

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PROPOSED  
HIGHWAY PLANS

COUNTY HIGHWAY 007: OLD CHICAGO ROAD  
AT FORKED CREEK (0.5 MI N OF MANTENO RD)  
SECTION: CWH 0007 22 BJ  
PROJECT: HBF-4NQA(142)  
BRIDGE DECK OVERLAY, BRIDGE JOINT  
REPLACEMENT AND REPAIRS  
WILL COUNTY

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	1
		ILLINOIS	CONTRACT NO. 62R87	

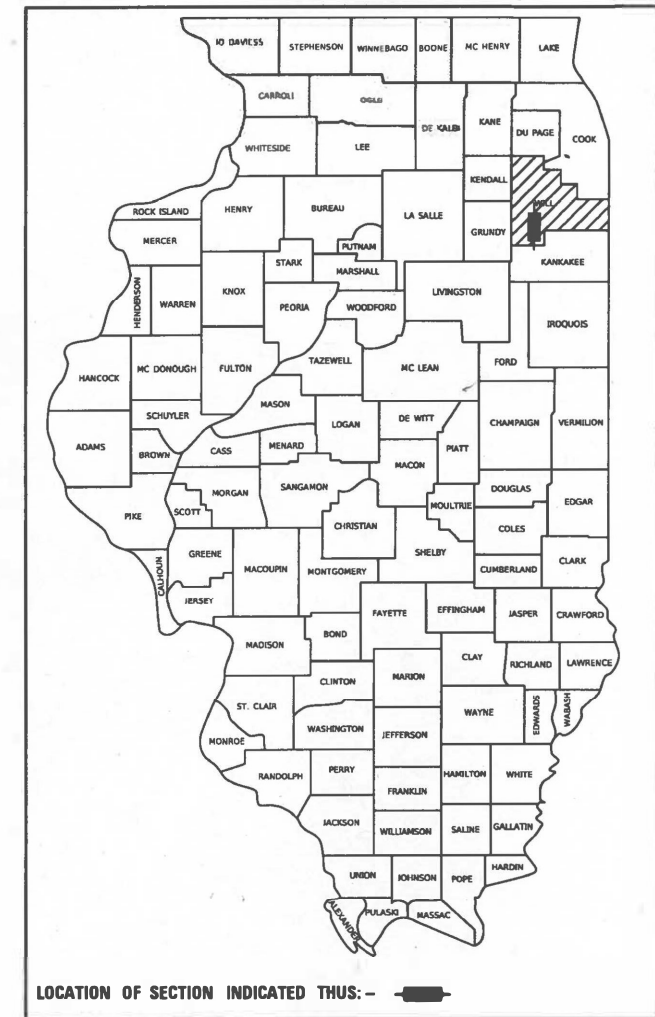
FOR INDEX OF SHEETS AND HIGHWAY STANDARDS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN WESLEY TOWNSHIP

TRAFFIC DATA

2021 ADT: 1,150  
POSTED SPEED LIMIT: 55 MPH  
FUNCTIONAL CLASSIFICATION: LOCAL ROAD

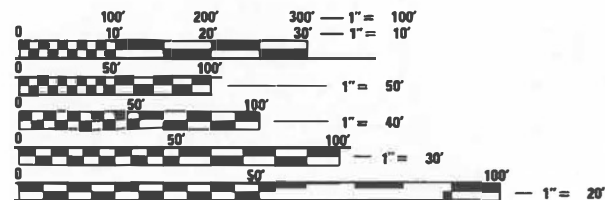
D-91-204-22



C-91-256-22  
R 10E

PROJECT LOCATION  
OLD CHICAGO ROAD  
OVER FORKED CREEK  
STRUCTURE NO. 099-4609

T 32N



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 EXCAVATORS  
1-800-892-0123  
OR 811

TOWNSHIPS: WESLEY

GROSS LENGTH = 282 FT. = 0.05 MILE  
NET LENGTH = 282 FT. = 0.05 MILE

ATLAS ENGINEERING GROUP, LTD.  
Date: 8-1-23  
*Christopher Prosperi*  
Christopher Prosperi  
Expires: 11-30-23  
Sheet No. 2-7, 18-25

PROJECT ENGINEER: LUKASZ POCIECHA (847) 705-4225  
PROJECT MANAGER: FAWAD AQUEEL

CONTRACT NO. 62R87

**AEG** ATLAS ENGINEERING GROUP, LTD.

CONTACT: CHRIS PROSPERI (847) 753-8020

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 18, 2023  
*Jose Rios* REGIONAL ENGINEER

October 13, 2023  
*Scott A. Etk*  
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2023  
*Stephen M. ...*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS, IDOT HIGHWAY STANDARDS, HMA MIX TABLE & GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5 - 6	DETOUR PLANS
7	ROADWAY AND PAVEMENT MARKING PLAN
8 - 17	STRUCTURAL DRAWINGS S.N. 099-4609
18	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)
19	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
20	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
21	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
22	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
23	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS (TC-21)
24	ARTERIAL ROAD INFORMATION SIGN (TC-22)
25	RAILROAD CROSSING REPAIR DETOUR SIGNING (TC-28)

**HIGHWAY STANDARDS**

00001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701301-04	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701901-08	TRAFFIC CONTROL DEVICES

**HOT-MIX ASPHALT MIXTURE TABLE**

MIXTURE TYPE: BUTT JOINT AND APPROACH PAVEMENT OVERLAY	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	4% @ 70 GYR	QC/QA
QMP DESIGNATION; QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

MIXTURE REQUIREMENT NOTES:

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
- 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 RECLAIMED MATERIALS SPECIFICATIONS.

**GENERAL NOTES**

- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITY AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES.
- MEADE ELECTRIC COMPANY, THE IDOT DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR, LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES, CALL 773-287-7672 FOR THE INITIAL LOCATE. REQUEST FOR LOCATES OF PREVIOUSLY MARKED FACILITIES MAY BE AT THE CONTRACTOR'S EXPENSE.
- IN ADDITIONAL TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSION AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11/G/1/ THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA, THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT ERIC CAMPOS, AREA TRAFFIC ENGINEER, AT ERIC.CAMPOS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT.
- THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A USACE PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE PERMIT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPOSE USACE PERMITS. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO SECURE AND COMPLY WITH A USACE PERMIT FOR CONTRACTOR'S ACTIVITIES 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.
- THESE PLANS HAVE BEEN PREPARED FORM NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
- THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- FOR WORK OUTSIDE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
- RAISED REFLECTIVE PAVEMENT MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS-RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN PLAN.
- THE CENTERLINE IS FOR INFORMATION ONLY.
- STRUCTURAL CONCRETE REMOVED AS DIRECTED BY THE ENGINEER FOR THE ADJUSTMENT OF THE DRAINAGE STRUCTURES TO THE FINAL GRADE SHALL BE RECONSTRUCTED ACCORDING TO THE APPROACH SLAB REPAIR SPECIFICATION. COST OF THE CONCRETE REMOVAL, DISPOSAL AND RECONSTRUCTION IS INCLUDED WITH THE ASSOCIATED "INLETS TO BE ADJUSTED" PAY ITEM AS INCLUDED IN THE ROADWAY PLANS.
- THE ENGINEER OR CONTRACTOR SHALL SUBMIT AN OPER 2410 FORM TO THE IDOT CENTRAL BUREAU OF OPERATIONS VIA DOT.ROADINFO@ILLINOIS.GOV NOTING THE CLOSURE OF OLD CHICAGO RD OVER THE FORKED RIVER AT LEAST 21 DAYS PRIOR TO THE ACTUAL RESTRICTION BECOMING EFFECTIVE. REVISED OPER 2410 FORMS MUST BE SUBMITTED AS NECESSARY DURING THE LIFE OF THE CONSTRUCTION PROJECT. IF YOU HAVE ANY QUESTIONS OR REQUIRE FURTHER INFORMATION, PLEASE CONTACT MICHAEL OLSON WITH THE BUREAU OF OPERATIONS AT (217) 782-8551. BLANK OPER 2410 FORMS CAN BE OBTAINED AT [HTTPS://IDOT.ILLINOIS.GOV/HOME/RESOURCES/FORMS-FOLDER/O](https://idot.illinois.gov/home/resources/forms-folder/o).

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, IDOT HIGHWAY STANDARDS,  
HMA MIX TABLE & GENERAL NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	2
ILLINOIS			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				

USER NAME = nappel	DESIGNED - CMP	REVISED -
	DRAWN - NKA	REVISED -
PLOT SCALE = N/A	CHECKED - BA	REVISED -
PLOT DATE = 8/7/2023	DATE - 8/7/23	REVISED -

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				80% FEDERAL 20% STATE	
				BRIDGE	
				0059	RURAL
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	182	182	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	218	218	
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	52	52	
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	121	121	
50102400	CONCRETE REMOVAL	CU YD	15.9	15.9	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	17.2	17.2	
50300260	BRIDGE DECK GROOVING	SQ YD	424	424	
50300300	PROTECTIVE COAT	SQ YD	553	553	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	210	210	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,540	2,540	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	58	58	
52100520	ANCHOR BOLTS, 1"	EACH	8	8	
60260100	INLETS TO BE ADJUSTED	EACH	4	4	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	112.5	112.5	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				80% FEDERAL 20% STATE	
				BRIDGE	
				0059	RURAL
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
63200310	GUARDRAIL REMOVAL	FOOT	138	138	
64300260	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
67100100	MOBILIZATION	L SUM	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	59	59	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	277	277	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	327	327	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	4	
X0325748	ACRYLIC COATING	SQ YD	17	17	
X0325749	FIBER WRAP	SQ FT	115	115	
X0326697	CENTER LINE - RUMBLE STRIP - 8"	FOOT	139	139	
X5060700	CLEANING AND PAINTING BEARINGS	EACH	12	12	
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12	

\* = SPECIALTY ITEM

MODEL: D:\default...  
FILE: Mainfile...  
PROJECT: 130703070 DS 0011WD 3210 CAD33\_Sheets01\_General0162887-500.dgn

	USER NAME = nappelt	DESIGNED - CMP	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = N/A	CHECKED - BA	REVISED -		007	CWH 0007 22 BJ	WILL	25	3				
	PLOT DATE = 8/16/2023	DATE - 8/16/23	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				80% FEDERAL 20% STATE	
				BRIDGE	
				0059	RURAL
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
* X7800815	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	40	40	
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	3	3	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	3	3	
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 ½ INCHES	SQ YD	393	393	
Z0012130	BRIDGE DECK SCARIFICATION ¾"	SQ YD	393	393	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	4	4	
Z0015550	DEBRIS REMOVAL	CU YD	3	3	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	1	1	
Z0018051	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	4	4	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	54.6	54.6	
Z0032400	JOINT REPAIR	EACH	18	18	
Z0043800	PRECAST PRESTRESSED CONCRETE I-BEAM REPAIR	SQ FT	48	48	
* Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	

\* = SPECIALTY ITEM

MODEL: Default  
 FILE NAME: p:\atlas\paw\benley.com\atlas\paw\01\Documents\Project\130703070\_DS\_001\W0\_37\10\_CAD\_3\_Sheets\01\_General\01\_62R87-S00.dgn

**AEG** ATLAS ENGINEERING GROUP, LTD.

USER NAME = nappel	DESIGNED - CMP	REVISED -
PLOT SCALE = N/A	DRAWN - NKA	REVISED -
PLOT DATE = 8/7/2023	CHECKED - BA	REVISED -
	DATE - 8/7/23	REVISED -

DESIGNED - CMP	REVISED -
DRAWN - NKA	REVISED -
CHECKED - BA	REVISED -
DATE - 8/7/23	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**







SCALE: SHEET OF SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R87	



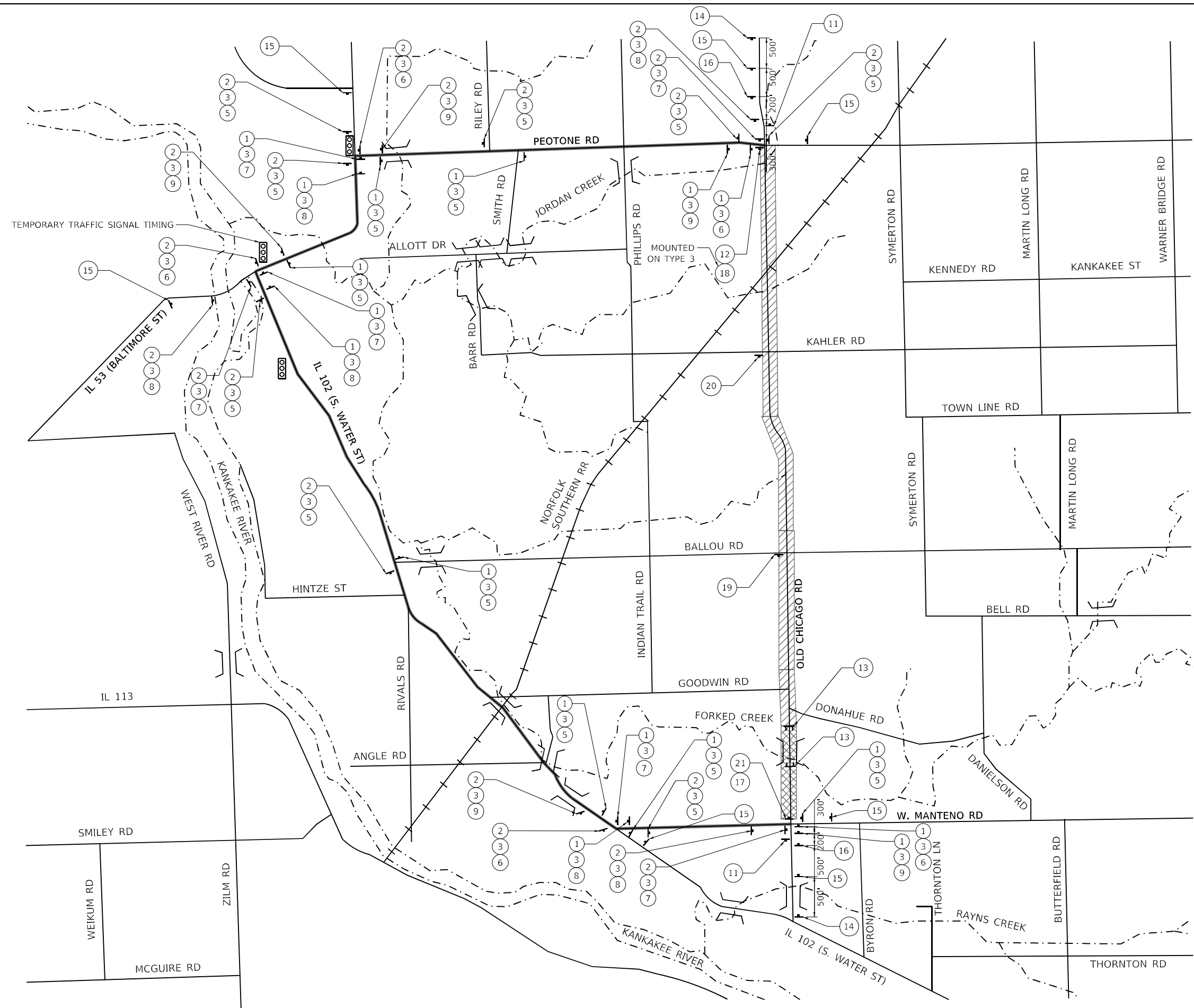


**LEGEND**

-  FULL CLOSURE
-  PARTIAL CLOSURE
-  DETOUR ROUTE
-  TYPE III BARRICADE
-  DETOUR / CLOSURE SIGNAGE
-  TRAFFIC SIGNAL

**DETOUR PLAN NOTES:**

1. SEE SHEET 6 FOR SIGN SIZING AND DETAILS.
2. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022, THE DETAILS IN THIS PLAN, THE LATEST EDITION OF THE IDOT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
3. DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4. ENSURE THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED ARE IN PLACE AND OPERATING 24 HOURS EACH DAY, INCLUDING SUNDAYS AND HOLIDAYS, DURING THE TIME THIS DETOUR IS IN EFFECT.
5. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED.
6. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THIS PLAN SHALL BE AS REQUIRED BY THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
7. PROPOSED DETOUR SIGNING SHALL BE COVERED OR REMOVED WHEN NOT REQUIRED DURING CONSTRUCTION.
8. A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE OF THE CONSTRUCTION ON OLD CHICAGO RD THE CONTRACTOR SHALL PLACE ONE ARTERIAL ROAD INFORMATION SIGN AT EACH END OF THE PROJECT AS DIRECTED AND AT A LOCATION DESIGNATED BY THE ENGINEER TO INFORM MOTORISTS OF THE UPCOMING CONSTRUCTION. THE MESSAGE SHALL BE APPROVED BY THE ENGINEER.
9. THE CONTRACTOR SHALL NOT OBSTRUCT ANY EXISTING SIGN WITH THE PLACEMENT OF DETOUR SIGNAGE.
10. ALL SINGING MUST BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022, THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
11. DETOUR SIGNAGE SHALL BE CONSIDERED INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL) EXCEPT AS OTHERWISE NOTED.
12. SEE DETAIL TC-21 FOR TYPICAL SIGN SPACING.
13. LOCAL ACCESS SHALL BE PROVIDED AT ALL TIMES TO RESIDENTS AND BUSINESSES.



MODEL: Default  
 FILE: AEG-ATLAS-ENGINEERING-PROJECTS\PROJECTS\130703070.DS\001\WD\_3710\_CAD\3\_Sheets\05\_Signing\MOT\162887-DeTourPlan.dgn

**AEG ATLAS ENGINEERING GROUP, LTD.**

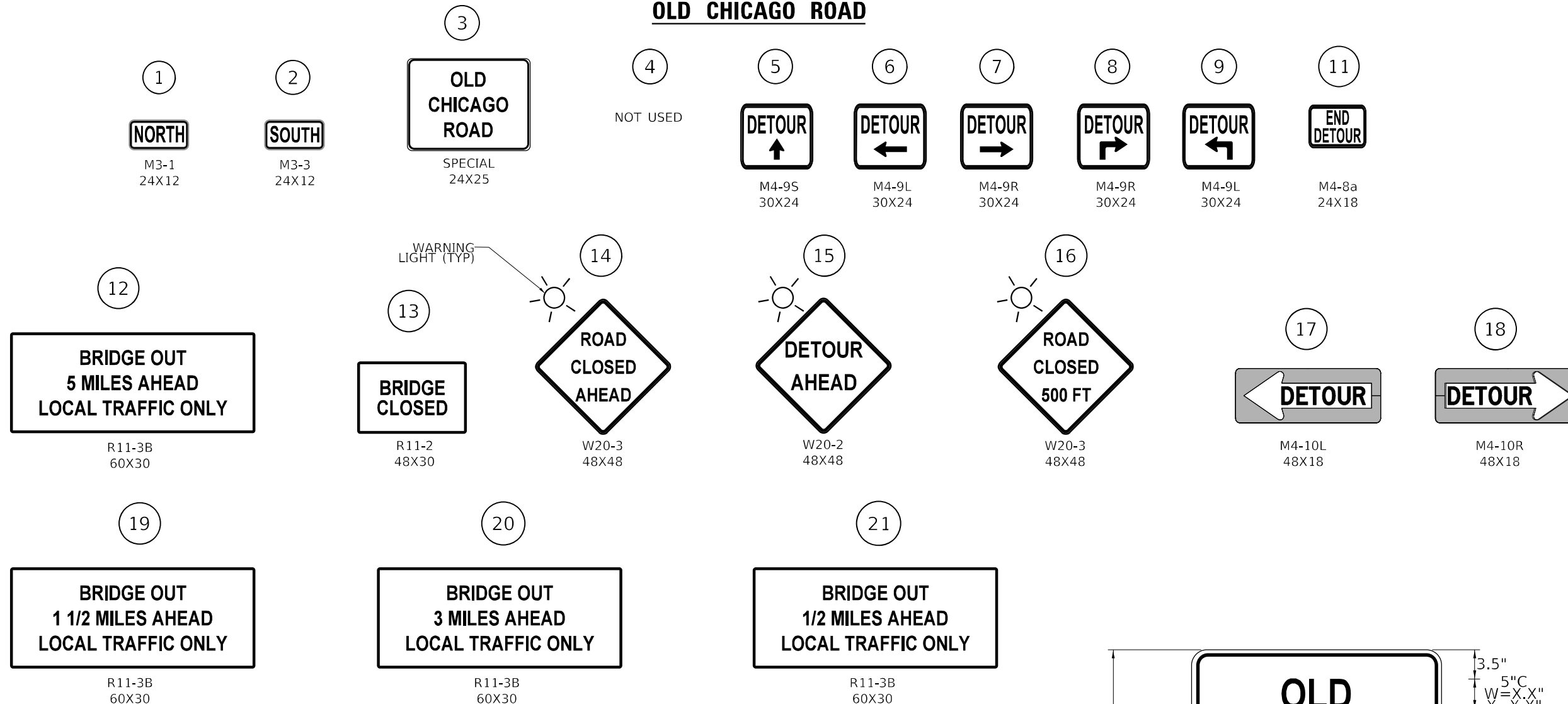
USER NAME = nappk	DESIGNED - CMP	REVISED -
PLOT SCALE = N/A	DRAWN - NKA	REVISED -
PLOT DATE = 8/7/23	CHECKED - BA	REVISED -
	DATE - 8/7/23	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DETOUR PLAN OLD CHICAGO ROAD</b>	
SCALE: N. T. S.	SHEET OF SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R87	

**DETOUR SIGNAGE LEGEND  
OLD CHICAGO ROAD**



**DETOUR PLAN GENERAL NOTES:**

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2022 THE DETAILS IN THIS PLAN, THE LATEST EDITION OF THE IDOT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"
- SIGNS 1-11 AND 14-18 SHALL HAVE BLACK LEGEND ON A FLOURESCENT ORANGE (RETROREFLECTIVE) BACKGROUND.
- SIGNS 12-13 AND 19-20 SHALL HAVE A BLACK LEGEND ON A WHITE (RETROREFLECTIVE) BACKGROUND.

