

06-15-2018 LETTING ITEM 002

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-1	WILL	27	1
CONTRACT NO. 60M88				

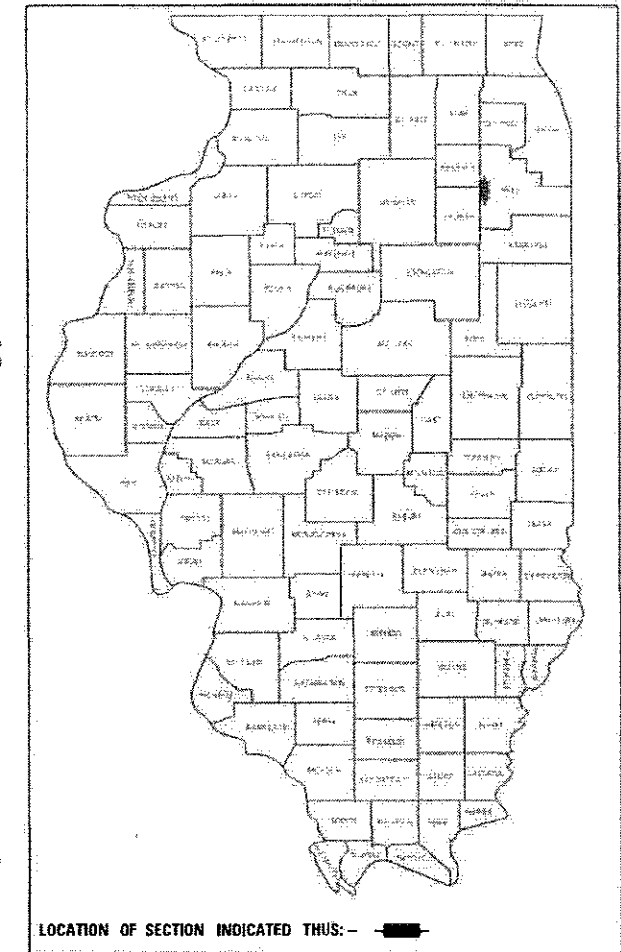
27+4-1 = 30 TOTAL SHEETS

D-91-194-11

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

F.A.I. ROUTE 55 / I-55 E. FRONTAGE ROAD AT I & M CANAL (THOMAS DILLON DR)  
SECTION 86B-3-1  
PROJECT STP-IPRP(270)  
BRIDGE DECK OVERLAY  
WILL COUNTY  
C-91-194-11

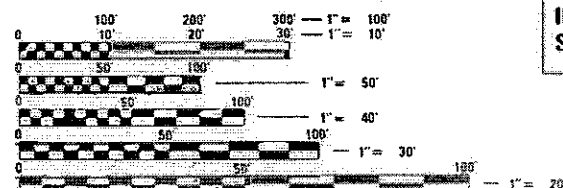


PROJECT LOCATION  
I-55 E. FRONTAGE ROAD  
AT I & M CANAL  
STRUCTURE NO. 099-0035

**TRAFFIC DATA:**

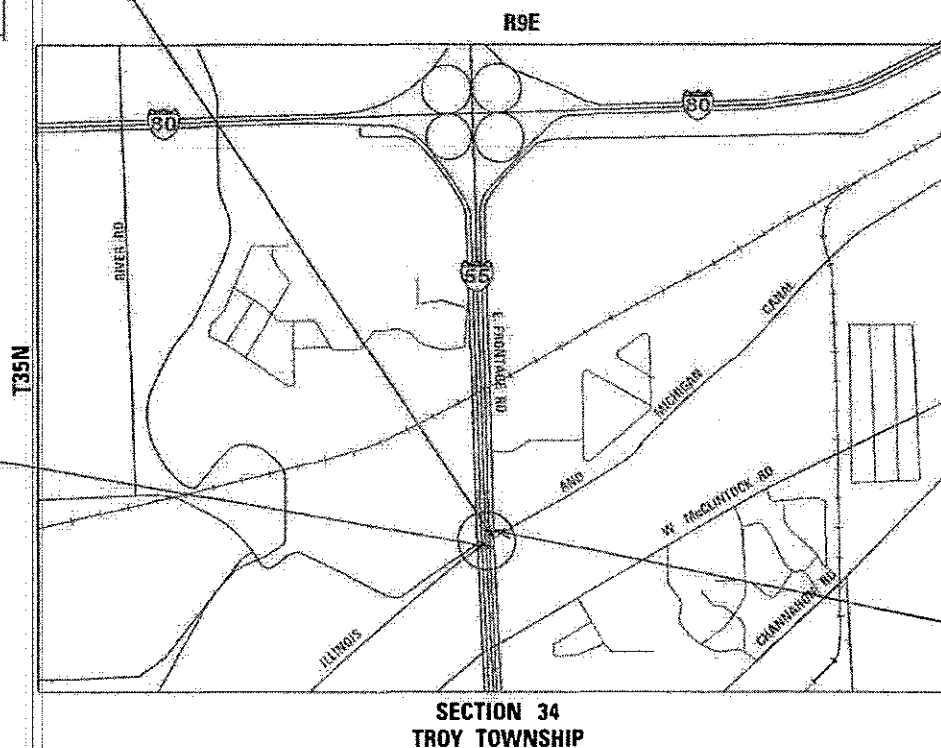
EXISTING ADT = 1650 (2016)  
POSTED SPEED = 35 MPH

PROJECT IS LOCATED IN THE  
VILLAGE OF CHANNAHON



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



IMPROVEMENT ENDS  
STA. 1099 + 84

*M.M. Mohd*  
DATE: 3/20/2018  
IL. LICENSED PROFESSIONAL  
LICENSE EXPIRES ON 11/30/2019

*[Signature]*  
DATE: 3/20/2018  
IL. LICENSED PROFESSIONAL  
LICENSE EXPIRES ON 11/30/2018

IMPROVEMENT BEGINS  
STA. 1095 + 64

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED *March 22 2018*

*[Signature]*  
REGIONAL ENGINEER

*May 11 2018*  
*[Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

*May 10 2018*  
*[Signature]*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER: RAGHAD ADEIS DAHHAN, SE PE (847) 705-4237  
PROJECT MANAGER: FAWAD AQUEEL, PE, PTOE (847) 705-4247

CONTRACT NO. 60M88

GROSS LENGTH OF PROJECT = 881 FEET = 0.17 MILES  
NET LENGTH OF PROJECT = 881 FEET = 0.17 MILES

**AES**  
ENGINEERS & SURVEYORS  
111 S. Wecker Drive,  
Suite 3910  
Chicago, IL 60606  
Ph: 312-235-6783

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OF THE STATE OF ILLINOIS

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**STATE STANDARDS**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-03 NAME PLATE FOR BRIDGES
- 630001-12 STEEL PLATE BEAM GUARDRAIL
- 630201-07 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-08 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631011-10 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631032-09 TRAFFIC BARRIER TERMINAL, TYPE 6A
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701321-17 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701901-07 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 725001-01 OBJECT AND TERMINAL MARKERS
- 780001-05 TYPICAL PAVEMENT MARKING
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**COMMITMENTS**

NONE

**GENERAL NOTES:**

1. THESE PLANS HAVE BEEN PREPARED FROM INFORMATION ACQUIRED FROM EXISTING PLANS AND NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO VARIATIONS FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. ANY ADJUSTMENTS PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE.
3. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 FOR LOCATIONS OF THE EXISTING UTILITIES.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. 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.
6. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
7. 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.
8. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
9. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS INTO THE I&M CANAL OR THE I&M CANAL TRAIL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.
11. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
12. THE RESIDENT ENGINEER SHALL CONTACT ERIC CAMPOS, IDOT'S AREA TRAFFIC FIELD ENGINEER FOR THE WILL COUNTY, VIA E-MAIL AT ERIC.CAMPOS@ILLINOIS.GOV AND, OR AT (815) 485-6475 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
13. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
14. ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.
15. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

**AES**  
ENGINEERS & SURVEYORS  
111 S. Wacker Drive,  
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Chicago, IL 60606  
Ph: 312-235-6783

USER NAME = SUSER5	DESIGNED - TOM	REVISIONS -
DRAWN - YN	CHECKED - MO	DATE - 04/30/2018
REVISIONS -	REVISIONS -	REVISIONS -
PLOT SCALE = 55CALES		
PLOT DATE = 5/8/2018		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
INDEX OF SHEETS, STATE STANDARDS  
GENERAL NOTES AND COMMITMENTS**

SCALE: N/A SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	868-3-I	WILL	27	02
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				ROADWAY 0013 URBAN	BRIDGE 0013 86B-3-I
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	165	165	
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	17	17	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	132	132	
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	17	17	
20101700	SUPPLEMENTAL WATERING	UNIT	7	7	
20200100	EARTH EXCAVATION	CU YD	790	790	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	899	899	
25000300	SEEDING, CLASS 3	ACRE	0.25	0.25	
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	899	899	
28000400	PERIMETER EROSION BARRIER	FOOT	1285	1285	
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	585	585	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	13	13	
3101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	30	30	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	347	347	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	34	34	
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	481	481	
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	583	583	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				URBAN	
				ROADWAY 0013 URBAN	BRIDGE 0013 86B-3-I
50102400	CONCRETE REMOVAL	CU YD	3		3
50157300	PROTECTIVE SHIELD	SQ YD	184		184
50300100	FLOOR DRAINS	EACH	4		4
50300260	BRIDGE DECK GROOVING	SQ YD	173		173
50900200	STEEL RAILING, TYPE 2399	FOOT	87		87
63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	588	588	
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	3	3	
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	5	
63200310	GUARDRAIL REMOVAL	FOOT	235	235	
63200400	CABLE ROAD GUARD REMOVAL	FOOT	84	84	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4	
67100100	MOBILIZATION	L SUM	1	1	

\* SPECIALTY ITEMS

MODEL: DEMISE  
 FILE NAME: P:\0618002.02.1807.P18185.002.W02.L55.Frontage Road at I&M Canal\_60MB88.DWG\SHEET3.D18088-SH-S00\_1.dgn

111 S. Wacker Drive, Suite 3910 Chicago, IL 60606 Ph: 312-255-5783	USER NAME = tmohammed	DESIGNED - TOM	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-55 E. FRONTAGE ROAD AT I&M CANAL SUMMARY OF QUANTITIES SHEET 1 OF 2	F.A.I. RTE. 55	SECTION 86B-3-I	COUNTY WILL	TOTAL SHEETS 27	SHEET NO. 03
	PLOT SCALE = 2.0000' / in.	CHECKED - MO	REVISED			CONTRACT NO. 60MB88				
	PLOT DATE = 3/22/2018	DATE - 03/22/2018	REVISED			ILLINOIS FED. AID PROJECT				
	SCALE: N/A SHEET 1 OF 2 SHEETS STA. TO STA.									

REV 5-8-18

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	
				ROADWAY 0013 URBAN	BRIDGE 0013 86B-3-I
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	111	111	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	402	402	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	4765	4765	
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	66	66	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	896	896	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,011	1,011	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	4	
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	6	6	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4,872	4,872	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	26	26	
89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	
				ROADWAY 0013 URBAN	BRIDGE 0013 86B-3-I
X0326131	RELOCATE EXISTING TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	2	
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	1,624	1,624	
X6310088	TRAFFIC BARRIER TERMINAL TYPE 6A (SPECIAL)	EACH	1	1	
X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	25	25.00	
X6650206	WOVEN WIRE FENCE TO BE REMOVED AND RE-ERECTED	FOOT	284	284	
X7010218	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1	1	
X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	140	140	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	2,138	2,138	
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	173		173
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	173		173
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	31		31
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2		2
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	29		29
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
Z0049790	RELOCATING NAME PLATES	EACH	1		1

\* SPECIALTY ITEMS

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111 S. Wacker Drive,  
Suite 3910  
Chicago, IL 60606  
Ph: 312-235-6783

USER NAME = tmohammed  
DESIGNED - TOM  
DRAWN - YN  
CHECKED - MO  
DATE - 03/22/2018

REVISOR  
REVISION  
REVISION  
REVISION

PLOT SCALE = 2.0000' / in.  
PLOT DATE = 3/22/2018

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
SUMMARY OF QUANTITIES SHEET 2 OF 2**

SCALE: N/A    SHEET 2 OF 2 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	04
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

**HMA MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)
<b>HMA SURFACE COURSE</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 MM)	4% @ 70 GYR	QC/QA
<b>HOT MIX ASPHALT SHOULDERS, 10"</b>		
2" HMA SURFACE COURSE, MIX D N70 (IL-9.5MM)	4% @ 70 GYR	QC/QA
8" HMA BINDER IL-19 MM	4% @ 70 GYR	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)		

**MIXTURE TABLE NOTES**

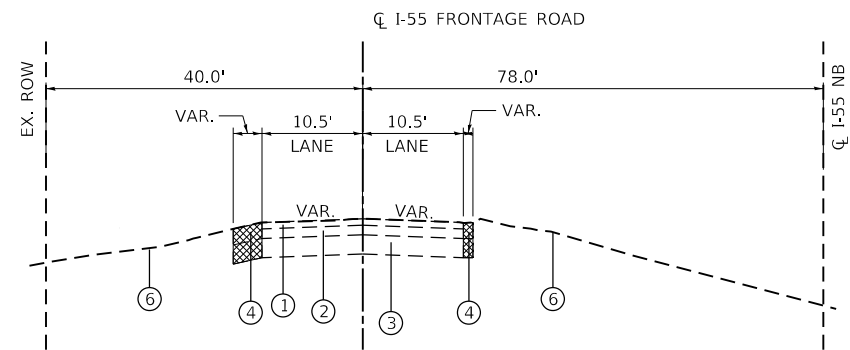
- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN.
- THE "AC TYPE" FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

**EXISTING LEGEND**

- ① EXISTING HMA SURFACE COURSE, (VAR. THICKNESS)
- ② EXISTING HMA OVERLAY (VAR. THICKNESS)
- ③ EXISTING HMA BASECOURSE (VAR. THICKNESS)
- ④ EXISTING AGGREGATE TO BE REMOVED PAID FOR AS EARTH EXCAVATION
- ⑤ EXISTING GUARD RAIL TO BE REMOVED
- ⑥ EXISTING EMBANKMENT
- ⑦ EXISTING CABLE ROAD GUARD TO BE REMOVED

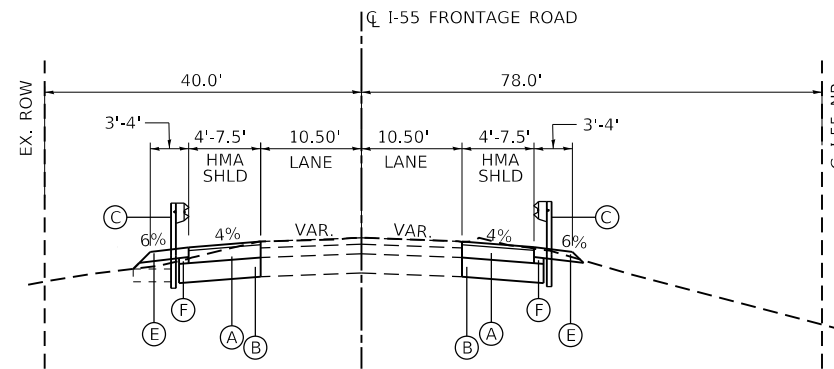
**PROPOSED LEGEND**

- Ⓐ HOT MIX ASPHALT SHOULDERS, 10"  
-1 3/4" HOT-MIX ASPHALT SURFACE COURSE, -MIX "D", N70 (IL 9.5 MM)  
-8" HMA BINDER IL-19 MM
- Ⓑ AGGREGATE SUBGRADE IMPROVEMENT 12"
- Ⓒ STEEL PLATE GUARDRAIL, TYPE A, 9 FOOT POSTS
- Ⓓ RESTORATION LANDSCAPING:  
- HEAVY DUTY EROSION CONTROL BLANKET  
- SEEDING, CLASS 3  
- TOPSOIL FURNISH AND PLACE, 4"
- Ⓔ AGGREGATE SHOULDERS, TYPE B 6"
- Ⓕ SUBBASE GRANULAR MATERIAL, TYPE C
- Ⓖ EARTH EXCAVATION



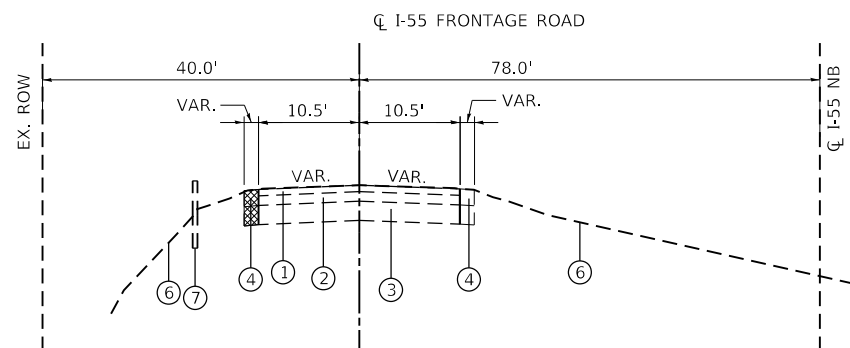
**EXISTING TYPICAL SECTION**

STA. 1096+37.00 TO STA. 1097+55.00  
STA. 1097+90.00 TO STA. 1099+00.00



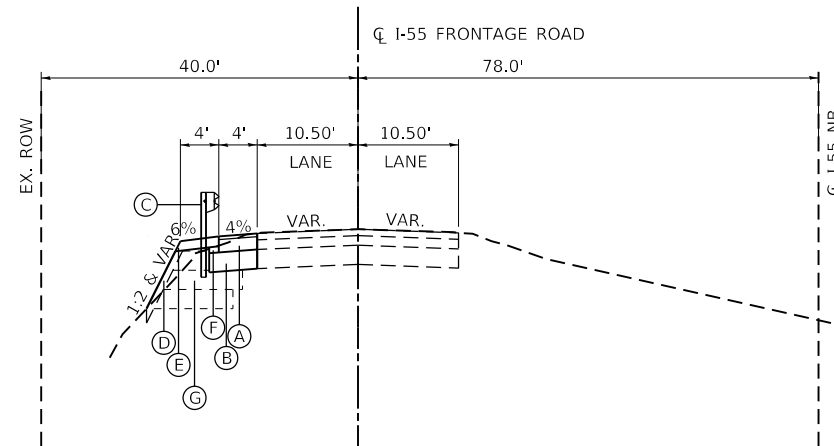
**PROPOSED TYPICAL SECTION**

STA. 1095+64 TO STA. 1097+54  
STA. 1097+93 TO STA. 1099+37



**EXISTING TYPICAL SECTION**

STA. 1098+92.00 TO STA. 1099+84.00



**PROPOSED TYPICAL SECTION**

STA. 1099+37 TO STA. 1104+45

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

I-55 E. FRONTAGE ROAD AT I&M CANAL  
EXISTING & PROPOSED TYPICAL SECTIONS

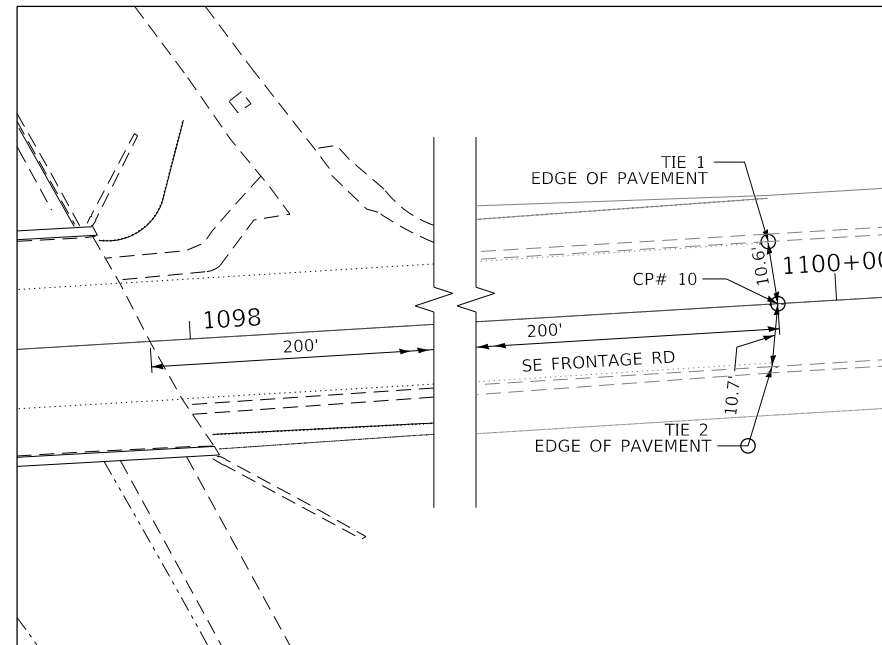
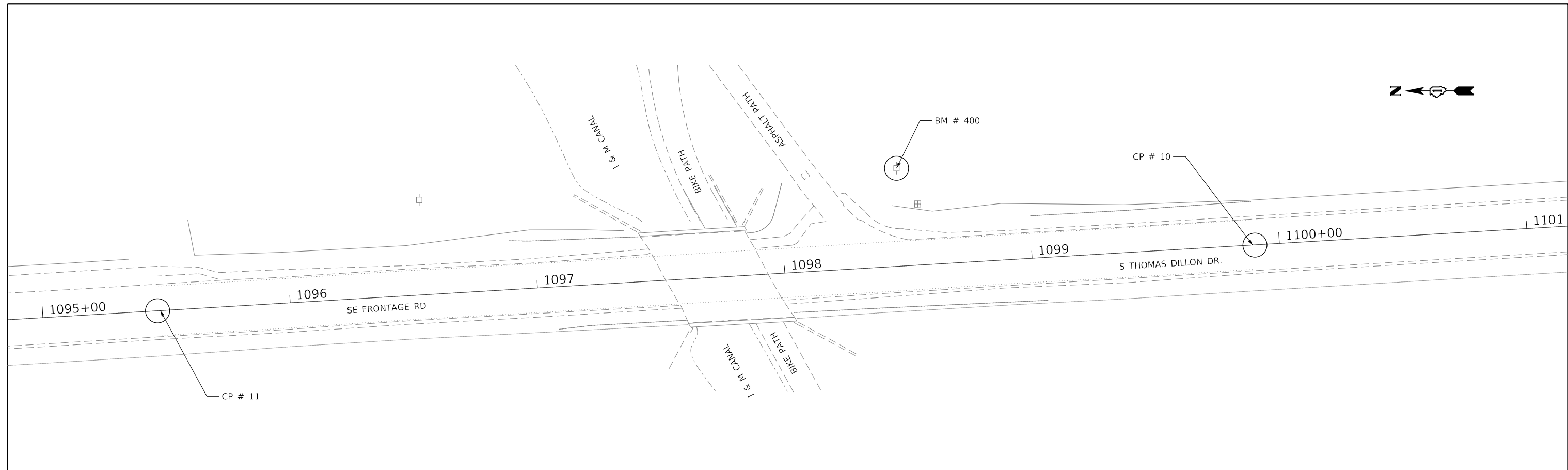
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	05
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

