

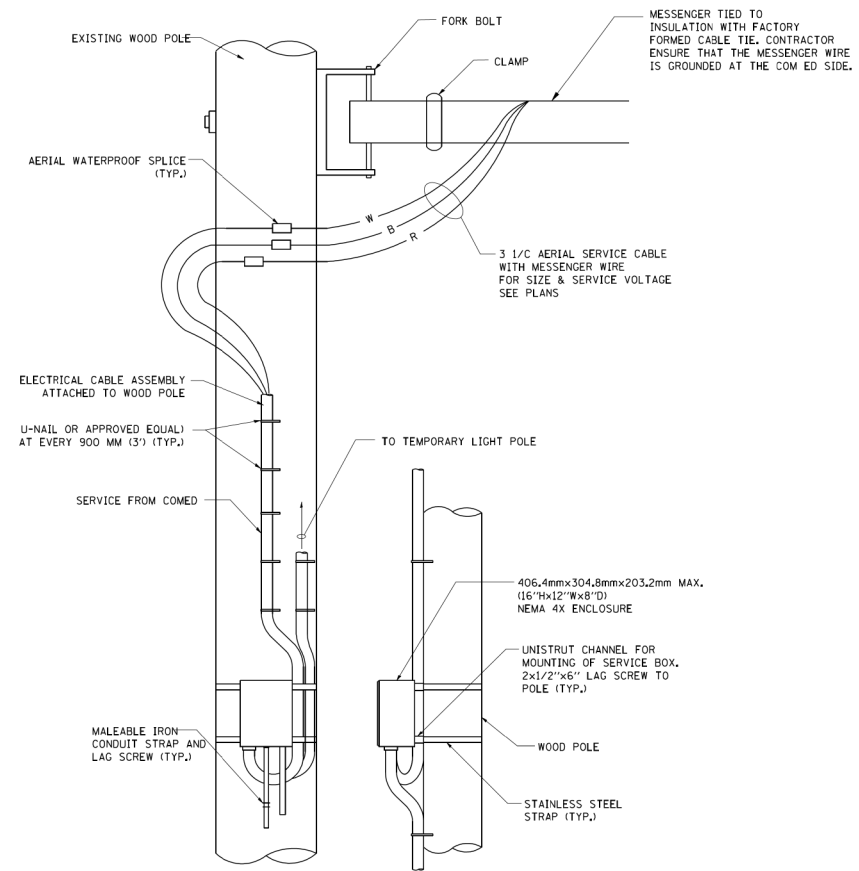
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE



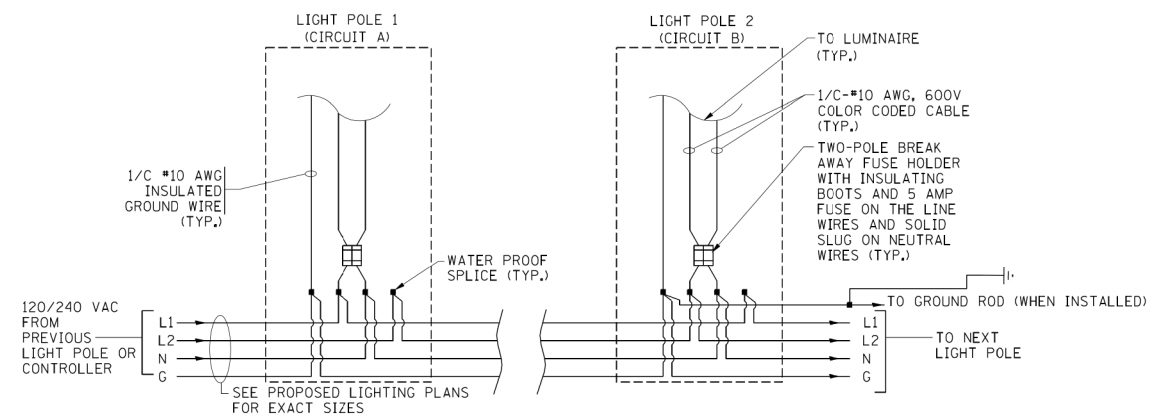
TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)
NOT TO SCALE



TEMPORARY SERVICE INSTALLATION DETAIL
NOT TO SCALE



DISCONNECT MOUNTING DETAIL
NOT TO SCALE



LIGHT POLE WIRING DETAIL
NOT TO SCALE

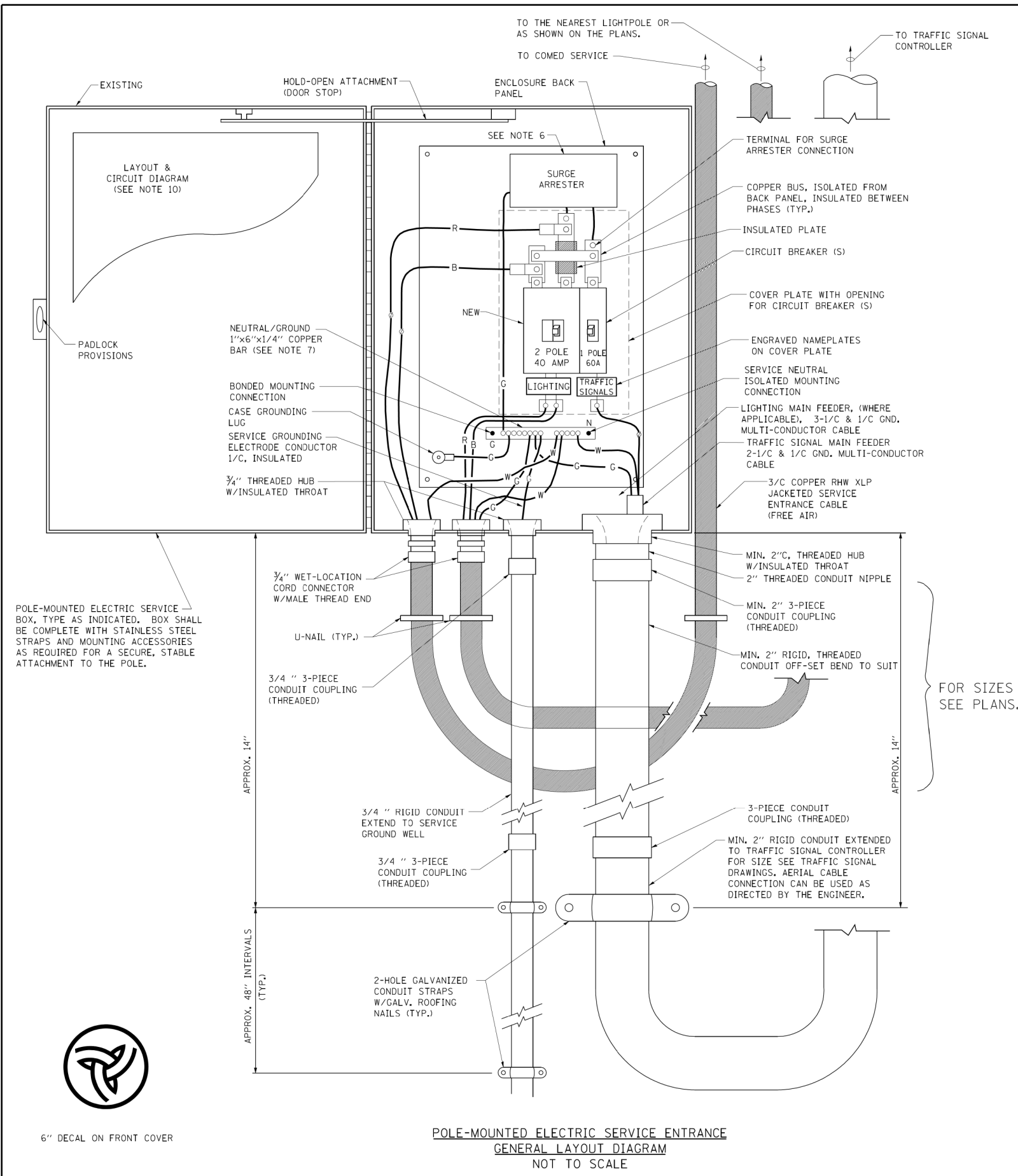
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		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND TRAFFIC SIGNALS
FOR SINGLE LANE STAGING**

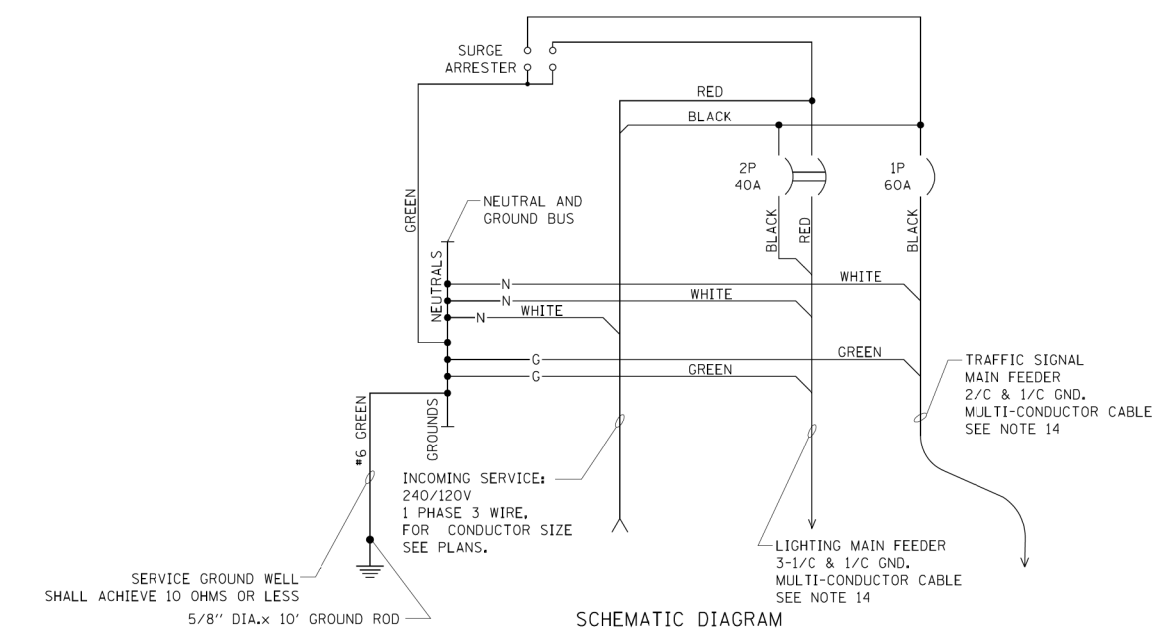
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	30
BE-805		CONTRACT NO. 62F03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CM0V230L065XST OR APPROVED EQUAL.
- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



**POLE-MOUNTED ELECTRIC SERVICE ENTRANCE
GENERAL LAYOUT DIAGRAM
NOT TO SCALE**

SCHEMATIC DIAGRAM

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		CHECKED -	REVISED -
		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING			
SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA. TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	31
BE-805		CONTRACT NO. 62F03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

Bench Mark: BM 2 - Tagged bolt on first fire hydrant west of Skokie River, north side Winnetka Road, at sta. 23+01
Elev. = 622.86

Existing Structure: S.N. 016-1162, built in 1935 is a three, simple span reinforced concrete structure; the middle span (34'-9") is a concrete tee beam superstructure and the shorter end spans (18'-8 1/2") are reinforced concrete slabs. The substructure consists of R.C. piers and closed abutments on spread footings. Structure is located in the Forest Preserve District of Cook County between the Village of Winnetka and Northfield. Total length end to end of wingwalls is 119'-6". Total length back to back abutment is 73'-2". Clear width between curbs is 44'-0". Total width out to out of deck is 62'-0".

Superstructure is to be removed and replaced. Traffic is to be maintained utilizing stage construction. One lane for both directions will be provided by using temporary traffic signals.

No Salvage.

PROPOSED SCOPE OF WORK

1. Remove and replace concrete superstructure except stone facade and parapets.
2. Modify abutment and pier caps as required for new superstructure.
3. Repair concrete piers and abutments (crack sealing and structural concrete repairs).
4. Repair decorative stone facade, parapets and pier noses. see general note on sheet S-2.
5. Remove and replace bridge approach slabs.
6. Install Scour Countermeasure (see civil plans).



DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition, (New Construction)

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.084 g
Design Spectral Acceleration at 0.2 sec. (S_S) = 0.136 g
Soil Site Class = D

DESIGN STRESSES

FIELD UNITS

EXISTING	PROPOSED
f _c = 2,500 psi	f _c = 3,500 psi
f _y = 33,000 psi (Reinf.)	f _c = 4,000 psi (Superstructure Concrete)
	f _y = 60,000 psi (Reinf.)

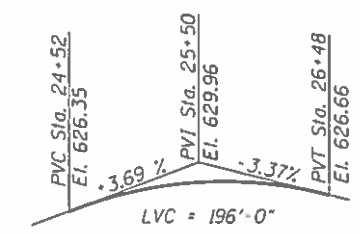
STATION 25+50.00
RE-BUILT 201- BY
STATE OF ILLINOIS
F.A.U. RTE. 1291 SEC. 2017-005BR
LOADING HL-93
STRUCTURE NO. 016-1162

NAME PLATE

(See Std. 515001)
Existing Name Plate shall be cleaned and relocated next to the new Name Plate.
Cost included with Name Plates.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier - 1 & 2	E. Abut.
	610.98	610.98	610.98



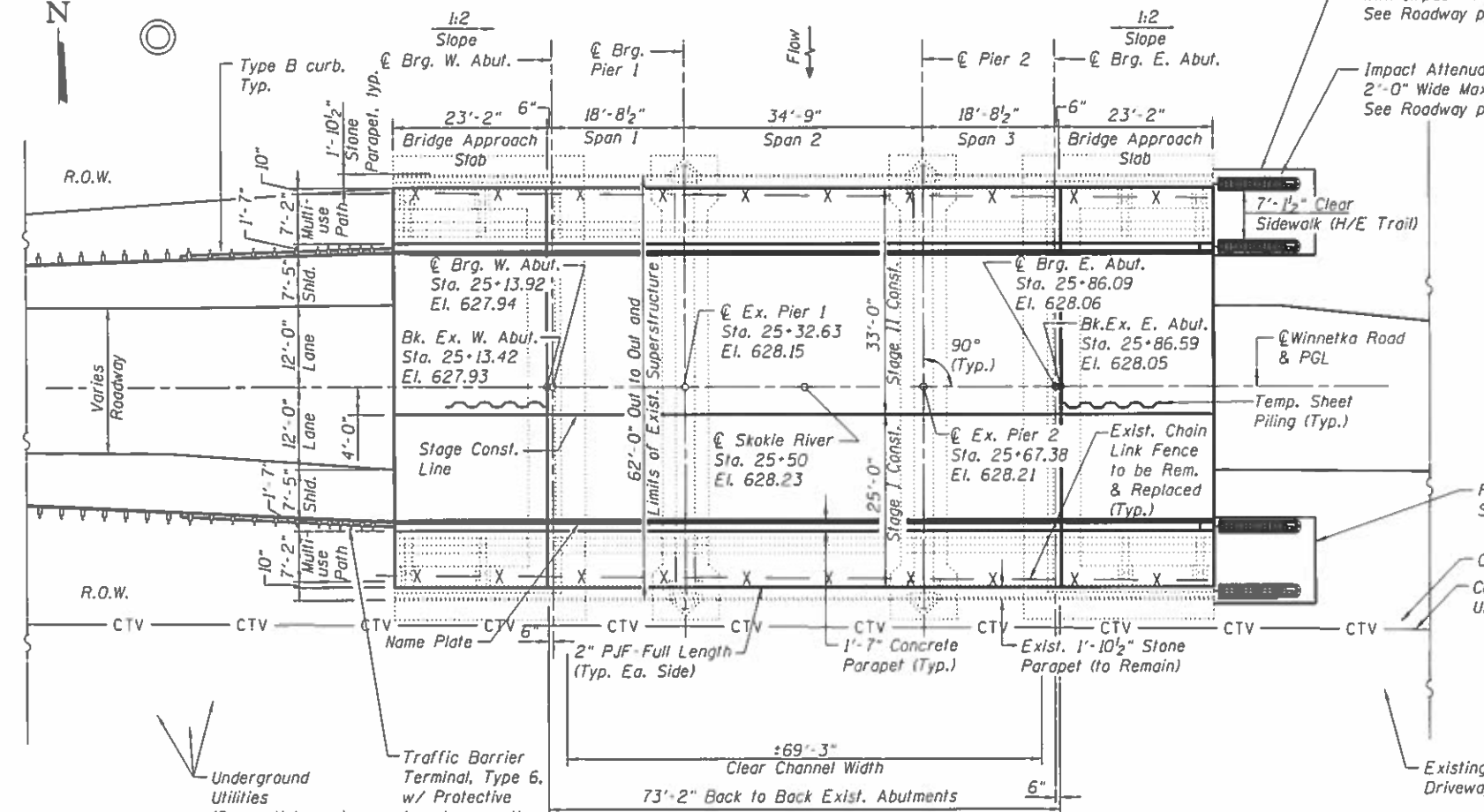
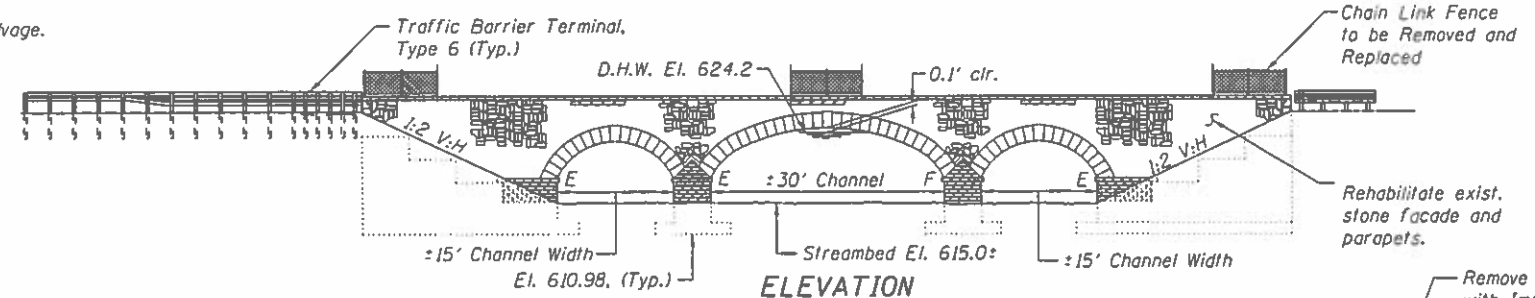
PROFILE GRADE
(Along \bar{C} Winnetka Road)

APPROVED
For Structural Adequacy Only
[Signature]
Engineer of Bridges & Structures



COLLINS ENGINEERS, INC.
EWA MRODZEK, P.E., S.E.
NO. 081-006067
EXP.: 11/30/2020

GENERAL PLAN AND ELEVATION
WINNETKA ROAD OVER SKOKIE RIVER
F.A.U. RT. 1291 - SEC. 2017 005BR
COOK COUNTY
STATION 25+50.00
STRUCTURE NO. 016-1162



PLAN WATERWAY INFORMATION

Drainage Area = 29.0 sq. miles		Low Grade Elev. = 623.5 feet at Sta. 22+50 (existing/proposed)		Max. Recorded H.W.E. = 624.0 ft. (July, 1938)					
Flood	Frequency (Yr.)	Discharge cfs	Waterway Opening Existing	Waterway Opening Proposed	Natural H.W.E.	Created Head Existing	Created Head Proposed	Headwater Elev. Existing	Headwater Elev. Proposed
Design	10	604	395	395	622.8	0.0	0.0	622.8	622.8
Base	50	1233	407	407	624.2	0.0	0.0	624.3	624.3
Overlapping	100	1653	407	407	625.3	0.0	0.0	625.5	625.5
Max. calc.	30	900	401	401	623.5	-	-	623.5	623.5

2 - Year flow Elevation = 619.0
2 - Year flow = 285 cfs
1 - Year flow = 160 cfs

LEGEND
--- Permanent Easement
--- Temporary Easement

11/26/2018 11:50:30 AM Winnetka Road Structure.dwg 11/26/2018 11:50:30 AM

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Chicago, IL 60606
(312) 791-9200
www.collinseng.com

USER NAME :
DESIGNED : AMS
CHECKED : EKM
DRAWN : DR
PLOT DATE : 11/26/2018

DESIGNED : AMS
CHECKED : AMS
REVISIONS:
REVISIONS:
REVISIONS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-1162
SHEET NO. 51 OF 518 SHEETS

F.A.U. RTE. 1291
SECTION 2017-005BR
COUNTY COOK
TOTAL SHEETS 56
SHEET NO. 32
CONTRACT NO. 62F03
ILLINOIS FED. AID PROJECT

INDEX OF SHEETS

S1 General Plan and Elevation
 S2 General Notes, Index of Sheets and Total Bill of Material
 S3 Stage Construction Details
 S4 Temporary Concrete Barrier for Stage Construction
 S5 Top of Slab Elevations
 S6 Top of West Approach Slab Elevations
 S7 Top of East Approach Slab Elevations
 S8 Superstructure
 S9 Superstructure Details
 S10-11 Bridge Approach Slab Details
 S12 Bicycle Railing
 S13 Bearing Details
 S14 West Abutment Details
 S15 East Abutment Details
 S16 Pier 1 Details
 S17 Pier 2 Details
 S18 Bar Splicer Assembly and Mechanical Splicer Details

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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 of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of false work, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.

Slipforming of the parapet is not allowed.

Current Rating on file for S.N. 016-1162
 Inventory: HS 10
 Operating: HS 16.6
 Live Load Restrictions: Yes (15 Tons)

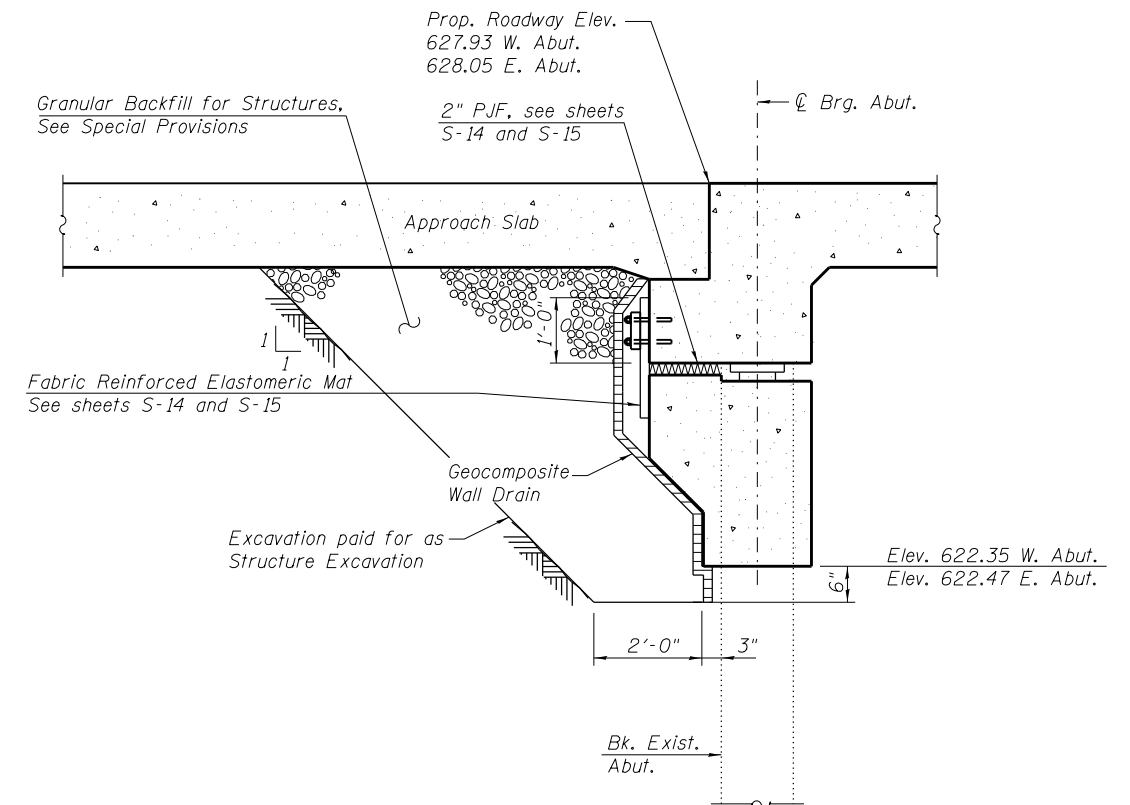
Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the Special Provisions.