MODEL: Default  
FILE NAME: p:\atlas\paw\01\Documents\Project\130703070.DS 001\WD 32\10 CAD\_3\_Sheet105\_Signing\MOT\162887\_DetourSigning.dgn

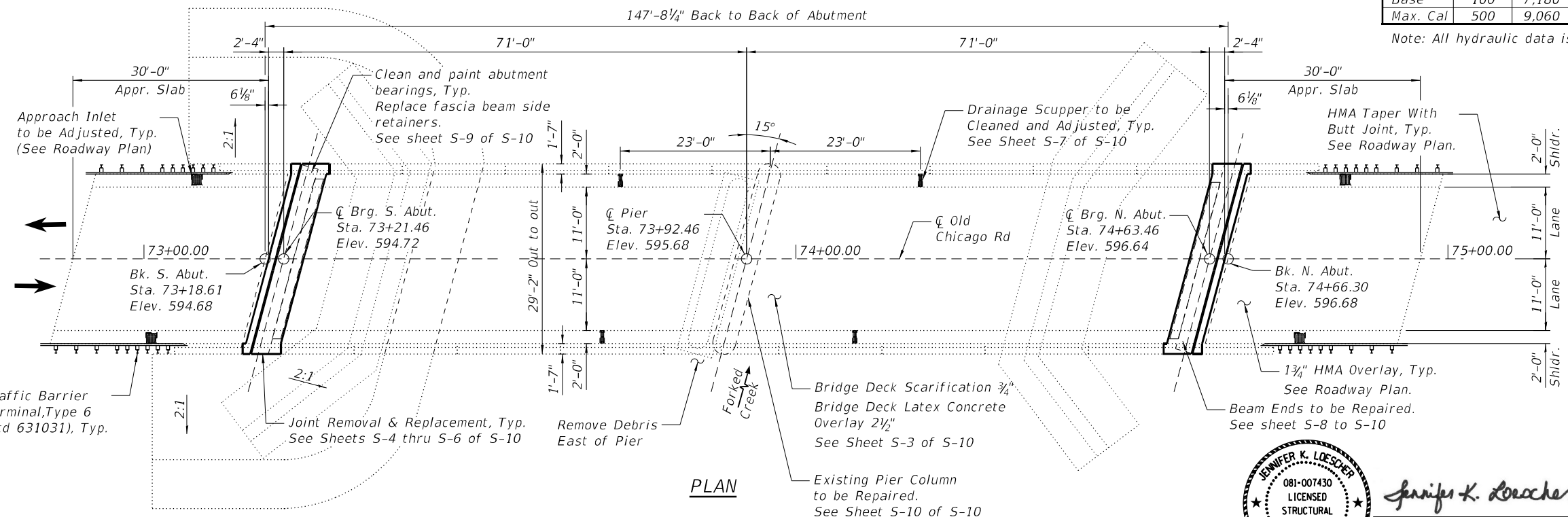
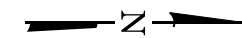
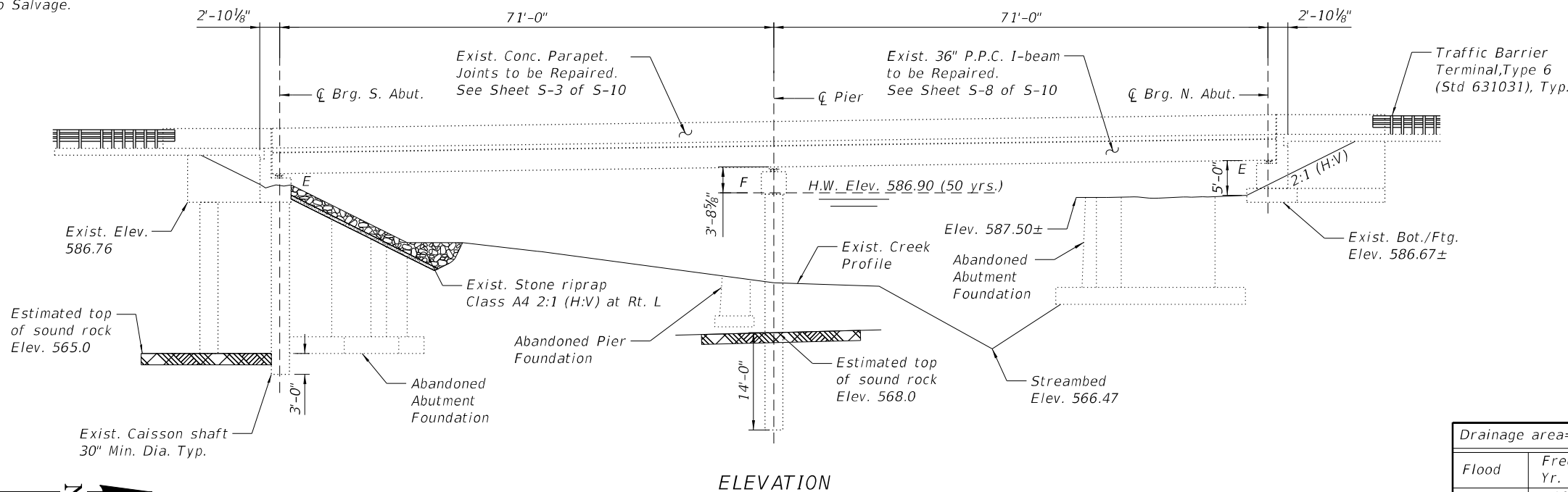
	USER NAME = nappel	DESIGNED - CMP	REVISED -	<p align="center"><b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>DETOUR SIGN DETAILS AND NOTES OLD CHICAGO ROAD</b></p>				C.H. RTE. 007	SECTION CWH 0007 22 BJ	COUNTY WILL	TOTAL SHEETS 25	SHEET NO. 6
	PLOT SCALE = N/A	CHECKED - BA	REVISED -		SCALE: N. T. S.	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 62R87 ILLINOIS FED. AID PROJECT					
	PLOT DATE = 8/7/2023	DATE - 8/7/23	REVISED -										



Bench Mark: Cut in north end of east headwall of bridge over Forked Creek on Old Orchard Road, Elev. 595.40.  
All elevations are from the 1994 bridge plans.

Existing Structure: Previous S.N. 099-0158 constructed in 1930 and removed in 1994.  
The abutment and pier foundations were abandoned.  
S.N. 099-4609, constructed in 1994 is a two-span bridge (71'-0"/71'-0") with a total length of 147'-8 1/4" (back to back of abutment), an overall width of 29'-2" (out to out of deck), and a skew angle of 15° to the CL of the roadway. The superstructure consists of a 7 1/2" thick concrete slab on 6 Precast Prestressed Concrete I-Beams, 36". The substructure consists of reinforced concrete abutments, wingwalls, pier and caissons. Traffic to be maintained by a detour.

No Salvage.



**LOADING HS 20-44 (EXIST.)**

No future wearing surface.

**DESIGN STRESSES**

**FIELD UNITS (NEW CONST.)**

f'c = 3,500 psi (Substructure)  
f'c = 4,000 psi (Superstructure)  
fy = 60,000 psi (Reinforcing Steel)  
fy = 50,000 psi (Structural Steel)

**FIELD UNITS (EXIST. CONST.)**

Cast in place reinforced concrete  
f'c = 3,500 psi (Concrete)  
fy = 60,000 psi (Reinforcing Steel)  
Structural Steel  
fy = 36,000 psi (M270, Grade 36)  
fy = 50,000 psi (M270, Grade 50)  
Pre-stressed concrete  
f'c = 6,000 psi  
f'ci = 5,000 psi  
f's = 270,000 psi (1/2" dia. low relaxation strands)  
f'si = 201,960 psi (1/2" dia. low relaxation strands)

**DESIGN SPECIFICATIONS (NEW CONST.)**

2002 AASHTO Standard Specification for Highway Bridges, 17th Edition.  
2012 AASHTO Guide Specification for Design of Bonded FRP Systems for Repair, First Edition.

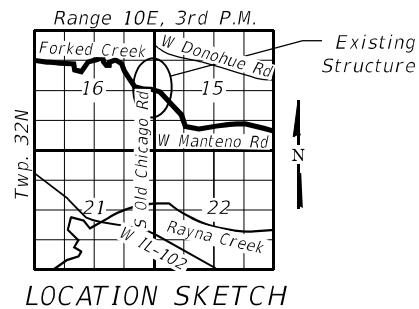
**DESIGN SPECIFICATIONS (EXIST.)**

AASHTO 1992 Standard Specifications for Highway Bridges and 1993 Interim Specifications.

**WATERWAY INFORMATION**

		Q		Opening Sq. Ft.		NAT H.W.E.		Head-Ft		Headwater El.	
Flood Yr.	Freq.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	4,370	837	837	585.5	0	0	585.5	585.5	585.5	585.5
Base	50	6,370	970	970	586.9	0	0	586.9	586.9	586.9	586.9
Max. Cal	100	7,180	1,009	1,009	587.3	0	0	587.3	587.3	587.3	587.3
	500	9,060	1,105	1,105	588.3	0.2	0.2	588.5	588.5	588.5	588.5

Note: All hydraulic data is from 1994 bridge plans.



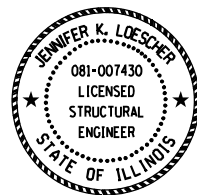
**GENERAL PLAN AND ELEVATION  
OLD CHICAGO ROAD OVER FORKED CREEK**

C.H. RTE. 007 SEC. CWH 0007 22 BJ

WILL COUNTY

STATION 73+92.46

STRUCTURE NO. 099-4609



JENNIFER K. LOESCHER  
081-007430  
LICENSED STRUCTURAL ENGINEER  
STATE OF ILLINOIS  
JENNIFER K. LOESCHER, P.E., S.E.  
DATE: 8/1/2023  
NO. 081-007430  
EXP. DATE 11/30/2024

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
STRUCTURE NO. 099-4609

SHEET S-1 OF S-10 SHEETS

USER NAME	DESIGNED	REVISIONS
FM	FM	
JKL	JKL	
KB	KB	
8/1/22	8/1/22	

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	8
CONTRACT NO. 62R87				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: p:\v\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 321\0 CAD\3\_Sheets\12\_Structural\162R87-0994609-001-GPE.dgn  
9/21/2023 2:45:46 PM

**INDEX OF SHEETS**

- S-1. General Plan and Elevation
- S-2. General Data
- S-3. Deck Repair
- S-4. Joint Removal & Replacement Details
- S-5. Joint Removal & Replacement Details
- S-6. Preformed Joint Strip Seal
- S-7. Drainage Scupper Adjustment Details
- S-8. Beam Repair
- S-9. Bearing Repair
- S-10. Pier Repair

**SCOPE OF WORK**

1. Perform 3/4" bridge deck scarification.
2. Remove full depth concrete of deck ends, parapet ends, hatch block, and approach slab repair.
3. Perform structural repair on pier concrete.
4. Clean and paint bearings. Replace fascia beam bearing side retainers at abutments.
5. Clean and adjust drainage scuppers and approach inlets.
6. Repair beams with Precast Prestressed Concrete I-beam Repair, Fiber Wrap, and Acrylic Coat.
7. Complete concrete deck and approach slab repairs.
8. Reconstruct deck ends, parapet ends, and hatch block.
9. Install preformed joint strip seal.
10. Place 2 1/2" bridge deck latex concrete overlay.
11. Place 1 3/4" HMA overlay on approach slabs. (See Roadway Plans)
12. Perform bridge deck grooving.
13. Apply protective coat to bridge deck and parapets.
14. Replace parapet joint sealant.
15. Remove debris at east end of pier.

**GENERAL NOTES**

Plan dimensions and details relative to the existing structure have been taken from existing plans and 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 work; however, the Contractor shall be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPC- SP3 standards). Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the joint concrete is poured at an ambient temperature other than 50°F.

Cleaning and painting of the existing steel bearings shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures."

Calculated Weight of Structural Steel=210 lb.

All Structural Steel shall be AASHTO M270, Grade 50 and shall be galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel."

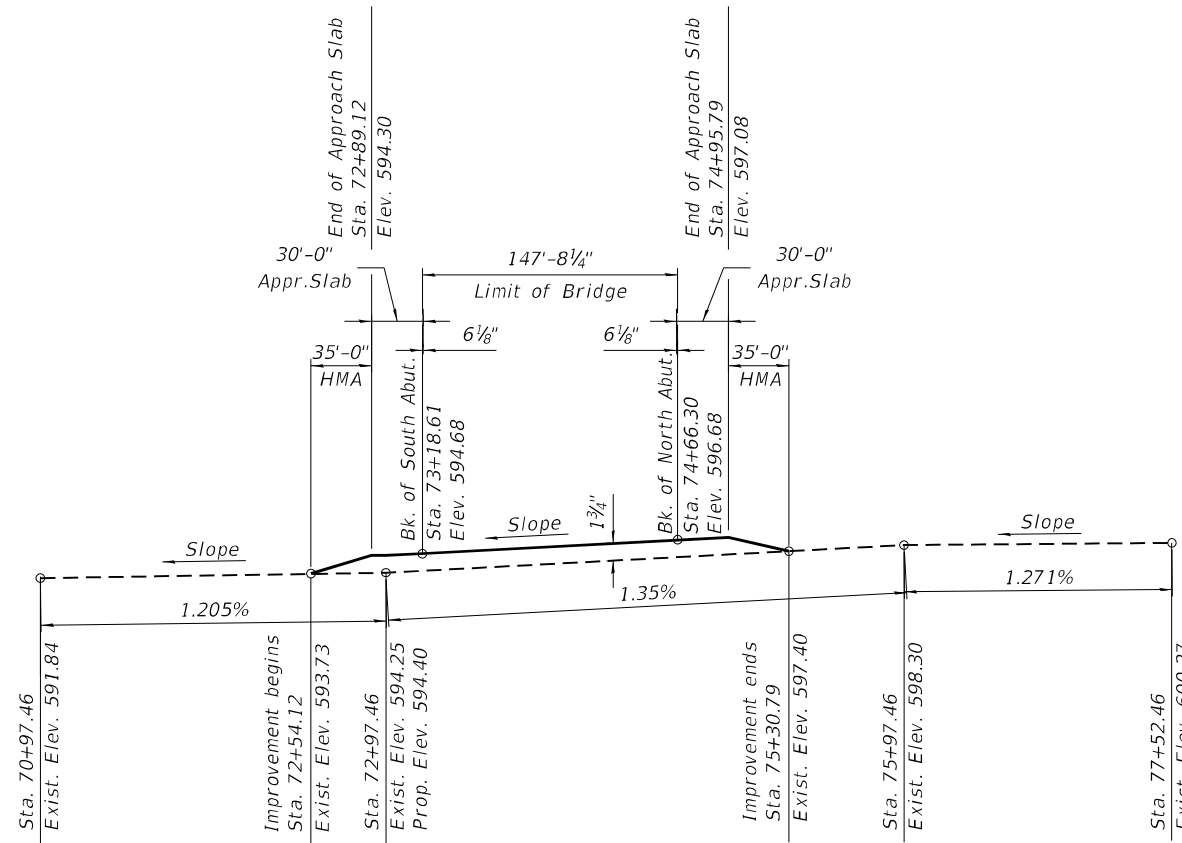
Structural concrete removed as directed by the Engineer for the adjustment of the Drainage Structures to the final grade shall be reconstructed according to the Approach Slab Repair specification. Cost of the concrete removal, disposal and reconstruction is included with the associated "Inlets to be Adjusted" pay item as included in the Roadway Plans.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	15.9	-	15.9
Concrete Superstructure	Cu. Yd.	17.2	-	17.2
Bridge Deck Grooving	Sq. Yd.	424	-	424
Protective Coat	Sq. Yd.	553	-	553
** Furnishing and Erecting Structural Steel	Pound	210	-	210
Reinforcement Bars, Epoxy Coated	Pound	2540	-	2540
Preformed Joint Strip Seal	Foot	58	-	58
Anchor Bolts, 1"	Each	8	-	8
* Acrylic Coating	Sq. Yd.	17	-	17
* Fiber Wrap	Sq. Ft.	115	-	115
** Cleaning and Painting Bearings	Each	-	12	12
* Approach Slab Repair (Full Depth)	Sq. Yd.	3	-	3
* Approach Slab Repair (Partial Depth)	Sq. Yd.	3	-	3
** Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	Sq. Yd.	393	-	393
* Bridge Deck Scarification, 3/4"	Sq. Yd.	393	-	393
** Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	-	4	4
* Debris Removal	Cu. Yd.	-	3	3
** Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	1	-	1
* Drainage Scupper to be Adjusted	Each	4	-	4
* Joint Repair	Each	18	-	18
* Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	48	-	48