MODEL: D:\a\11  
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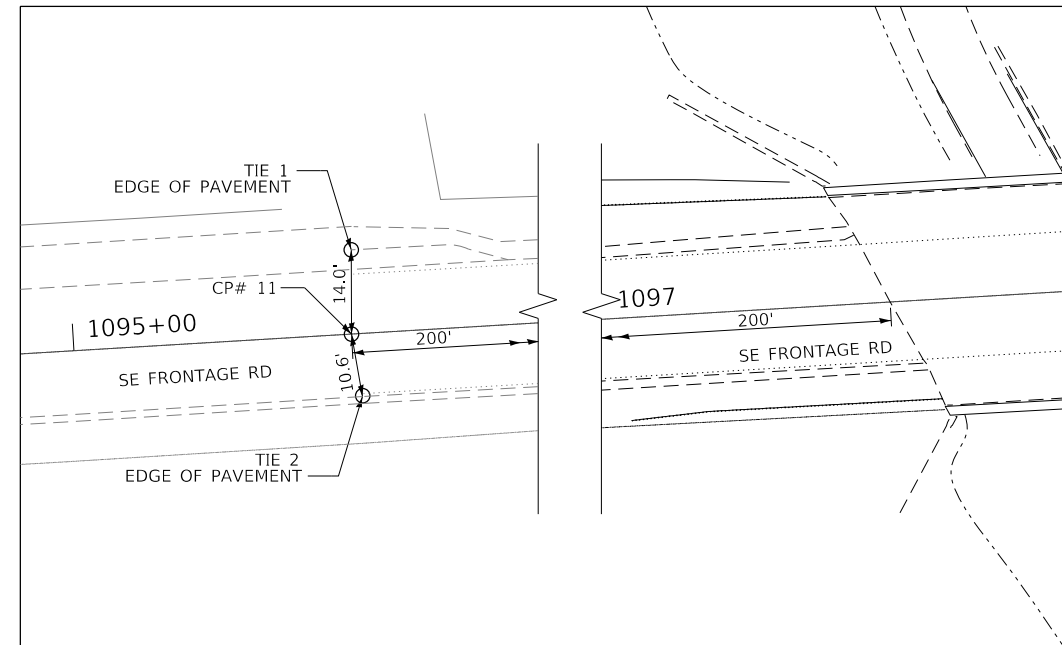
**AES**  
ENGINEERS & SURVEYORS  
111 S. Wacker Drive,  
Suite 3910  
Chicago, IL 60606  
Ph: 312-235-6783

USER NAME = tmohammed	DESIGNED - TOM	REVISED -
PLOT SCALE = 20.0000 "/in.	DRAWN - YN	REVISED -
PLOT DATE = 4/30/2018	CHECKED - MO	REVISED -
	DATE - 04/30/2018	REVISED -



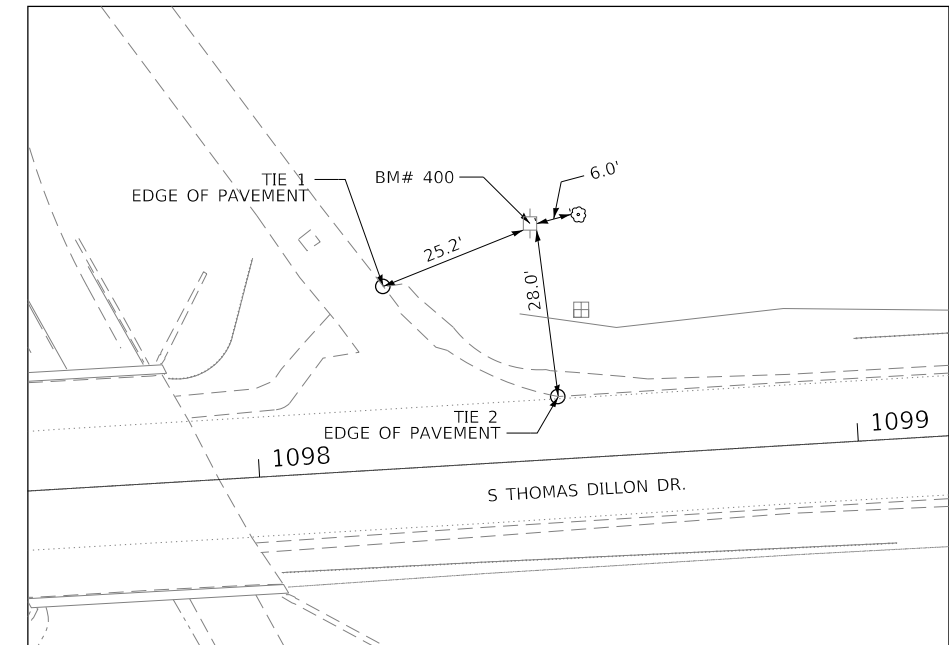
**CP #10**

ELEV. : 531.579  
 TYPE OF MARKER : MAG NAIL  
 STA: 1095+46.38, 0' LT/RT  
 NORTHING : 1749236.86  
 EASTING : 1021648.17  
 LOCATION : MAG NAIL IN CENTER LINE  
 200' SOUTH OF ABUTMENT



**CP #11**

ELEV. : 539.318  
 TYPE OF MARKER : MAG NAIL  
 STA: 1099+90.21, 0' LT/RT  
 NORTHING : 1749132.13  
 EASTING : 1021651.84  
 LOCATION : MAG NAIL IN CENTER LINE  
 200' NORTH OF ABUTMENT



**BM #400**

ELEV. : 528.805  
 TYPE OF MARKER : RR SPIKE  
 STA: 1098+47.55, 39.5' LT  
 NORTHING : 1748861.26  
 EASTING : 1021638.81  
 LOCATION : RR SPIKE IN POWER POLE

MODEL: Dwg.rvt  
 FILE NAME: P:\60618002\02\_IDOT\_PFB\185\_002\_155\_Frontage Road at I&M Canal\_60M88\01\CADD\Sheet16\_0160M88-sh1-A.rvt.dgn



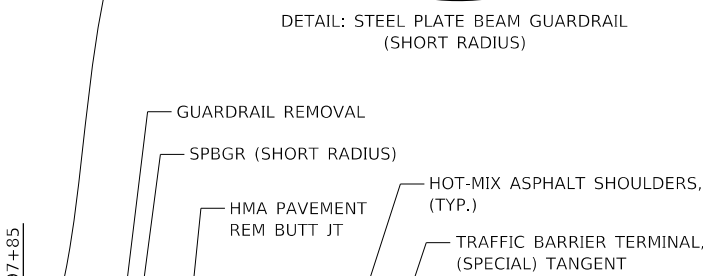
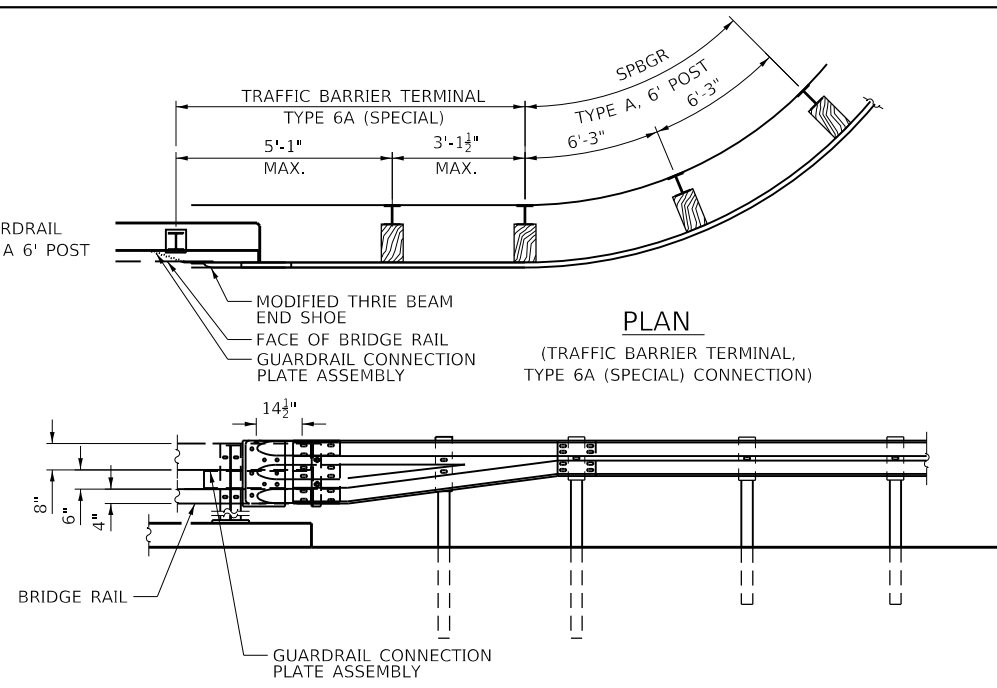
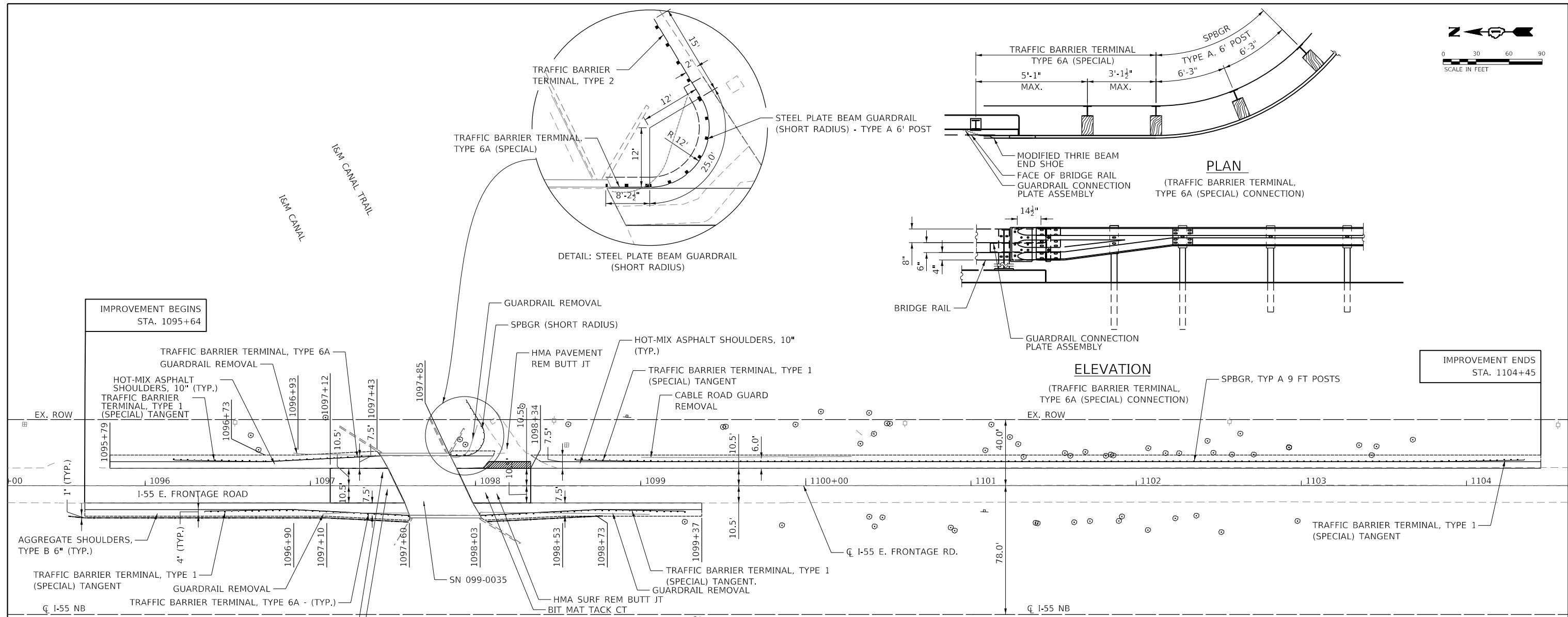
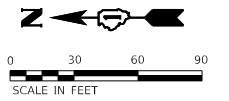
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	DATE - 03/22/2018	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
 ALIGNMENT, TIES & BENCHMARK**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	06
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				



**ELEVATION**  
(TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL) CONNECTION)

**EARTH EXCAVATION**

LOCATION/STAGE	EARTH EXCAVATION CUBIC YARD	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CUBIC YARD	EMBANKMENT CUBIC YARD	EARTHWORK BALANCE WASTE (+) OR SHRINKAGE (-) CUBIC YARD
PRE-STAGE				
1095+50 TO 1097+53	70	59	2	57
1098+93 TO 1100+00	148	126	144	-28
PRESTAGE TOTALS	218	185	147	39
STAGE 1				
1095+50 TO 1097+53	80	68	1	67
1098+93 TO 1100+00	75	64	22	41
STAGE 1 TOTALS	155	132	23	108
STAGE 2				
1100+00 TO 1104+40	415	352	362	-9
TOTAL	788	670	532	138

**GUARDRAIL REMOVAL SCHEDULE**

QUADRANT	GUARDRAIL REMOVAL (FEET)
NORTHWEST	52.0
NORTHEAST	52.5
SOUTHWEST	103.0
SOUTHEAST	27.5
TOTAL	235.0

**PAVEMENT REMOVAL SCHEDULE**

LOCATION	HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT (SQ YD)
1097+12 TO 1097+52	168
1097+94 TO 1098+34	179
TOTAL	347

**GUARDRAIL SCHEDULE**

STATION	TO	STATION	LT/RT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 6A (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL) (EACH)	TERMINAL MARKER - DIRECT APPLIED (EACH)	SPBGR, TYP A, 9 FT POSTS (FEET)	SPBGR (SHORT RADIUS) (FEET)	TRAFFIC BARRIER TERMINAL, TYPE 2 (EACH)
1096+17.0	TO	1096+67.0	LT	1	-	-	1	-	-	-
1096+67.0	TO	1097+04.5	LT	-	-	-	-	37.5	-	-
1097+04.5	TO	1097+44.5	LT	-	1	-	-	-	-	-
1096+36.0	TO	1096+86.0	RT	1	-	-	1	-	-	-
1096+86.0	TO	1097+23.5	RT	-	-	-	-	37.5	-	-
1097+23.5	TO	1097+63.5	RT	-	1	-	-	-	-	-
1097+85.0	TO	1097+93.0	LT	-	-	1	-	-	-	-
1097+93.0	TO		LT	-	-	-	1	-	25.0	1
1098+60.0	TO	1099+10.0	LT	1	-	-	1	-	-	-
1099+10.0	TO	1103+85.0	LT	-	-	-	-	475	-	-
1103+85.0	TO	1104+35.0	LT	1	-	-	1	-	-	-
1097+99.5	TO	1098+39.5	RT	-	1	-	-	-	-	-
1098+39.5	TO	1098+77.0	RT	-	-	-	-	37.5	-	-
1098+77.0	TO	1099+27.0	RT	1	-	-	1	-	-	-
TOTAL					5	3	1	587.5	25.0	1

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 PLOT DATE: = 4/30/2018



USER NAME = tmo	DESIGNED - TOM	REVISD -
	DRAWN - YN	REVISD -
	CHECKED - MO	REVISD -
	DATE - 04/30/2018	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
PLAN & SCHEDULE OF QUANTITIES**

SCALE: 1" = 30'  
SHEET 1 OF 1 SHEETS  
STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	07
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE MOT PLANS.
3. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
4. ALL VEHICLES, EQUIPMENT, WORKERS, AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
5. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC STRIPING SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "PAVEMENT MARKING REMOVAL" OF DESIGNATED METHOD.
6. THE CONTRACTOR SHALL REMOVE ALL PAVEMENT MARKING TAPE WHICH CONFLICTS WITH THE NEXT STAGE OR FINAL STRIPING. REMOVAL OF TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT, "TEMPORARY PAVEMENT MARKING REMOVAL".
7. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED ON THE PLANS, OR HIGHWAY STANDARD SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION OR AS DIRECTED BY THE ENGINEER.
8. ALL DRUMS, VERTICAL PANELS, AND BARRICADES ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE EQUIPPED WITH STEADY-BURNING BIDIRECTIONAL LIGHTS.
9. TEMPORARY CONCRETE BARRIER SHALL BE USED ACROSS THE BRIDGE WHEN SPECIFIED IN THE PLANS.
10. ALL EXISTING SIGNS WITHIN THE LIMITS OF MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
11. TEMPORARY, OFF-PEAK HOUR LANE CLOSURES MUST BE REQUESTED THROUGH THE ENGINEER AND AS SPECIFIED IN THE SPECIAL PROVISIONS. WHEN OFF-PEAK HOUR OR WEEKEND LANE CLOSURES ARE REQUIRED, A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE WEEK PRIOR TO THE CLOSURE. THE MESSAGE SIGN WORDING AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
12. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACE TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR DAY, "CHANGEABLE MESSAGE SIGN".
13. ALL TEMPORARY INFORMATION SIGNS SHALL BE PAID FOR SEPARATELY AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR "TEMPORARY INFORMATION SIGNING".
14. HIGH-INTENSITY FLASHING LIGHTS SHALL BE USED ON EACH APPROACH IN ADVANCE OF THE WORK ZONE DURING HOURS OF DARKNESS AND INSTALLED ABOVE THE FIRST TWO SIGNS IN EACH SERIES.
15. THE ENGINEER MUST BE NOTIFIED AT LEAST 72 HOURS PRIOR TO PLACING THE TEMPORARY TRAFFIC SIGNALS IN OPERATION SO THAT ARRANGEMENTS CAN BE MADE TO INSPECT THE INSTALLATION AND SET THE TIMING OF THE SIGNALS. THE CONTRACTOR SHALL FURNISH TIMING CYCLE GEARS OF 60, 65, 70, 80, 90, 100, AND 120 SECONDS FOR THE CONTROLLER.
16. FOR ADDITIONAL TEMPORARY TRAFFIC SIGNAL INFORMATION, SEE IDOT STANDARD 701321.
17. FOR ADDITIONAL BRIDGE CONSTRUCTION STAGING INFORMATION, SEE STRUCTURAL PLANS.

**SUGGESTED CONSTRUCTION SEQUENCING**

**PRE STAGE**

CONSTRUCTION:

INSTALL TEMPORARY TRAFFIC SIGNALS AND ASSOCIATED MOT ITEMS.  
 REMOVE EXISTING EXCAVATION & EMBANKMENT ALONG NORTHBOUND LANE.  
 REMOVE EXISTING GUARDRAIL AND TERMINAL SECTIONS ALONG NORTHBOUND LANE.  
 PLACE HMA AND AGGREGATE SHOULDER ON NORTHBOUND SHOULDER.  
 PLACE NEW GUARDRAIL TERMINAL SECTIONS AND STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS).

MAINTENANCE OF TRAFFIC:  
 UTILIZE STANDARD 701301.

**STAGE 1**

CONSTRUCTION:

SOUTHBOUND LANE:  
 REMOVE EXISTING GUARDRAIL AND TERMINAL SECTIONS.  
 REMOVE EXISTING AGGREGATE SHOULDERS ALONG SOUTHBOUND LANE.  
 PERFORM BRIDGE DECK PATCHING.  
 PERFORM BRIDGE DECK SCARIFICATION ¾".  
 PLACE 2½" BRIDGE DECK LATEX CONCRETE OVERLAY.  
 PLACE 1¾" HMA SURFACE COURSE.  
 INSTALL STEEL RAILING, TYPE 2399.  
 PLACE NEW GUARDRAIL TERMINAL SECTIONS.  
 CONSTRUCT HMA AND AGGREGATE SHOULDER ON SOUTHBOUND SHOULDER.

MAINTENANCE OF TRAFFIC:

UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701321.

**STAGE 2**

CONSTRUCTION:

NORTHBOUND LANE:  
 PERFORM BRIDGE DECK PATCHING.  
 PERFORM BRIDGE DECK SCARIFICATION ¾".  
 PLACE 2½" BRIDGE DECK LATEX CONCRETE OVERLAY.  
 PLACE 1¾" HMA SURFACE COURSE.  
 INSTALL STEEL RAILING, TYPE 2399.

MAINTENANCE OF TRAFFIC:

UTILIZE MAINTENANCE OF TRAFFIC DETAILS IN THE PLANS AND STANDARD 701321.

**STAGE 3**

CONSTRUCTION:

PLACE PERMANENT PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS.

MAINTENANCE OF TRAFFIC:

UTILIZE STANDARD 701301.

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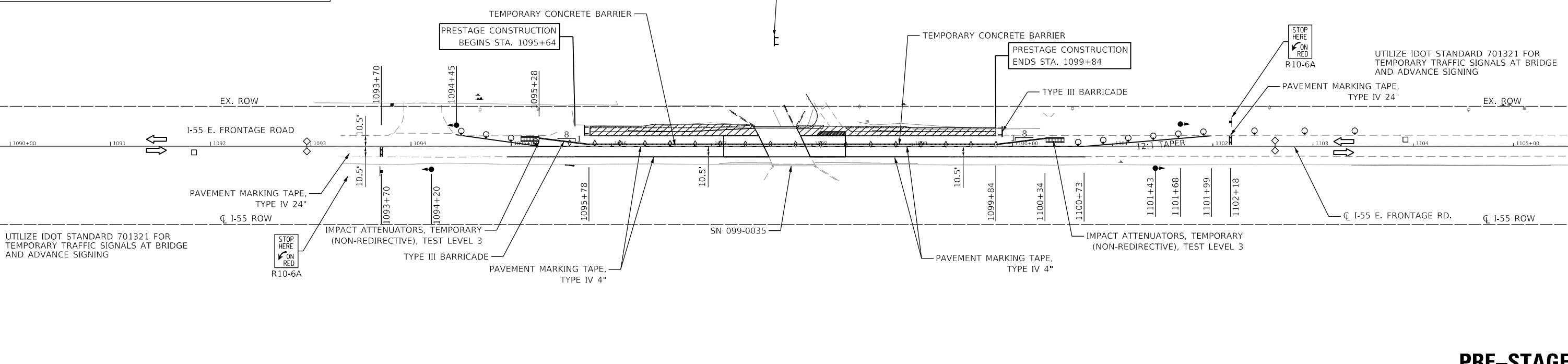
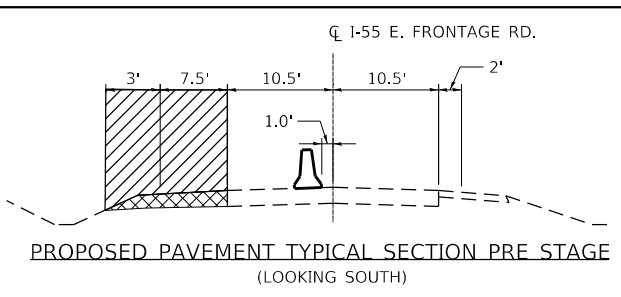
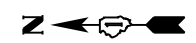
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
 TRAFFIC CONTROL GENERAL NOTES AND  
 SUGGESTED CONSTRUCTION SEQUENCING**

SCALE: N/A	SHEET 1 OF 3 SHEETS	STA. TO STA.
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F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	08
				CONTRACT NO. 60M88
		ILLINOIS	FED. AID PROJECT	

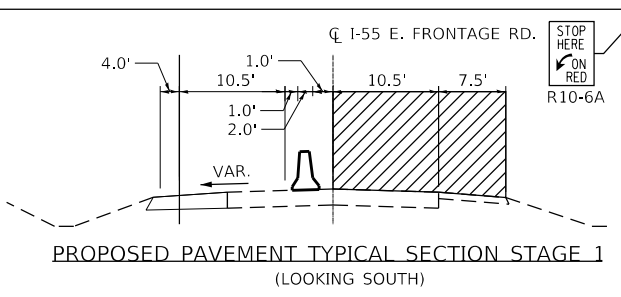
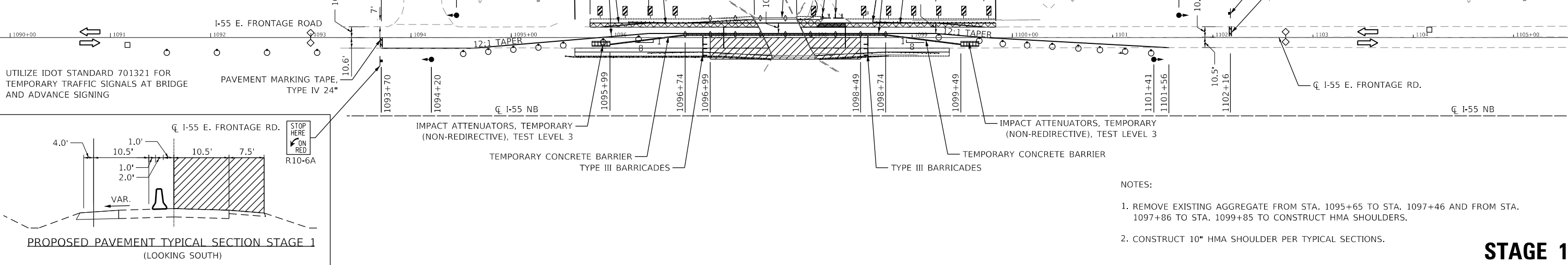




### PRE-STAGE

#### LEGEND:

- WORK AREA
- HMA SHOULDERS 10"
- TEMPORARY CONCRETE BARRIER
- SIGN
- DRUM WITH STEADY BURNING BIDIRECTIONAL LIGHT
- TYPE III BARRICADE
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE, NARROW) TEST LEVEL 3
- DIRECTION OF TRAFFIC
- CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER
- DETECTOR LOOPS
- TRAFFIC SIGNAL



#### NOTES:

1. REMOVE EXISTING AGGREGATE FROM STA. 1095+65 TO STA. 1097+46 AND FROM STA. 1097+86 TO STA. 1099+85 TO CONSTRUCT HMA SHOULDERS.
2. CONSTRUCT 10" HMA SHOULDER PER TYPICAL SECTIONS.

