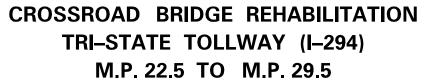
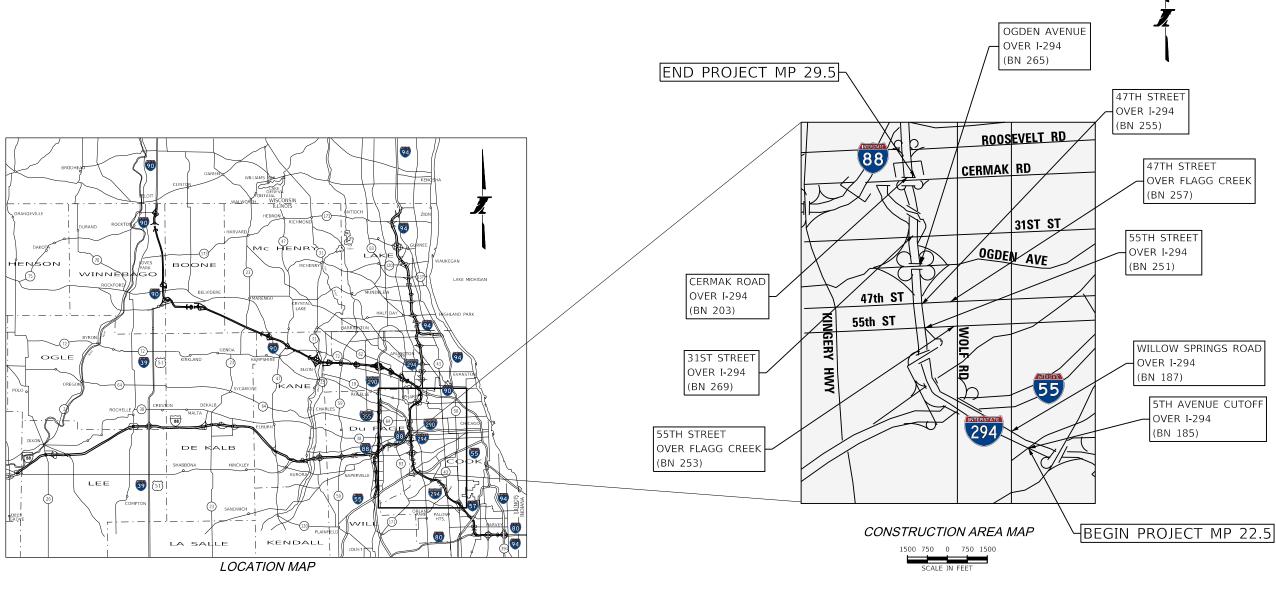


Tillinois THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY CONTRACT RR-18-4387





LOCATION	ADT (YEAR)	POSTED /DESIGN SPEED
5TH AVENUE CUTOFF WILLOW SPRINGS ROAD 55TH STREET 47TH STREET OGDEN AVENUE 31ST STREET CERMAK ROAD	1,400 (2010) 10,300 (2014) 19,000 (2014) 9,800 (2014) 32,600 (2016) 19,000 (2016) 28,500 (2016)	40 /40 40 /40 35 /35 35 /35 45 /45 45 /45 40 /40









mother of Schoon

AECOM MATTHEW J. LEHAN, P.E. # 062-057159 SIGNATURE AND SEAL APPLY TO DRAWINGS: 1-20, 25-26, 32-37, 45-48, 56-59,



EXPIRATION DATE: 11/30/2019

Row

AECOM
B. ROBERT TESSIATORE, S.E.
081-004607
SIGNATURE AND SEAL
APPLY TO DRAWINGS:
136-155



EXPIRATION DATE: 11/30/2018

Johna Clark

PERALTE-CLARK LLC JOHN A. CLARK, P.E. # 062-055684 SIGNATURE AND SEAL APPLY TO DRAWINGS: 24, 31, 44, 55



081-006358 LICENSED STRUCTURAL ENGINEER OF

EXPIRATION DATE: 11/30/2019

Moleun M Farah-RUBINOS & MESIA ENGINEERS, N.C.

MOHSEN M. FARAHANY, S.E. # 81-005131
SIGNATURE AND SEAL
APPLY TO DRAWINGS:
113-135



EXPIRATION DATE: 11/30/2018

Michael D. Cina

QUIGG ENGINEERING INC. MICHAEL D. CIMA, S.E. # 081-005984 SIGNATURE AND SEAL APPLY TO DRAWINGS: 156-167



EXPIRATION DATE: 11/30/2018

Michael D. Cina

QUIGG ENGINEERING INC MICHAEL D. CIMA, P.E. # 062-049631 SIGNATURE AND SEAL APPLY TO DRAWINGS: 60-62



EXPIRATION DATE: 11/30/2019

Denk N. Mall

CIVILTECH ENGINEERING INC. DEREK N. MALL, P.E. # 062-051308 SIGNATURE AND SEAL APPLY TO DRAWINGS: 27, 38-40, 49-51



EXPIRATION DATE: 11/30/2019

Brandon Bossell

BAXTER & WOODMAN CONSULTING ENGINEERS BRANDON L. BUZZELL, S.E. # 081-006358 SIGNATURE AND SEAL APPLY TO DRAWINGS: 74-112



Denis Hogan

BAXTER & WOODMAN CONSULTING ENGINEERS DENIS T. HOGAN, P.E. # 62-050059 SIGNATURE AND SEAL APPLY TO DRAWINGS: 21-23, 28-30, 41-43 52-54, 63-73 C ENGINEER OF LL-MINITARY

EXPIRATION DATE: 11/30/2019

2446113 FM 4713/2018 PLOT SCALE = 20.0000 '/ 10.

DRAWN BY OPS

DATE 02/09/2018

DATE 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387

DATE DESCRIPTION

SIGNATURE SHEET

GEN-02

DRAWING NO.
2 OF 175

INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
COV-01	COVER SHEET
GEN-02	SIGNATURE SHEET
GEN-03	INDEX OF DRAWINGS, ILLINOIS TOLLWAY STANDARD DRAWINGS, HIGHWAY STANDARDS AND DISTRICT 1 STANDARDS
GEN-04	GENERAL NOTES
GEN-05 TO GEN-06	SUGGESTED PROGRESS SCHEDULE
GQ-01 TO GQ-03	SUMMARY OF QUANTITIES
GA-01 TO GA-07	ALIGNMENT AND LOCATION PLAN
MOT-01	SUGGESTED MAINTENANCE OF TRAFFIC - GENERAL NOTES
MOT-02	SUGGESTED MAINTENANCE OF TRAFFIC - SEQUENCE OF CONSTRUCTION NOTES
M294-00 TO M203-00	SUGGESTED MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS
M185-01	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 185 (5TH AVE. CUTOFF) STAGE 1
M187-01	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 187 (WILLOW SPRING RD.) STAGE 1
M251-01	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 251 AND B.N. 253 (55TH ST.) STAGE 1
M255-01	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 255 AND B.N. 257 (47TH STREET) STAGE 1
M265-01A TO M265-01B	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 265 (OGDEN AVE.) STAGE 1A
M265-01C TO M265-01D	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 265 (OGDEN AVE.) STAGE 1B
M269-01A TO M269-01B	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 269 (31ST ST.) STAGE 1
M203-01A TO M203-01C	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 203 (CERMAK RD.) STAGE 1
M185-02	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 185 (5TH AVE. CUTOFF) STAGE 2
M187-02	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 187 (WILLOW SPRING RD.) STAGE 2
	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 251 AND B.N. 253 (55TH ST.) STAGE 2
	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 255 AND B.N. 257 (47TH ST.) STAGE 2
	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 265 (OGDEN AVE.) STAGE 2
	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 269 (31ST ST.) STAGE 2
	SUGGESTED MAINTENANCE OF TRAFFIC B.N. 203 (CERMAK RD.) STAGE 2
	PAVEMENT MARKING PLANS B.N. 185 (5TH AVE. CUTOFF)
	PAVEMENT MARKING PLANS B.N. 187 (WILLOW SPRING RD.)
	PAVEMENT MARKING PLANS B.N. 251 AND B.N. 253 (55TH ST.)
	PAVEMENT MARKING PLANS B.N. 255 AND B.N. 257 (47TH ST.)
	PAVEMENT MARKING PLANS B.N. 265 (OGDEN AVE.)
	PAVEMENT MARKING PLANS B.N. 269 (31ST ST.)
	PAVEMENT MARKING PLANS B.N. 203 (CERMAK RD.)
	TEMPORARY TRAFFIC SIGNALS 5TH STREET
	TEMPORARY TRAFFIC SIGNALS 5TH STREET
	BRIDGE REHABILITATION - B.N. 185 (5TH AVENUE CUTOFF)
	BRIDGE REHABILITATION - B.N. 187 (WILLOW SPRING ROAD)
	BRIDGE REHABILITATION - B.N. 251 (55TH STREET OVER I-294)
	BRIDGE REHABILITATION - B.N. 253 (55TH STREET OVER FLAGG CREEK)
	BRIDGE REHABILITATION - B.N. 255 (47TH STREET)
	BRIDGE REHABILITATION - B.N. 257 (47TH STREET OVER FLAGG CREEK)
	BRIDGE REHABILITATION - B.N. 265 (OGDEN AVENUE)
	BRIDGE REHABILITATION B.N. 269 (GODEN AVERGE)
	BRIDGE REHABILITATION - B.N. 209 (3131 31 KEEL) BRIDGE REHABILITATION - B.N. 203 (CERMAK ROAD)
	TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
	TC-12 MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS
	TC-13 TYPICAL PAVEMENT MARKINGS TC 14 TRAFFIC CONTROL AND REDITECTION AT THEN BAYS (TO REMAIN OPEN TO TRAFFIC)
	TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
IC-16	TC-16 SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-22	TC-22 ATERIAL ROAD INFORMATION SIGN
	COV-01 GEN-02 GEN-03 GEN-04 GEN-05 TO GEN-06 GQ-01 TO GQ-03 GA-01 TO GA-07 MOT-01 MOT-02 M294-00 TO M203-00 M185-01 M187-01 M251-01 M255-01 M265-01A TO M265-01B M269-01A TO M203-01C

CHECKED BY OPS DATE 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

		GEN-03				
DATE DESCRIPTION	CONTRACT NO. RR-18-4387	GEN-03				
		DRAWING NO.				
	INDEX OF DRAWINGS AND STANDARDS	3 OF 175				

TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

TC-12 MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

TC-13 TYPICAL PAVEMENT MARKINGS

TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

TC-16 SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

TC-22 ATERIAL ROAD INFORMATION SIGN

TC-26 DRIVEWAY ENTRANCE SIGNING

TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

ILLINOIS TOLLWAY STANDARD DRAWINGS

C1-10 GALVANIZED STEEL PLATE BEAM GUARDRAIL

D2-04 SYMBOLS AND PATTERNS

D5-06 PERMENANT PAVEMENT MARKINGS

D6-07 PAVEMENT MARKING AND SHOULDER RUMBLE STRIP DETAILS

E1-06 CONSTRUCTION SIGNS

E2-07 LANE CLOSURE DETAILS

E3-06 SHOULDER CLOSURE DETAILS

IDOT HIGHWAY STANDARD DRAWINGS

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

701011-04 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY

701101-05 OFF-RD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE

701206-04 LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS≥ 45 MPH

701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-03 LANE CLOSURE 2L,2W MOVING OPERATIONS-DAY ONLY

701316-12 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS \geq 45 MPH

701411-09 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45MPH

701427-05 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS≤ 40 MPH

701501-06 URBAN LANE CLOSURE, 2L. 2W, UNDIVIDED

701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

701602-09 URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

701606-10 URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

701611-11 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

701701-10 URBAN LANE CLOSURE MULTILANE INTERSECTION

701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-07 TRAFFIC CONTROL DEVICES

780001-05 TYPICAL PAVEMENT MARKINGS

880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

GENERAL NOTES

- 1. GENERAL SAFETY PROVISIONS: TO PROVIDE ILLINOIS TOLLWAY AND CROSSROAD PATRONS SAFE TRAVEL CONDITIONS DURING THIS CONSTRUCTION PROJECT, AND TO PROVIDE SAFE WORKING CONDITIONS FOR ALL EMPLOYEES, BOTH OF THE ILLINOIS TOLLWAY AND PRIVATE CONTRACTOR, THE RULES, REGULATIONS, AND CONDITIONS WILL PREVAIL FOR THE DURATION OF THIS CONTRACT.
- 2. THE CONTRACTOR SHALL BE MADE AWARE THAT ALL CONSTRUCTION VEHICLES SHALL BE LIMITED TO 15 FEET ABOVE EXISTING GRADE WHILE CROSSING UNDER COMMONWEALTH EDISON'S TRANSMISSION LINES.
- 3. DISTRIBUTORS: ALL DISTRIBUTORS FOR ASPHALT PAVING OPERATIONS SHALL BE EQUIPPED WITH SHIELDS TO PREVENT DAMAGES TO MOTORISTS' VEHICLES AND TO ADJACENT HIGHWAY APPURTENANCES.
- 4. FENCE: EXISTING FENCE THAT HAS TO BE DISCONNECTED AND/OR REMOVED FOR THE CONTRACTOR'S OPERATION SHALL BE RECONNECTED AND/OR REPLACED BY THE CONTRACTOR IN KIND AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY. TEMPORARY FENCE SHOULD BE INSTALLED IF EXISTING FENCE IS TO BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 664 OF THE STANDARD SPECIFICATIONS. ANY RIGHT-OF-WAY MARKERS DISTURBED BY THE CONTRACTOR'S OPERATION SHOULD BE REESTABLISHED BY A REGISTERED LAND SURVEYOR AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.
- 5. THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS.
- 6. ALL ELEVATIONS ARE BASED ON UNITED STATES COAST AND GEODETIC SURVEY DATUM. BENCHMARKS FOR THE PROJECT ARE DESCRIBED IN THE PLANS.
- 7. AT THE TIME OF THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, THE PROPOSED CONCRETE TRUCK WASHOUT LOCATIONS, TYPE, MAINTENANCE PLAN, AND IDENTIFICATION. RUNOFF FROM WASH AREAS SHALL BE CONTAINED IN DESIGNATED AREAS SO THAT RUNOFF DOES NOT REACH THE STORM SEWER OR DITCH SYSTEMS.

AECOM



ILLINOIS 60515

DATE 02/09/2018

SUGGESTED PROGRESS SCHEDULES

				2018							1							
	JULY		AUGUST			SEPTEMBER			OCTOBER			₹	N	IOVE	МВЕ	R		
TASK																		
NOTICE TO PROCEED (6/30/2018)																		
PERMITS																		
MOBILIZATION																		
BN 185 5TH AVENUE CUTOFF																		
ORDER/FAB JOINT MATERIAL																		
STAGE 1 - 5TH AVENUE																		
STAGE 2 - 5TH AVENUE																		
ORDER/FAB BEARINGS																		
PIER REPAIRS - NB																		
PIER REPAIRS - SB																		
BEARING REPL. / ABUT REPAIRS																		
SEALER, CLEANUP		T																
BN 187 WILLOW SPRINGS RD		T																
ORDER/FAB JOINT MATERIAL																		
STAGE 1 - WILLOW SPRINGS																		
STAGE 2 - WILLOW SPRINGS																		
SUBSTRUCTURE REPAIRS - NB																		
SUBSTRUCTURE REPAIRS - SB																		
SEALER, CLEANUP																		
BN 251/253 55TH STREET																		
ORDER/FAB JOINT MATERIAL																		
PROTECTIVE SHIELD (251)																		
STAGE 1 - 55TH STREET																		
STAGE 2 - 55TH STREET																		
SUB REPAIRS (251) - NB																		
SUB REPAIRS (251) - SB																		
PROTECTIVE SHIELD REMOVAL & MOT																		
SEALER, CLEANUP																		
BN 255 & BN 257 47TH STREET																		
ORDER/FAB JOINT MATERIAL																		
PROTECTIVE SHIELD																		
STAGE 1 -47TH STREET																		
STAGE 2 - 47TH STREET																		
SUBSTRUCTURE REPAIRS -NB																		
SUBSTRUCTURE REPAIRS - SB																		
PROTECTIVE SHIELD REMOVAL & MOT																		
SEALER, CLEANUP		T																

CONSTRUCTION SCHEDULE NOTES

- 1. THIS IS ONLY A SUGGESTED PROJECT SCHEDULE AND IS NOT TO BE CONSIDERED A PROGRESS SCHEDULE AS REQUIRED IN ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS ARTICLE 108.02. THE INTENT OF THIS PROGRESS SCHEDULE IS TO ILLUSTRATE THE WORK CAN REASONABLY BE PERFORMED WITHIN THE SUGGESTED SCHEDULE DURATION.
- 2. IF ANY DISCREPANCIES EXIST BETWEEN THIS SUGGESTED PROGRESS SCHEDULE, AND SPECIFICATIONS, SPECIAL PROVISIONS OR OTHER CONTRACT DRAWINGS, THE SPECIFICATIONS, SPECIAL PROVISIONS OR OTHER CONTRACT DRAWINGS SHALL GOVERN.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITIES TO PROVIDE MANPOWER AND EQUIPMENT TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

<u>HOLIDAYS</u>

NO WORK REQUIREING MOVEMENT OF VEHICLES TO AND FROM THE WORKSITE THAT INTERFERES WITH TOLLWAY TRAFFIC WILL BE ALLOWED DURING CONSTRUCTION IN THE FOLLOWING HOLIDAY PERIODS WITHOUT SPECIFIC WRITTEN AUTHORIZATION FROM THE TOLLWAY.