\* See Special Provisions  
 \*\* See GBSP



**PROPOSED PROFILE GRADE**

At Old Chicago Road

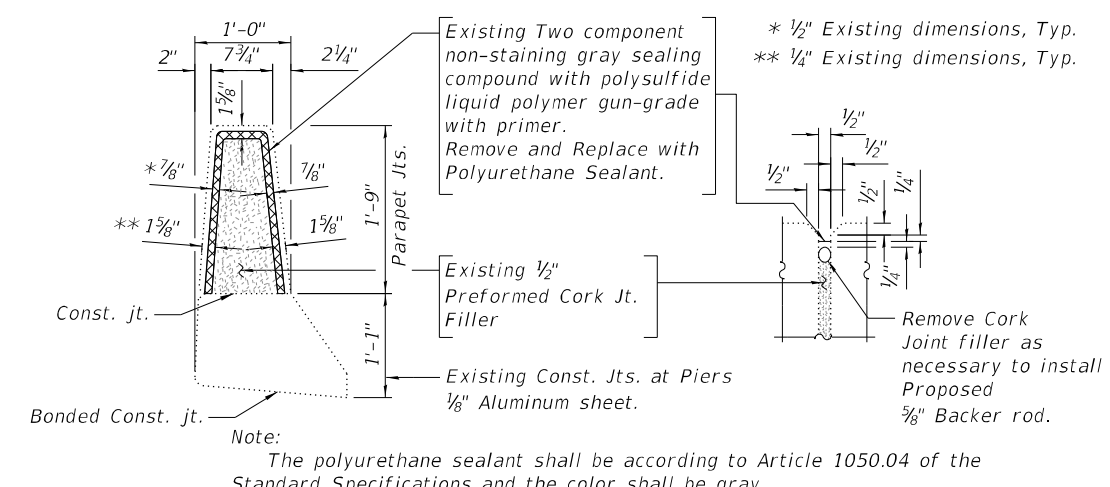
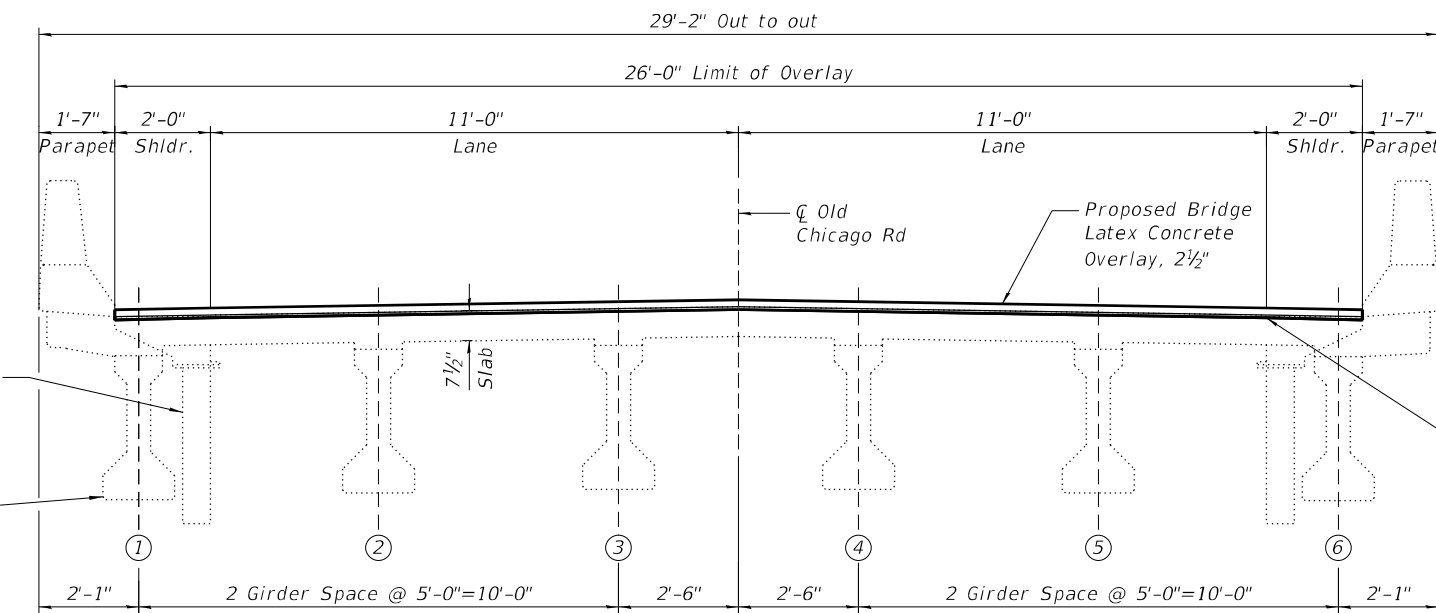
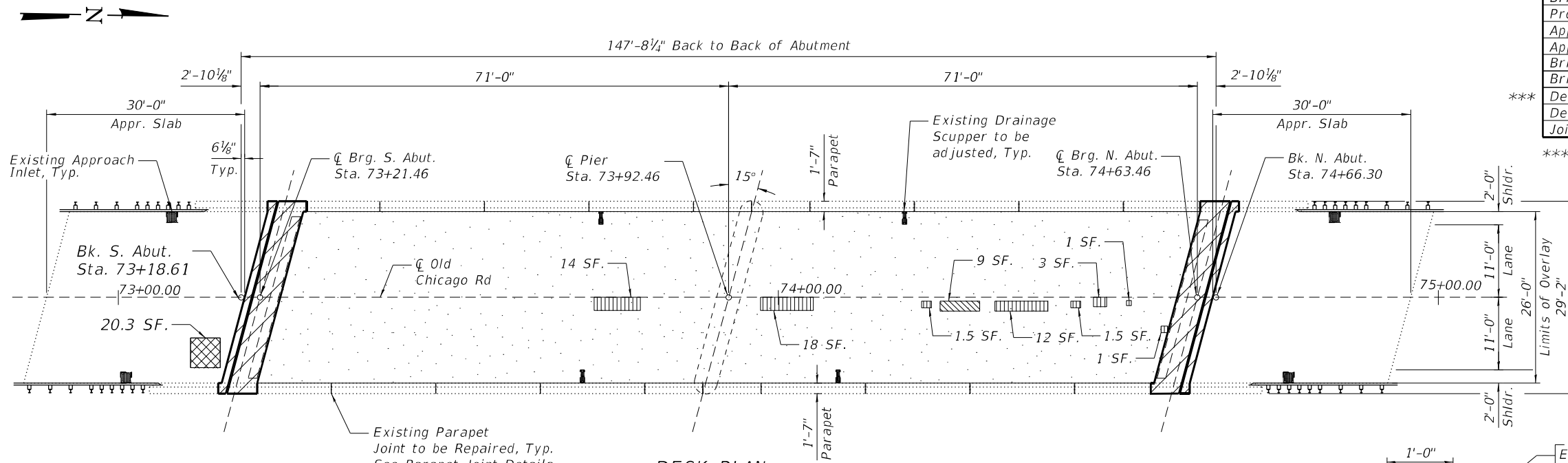
MODEL: Default  
 FILE NAME: p:\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\WO 32110 CAD\3\_Sheets\12\_Structural\12.162R87-0994609-002-General Data.dgn  
 9/21/2023 2:45:53 PM

	USER NAME =	DESIGNED - FM	REVISED -	<p align="center"><b>STATE OF ILLINOIS</b>  <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p align="center"><b>GENERAL DATA</b>  <b>STRUCTURE NO.099-4609</b></p>	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1=1	DRAWN - KB	REVISED -			007	CWH 0007 22 BJ	WILL	25	9
PLOT DATE =	CHECKED - 8/1/23	REVISED -		SHEET S-2 OF S-10 SHEETS		CONTRACT NO. 62R87				
						ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Bridge Deck Grooving	Sq. Yd.	424
Protective Coat	Sq. Yd.	553
Approach Slab Repair (Full Depth)	Sq. Yd.	3
Approach Slab Repair (Partial Depth)	Sq. Yd.	3
Bridge Deck Latex Concrete Overlay 2 1/2 inches	Sq. Yd.	393
Bridge Deck Scarification 3/4"	Sq. Yd.	393
Deck Slab Repair (Partial)	Sq. Yd.	6
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	1
Joint Repair	Each	18

\*\*\* For Information only



**NOTES**

Repair areas shown are intended as a guide for bidding purposes. Actual repair areas shall be determined in the field by the Engineer. A nominal amount of additional repair quantities have been provided to account for repairs not shown.

Protective coat shall be applied to the top surface of the concrete overlay and new concrete for joint replacement. It shall also be applied to the top and inside vertical faces of new and existing parapet.

Areas of Deck Slab Repair (Partial) are shown for information only and shall be included in the Cost of Bridge Deck Latex Concrete Overlay, 2 1/2".

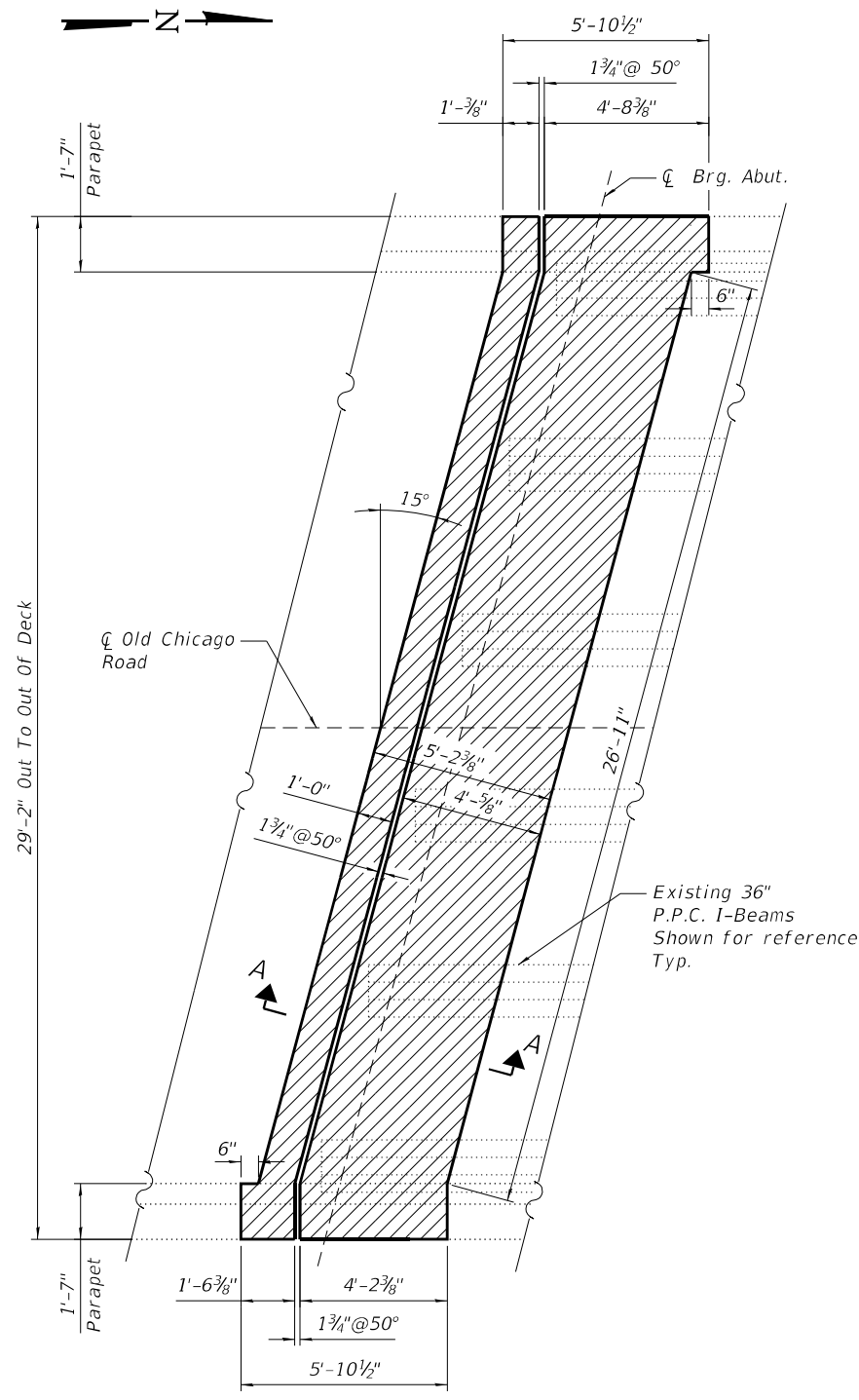
**LEGEND**

- Bridge Deck Scarification 3/4"
- Bridge Deck Latex Concrete Overlay 2 1/2"
- Joint Removal and Replacement See Sheets S-4 thru S-6 of S-10
- Deck Slab Repair (Partial) For Information only
- Deck Slab Repair (Full Depth)
- Approach Slab Repair (Full Depth)

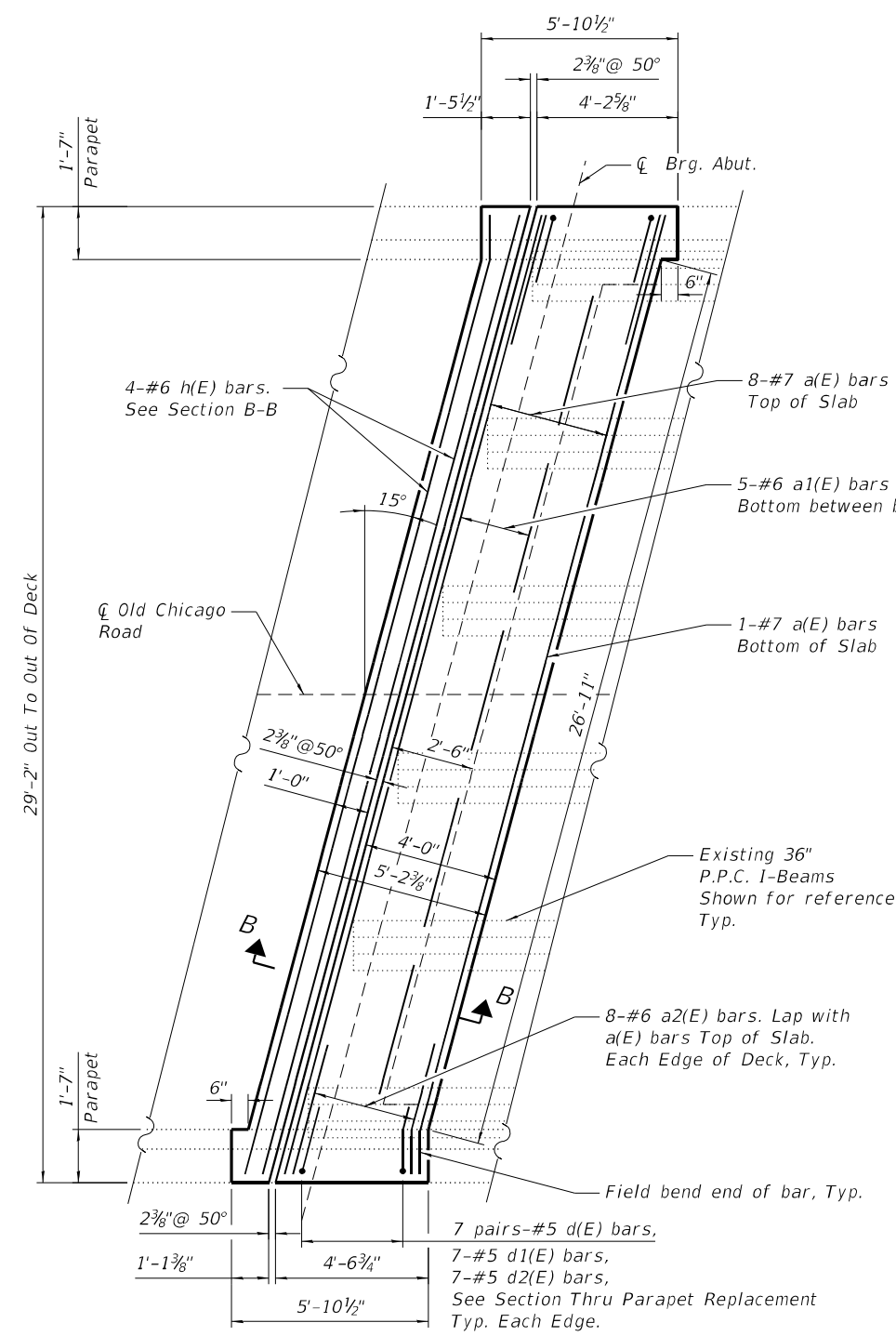
MODEL: Default  
FILE NAME: p:\atlas-pw-bentley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 321.10 CAD\3\_Sheets\12\_Structural\162R87-0994609-003-Deck\_Repair.dgn

<b>AEG ATLAS ENGINEERING GROUP, LTD.</b>	USER NAME =	DESIGNED - FM	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DECK REPAIR STRUCTURE NO.099-4609</b>	C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1"=10'	CHECKED - JKL	REVISED -			007	CWH 0007 22 BJ	WILL	25	10
PLOT DATE =	DRAWN - KB	REVISED -		SHEET S-3 OF S-10 SHEETS						
	CHECKED - 8/1/23	REVISED -		CONTRACT NO. 62R87						
ILLINOIS FED. AID PROJECT										

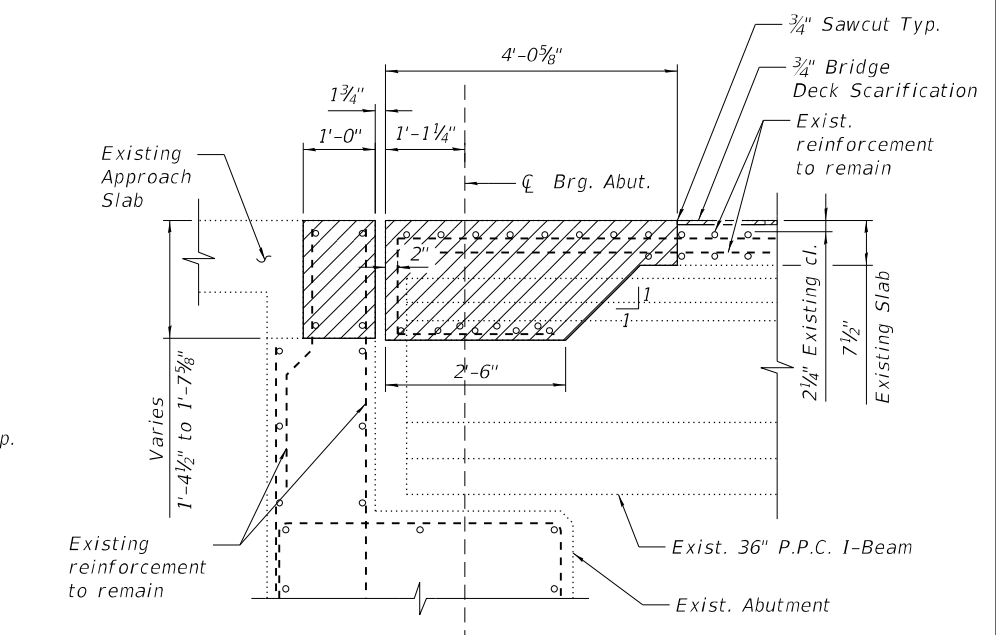
MODEL: Default  
 FILE NAME: p:\v\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 3210 CAD\3\_Sheets\12\_Structural\162R87-0994609-004-join-Removal-Replacement(1).dgn  
 9/21/2023 2:46:07 PM



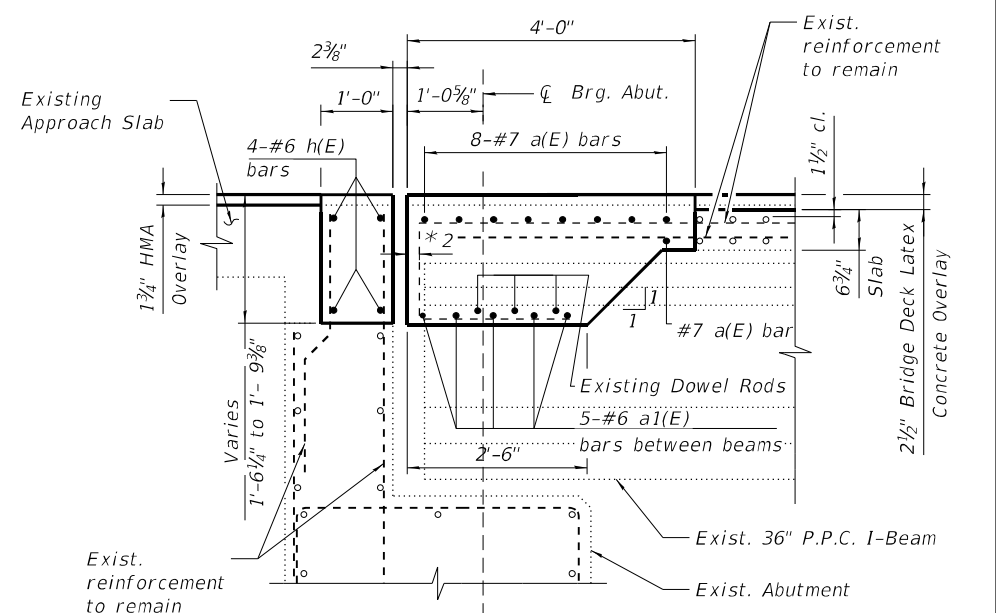
**CONCRETE REMOVAL PLAN**  
 (South Abutment Shown.  
 North Abutment Similar.)



**CONCRETE REPLACEMENT PLAN**  
 (South Abutment Shown.  
 North Abutment Similar.)



**SECTION A-A**  
 (Horiz. dim. @ Rt. L's)



**SECTION B-B**  
 (Horiz. dim. @ Rt. L's)

\* Straighten existing bar and field bend to provide 2" clr.

**LEGEND**

Concrete Removal

**Notes:**  
 Existing reinforcement shall be cleaned, straightened, 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.  
 Removal of existing joint system is included with Concrete Removal.  
 See Sheet S-5 of S-10 for Section Thru Parapet and Bill of Material.