### STAGE 1

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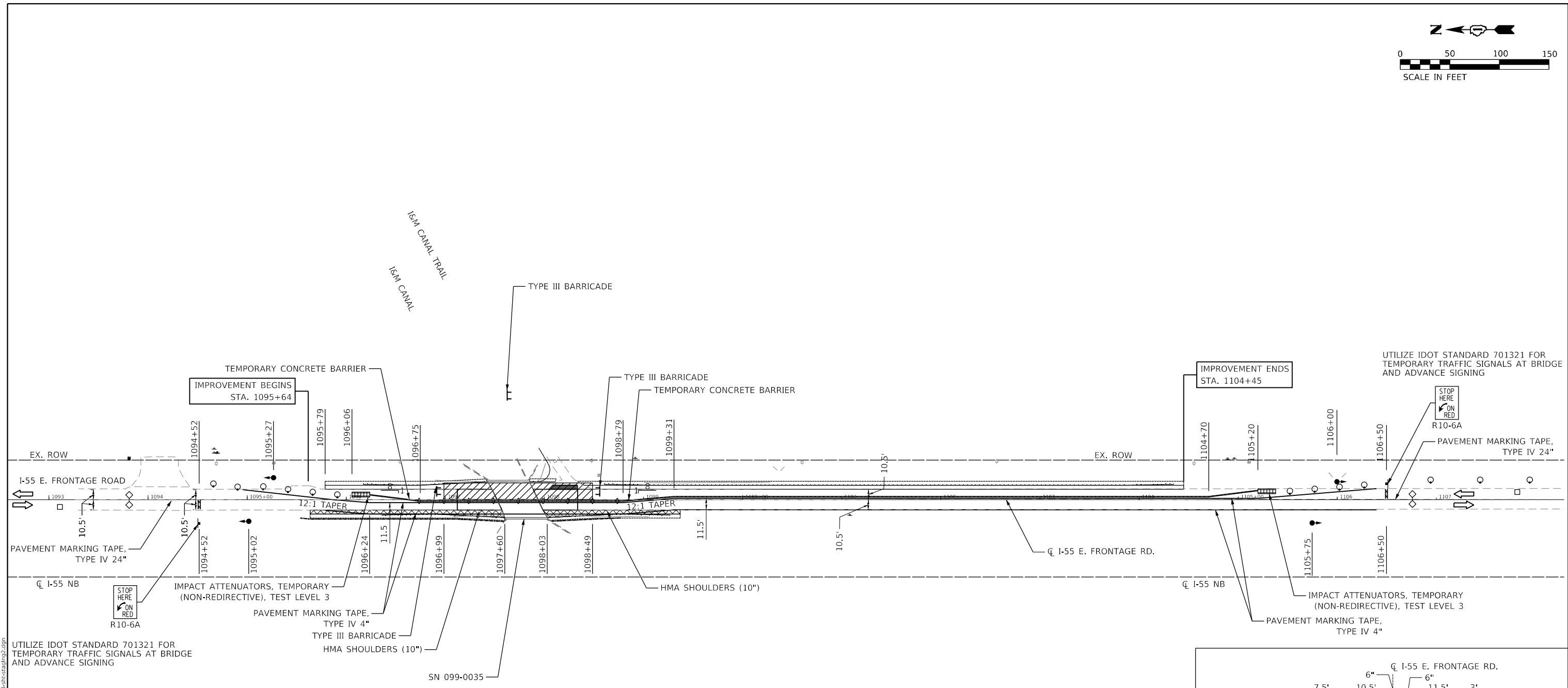
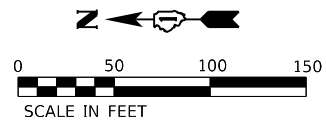
111 S. Wacker Drive,  
 Suite 3910  
 Chicago, IL 60606  
 Ph: 312-235-6783

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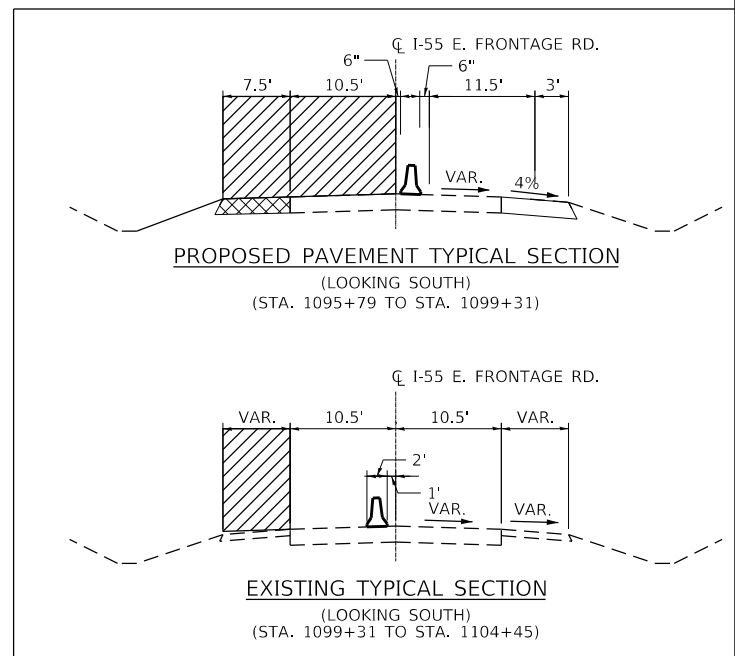
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**I-55 E. FRONTAGE ROAD AT I&M CANAL**  
**SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL**  
**STAGE 1**  
 SCALE: 1"=50'    SHEET 2 OF 3 SHEETS    STA. 1090+00 TO STA. 1105+00

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	09
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				



### STAGE 2



UTILIZE IDOT STANDARD 701321 FOR TEMPORARY TRAFFIC SIGNALS AT BRIDGE AND ADVANCE SIGNING

- LEGEND:**
- WORK AREA
  - HMA SHOULDERS 10"
  - TEMPORARY CONCRETE BARRIER
  - SIGN
  - DRUM WITH STEADY BURNING BIDIRECTIONAL LIGHT
  - TYPE III BARRICADE
  - IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE, NARROW) TEST LEVEL 3
  - DIRECTION OF TRAFFIC
  - CRYSTAL, BIDIRECTIONAL BARRIER WALL/GUARDRAIL MARKER
  - DETECTOR LOOPS
  - TRAFFIC SIGNAL

111 S. Wacker Drive,  
Suite 3910  
Chicago, IL 60606  
Ph: 312-235-6783

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PLOT DATE = 4/30/2018	CHECKED - MO	REVISED -
	DATE - 04/30/2018	REVISED -

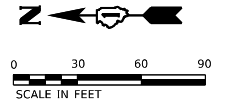
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**I-55 E. FRONTAGE ROAD AT I&M CANAL**  
**SUGGESTED STAGE OF CONSTRUCTION & TRAFFIC CONTROL**  
**STAGE 2**

SCALE: 1"=50' SHEET 3 OF 3 SHEETS STA. TO STA.

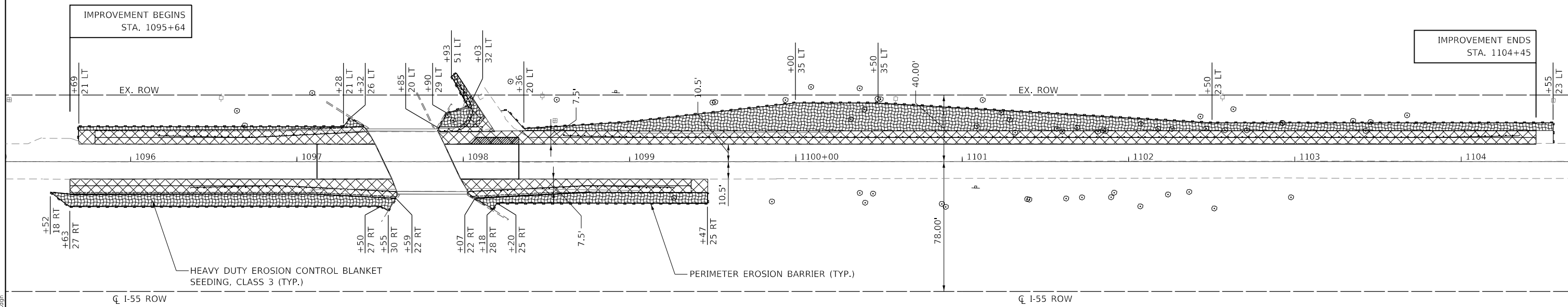
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	10
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

MODEL: D:\a\111 S. Wacker Drive, Suite 3910 Chicago, IL 60606 Ph: 312-235-6783



**NOTES:**

1. THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION
2. DIRECT OR INDIRECT PUMPING OF SEDIMENT LADEN WATER INTO STORM WATER FACILITY WITHOUT FILTRATION IS PROHIBITED
3. RUNOFF FROM EXCAVATED AREAS SHALL LEAVE THE SITE THROUGH SEDIMENT CONTROL DEVICES SHOWN IN IDOT STD. 280001, AND/OR NRCS DETAILS FROM THE MOST RECENT VERSION OF THE ILLINOIS URBAN MANUAL.
4. THE CONTRACTOR SHALL PROTECT ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER
5. HEAVY DUTY EROSION CONTROL BLANKET SHALL BE USED FOR COVERING SLOPES STEEPER THAN 3H:1V



**SEEDING AND EROSION CONTROL SCHEDULE**

LOCATION	SIDE	TOPSOIL FURNISH AND PLACE, 4"	NITROGEN FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	SEEDING CLASS 3
STATION TO STATION	LT/RT	(SQ YD)	(POUND)	(POUND)	(ACRE)
I-55 FRONTAGE ROAD					
1095+64 TO 1097+52	LT	33	1	1	0.01
1095+64 TO 1097+52	RT	161	3	3	0.04
1097+94 TO 1104+45	LT	620	11	11	0.12
1097+94 TO 1099+47	RT	85	2	2	0.02
<b>TOTAL</b>		<b>899</b>	<b>17</b>	<b>17</b>	<b>0.25</b>

**LEGEND:**

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- WORKZONE

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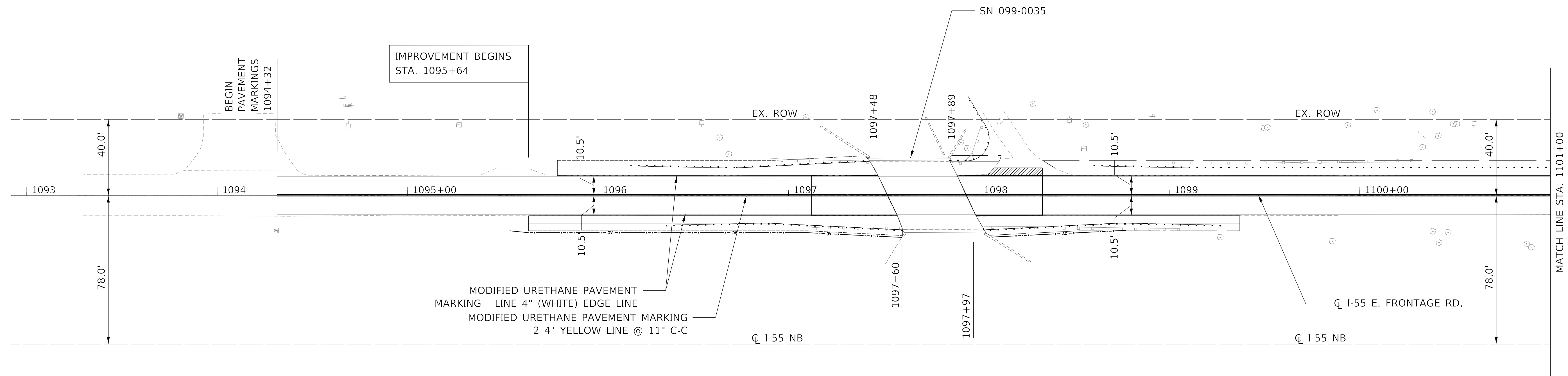
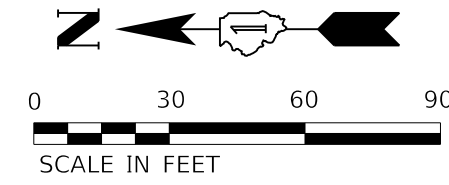
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
EROSION CONTROL PLAN**

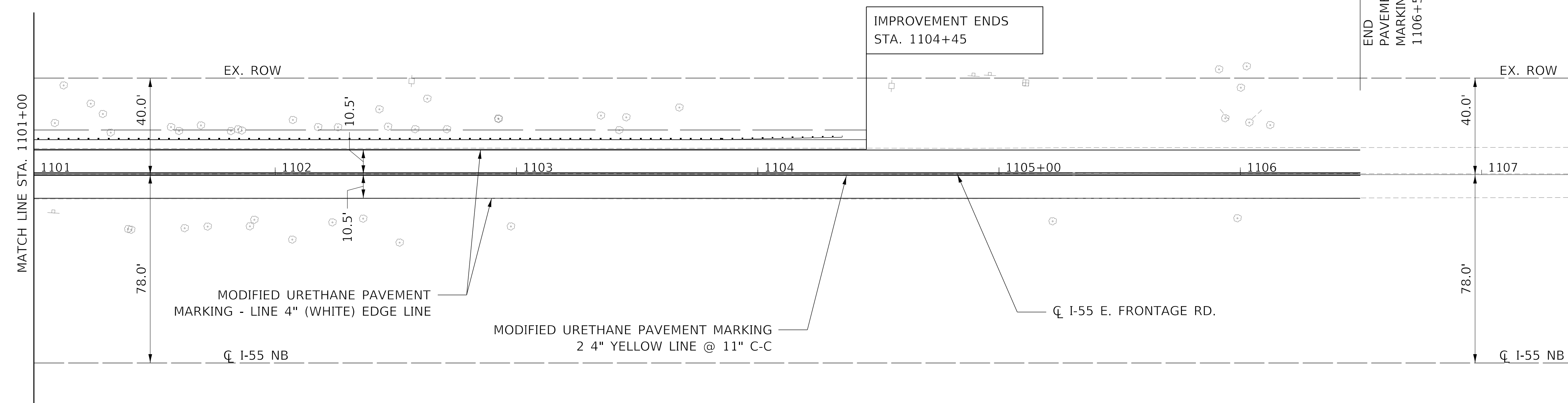
SCALE: 1" = 30'    SHEET 1 OF 1 SHEETS    STA.                    TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	11
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				



**NOTES:**

1. TYPICAL PAVEMENT MARKINGS INSTALLED ACCORDING TO IDOT'S D1 DETAIL TC-13
2. THE PROPOSED PAVEMENT MARKINGS SHALL BE PLACED IN THE SAME LOCATIONS AS THE EXISTING PAVEMENT MARKINGS OR AS DIRECTED BY THE ENGINEER.



MODEL: SMOELMAMES  
FILE NAME: SFLELS



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PLOT DATE = 5/8/2018	CHECKED - MO	REVISED -
	DATE - 04/30/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
PAVEMENT MARKING PLAN**

SCALE: 1"=30' SHEET OF SHEETS STA. TO STA.

F.A.I. RTE. 55	SECTION 868-3-1	COUNTY WILL	TOTAL SHEETS 27	SHEET NO. 12
			CONTRACT NO. 60M88	
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall 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 scope of the work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. Dimensions, elevations and Stations were taken from the existing plans.
3. Existing Name Plate shall be removed so as not to damage the plate and shall be installed per Section 515 of Standard Specifications.
4. Protective Shield system shall be erected and maintained to prevent any debris falling into the canal or trail path.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications, 17th Edition

**DESIGN STRESSES**

**EXISTING**

$f_c = 1,400$  psi (Superstructure)  
 $f_c = 800$  psi (Substructure)  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_s = 18,000$  psi (Structural)  
 Soil Pressure = 3.04 K/sq.ft.

**LAST DELAMINATION SURVEY**

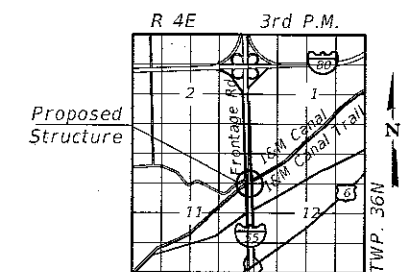
August 25, 2017

**INDEX OF SHEETS**

- S1 - General Plan and Elevation
- S2 - Stage Construction Details
- S3 - Temporary Concrete Barrier
- S4 - Bridge Deck & Abutment Repair Details
- S5 - Deck Plan and Cross Section
- S6 - Parapet Elevation Section and Details
- S7 - Steel Railing, Type 2399

**SCOPE OF WORK**

1. Bridge Deck Patching - Partial and Full Depth
2. Remove concrete Railing and Post and replace with Type 2399 Steel Railing.
3. Remove and replace steel guardrail with current standards.
4. Scarify Bridge Deck  $\frac{3}{4}$ "
5. Place 2 $\frac{1}{2}$ " Latex Concrete Overlay on Bridge Deck.



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION**  
**I-55 E. FRONTAGE RD. OVER I&M CANAL**  
**F.A.I. RT. 55 - SEC. 86B-3-1**

**WILL COUNTY**

**STATION 1097+72.89**

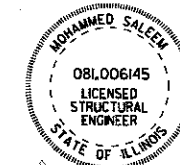
**STRUCTURE NO. 099-0035**

S1

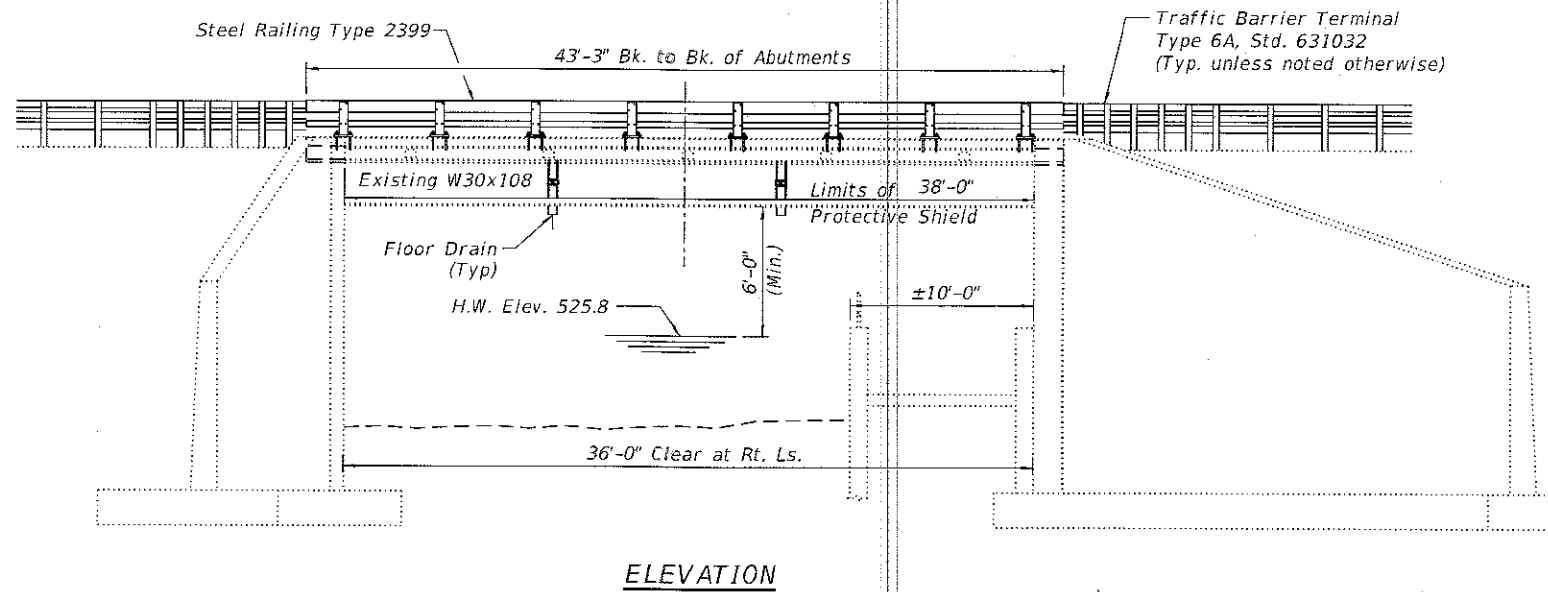
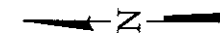
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-1	WILL	27	13
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

**Existing Structure:**

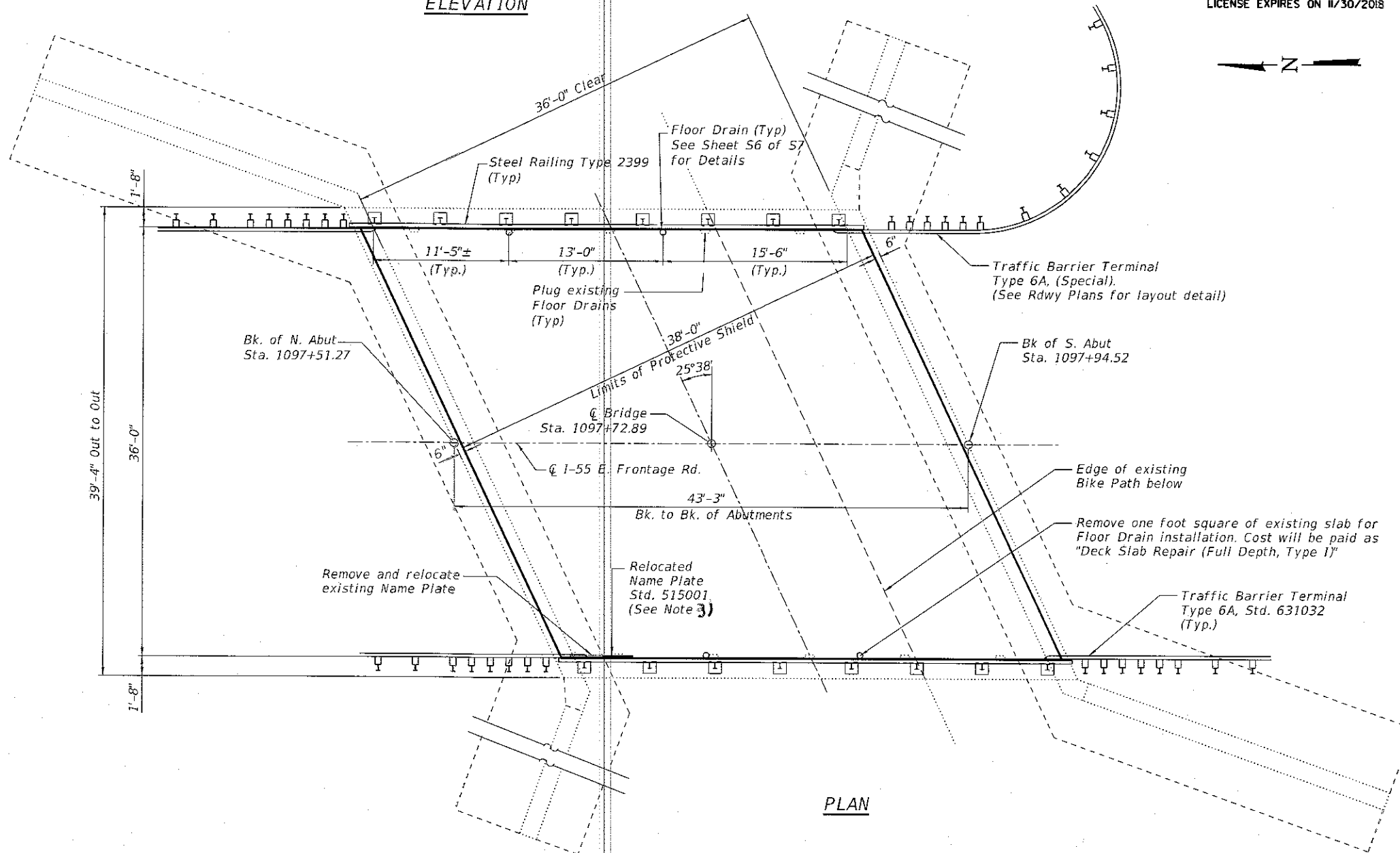
SN 099-0035 was built in 1955 as F.A. Rte. 77, Sec 86B-3, F.A. Proj. IN-373(36) as a single span Reinforced Concrete Slab on steel Beams. The Structure measures 39'-4" Out to Out Deck and 43'-3" Bk. to Bk. Abutments. The substructures consists of Reinforced Concrete Closed Abutments and Wingwalls. One Lane for both directions will be provided by using temporary traffic signals during construction.