- INDEPENDENCE DAY WEEKEND 12:00 NOON, FRIDAY, JUNE 29, 2018 THROUGH 9:00 AM THURSDAY, JULY 5, 2018. LABOR DAY WEEKEND 12:00 NOON, FRIDAY, AUGUST 31 2018 THROUGH
- 9:00 AM TUESDAY, SEPTEMBER 4, 2018.

DATE 02/09/2018 CHECKED BY MJL DATE 4/17/2018





2 7 0 0 0 G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

SUGGESTED PROGRESS SCHEDULES

				2018															
		JU	LY		AUG	UST		SI	EPTE	МВЕ	R	(ЭСТО	OBER	₹	N	IOVE	MBE	R
TASK																			
BN 265 OGDEN AVENUE																			
IDOT CONTRACT 62F56 - RESURFACING																			
PROTECTIVE SHIELD																			
STAGE 1A -OGDEN AVE																			
STAGE 1B -OGDEN AVE																			
STAGE 2 - OGDEN AVE																			
SUBSTRUCTURE REPAIRS -NB																			
SUBSTRUCTURE REPAIRS - SB																			
GIRDER REPAIRS																			
CLEAN, PAINT, SEALANT																			
PROTECTIVE SHIELD REMOVAL & MOT																			
BN 269 31ST STREET																			
ORDER/FAB JOINT MATERIAL																			
STAGE 1 -31ST STREET																			
STAGE 2 - 31ST STREET																			
SUBSTRUCTURE REPAIRS -NB																			
SUBSTRUCTURE REPAIRS - SB																			
GIRDER REPAIRS																			
CLEAN, PAINT, SEALANT																			
BN 203 CERMAK AVE.																			
ORDER/FAB MATERIAL																			
PROTECTIVE SHIELD																			
STAGE 1 -DECK, PARA & JT REP																			
STAGE 2 - DECK, PARA & JT REP																			
REPAIR PIER DRAIN PIPE-NB																			
REPAIR PIER DRAIN PIPE-SB																			
REPAIR GUARDRAIL																			
PROTECTIVE SHIELD REMOVAL & MOT																			
MISC WORK	+ +	\dashv					_												
PUNCH LIST	+	\dashv					\vdash												
PUNCH LIST																			

CONSTRUCTION SCHEDULE NOTES

- 1. THIS IS ONLY A SUGGESTED PROJECT SCHEDULE AND IS NOT TO BE CONSIDERED A PROGRESS SCHEDULE AS REQUIRED IN TOLLWAY SUPPLEMENTAL SPECIFICATIONS ARTICLE 108.02. THE INTENT OF THIS PROGRESS SCHEDULE IS TO ILLUSTRATE THE WORK CAN REASONABLY BE PERFORMED WITHIN THE SUGGESTED SCHEDULE
- 2. IF ANY DISCREPANCIES EXIST BETWEEN THIS SUGGESTED PROGRESS SCHEDULE, AND SPECIFICATIONS, SPECIAL PROVISIONS OR OTHER CONTRACT DRAWINGS, THE SPECIFICATIONS, SPECIAL PROVISIONS OR OTHER CONTRACT DRAWINGS SHALL GOVERN.
- 3. IT IS THE CONTRACTOR'S RESPONSIBILITIES TO PROVIDE MANPOWER AND EQUIPMENT TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

HOLIDAYS

NO WORK REQUIREING MOVEMENT OF VEHICLES TO AND FROM THE WORKSITE THAT INTERFERES WITH TOLLWAY TRAFFIC WILL BE ALLOWED DURING CONSTRUCTION IN THE FOLLOWING HOLIDAY PERIODS WITHOUT SPECIFIC WRITTEN AUTHORIZATION FROM THE TOLLWAY.

- INDEPENDENCE DAY WEEKEND 12:00 NOON, FRIDAY, JUNE 29, 2018 THROUGH 9:00 AM THURSDAY, JULY 5, 2018.
- LABOR DAY WEEKEND 12:00 NOON, FRIDAY, AUGUST 31 2018 THROUGH 9:00 AM TUESDAY, SEPTEMBER 4, 2018.

DATE 02/09/2018 CHECKED BY MJL DATE 4/17/2018





SUMMARY OF QUANTITIES

SPECIAL PROVISION (S.P.)	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORD QUANTIT
(=1.1.1)	28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	28	
	50102400	CONCRETE REMOVAL	CU YD	80	
	50157300	PROTECTIVE SHIELD	SQ YD	1710	
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	80	
	50300300	PROTECTIVE COAT	SQ YD	279	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7720	
	50800515	BAR SPLICERS	EACH	100	
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	968	
	52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	10	
	59000200	EPOXY CRACK INJECTION	FOOT	10	
	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50	
	63200310	GUARDRAIL REMOVAL	FOOT	50	
	70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	124	
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	5448	
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	356	
	70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	583	
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	36	
BDE	70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	37	
BDE	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	138510	
BDE	70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	150	
BDE	70300908	PAVEMENT MARKING TAPE, TYPE IV 8"	FOOT	5720	
BDE	70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	400	
	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	123	
	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19781	
	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1679	
	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	471	
	78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	41	
	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	33075	
	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	495	

LEGEND FOR S.P. COLUMN

- * INDICATES SPECIAL PROVISION

 ** INDICATES TOLLWAY SUPPLEMENTAL SPECIFICATIONS

 *** INDICATES IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

BDE INDICATES IDOT BDE SPECIAL PROVISION GBSP INDICATES IDOT GBSP SPECIAL PROVISION D1 INDICATES IDOT DISTRICT 1 SPECIAL PROVISION

AECOM DATE 02/09/2018 CHECKED BY MJL DATE 4/17/2018





SUMMARY OF QUANTITIES

SPECIAL PROVISION (S.P.)	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORD QUANTIT
,	78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	1778	
	78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	44	
	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	62	
	78100300	REPLACEMENT REFLECTOR	EACH	185	
D1	89000075	TEMPORARY PORTABLE BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	
GBSP	X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	74	
*	X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	1745	
*	X0326331	CLEANING AND PAINTING BEARINGS	EACH	120	
BDE	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	15430	
BDE	X2700003	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	2759	
BDE	X2700004	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"	FOOT	3301	
*	X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	92663	
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	
BDE	X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	592	
BDE	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	53545	
*	X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	185	
*	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	17	
GBSP	Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	10	
GBSP	Z0005876	BONDED PREFORMED JOINT SEALER, 4 INCH	FOOT	278	
*	Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ YD	12458	
*	Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	12458	
GBSP	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	47	
GBSP	Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	178	
D1	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	561	
***	Z0041895	POLYMER CONCRETE	CU FT	1	
D1	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3	
*	JI505040	REPAIR BRIDGE DRAINAGE SYSTEM	EACH	1	
**	JS121101	DRILL AND GROUT DOWEL BARS AND ANCHOR RODS	EACH	20	
**	JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	881	

LEGEND FOR S.P. COLUMN

- * INDICATES SPECIAL PROVISION

 ** INDICATES TOLLWAY SUPPLEMENTAL SPECIFICATIONS

 *** INDICATES IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

BDE INDICATES IDOT BDE SPECIAL PROVISION GBSP INDICATES IDOT GBSP SPECIAL PROVISION D1 INDICATES IDOT DISTRICT 1 SPECIAL PROVISION

DATE 02/09/2018 CHECKED BY MJL DATE 4/17/2018





SUMMARY OF QUANTITIES

SPECIAL PROVISION	ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RECORE QUANTIT
(S.P.) **	JS670C00	FIELD OFFICE, TYPE C	CAL MO	6	
**	JS671010	MOBILIZATION, TOLLWAY	L SUM	1	
*	JS701010	MAINTENANCE OF TRAFFIC	L SUM	1	
*	JT154005	EMERGENCY PAVEMENT AND SHOULDER REPAIRS	UNIT	20000	
*	JT154008	UNFORESEEN ADDITIONAL MAINTENANCE OF TRAFFIC	UNIT	20000	
*	JT155001	CONTRACTOR'S QUALITY PROGRAM	L SUM	1	
*	JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	76	
*	JT503050	SHALLOW CONCRETE REPAIR	SQ FT	109	
*	JT524010	APPLY CONCRETE SEALANT	SQ FT	25999	
*	JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.	FOOT	194	
*	JT602831	CLEAN DRAINAGE SYSTEM, LOCATION NO. 1	EACH	1	
*	JT602832	CLEAN DRAINAGE SYSTEM, LOCATION NO. 2	EACH	1	
*	JT602833	CLEAN DRAINAGE SYSTEM, LOCATION NO. 3	EACH	1	
*	JT602834	CLEAN DRAINAGE SYSTEM, LOCATION NO. 4	EACH	1	
*	JT602835	CLEAN DRAINAGE SYSTEM, LOCATION NO. 5	EACH	1	
*	JT602836	CLEAN DRAINAGE SYSTEM, LOCATION NO. 6	EACH	1	
*	JT602837	CLEAN DRAINAGE SYSTEM, LOCATION NO. 7	EACH	1	
*	JT602838	CLEAN DRAINAGE SYSTEM, LOCATION NO. 8	EACH	1	
*	JT701030	SUPPLEMENTAL BARRICADE	EACH/DAY	20	
*	JT701031	SUPPLEMENTAL SIGNING	SQ FT	20	
*	JT701032	SUPPLEMENTAL FLASHING ARROW BOARD (PER DAY)	EACH/DAY	50	
*	JT701033	SUPPLEMENTAL FLASHING ARROW BOARD (PER WEEK)	EACH/WEEK	20	
*	JT701034	SUPPLEMENTAL FLASHING ARROW BOARD (PER MONTH)	EACH/MONTH	20	
*	JT701035	SUPPLEMENTAL MAINTENANCE OF TRAFFIC	DAY	5	
*	JT783005	WATERBLAST PAVEMENT MARKING REMOVAL WITH VACUUM RECOVERY	SQ FT	1037	

LEGEND FOR S.P. COLUMN

- * INDICATES SPECIAL PROVISION

 ** INDICATES TOLLWAY SUPPLEMENTAL SPECIFICATIONS

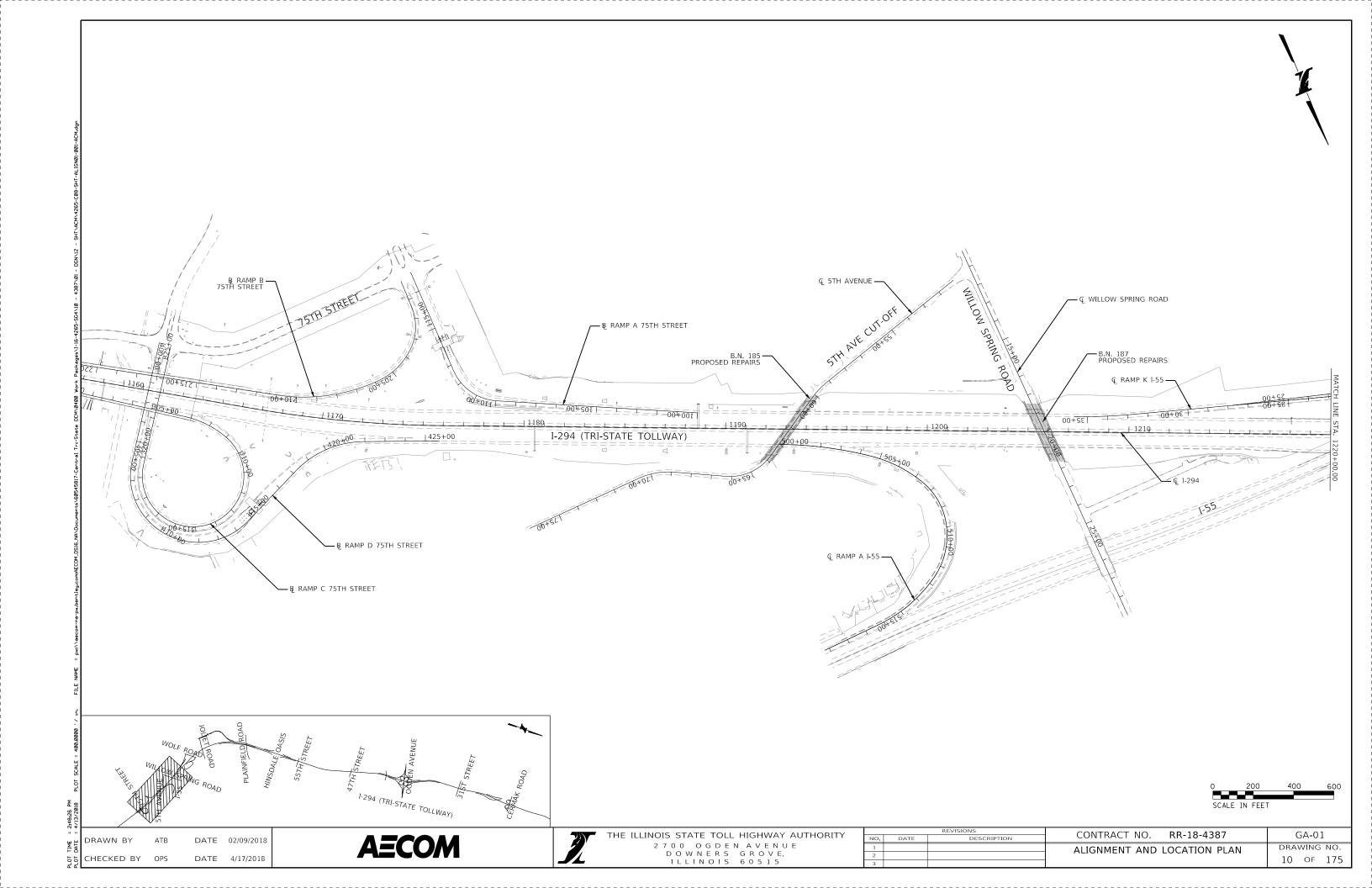
 *** INDICATES IDOT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