USER NAME =	DESIGNED - KB	REVISED -
PLOT SCALE = 3/8"=1'-0"	CHECKED - JKL	REVISED -
PLOT DATE =	DRAWN - KB	REVISED -
	CHECKED - 8/1/23	REVISED -

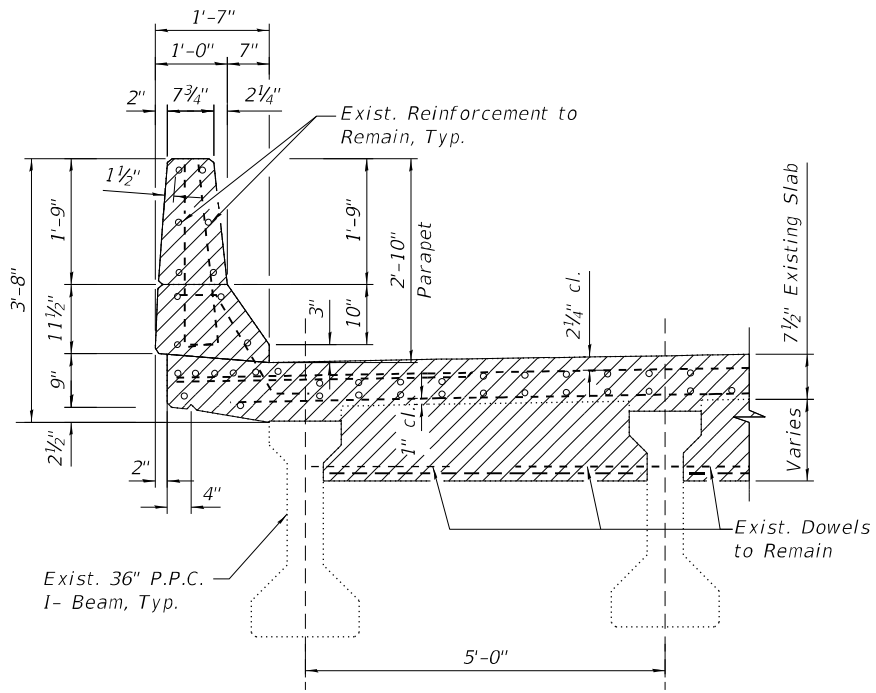
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**JOINT REMOVAL & REPLACEMENT DETAILS  
 STRUCTURE NO.099-4609**

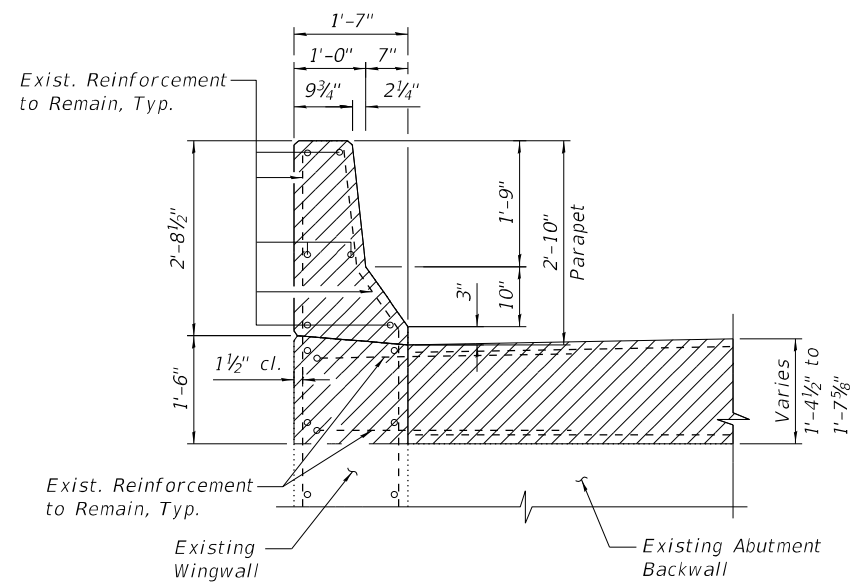
SHEET S-4 OF S-10 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	11
CONTRACT NO. 62R87				
ILLINOIS FED. AID PROJECT				

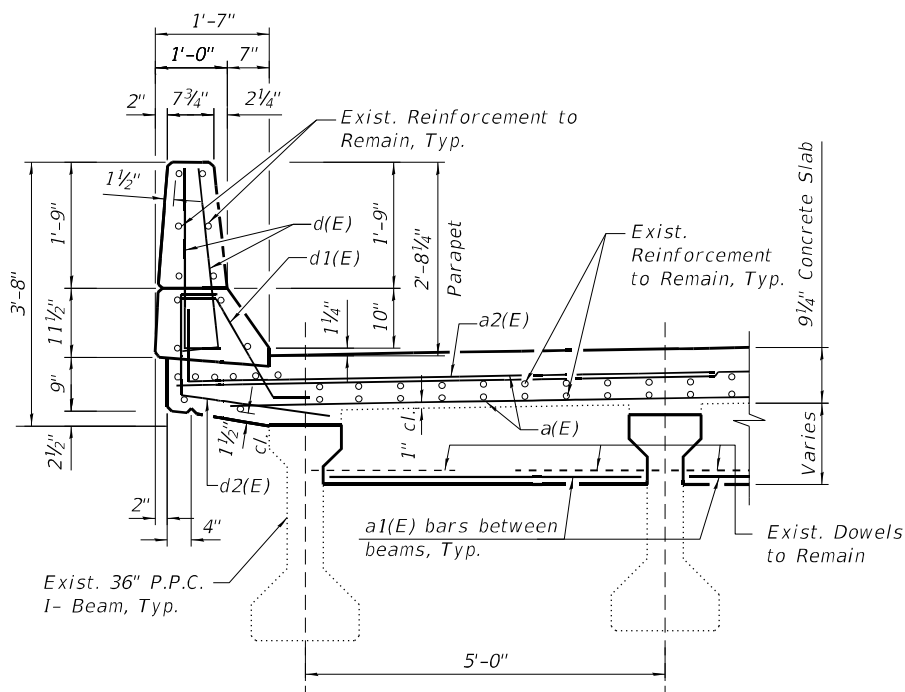
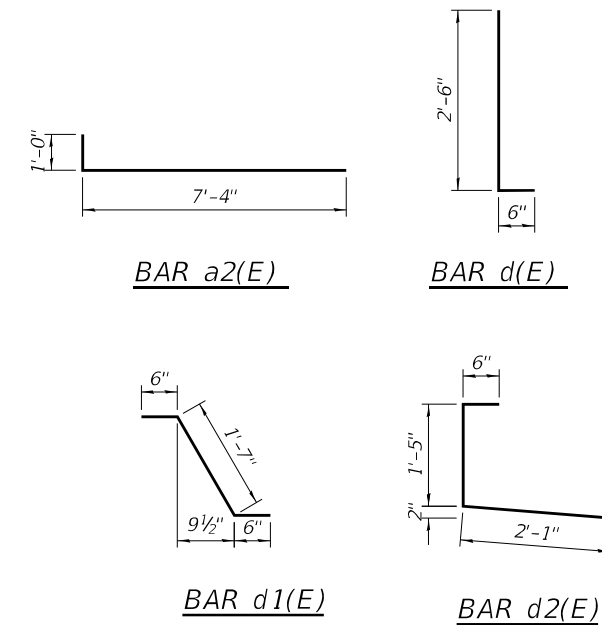
MODEL: Default  
 FILE NAME: p:\v\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 321\0 CAD\3\_Sheets\12\_Structural\162R87-0994609-005-00m-Removal-Replacement(2).dgn  
 9/21/2023 2:46:13 PM



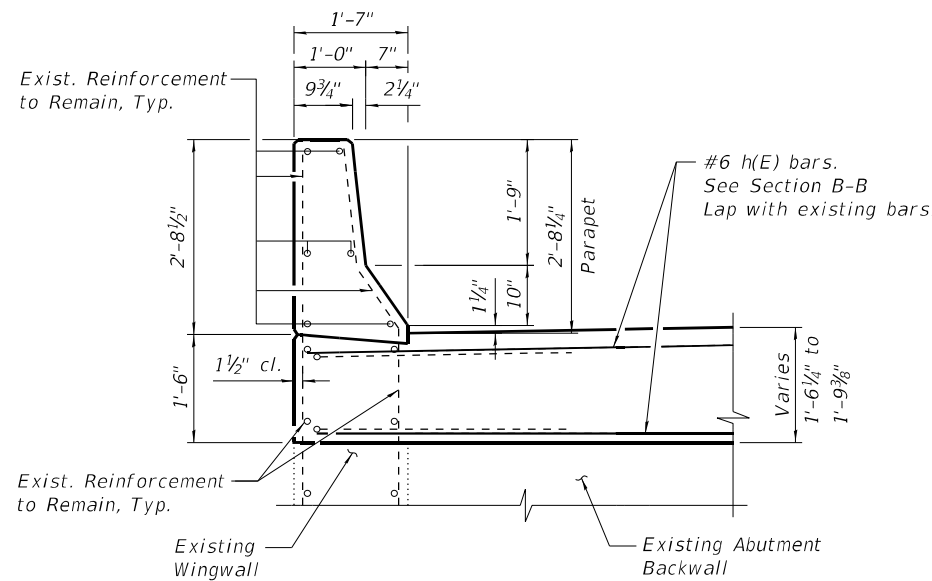
**SECTION THRU PARAPET REMOVAL**



**SECTION THRU APPROACH PARAPET REMOVAL**



**SECTION THRU PARAPET REPLACEMENT**



**SECTION THRU APPROACH PARAPET REPLACEMENT**

**BILL OF MATERIAL FOR TWO JOINTS**

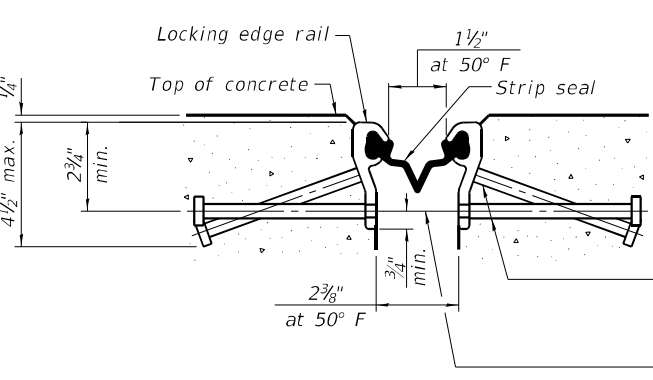
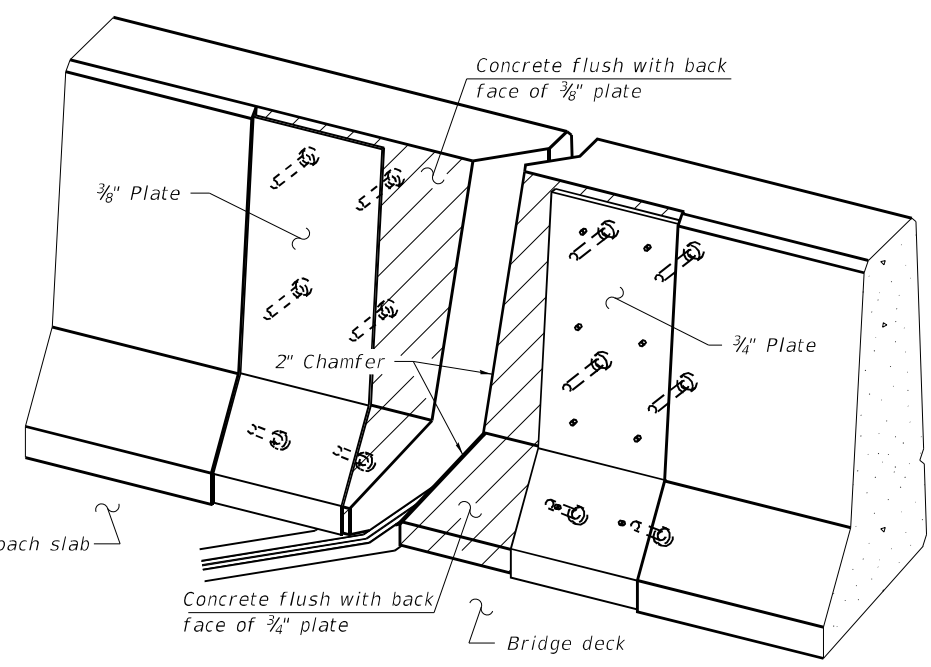
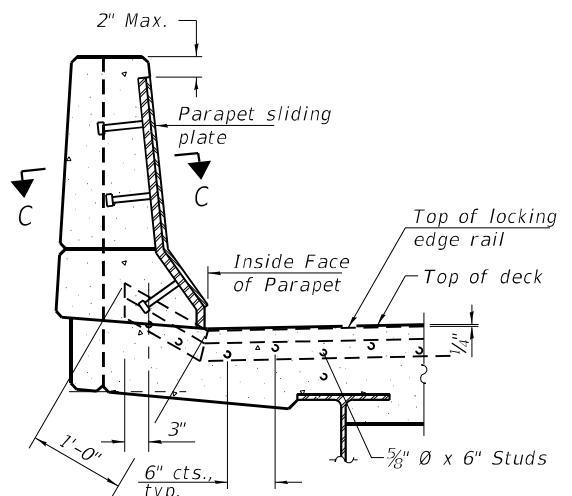
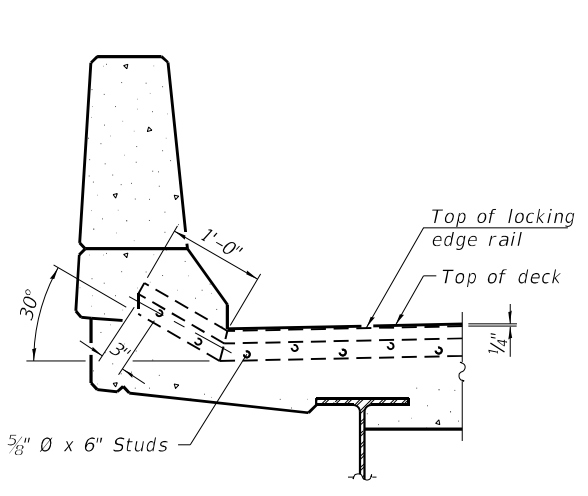
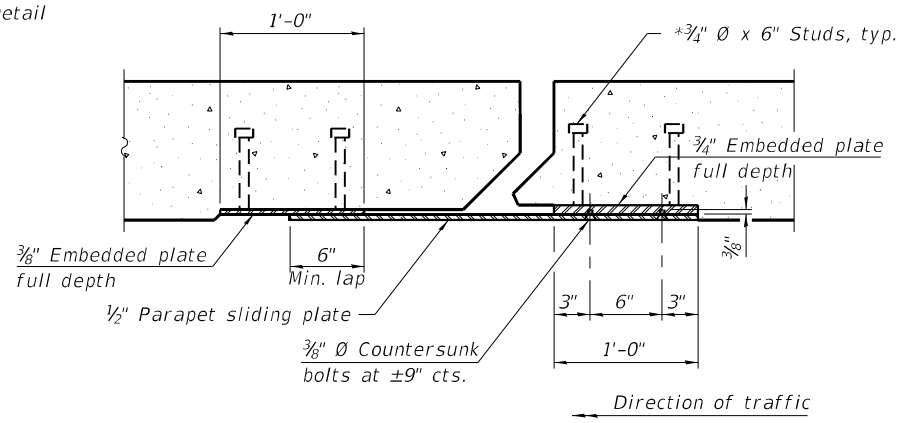
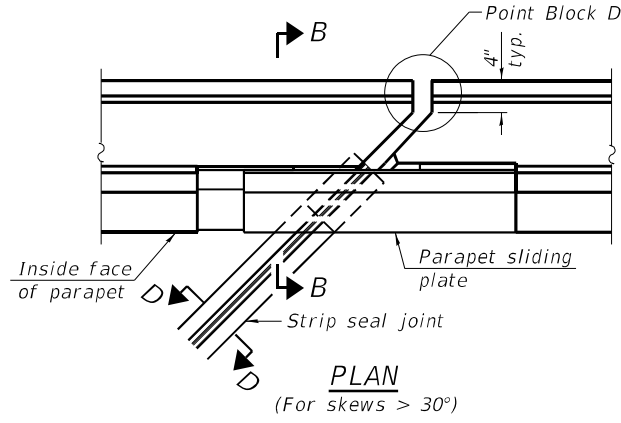
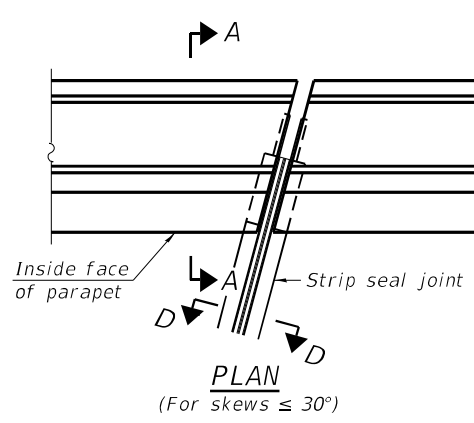
Bar	No.	Size	Length	Shape
a(E)	18	#7	29'-7"	—
a1(E)	50	#6	4'-4"	—
a2(E)	32	#6	8'-4"	—
d(E)	56	#5	3'-0"	┌
d1(E)	28	#5	2'-7"	└
d2(E)	28	#5	4'-0"	└
h(E)	8	#6	29'-10"	—
Concrete Removal			Cu Yd	15.9
Concrete Superstructure			Cu Yd	17.2
Reinforcement Bars, Epoxy Coated			Pound	2540

**LEGEND**

Concrete Removal

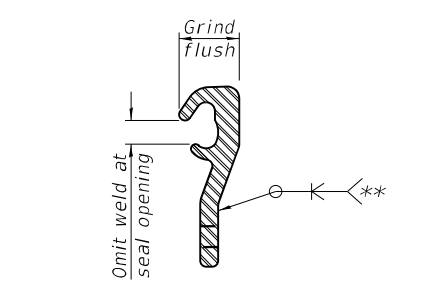
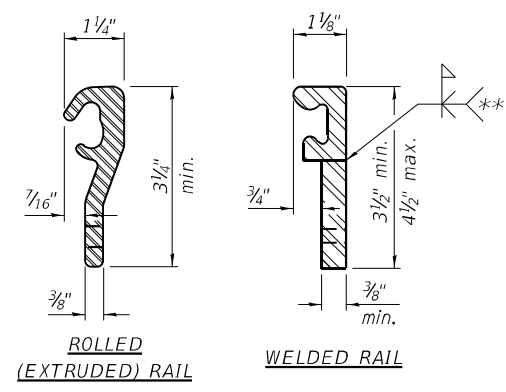
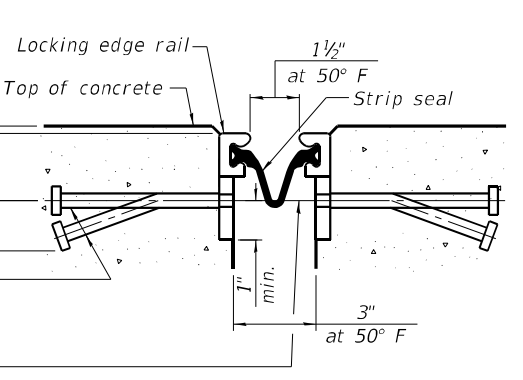


MODEL: Default  
 FILE NAME: p:\v\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 32110 CAD\3\_Sheets\12\_Sheets\12\_Structural\12\_Prefomed Joint Strip Seal.dgn  
 8/7/2023 2:19:20 PM



\*  $\frac{5}{8}$ "  $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

$\frac{3}{8}$ "  $\phi$  threaded rods in  $\frac{1}{16}$ "  $\phi$  holes at  $\pm 4$ "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



**SECTION D-D**

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

**BILL OF MATERIAL FOR TWO JOINTS**

Item	Unit	Total
Prefomed Joint Strip Seal	Foot	58

**Notes:**

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Prefomed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

**NOTES:**

Existing drainage scupper grates shall be adjusted so that the top of the existing grate is flush with the top of the bridge deck overlay.

Proposed structural steel for adjusting the scupper grates shall be AASHTO Classification M-270 Gr. 36. All proposed components adjusting the scupper grates shall be hot dipped galvanized.

Bolts shall be 1/2" Ø ASTM F3125 Grade A325 Type 1, hot dipped galvanized. Spacer may be fabricated from round steel pipe.

The Contractor shall ensure that no damage is done to the existing grates to be reused.