Remove and reconstruct stone veneer on pier noses on the upstream (north) side. Remove and reconstruct the top two feet of parapet walls and additional areas located at northwest and southwest parapet ends. Existing stones shall be carefully removed and reused. Clean both stone facades and all sides of parapets. Repair decorative stone facade by replacing damaged stones. See special provisions.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu. Yd.	-	29.8	29.8
Structure Excavation	Cu. Yd.	-	88.3	88.3
Concrete Structures	Cu. Yd.	-	76.5	76.5
Concrete Superstructure	Cu. Yd.	239.1	-	239.1
Bridge Deck Grooving	Sq. Yd.	491	-	491
Protective Coat	Sq. Yd.	894	-	894
Concrete Superstructure (Approach Slab)	Cu. Yd.	125.2	-	125.2
Reinforcement Bars, Epoxy Coated	Pound	154,930	11,490	166,420
Bar Splicers	Each	283	104	387
Bicycle Railing	Foot	239	-	239
Parapet Railing	Foot	239	-	239
Name Plates	Each	1	-	1
Elastomeric Bearing Assembly, Type I	Each	27	-	27
Anchor Bolts, 1"	Each	54	-	54
Temporary Sheet Piling	Sq. Ft.	-	233	233
Epoxy Crack Injection	Foot	-	48	48
Geocomposite Wall Drain	Sq. Yd.	-	70	70
Conduit Embedded in Structure 2" Dia., PVC	Foot	-	240	240
Masonry Reconstruction	Sq. Yd.	176	-	176
Granular Backfill for Structures	Cu. Yd.	-	92.6	92.6
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	-	226	226



SECTION THRU ABUTMENT (PARTIAL)
 (Horiz. dim. @ Rt. L's)

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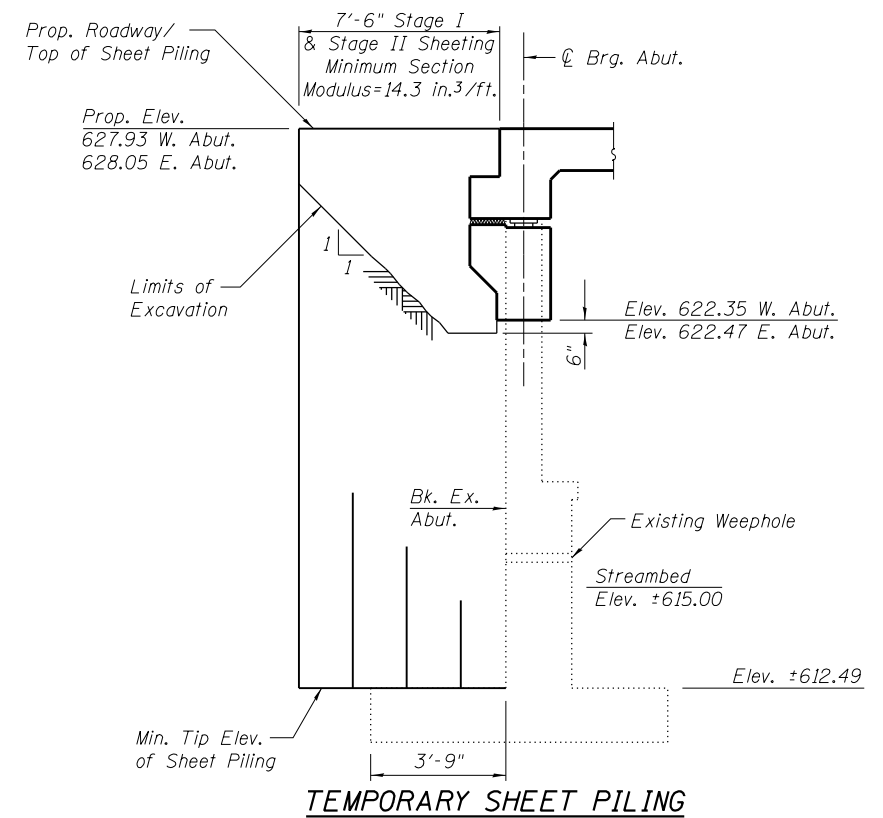
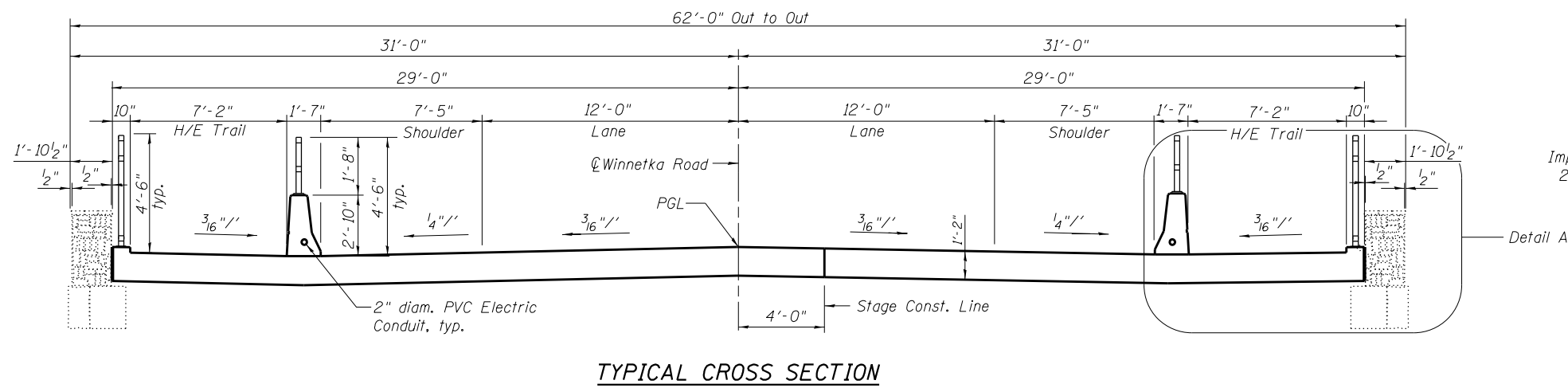
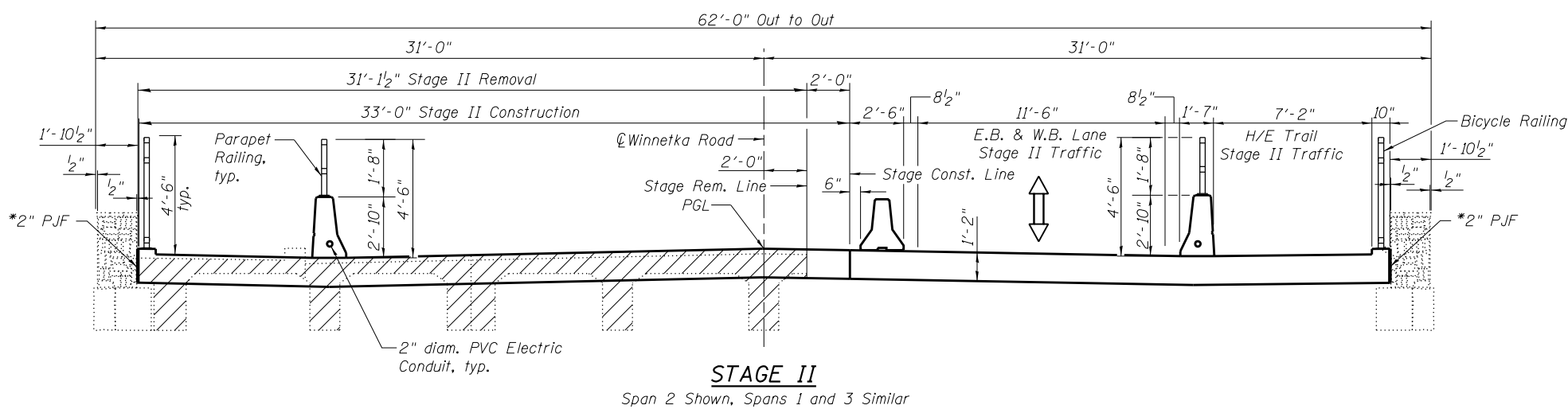
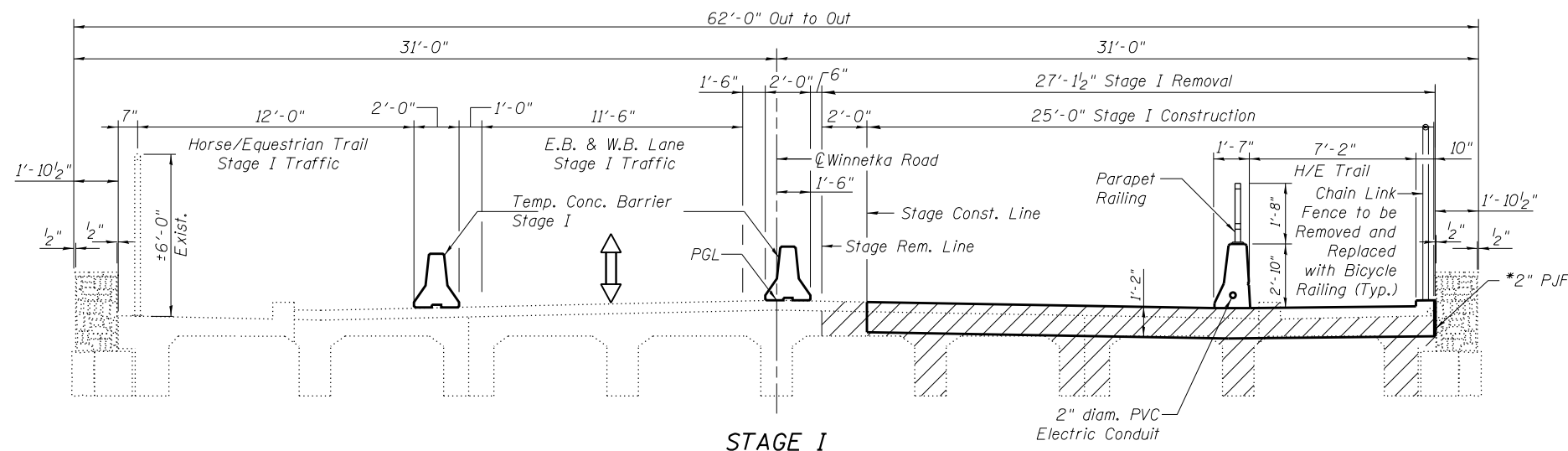
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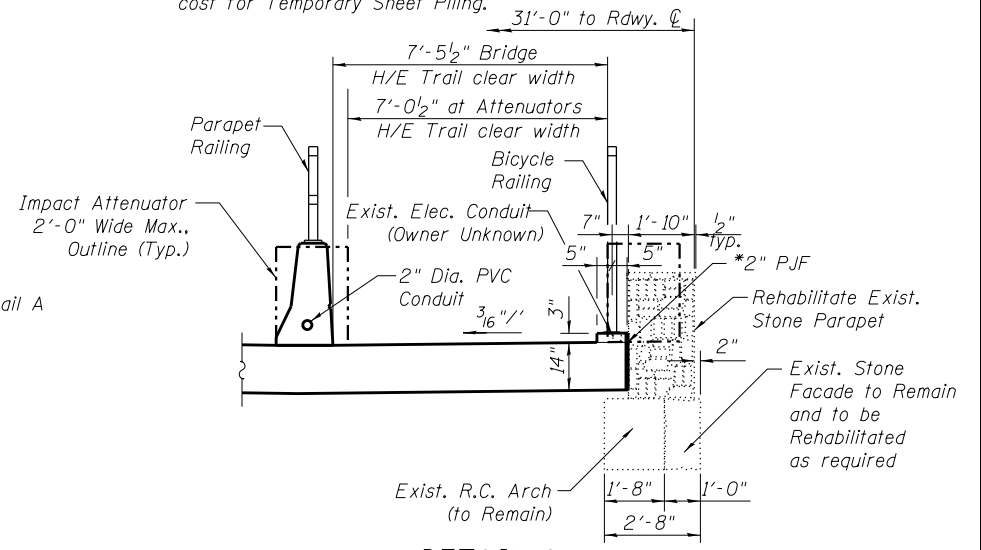
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-1162
 SHEET NO. S2 OF S18 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	33
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				



- Notes:
- All sections are looking east.
 - The cost of removal and disposal of existing wearing surface, flagstone, chain link fence, and bearings are included in the cost of removal of existing superstructure.
 - For quantity of temporary concrete barrier, see roadway plans.
 - If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
 - The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.



LEGEND:
 Removal of Existing Superstructures. See Note 2.

* 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the stone parapet with suitable adhesive as recommended by the supplier. Cost included with Concrete Superstructures.

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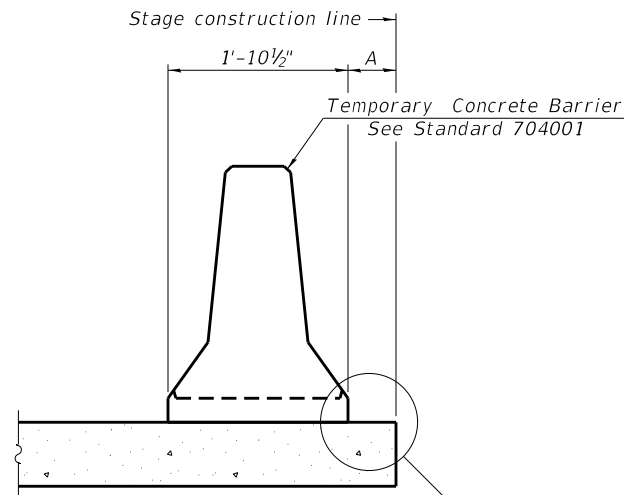
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PLOT SCALE =		
PLOT DATE = 10/19/2018		

**STATE OF ILLINOIS
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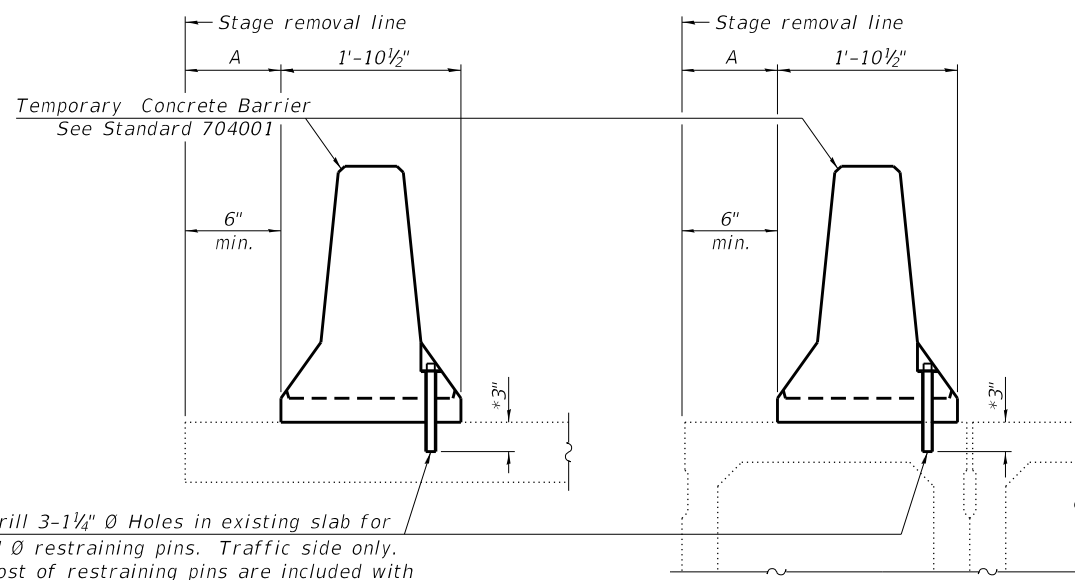
**STAGE CONSTRUCTION DETAILS
 STRUCTURE NO. 016-1162**
 SHEET NO. S3 OF S18 SHEETS

F.A.U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	34
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

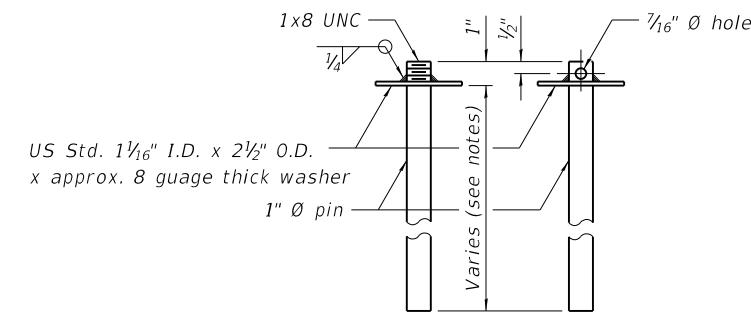


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

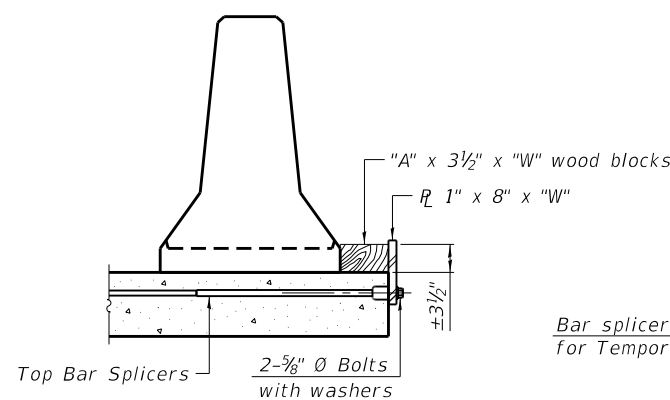
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

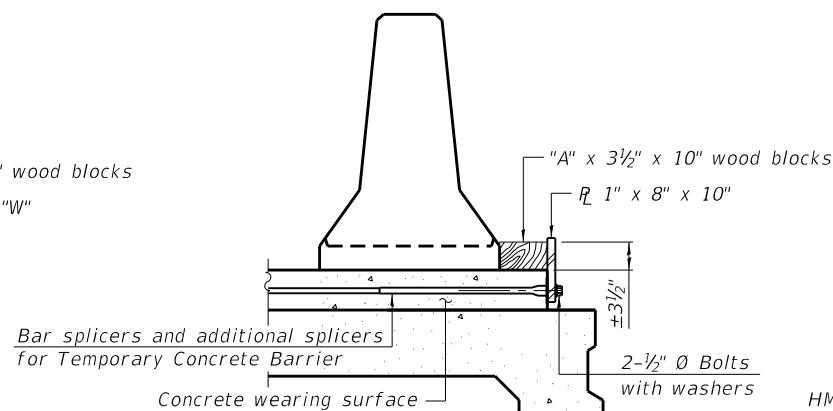


RESTRAINING PIN

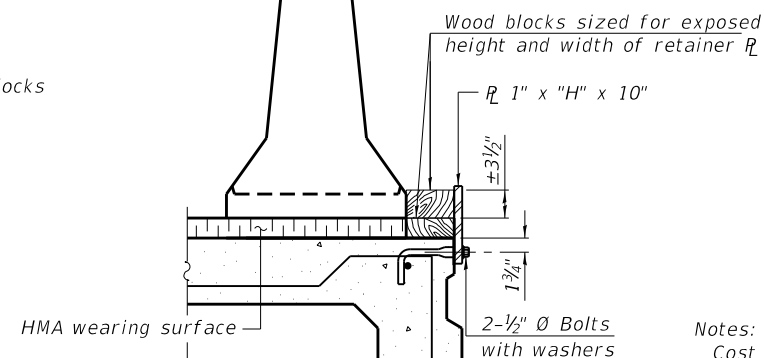
SECTIONS THRU SLAB OR DECK BEAM



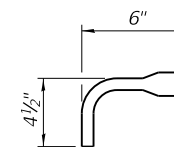
DETAIL I



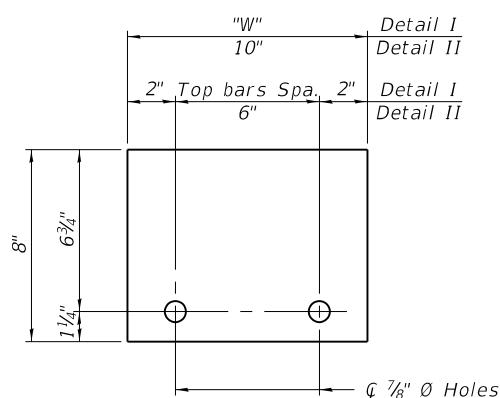
DETAIL II



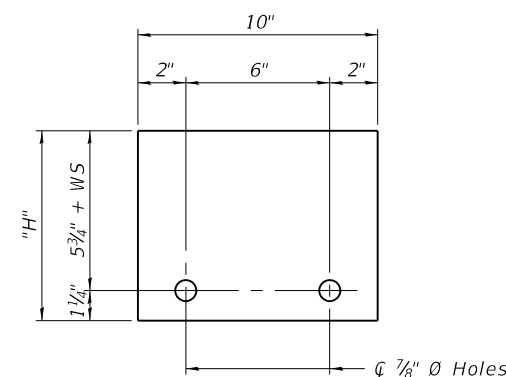
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{C} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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R-27 8-11-2017

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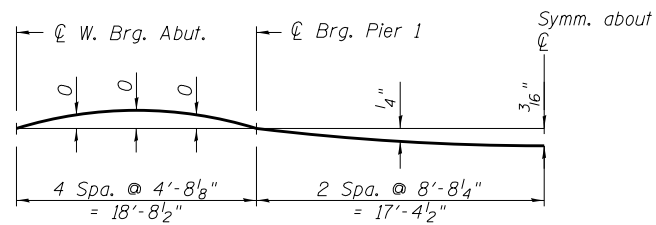
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 016-1162

SHEET NO. 54 OF 518 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	35
CONTRACT NO. 62F03			ILLINOIS FED. AID PROJECT	



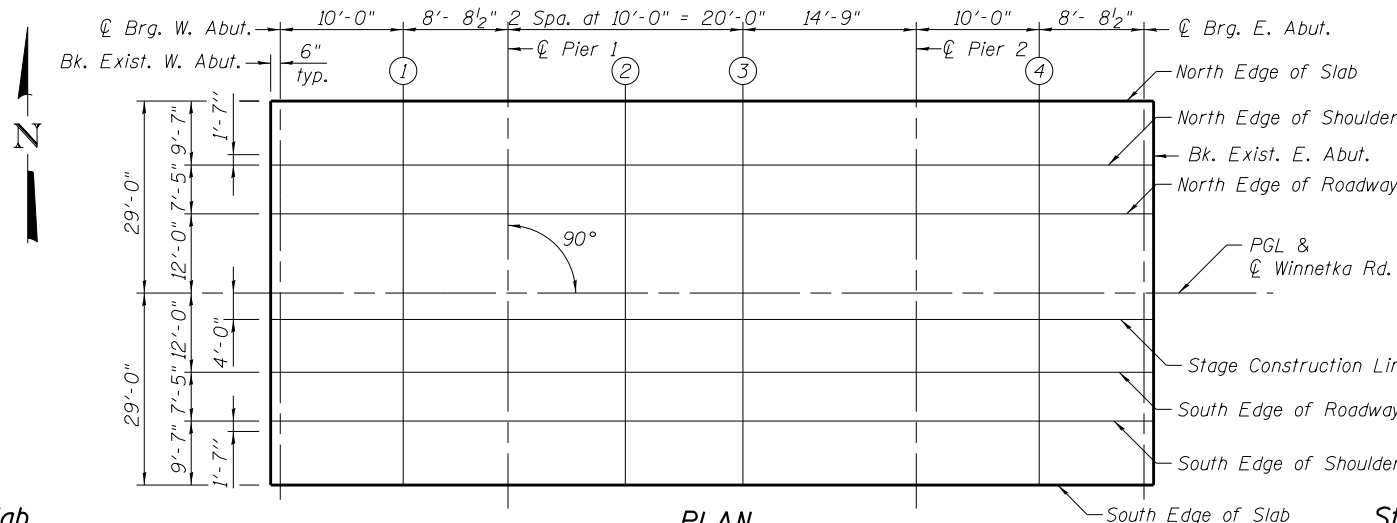
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete slab and parapet.)

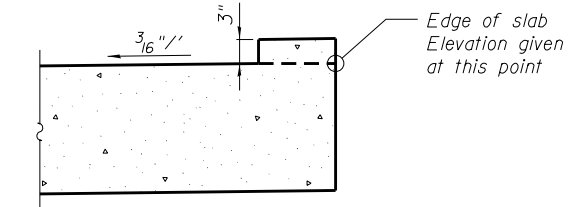
Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of false work, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.