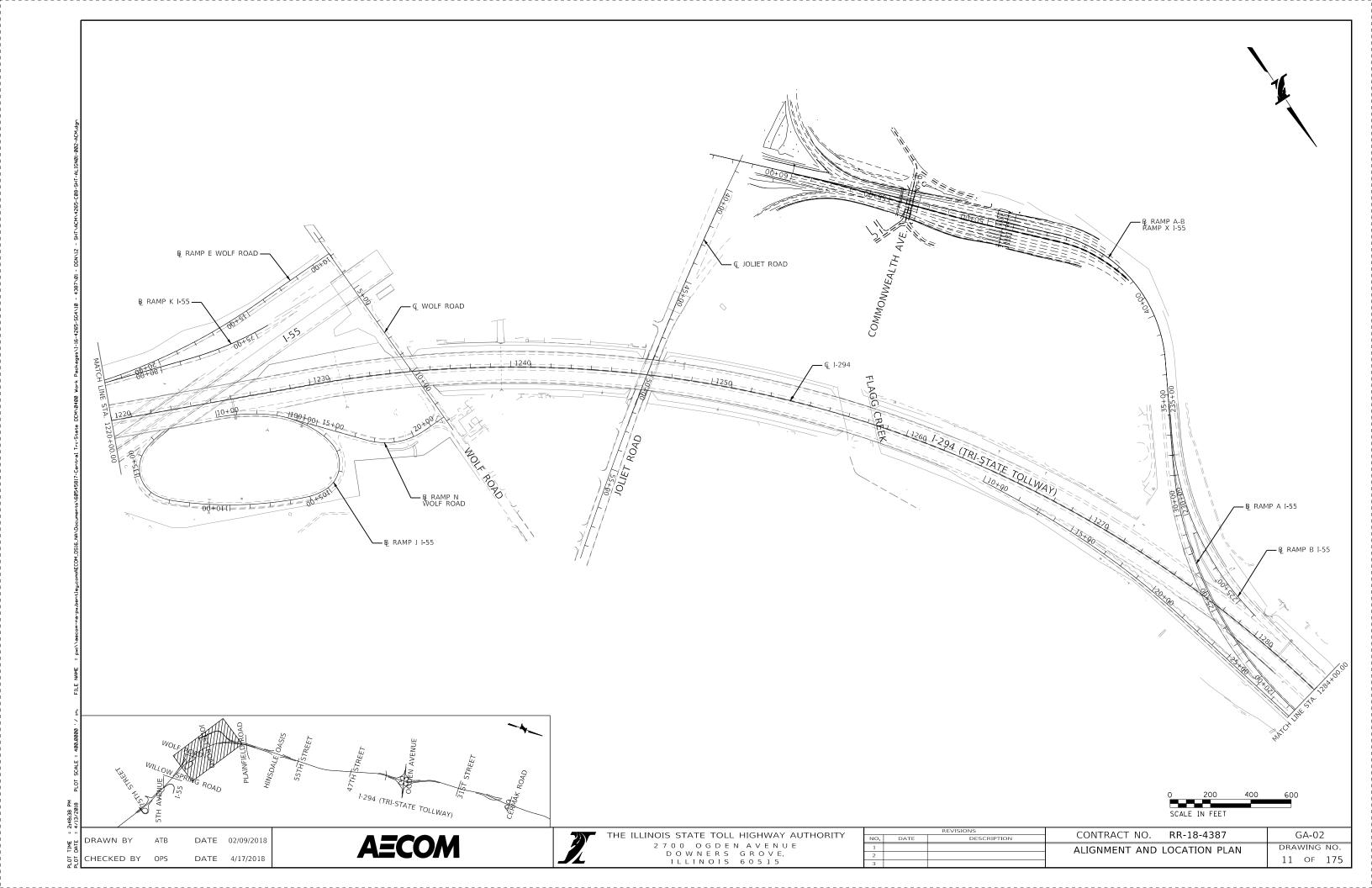
BDE INDICATES IDOT BDE SPECIAL PROVISION GBSP INDICATES IDOT GBSP SPECIAL PROVISION D1 INDICATES IDOT DISTRICT 1 SPECIAL PROVISION

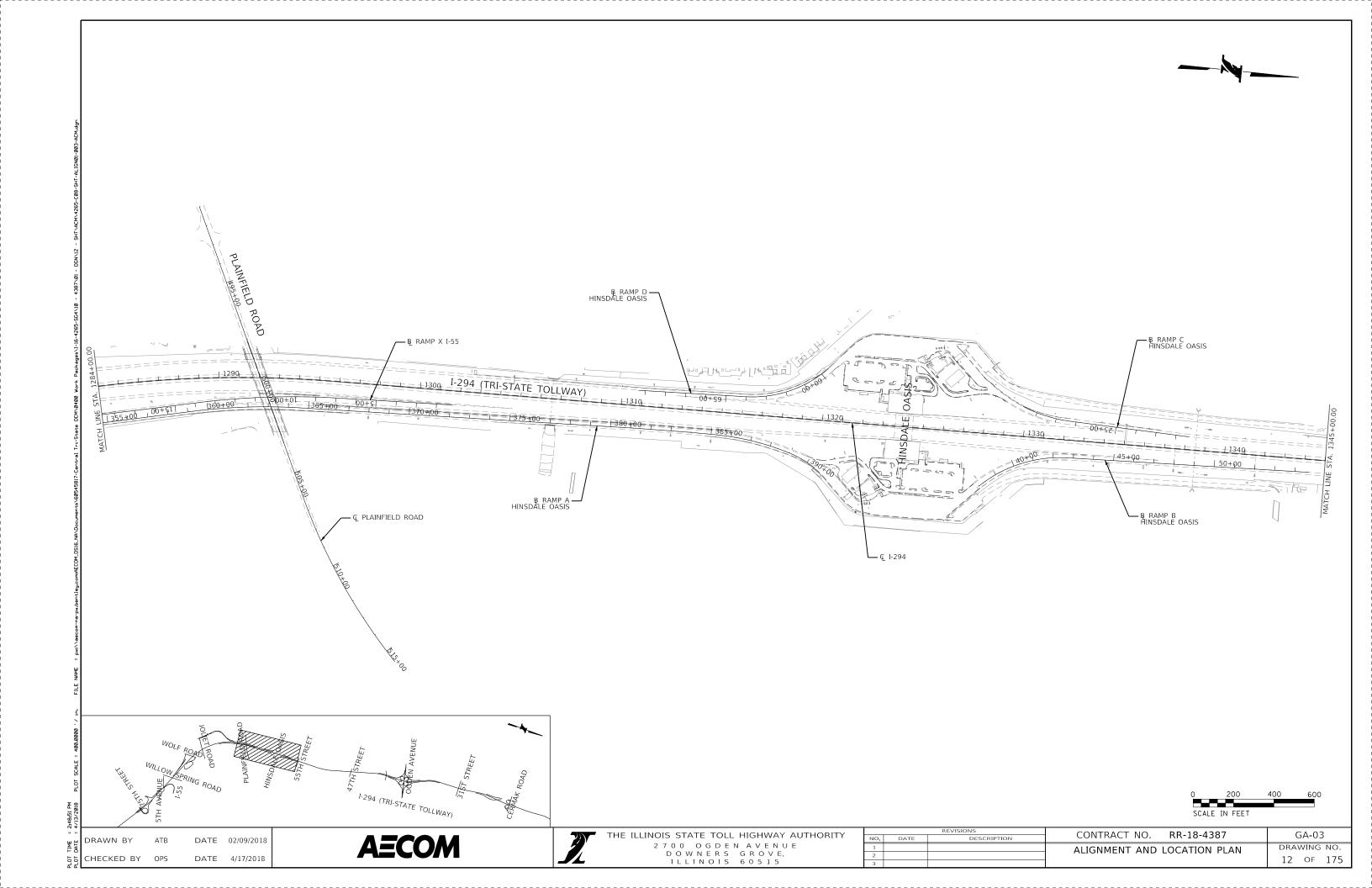
DATE 02/09/2018 CHECKED BY MJL DATE 4/17/2018