DATE 5/4/18  
 LICENSE EXPIRES ON 11/30/2018



**ELEVATION**



**PLAN**

MODEL: Default  
 FILE NAME: P:\60618002.02\_IDOT\_FTBL185\_002\_W02\_I-55 Frontage Road at I&M Canal\_60M88(1)CAD\Drawings\13\_D160M88-sht-CP&E.dgn  
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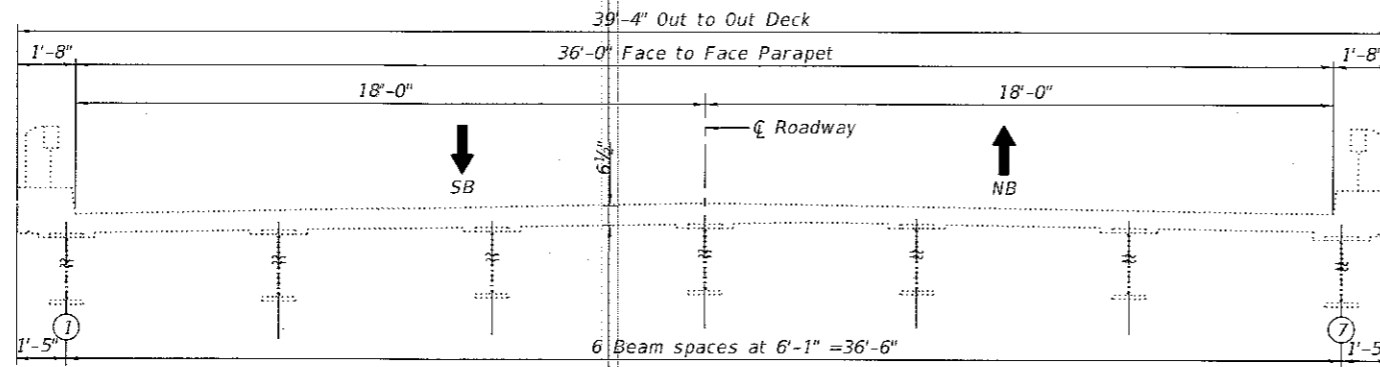
**AES**  
 ENGINEERS & SURVEYORS  
 111 S. Wacker Drive  
 Suite 2010  
 Chicago, IL 60606  
 Ph: 312-235-6783

USER NAME =	DESIGNED - AWM	REVISED
PLOT SCALE =	CHECKED - MS	REVISED
PLOT DATE =	DRAWN - AWM	REVISED
	CHECKED - MS	REVISED

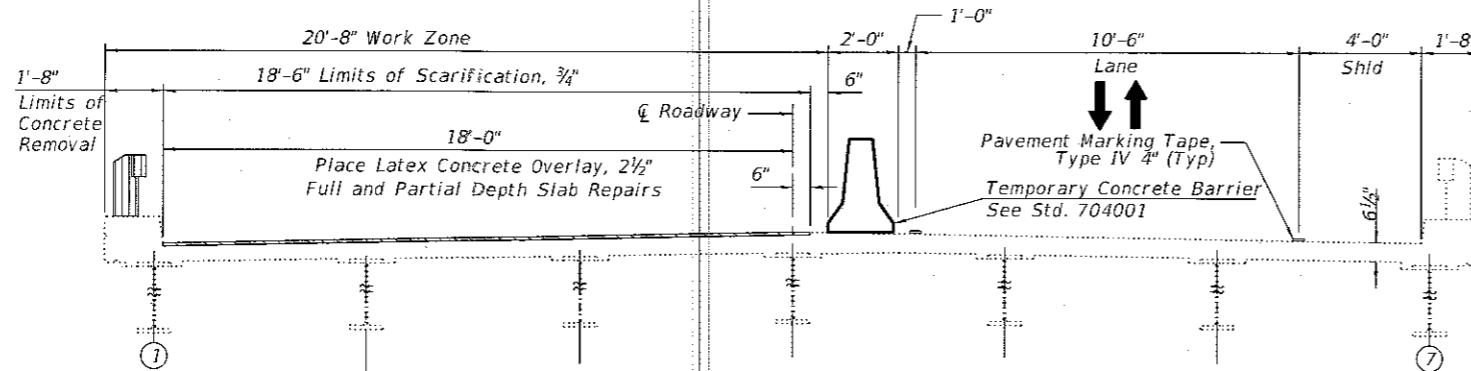
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION**  
**STRUCTURE NO. 099-0035 STA. 1097 + 72.89**

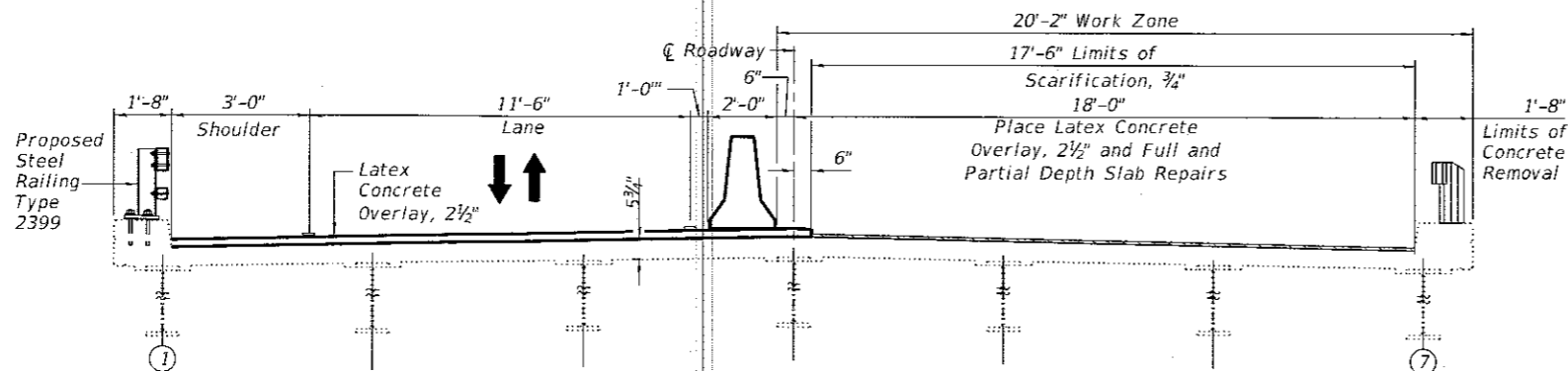
SHEET S1 OF S7 SHEETS



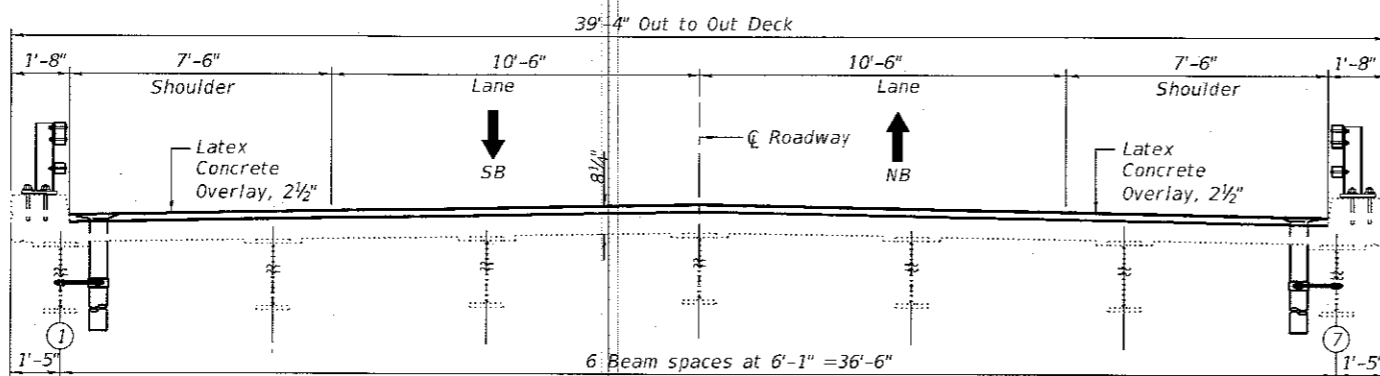
**EXISTING**  
(Looking North)



**STAGE 1 REMOVAL & CONSTRUCTION**  
(Looking North)



**STAGE 2 REMOVAL & CONSTRUCTION**  
(Looking North)



**FINAL**  
(Looking North)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	3	-	3
Protective Shield	Sq. Yd.	184	-	184
Floor Drains	Each	4	-	4
Bridge Deck Grooving	Sq. Yd.	173	-	173
Steel Railing, Type 2399	Foot	87	-	87
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	173	-	173
Bridge Deck Scarification 3/4"	Sq. Yd.	173	-	173
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	-	31	31
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	2	-	2
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	29	-	29
Relocating Name Plates	Each	1	-	1

**LEGEND:**

- Bridge Deck Scarification 3/4"
- Concrete Removal

Note:  
Deck Slab repair are not shown for clarity of drawing. See Sheet S4 of S7 for Deck Slab repairs.

MODEL: Default  
 FILE NAME: P:\60618002.02\_IDOT\_FTBL185\_002\_W02\_1-55 Frontage Road at I&M Canal\_e0b88b91c4d01\Sheets\14\_P160M88-sh-Stage-const.dgn  
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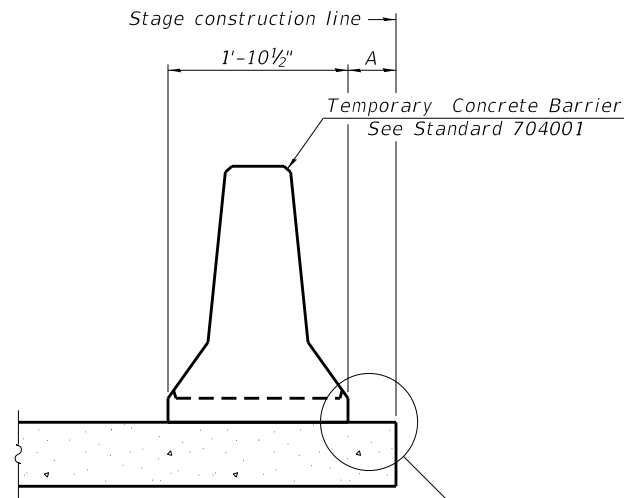
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89**

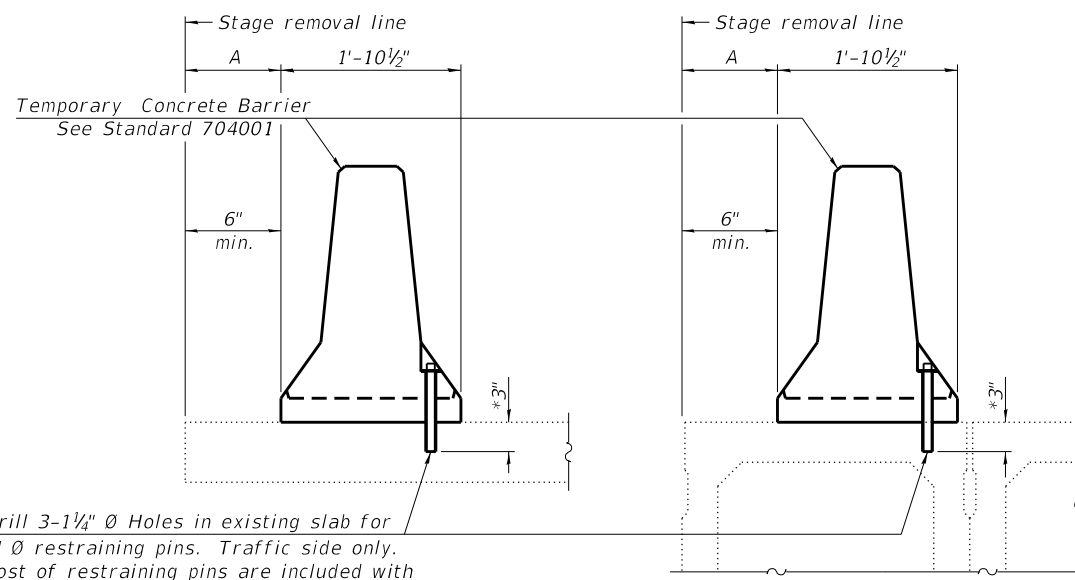
SHEET S2 OF S7 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-1	WILL	27	14
CONTRACT NO. 60M88			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

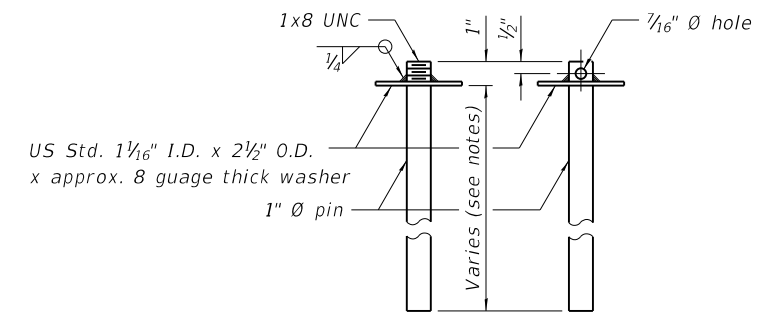


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

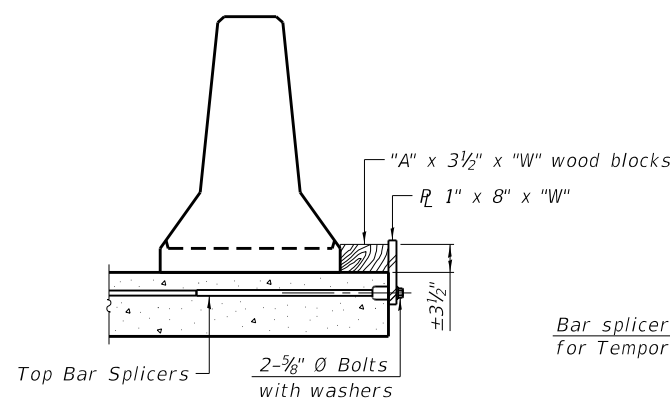
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

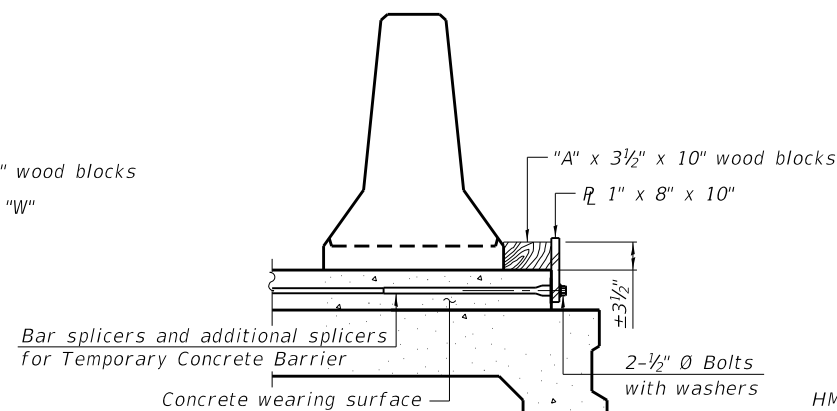


RESTRAINING PIN

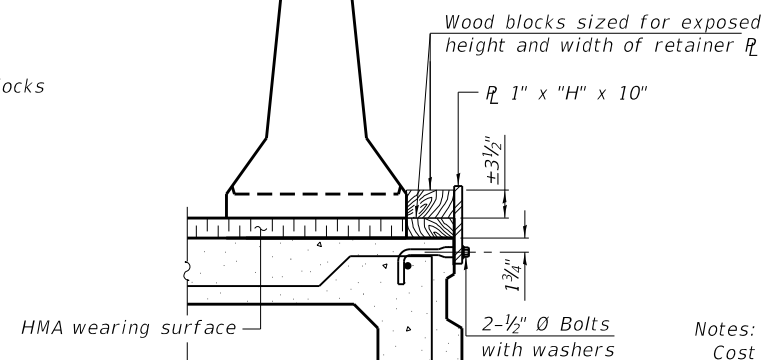
SECTIONS THRU SLAB OR DECK BEAM



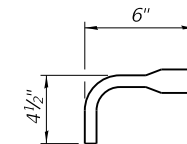
DETAIL I



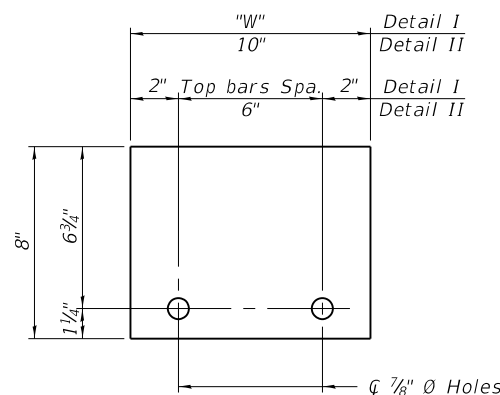
DETAIL II



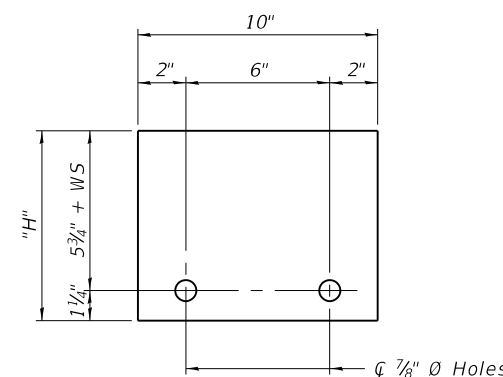
DETAIL III



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 center 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.