PLAN



TOP OF SLAB AT CURB

North Edge of Slab

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	-29.0	-29.0	-29.0	-29.0	-29.0	-29.0	-29.0	-29.0	-29.0	-29.0
Theoretical Grade Elevations	627.74	627.75	627.88	627.96	628.02	628.05	628.02	627.95	627.87	627.86
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.74	627.75	627.88	627.96	628.03	628.06	628.02	627.95	627.87	627.86
Bottom of Slab	626.58	626.58	626.71	626.79	626.86	626.89	626.85	626.78	626.70	626.69

North Edge of Shoulder

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	-19.42	-19.42	-19.42	-19.42	-19.42	-19.42	-19.42	-19.42	-19.42	-19.42
Theoretical Grade Elevations	627.59	627.60	627.73	627.81	627.87	627.89	627.86	627.80	627.71	627.71
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.59	627.60	627.72	627.81	627.88	627.91	627.86	627.80	627.71	627.71
Bottom of Slab	626.43	626.43	626.56	626.64	626.71	626.74	626.70	626.63	626.55	626.54

North Edge of Roadway

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	-12.00	-12.00	-12.00	-12.00	-12.00	-12.00	-12.00	-12.00	-12.00	-12.00
Theoretical Grade Elevations	627.75	627.75	627.88	627.96	628.02	628.05	628.02	627.95	627.87	627.86
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.75	627.75	627.88	627.96	628.03	628.06	628.02	627.95	627.87	627.86
Bottom of Slab	626.58	626.59	626.71	626.80	626.87	626.90	626.85	626.78	626.70	626.70

PGL & Centerline

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Theoretical Grade Elevations	627.93	627.94	628.07	628.15	628.21	628.24	628.21	628.14	628.06	628.05
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.93	627.94	628.07	628.15	628.22	628.25	628.21	628.14	628.06	628.05
Bottom of Slab	626.77	626.77	626.90	626.98	627.06	627.08	627.04	626.97	626.89	626.88

Stage Construction Line

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Theoretical Grade Elevations	627.87	627.88	628.01	628.09	628.15	628.17	628.14	628.08	627.99	627.99
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.87	627.88	628.00	628.09	628.16	628.19	628.14	628.08	627.99	627.99
Bottom of Slab	626.70	626.71	626.84	626.92	626.99	627.02	626.98	626.91	626.83	626.82

South Edge of Roadway

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Theoretical Grade Elevations	627.75	627.75	627.88	627.96	628.02	628.05	628.02	627.95	627.87	627.86
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.75	627.75	627.88	627.96	628.03	628.06	628.02	627.95	627.87	627.86
Bottom of Slab	626.58	626.59	626.71	626.80	626.87	626.90	626.85	626.78	626.70	626.70

South Edge of Shoulder

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	19.42	19.42	19.42	19.42	19.42	19.42	19.42	19.42	19.42	19.42
Theoretical Grade Elevations	627.59	627.60	627.73	627.81	627.87	627.89	627.86	627.80	627.71	627.71
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.59	627.60	627.72	627.81	627.88	627.91	627.86	627.80	627.71	627.71
Bottom of Slab	626.43	626.43	626.56	626.64	626.71	626.74	626.70	626.63	626.55	626.54

South Edge of Slab

Location	Bk. of W. Abut.	C. Brg. W. Abut.	Span 1		Span 2		Span 3	C. Brg. E. Abut.	Bk. of E. Abut.	
			1	C. Pier 1	2	3				C. Pier 2
Station	25+13.42	25+13.92	25+23.92	25+32.63	25+42.63	25+52.63	25+67.38	25+77.38	25+86.09	25+86.59
Offset	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
Theoretical Grade Elevations	627.74	627.75	627.88	627.96	628.02	628.05	628.02	627.95	627.87	627.86
Theoretical Grade Elevations Adjusted For Dead Load Deflection	627.74	627.75	627.88	627.96	628.03	628.06	628.02	627.95	627.87	627.86
Bottom of Slab	626.58	626.58	626.71	626.79	626.87	626.89	626.85	626.78	626.70	626.69

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North Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	-29.00	627.39
A1	25+00.25	-29.00	627.54
A2	25+10.25	-29.00	627.69
East End West Approach	25+13.42	-29.00	627.74

North Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	-19.42	627.23
A1	25+00.25	-19.42	627.39
A2	25+10.25	-19.42	627.54
East End West Approach	25+13.42	-19.42	627.59

North Edge of Roadway

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	-12.00	627.39
A1	25+00.25	-12.00	627.54
A2	25+10.25	-12.00	627.69
East End West Approach	25+13.42	-12.00	627.74

PGL & Centerline

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	0.00	627.57
A1	25+00.25	0.00	627.73
A2	25+10.25	0.00	627.88
East End West Approach	25+13.42	0.00	627.93

Stage Construction Line

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	4.00	627.44
A1	25+00.25	4.00	627.63
A2	25+10.25	4.00	627.81
East End West Approach	25+13.42	4.00	627.87

South Edge of Roadway

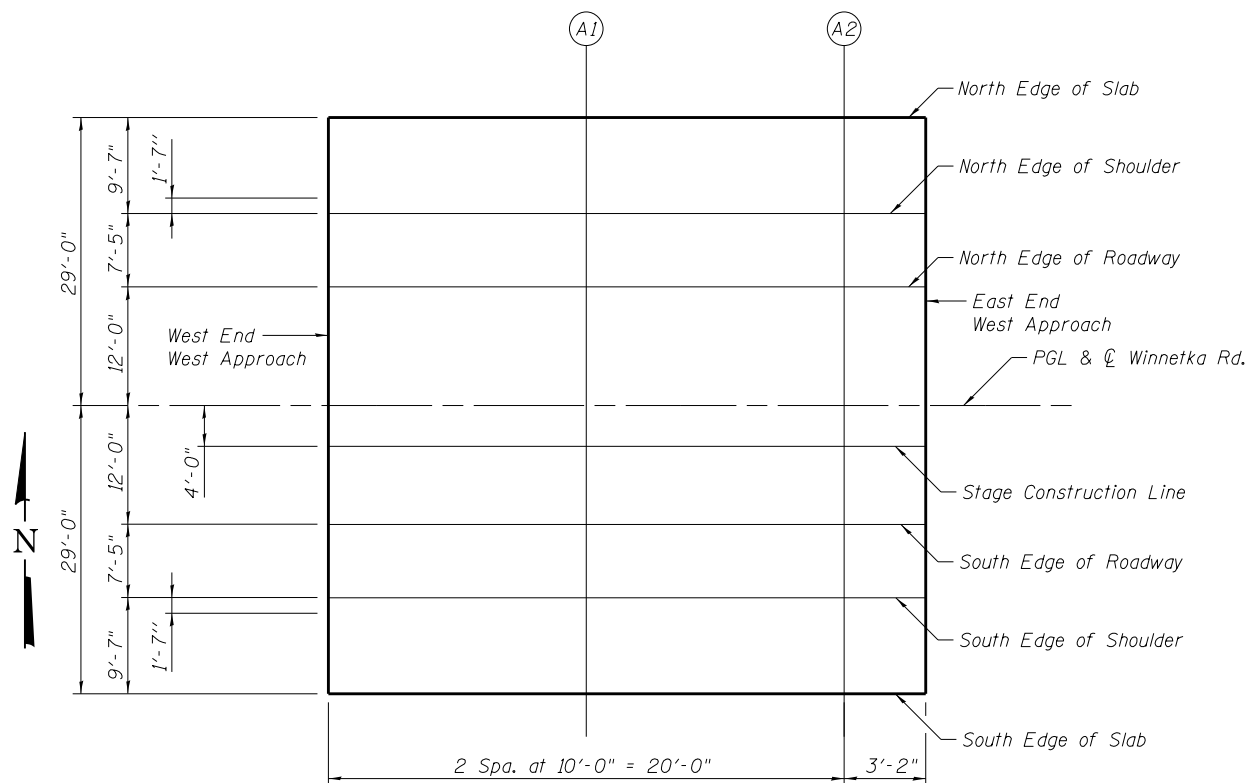
Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	12.00	627.18
A1	25+00.25	12.00	627.42
A2	25+10.25	12.00	627.67
East End West Approach	25+13.42	12.00	627.74

South Edge of Shoulder

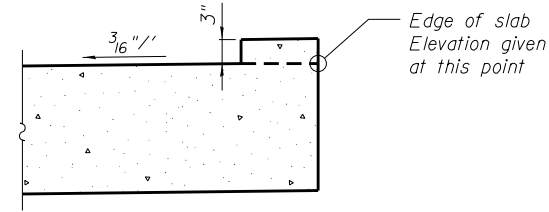
Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	19.42	627.02
A1	25+00.25	19.42	627.27
A2	25+10.25	19.42	627.51
East End West Approach	25+13.42	19.42	627.59

South Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
West End West Approach	24+90.25	29.00	627.18
A1	25+00.25	29.00	627.42
A2	25+10.25	29.00	627.66
East End West Approach	25+13.42	29.00	627.74



PLAN



TOP OF SLAB AT CURB

North Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	-29.00	627.86
A3	25+96.59	-29.00	627.59
A4	26+06.59	-29.00	627.31
East End East Approach	26+09.76	-29.00	627.23

North Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	-19.42	627.71
A3	25+96.59	-19.42	627.43
A4	26+06.59	-19.42	627.16
East End East Approach	26+09.76	-19.42	627.08

North Edge of Roadway

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	-12.00	627.86
A3	25+96.59	-12.00	627.59
A4	26+06.59	-12.00	627.32
East End East Approach	26+09.76	-12.00	627.23

PGL & Centerline

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	0.00	628.05
A3	25+96.59	0.00	627.84
A4	26+06.59	0.00	627.63
East End East Approach	26+09.76	0.00	627.56

Stage Construction Line

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	4.00	627.99
A3	25+96.59	4.00	627.75
A4	26+06.59	4.00	627.51
East End East Approach	26+09.76	4.00	627.43

South Edge of Roadway

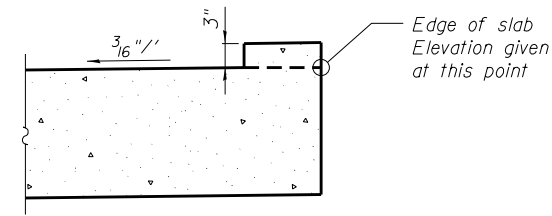
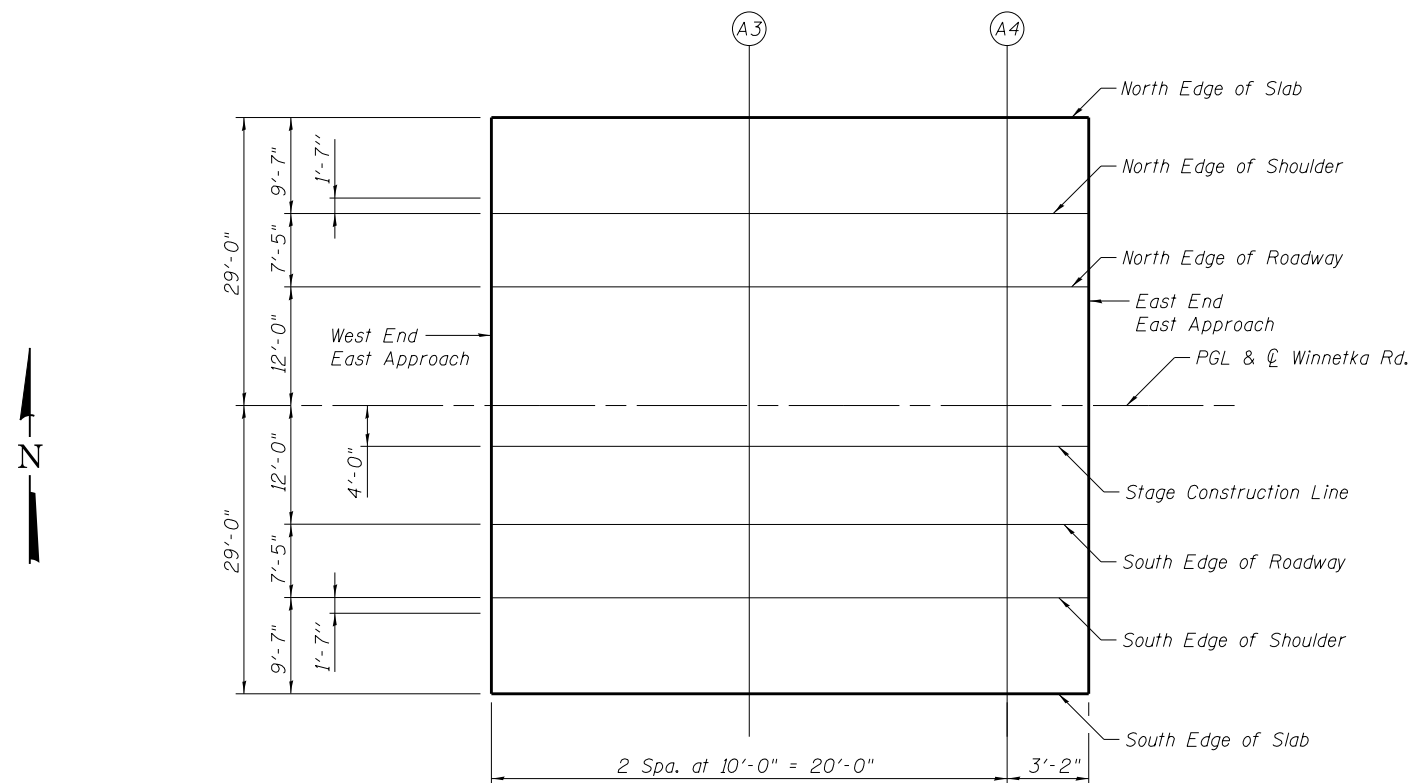
Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	12.00	627.86
A3	25+96.59	12.00	627.56
A4	26+06.59	12.00	627.27
East End East Approach	26+09.76	12.00	627.17

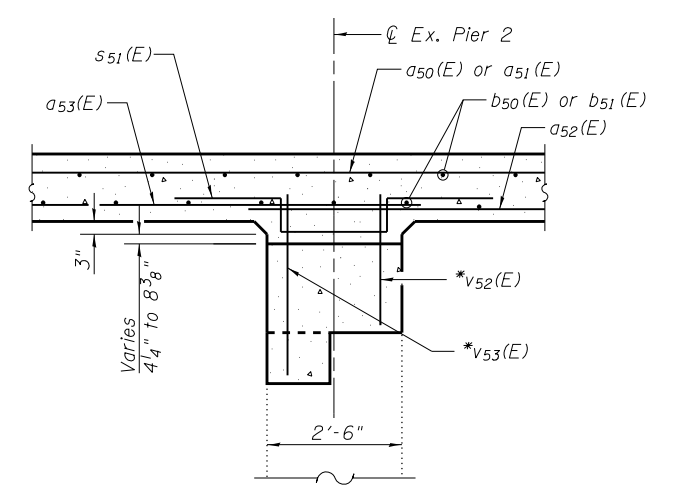
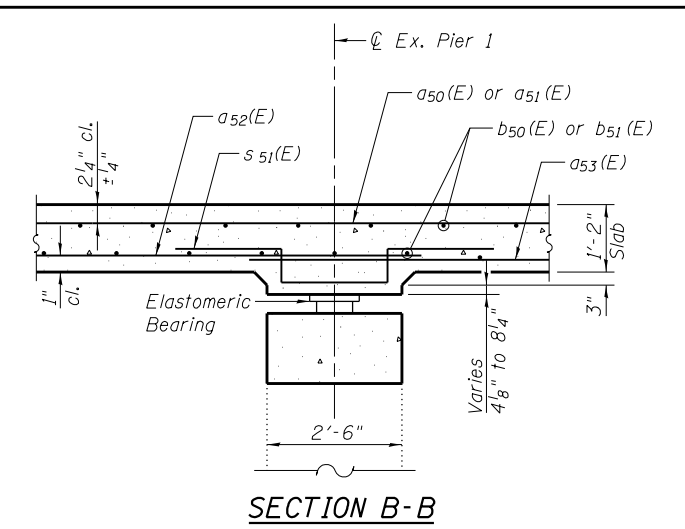
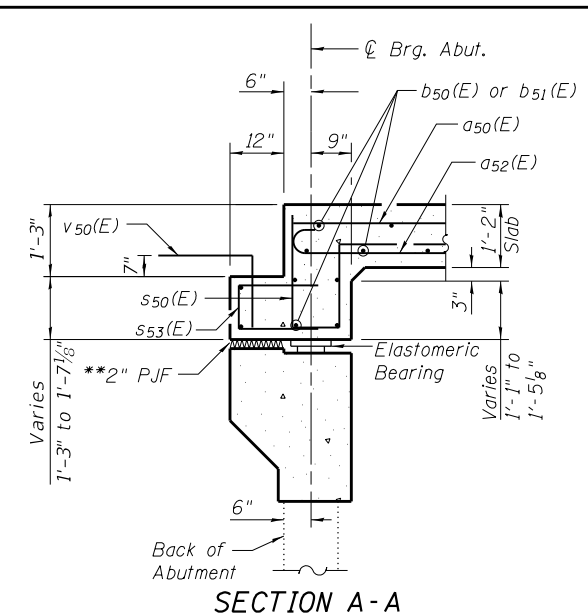
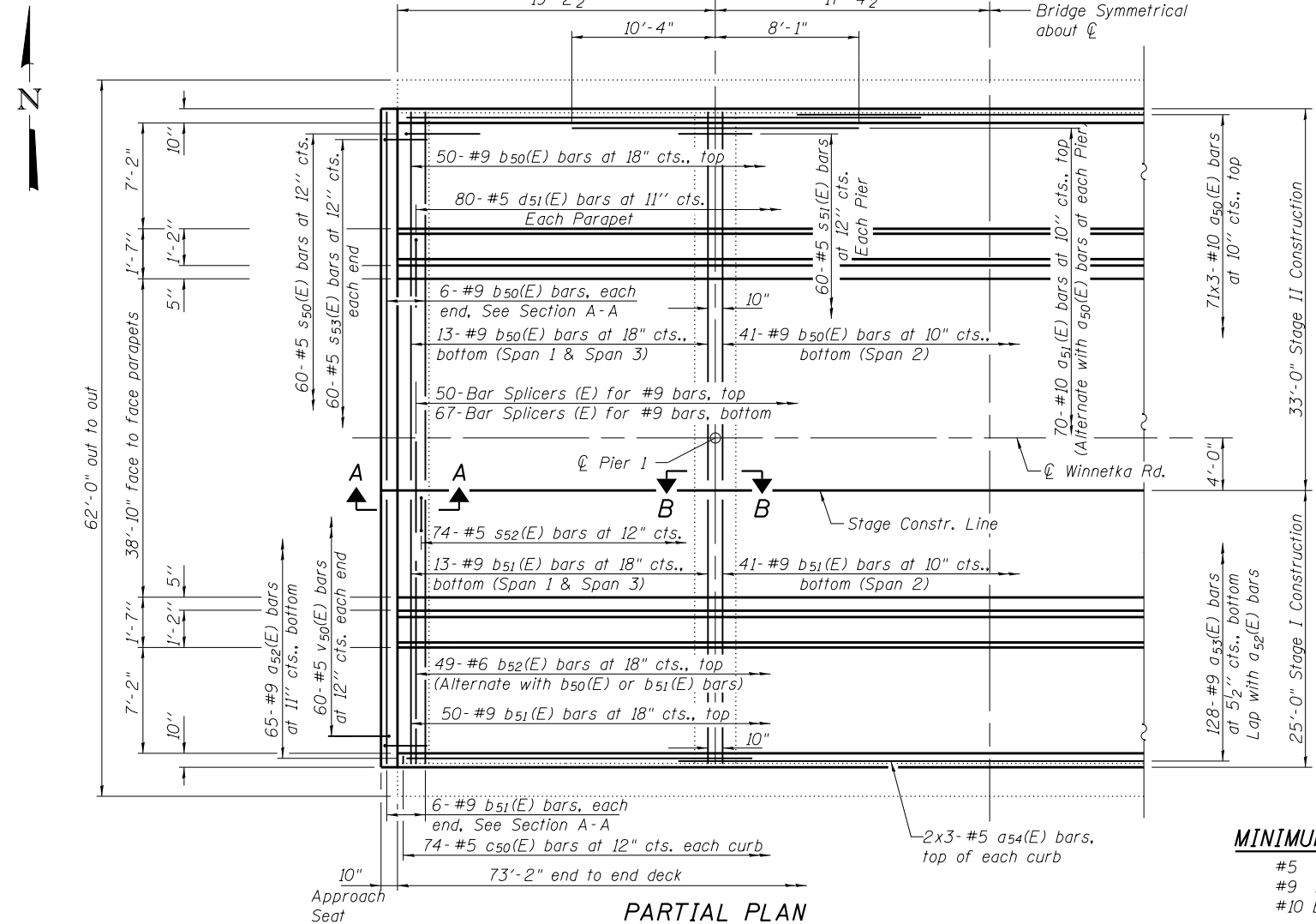
South Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	19.42	627.71
A3	25+96.59	19.42	627.41
A4	26+06.59	19.42	627.11
East End East Approach	26+09.76	19.42	627.02

South Edge of Slab

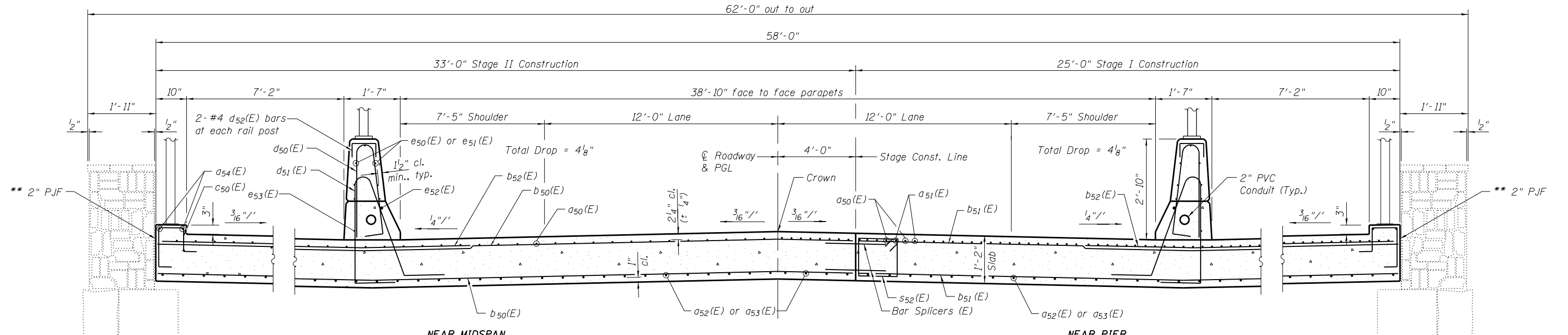
Location	Station	Offset	Theoretical Grade Elevations
West End East Approach	25+86.59	29.00	627.86
A3	25+96.59	29.00	627.56
A4	26+06.59	29.00	627.26
East End East Approach	26+09.76	29.00	627.17



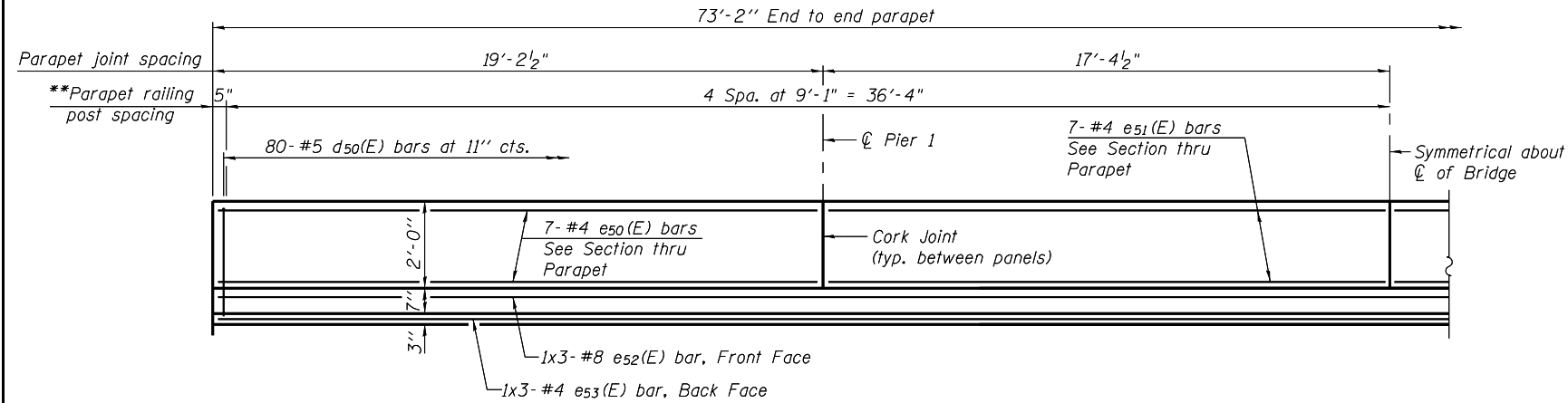


Notes:
 See Sheet S9 for superstructure details and Bill of Material.
 Bars indicated thus 71 x 3-#5 etc. indicates 71 lines of bars with 3 lengths per line.
 See Sheet S9 of S18 for parapet reinforcement.
 See Sheets S14 thru S17 of S18 for substructure modification.
 See Sheet S12 for parapet railing details.
 See Sheet S13 for bearing details.
 See Sheets S14 and S15 for details at Abutments.
 See Sheets S16 and S17 for details at Piers.
 See Sheet S18 for Bar Splicer Assembly Details.

MINIMUM BAR LAP
 #5 Bar = 3'-0"
 #9 Bar = 9'-7"
 #10 Bar = 7'-2"



** 2" P/JF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the stone parapet with suitable adhesive as recommended by supplier. Cost included with Concrete Superstructures.

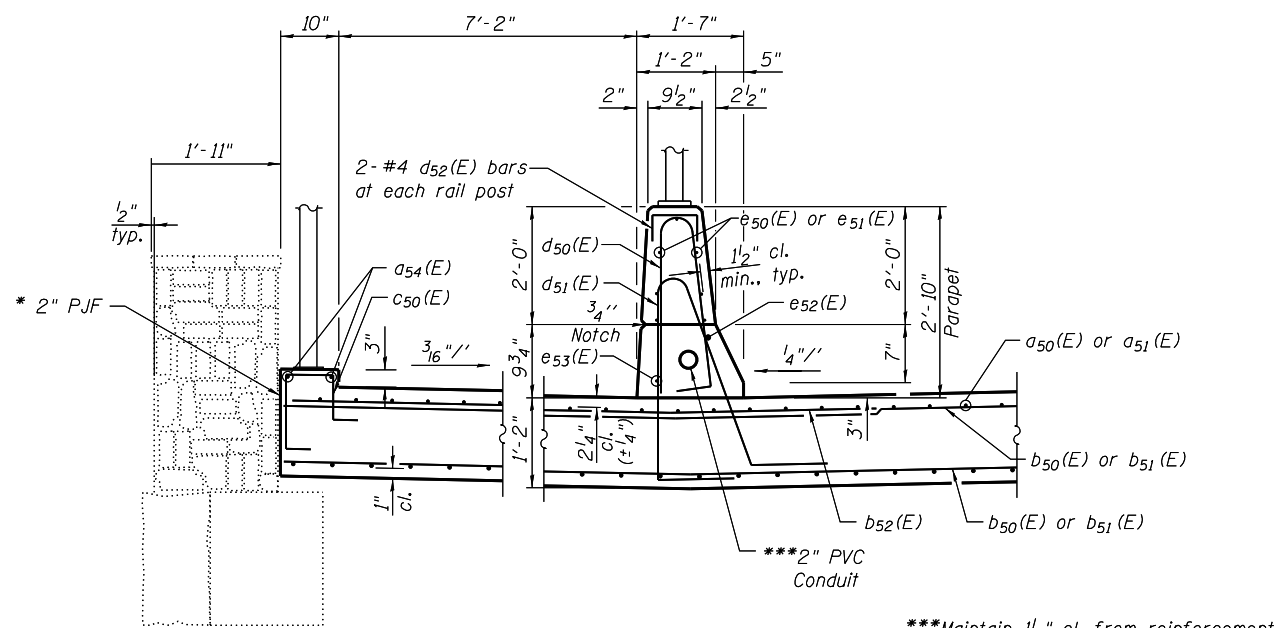


INSIDE ELEVATION OF PARAPET

**Bicycle Railing post spacing similar

MINIMUM BAR LAP

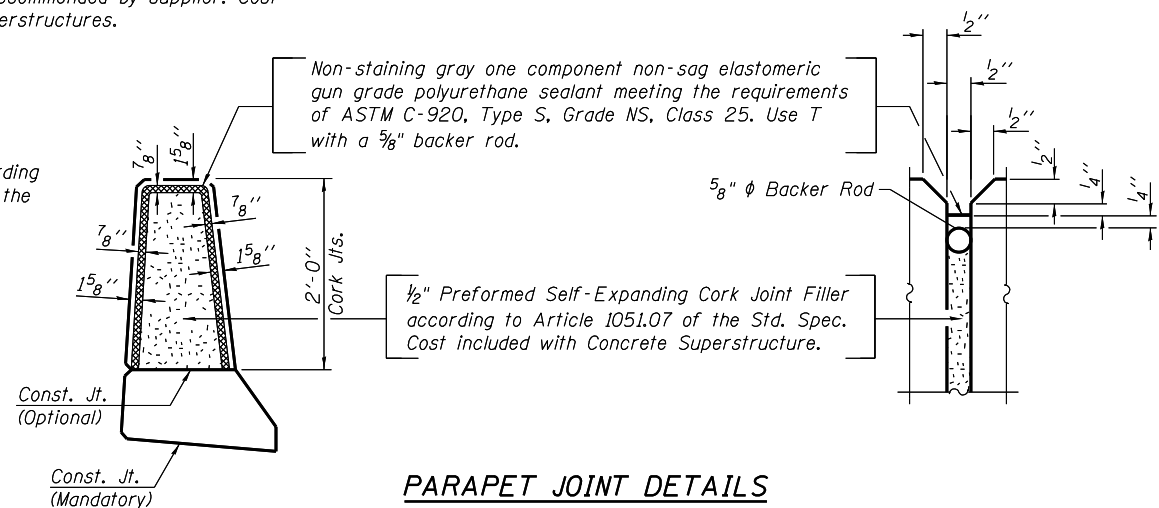
(Parapet)
 #4 bar = 2'-8"
 #8 bar = 5'-11"



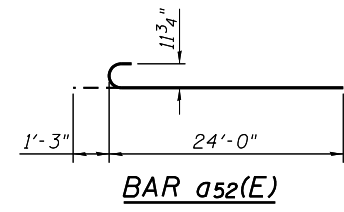
SECTION THRU PARAPET

* 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the stone parapet with suitable adhesive as recommended by supplier. Cost included with Concrete Superstructures.