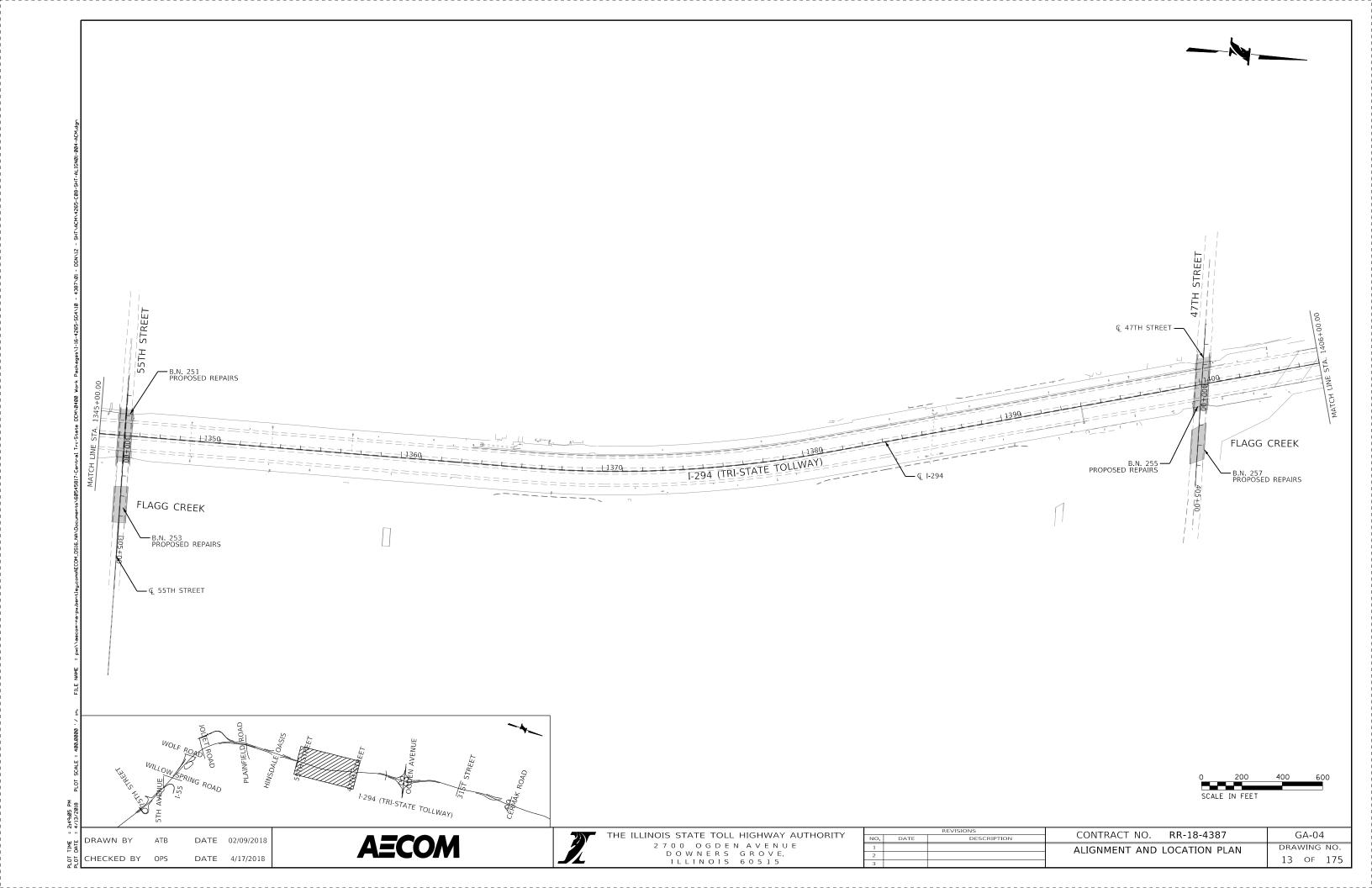


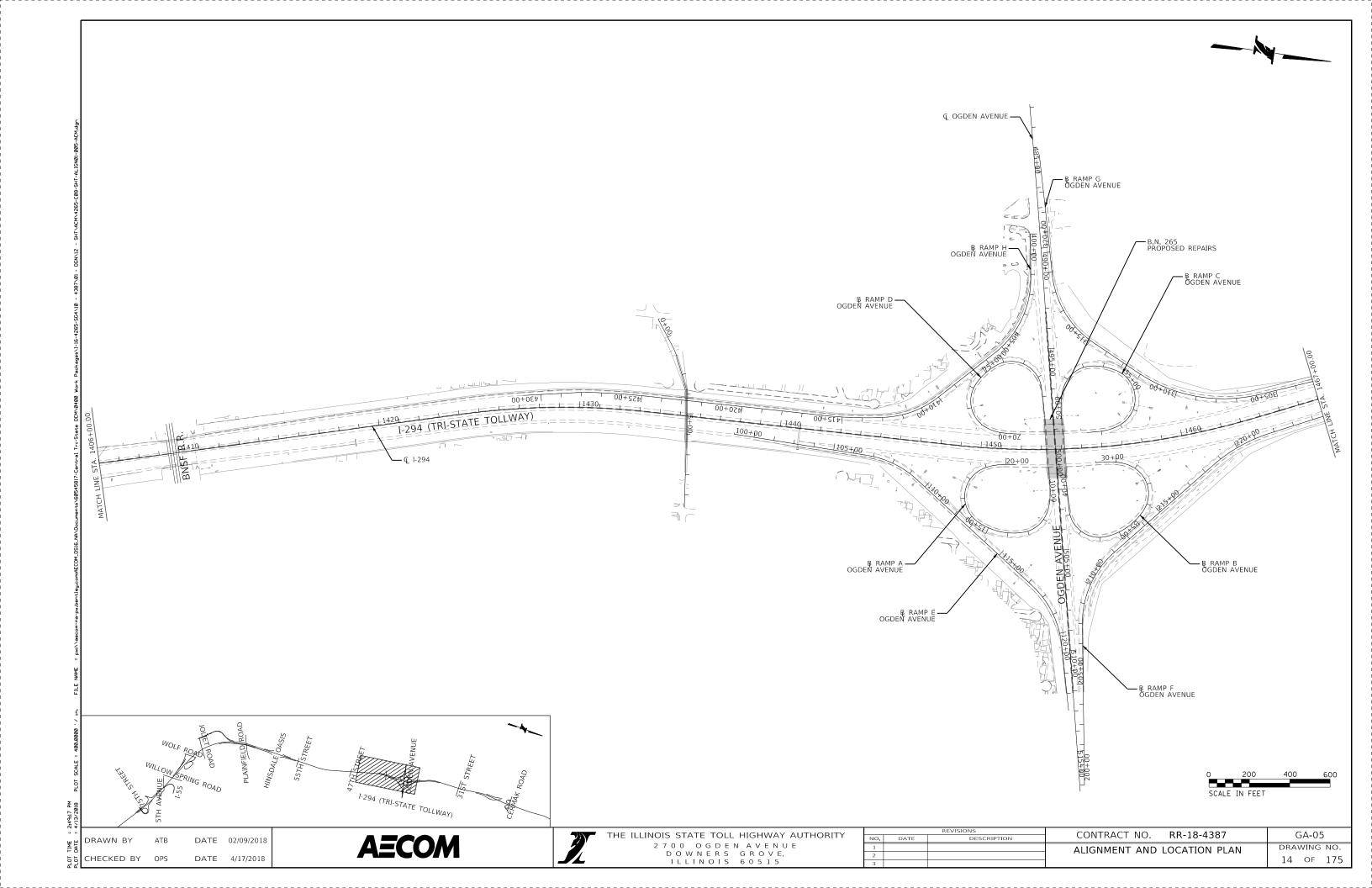


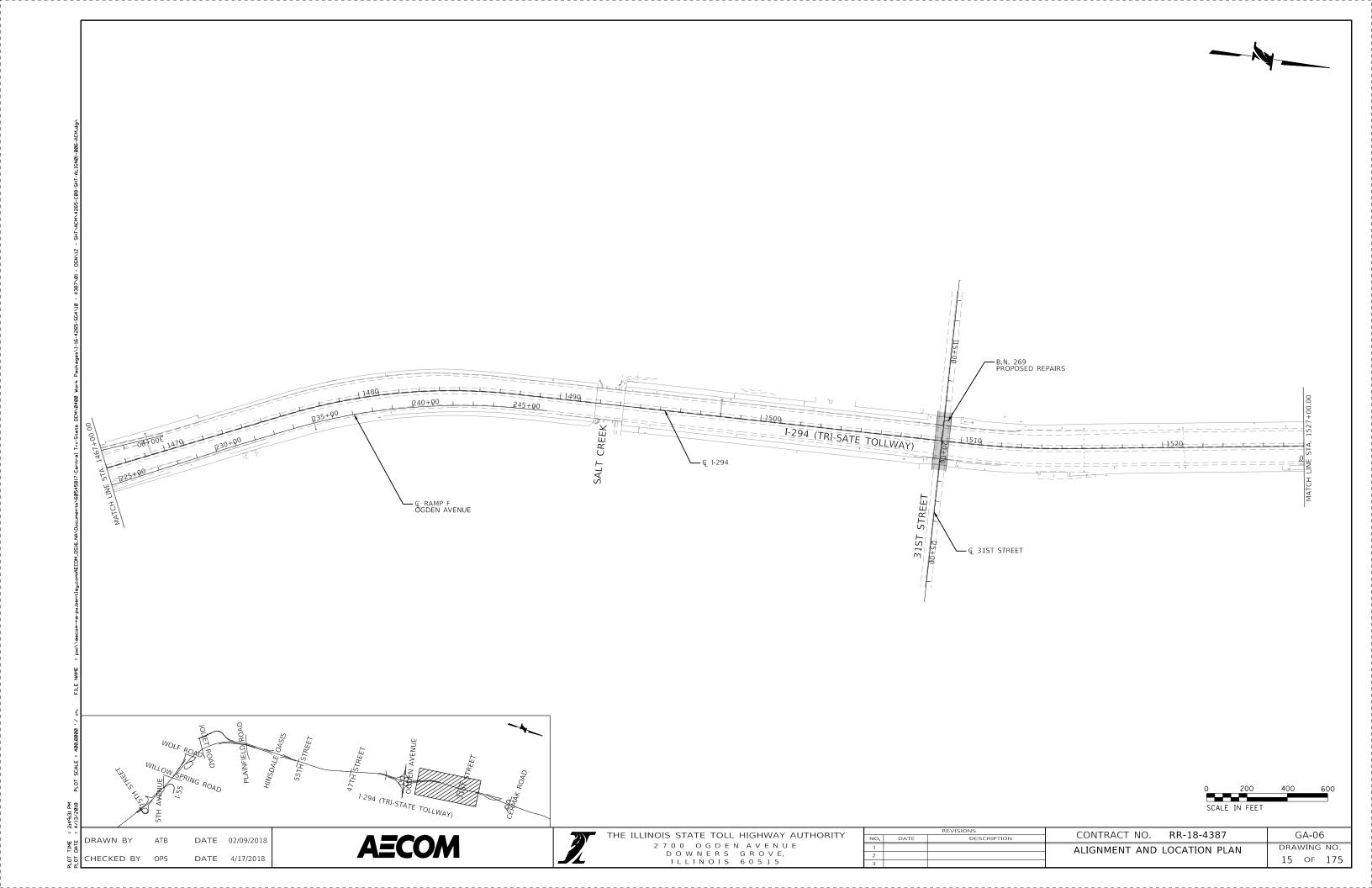


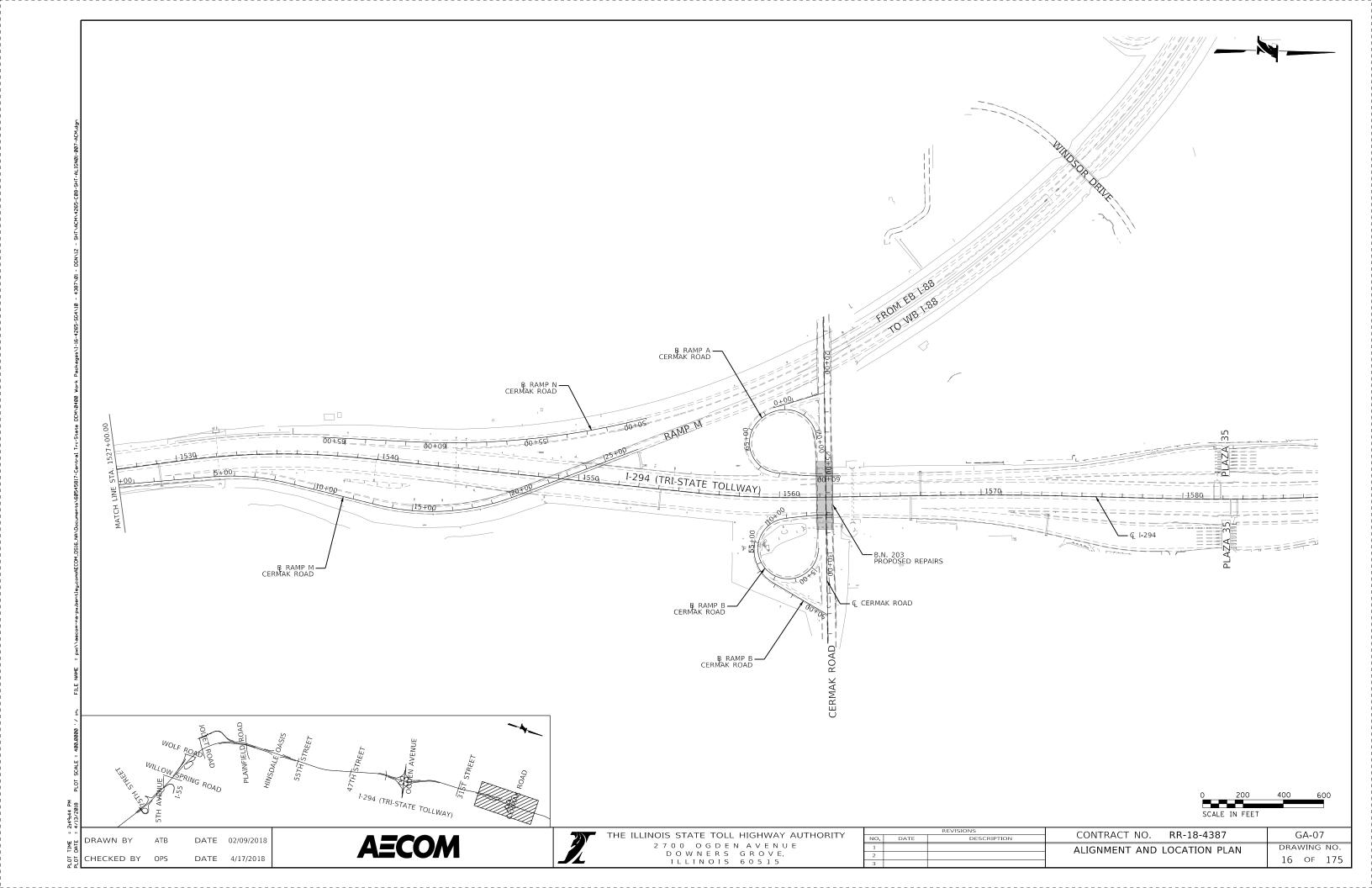












MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 1 ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 14 DAYS IN ADVANCE OF BEGINNING WORK.

2. WORK ZONE SPEED LIMIT

WORK ZONE SPEED LIMITS WITHIN THE CONSTRUCTION LIMITS OF NORTHBOUND AND SOUTHBOUND 1-294 FOR PRESTAGES A AND B SHALL BE 55 MPH.

5TH AVENUE CUTTOFF WORK ZONE SPEED LIMIT SHALL BE 30 MPH.

WILLOW SPRINGS ROAD WORK ZONE SPEED LIMIT SHALL BE 35 MPH.

55TH STREET WORK ZONE SPEED LIMIT SHALL BE 35 MPH.

47TH STREET WORK ZONE SPEED LIMIT SHALL BE 35 MPH.

OGDEN AVENUE WORK ZONE SPEED LIMIT SHALL BE 30 MPH.

31ST STREET WORK ZONE SPEED LIMIT SHALL BE 45 MPH.

CERMAK ROAD WORK ZONE SPEED LIMIT SHALL BE 40 MPH.

3. EXISTING RAISED PAVEMENT MARKER REFLECTORS THAT CONFLICT WITH STAGED TRAFFIC PATTERNS SHALL BE REMOVED UNDER THIS CONTRACT. THESE SHALL BE REPLACED WITHIN THE LIMITS OF THIS CONTRACT'S MAINTENANCE OF TRAFFIC, ALONG WITH ANY OTHER MARKERS THAT WERE MISSING REFLECTORS PRIOR TO REOPENING THE LANES TO TRAFFIC.

DRAWN BY CHECKED BY MJL

DATE 02/09/2018 DATE 4/17/2018





1. INSTALL PROTECTIVE SHIELD AND COMPLETE SUBSTRUCTURE REPAIRS

MAINTENANCE OF TRAFFIC:

1. NIGHT TIME LANE CLOSURES PER ILLINOIS TOLLWAY STANDARD DRAWING E2-07

MAINTENANCE OF TRAFFIC: STAGE 1

5[™] AVENUE CUTOFF MAINTENANCE OF TRAFFIC - STAGE 1

- SET UP TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING AS SHOWN IN THE PLANS
- PERFORM EXPANSION JOINT RECONSTRUCTION WORK AS DETAILED IN THE PLANS PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK ZONE AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER

MAINTENANCE OF TRAFFIC:

- 1. ESTABLISH ONE-WAY TRAFFIC FLOW ALONG THE SOUTH SIDE OF 5TH AVENUE CUTTOFF FOR BRIDGE REPAIRS WITH TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS
 2. MAINTAIN TWO-WAY TRAFFIC FLOW OF SUNSET AVENUE AND PLEASANTDALE DRIVE WITH TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS
- 3. CONSTRUCT BRIDGE REPAIRS ON NORTH SIDE OF BRIDGE

WILLOW SPRINGS ROAD MAINTENANCE OF TRAFFIC - STAGE 1

CONSTRUCTION

- SET UP TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING AS SHOWN IN THE PLANS
- PERFORM EXPANSION JOINT RECONSTRUCTION WORK AS DETAILED IN THE PLANS PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK ZONE AS
- SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER PERFORM BRIDGE DECK SCARIFICATION TO THE LIMITS SHOWN IN THE PLANS
- INSTALL POLYMER CONCRETE OVERLAY TO THE LIMITS SHOWN IN THE PLANS

- MAINTENANCE OF TRAFFIC:

 1. ESTABLISH TWO-LANE TWO-WAY TRAFFIC FLOW ALONG THE EAST SIDE OF WILLOW SPRINGS ROAD FOR BRIDGE REPAIRS AS SHOWN IN THE PLANS

 2. CONSTRUCT BRIDGE REPAIRS ON WEST SIDE OF BRIDGE

55[™] STREET MAINTENANCE OF TRAFFIC - STAGE 1

- CONSTRUCTION:
 1. SET UP TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING AS
- PERFORM EXPANSION JOINT RECONSTRUCTION AND REPAIR WORK AS DETAILED IN THE
- INSTALL PROTECTIVE SHIELD IN PREPARATION FOR DECK SLAB REPAIRS IN BOTH STAGES (BN 251 ONLY)
 PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK ZONE AS
- SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER PERFORM BRIDGE DECK SCARIFICATION TO THE LIMITS SHOWN IN THE PLANS INSTALL POLYMER CONCRETE OVERLAY TO THE LIMITS SHOWN IN THE PLANS

MAINTENANCE OF TRAFFIC:

- 1. ESTABLISH TWO-WAY TRAFFIC FLOW IN THE OUTSIDE LANES OF 55TH STREET FOR BRIDGE REPAIRS AS SHOWN IN THE PLANS
- CONSTRUCT BRIDGE REPAIRS ON THE INSIDE LANES OF BRIDGE

47TH STREET MAINTENANCE OF TRAFFIC - STAGE 1

1. PERFORM BRIDGE DECK REPAIRS IN THE WESTBOUND LANES

MAINTENANCE OF TRAFFIC:

1. CLOSE ONE LANE OF TRAFFIC IN EACH DIRECTION, SHIFT TRAFFIC TO THE EASTBOUND LANES AND MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION

OGDEN AVENUE MAINTENANCE OF TRAFFIC - STAGE 1A

CONSTRUCTION:

1. COMPLETE BRIDGE DECK AND JOINT REPAIRS AND OVERLAY IN THE INSIDE LANE IN EACH DIRECTION

MAINTENANCE OF TRAFFIC:

1. CLOSE THE INSIDE LANE OF TRAFFIC IN BOTH DIRECTIONS AND MAINTAIN TRAFFIC IN THE OUTSIDE LANE AND AUXILLIARY LANE.

OGDEN AVENUE MAINTENANCE OF TRAFFIC - STAGE 1B

1. COMPLETE BRIDGE DECK AND JOINT REPAIRS AND OVERLAY IN THE MIDDLE LANES IN EACH DIRECTION

MAINTENANCE OF TRAFFIC:

1. CLOSE THE INSIDE LANE OF TRAFFIC IN BOTH DIRECTIONS AND SHIFT ONE LANE OF TRAFFIC TO THE OUTSIDE SHOULDER AND AUXILIARY LANE. ALL WORK SHALL BE PREFORMED WITHIN A WEEKEND CLOSURE

31ST STREET MAINTENANCE OF TRAFFIC - STAGE 1

CONSTRUCTION:

1. COMPLETE BRIDGE DECK AND JOINT REPAIRS AND OVERLAY IN THE WESTBOUND

MAINTENANCE OF TRAFFIC:
1. CLOSE ONE LANE OF TRAFFIC IN EACH DIRECTION, SHIFT TRAFFIC TO THE EASTBOUND LANES AND MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION

22ND SREET/CERMAK MAINTENANCE OF TRAFFIC - STAGE 1

- COMPLETE BRIDGE DECK OVERLAY IN THE OUTSIDE LANES
- REPLACE EXPANSION JOINTS IN THE OUTSIDE LANES

- MAINTENANCE OF TRAFFIC:

 1. CLOSE THE OUTSIDE LANES OF TRAFFIC IN EACH DIRECTION
- 2. MAINTAIN THE INSIDE LANE OF TRAFFIC IN EACH DIRECTION

MAINTENANCE OF TRAFFIC: STAGE 2

5^H AVENUE CUTOFF MAINTENANCE OF TRAFFIC - STAGE 2

- CONSTRUCTION:
 1. ADJUST TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING
- AS SHOWN IN THE PLANS
 PERFORM EXPANSION JOINT RECONSTRUCTION WORK AS DETAILED IN THE PLANS PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK ZONE AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER

- MAINTENANCE OF TRAFFIC:

 1. ESTABLISH ONE-WAY TRAFFIC FLOW ALONG THE NORTH SIDE OF 5TH AVENUE CUTTOFF FOR BRIDGE REPAIRS WITH TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS
- MAINTAIN TWO-WAY TRAFFIC FLOW OF SUNSET AVENUE AND PLEASANTDALE DRIVE WITH TEMPORARY TRAFFIC SIGNALS AS SHOWN IN THE PLANS
- 3. CONSTRUCT BRIDGE REPAIRS ON SOUTH SIDE OF BRIDGE

WILLOW SPRINGS ROAD MAINTENANCE OF TRAFFIC - STAGE 2

- CONSTRUCTION:
 1. ADJUST TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING
- AS SHOWN IN THE PLANS
 PERFORM EXPANSION JOINT RECONSTRUCTION WORK AS DETAILED IN THE PLANS
 PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK
- ZONE AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER
- PERFORM BRIDGE DECK SCARIFICATION TO THE LIMITS SHOWN IN THE PLANS INSTALL POLYMER CONCRETE OVERLAY TO THE LIMITS SHOWN IN THE PLANS

MAINTENANCE OF TRAFFIC:

1. ESTABLISH TWO-LANE TWO-WAY TRAFFIC FLOW ALONG THE WEST SIDE OF WILLOW SPRINGS ROAD FOR BRIDGE REPAIRS AS SHOWN IN THE PLANS CONSTRUCT BRIDGE REPAIRS ON EAST SIDE OF BRIDGE

55" STREET MAINTENANCE OF TRAFFIC - STAGE 2

CONSTRUCTION

- 1. ADJUST TRAFFIC CONTROL DEVICES, TRAFFIC LANE CONFIGURATIONS AND SIGNING AS SHOWN IN THE PLANS
- PERFORM EXPANSION JOINT RECONSTRUCTION AND REPAIR WORK AS DETAILED IN
- 3. PERFORM BRIDGE DECK AND APPROACH SLAB REPAIRS IN DESIGNATED WORK ZONE AS SHOWN ON THE PLANS AND AS DETERMINED BY THE ENGINEER
- 4. PERFORM BRIDGE DECK SCARIFICATION TO THE LIMITS SHOWN IN THE PLANS
- 5. INSTALL POLYMER CONCRETE OVERLAY TO THE LIMITS SHOWN IN THE PLANS

MAINTENANCE OF TRAFFIC:

- 1. ESTABLISH TWO-WAY TRAFFIC FLOW IN THE INSIDE LANES OF 55TH STREET FOR BRIDGE REPAIRS AS SHOWN IN THE PLANS
- 2. CONSTRUCT BRIDGE REPAIRS ON THE OUTSIDE LANES OF BRIDGE

47TH STREET MAINTENANCE OF TRAFFIC - STAGE 2

1. PERFORM BRIDGE DECK REPAIRS AND MISCELLANEOUS STRUCTURAL REPAIRS IN THE EASTBOUND LANES.

MAINTENANCE OF TRAFFIC:

CLOSE ONE LANE OF TRAFFIC IN EACH DIRECTION, SHIFT TRAFFIC TO THE WESTBOUND LANES AND MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.