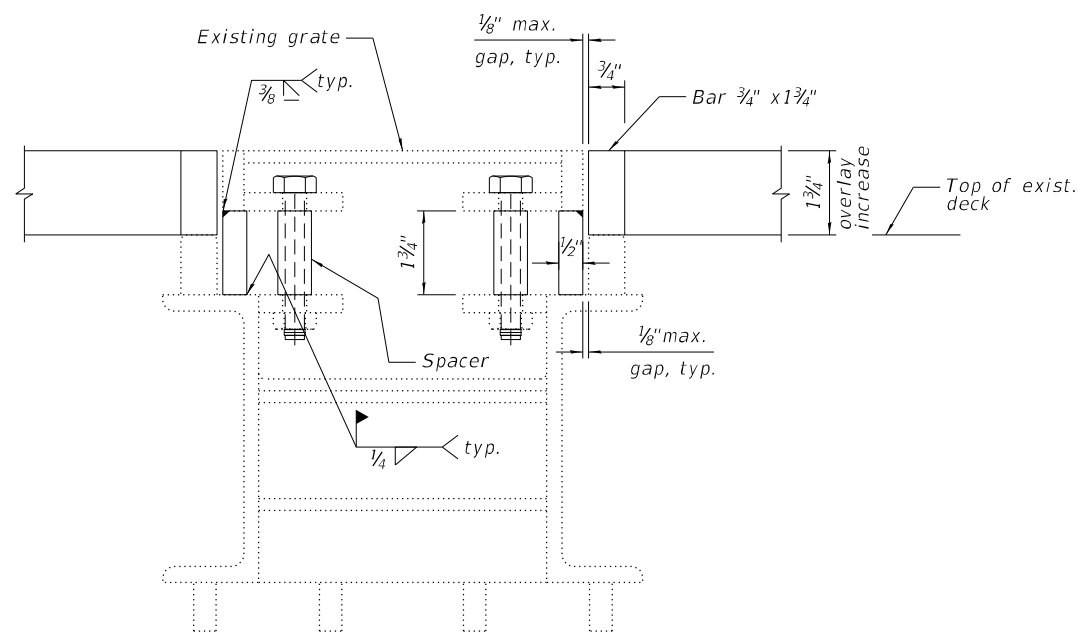
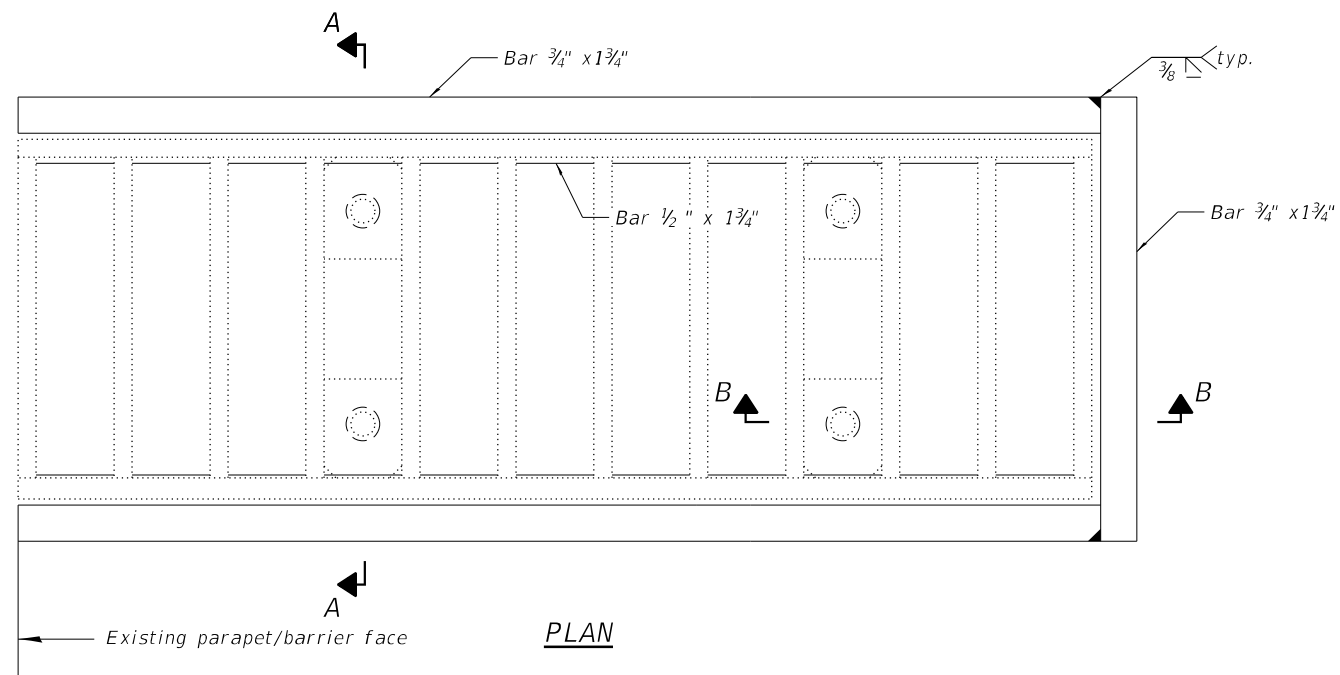
Shop plans for the proposed scupper adjustment ring shall be submitted to the Engineer for approval prior to fabrication.

The Contractor shall field verify the type of scupper present and the scupper dimensions.

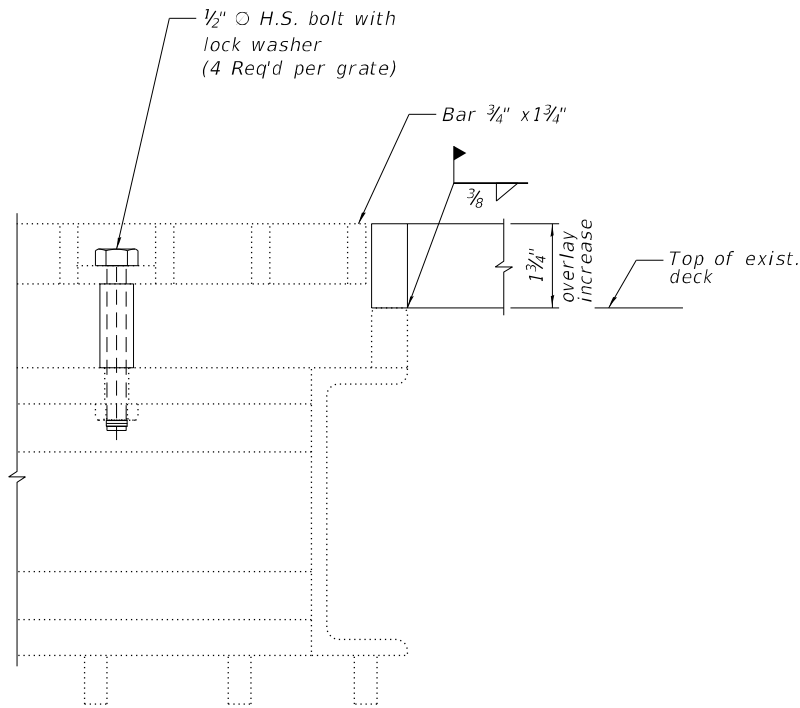
Galvanizing for field welded areas shall be repaired per ASTM A 780.

Cost of all labor and materials necessary to remove existing grates, clean existing scuppers and downspouts, furnish and install scupper adjustment ring, and reinstall the grates is included in the cost per unit each for Drainage Scuppers to be Adjusted.

These scupper adjustment details are intended for a steel drainage scupper. The Contractor shall confirm the material of the existing drainage scuppers and may propose a cast iron adjustment ring detail if necessary.



**SECTION A-A**



**SECTION B-B**

ITEM	ITEM	TOTAL
Drainage Scuppers to be Adjusted	Each	4

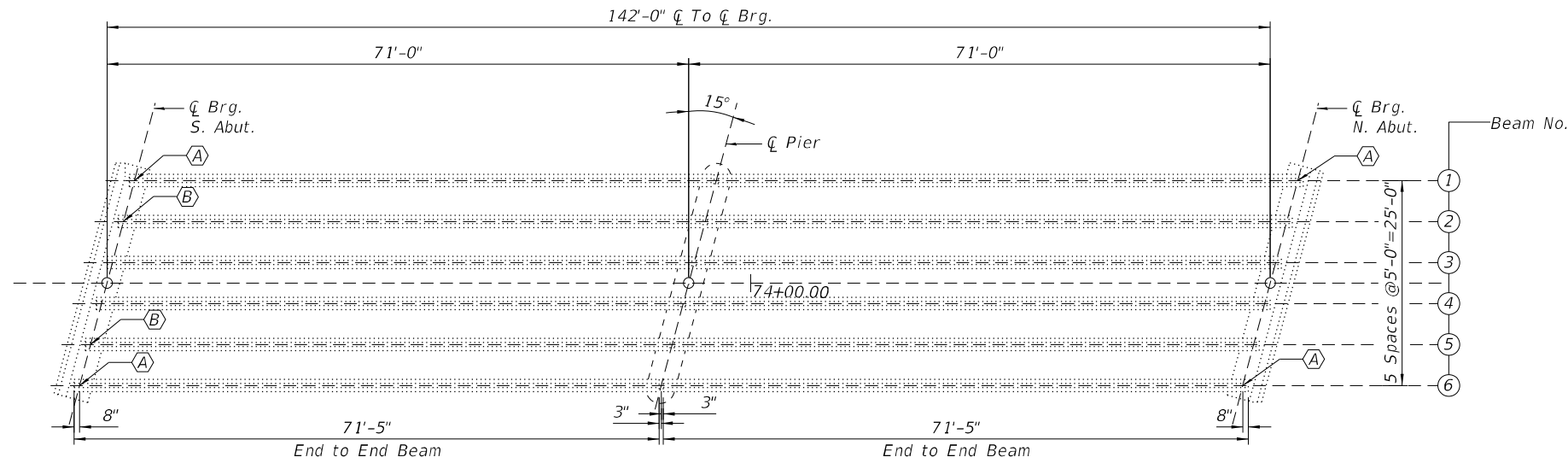
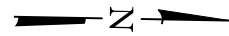
MODEL: Default  
FILE NAME: p:\atlas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 32110 CAD\3\_Sheets\12\_Structural\12.16.2020\09-007-Drainage\_Scupper\_Adjustment.dgn

<b>AEG ATLAS ENGINEERING GROUP, LTD.</b>	USER NAME =	DESIGNED - KB	REVISED -
	PLOT SCALE = 6"=1'-0"	CHECKED - JKL	REVISED -
	PLOT DATE =	DRAWN - KB	REVISED -
		CHECKED - 8/1/23	REVISED -

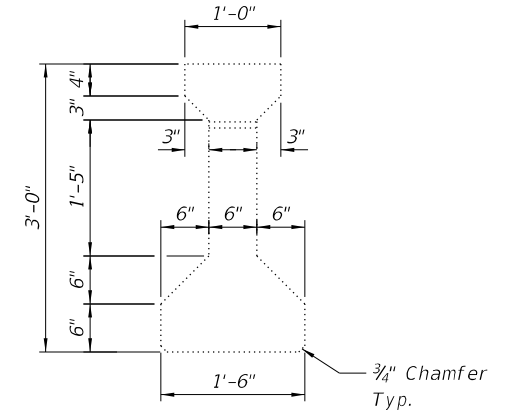
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER ADJUSTMENT DETAILS  
STRUCTURE NO.099-4609**

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R87	



**FRAMING PLAN**



**BEAM DIMENSIONS**

**NOTES:**

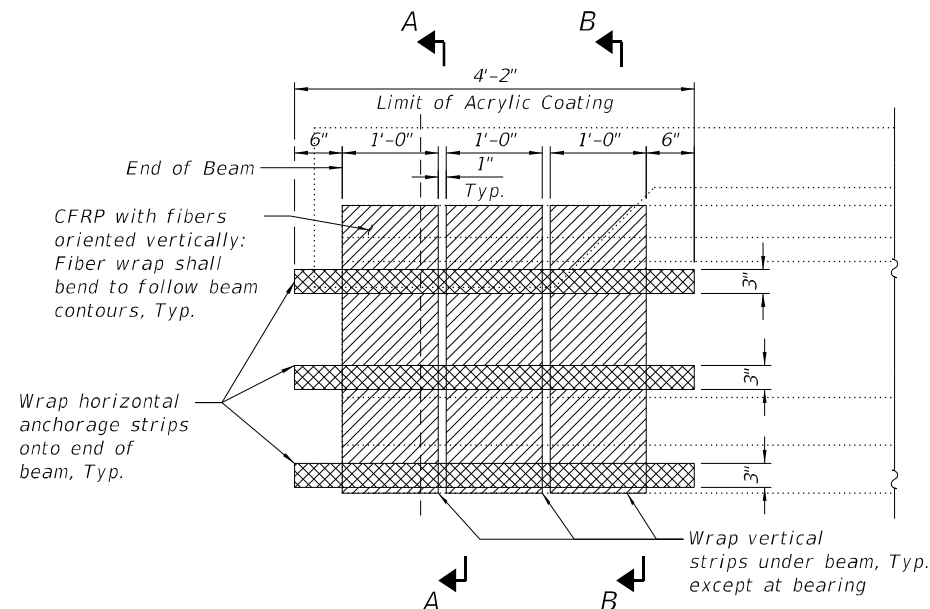
The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions. Acrylic Coating shall be placed over the fiber wrap repairs. Two coats shall be applied. See Special Provision for "FRP Strengthening for P.P.C. I-Beam Repairs". See Special Provision for "Precast Prestressed Concrete I-Beam Repair." All abutment bearing top plates and side retainers shall be cleaned and painted. See Special Provision for "Cleaning and Painting Existing Steel Structures."

**BILL OF MATERIAL**

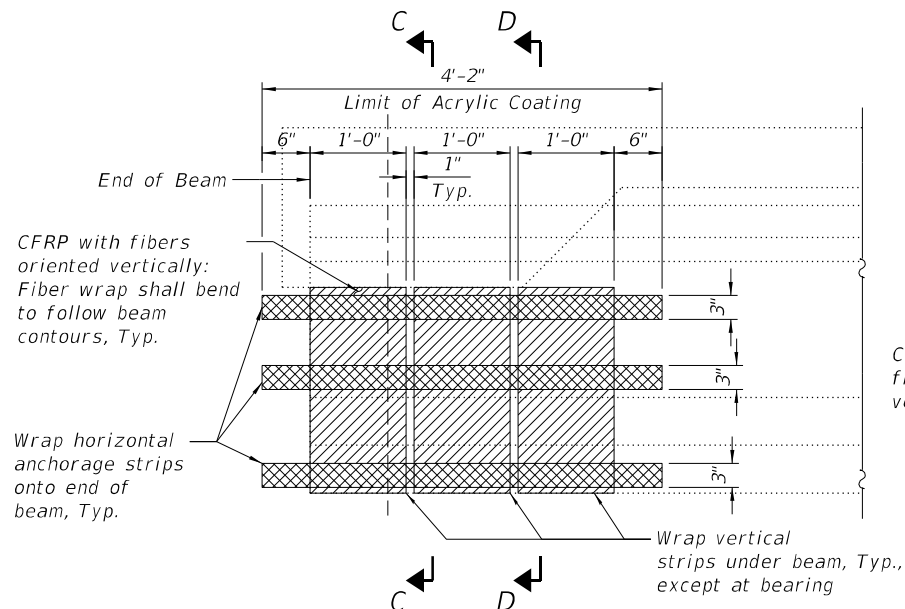
ITEM	UNIT	Quantity
Acrylic Coating	Sq. Yd.	17
Fiber Wrap	Sq. Ft.	115
Cleaning and Painting Bearings	Each	12
Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	48

**P.P.C. I-BEAM REPAIR ESTIMATED QUANTITIES**

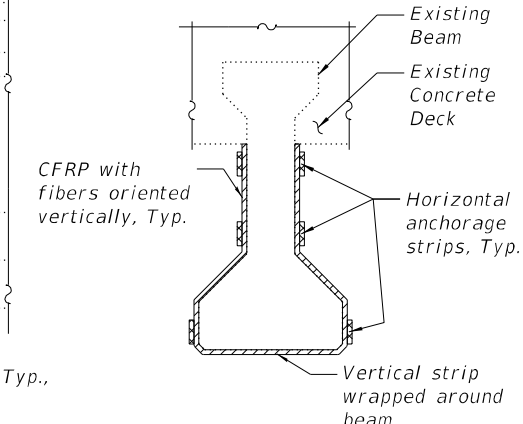
SOUTH ABUT.		NORTH ABUT.	
Beam	Sq. Ft.	Beam	Sq. Ft.
1	8.5	1	8.5
2	7.0	2	0
3	0	3	0
4	0	4	0
5	7.0	5	0
6	8.5	6	8.5



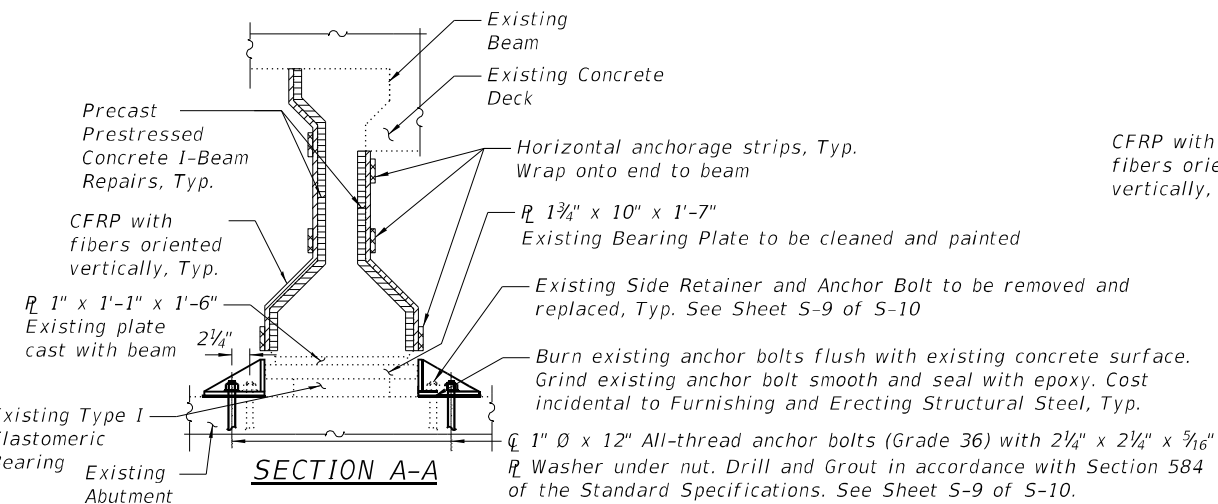
**REPAIR (A) - BEAM 6 AT S. ABUT.**  
(All Exterior Beams Similar)



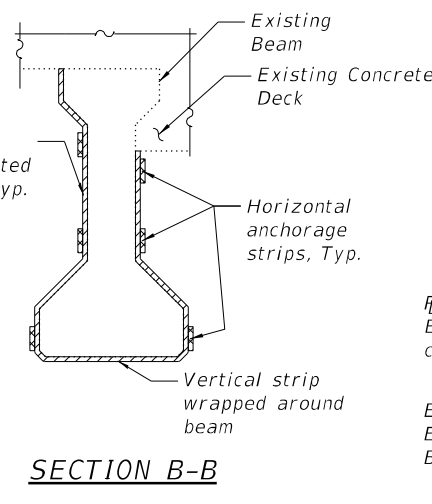
**REPAIR (B) - BEAM 2 AT S. ABUT.**  
(All Interior Beams Similar)



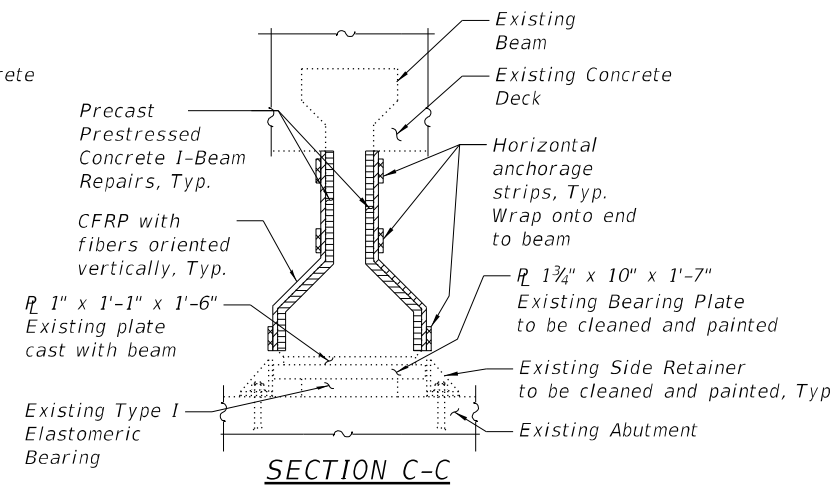
**SECTION D-D**



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

**LEGEND**

- Precast Prestressed Concrete I-Beam Repair
- Fiber Wrap Repair
- Horizontal Anchorage Strips