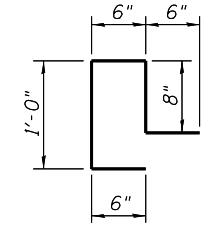
Note:
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



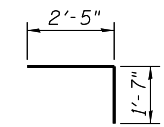
PARAPET JOINT DETAILS



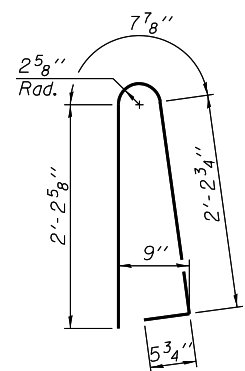
BAR a52(E)



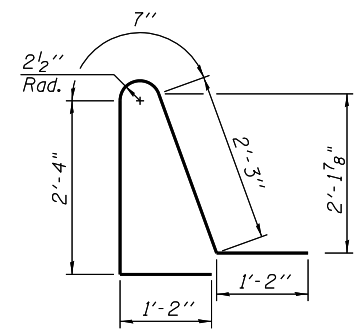
BAR c50(E)



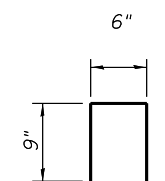
BAR v50(E)



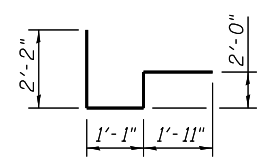
BAR d50(E)



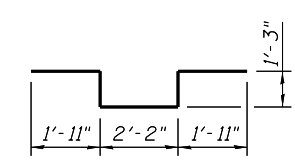
BAR d51(E)



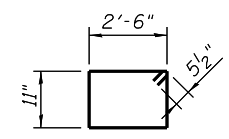
BAR d52(E)



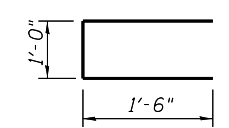
BAR s50(E)



BAR s51(E)



BAR s52(E)



BAR s53(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a50(E)	213	#10	29'-3"	—
a51(E)	140	#10	18'-5"	—
a52(E)	130	#9	25'-3"	—
a53(E)	128	#9	44'-4"	—
a54(E)	12	#5	26'-5"	—
b50(E)	129	#9	32'-8"	—
b51(E)	129	#9	24'-8"	—
b52(E)	98	#6	15'-1"	—
c50(E)	148	#5	3'-2"	—
d50(E)	160	#5	5'-7"	—
d51(E)	160	#5	7'-6"	—
d52(E)	36	#4	2'-0"	—
e50(E)	28	#4	18'-11"	—
e51(E)	28	#4	17'-1"	—
e52(E)	6	#8	28'-6"	—
e53(E)	6	#4	26'-4"	—
s50(E)	120	#5	7'-2"	—
s51(E)	120	#5	8'-6"	—
s52(E)	74	#5	7'-9"	—
s53(E)	120	#5	4'-0"	—
v50(E)	120	#5	4'-0"	—
Removal of Existing Superstructures	Each		1	
Reinforcement Bars, Epoxy Coated	Pound		103,590	
Concrete Superstructure	Cu. Yd.		228.2	
Bridge Deck Grooving	Sq. Yd.		301	
Protective Coat	Sq. Yd.		548	
Condit Embedded in Structure, 2" Dia., PVC	Foot		147	

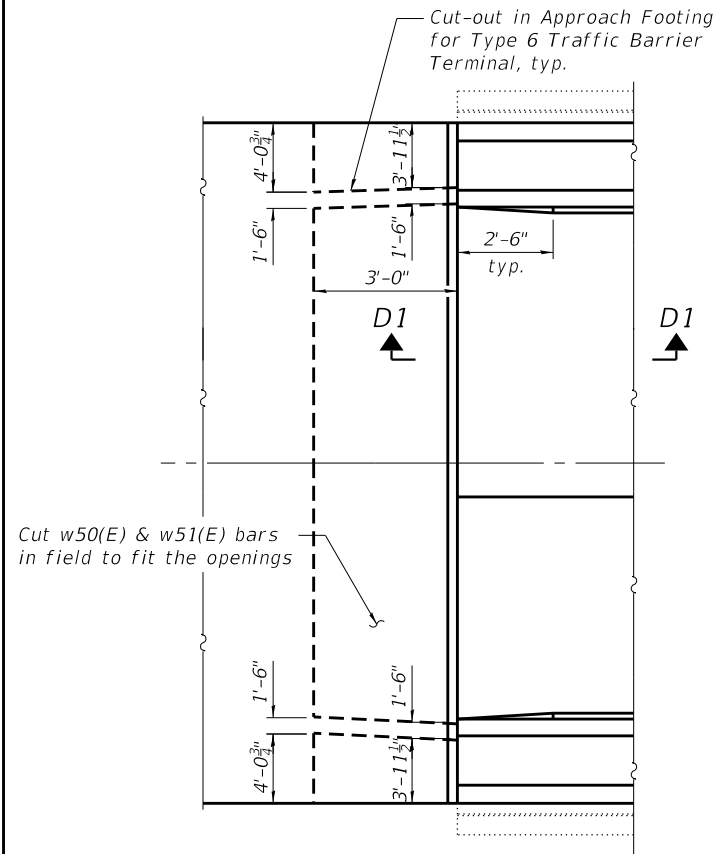
Bars indicated thus 1x3-#5 etc. indicates 1 line of bars with 3 lengths per line.

11/12/2018 Z:\6710\6710.17_6710.21 - Kinnestke Road Structural\CA000.WD 21\CA000_Sheets\016162-62F03-0095-superstructure.dwg

USER NAME =	DESIGNED - AMS	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 11/12/2018	DRAWN - DR	REVISED -
	CHECKED - AMS	REVISED -

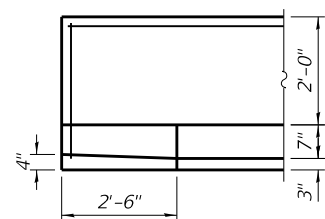
F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	40
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				

Notes:
 See sheet S11 for Sections A-A, and B-B.
 a55(E), a56(E), a57(E), a58(E) and a59(E) bar spacings measured along \bar{C} Rdwy.
 See sheet S18 for bar splicer assembly details.



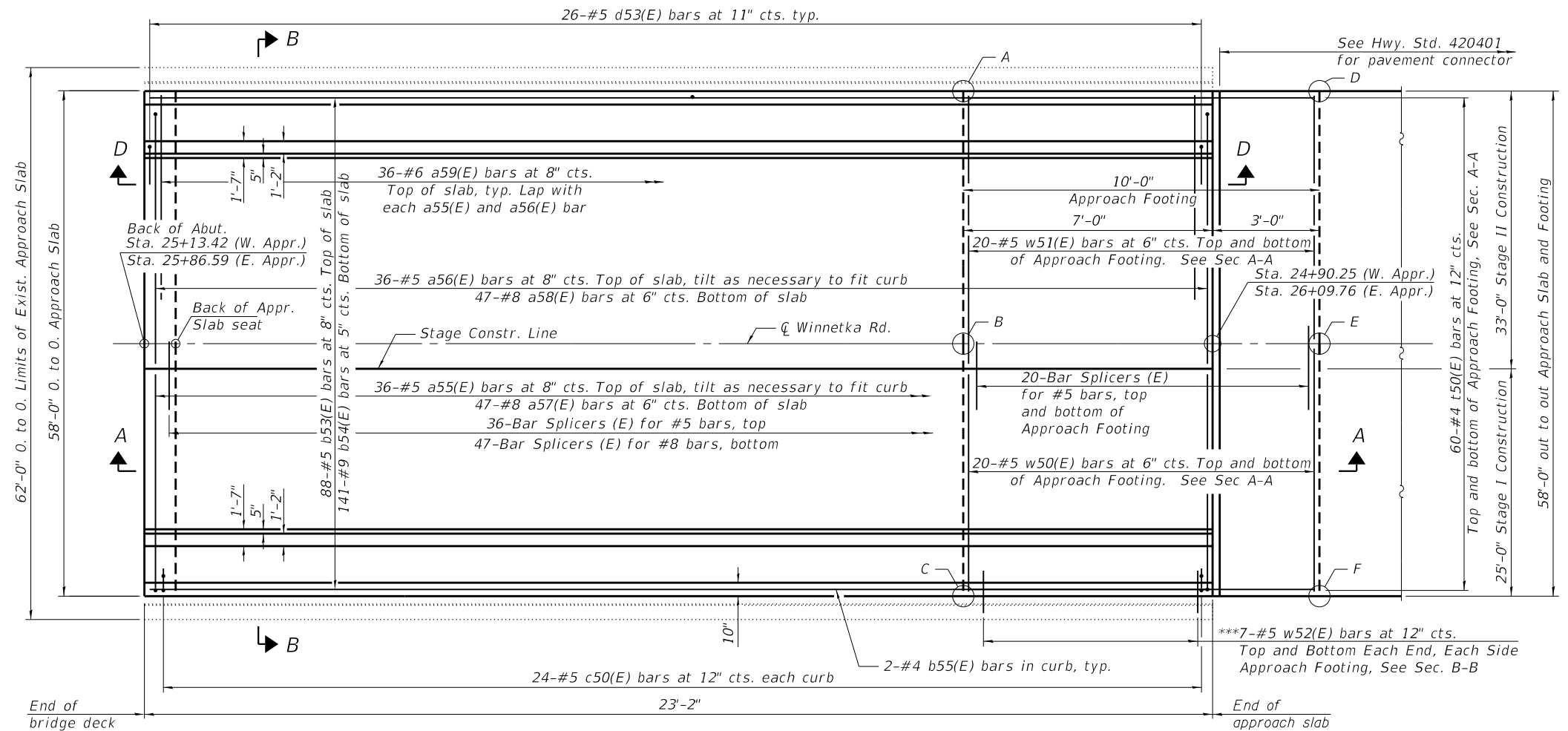
PLAN 2

West Approach - Type 6 terminal connection.



VIEW D1-D1

For Type 6 terminal connections see Hwy. Std. 631031.



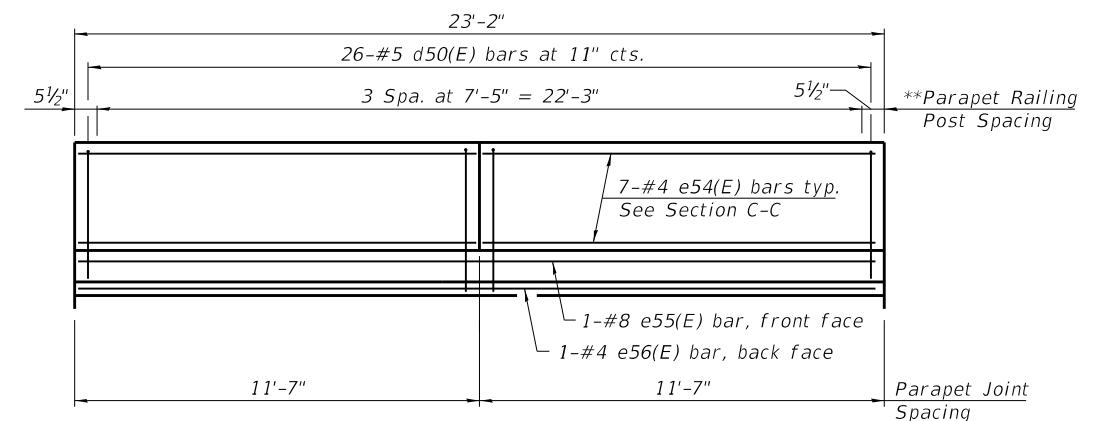
PLAN

(East Approach shown, West Approach opposite hand, except as shown on Plan 2.)

*** Drill and epoxy grout bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

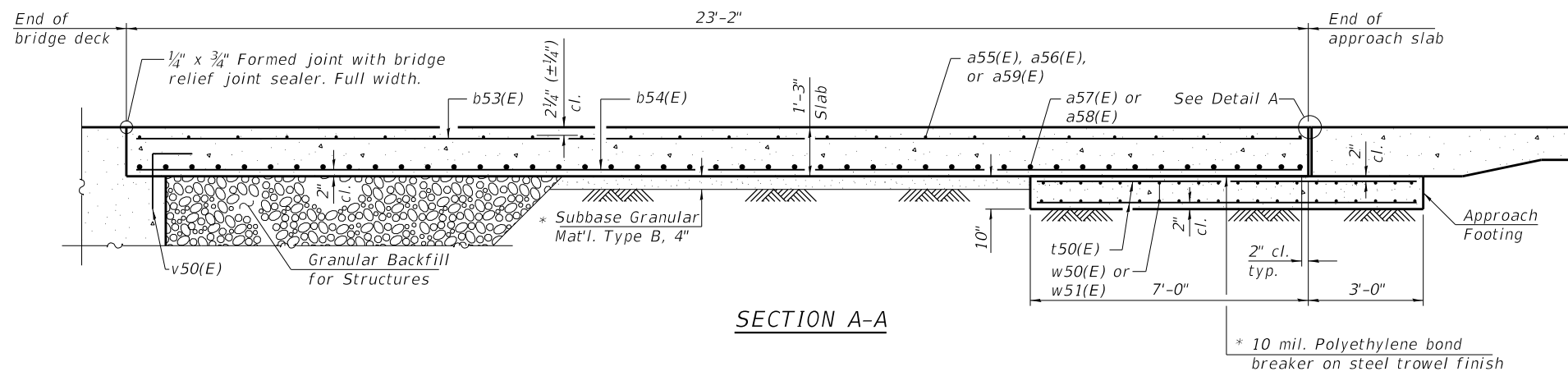
Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
A	626.24	625.41	626.17	625.33
B	626.43	625.60	626.46	625.62
C	626.10	625.26	626.13	625.29
D	626.03	625.20	625.95	625.12
E	626.24	625.41	626.03	625.20
F	625.86	625.03	625.63	624.80



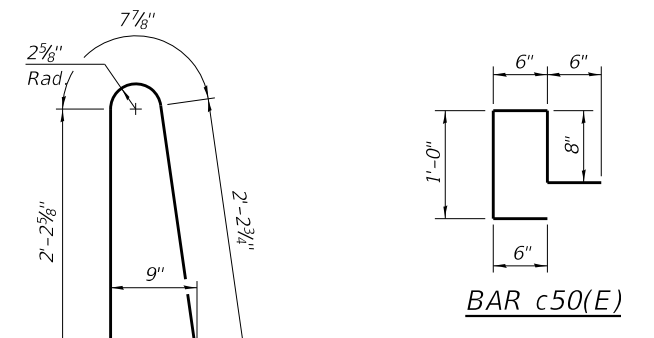
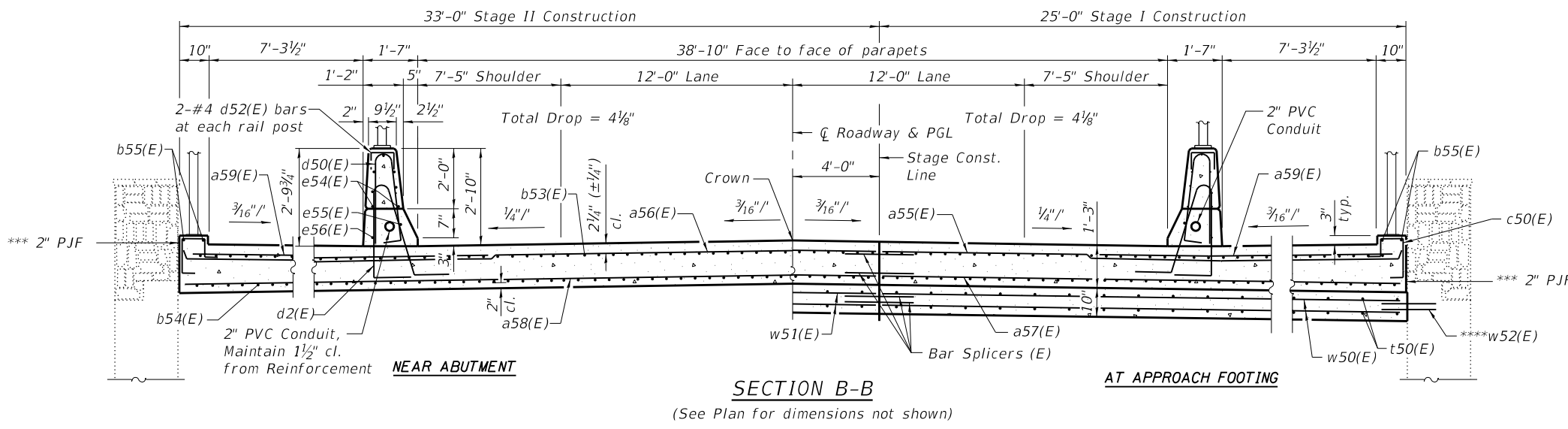
VIEW D-D

**Bicycle Railing post spacing similar

(Sheet 1 of 2)

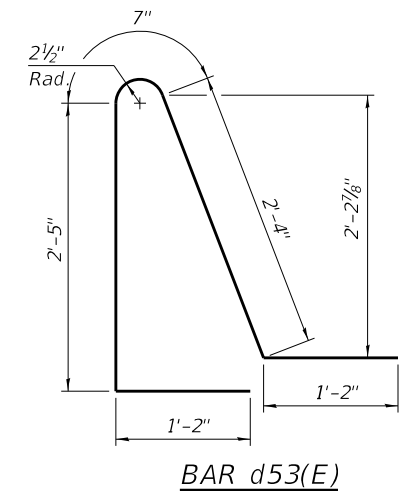
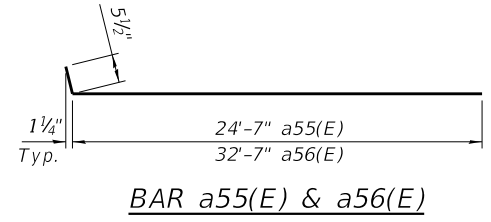
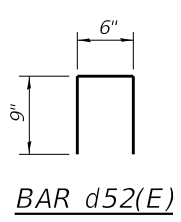
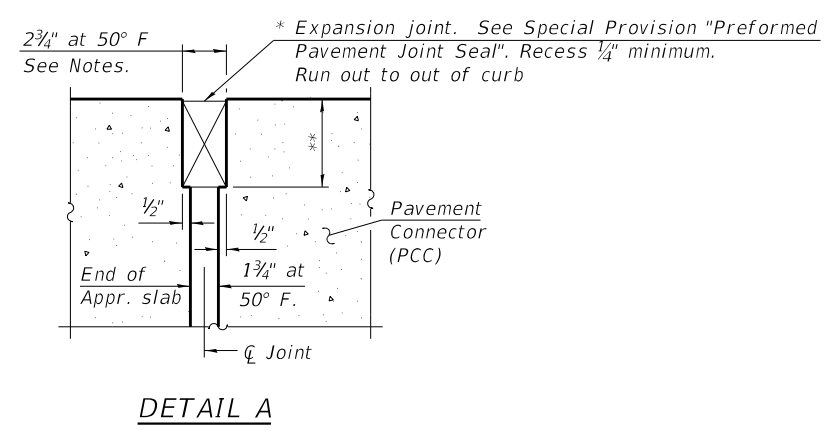


Notes:
 For v50(E) bar details, see sheet S8 and S9.
 For bar splicer details, see sheet S18.
 For additional parapet details, see sheet S9.
 For parapet railing details, see sheet S12.
 For Wingwall Modification for Approach, see sheets S14 and S15.
 For Type 6 Terminal Connection (West Approach), see Std. 631031.
 For Impact Attenuator Connection (East Approach), refer to manufacturer's specifications.
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
 Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet S2.



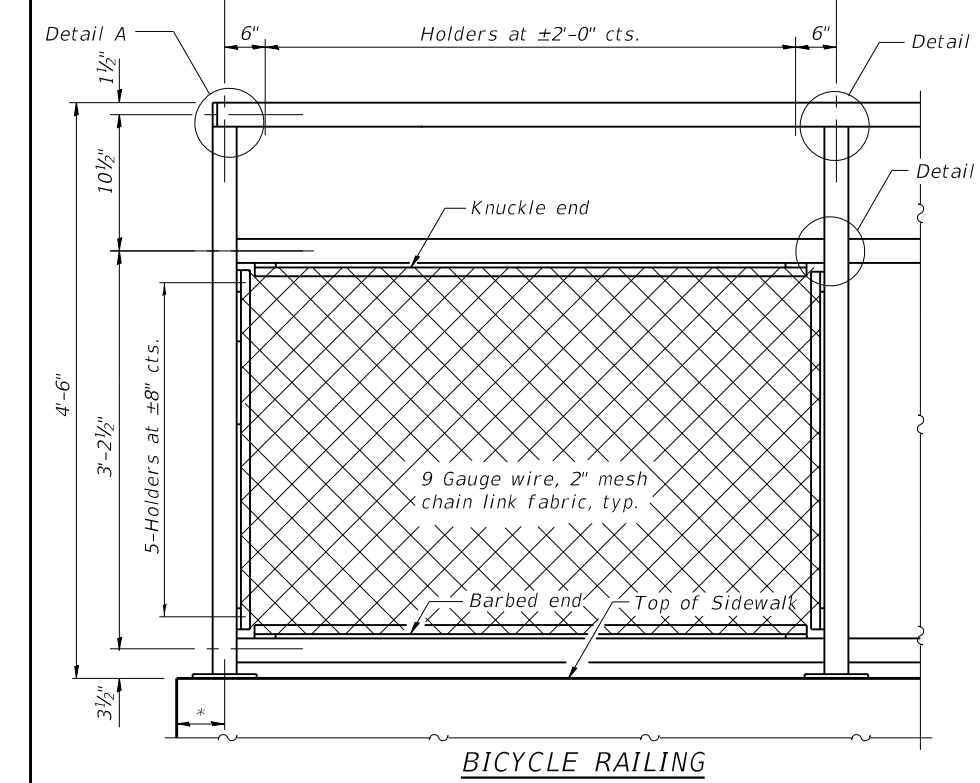
**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a55(E)	72	#5	25'-0 1/2"	┌───┐
a56(E)	72	#5	33'-0 1/2"	┌───┐
a57(E)	94	#8	24'-8"	┌───┐
a58(E)	94	#8	32'-8"	┌───┐
a59(E)	144	#6	15'-1"	┌───┐
b53(E)	176	#5	22'-11"	┌───┐
b54(E)	282	#9	22'-11"	┌───┐
b55(E)	8	#4	22'-11"	┌───┐
c50(E)	96	#5	3'-2"	┌──┐
d50(E)	104	#5	5'-7"	┌──┐
d52(E)	32	#4	2'-0"	┌──┐
d53(E)	104	#5	7'-8"	┌──┐
e54(E)	56	#4	11'-3"	┌──┐
e55(E)	4	#8	22'-10"	┌──┐
e56(E)	4	#4	22'-10"	┌──┐
t50(E)	240	#4	9'-8"	┌──┐
w50(E)	80	#5	24'-8"	┌──┐
w51(E)	80	#5	32'-8"	┌──┐
w52(E)	56	#5	2'-6"	┌──┐
Concrete Superstructure		Cu. Yd.	10.9	
Concrete Superstructure (Approach Slab)		Cu. Yd.	125.2	
Concrete Structures		Cu. Yd.	36.0	
Bridge Deck Grooving		Sq. Yd.	190	
Protective Coat		Sq. Yd.	346	
Reinforcement Bars, Epoxy Coated		Pound	57,820	
Conduit Embedded in Structure, 2" Dia., PVC		Foot	93	

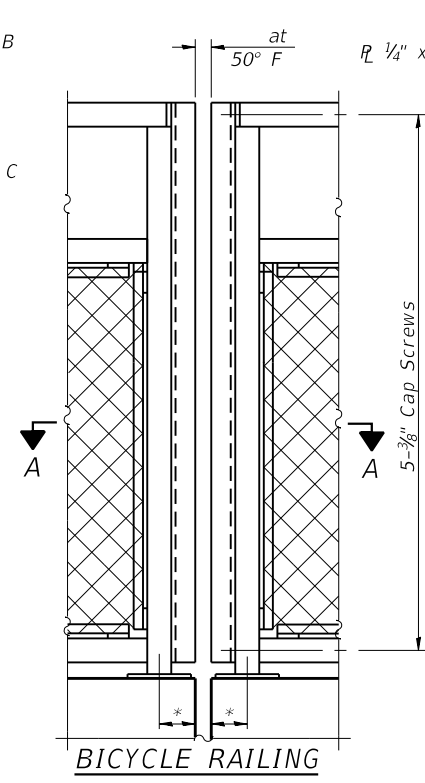


* Cost included with Concrete Superstructure (Approach Slab).
 ** Per manufacturer recommendations
 *** 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the stone parapet with suitable adhesive as recommended by supplier. Cost included with Concrete Superstructure.
 **** Drill and epoxy grout bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

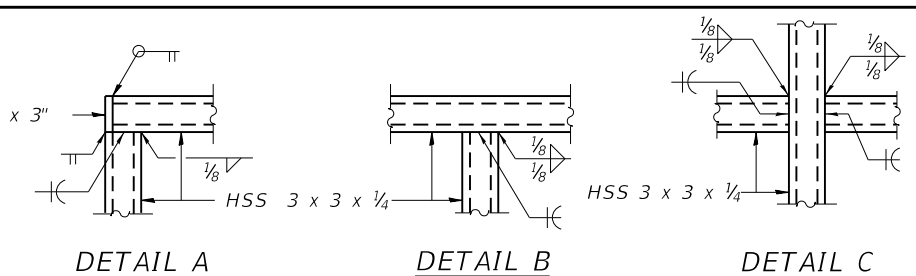
(Sheet 2 of 2)



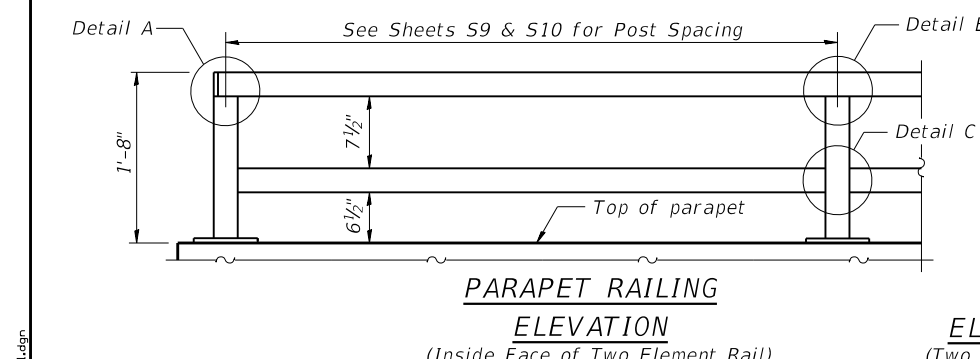
BICYCLE RAILING



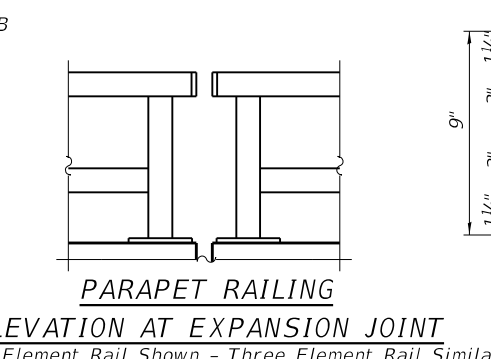
BICYCLE RAILING
* See sheets S9 & S10



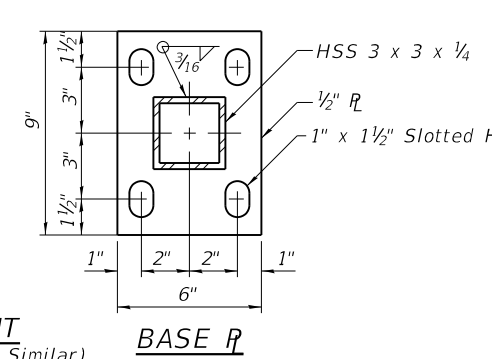
All post, railing, splices, anchor devices, and bent plates shall be vinyl coated. The color of the coat shall be black.