MODEL: Default  
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R-27 8-11-2017



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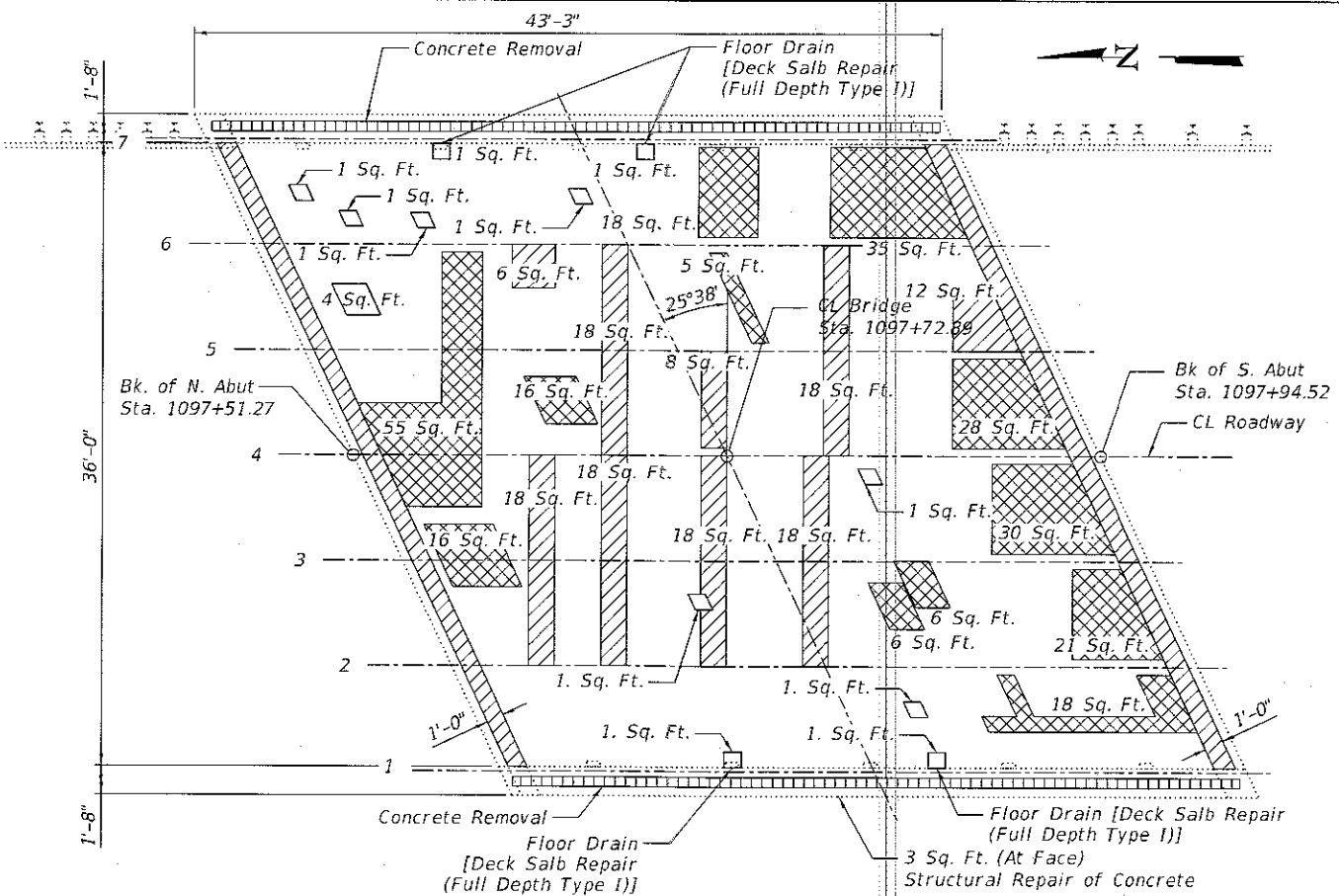
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89

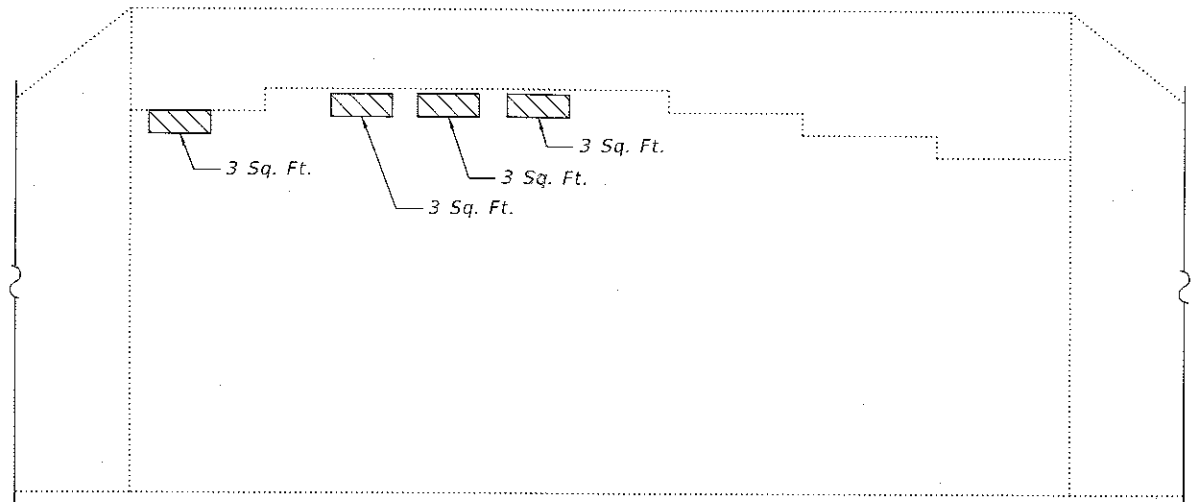
SHEET S3 OF S7 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	15
			CONTRACT NO. 60M88	
		ILLINOIS FED. AID PROJECT		

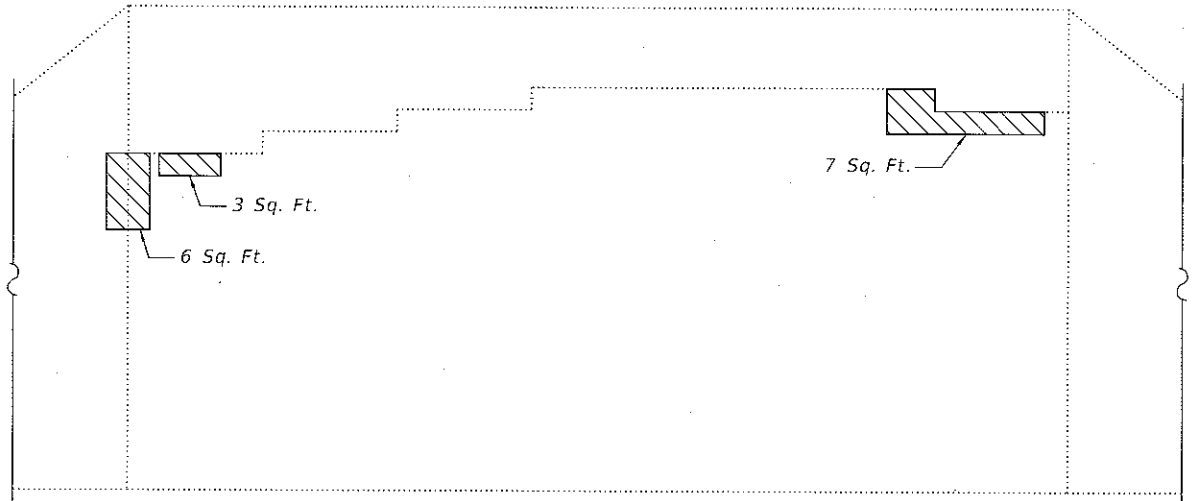
S3



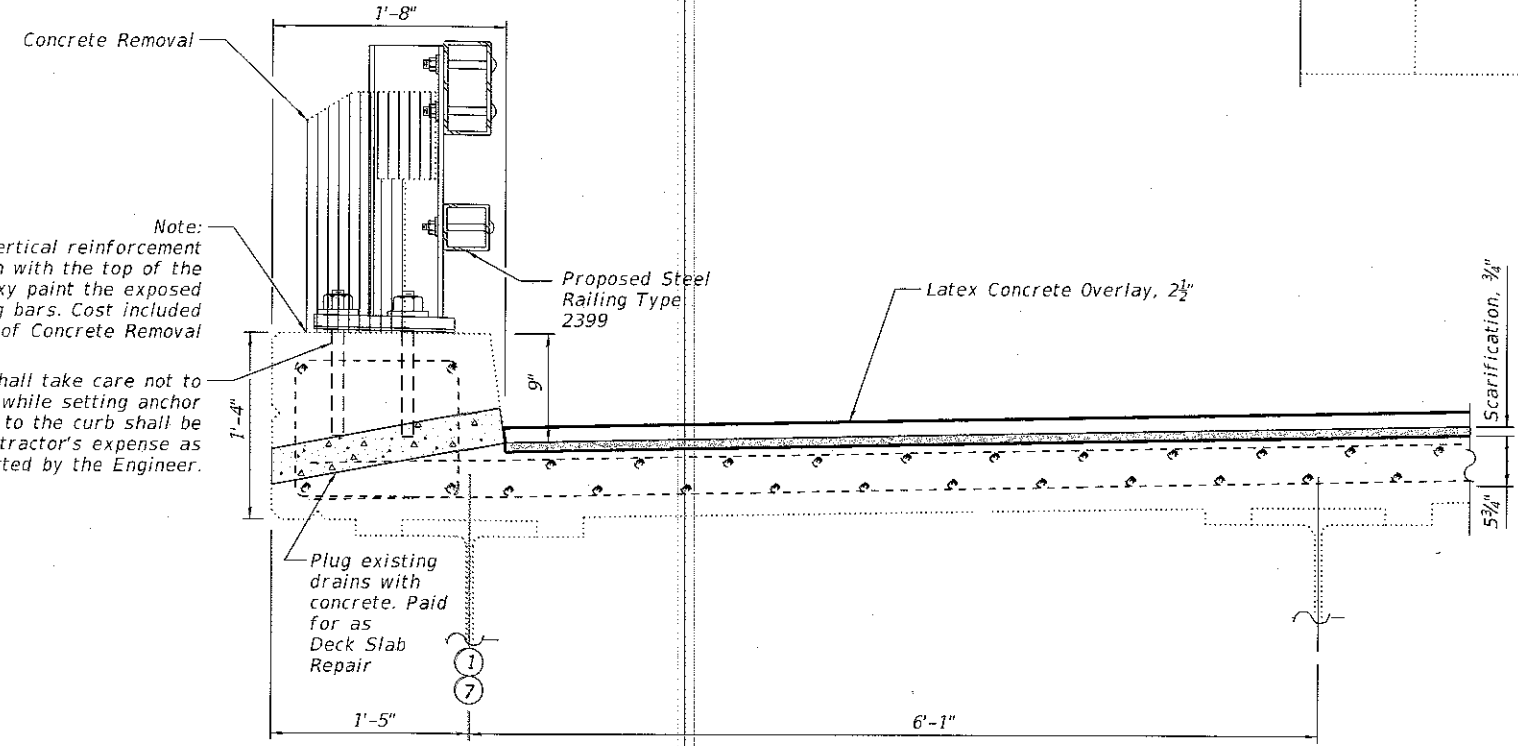
**PROPOSED DECK REPAIR PLAN**



**SOUTH ABUTMENT**



**NORTH ABUTMENT**



**TYPICAL PROPOSED SECTION**

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Protective Shield	Sq. Yd.	184
Floor Drains	Each	4
Bridge Deck Grooving	Sq. Yd.	173
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	173
Bridge Deck Scarification 3/4"	Sq. Yd.	173
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	2
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	29
Relocating Name Plates	Each	1

- Notes:
- The actual areas to be repaired will be determined by the Engineer at the time of construction.
  - Existing bars to remain shall be cleaned, straightened and incorporated into new concrete.
  - Exposed and rusty rebars in the spalled areas shall be cleaned and painted prior to patching.

**LEGEND: (Proposed Construction)**

- Deck Slab Repair (Partial) - (For Information Only)
- Deck Slab Repair (Full Depth Type I)
- Deck Slab Repair (Full Depth Type II)
- Concrete Post and Railing Removal
- Structural Repair of Concrete (D <= 5')

Note:  
Cut existing post vertical reinforcement bars and grind flush with the top of the existing curb. Epoxy paint the exposed surface of the existing bars. Cost included in the Cost of Concrete Removal

The Contractor shall take care not to damage existing curb while setting anchor rods. Any damage to the curb shall be repaired at the Contractor's expense as directed by the Engineer.

MODEL: Default  
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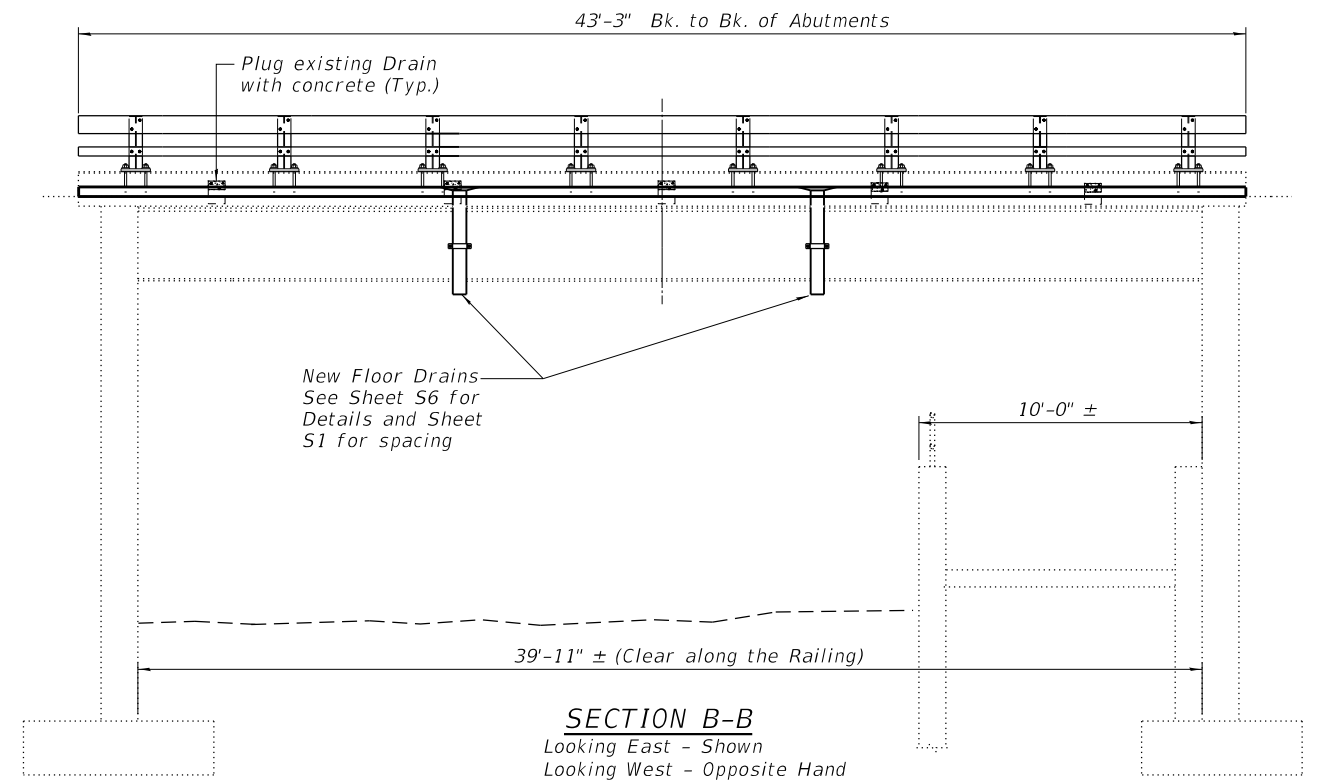
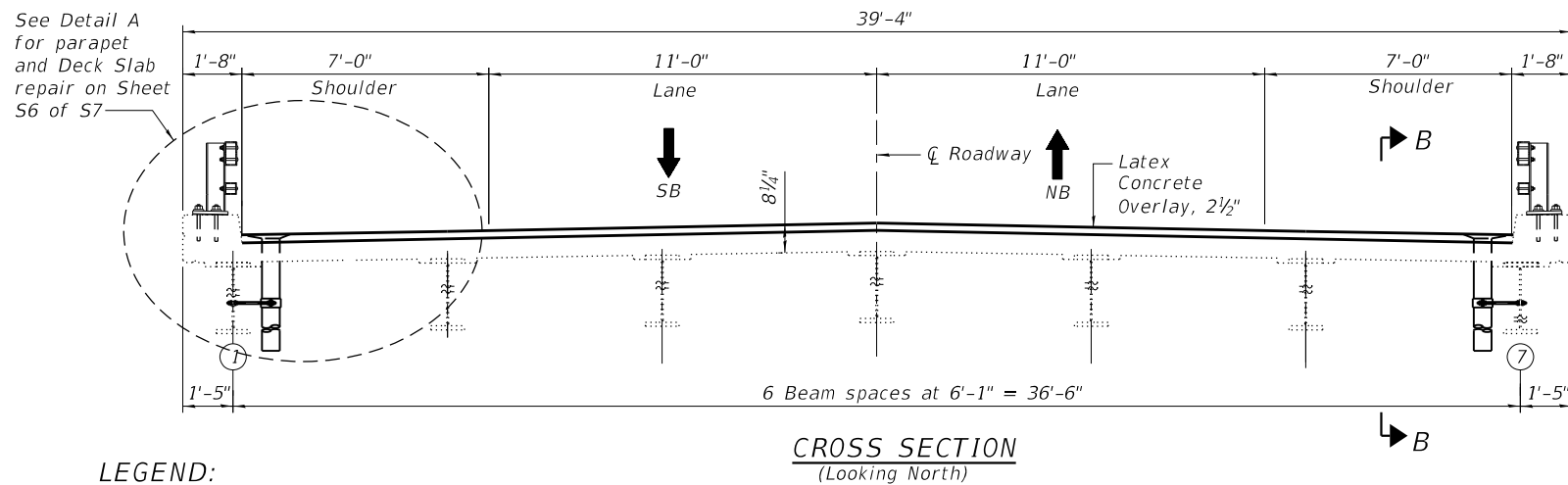
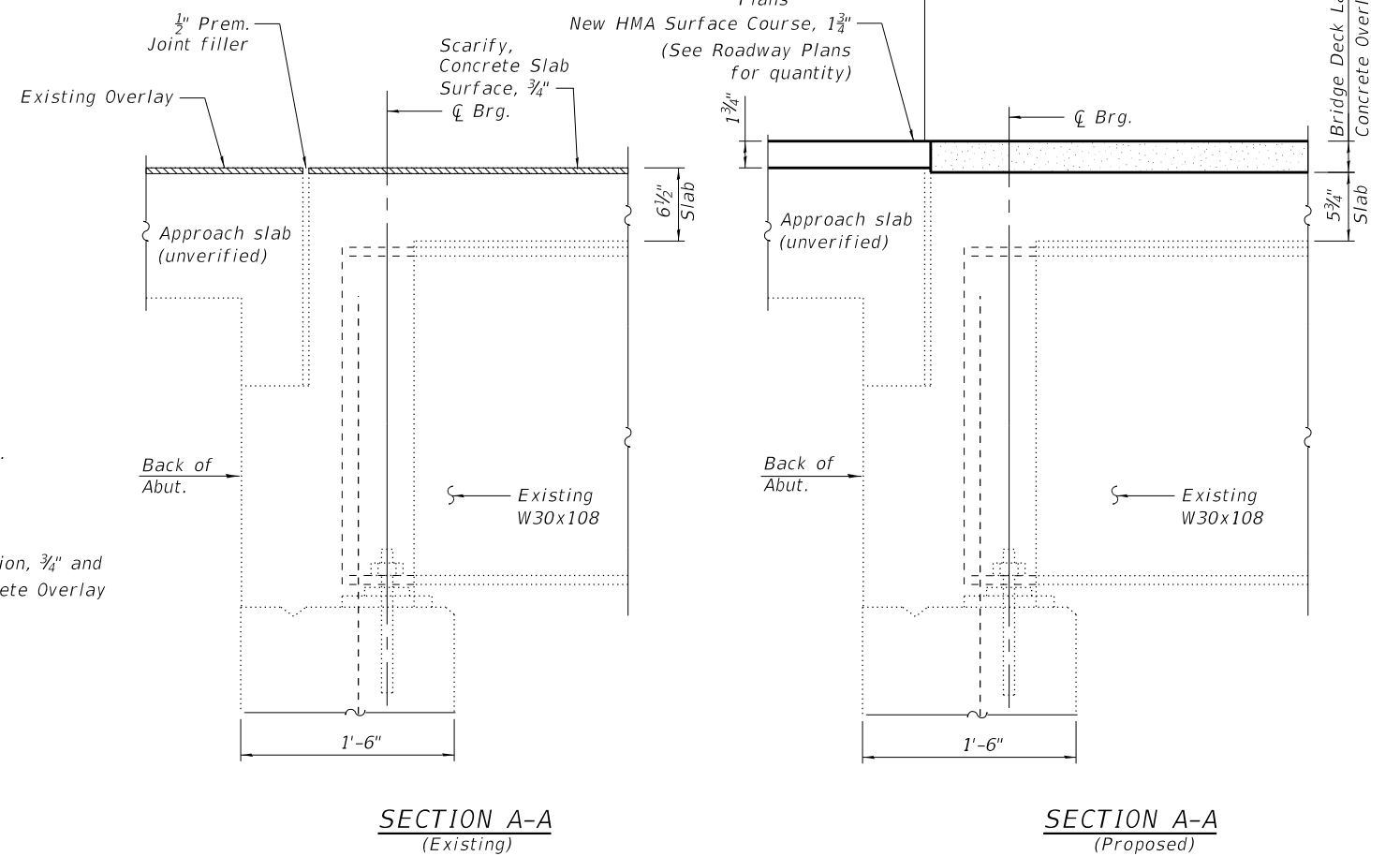
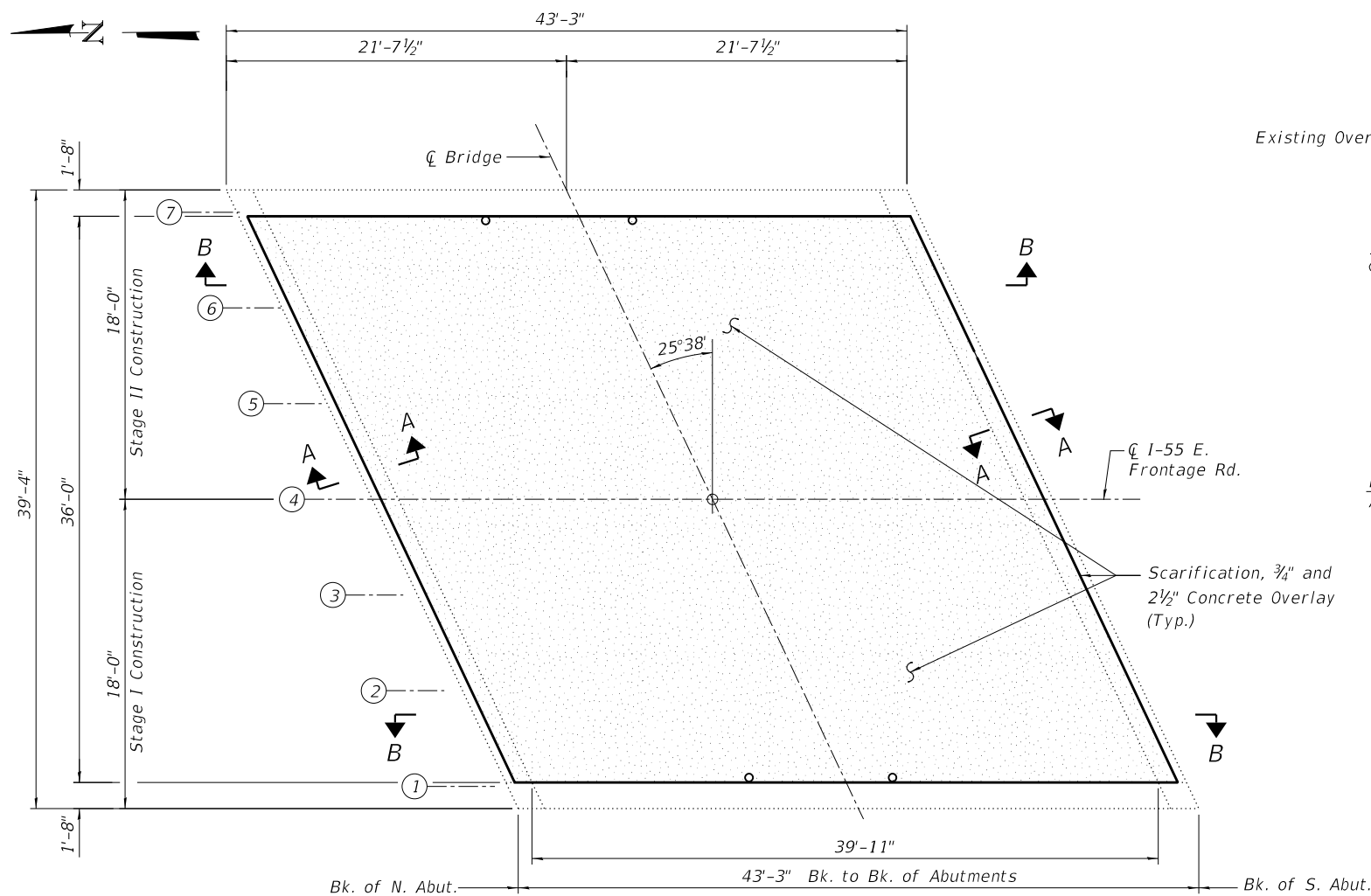
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK AND ABUTMENT REPAIR DETAILS  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	88B-3-I	WILL	27	16
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