OGDEN AVENUE MAINTENANCE OF TRAFFIC - STAGE 2

CONSTRUCTION

1. COMPLETE BRIDGE DECK AND JOINT REPAIRS AND OVERLAY IN THE OUTSIDE LANE IN EACH DIRECTION.

MAINTENANCE OF TRAFFIC:

1. CLOSE THE OUTSIDE LANE OF TRAFFIC IN BOTH DIRECTIONS AND MAINTAIN TWO LANES OF TRAFFIC IN THE INSIDE LANES.

31ST STREET MAINTENANCE OF TRAFFIC - STAGE 2

CONSTRUCTION

1. COMPLETE BRIDGE DECK AND JOINT REPAIRS AND OVERLAY IN THE EASTBOUND LANES.

MAINTENANCE OF TRAFFIC:

1. CLOSE ONE LANE OF TRAFFIC IN EACH DIRECTION, SHIFT TRAFFIC TO THE WESTBOUND LANES AND MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION.

22ND STREET/CERMAK MAINTENANCE OF TRAFFIC - STAGE 2

CONSTRUCTION:
1. COMPLETE BRIDGE DECK OVERLAY IN THE INSIDE LANES.
2. REPLACE EXPANSION JOINTS IN THE INSIDE LANES.

MAINTENANCE OF TRAFFIC:

1. CLOSE THE INSIDE LANE OF TRAFFIC IN EACH DIRECTION.

MAINTAIN THE OUTSIDE LANES OF TRAFFIC IN EACH DIRECTION.

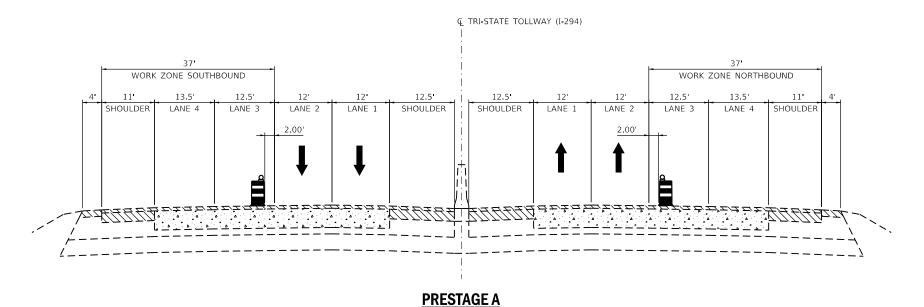
MAINTENANCE OF TRAFFIC: STAGE 3

ALL LOCATIONS MAINTENANCE OF TRAFFIC - STAGE 3

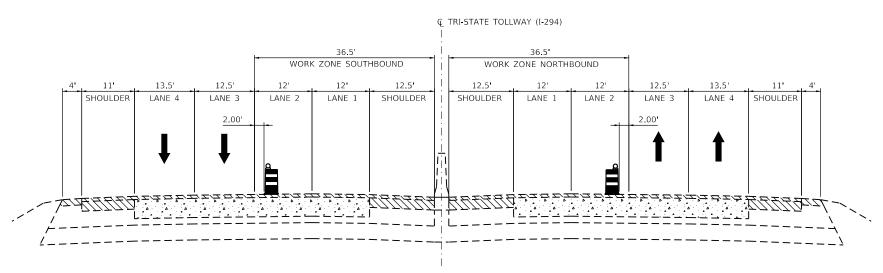
1. REMOVE PROTECTIVE SHIELD.

MAINTENANCE OF TRAFFIC: 1. NIGHT TIME LANE CLOSURES PER ILLINOIS TOLLWAY STANDARD DRAWING E2-07.





- @ 55TH STREET (B.N. 251)
- @ 47TH STREET (B.N. 255)
- @ 31ST STREET (B.N. 269)



START DAY	ALLOWABLE 2-LAN	IE CLOSURE TIMES
START DAT	NORTHBOUND I-294	SOUTHBOUND I-294
MONDAY	10:00 P.M. MON 4:00 A.M. TUES.	10:00 P.M. MON 4:00 A.M. TUES.
TUESDAY	10:00 P.M. TUES 4:00 A.M. WED.	10:00 P.M. TUES 4:00 A.M. WED.
WEDNESDAY	10:00 P.M. WED 4:00 A.M. THUR.	10:00 P.M. WED 4:00 A.M. THUR.
THURSDAY	10:00 P.M. THUR 4:00 A.M. FRI.	10:00 P.M. THUR 4:00 A.M. FRI.
FRIDAY	NOT ALLOWED	NOT ALLOWED
SATURDAY	8:00 P.M. SAT 8:00 A.M. SUN.	8:00 P.M. SAT 8:00 A.M. SUN.

10:00 P.M. SUN. - 4:00 A.M. MON. 10:00 P.M. SUN. - 4:00 A.M. MON.

PRESTAGE B

- @ 55TH STREET (B.N. 251)
- @ 47TH STREET (B.N. 255)
- @ 31ST STREET (B.N. 269)

MOT TYPICAL LEGEND



TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE



WORK AREA



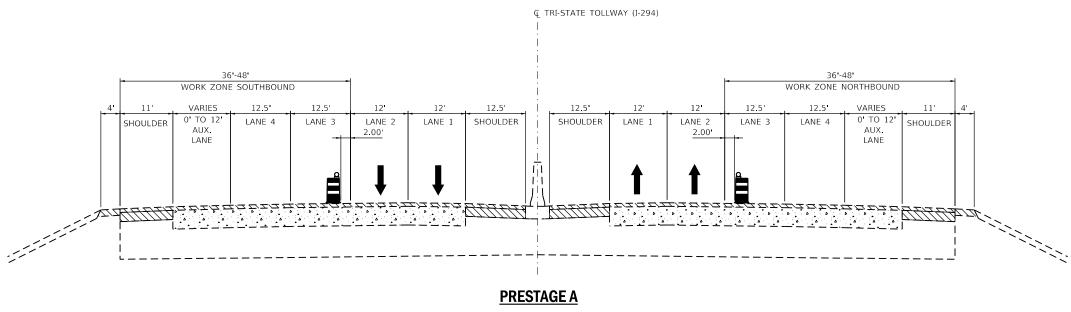
DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKINGS

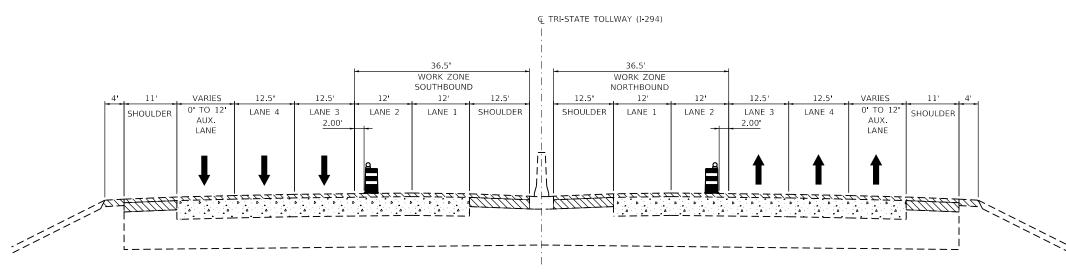
DATE 02/09/2018 DRAWN BY CHECKED BY OPS DATE 4/17/2018







- @ 5TH AVE (B.N. 185)
- @ WILLOW SPRINGS ROAD (B.N. 187)
- @ OGDEN AVE (B.N. 265)
- @ CERMAK RD (B.N. 203)



PRESTAGE B

- @ 5TH AVE (B.N. 185)
- @ WILLOW SPRINGS ROAD (B.N. 187)
- @ OGDEN AVE (B.N. 265)
- @ CERMAK RD (B.N. 203)

START DAY	ALLOWABLE Z-LAN	IE CLOSURE TIMES
STAILT DAT	NORTHBOUND I-294	SOUTHBOUND I-294
MONDAY	10:00 P.M. MON 4:00 A.M. TUES.	10:00 P.M. MON 4:00 A.M. TUES.
TUESDAY	10:00 P.M. TUES 4:00 A.M. WED.	10:00 P.M. TUES 4:00 A.M. WED.
WEDNESDAY	10:00 P.M. WED 4:00 A.M. THUR.	10:00 P.M. WED 4:00 A.M. THUR.
THURSDAY	10:00 P.M. THUR 4:00 A.M. FRI.	10:00 P.M. THUR 4:00 A.M. FRI.
FRIDAY	NOT ALLOWED	NOT ALLOWED
SATURDAY	8:00 P.M. SAT 8:00 A.M. SUN.	8:00 P.M. SAT 8:00 A.M. SUN.
SUNDAY	10:00 P.M. SUN 4:00 A.M. MON.	10:00 P.M. SUN 4:00 A.M. MON.

MOT TYPICAL LEGEND



TYPE II BARRICADE, DRUM OR VERTICAL



WORK AREA



DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKINGS

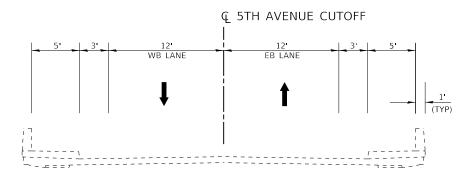
DRAWN BY DATE 02/09/2018 CHECKED BY OPS DATE 4/17/2018

AECOM



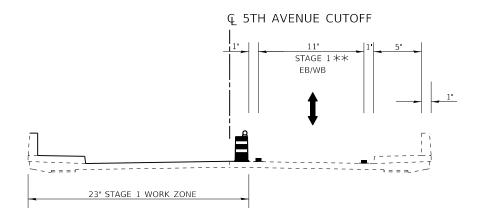
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 0 G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 M294-01 DRAWING NO. I-294 TYPICAL SECTIONS 20 OF 175 SUGGESTED MAINTENANCE OF TRAFFIC

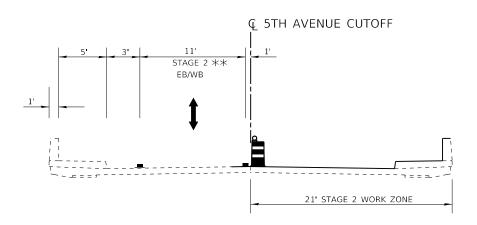


5TH AVENUE CUTOFF EXISTING TYPICAL SECTION

AT I-294 (BN 185)



5TH AVENUE CUTOFF STAGE 1 CONSTRUCTION AT I-294 (BN 185)



5TH AVENUE CUTOFF STAGE 2 CONSTRUCTION AT I-294 (BN 185)

** ONE-WAY TRAFFIC EACH DIRECTION MAINTAINED WITH TEMPORARY TRAFFIC SIGNALS SEE IDOT STANDARD 701316-12

DATE 4/17/2018 CHECKED BY JFM DATE 4/17/2018





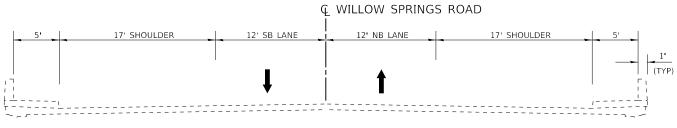
MOT TYPICAL LEGEND

DIRECTION OF TRAFFIC

BARRICADE

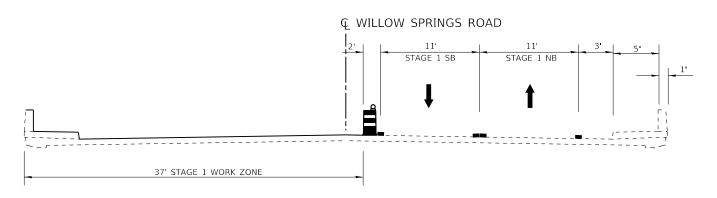
TYPE II BARRICADE, DRUM OR VERTICAL

TEMPORARY PAVEMENT MARKINGS



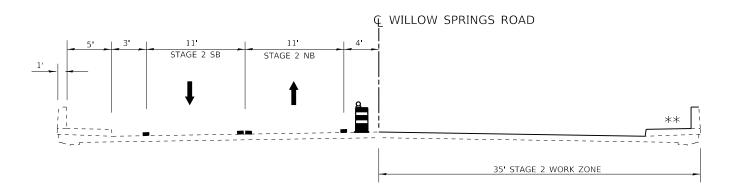
WILLOW SPRINGS ROAD EXISTING TYPICAL SECTION

AT I-294 (BN 187)



WILLOW SPRINGS ROAD STAGE 1 CONSTRUCTION

AT I-294 (BN 187)



WILLOW SPRINGS ROAD STAGE 2 CONSTRUCTION

AT I-294 (BN 187)

*** PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES.

DURING CONSTRUCTION OF THE EXPANSION JOINTS AT THE
SIDEWALK, PEDESTRIAN ACCESS SHALL BE TEMPORARILY
DIVERTED PER HIGHWAY STANDARD 701801-06. BARRICADES
AND/OR FENCING SHALL BE PROVIDED TO PROTECT PEDESTRIANS
FROM TRAFFIC AND CONSTRUCTION OPERATIONS.

MOT TYPICAL LEGEND



TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE

DIRECTION OF TRAFFIC

■ TE

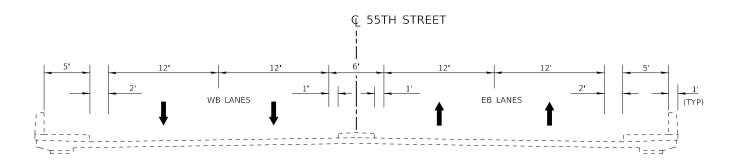
TEMPORARY PAVEMENT MARKINGS

DRAWN BY CJC DATE 4/17/2018

CHECKED BY JFM DATE 4/17/2018

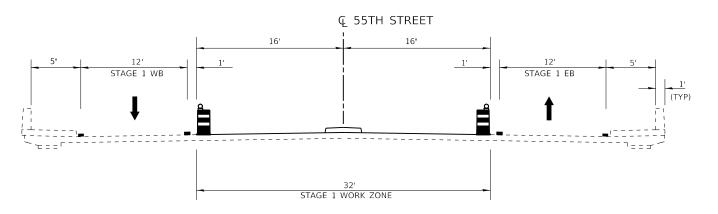






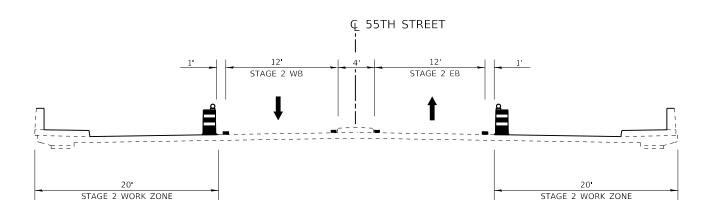
55TH STREET EXISTING TYPICAL SECTION

AT I-294 (BN 251) AND FLAGG CREEK (BN 253)



<u>55TH STREET</u> STAGE 1 CONSTRUCTION

AT I-294 (BN 251) AND FLAGG CREEK (BN 253)



55TH STREET STAGE 2 CONSTRUCTION

AT I-294 (BN 251) AND FLAGG CREEK (BN 253)

DRAWN BY CJC DATE 4/17/2018

CHECKED BY JFM DATE 4/17/2018

BAXTER WOODMAN Consulting Engineers

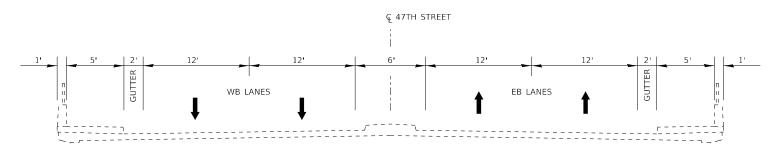


MOT TYPICAL LEGEND

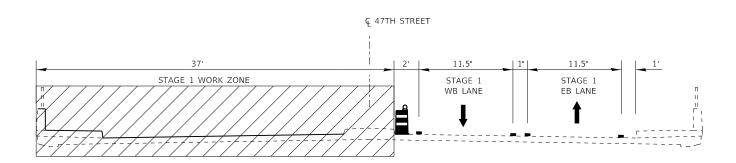
DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKINGS

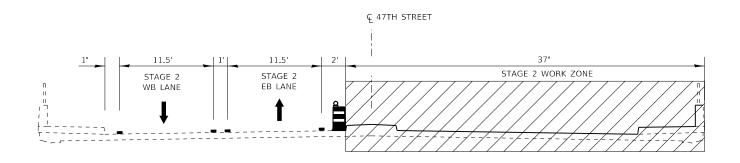
TYPE II BARRICADE, DRUM OR VERTICAL



47TH STREET OVER I-294 (BN 255) AND FLAGG CREEK (BN 257) EXISTING CROSS SECTION



47TH STREET OVER I-294 (BN 255) AND FLAGG CREEK (BN 257) STAGE 1 CONSTRUCTION



47TH STREET OVER I-294 (BN 255) AND FLAGG CREEK (BN 257) STAGE 2 CONSTRUCTION

NOTE: ALL SECTIONS LOOKING EAST

MOT TYPICAL LEGEND



TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE



WORK AREA



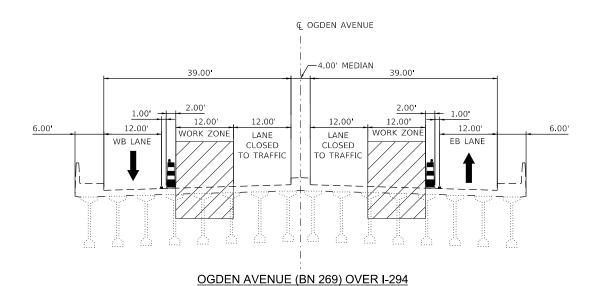
TEMPORARY PAVEMENT MARKINGS

DRAWN BY MET DATE 4/17/2018

CHECKED BY JAC DATE 4/17/2018







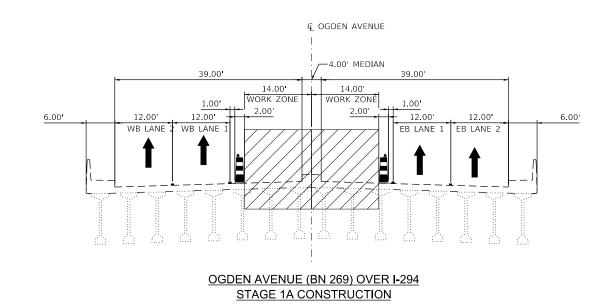
ALLOWABLE 2-LANE CLOSURE TIMES

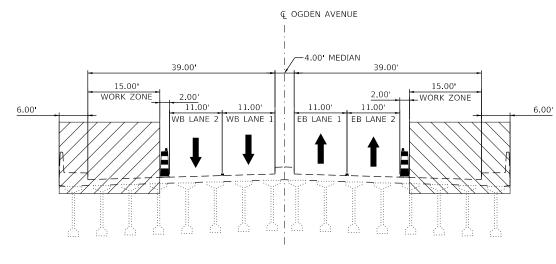
WESTBOUND OGDEN AVE. EASTBOUND OGDEN AVE.