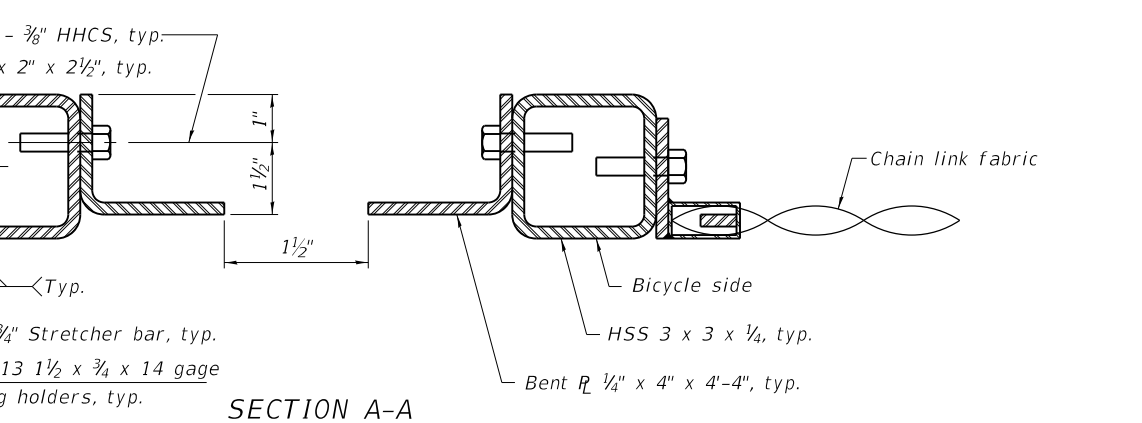
PARAPET RAILING
ELEVATION
(Inside Face of Two Element Rail)



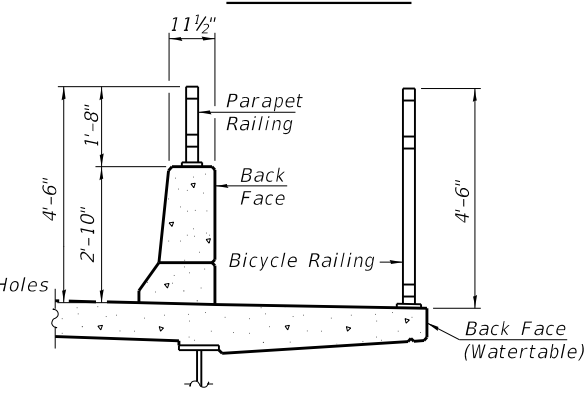
PARAPET RAILING
ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)



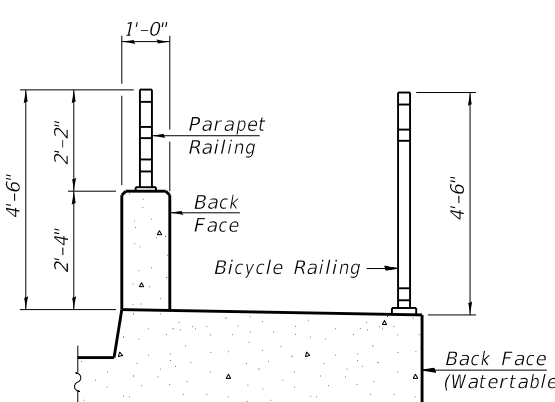
BASE R



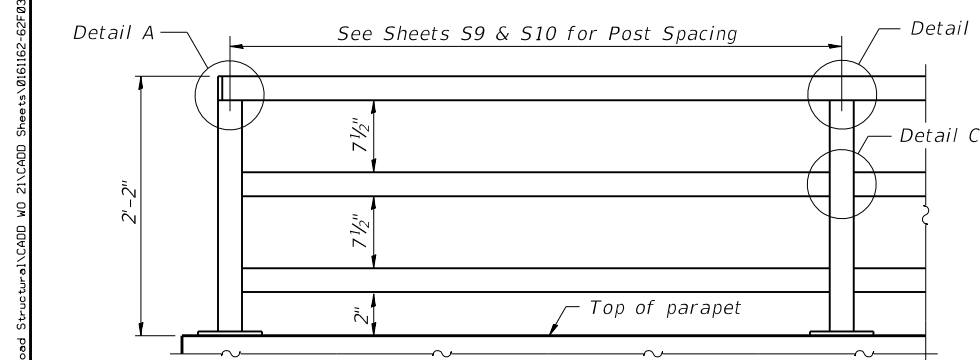
SECTION A-A



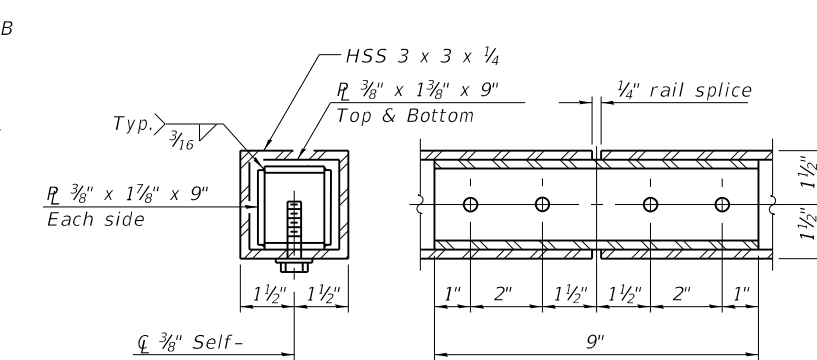
SECTION THRU DECK



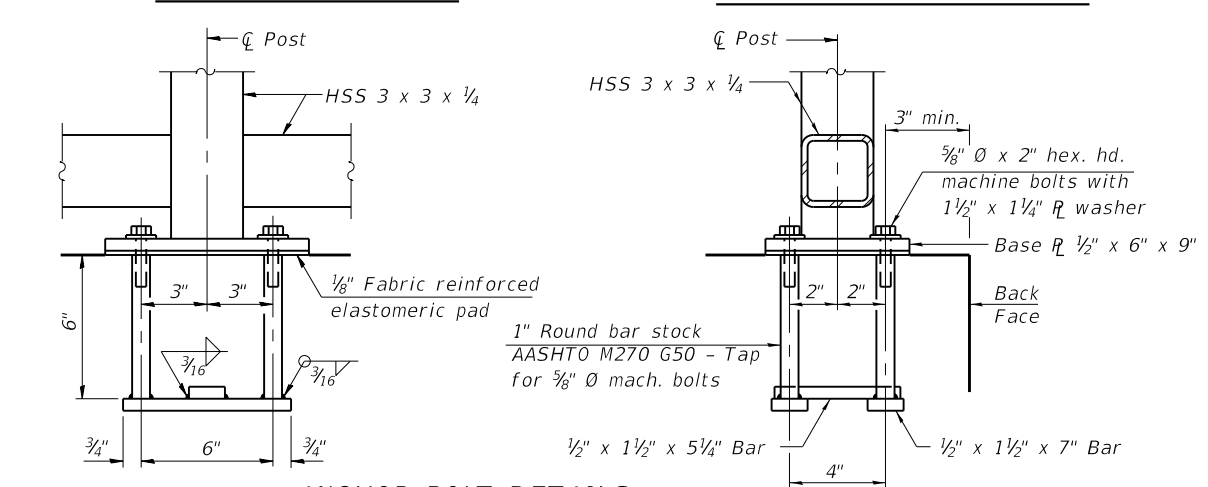
SECTION THRU SIDEWALK



PARAPET RAILING
ELEVATION
(Inside Face of Three Element Rail)



RAIL SPLICE



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing	Foot	239
Parapet Railing	Foot	239

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
CVN testing may be omitted for the Bicycle Railing.

R-29 8-11-2017 (10'-0" Maximum Post Spacing)

COLLINS ENGINEERS
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PLOT DATE = 10/19/2018	DRAWN - DR	REVISED -
	CHECKED - AMS	REVISED -

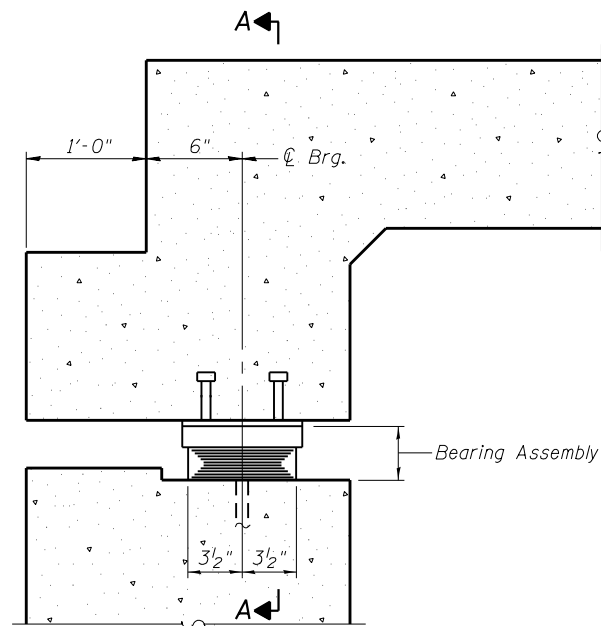
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING
STRUCTURE NO. 016-1162

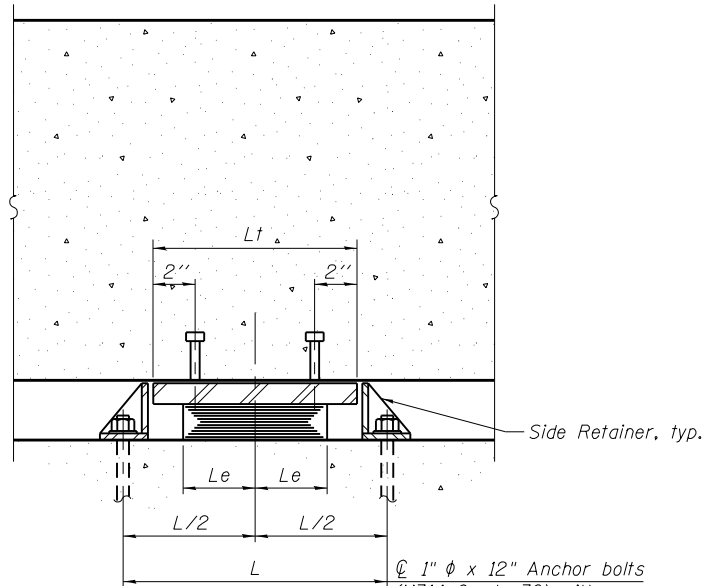
F.A.U. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	43
CONTRACT NO. 62F03				

SHEET NO. S12 OF S18 SHEETS

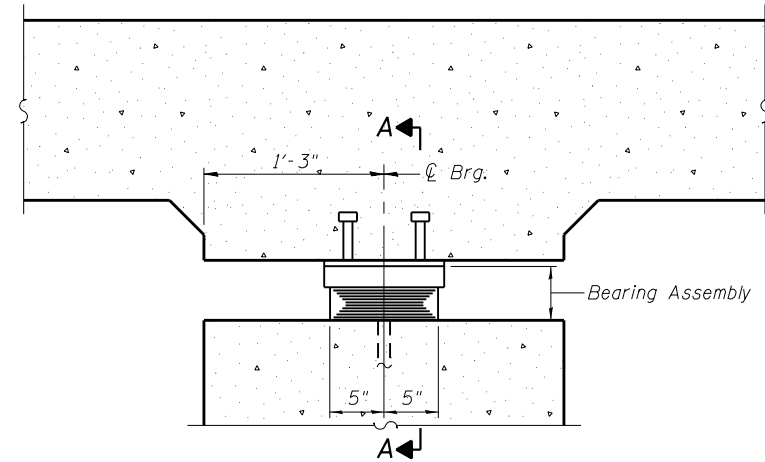
ILLINOIS FED. AID PROJECT



ELEVATION AT ABUT.

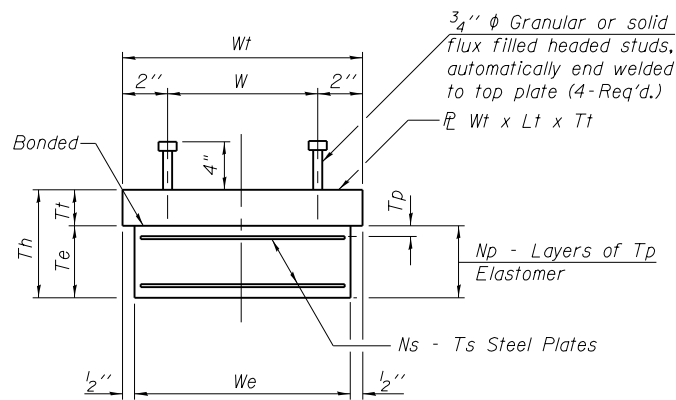


SECTION A-A



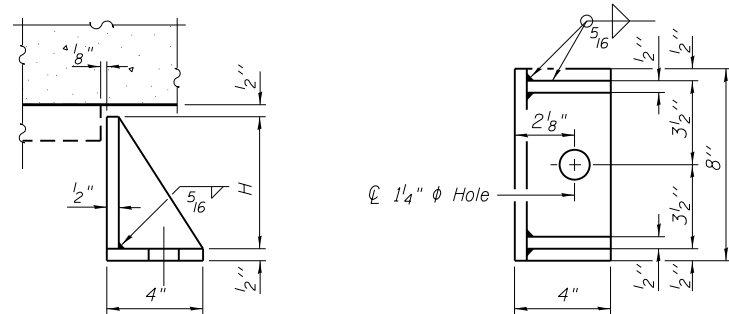
ELEVATION AT PIER 1

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.

Location	We	Le	Te	Tt	Th	Wt	Lt	W	Np	Tp	Ns	Ts	L	H
West Abutment	7"	6"	1 3/4"	1 3/4"	3 1/2"	8"	14"	4"	4	3/8"	3	3/32"	18 1/2"	2 1/2"
Pier 1	10"	7"	2 1/16"	2 1/8"	4 15/16"	11"	16"	7"	5	1/16"	4	1/8"	20 1/2"	3 13/16"
East Abutment	7"	6"	1 5/16"	1 3/4"	3 1/16"	8"	14"	4"	3	3/8"	2	3/32"	18 1/2"	2 1/16"

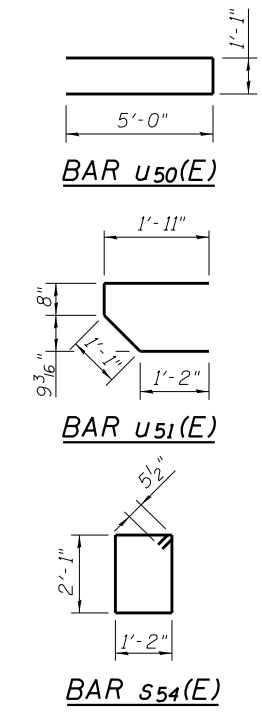
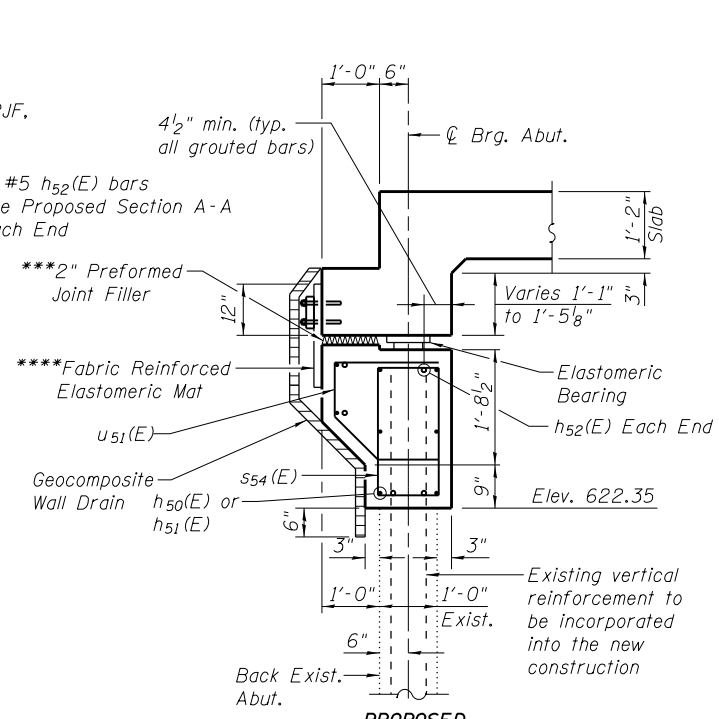
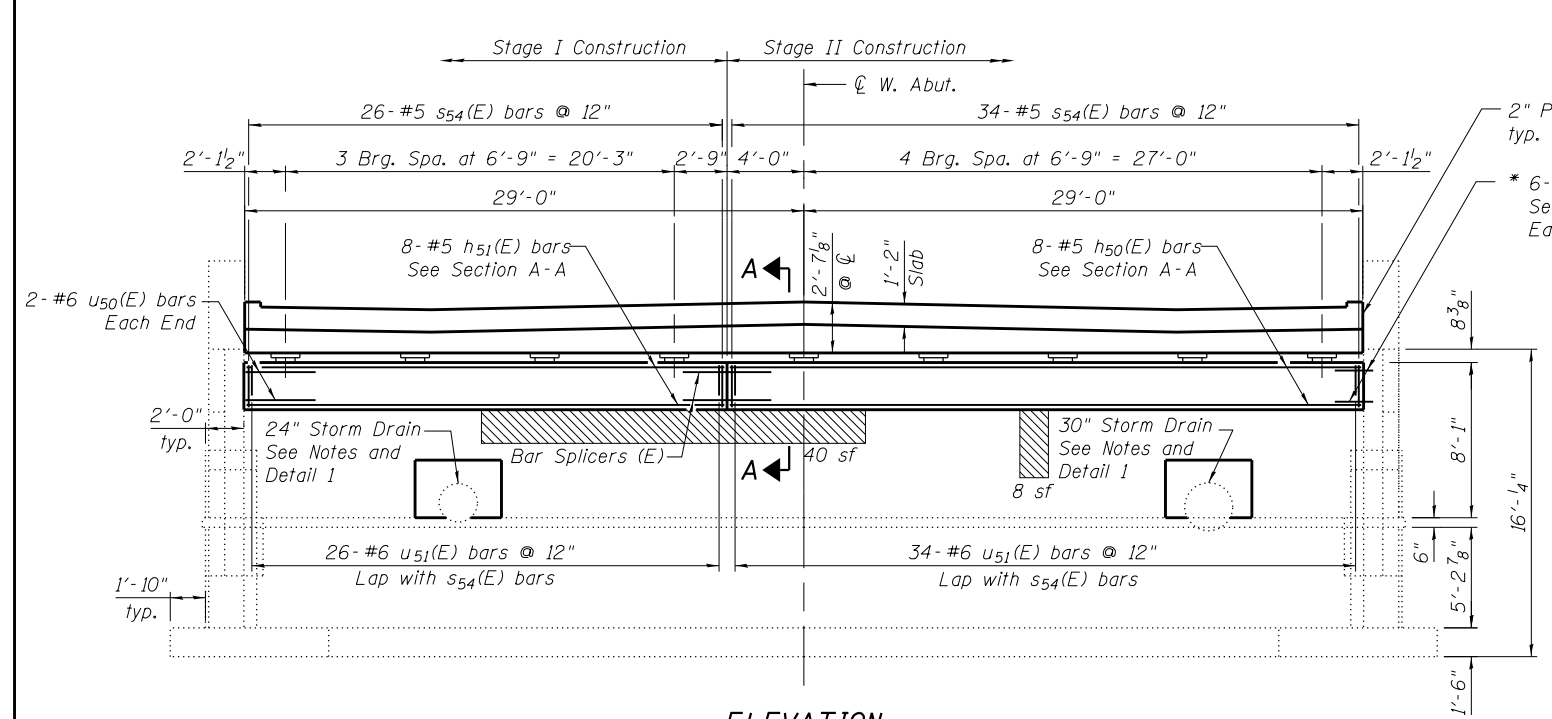
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	27
Anchor Bolts, 1"	Each	54

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**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d55(E)	22	#5	1'-11"	L
h50(E)	8	#5	32'-10"	—
h51(E)	8	#5	24'-10"	—
h52(E)	12	#5	2'-6"	—
h53(E)	6	#5	4'-2"	—
h54(E)	4	#5	3'-4"	—
s54(E)	60	#5	7'-5"	□
u50(E)	4	#6	12'-2"	U
u51(E)	60	#6	4'-10"	U
v51(E)	8	#5	3'-9"	—
Reinforcement Bars, Epoxy Coated			Pound	1,600
Concrete Structures			Cu. Yd.	10.2
Concrete Removal			Cu. Yd.	11.0
Structure Excavation			Cu. Yd.	47.9
Geocomposite Wall Drain			Sq. Yd.	35
Structural Repair of Concrete (Depth ≤ 5")			Sq. Ft.	48
Granular Backfill for Structures			Cu. Yd.	46.3