SHEET S4 OF S7 SHEETS





**LEGEND:**

- Polymer Concrete
- Bridge Deck Scarification, 3/4"
- Bridge Deck Latex Concrete Overlay, 2 1/2"

Notes:  
1. See Sheet S6 of S7 for Detail A

MODEL: Default  
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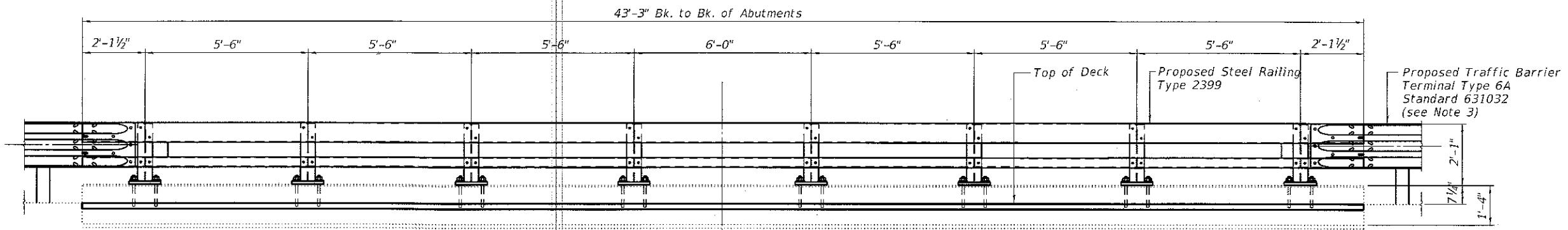
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DECK PLAN & CROSS SECTION  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89**

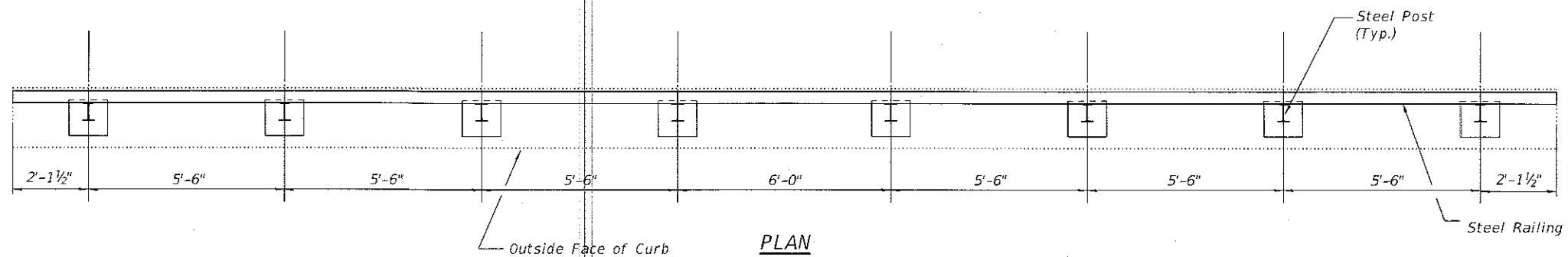
SHEET S5 OF S7 SHEETS

F&I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60M88				

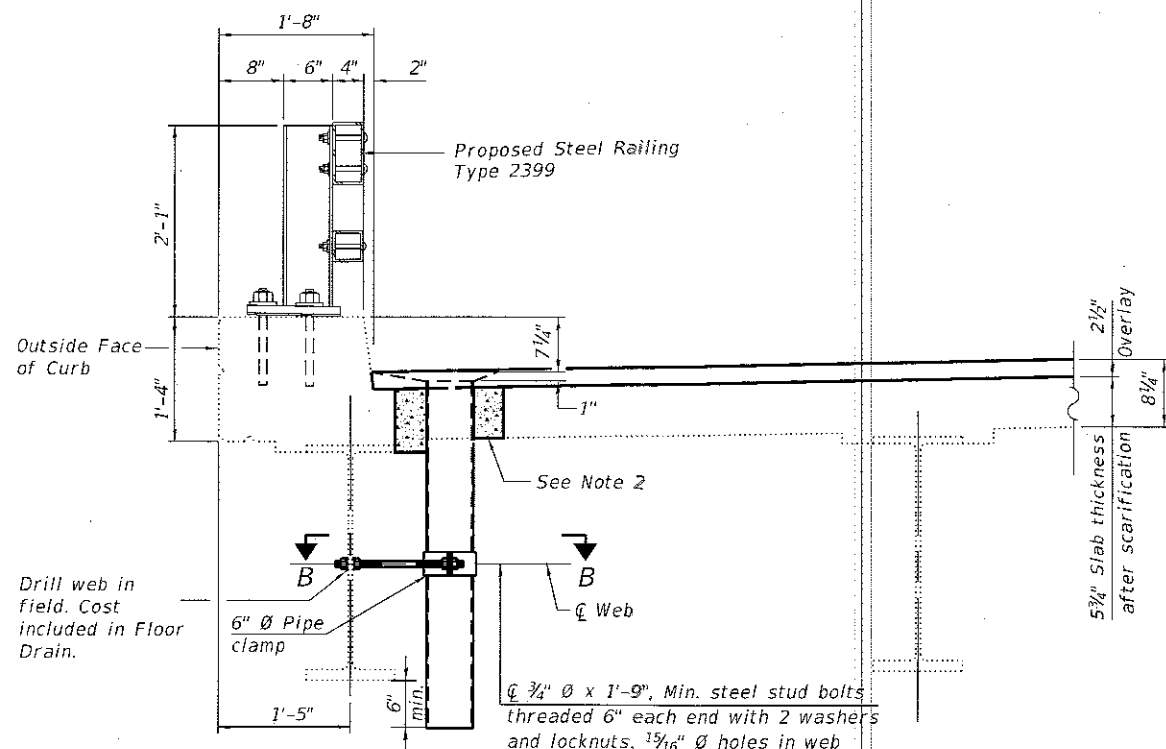
ILLINOIS FED. AID PROJECT



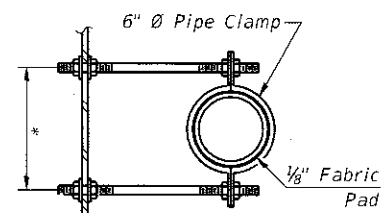
INSIDE ELEVATION OF RAILING



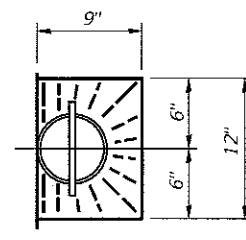
PLAN



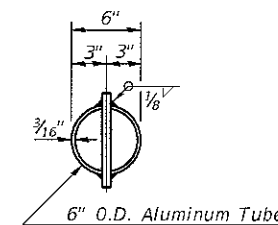
DETAIL A



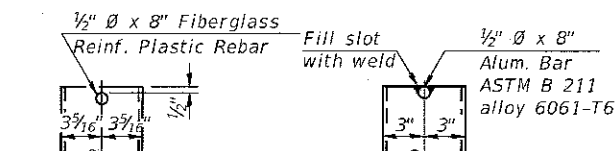
SECTION B-B  
\* Dimension as required by Pipe Clamp



TOP PLAN



TOP PLAN  
(Showing Aluminum Tube)



FIBERGLASS PIPE

ALUMINUM TUBE

- Note:
- The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Spec. SSPC-SP1 prior to painting. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. Galvanize clamping device according to AASHTO M232. Cost of clamping device and galvanizing included with Floor Drains.
  - Concrete removal and placement at floor drain locations shall be paid under Deck Slab Repair (Full Depth, Type I) for 1 ft x 1 ft area.
  - At SE corner of the Steel Railing, use Traffic Barrier Terminal Type 6A (Special). See Roadway Plans for detail.

Note:  
Floor Drains shall be located clear of all diaphragms.

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	CHECKED - MS	REVISED

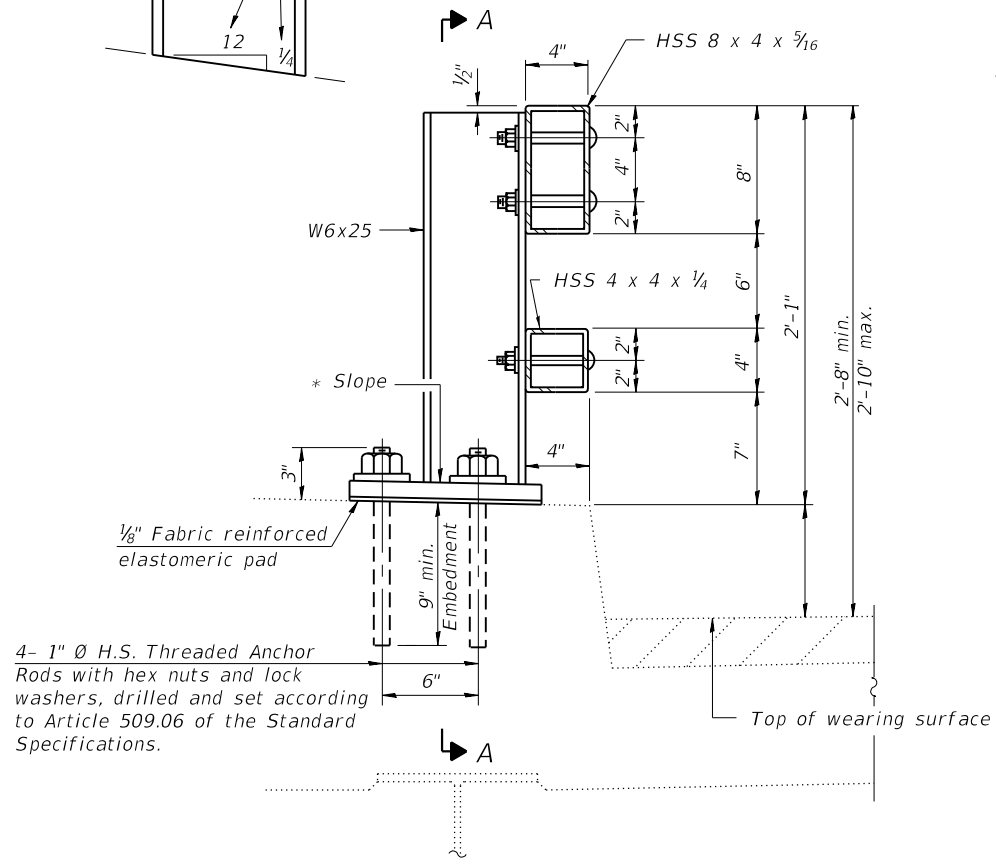
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATION SECTION AND DETAILS  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89

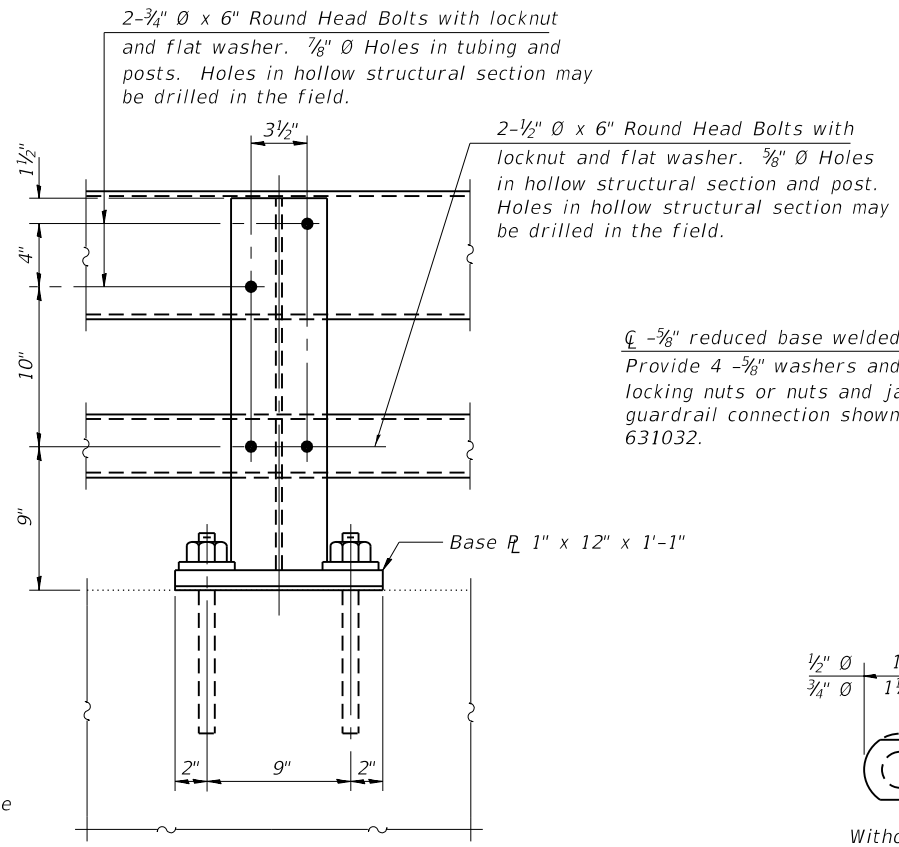
SHEET 56 OF 57 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	18
CONTRACT NO. 6CM88				
ILLINOIS FED. AID PROJECT				

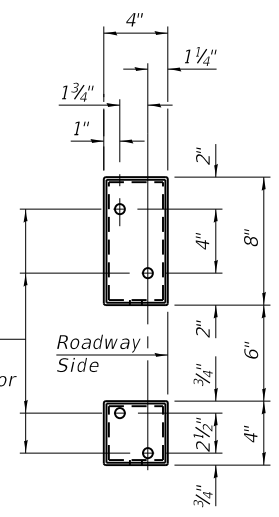
\* Cut bottom end of post to curb slope.



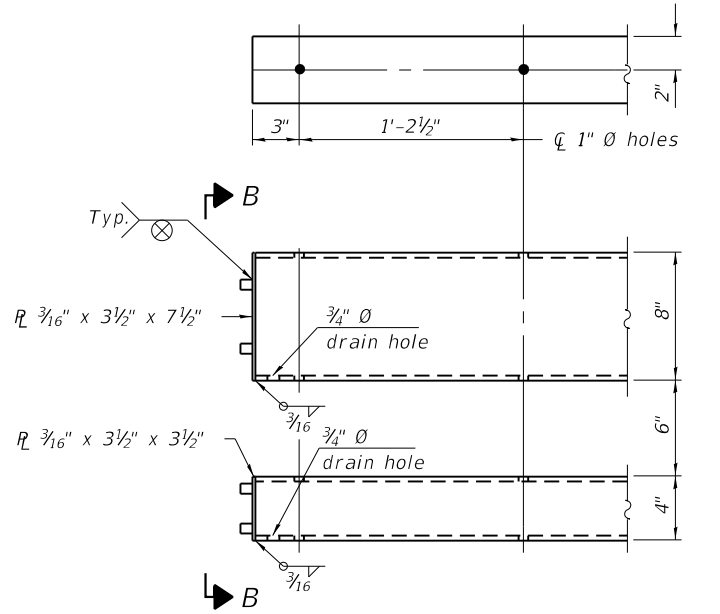
SECTION AT RAIL POST



SECTION A-A



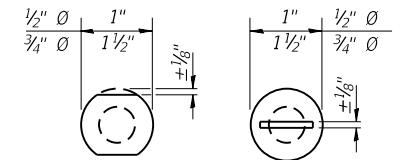
VIEW B-B



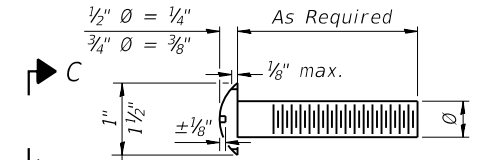
END OF RAIL DETAILS

4- 1" Ø H.S. Threaded Anchor Rods with hex nuts and lock washers, drilled and set according to Article 509.06 of the Standard Specifications.

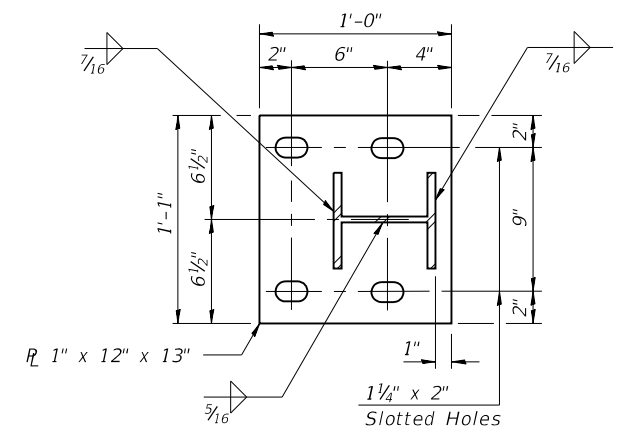
Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



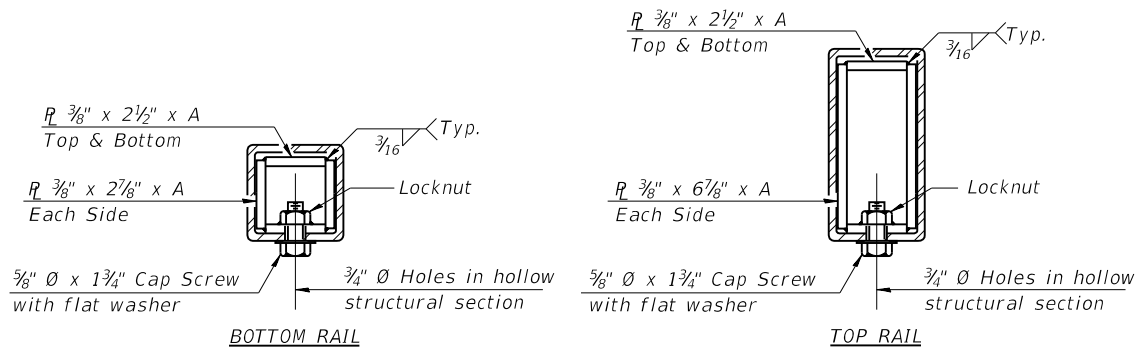
VIEW C-C



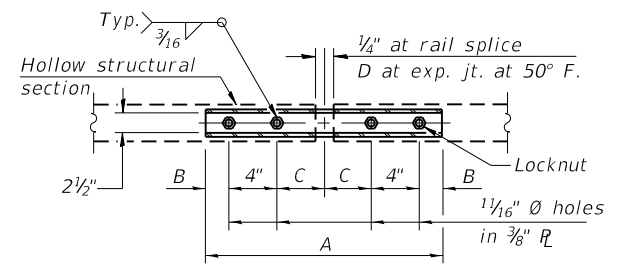
DETAIL OF 1/2" Ø & 3/4" Ø ROUND HEAD BOLTS



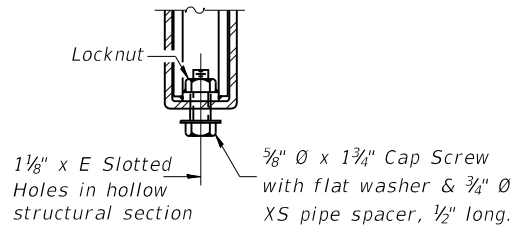
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE R TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

- Notes:
1. Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
  2. Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
  3. Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
  4. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/2"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	87

MODEL: Default FILE NAME: P:\60618002-02\_IDOT\_PTB185\_002\_W02\_L55\_Frontage\_Road\_at\_I&M\_Canal\_60M88\01\CADD\Sheets\19\_D160M88-sh-Steel\_Railing.dgn

R-31 8-11-2017 (6'-3" Maximum Post Spacing)

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399  
STRUCTURE NO. 099-0035 STA. 1097 + 72.89

SHEET 57 OF 57 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	19
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

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

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

MODEL: SPODELNAME\$  
FILE NAME: \$FILE\$

**AES** ENGINEERS & SURVEYORS  
111 S. Wacker Drive,  
Suite 3910  
Chicago, IL 60606  
Ph: 312-235-6783

USER NAME =	sUSERS
DESIGNED -	TOM
DRAWN -	YN
REVISOR -	
REVISION -	
CHECKED -	MO
DATE -	04/30/2018

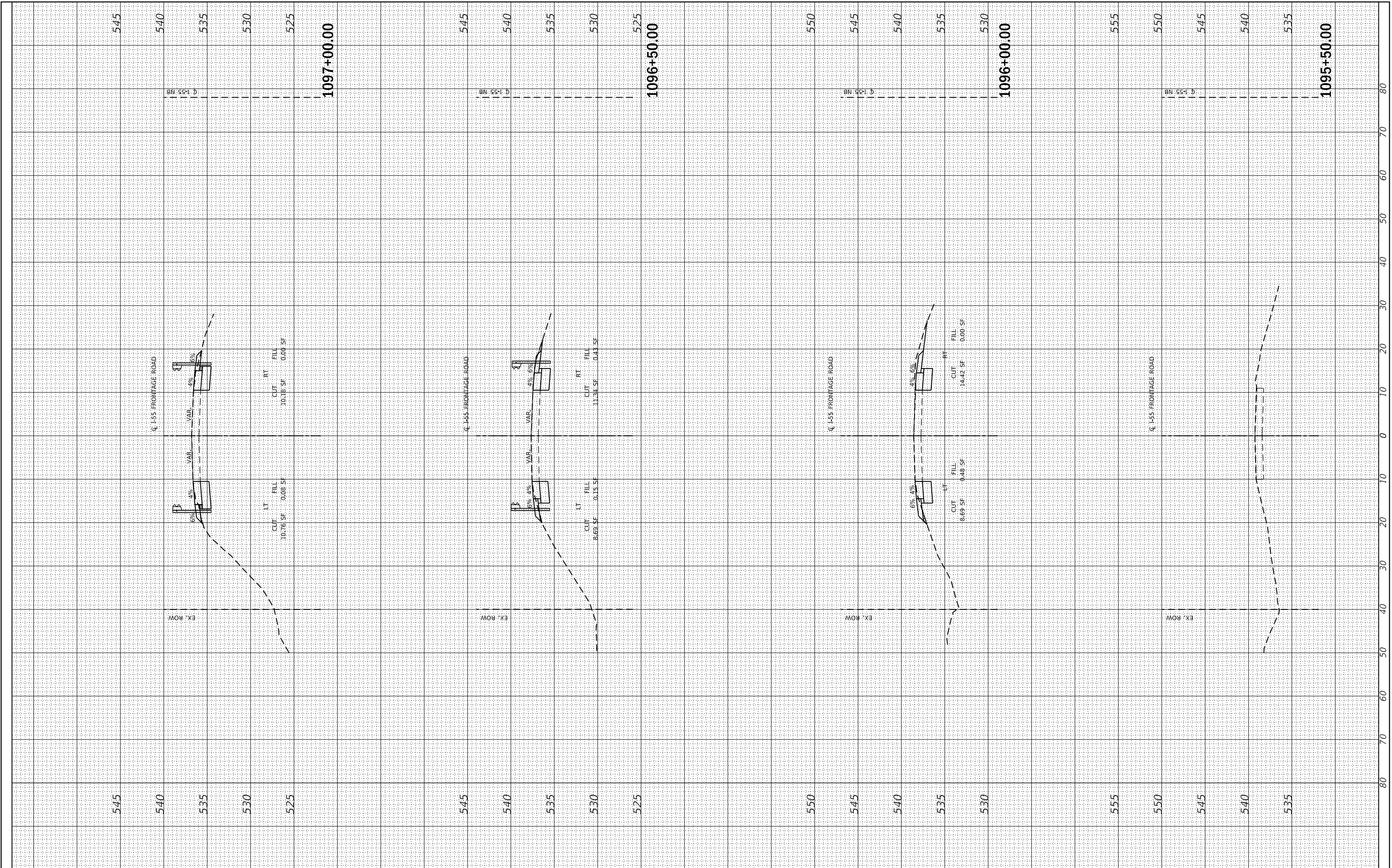
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DRAWN -	YN
REVISOR -	
REVISION -	
CHECKED -	MO
DATE -	04/30/2018