9:00 P.M. FRI. - 5:00 A.M. MON. 10:00 P.M. FRI. - 5:00 A.M. MON.

STAGE 1B CONSTRUCTION

(WEEKEND ONLY)





OGDEN AVENUE (BN 269) OVER I-294 STAGE 2 CONSTRUCTION

MOT TYPICAL LEGEND



TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE



WORK AREA



DIRECTION OF TRAFFIC

TEMPORARY PAVEMENT MARKINGS

 DRAWN BY
 ATB
 DATE
 02/09/2018

 CHECKED BY
 OPS
 DATE
 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

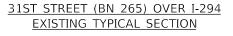
I L L I N O I S 6 0 5 1 5

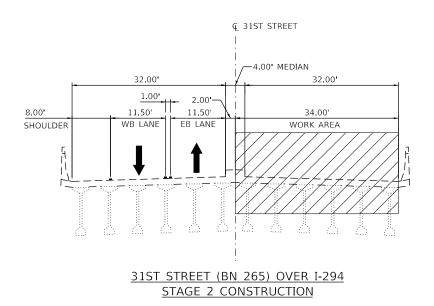
CONTRACT NO. RR-18-4387 M265-00

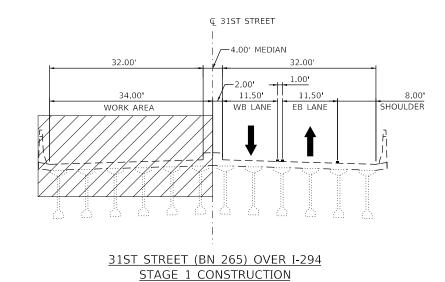
DESCRIPTION CONTRACT NO. RR-18-4387 M265-00

OGDEN AVENUE (BN 269) TYPICAL SECTIONS DRAWING NO.

SUGGESTED MAINTENANCE OF TRAFFIC 25 OF 175







MOT TYPICAL LEGEND

È

TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE

TEMPORARY PAVEMENT MARKINGS



WORK AREA

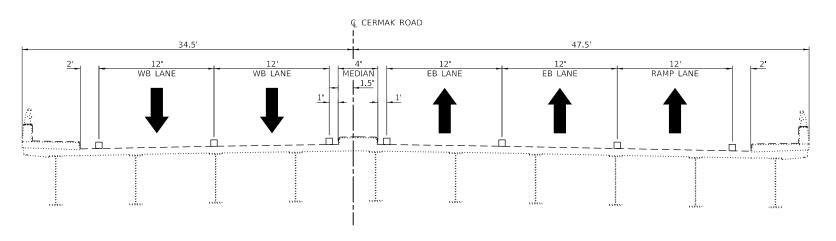


DIRECTION OF TRAFFIC

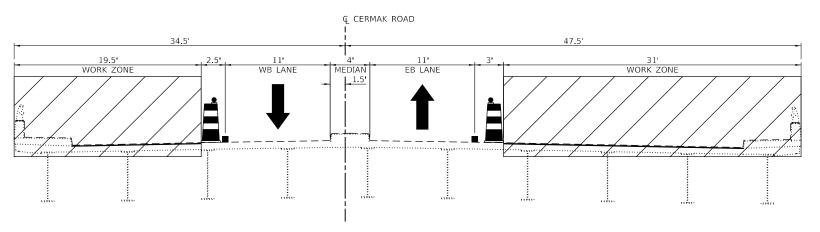
DRAWN BY ATB DATE 02/09/2018
CHECKED BY OPS DATE 4/17/2018

AECOM

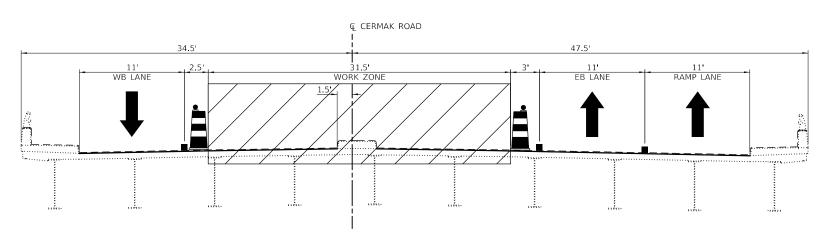




CERMAK ROAD (BN 203) OVER I-294 EXISTING TYPICAL SECTION



CERMAK ROAD (BN 203) OVER I-294 STAGE 1 CONSTRUCTION



CERMAK ROAD (BN 203) OVER I-294 STAGE 2 CONSTRUCTION

DRAWN BY MJP DATE 4/17/2018
CHECKED BY DNM DATE 4/17/2018

Civiltech Engineering, Inc.
www.civiltechinc.com

Two Pierco Place, Suite 1400 | Ileaca, IL 80143
Phone: 850.773.3900 | Fasc 850.773.3975



LEGEND

WORK ZONE AREA

DIRECTION OF TRAFFIC

EXISTING PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKINGS

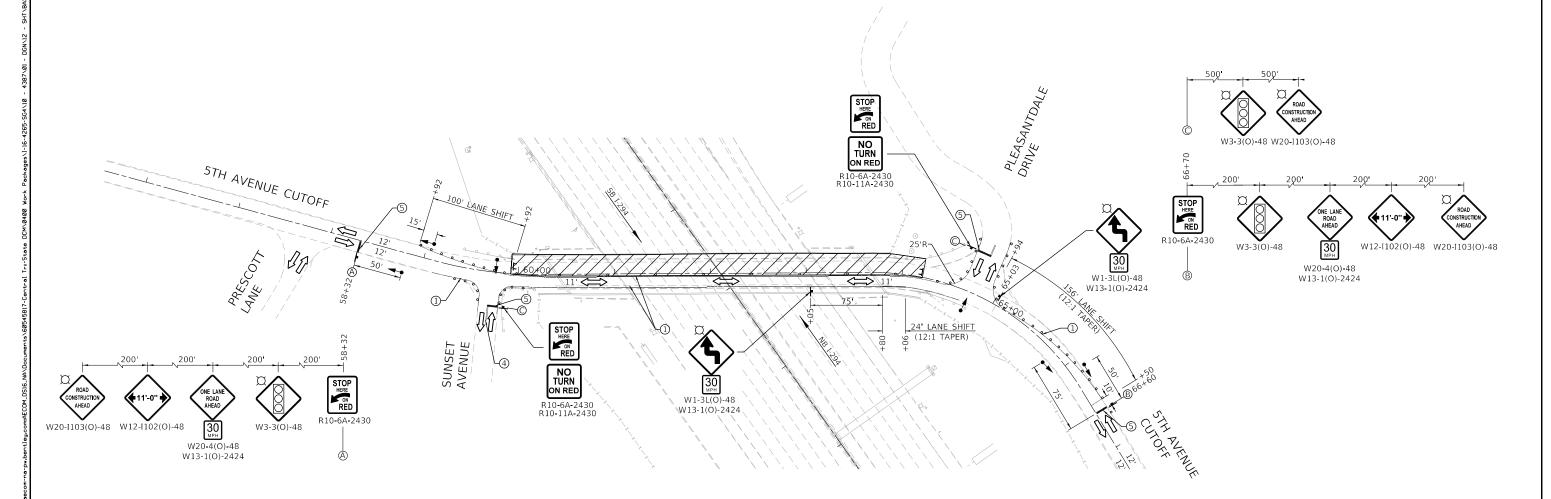
TYPE II BARRICADES OR DRUMS

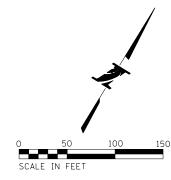
MOT SYMBOL LEGEND

- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE SPACED AT 50' CENTERS IN TANGENTS, 20' CENTERS IN TAPERS AND 10' CENTERS IN CURVES
- WORK AREA
- TYPE III BARICADE
- DIRECTION OF TRAFFIC
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- α HIGH-INTESITY AMBER LIGHT
- TEMPORARY TRAFFIC SIGNAL

MOT PROPOSED LEGEND

- PAVEMENT MARKING TAPE, TYPE IV 4" (WHITE) (70300904)
- 2 PAVEMENT MARKING TAPE, TYPE IV 4" (10' SKIP-30' DASH WHITE) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (YELLOW) (70300904)
- 4 PAVEMENT MARKING TAPE, TYPE IV 4" (DOUBLE YELLOW) (70300904)
- (5) PAVEMENT MARKING TAPE, TYPE IV 24" (WHITE) (70300924)
- PAVEMENT MARKING TAPE, TYPE IV 8" (WHITE) (70300908)
- PAVEMENT MARKING TAPE, TYPE IV 8" (3'-DASH 9'-SKIP WHITE) (70300908)



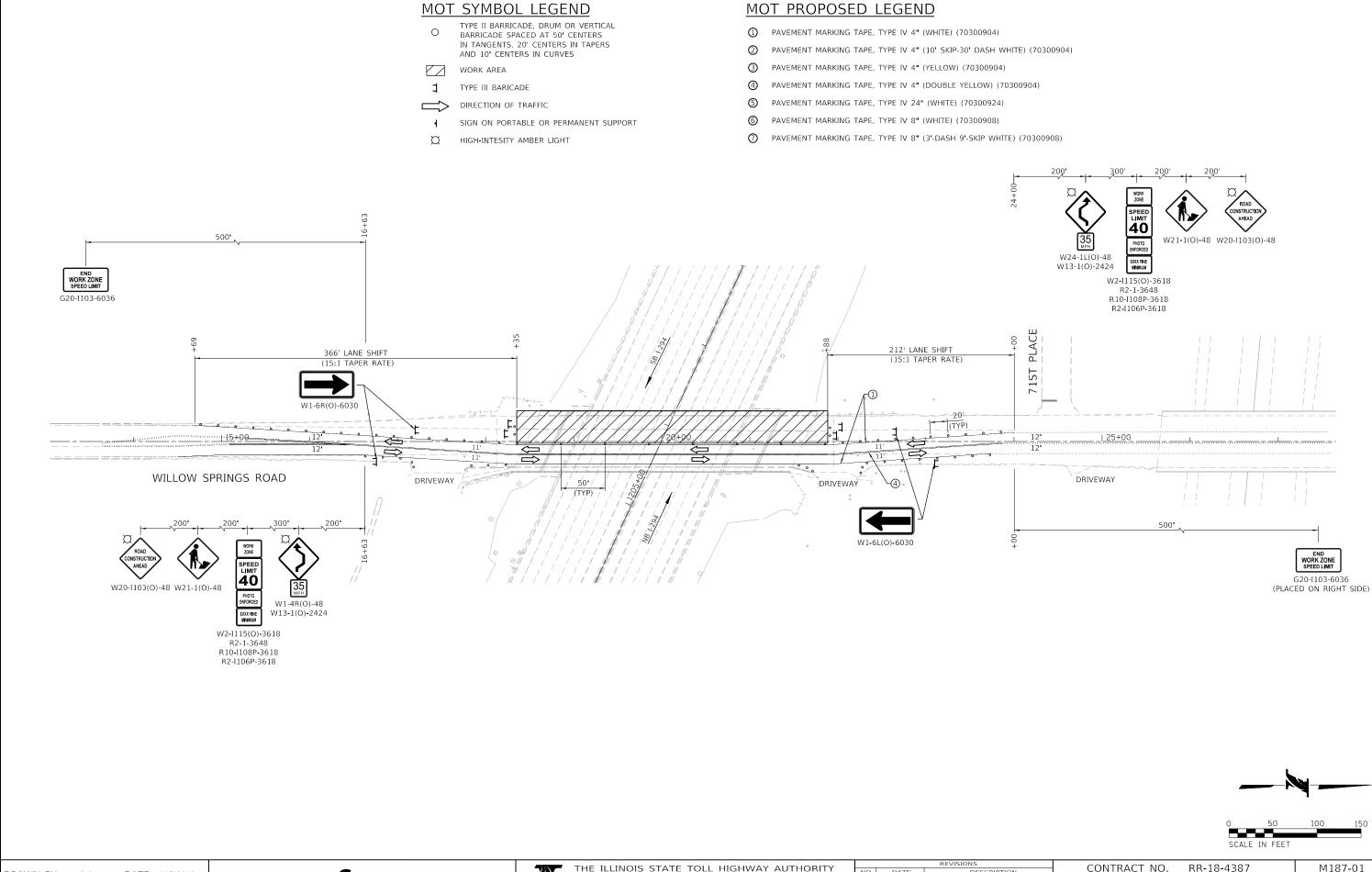


DATE 4/17/2018 CHECKED BY JFM DATE 4/17/2018



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 M185-01 DRAWING NO. 5TH AVENUE CUTOFF (BN 185) STAGE 1 SUGGESTED MAINTENANCE OF TRAFFIC 28 OF 175