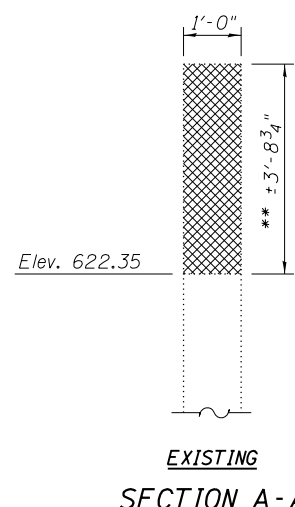
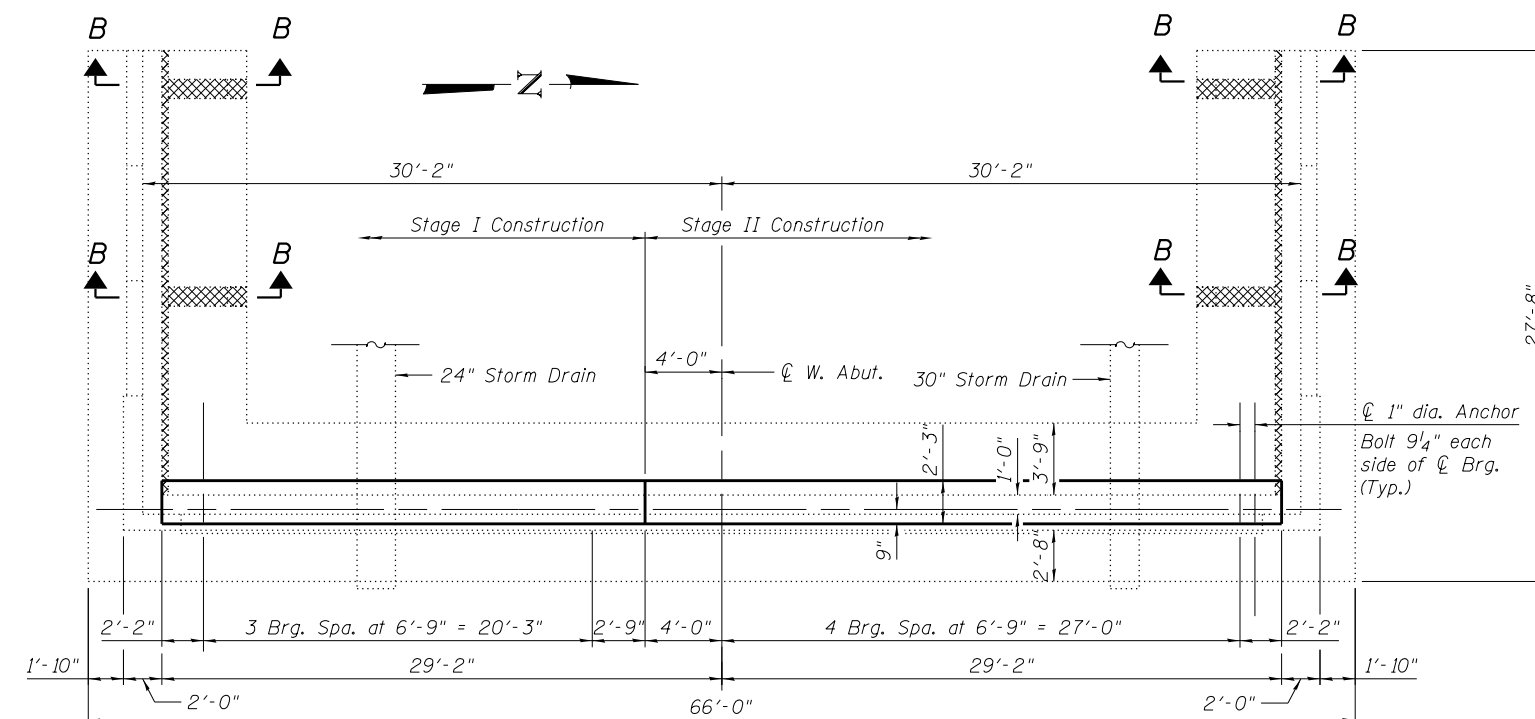
ELEVATION

PROPOSED

BAR u50(E)

BAR u51(E)

BAR s54(E)



BAR d55(E)

SECTION B-B

SECTION C-C

SECTION D-D

WINGWALL MODIFICATION

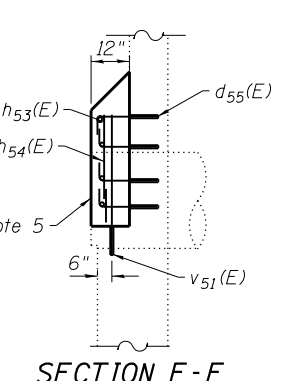
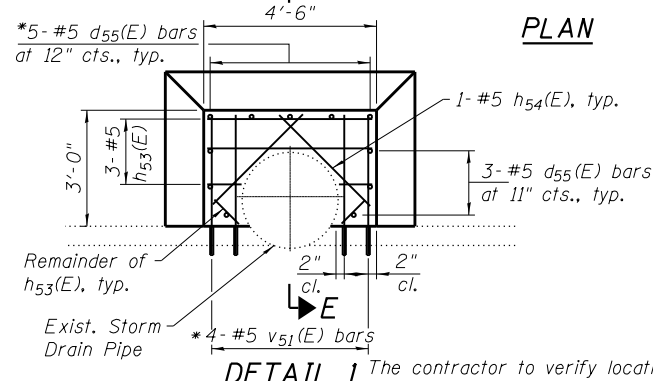
Notes:

- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- See sheet S3 of S18 for Structure Excavation and Temporary Sheet Piling Detail.
- See sheet S13 of S18 for Bearing Details.
- Existing storm drain outlets to be encased in concrete box, the flap gate to be removed and replaced with a duckbill valve bolted to the new concrete. Cost included with concrete structures. See drainage plans for details.
- Repair areas are estimated based on inspection completed in 2011, actual repair areas and locations shall be determined by the Engineer and shown on as-built plans.

Legend:

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Concrete Removal

- * Drill and epoxy grout bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.
- ** Estimated removal height. The quantity for Concrete includes an additional 10% to account for the possibility of additional removal height.
- *** 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the abutment cap with suitable adhesive as recommended by supplier. Cost included with Concrete Structures.
- **** Fabric reinforced elastomeric mat according to section 1028 of the Standard Specifications. Fabric mat shall be 24" wide and attached full width and vertically at edges to the abutment cap with a 3/8"x5" steel plate and 1/2" dia. studs with nuts and washers at 12" cts. Cost included with Concrete Superstructure.



DETAIL 1 The contractor to verify location of rebars to avoid conflict with valve bolts.

SECTION E-E

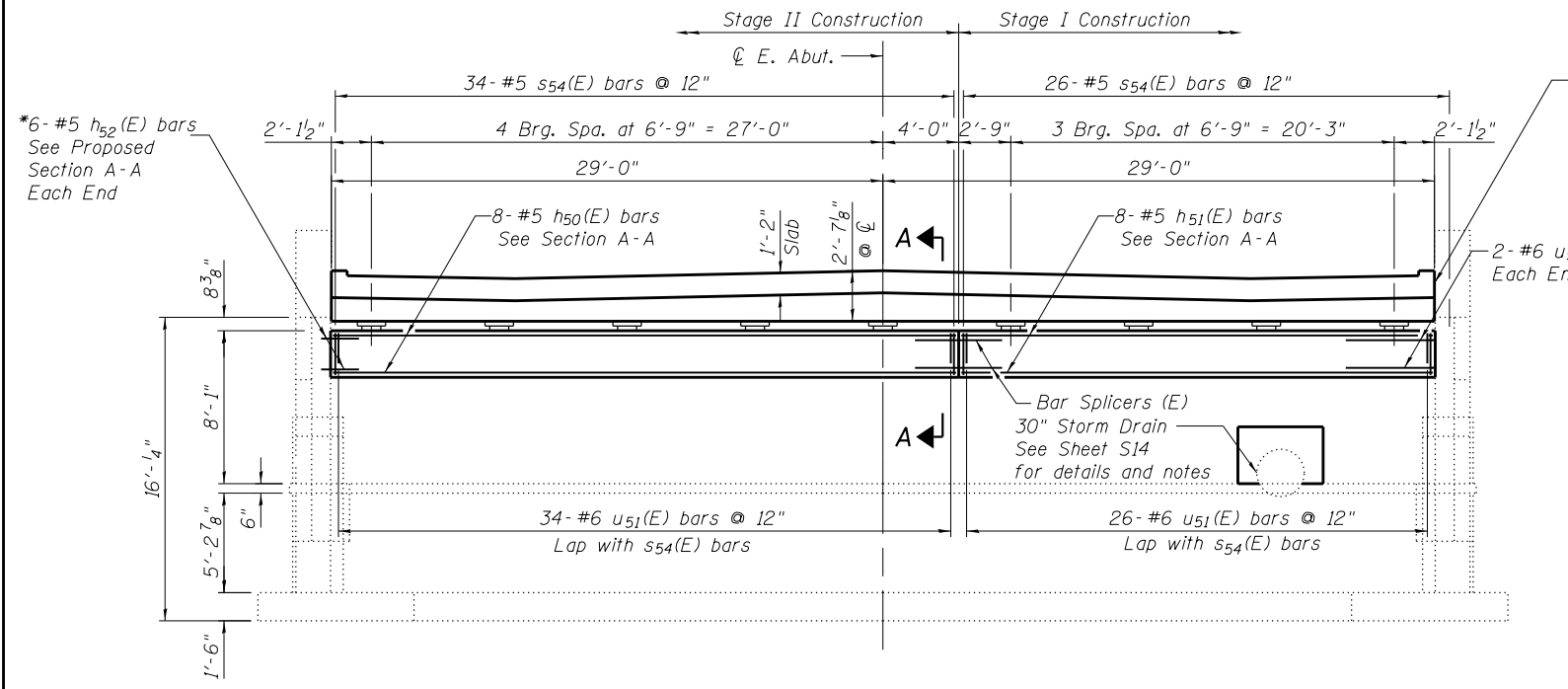
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PLLOT DATE = 11/12/2018	DRAWN - DR	REVISED -
	CHECKED - AMS	REVISED -

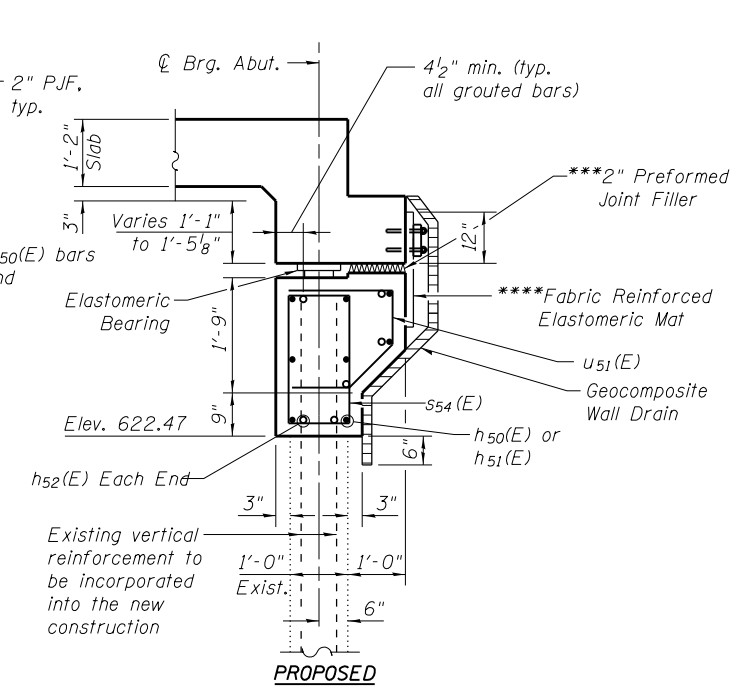
F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	46
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				

**SUPERSTRUCTURE
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d55(E)	11	#5	1'-11"	L
h50(E)	8	#5	32'-10"	—
h51(E)	8	#5	24'-10"	—
h52(E)	12	#5	2'-6"	—
h53(E)	3	#5	4'-2"	—
h54(E)	2	#5	3'-4"	—
s54(E)	60	#5	7'-5"	□
u50(E)	4	#6	12'-2"	U
u51(E)	60	#6	4'-10"	U
v51(E)	4	#5	3'-9"	—
Reinforcement Bars, Epoxy Coated			Pound	1,540
Concrete Structures			Cu. Yd.	10.4
Concrete Removal			Cu. Yd.	9.7
Geocomposite Wall Drain			Sq. Yd.	35
Structure Excavation			Cu. Yd.	40.4
Granular Backfill for Structures			Cu. Yd.	46.3



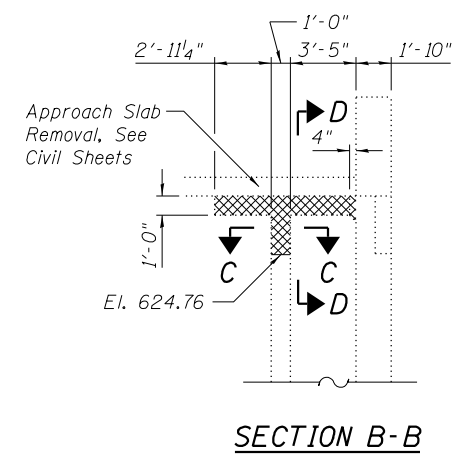
ELEVATION



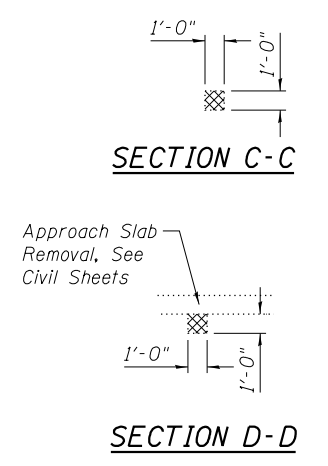
PROPOSED



EXISTING SECTION A-A



SECTION B-B



SECTION C-C

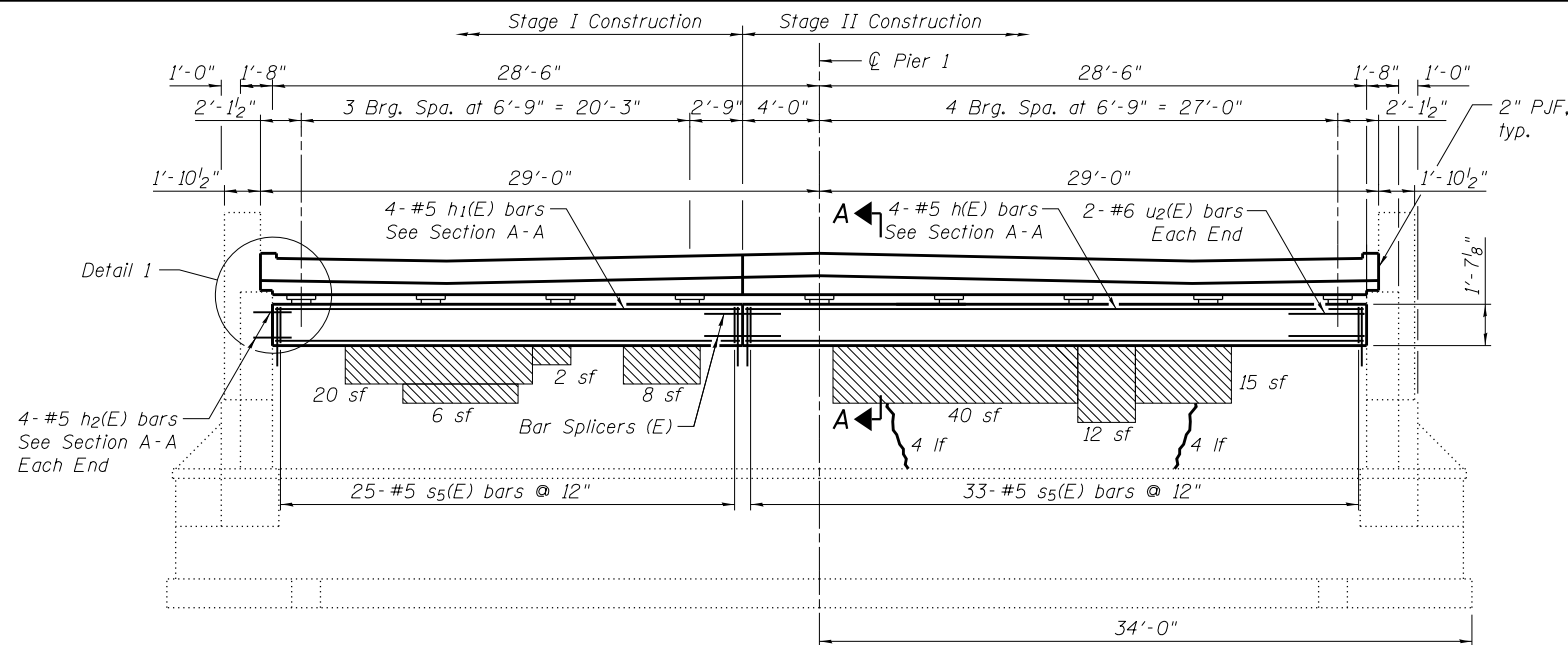
SECTION D-D

WINGWALL MODIFICATION

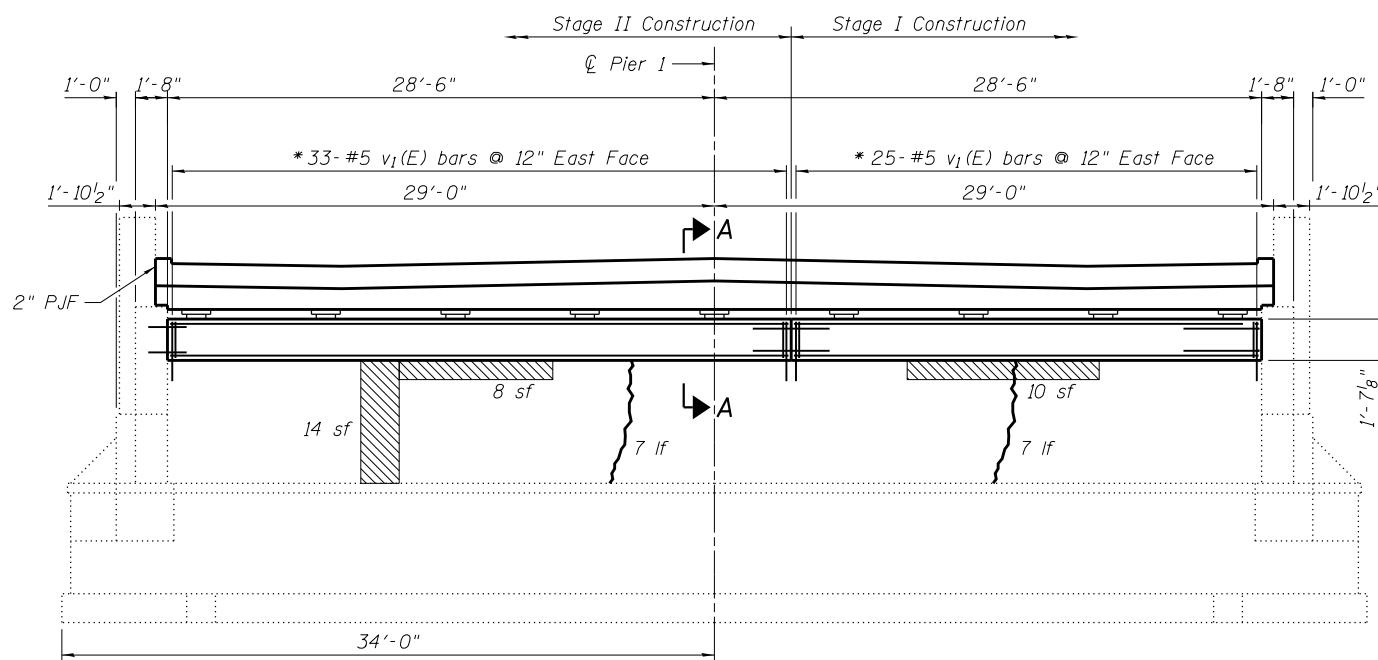
Notes:
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 See sheet S3 of S18 for Structure Excavation and Temporary Sheet Piling Detail.
 See sheet S13 of S18 for Bearing Details.
 Repair areas are estimated based on inspection completed in 2011, actual repair areas and locations shall be determined by the Engineer and shown on as-built plans.

Legend:
 Concrete Removal

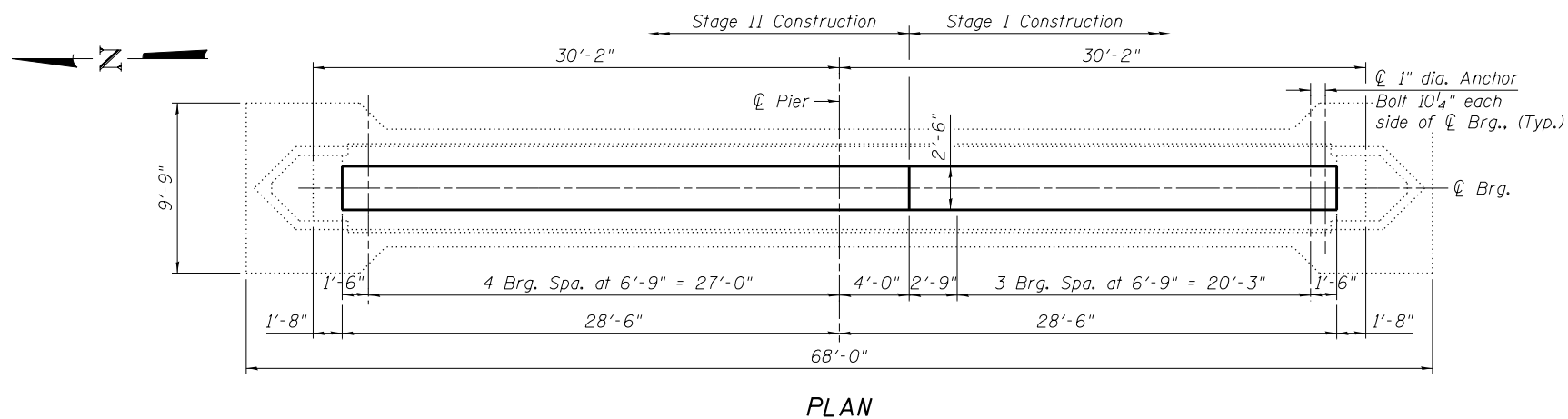
- * Drill and grout epoxy bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.
- ** Estimated removal height. The quantity for Concrete includes an additional 10% to account for the possibility of additional removal height.
- *** 2" P.J.F. (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to the abutment cap with suitable adhesive as recommended by supplier. Cost included with Concrete Structures.
- **** Fabric reinforced elastomeric mat according to section 1028 of the Standard Specifications. Fabric mat shall be 24" wide and attached full width and vertically at edges to the abutment cap with a 3/8"x5" steel plate and 1/2" dia. studs with nuts and washers at 12" cts. Cost included with Concrete Superstructure.



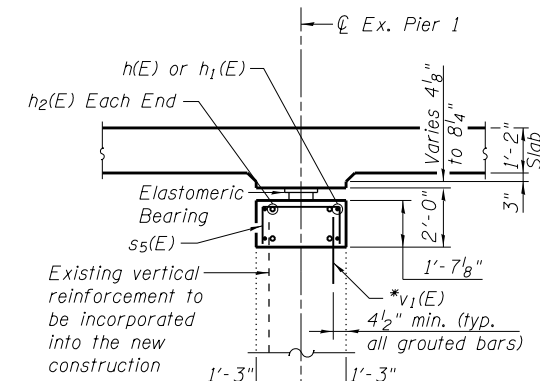
WEST FACE ELEVATION



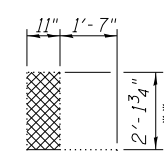
EAST FACE ELEVATION



PLAN

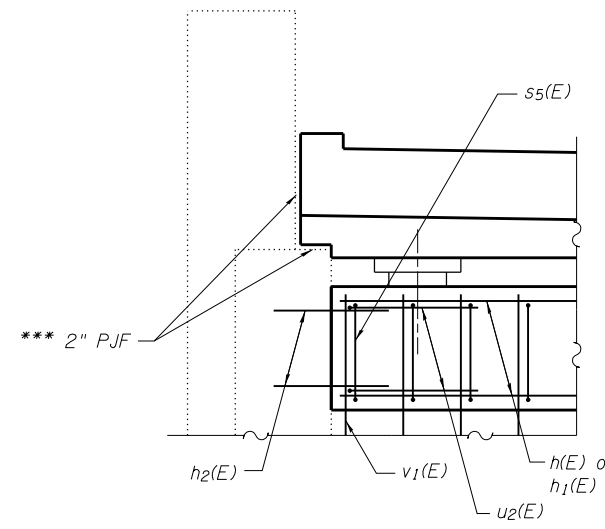


PROPOSED



EXISTING

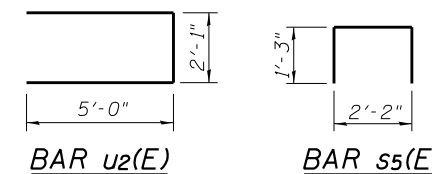
SECTION A-A



DETAIL 1

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
h(E)	4	#5	32'-2"	—	
h1(E)	4	#5	24'-2"	—	
h2(E)	8	#5	2'-6"	—	
s5(E)	58	#5	4'-8"	□	
u2(E)	4	#6	12'-1"	□	
v1(E)	58	#5	2'-2"	—	
Concrete Structures				Cu. Yd.	8.5
Concrete Removal				Cu. Yd.	4.6
Epoxy Crack Injections				Foot	22
Structural Repair of Concrete (Depth ≤ 5")				Sq. Ft.	135
Reinforcement Bars, Epoxy Coated				Pound	740



* Drill and epoxy grout bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

** Minimum removal height. Remove to a minimum elev. of 624.22. The quantity for Concrete includes an additional 10% to account for the possibility of additional removal height.

*** 2" P.J.F. (per Article 1051.09 of the Standard Specifications) full width at edges bonded to the stone parapet with suitable adhesive as recommended by supplier. Cost included with Concrete Structures.

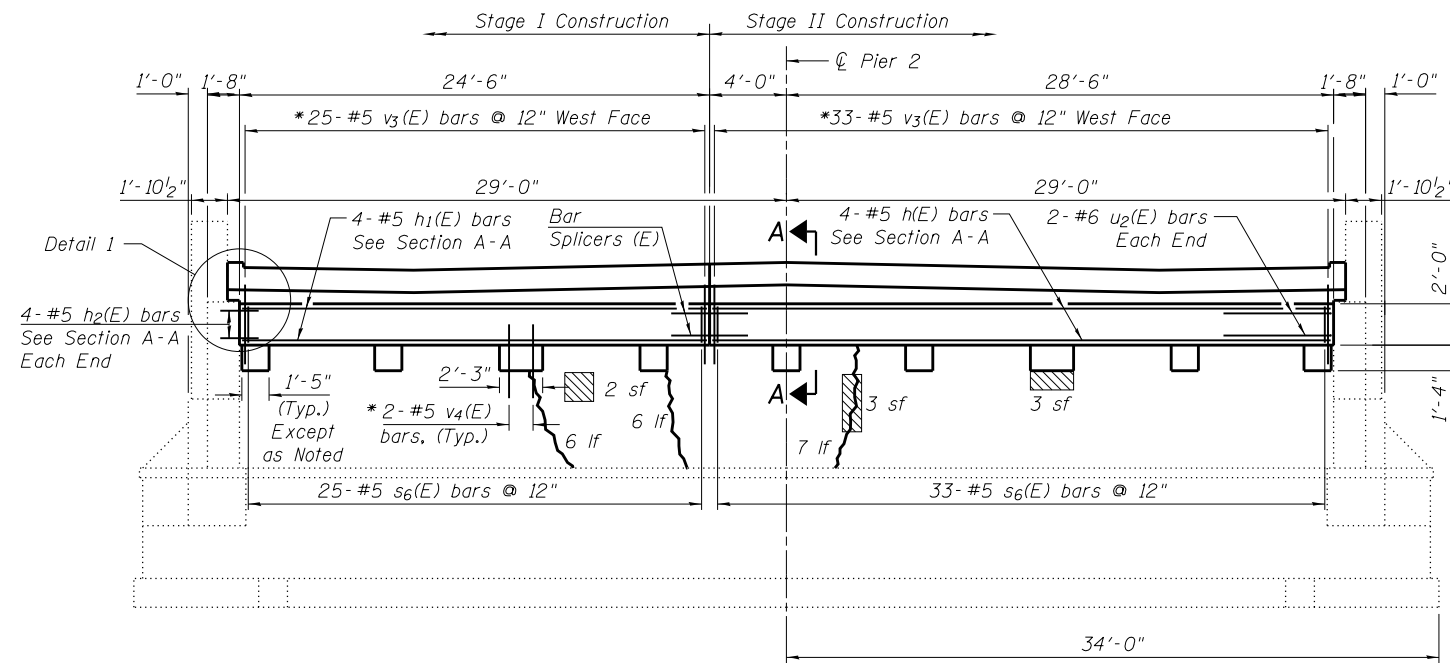
- Legend:**
- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
 - Concrete Removal
 - Epoxy Crack Injection

Notes:
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
See sheet S13 of S18 for Bearing Details.
Repair areas are estimated based on inspection completed in 2011, actual repair areas and locations shall be determined by the Engineer and shown on as-built plans.