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET OF SHEETS STA. 1095+50.00 TO STA. 1097+00.00

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS (SHEET 1 OF 6)**

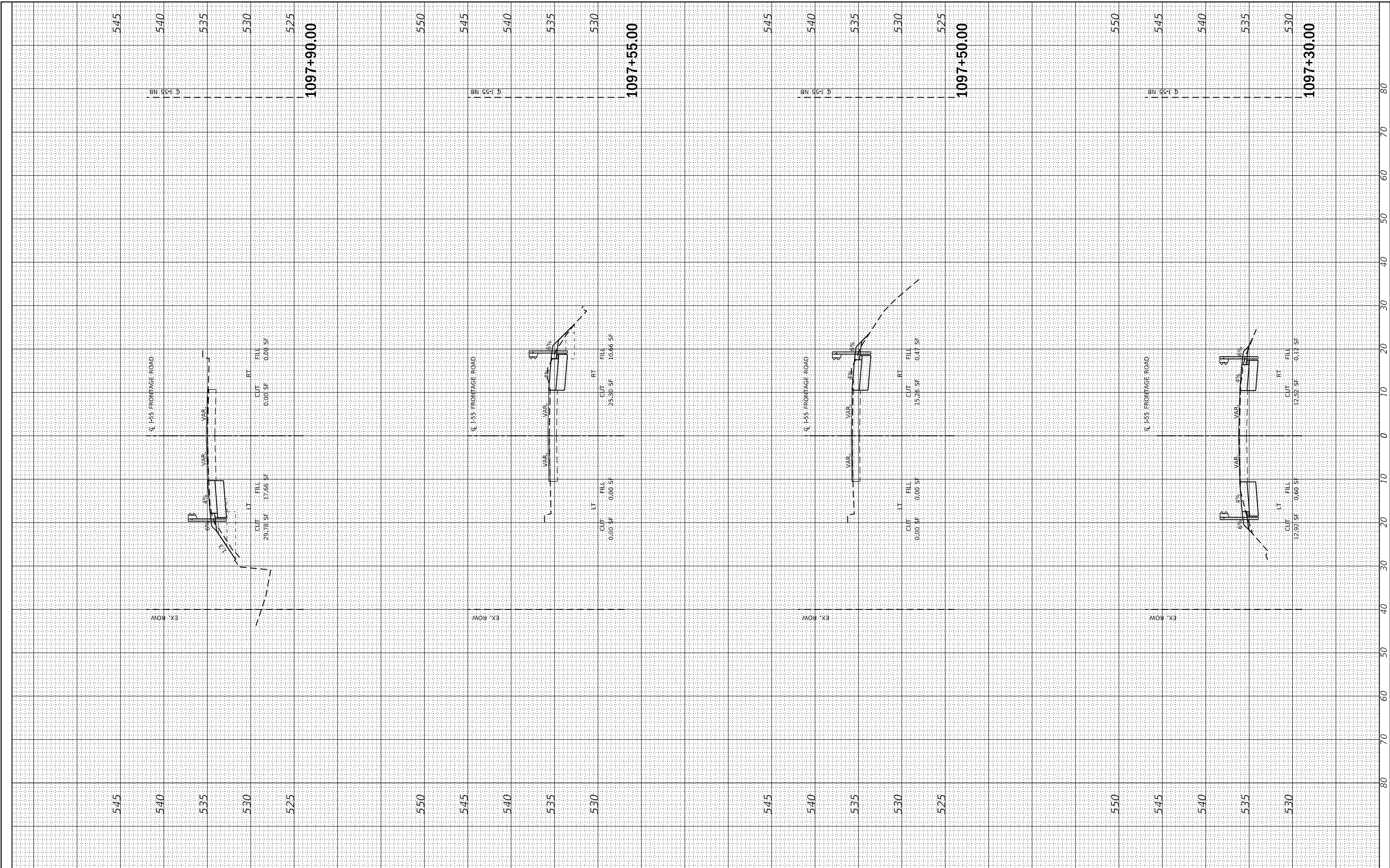
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	20
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				



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

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

MODEL: SP02ENAMES  
FILE NAME: ST1EELS



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Chicago, IL 60606  
Ph: 312-235-6783

USER NAME =	susers
DESIGNED -	TOM
DRAWN -	YN
REVISOR -	
REVISION -	
CHECKED -	MO
DATE -	04/30/2018
REVISOR -	
REVISION -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS (SHEET 2 OF 6)**

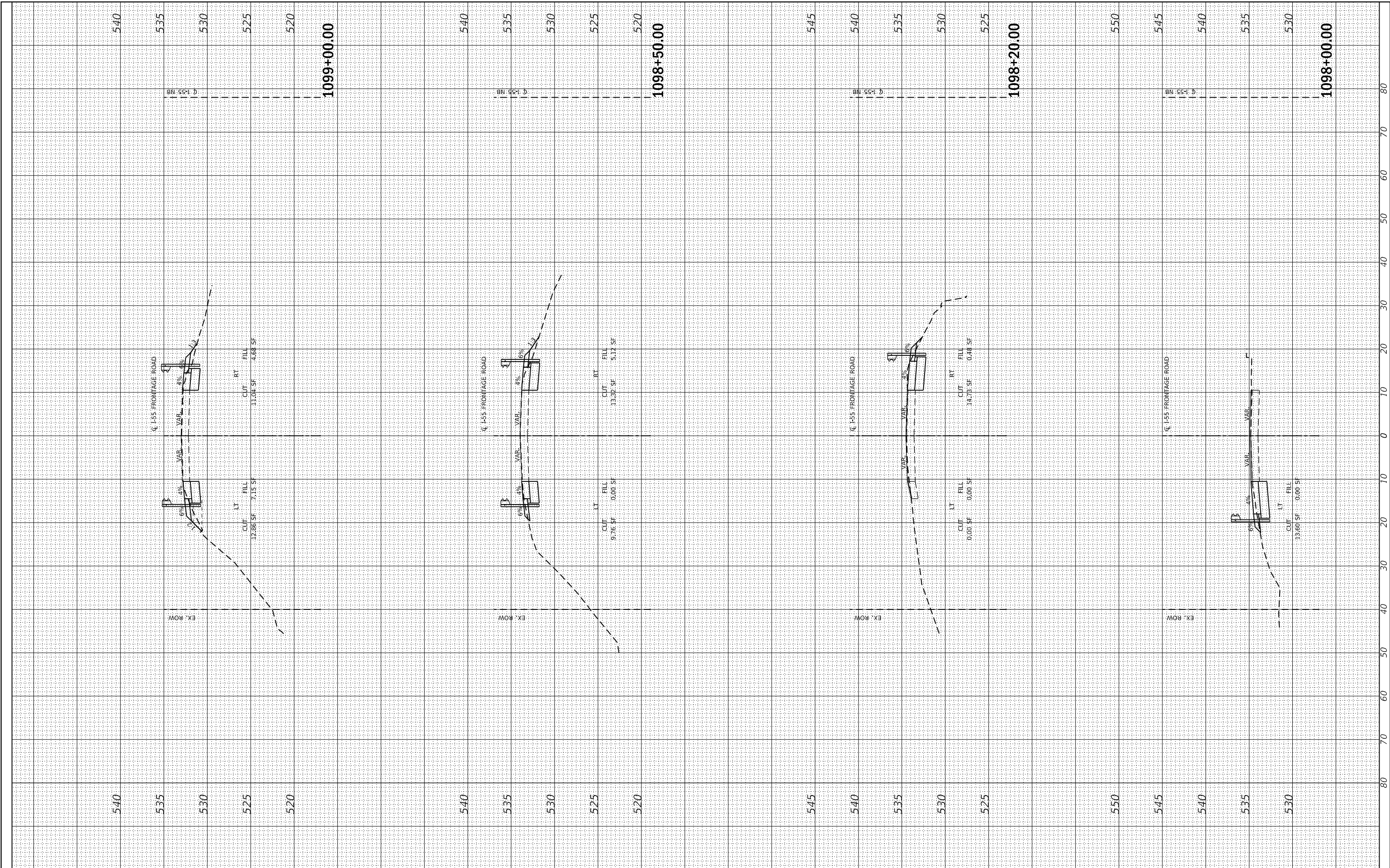
SCALE: SHEET OF SHEETS STA. 1097+30.00 TO STA. 1097+90.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-1	WILL	27	21
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

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

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

MODEL: SP02ENAMES  
FILE NAME: ST1EELS



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Chicago, IL 60606  
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USER NAME = \$USERS	DESIGNED - TOM	REVISED -
PLOT SCALE = \$SCALES	DRAWN - YN	REVISED -
PLOT DATE = 4/30/2018	CHECKED - MO	REVISED -
	DATE - 04/30/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET OF SHEETS STA. 1098+00.00 TO STA. 1099+00.00

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS (SHEET 3 OF 6)**

F.A. I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	21A
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

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

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

MODEL: SPODELNAME1  
FILE NAME: ST115

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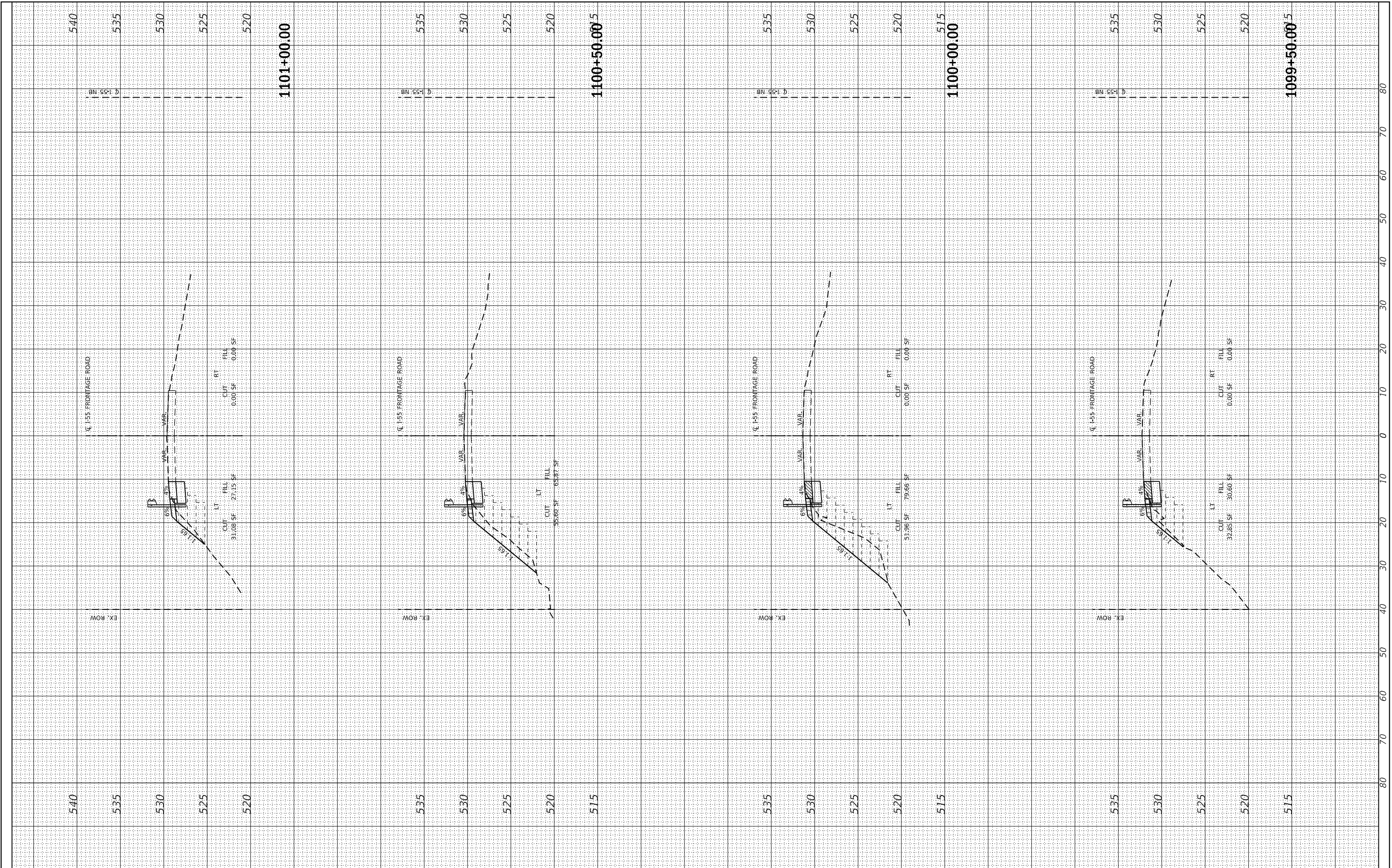
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	DATE - 04/30/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET OF SHEETS STA. 1099+50.00 TO STA. 1101+00.00

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS (SHEET 4 OF 6)**

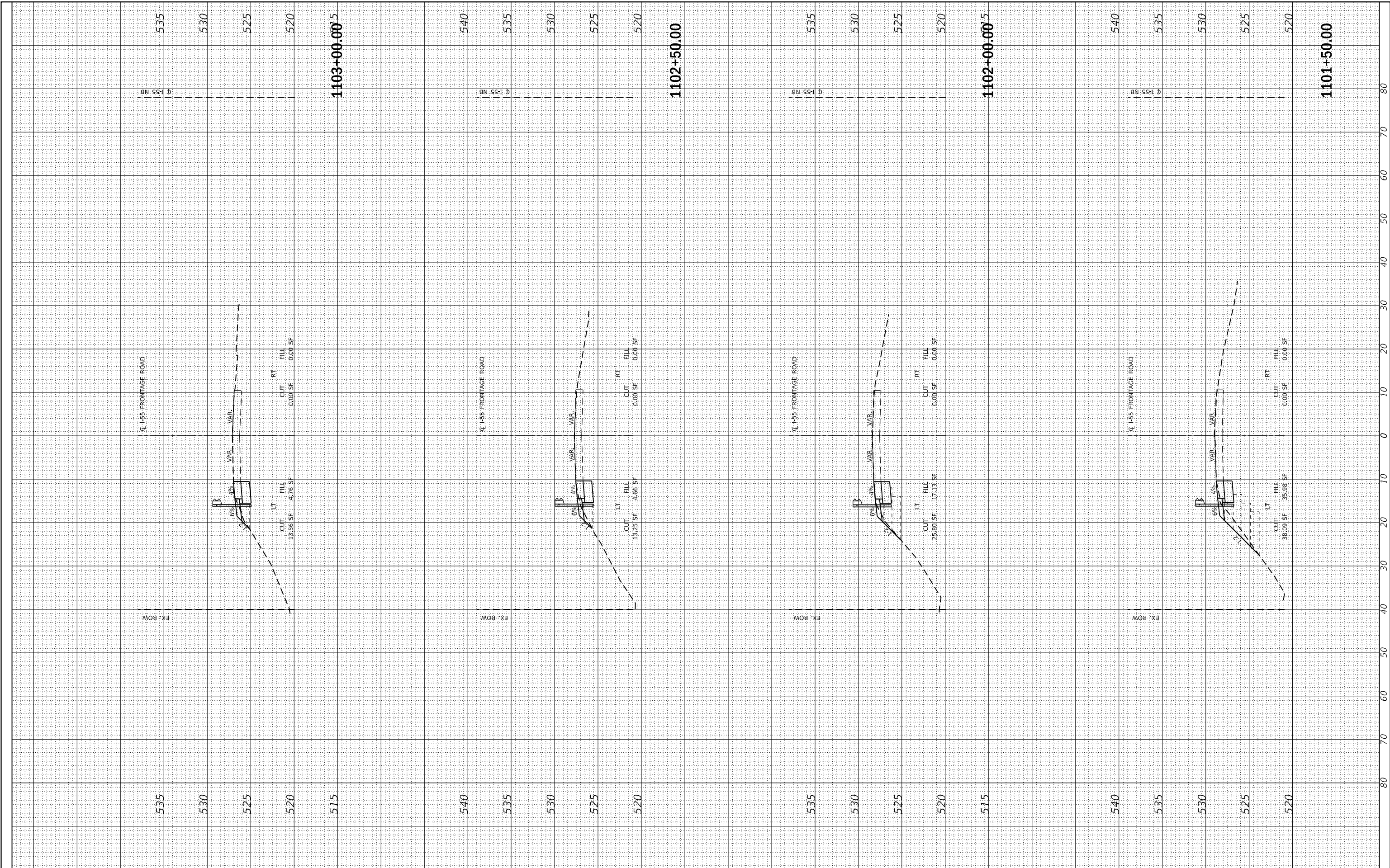
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	21B
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				



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

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

MODEL: SP0DELNAM1ES  
FILE NAME: SP11E5



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Ph: 312-235-6783

USER NAME = susers	DESIGNED - TOM	REVISED -
PLOT SCALE = 5/8"=1'-0"	DRAWN - YN	REVISED -
PLOT DATE = 4/30/2018	CHECKED - MO	REVISED -
	DATE - 04/30/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS (SHEET 5 OF 6)**

SCALE: SHEET OF SHEETS STA. 1101+50.00 TO STA. 1103+00.00

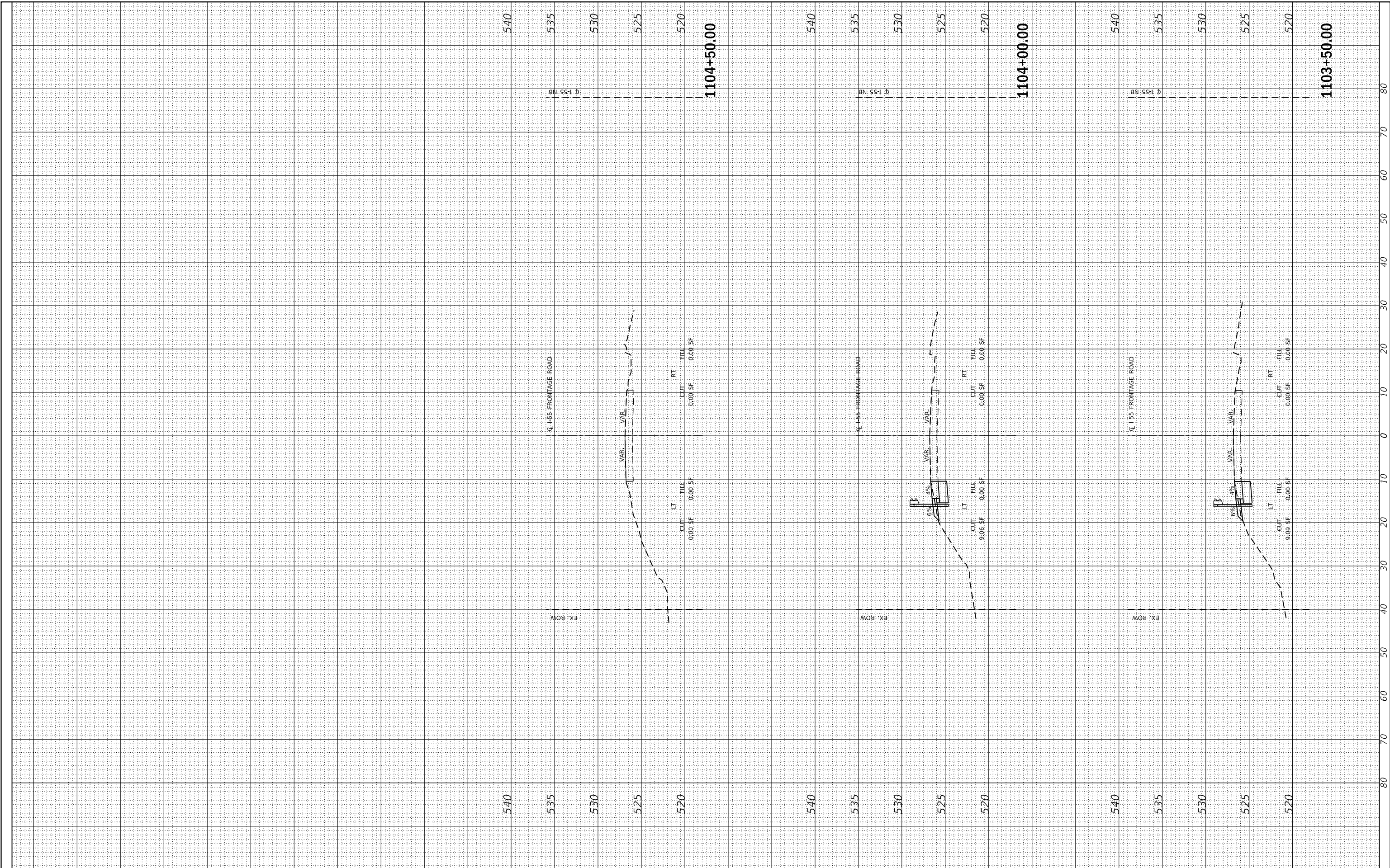
F.A.I. RTE. 55	SECTION 86B-3-1	COUNTY WILL	TOTAL SHEETS 27	SHEET NO. 21C
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60M88



FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

MODEL: SPODELNAME1  
FILE NAME: ST1E15



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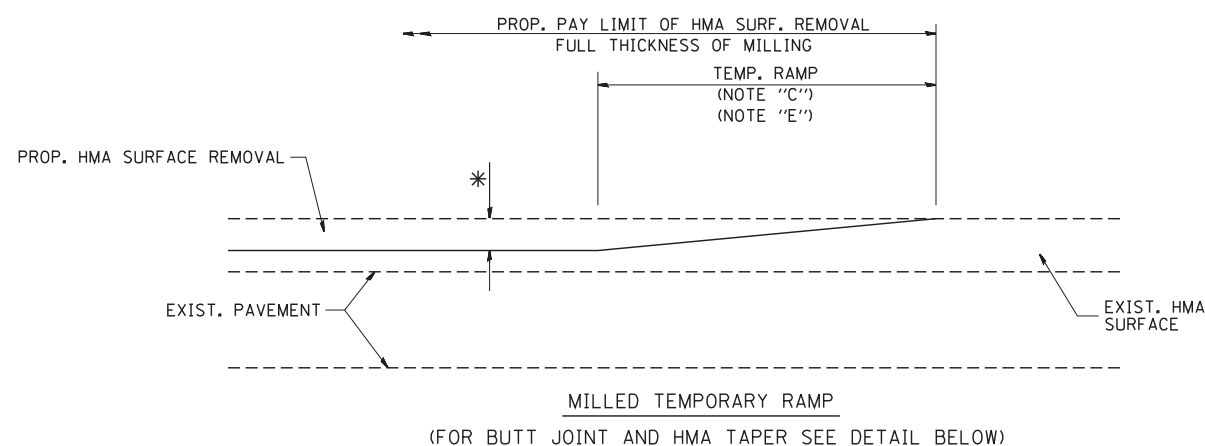
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