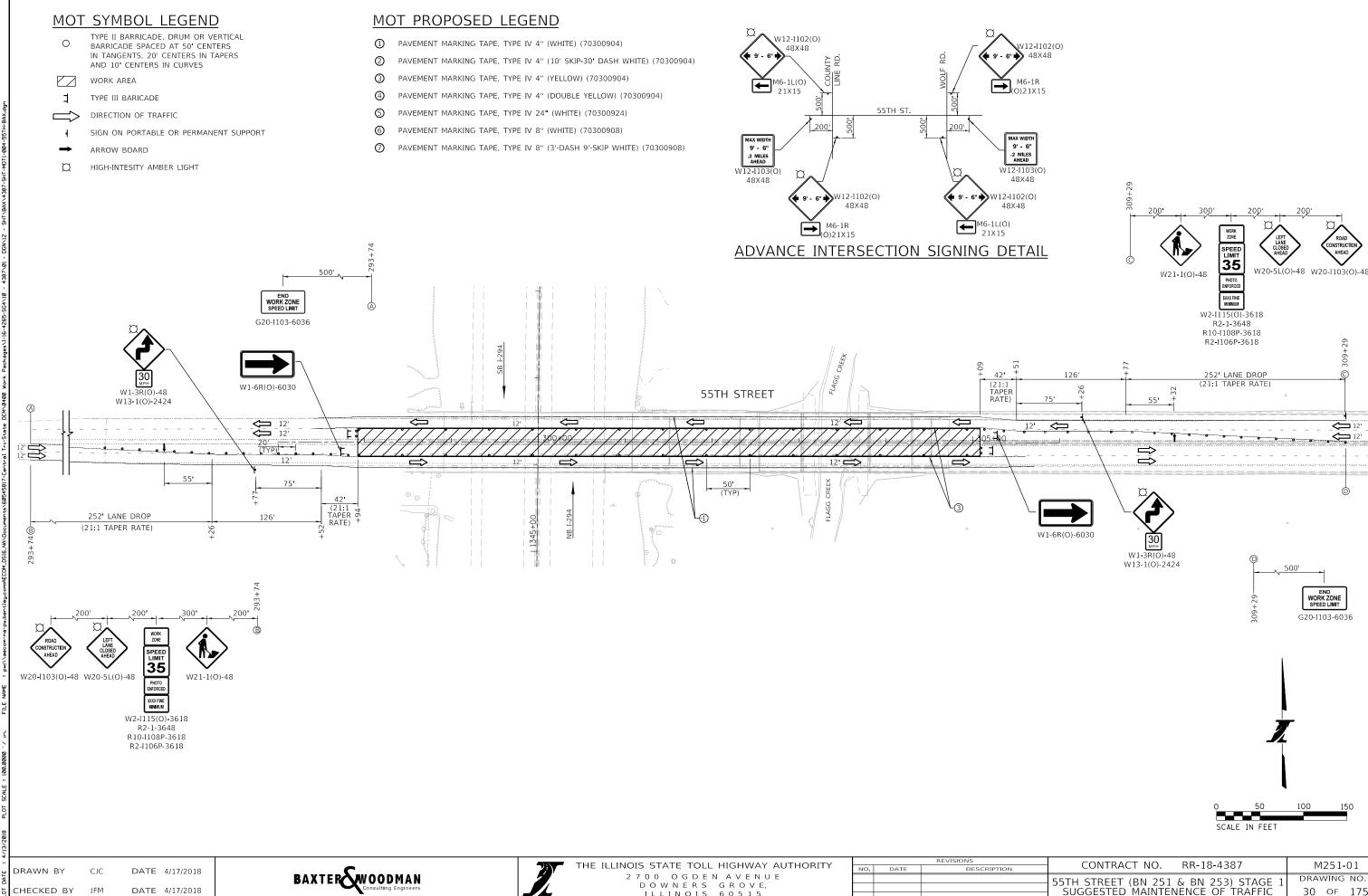


DRAWN BY

DATE 4/17/2018 CHECKED BY JFM DATE 4/17/2018

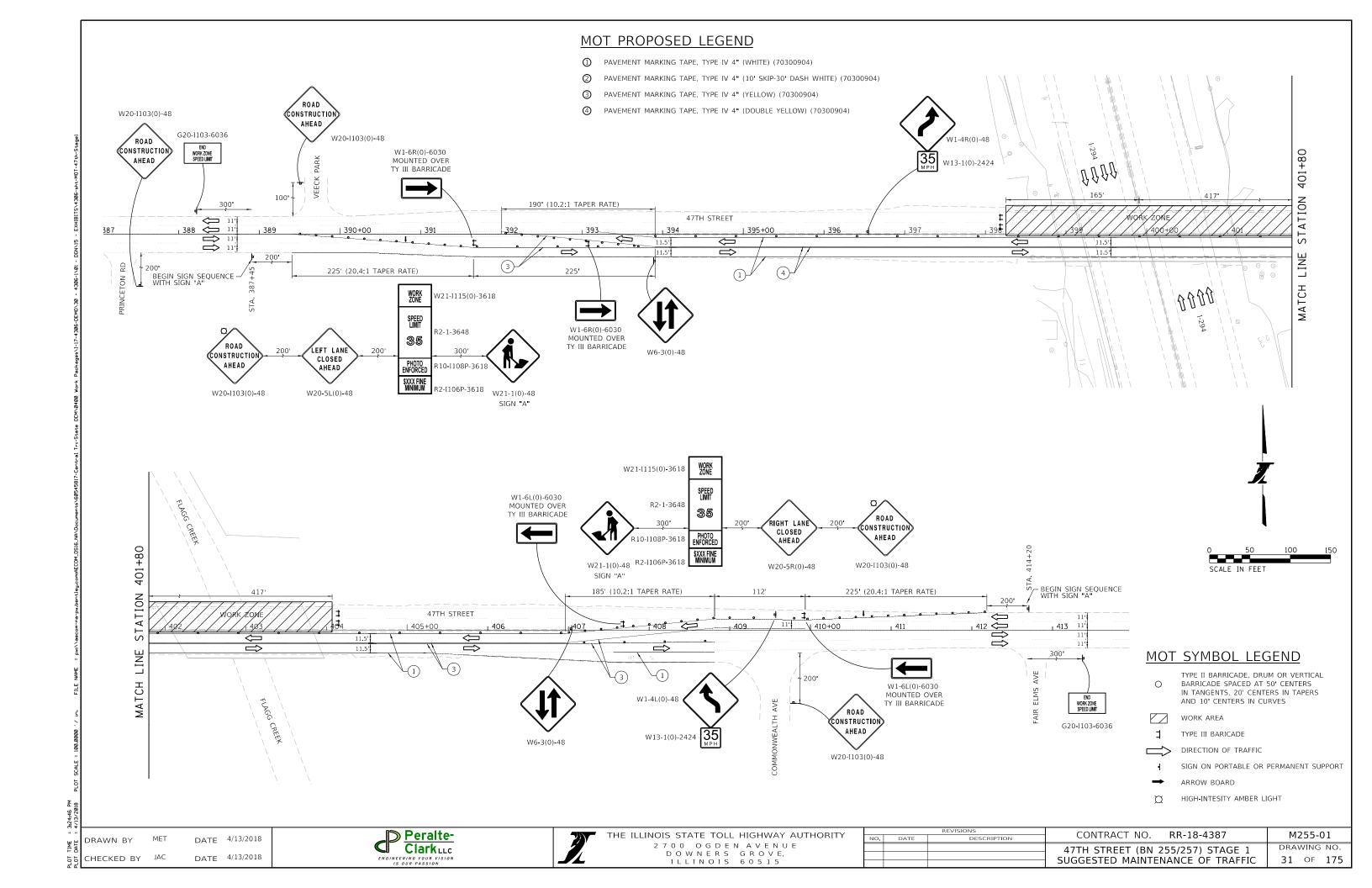


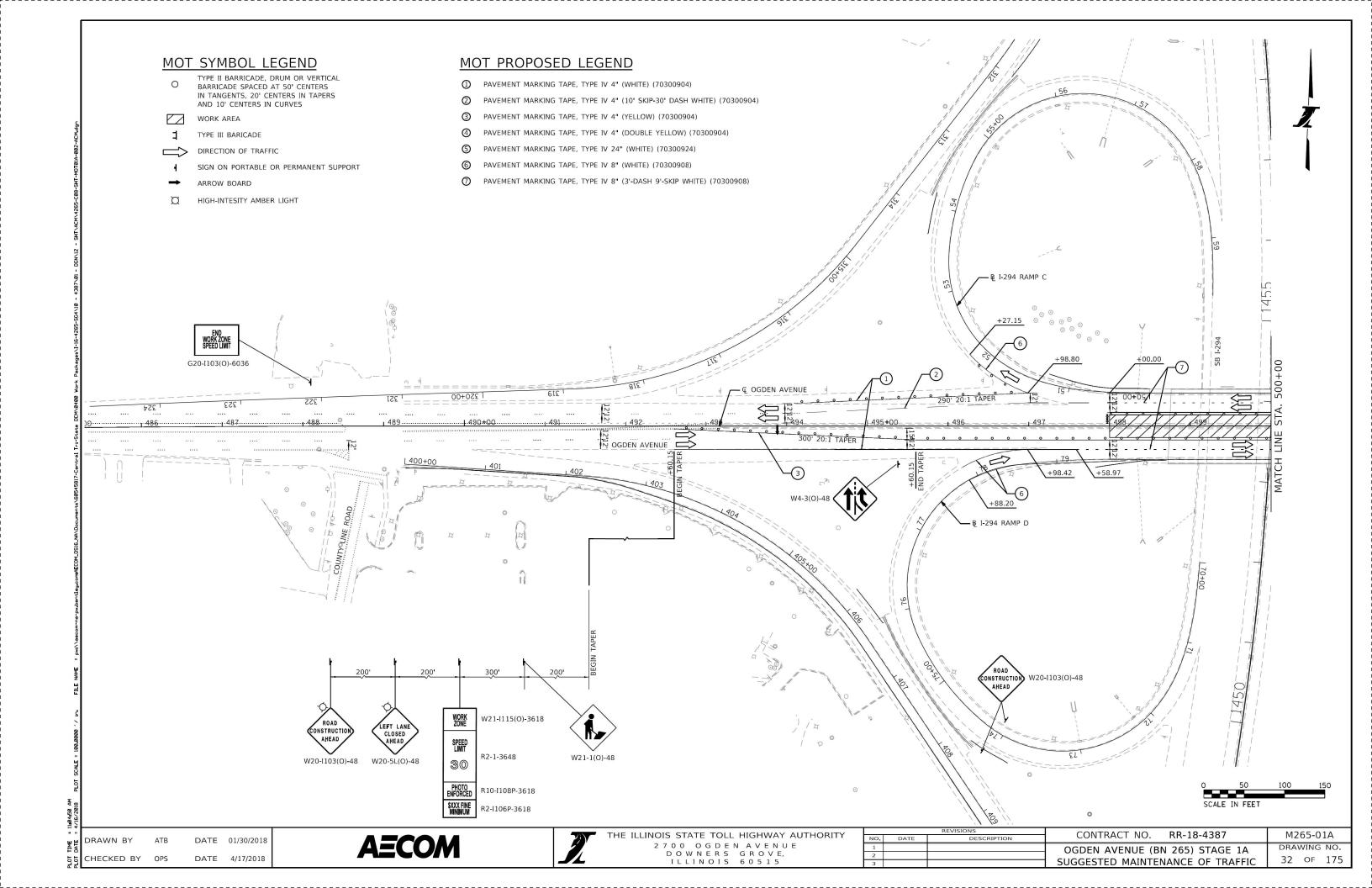


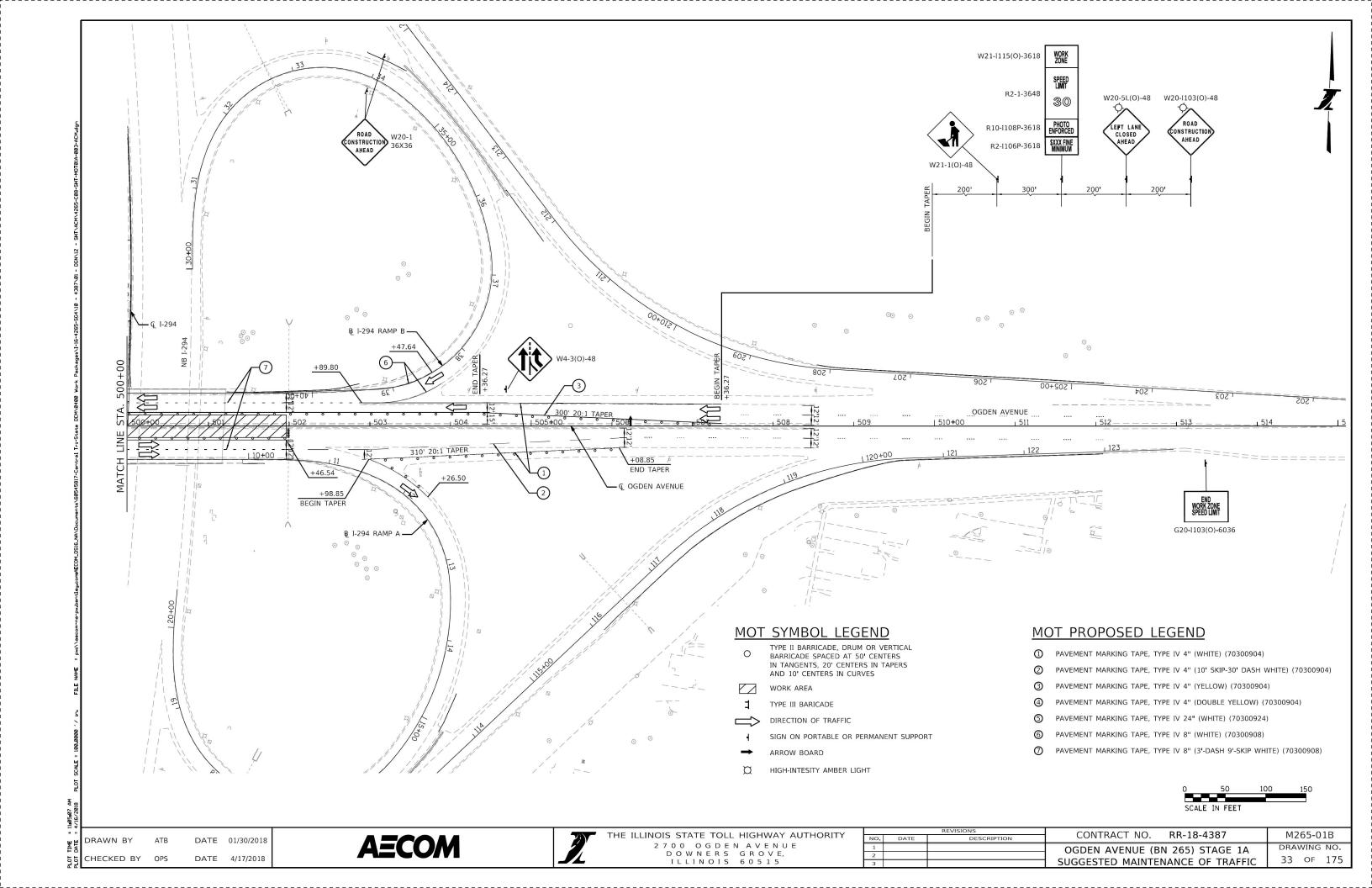