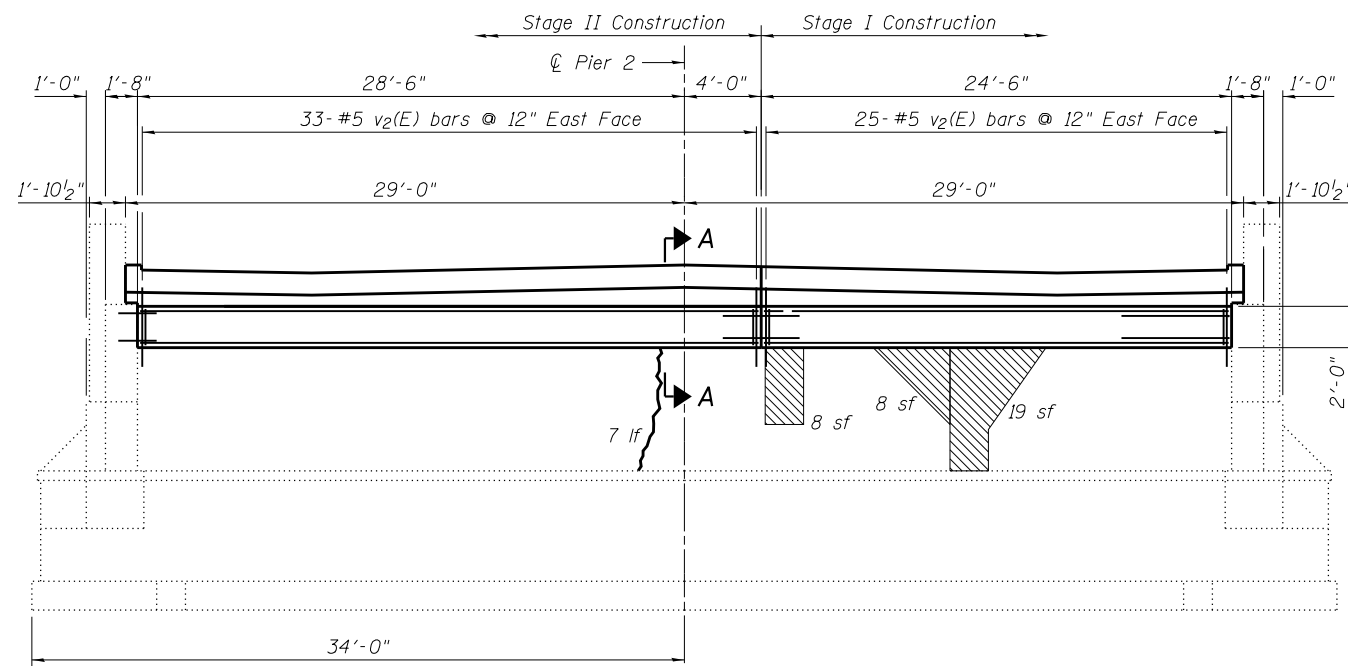
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PLOT DATE = 11/12/2018	DRAWN - DR	REVISED -
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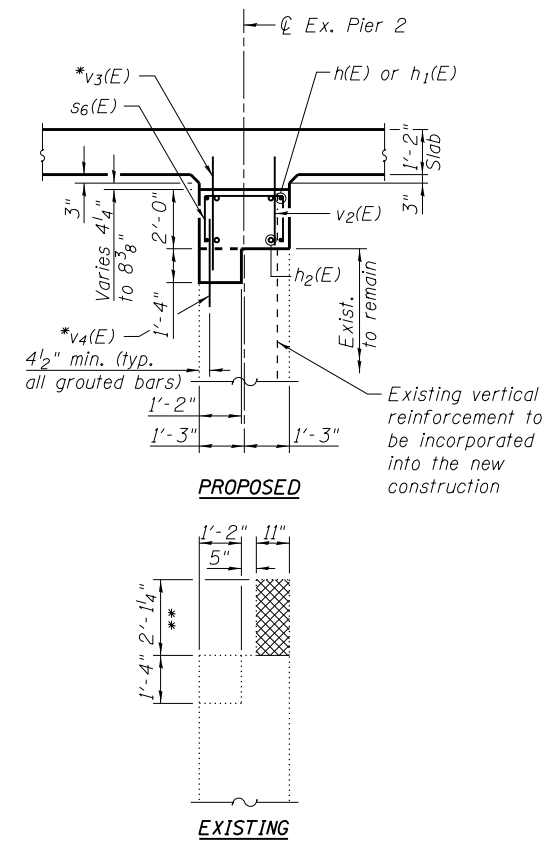
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	47
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				



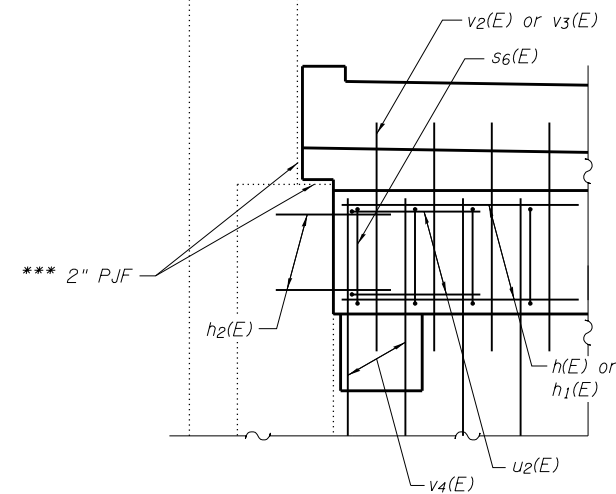
WEST FACE ELEVATION



EAST FACE ELEVATION



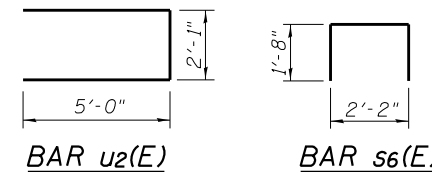
SECTION A-A



DETAIL 1

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#5	32'-2"	—
h1(E)	4	#5	24'-2"	—
h2(E)	8	#5	2'-6"	—
s6(E)	58	#5	5'-6"	□
u2(E)	4	#6	12'-1"	⊏
v2(E)	58	#5	3'-0"	—
v3(E)	58	#5	3'-9"	—
v4(E)	18	#5	3'-1"	—
Concrete Structures			Cu. Yd.	11.4
Concrete Removal			Cu. Yd.	4.5
Epoxy Crack Injections			Foot	26
Structural Repair of Concrete (Depth ≤ 5")			Sq. Ft.	43
Reinforcement Bars, Epoxy Coated			Pound	1,130



BAR u2(E)

BAR s6(E)

* Drill and epoxy grout bars 9" into existing structure according to Article 584 of the Standard Specifications. Cost included with Reinforcement Bars, Epoxy Coated.

** Minimum removal height. Remove to a minimum elev. of 624.45. The quantity for Concrete includes an additional 10% to account for the possibility of additional removal height.

*** 2" P.J.F. (per Article 1051.09 of the Standard Specifications) full width at edges bonded to the stone parapet with suitable adhesive as recommended by supplier. Cost included with Concrete Removal.

Legend:

- Structural Repair of Concrete (Depth Equal to or Less than 5 inches)
- Concrete Removal
- Epoxy Crack Injection

NOTES:

- Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- See sheet S13 of S18 for Bearing Details.
- Repair areas are estimated based on inspection completed in 2011, actual repair areas and locations shall be determined by the Engineer and shown on as-built plans.

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11/12/2018
COLLINS ENGINEERS
123 North Wacker Drive
Suite 300
Chicago, IL 60606
(312) 704-9300
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-00993

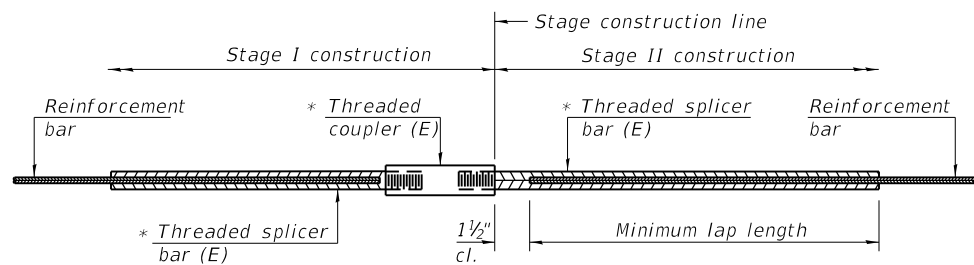
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PLOT SCALE =	CHECKED - EKM	REVISED -
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	CHECKED - AMS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 016-1162

SHEET NO. S17 OF S18 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	48
CONTRACT NO. 62F03				
ILLINOIS FED. AID PROJECT				

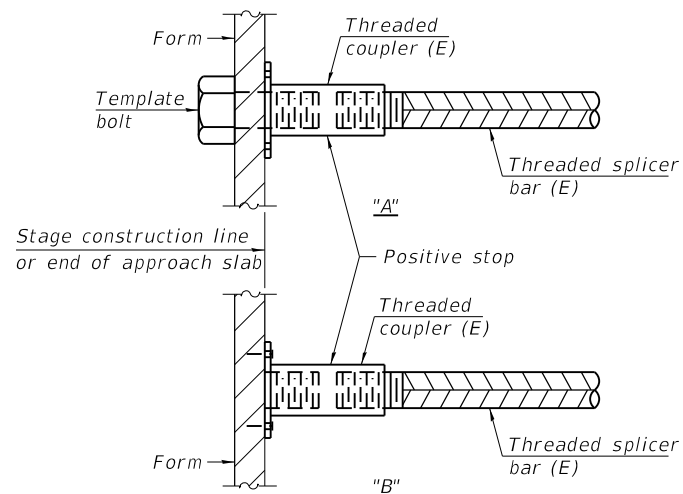


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

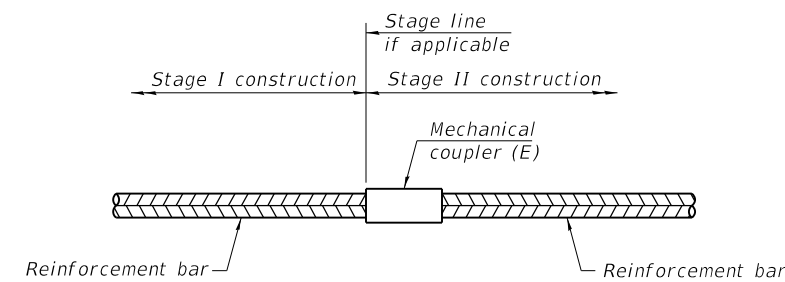
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Approach Top	#5	72	3'-0"
Approach Bottom	#8	94	7'-10"
Approach Footing	#5	80	3'-0"
Slab Top	#9	50	9'-7"
Slab Bottom	#9	67	9'-7"
W. Abut.	#5	8	3'-0"
E. Abut.	#5	8	3'-0"
Pier 1	#5	4	3'-0"
Pier 2	#5	4	3'-0"



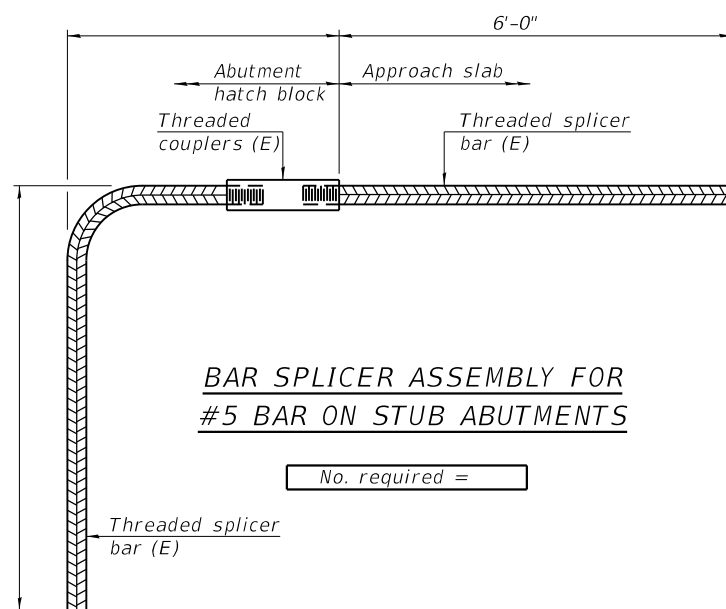
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with Threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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BSD-1

2-17-2017

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USER NAME =	DESIGNED - AMS	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE = 10/19/2018	DRAWN - DR	REVISED -
	CHECKED - AMS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

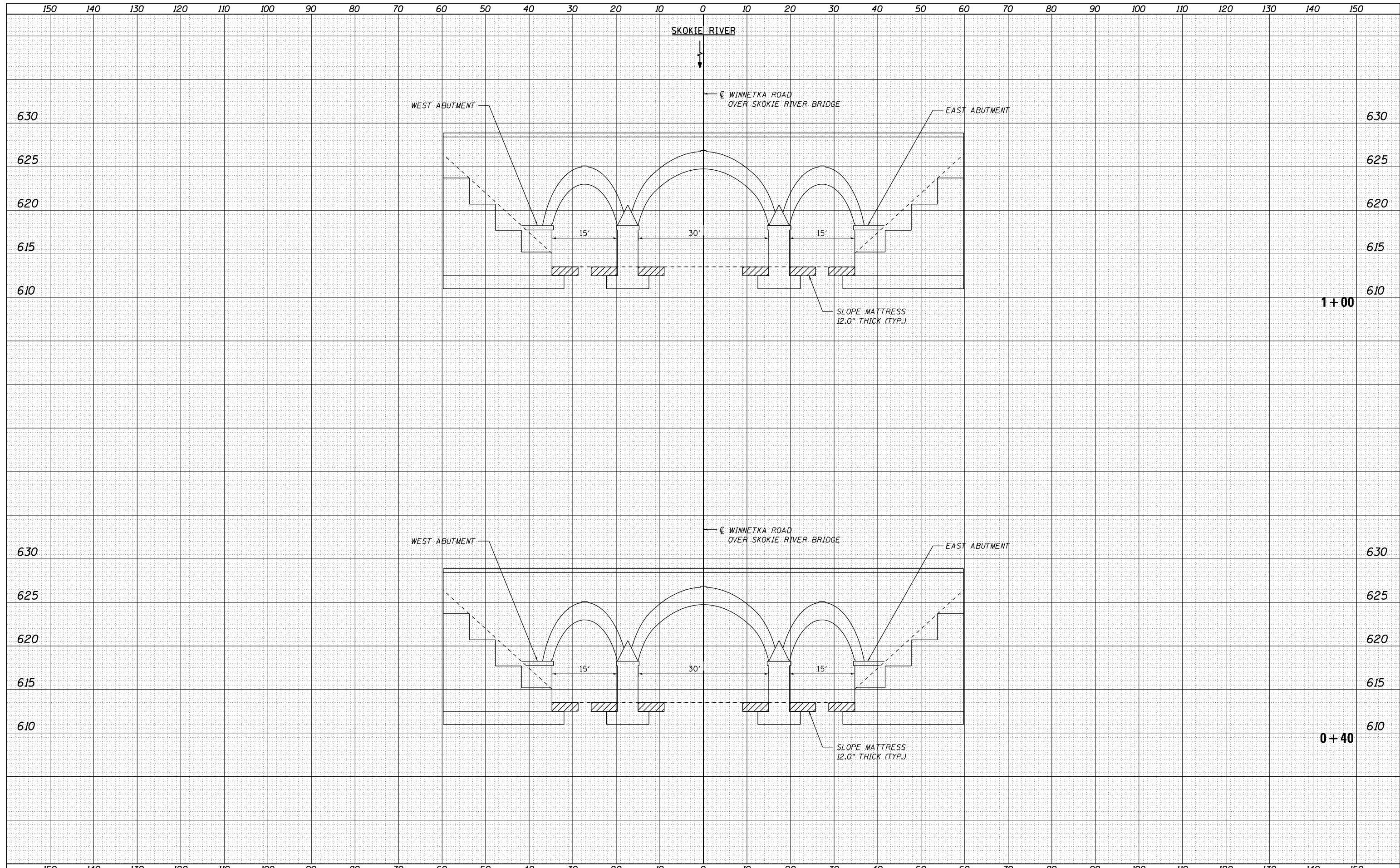
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 016-1162**

SHEET NO. S18 OF S18 SHEETS

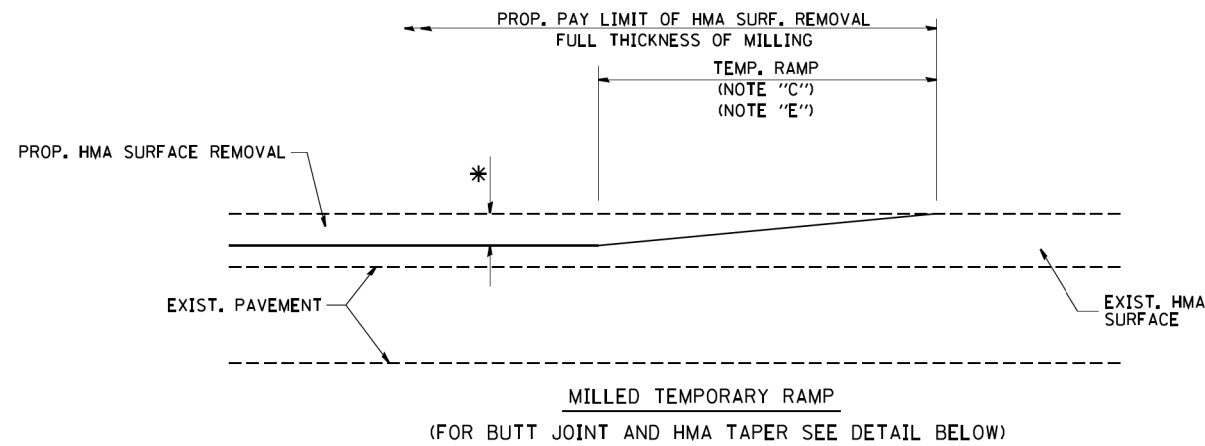
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			CONTRACT NO. 62F03	
ILLINOIS FED. AID PROJECT				

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BY	
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AREAS	
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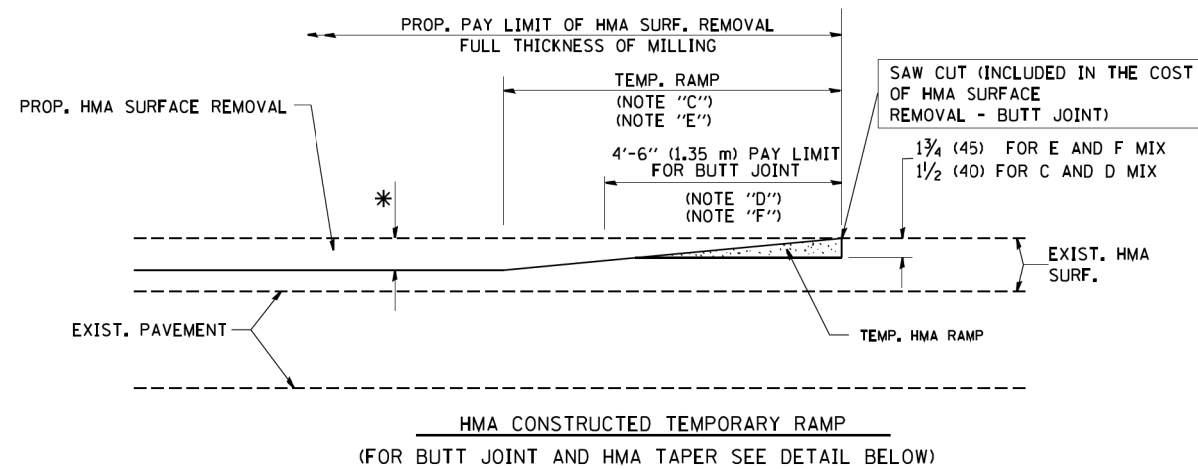
DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
ORIGINAL	
NO.	



FILE NAME =	USER NAME = ztanner	DESIGNED - REM	REVISÉD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS WINNETKA ROAD OVER SKOKIE RIVER			F.A.U. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\10.1.132.10\1\data-1\Poseidon\DOCS\6611\6611.25	- Winnetka Road Civil and Permits\CAAD\CADD\DRAWING\160482-PRH\ssht.dgn	CHECKED - REM	REVISÉD -		1291	2017-005BR	COOK	71	50			
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PLOT DATE = 10/19/2018		REVISÉD -							ILLINOIS FED. AID PROJECT			

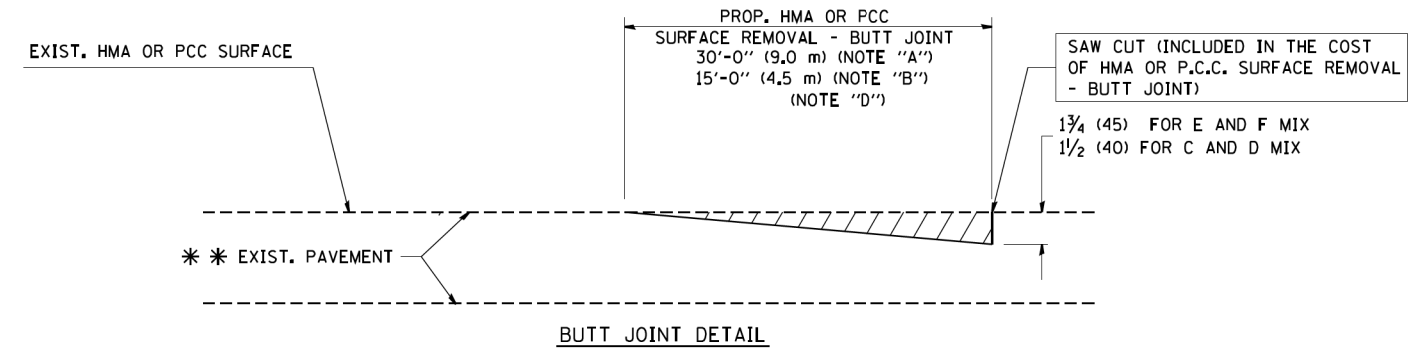


OPTION 1

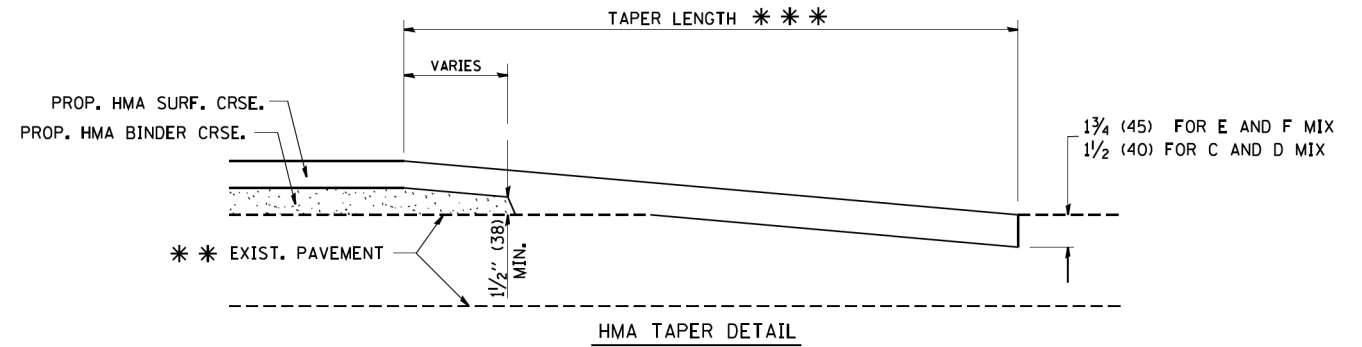


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

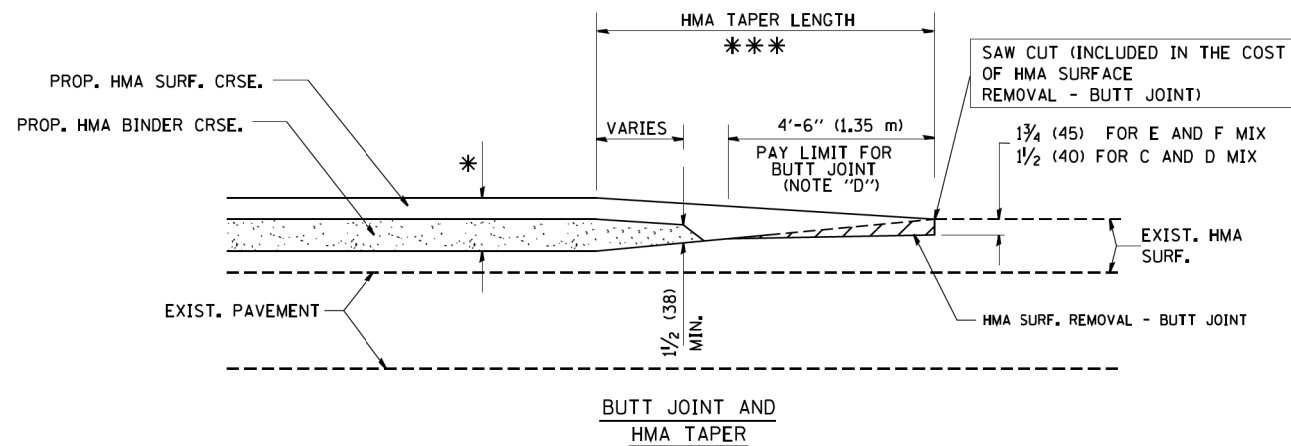
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = W:\distata\22x34\bd32.dgn