MODEL: Default  
FILE NAME: p:\valias-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\WO 3210 CAD\3\_Sheets\12\_Structural\12\_Structural\12\_Beam Repair.dgn  
9/21/2023 2:46:33 PM

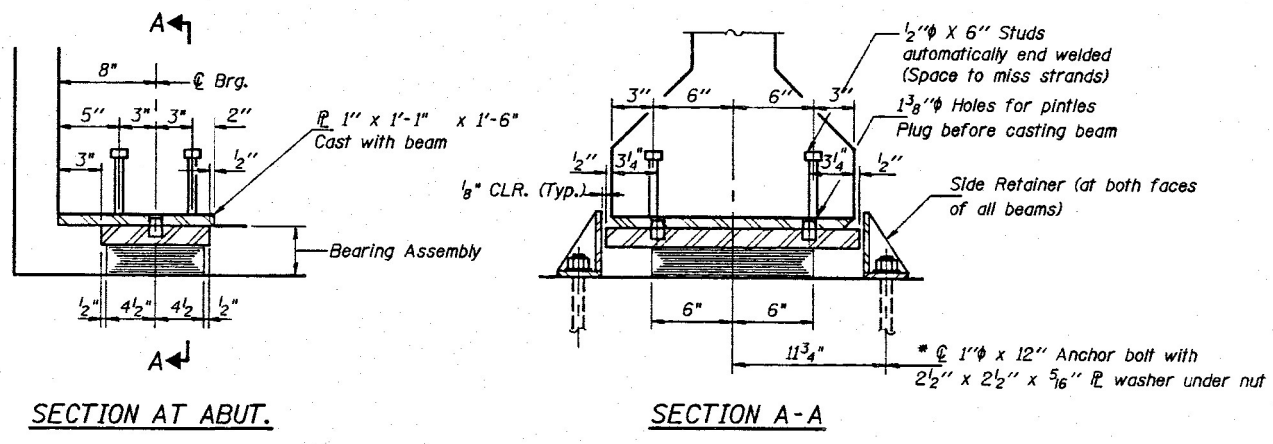
<b>AEG ATLAS ENGINEERING GROUP, LTD.</b>	USER NAME =	DESIGNED - KB	REVISED -
	PLOT SCALE = 1"=10'	CHECKED - JKL	REVISED -
	PLOT DATE =	DRAWN - KB	REVISED -
		CHECKED - 8/1/23	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BEAM REPAIR  
STRUCTURE NO. 099-4609**

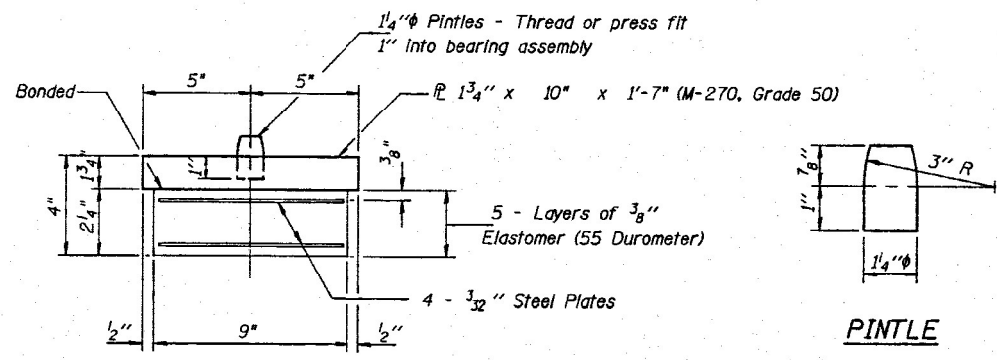
SHEET S-8 OF S-10 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	15
			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				

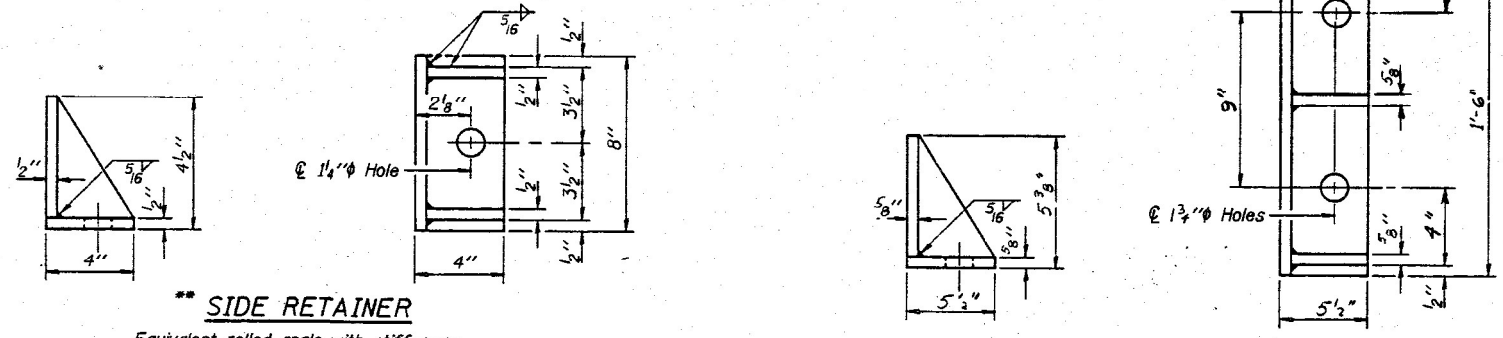


**TYPE I ELASTOMERIC EXP. BRG.**

\* Notes: After beams have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place.  
See sheet S11 for anchor bolt installation details.

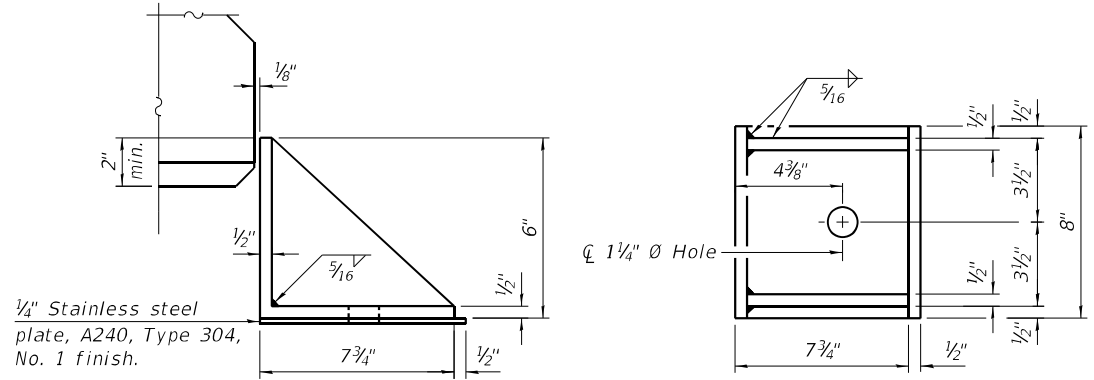


Note: Shim plates shall not be placed under Bearing Assembly.



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (24 Required)  
\*\* Weight included with "Furnishing and erecting structural steel".

(Only  $\bullet$  Exterior face of exterior beams)  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (2 Required)



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

Notes:  
Side retainers and stainless steel plates shall be included in the cost of Furnishing and Erecting Structural Steel.  
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.  
All exposed bearing plates and side retainers shall be hot dip galvanized according to AASHTO M111.  
See Special Provision for " Hot Dip Galvanizing for Structural Steel ".  
See Section A-A on Sheet S-8 of S-10 for Anchor Bolt Details.

**EXISTING BEARING DETAILS FOR INFORMATION ONLY**

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	210
Anchor Bolts, 1"	Each	8

MODEL: Default  
FILE NAME: p:\v\atlas-pw\benley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001\W0 3210 CAD\3\_Sheets\12\_Sheets\12\_Structural\162R87-0994609-009-Bearing\_Repair.dgn

<b>AEG ATLAS ENGINEERING GROUP, LTD.</b>	USER NAME =	DESIGNED - KB	REVISED -
	PLOT SCALE = 1=1	CHECKED - JKL	REVISED -
	PLOT DATE =	DRAWN - KB	REVISED -
		CHECKED - 8/1/23	REVISED -

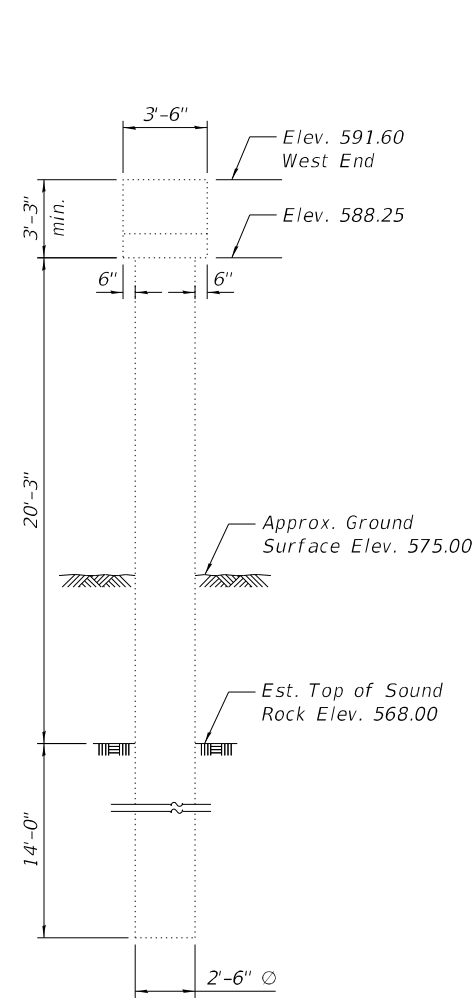
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**BEARING REPAIR STRUCTURE NO.099-4609**

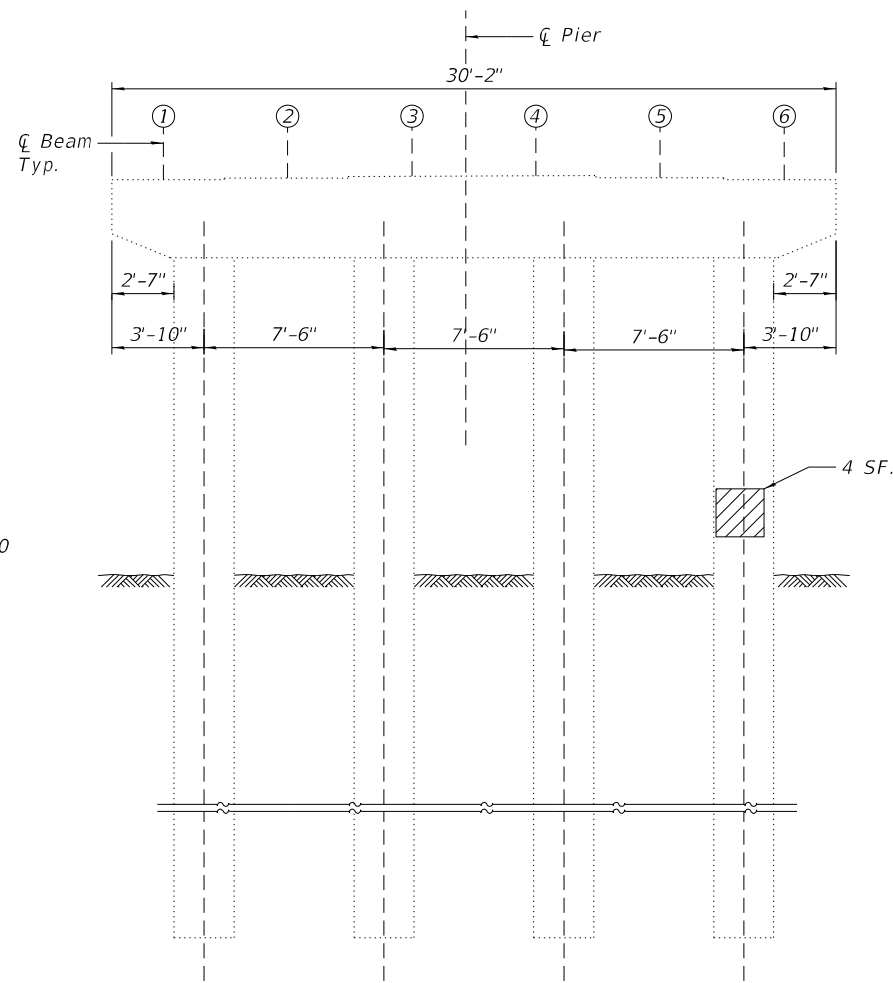
SHEET S-9 OF S-10 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	16
			CONTRACT NO. 62R87	
		ILLINOIS	FED. AID PROJECT	

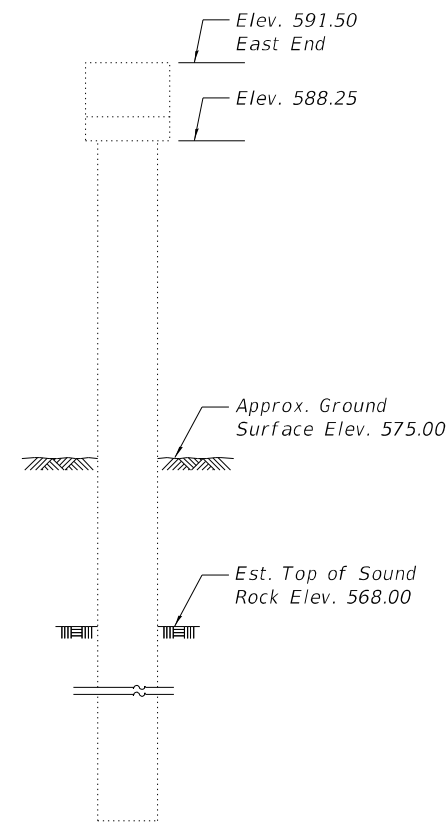
MODEL: Default  
 FILE NAME: p:\va\bas-pw\beniley.com\atlas-pw-01\Documents\Projects\3070\3070 DS 001WVO 32110 CAD\3\_Sheets\12\_Structural\162R87-0994609-010-Pier\_Repair.dgn



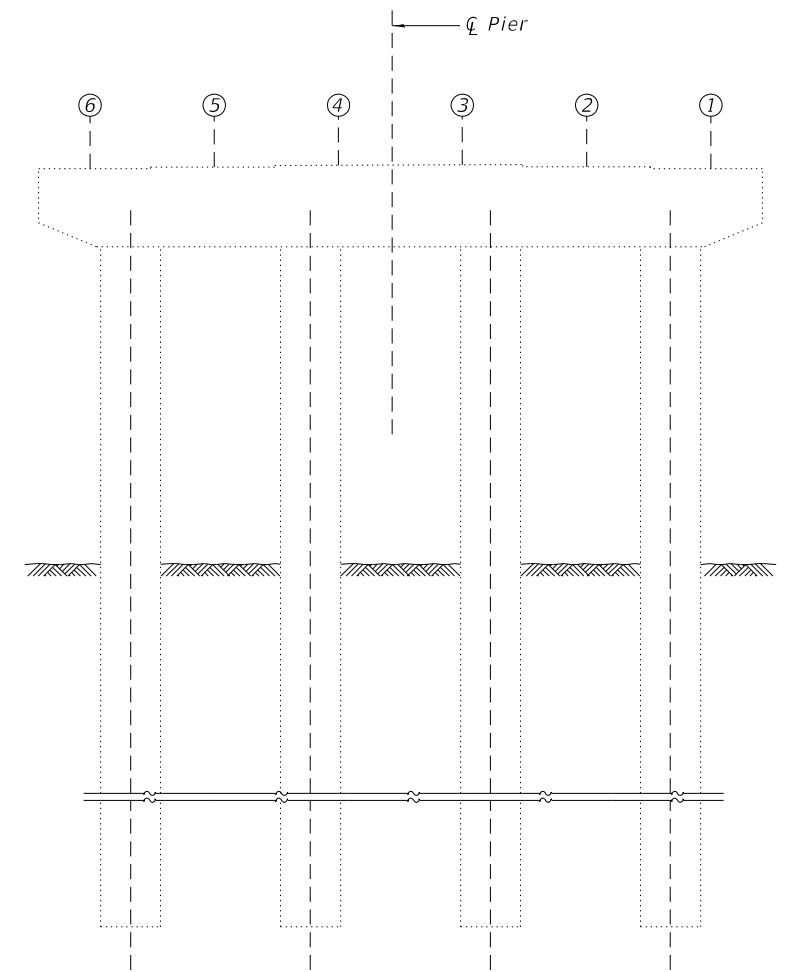
**WEST END VIEW**



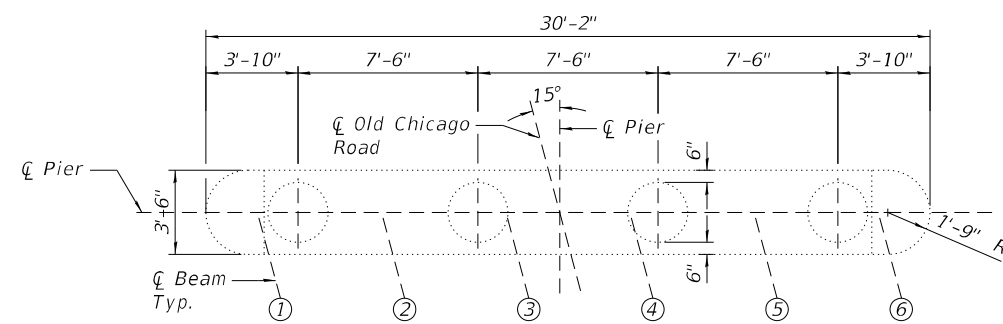
**ELEVATION PIER**  
(Looking North)



**EAST END VIEW**



**ELEVATION PIER**  
(Looking South)



**REFLECTED UNDERSIDE OF CAP PLAN**

**BILL OF MATERIAL**

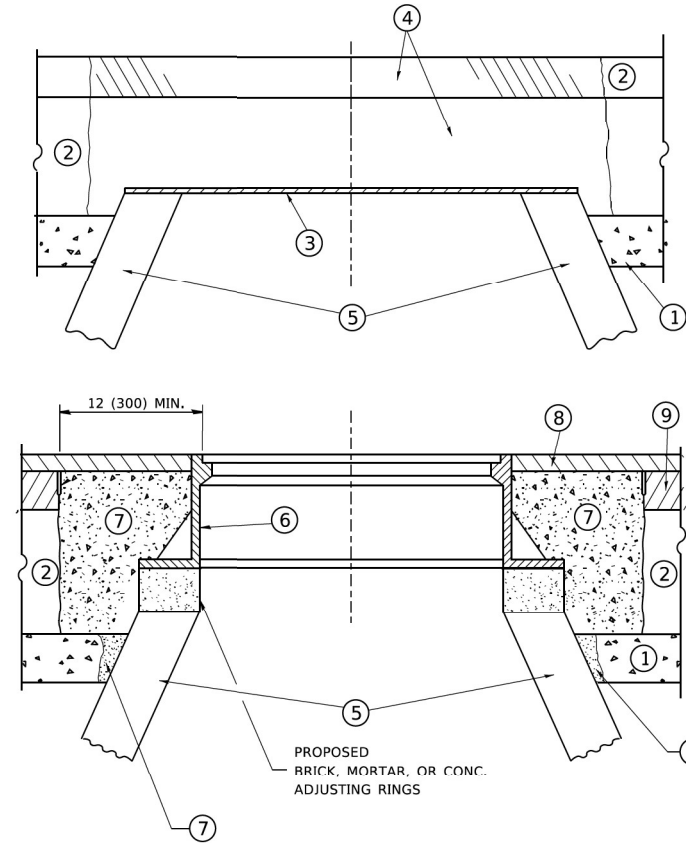
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	4

**NOTES:**

Repair areas shown are intended as a guide for bidding purposes. Actual repair areas shall be determined in the field by the Engineer. A nominal amount of additional repair quantities have been provided to account for repairs not shown.