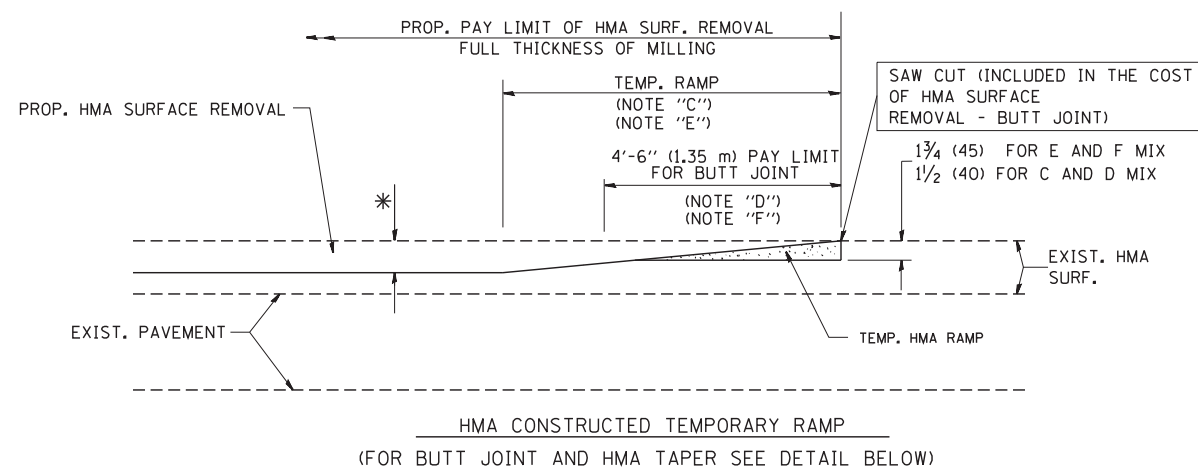
**I-55 E. FRONTAGE ROAD AT I&M CANAL  
CROSS SECTIONS ( SHEET 6 OF 6 )**

SCALE: SHEET OF SHEETS STA. 1103+50.00 TO STA. 1104+50.00

F.A.I. RTE. 55	SECTION 86B-3-1	COUNTY WILL	TOTAL SHEETS 27	SHEET NO. 21D
CONTRACT NO. 60M88				
ILLINOIS FED. AID PROJECT				

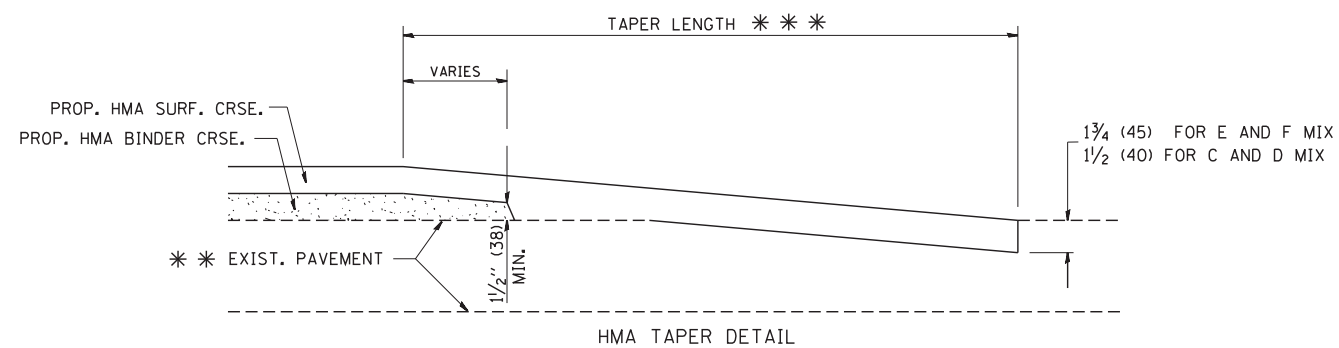
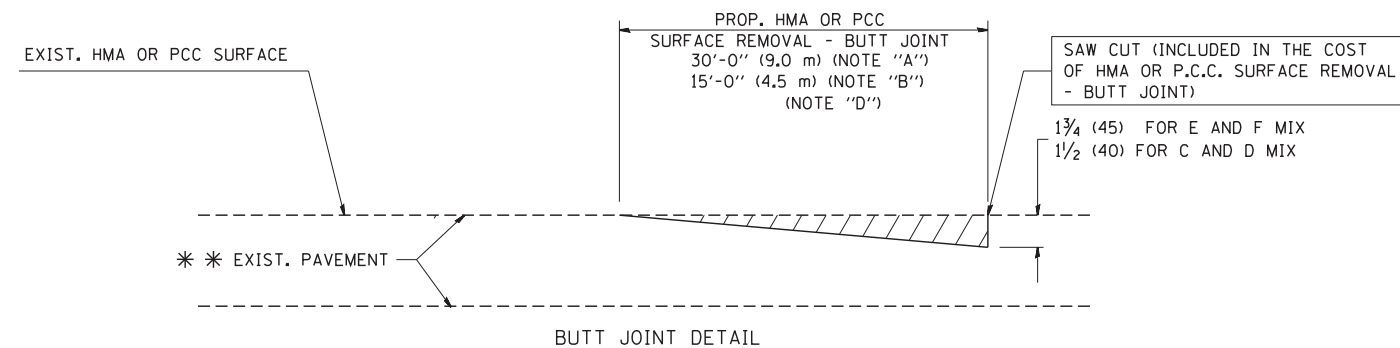


**OPTION 1**



**OPTION 2**

**TYPICAL TEMPORARY RAMP**



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

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

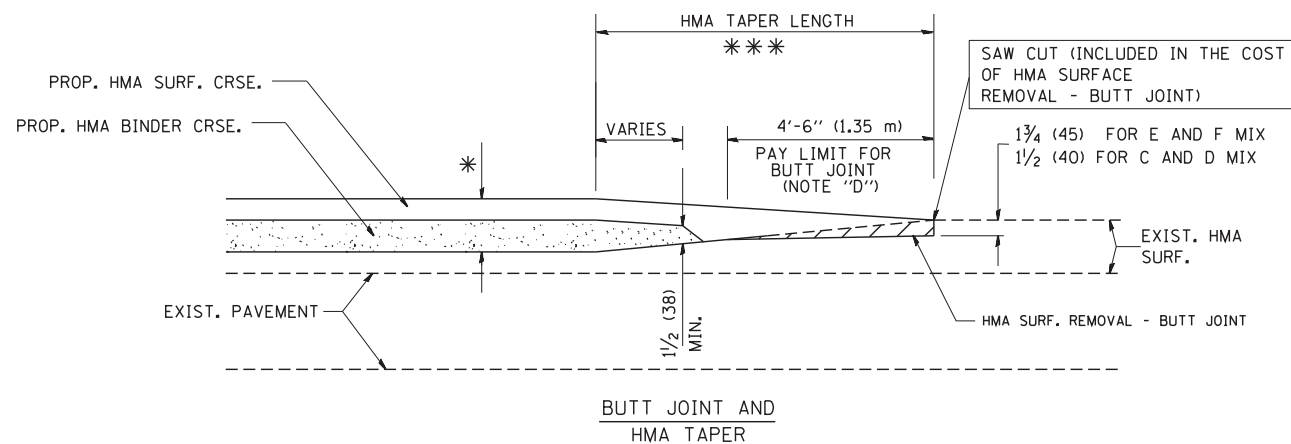
**NOTES**

- 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**

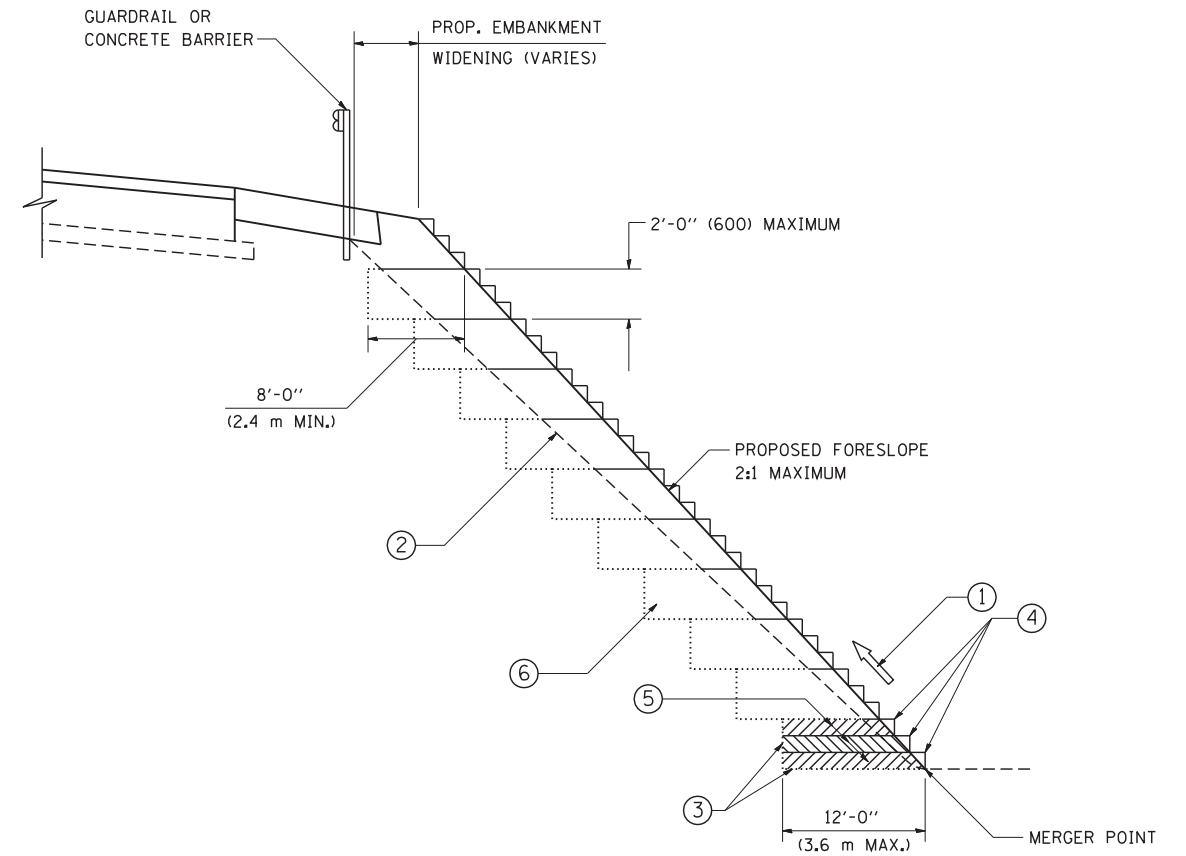
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		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	22
BD400-05 BD32			CONTRACT NO. 60M88	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TYPICAL BENCHING DETAIL  
FOR EMBANKMENT

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

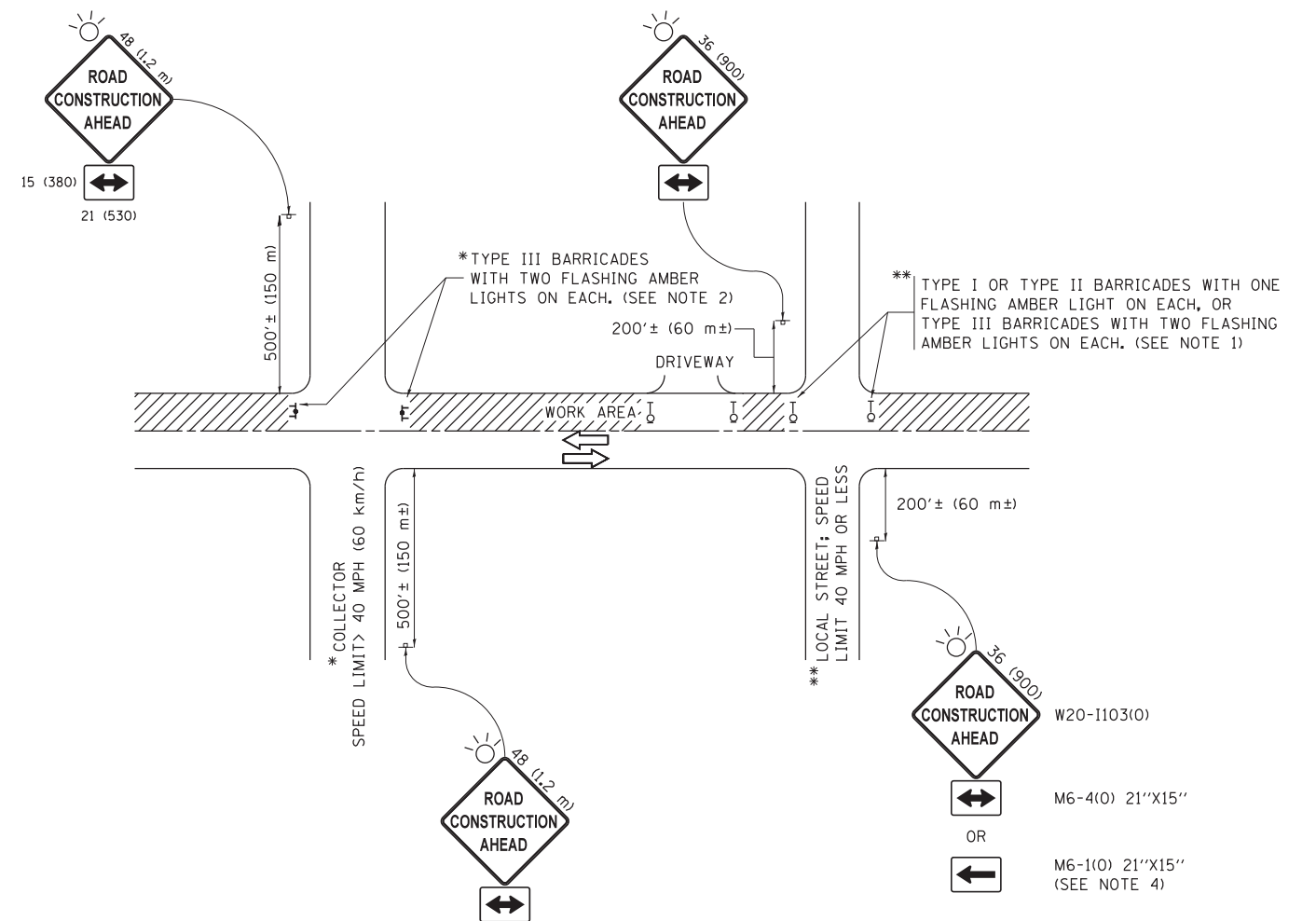
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>BENCHING DETAIL</b>			
<b>FOR EMBANKMENT WIDENING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	23
<b>BD-51</b>			<b>CONTRACT NO. 60M88</b>	
FED. ROAD DIST. NO. 1 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. 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).
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.

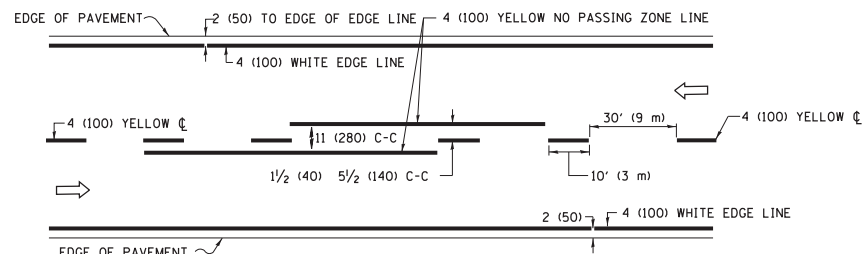
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

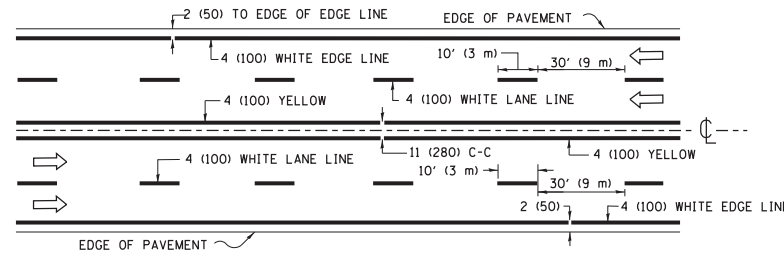
**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

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

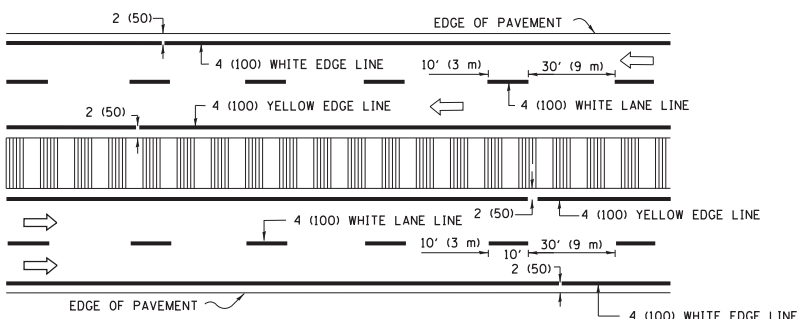
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	24
<b>TC-10</b>			<b>CONTRACT NO. 60M88</b>	
ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

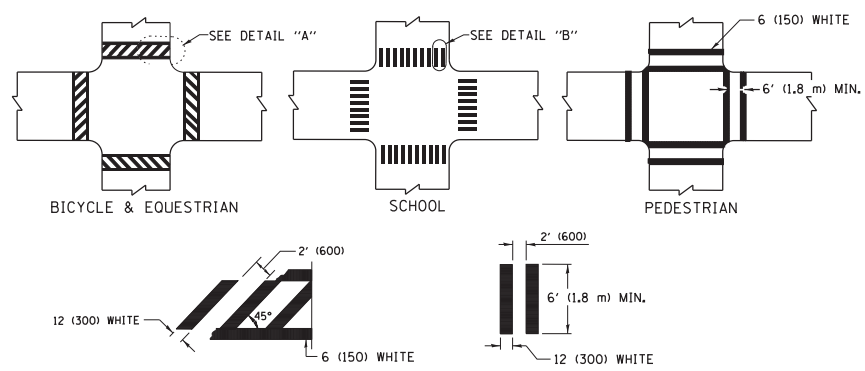


**MULTI-LANE UNDIVIDED**



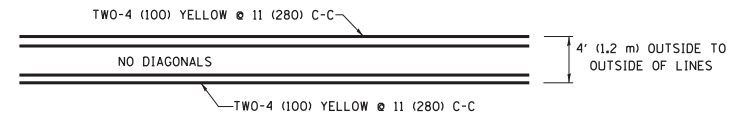
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

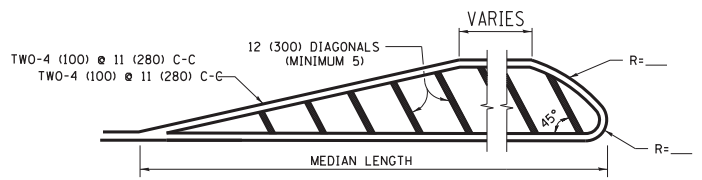


**TYPICAL CROSSWALK MARKING**

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

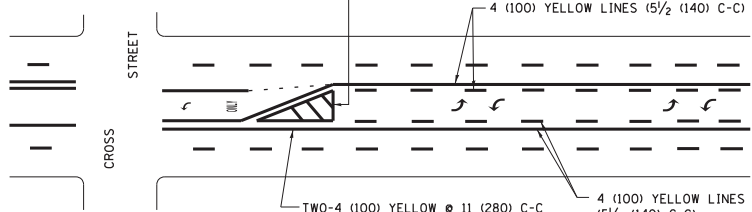


**4' (1.2 m) WIDE MEDIANS ONLY**

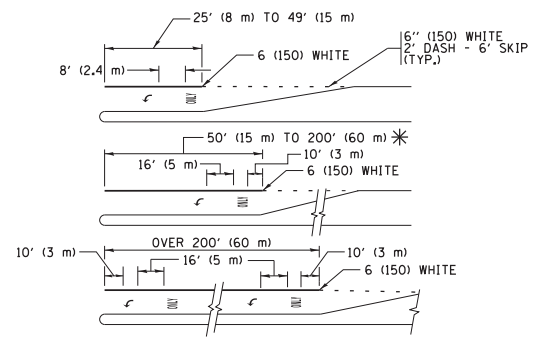


**MEDIANS OVER 4' (1.2 m) WIDE**

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))

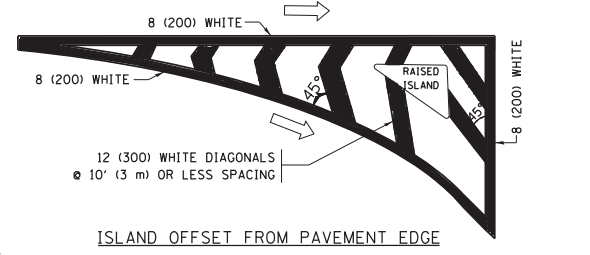


**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**

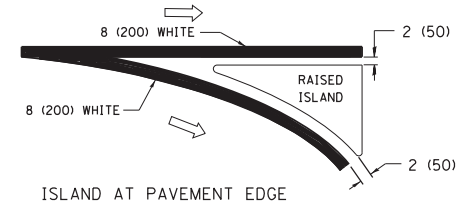


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

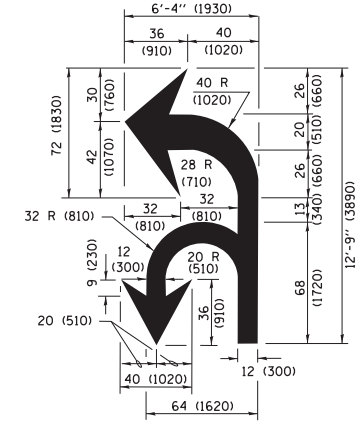
**TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING**



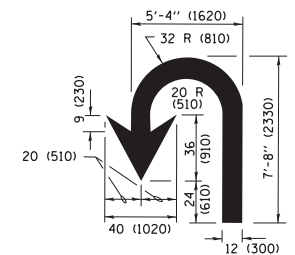
**ISLAND OFFSET FROM PAVEMENT EDGE**



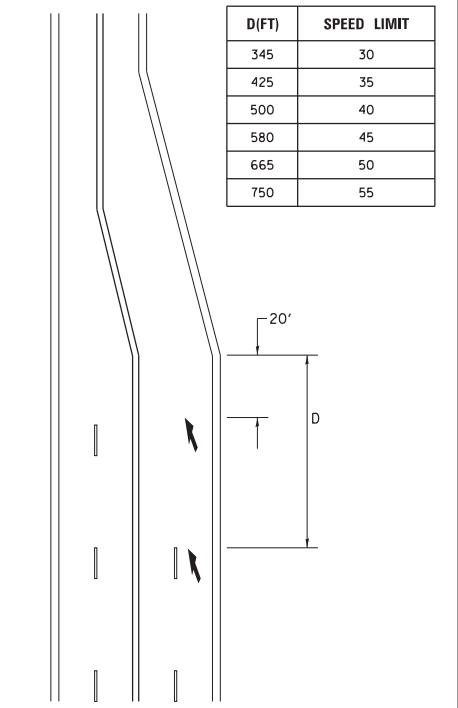
**ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING**



**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.

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" 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 <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.

FILE NAME = W:\diststd\22x34\to13.dgn	USER NAME = leysa	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
Default	PLOT SCALE = 50.000' / in.	DRAWN -	REVISED - C. JUCIUS 07-01-13
	PLOT DATE = 6/23/2017	CHECKED -	REVISED - C. JUCIUS 12-21-15
		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE TYPICAL PAVEMENT MARKINGS**

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

F.A.1	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	86B-3-I	WILL	27	26
<b>TC-13</b>		CONTRACT NO.	60M88	
ILLINOIS FED. AID PROJECT				