USER NAME = gegl1enobt
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PLOT DATE = 1/4/2008

DESIGNED - M. DE YONG
DRAWN -
CHECKED -
DATE - 06-13-90

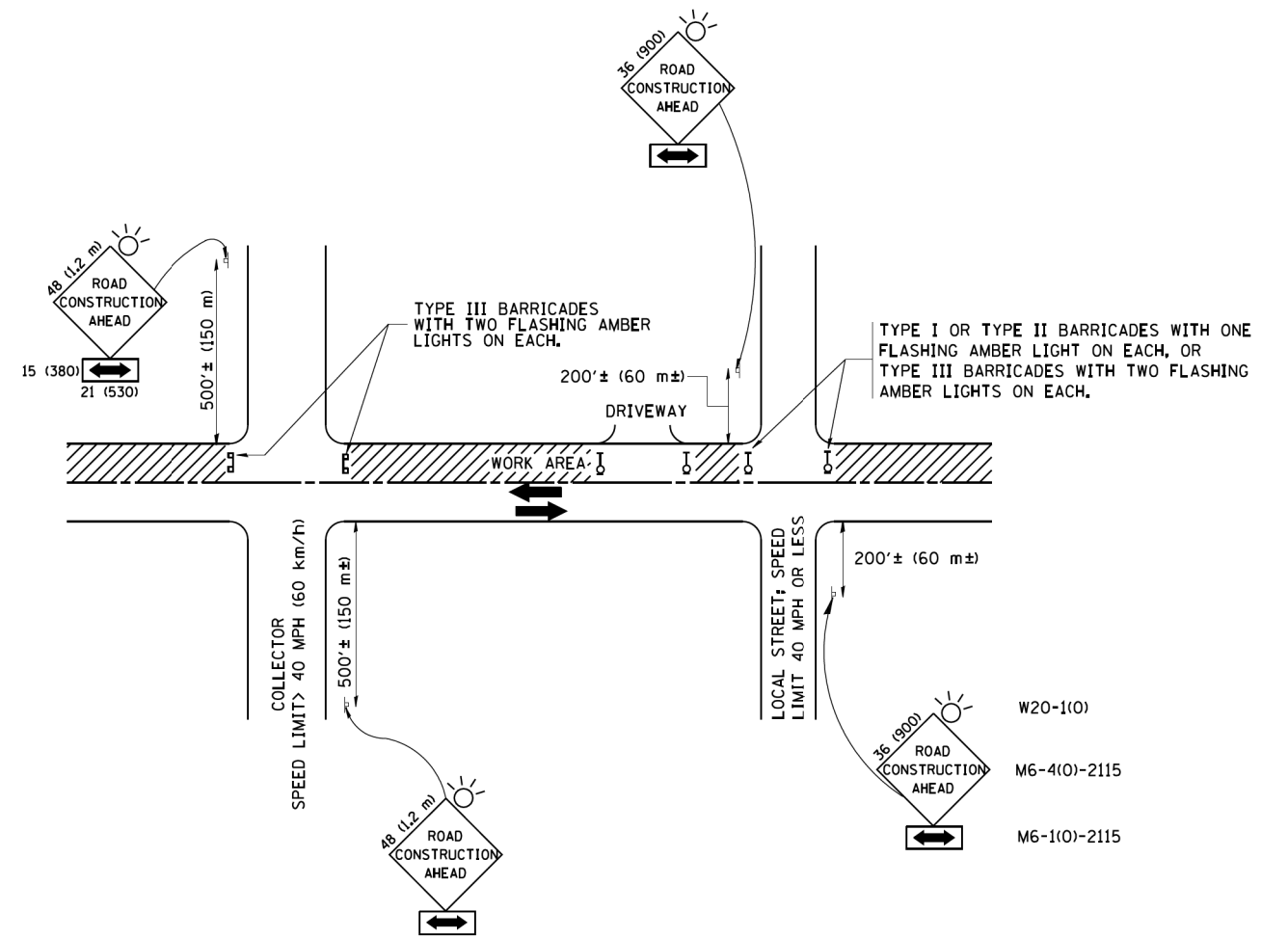
REVISED - R. SHAH 10-25-94
REVISED - A. ABBAS 03-21-97
REVISED - M. GOMEZ 04-06-01
REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	51
BD400-05 BD32			CONTRACT NO. 62F03	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) 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.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) 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.

3. 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.

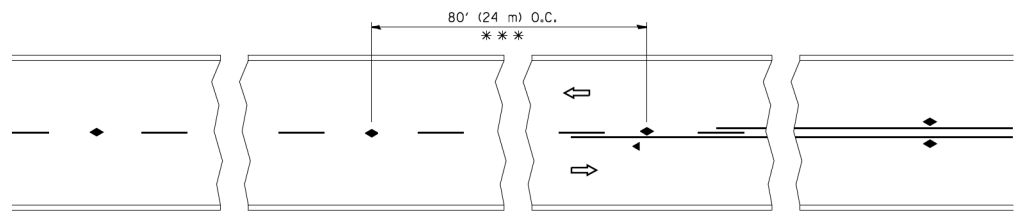
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	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

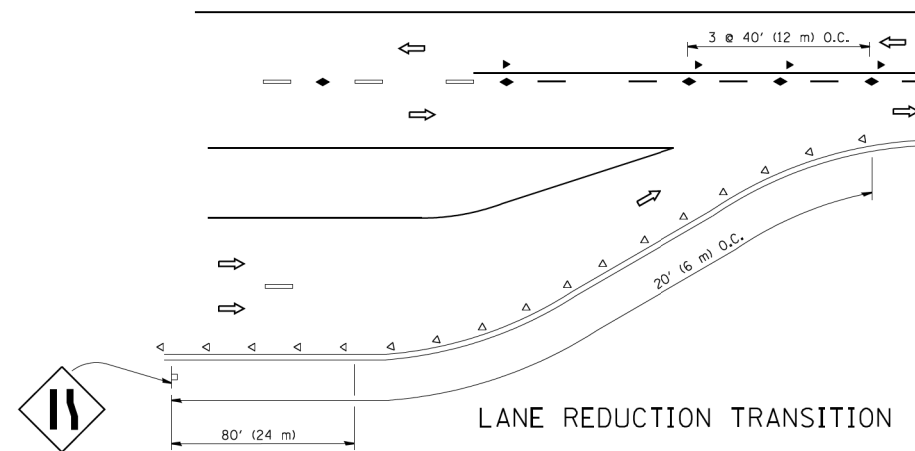
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 62F03	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

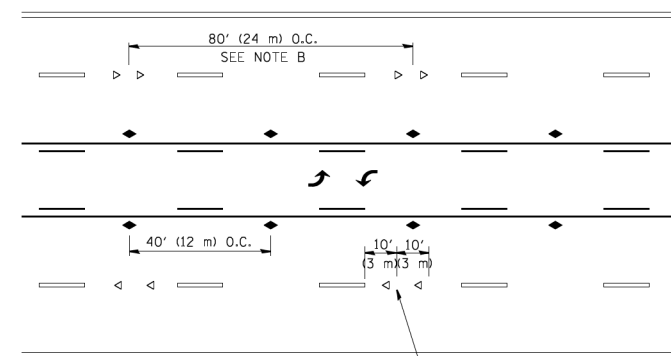


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

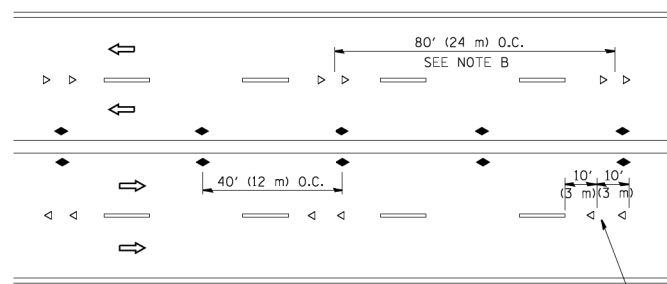
TWO-LANE/TWO-WAY



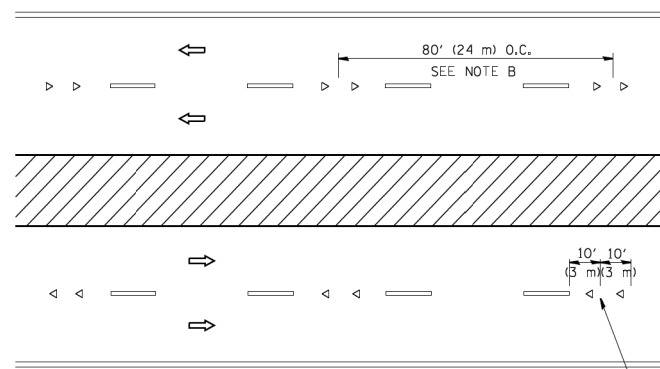
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

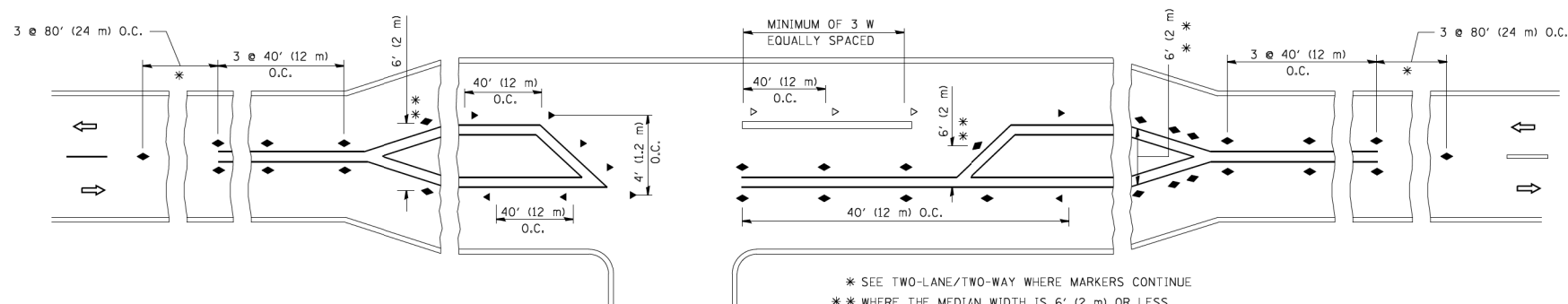
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

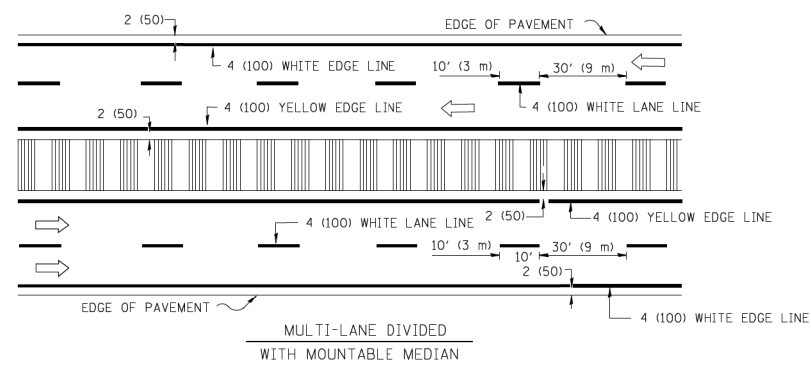
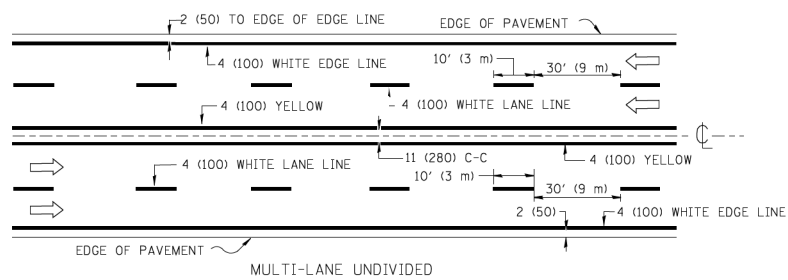
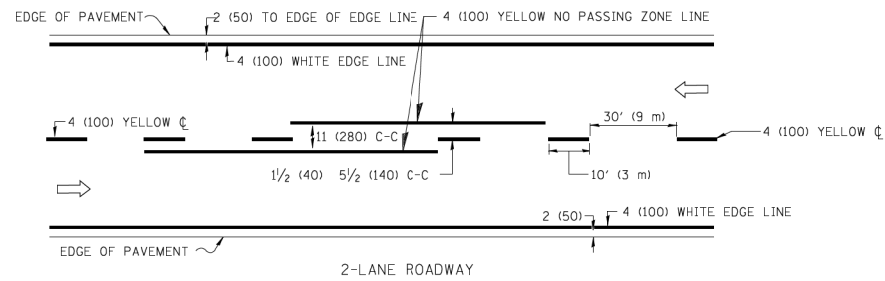


LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

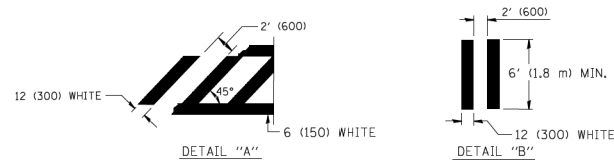
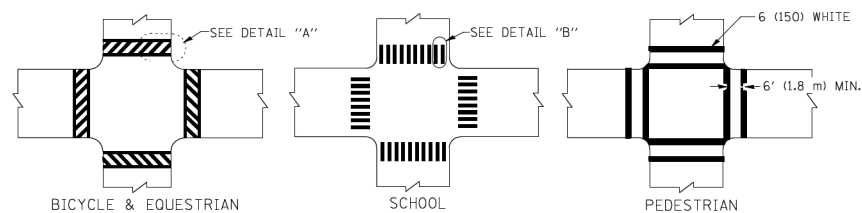
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = lveys	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pki\work\pki\dot\lveys\d0108315\tcl1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99					1291	2017-005BR	COOK	56	53
		PLOT SCALE = 50.000' / IN.	REVISED - T. RAMMACHER 01-06-00		TC-11			CONTRACT NO. 62F03				
		PLOT DATE = 3/2/2011	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

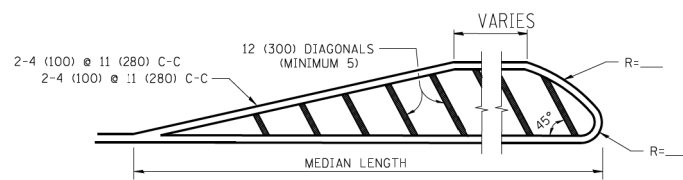
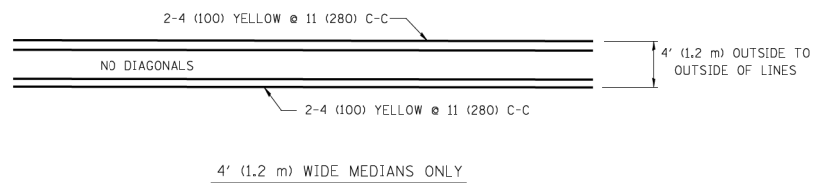


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



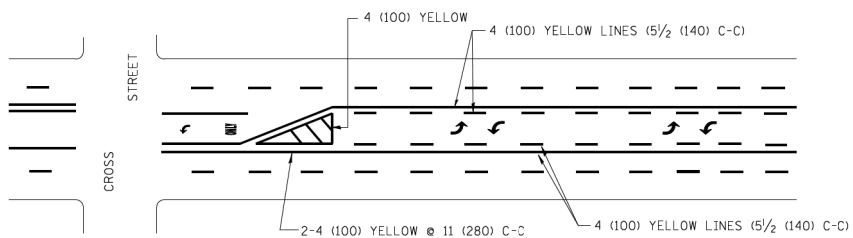
TYPICAL CROSSWALK MARKING



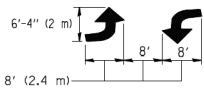
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

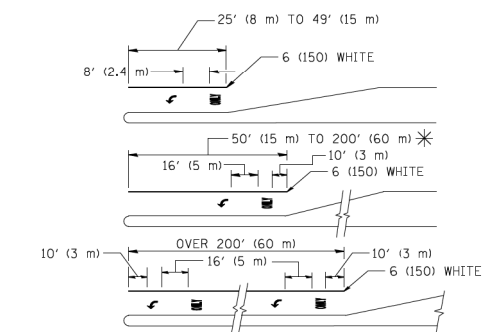


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

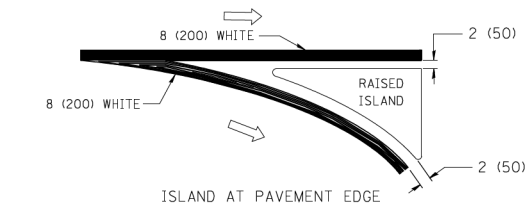
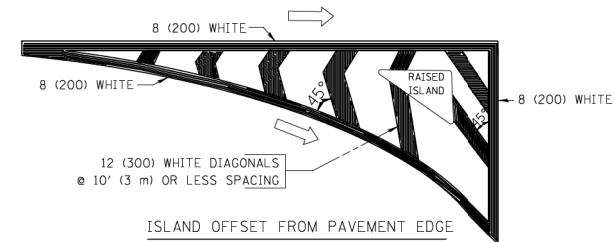


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NO LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

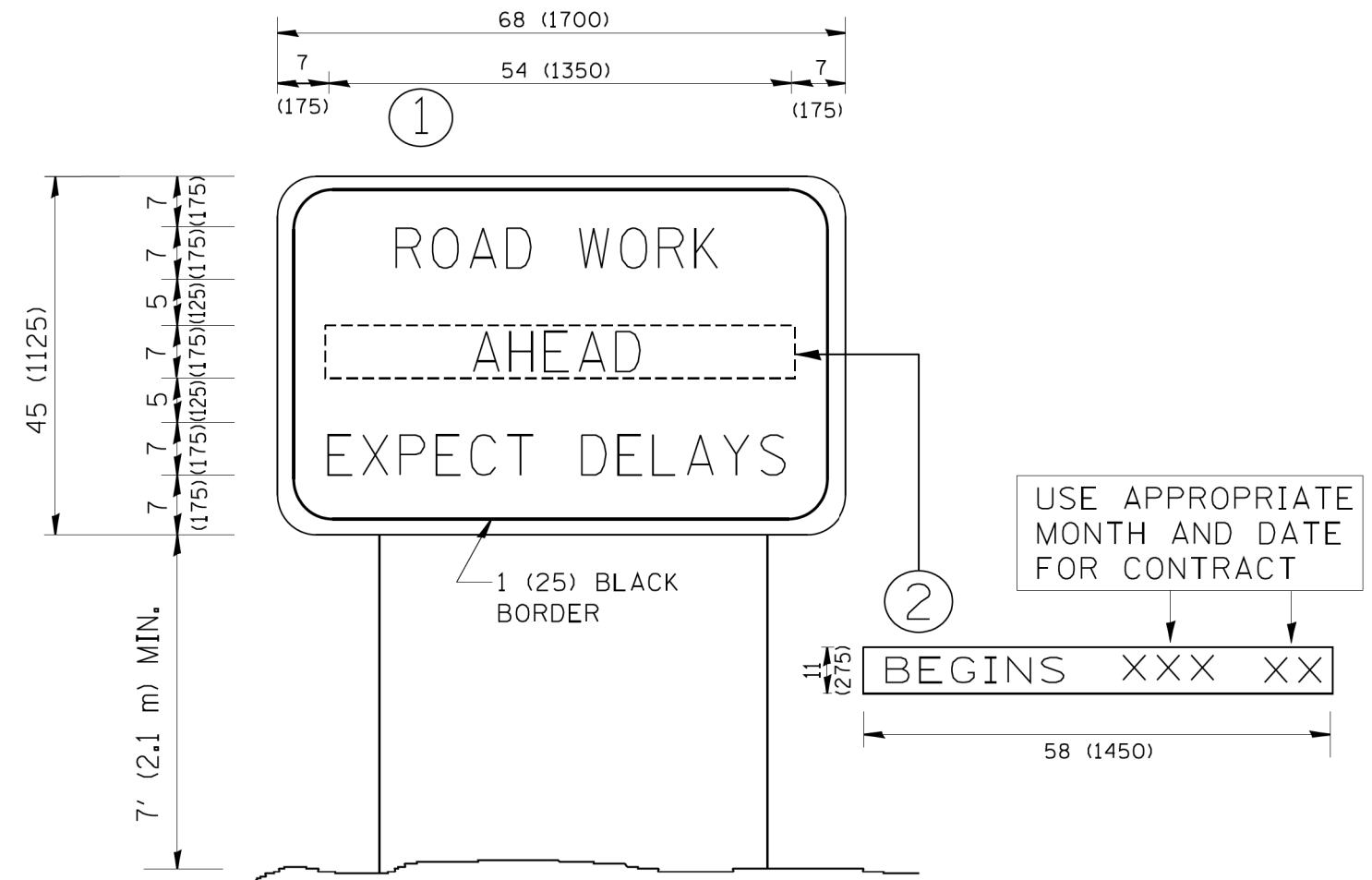
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = c:\p\work\p\dot\drivakosgn\d0108315\td3.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
		DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1291	2017-005BR	COOK	56	54
TC-13		CONTRACT NO. 62F03		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



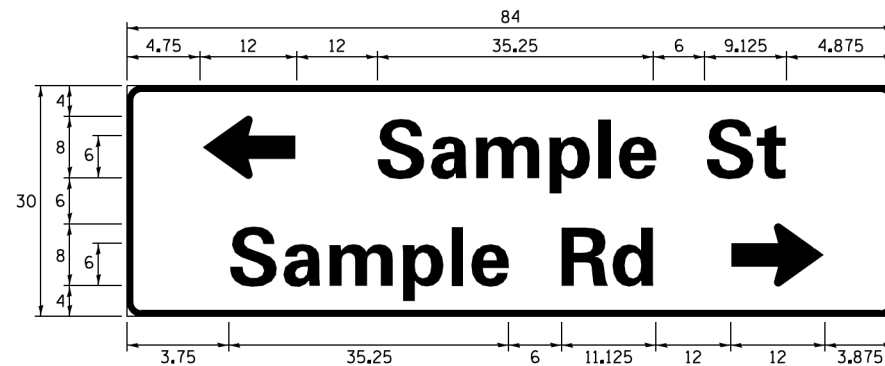
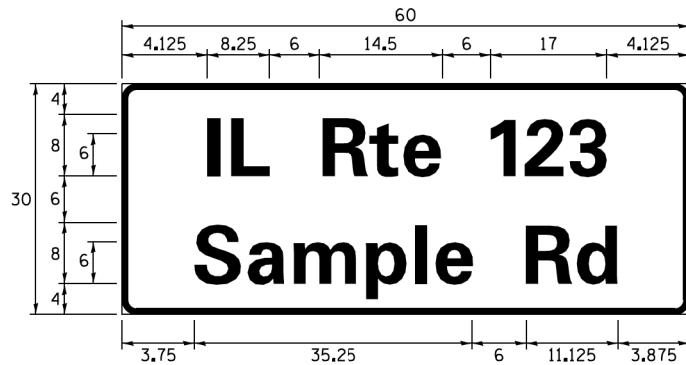
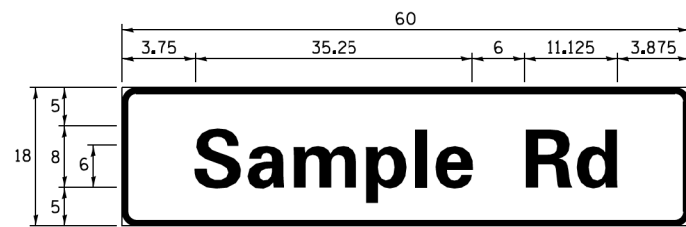
NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl1enobt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97 REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN		F.A.U. RTE. 1291	SECTION 2017-005BR	COUNTY COOK	TOTAL SHEETS 56	SHEET NO. 55	
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	CONTRACT NO. 62F03	
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA

WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

SIGN CHANNEL PART *HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
PART *HPN034 (UNIVERSAL)
BRACKETS CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

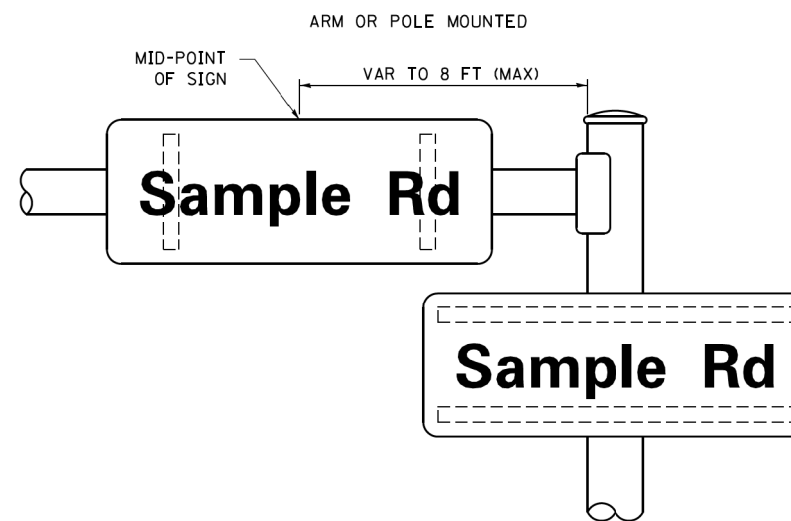
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

MOUNTING LOCATION



SUPPORTING CHANNELS