**LEGEND**

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



**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1 \* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT \*THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1 \*CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

MODEL: Default  
 FILE: \\miles.gov\pww\DOT\Documents\DOT\_Offices\District 1\Projects\Dist1\227231\CADD\ba\CADsheets\bd08.dgn

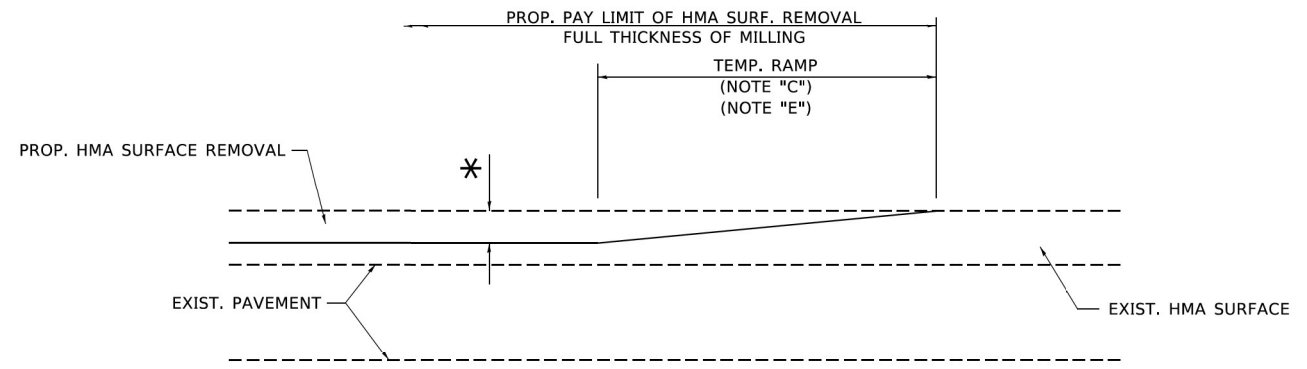
USER NAME = footemj	DESIGNED - R. SHAH	REVISED - R. WEDEMAN 05-14-04
	DRAWN -	REVISED - R. BORO 01-01-07
PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED - R. BORO 03-09-11
PLOT DATE = 3/27/2019	DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

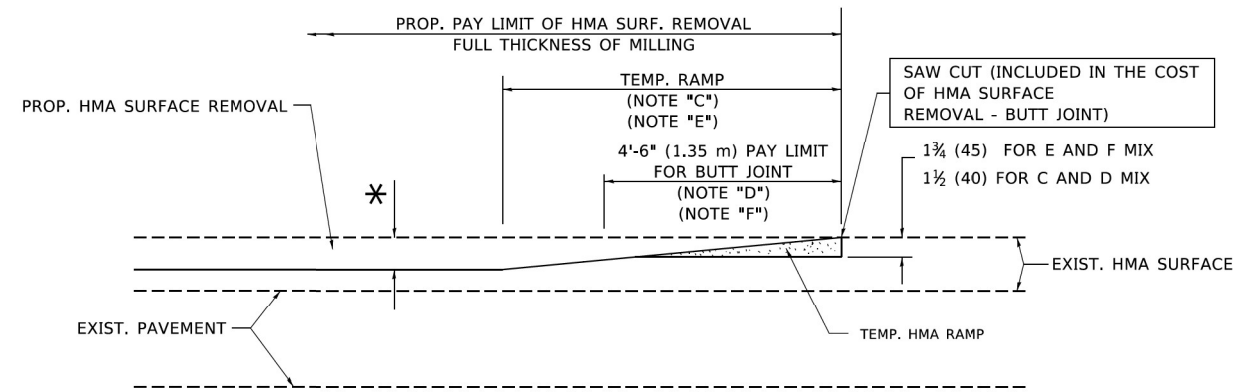
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	18
<b>BD600-03 (BD-8)</b>		CONTRACT NO. 62R87		
ILLINOIS FED. AID PROJECT				



**MILLED TEMPORARY RAMP**

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

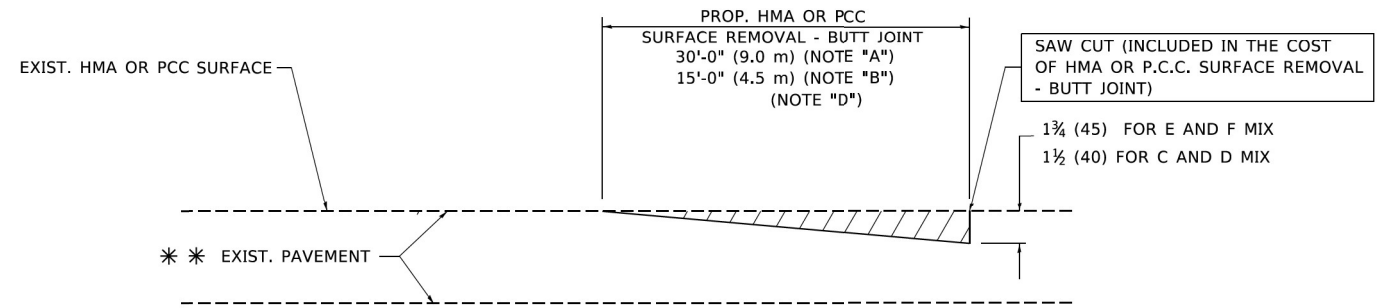


**HMA CONSTRUCTED TEMPORARY RAMP**

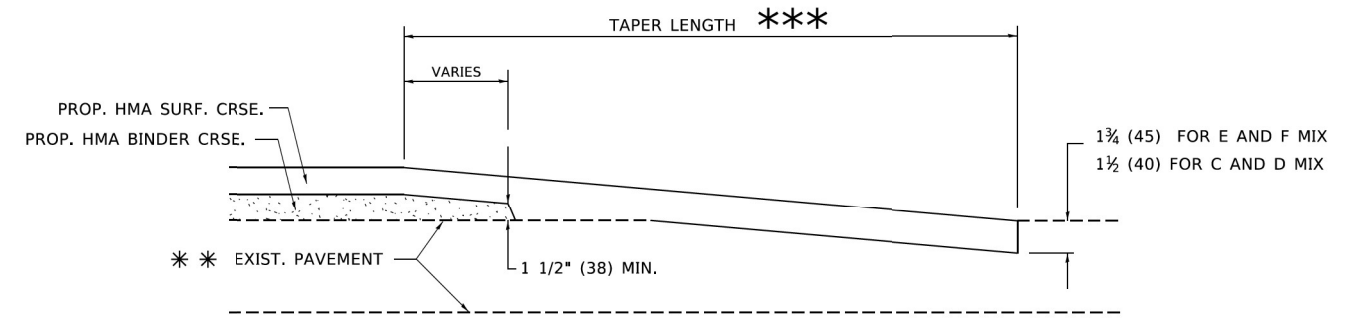
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**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.

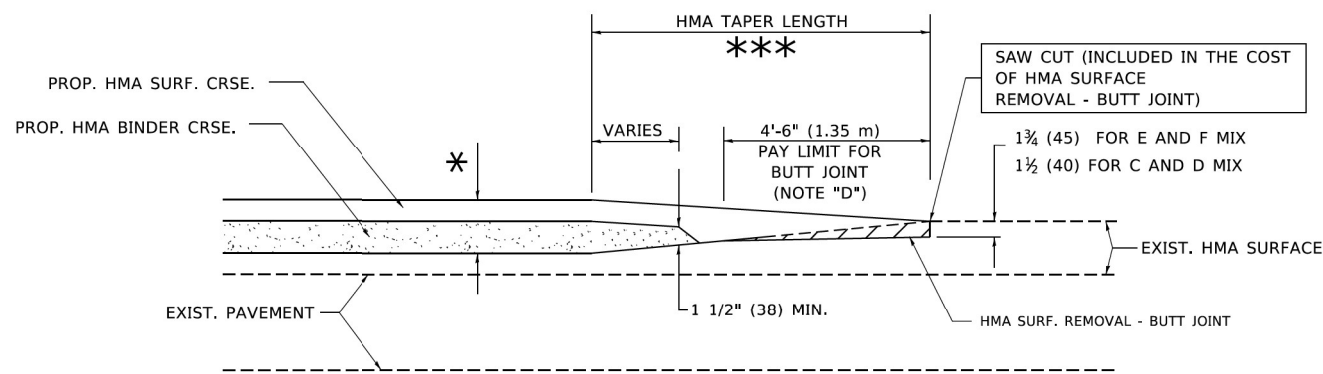
**NOTES**

- 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.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 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.



**BUTT JOINT AND HMA TAPER**

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

MODEL: Default  
FILE: M:\e:\proj\p100\p100\DOT\Documents\DOT\_Offices\Bldg\1\Projects\DOT\1027231\CADD\ba\CADsheets\B323.dgn

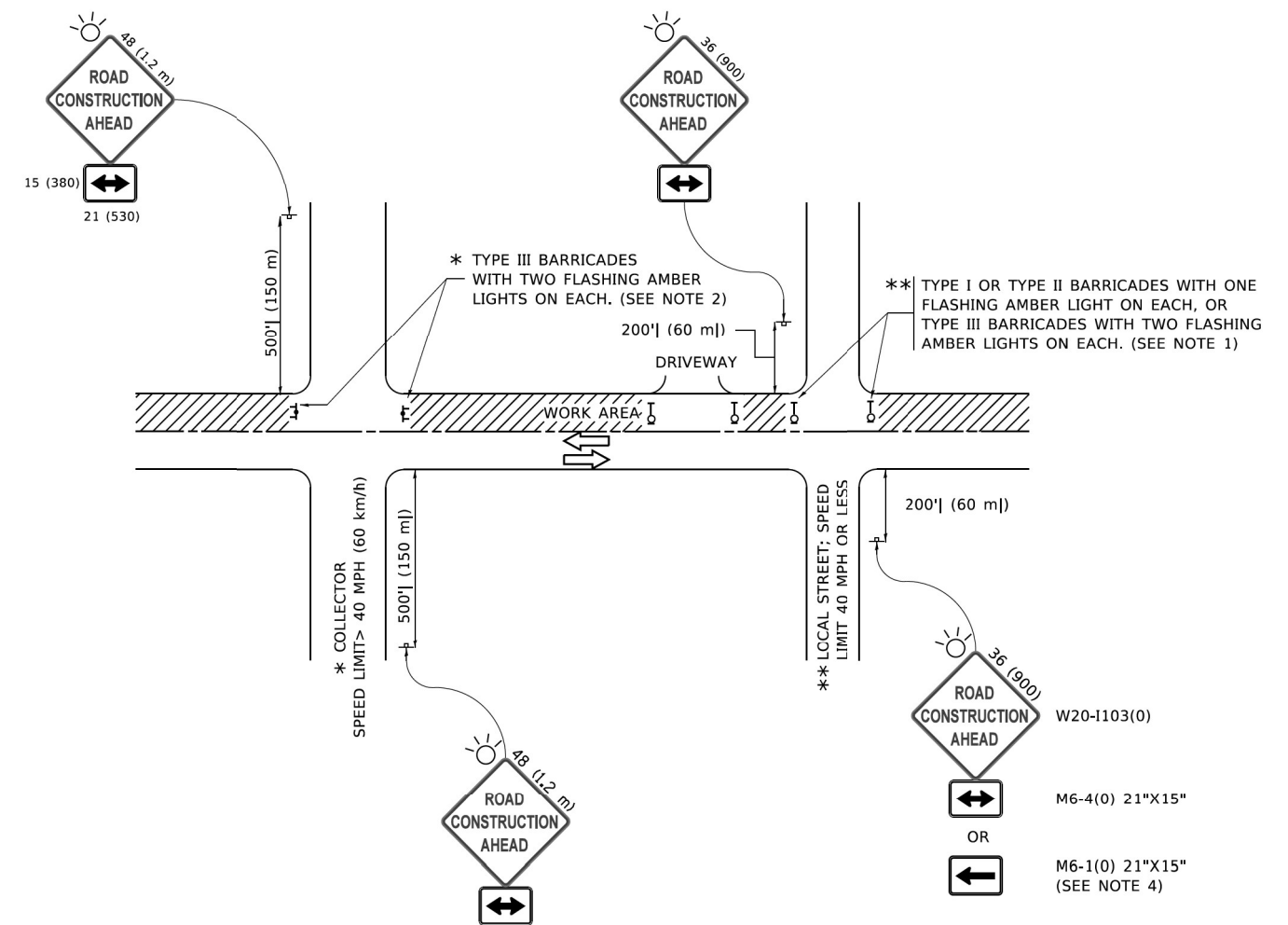
USER NAME = footemj	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE = 50,0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 3/27/2019	DATE - 06-13-90	REVISED - R.BORO 01-01-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**BUTT JOINT AND HMA TAPER DETAILS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	19
BD400-05 BD32		CONTRACT NO. 62R87		
ILLINOIS FED. AID PROJECT				



**NOTES:**

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 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

MODEL: Default  
 FILE NAME: p:\11084818\BID\NTEG\Illinois.gov\PIV\DOT\Documents\DOT Offices\District 1\Projects\0615\23\23-CAD\DD\1-CAD\Sheet1.ctb  
 PLOT DATE: 3/4/2019

USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
PLOT SCALE = 50,0000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
		REVISED - A. SCHUETZE 09-15-16

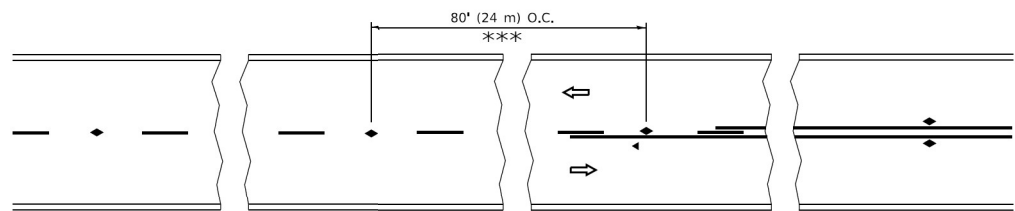
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

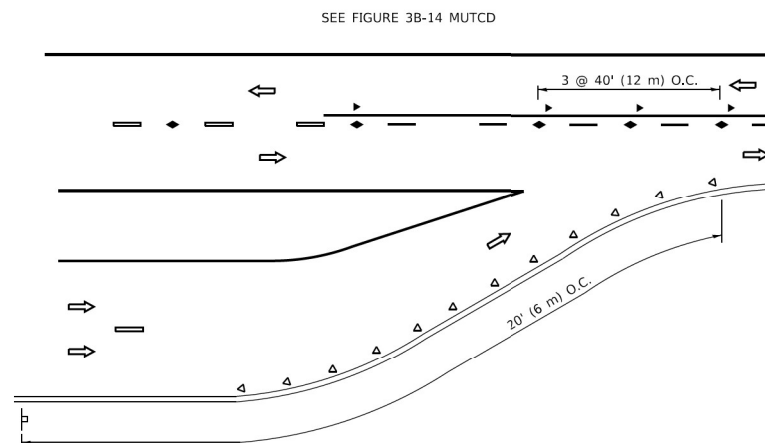
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	20
<b>TC-10</b>			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				



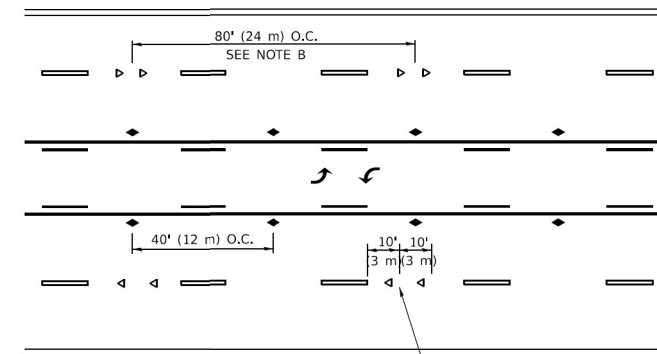


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

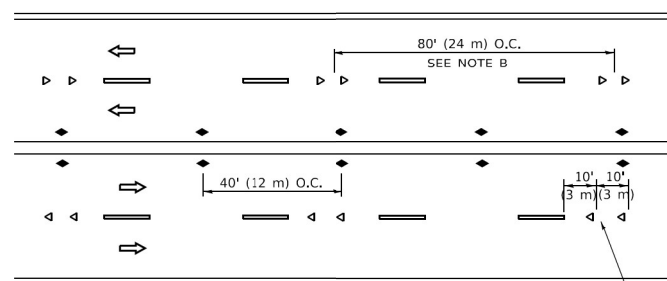
**TWO-LANE/TWO-WAY**



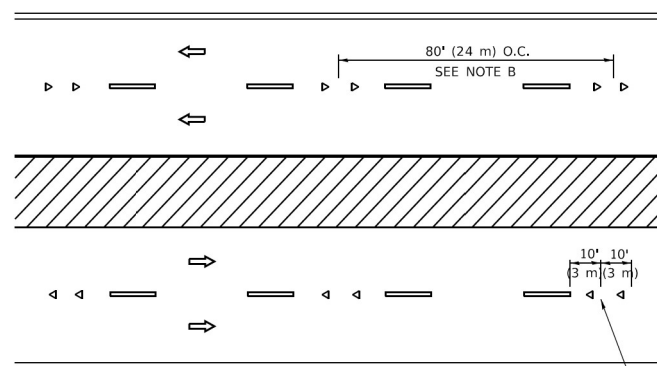
**LANE REDUCTION TRANSITION**



**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.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

**SYMBOLS**

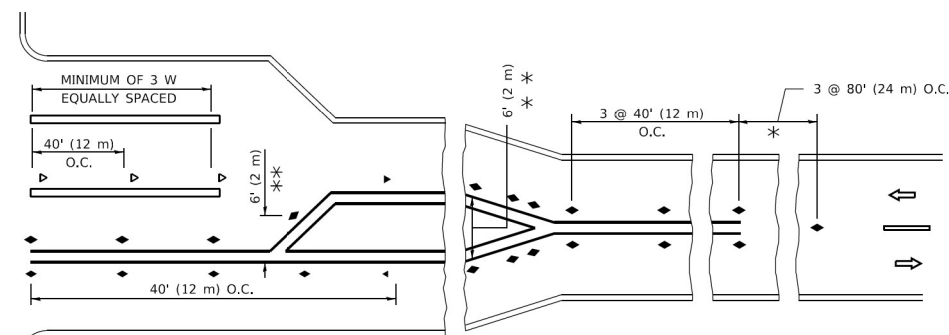
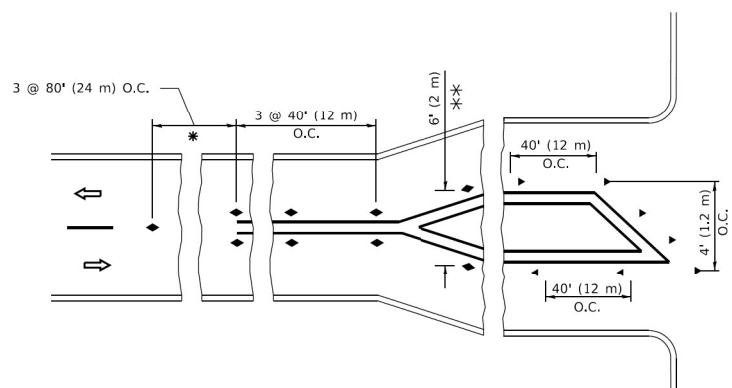
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

**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 CJBRS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



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

**TURN LANES**

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

MODEL: Default; FILE NAME: p:\010848\BID\NTEG\Illinois.gov\PIV\DOT\Documents\DOT Offices\District 3\Projects\010848\23-24\CADD\NA\CAD\Sheet\11.dgn

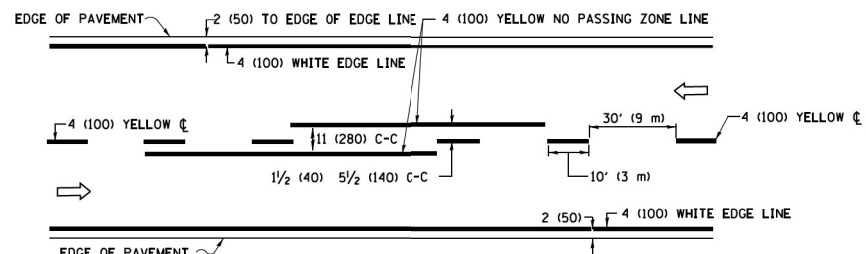
USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-12-99
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50,0000' / in.	CHECKED -	REVISED - C. JUCIUS 09-09-09
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

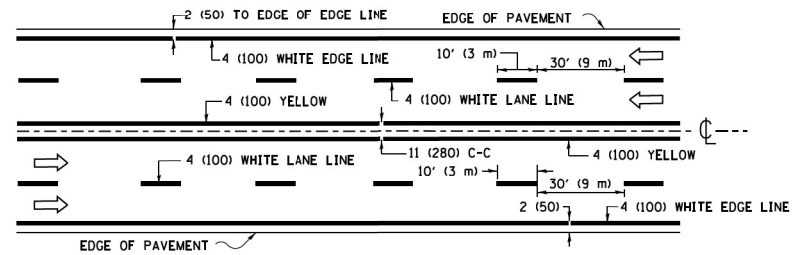
**TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

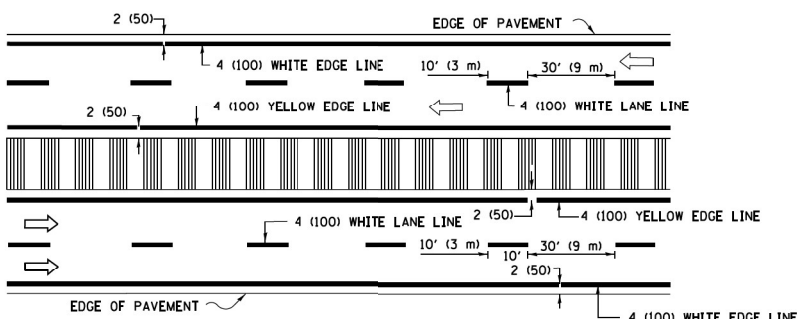
C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	21
TC-11			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

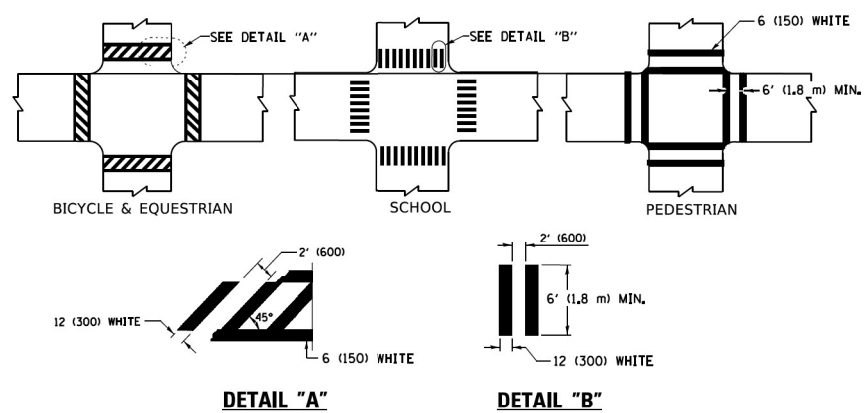


**MULTI-LANE UNDIVIDED**



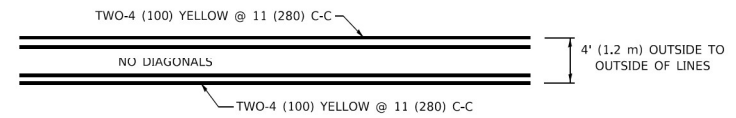
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

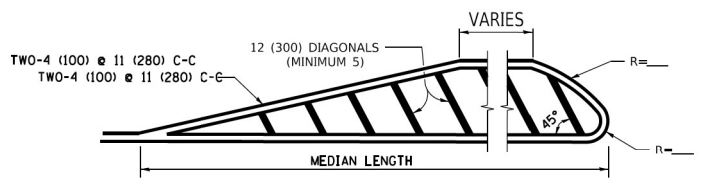


**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

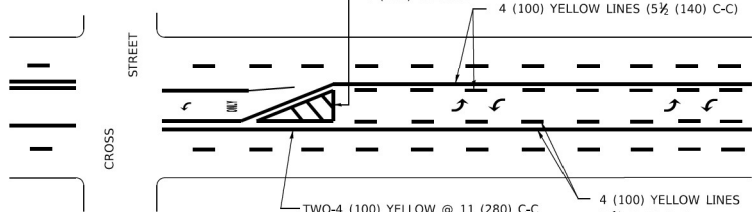


**4' (1.2 m) WIDE MEDIANS ONLY**

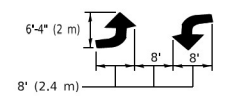


**MEDIANS OVER 4' (1.2 m) WIDE**

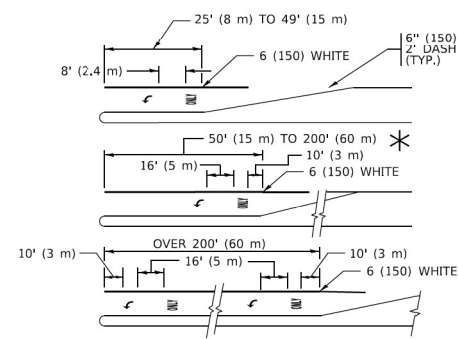
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



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.



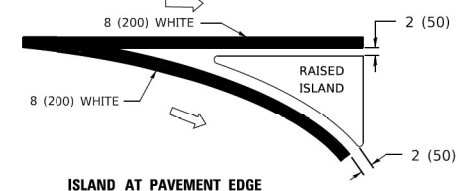
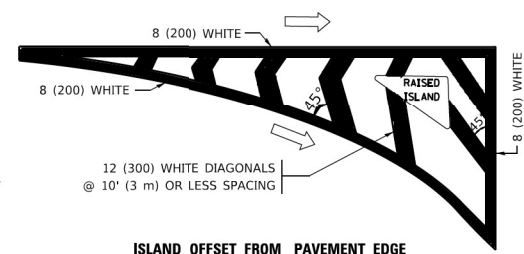
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**



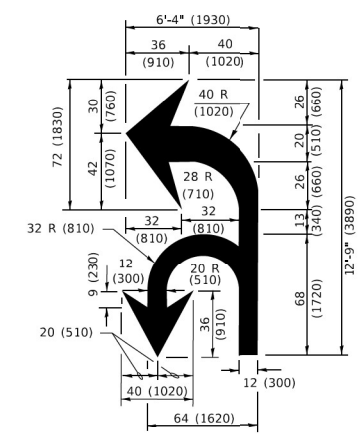
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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".

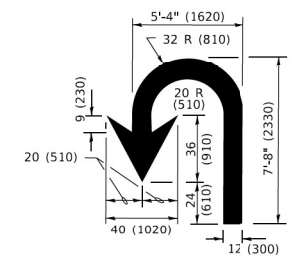
**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 MEDIANS IN YELLOW
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	NOT 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" 15 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 <sup>2</sup> ) EACH *X*=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

MODEL: Default  
FILE NAME: p:\work\1104848\BID\INTEC\Illinois.gov\WIDOT\Documents\DOT Offices\Distrcfct 1\Projects\Distrcfct 2\24\CADD\Distrcfct 1\13.dgn  
DATE: 3/4/2019 10:34:37 AM

USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
	DRAWN -	REVISED - C. JUCIUS 07-01-13
PLOT SCALE = 50.00000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.	
TYPICAL PAVEMENT MARKINGS		007		CWH 0007 22 BJ		WILL		25 22	
SCALE: NONE		SHEET 1 OF 2 SHEETS		STA. TO STA.		TC-13		CONTRACT NO. 62R87	
				ILLINOIS		FED. AID PROJECT			

MODEL - Default  
 FILE NAME: p:\110848\BID\NTEG\Illinois\gov\WIDOT\Documents\DOT\_Offices\Bldg\1\Projects\DKS\4823\24\CADD\Nal\CAD\sheet\TC21.dgn

**ROUTE MARKERS**

FOR U.S. ROUTES  
M1-40-2424

FOR ILLINOIS ROUTES  
M1-50-2424

R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-2-2115

M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

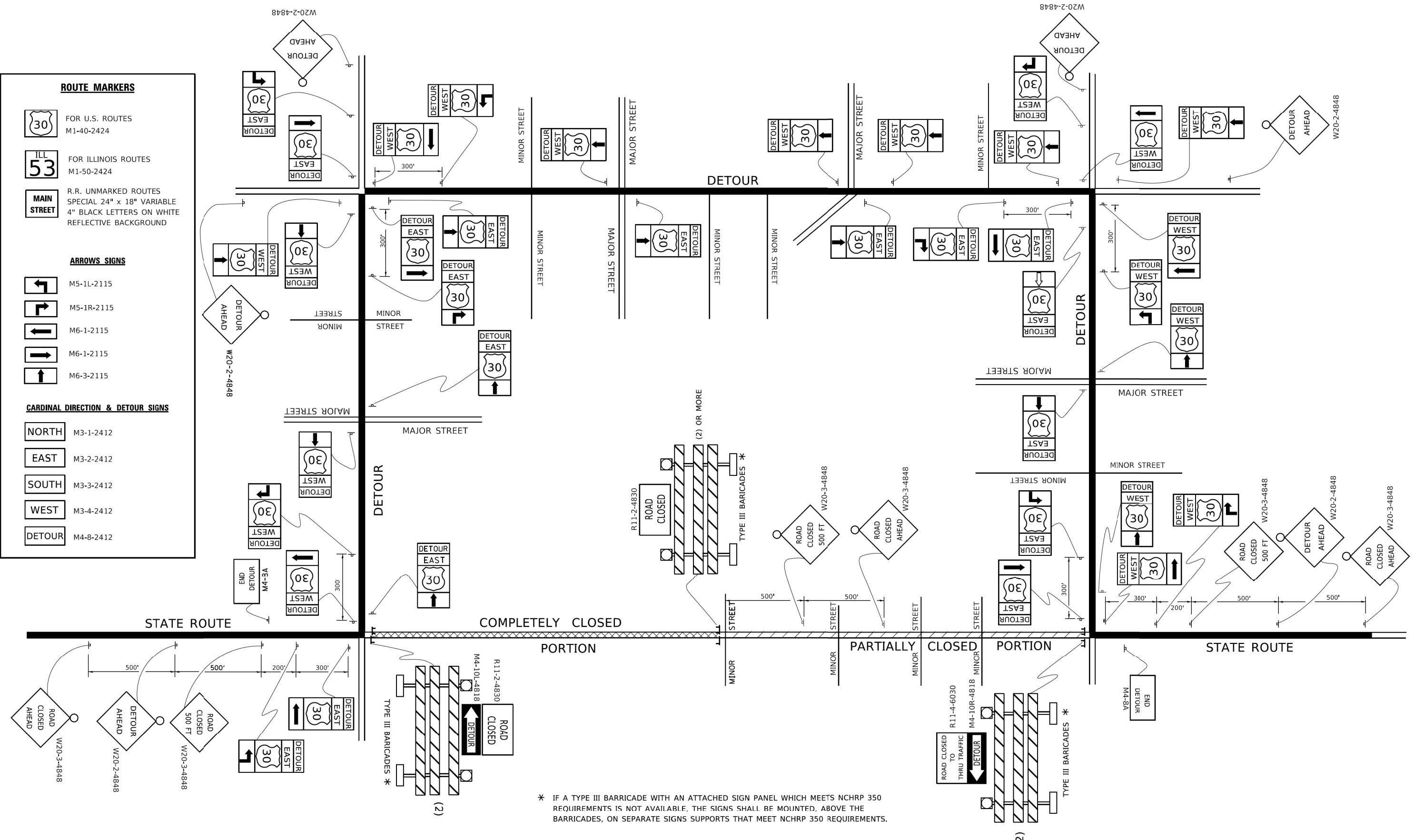
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



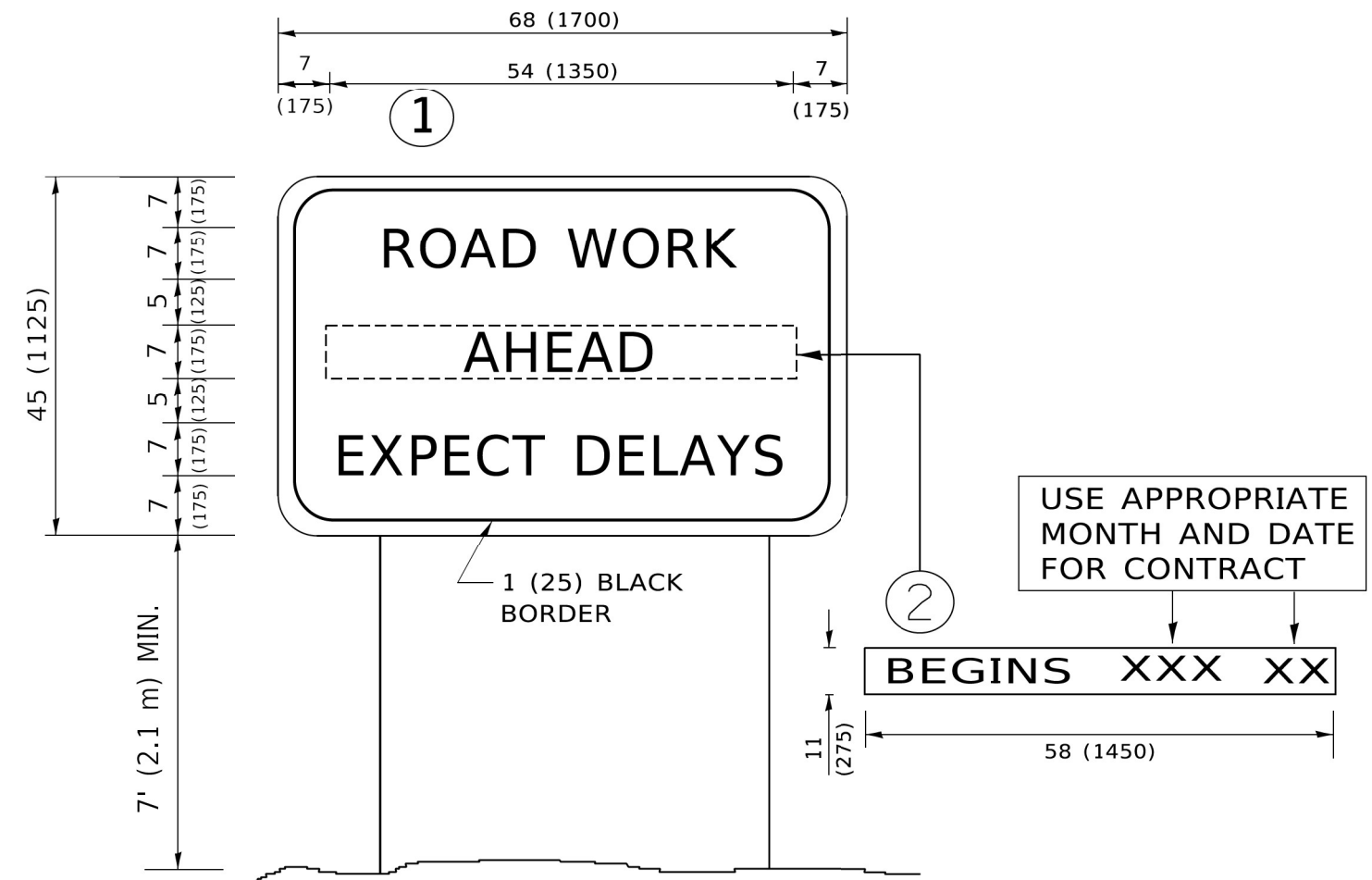
\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

USER NAME = footemj	DESIGNED -	REVISED - 10-18-02
	DRAWN -	REVISED - R. BORO 09-14-09
PLOT SCALE = 50,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	23
<b>TC-21</b>			CONTRACT NO. 62R87	
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.

MODEL: Default; FILE NAME: p:\u00484EBD\NTEG\Illinois.gov\PIV\DOT\Documents\DOT Offices\District 1\Projects\DU\S423\21\CADD\NA\CAD\sheet122.dgn

USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	24
<b>TC-22</b>			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				

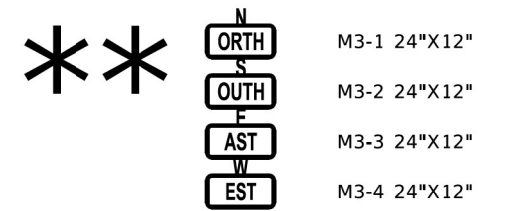
# RAILROAD CROSSING REPAIR DETOUR SIGNING

## NOTES:

- FOR DETOURS OF UNMARKED ROUTES, SIGNS 5 - 9A SHALL BE MODIFIED TO USE THE M4-9 SIGN SERIES.
- FOR DETOURS OF MARKED ROUTES, THE ORDER OF THE SIGNS SHOWN IN THE SIGN ASSEMBLIES 5 - 9A SHALL BE MODIFIED TO MATCH TYPICAL ASSEMBLY SHOWN BELOW.
- ANY SIGNS THAT ARE TO BE IN PLACE FOR MORE THAN 4 DAYS MUST HAVE A VERTICAL CLEARANCE OF 7 FEET FROM TOP OF PAVEMENT TO THE BOTTOM OF THE SIGN (5 FEET IN RURAL AREAS). THESE SIGNS SHALL BE POST MOUNTED IN THE GROUND WHERE POSSIBLE PER ARTICLE 701.14 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND HIGHWAY STANDARD 701901.
- FOR FREEWAY/EXPRESSWAY USE - M1-1100 36"x36" USED FOR ILLINOIS ROUTES, M1-4 36"x36" FOR U.S. ROUTES, OR ROAD NAMES SIGN WITH 6" LETTER MINIMUM BLACK LETTERS ON ORANGE BACKGROUND.
- REFER TO DISTRICT DETAIL TC-21 FOR TYPICAL SIGN LAYOUT AND SPACING



- ILLINOIS M1-1100 24"x24" USED FOR ILLINOIS ROUTES.
- M1-4 24"x24" USED FOR U.S. ROUTES.
- MAIN STREET CUSTOM ROAD NAME SIGN WITH 5" MINIMUM UPPERCASE BLACK LETTERS ON ORANGE BACKGROUND.
- OR
- Main St WHEN LOWER CASE LETTERS ARE USED, AS SHOWN, THEY SHALL BE 3/4 OF THE SIZE OF THE UPPER CASE LETTERS.
- FOR FREEWAY/EXPRESSWAY USE - SEE NOTE 4.



CARDINAL DIRECTION SIGNS SHALL BE USED DIRECTLY ABOVE THE ROUTE MARKER.

1A W20-3 48"x48"

3A W20-2a 48"x48"

4 W20-3 48"x48"

5 M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.  
M4-8 24"x12"  
M5-1L 21"x15"

5A M5-2L 21"x15"

6 M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.  
M4-8 24"x12"  
M6-1L 21"x15"

6A M6-2L 21"x15"

7 M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.  
M4-8 24"x12"  
M6-3 21"x15"

8 M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.  
M4-8 24"x12"  
M5-1R 21"x15"

8A M5-2R 21"x15"

9 M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.  
M4-8 24"x12"  
M6-1R 21"x15"

9A M6-2R 21"x15"

10 R11-3a 60"x30"

11 R11-3a 60"x30"

12 R11-2 48"x30"

13 M4-10R 48"x18"

14 M4-10L 48"x18"

15 M4-8a 24"x18"

M1-1100 24"x24" (STATE ROUTE)  
M1-4 24"x24" (US ROUTE)  
FOR FREEWAY/EXPRESSWAY USE SEE NOTE 4.

17 5" LETTER MIN. BLACK LETTERS ON ORANGE BACKGROUND

18 5" LETTER MIN. BLACK LETTERS ON ORANGE BACKGROUND

19 5" LETTER MIN. BLACK LETTERS ON ORANGE BACKGROUND

20 R3-2 24"x24"

21 R3-1 24"x24"

TYPE III BARRICADE W/ FLASHING LIGHTS

TYPE A FLASHING LIGHT

SEE R11-2, R-11-3a ABOVE

SEE M4-10L, M4-10R ABOVE (AS REQUIRED)

MODEL: Default; FILE NAME: p:\010848\BENTON\TEC\Illinois\pav\WIDOT\Documents\DOT Offices\District 1\Projects\DUK\5423\24\CADD\Rail\CAD\sheet1228.dgn

USER NAME = footemj	DESIGNED -	REVISED - A. SCHUETZE 09-16
	DRAWN -	REVISED -
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

RAILROAD CROSSING REPAIR  
DETOUR SIGNING

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
007	CWH 0007 22 BJ	WILL	25	25
TC-28			CONTRACT NO. 62R87	
ILLINOIS FED. AID PROJECT				