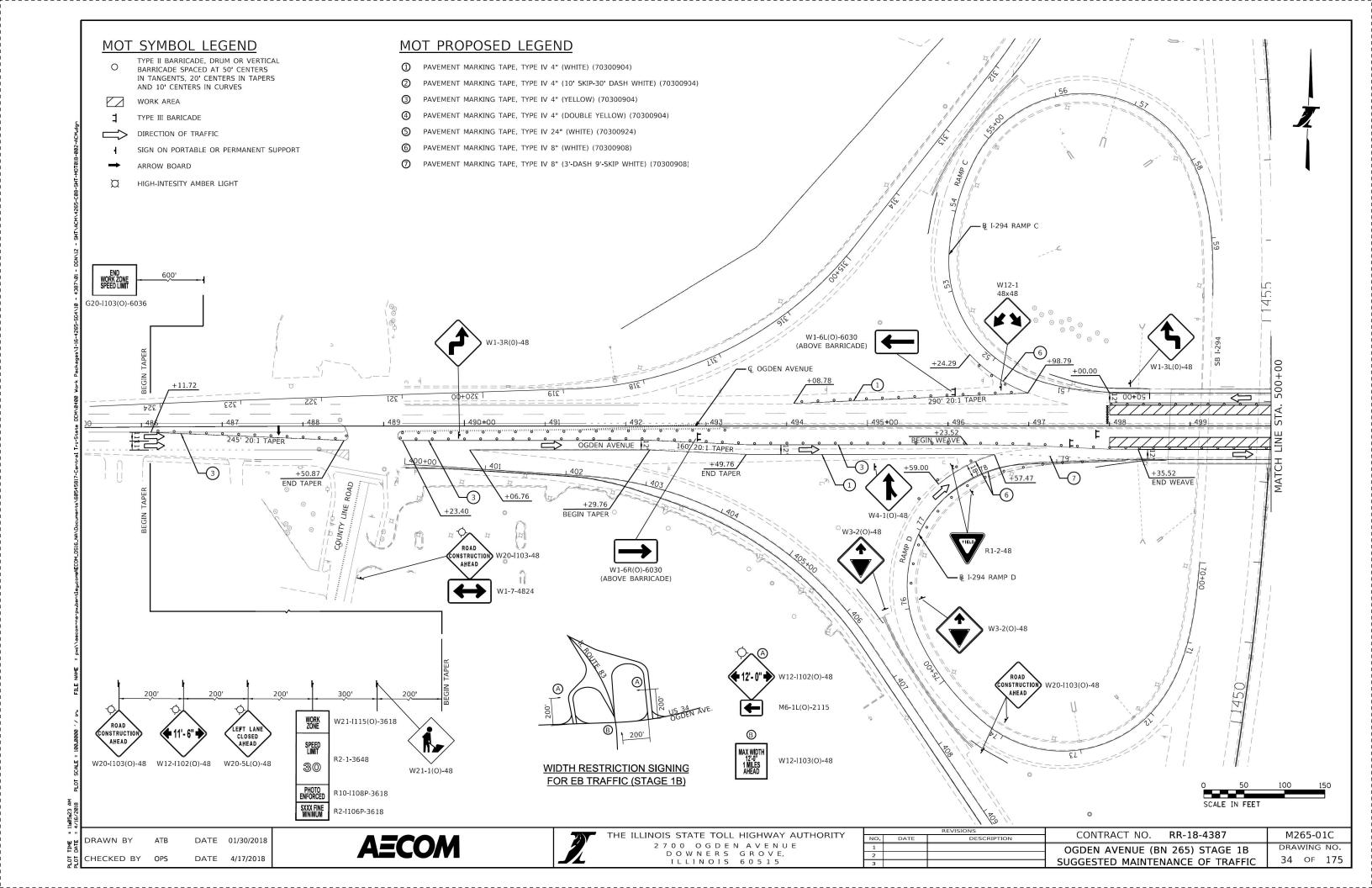
CHECKED BY DATE 4/17/2018

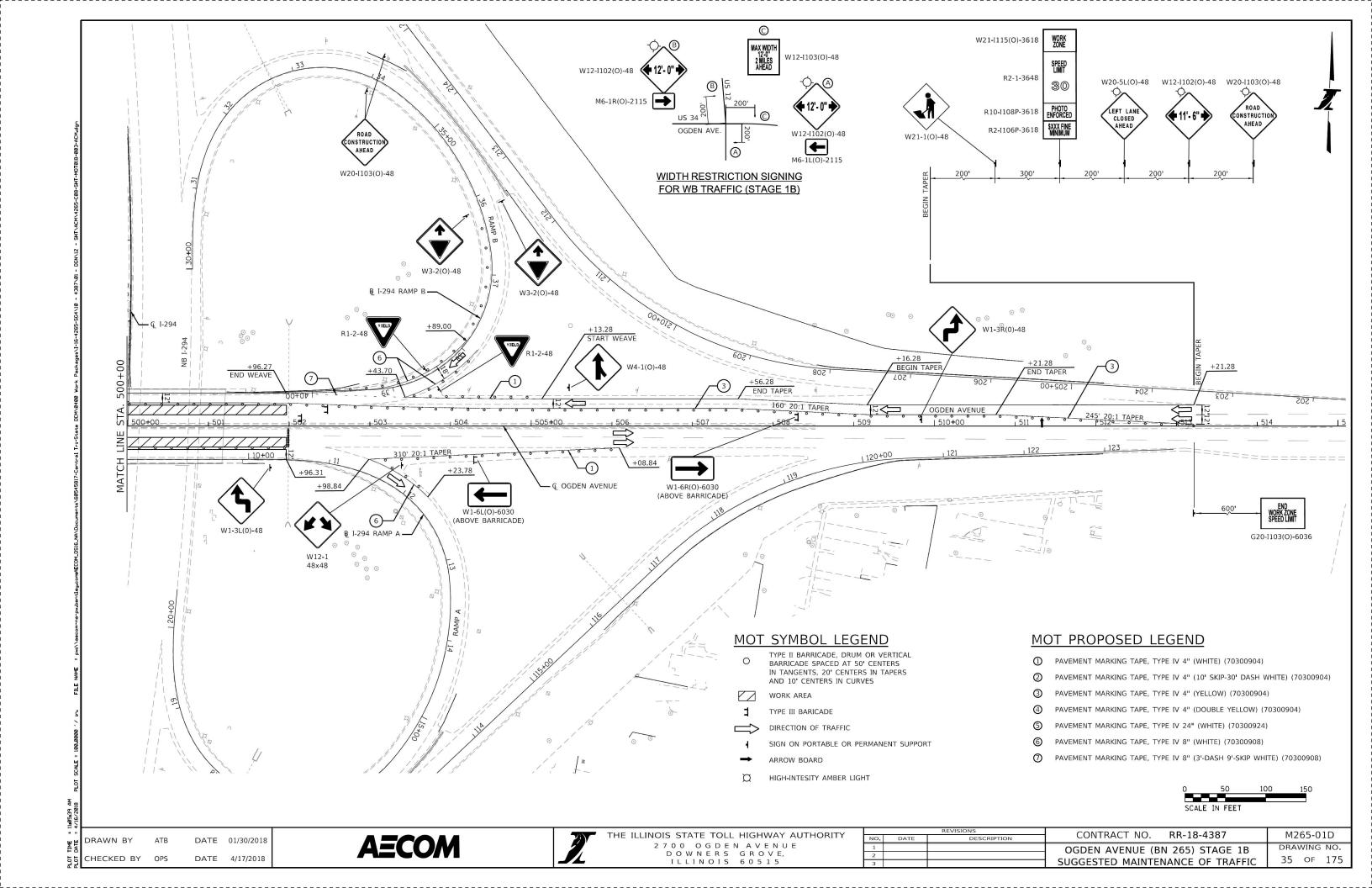


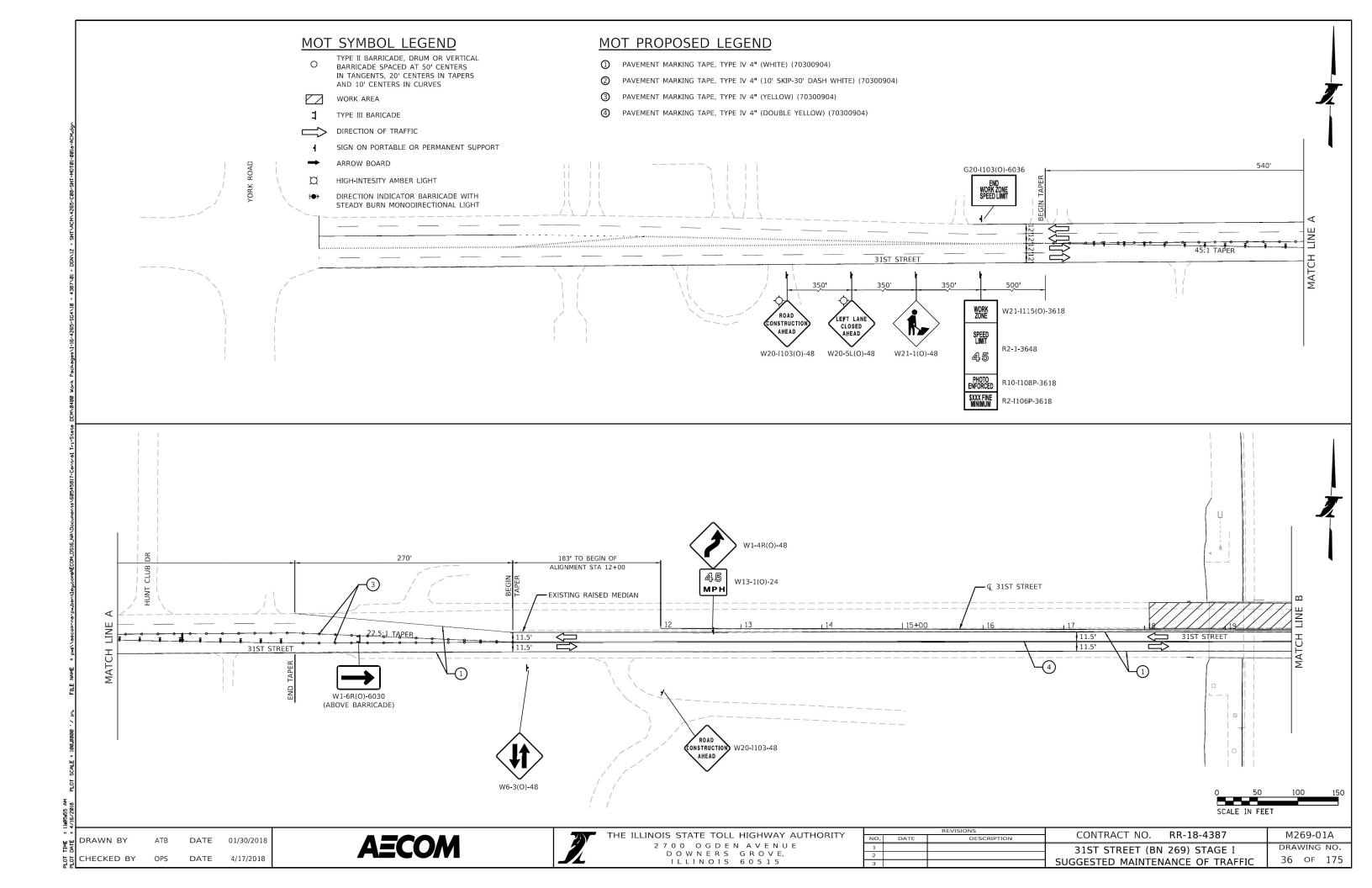


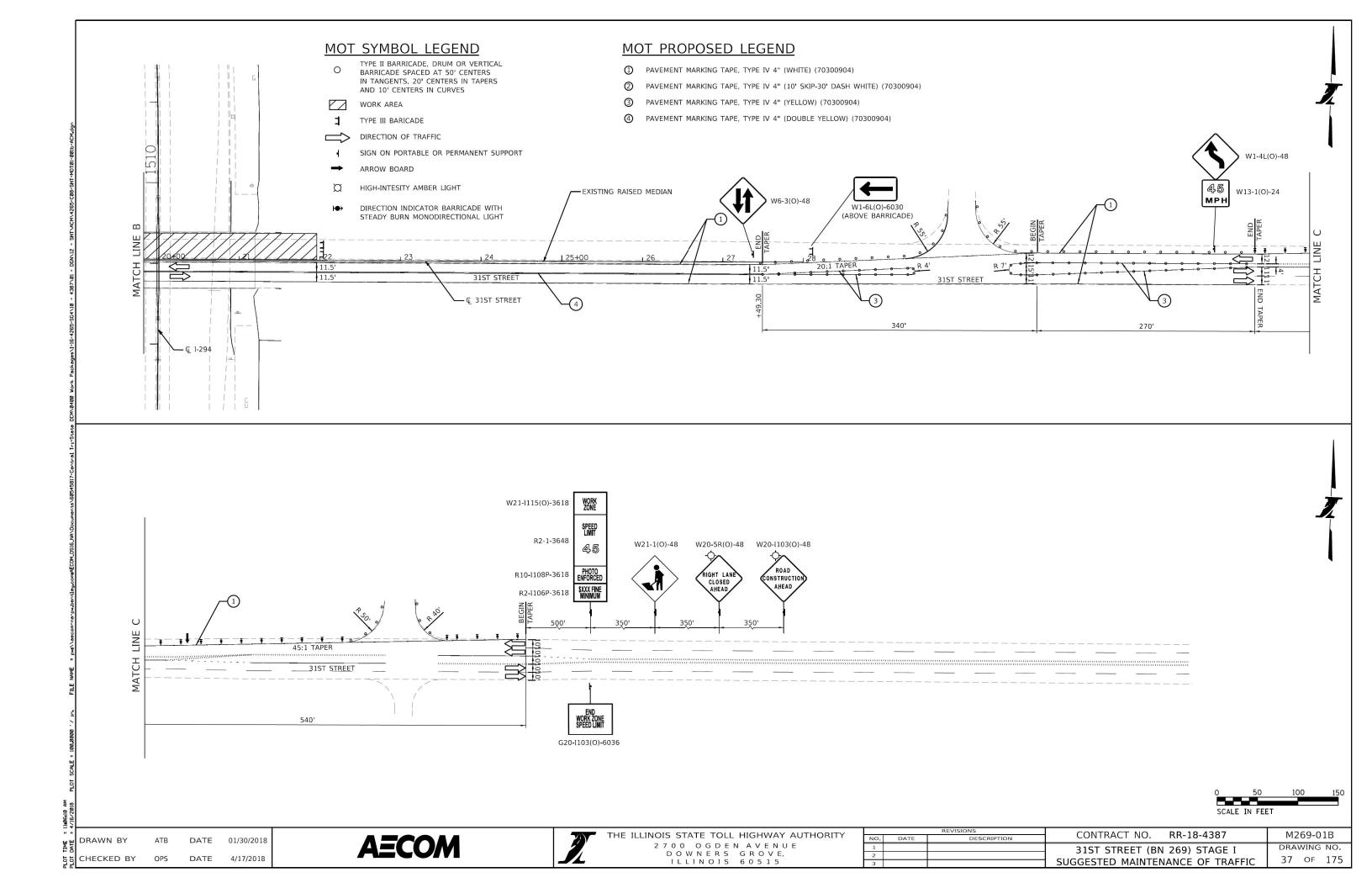


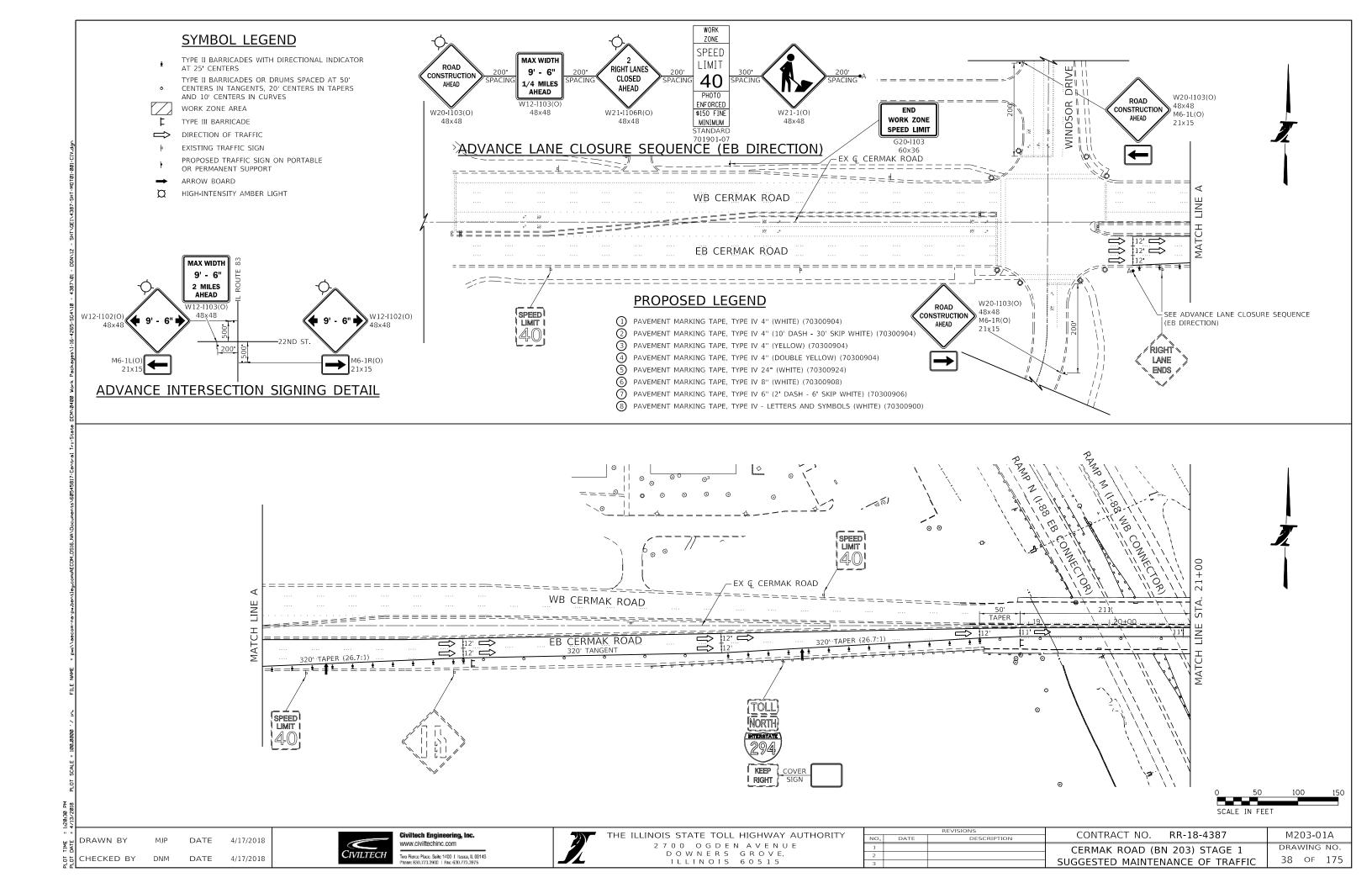


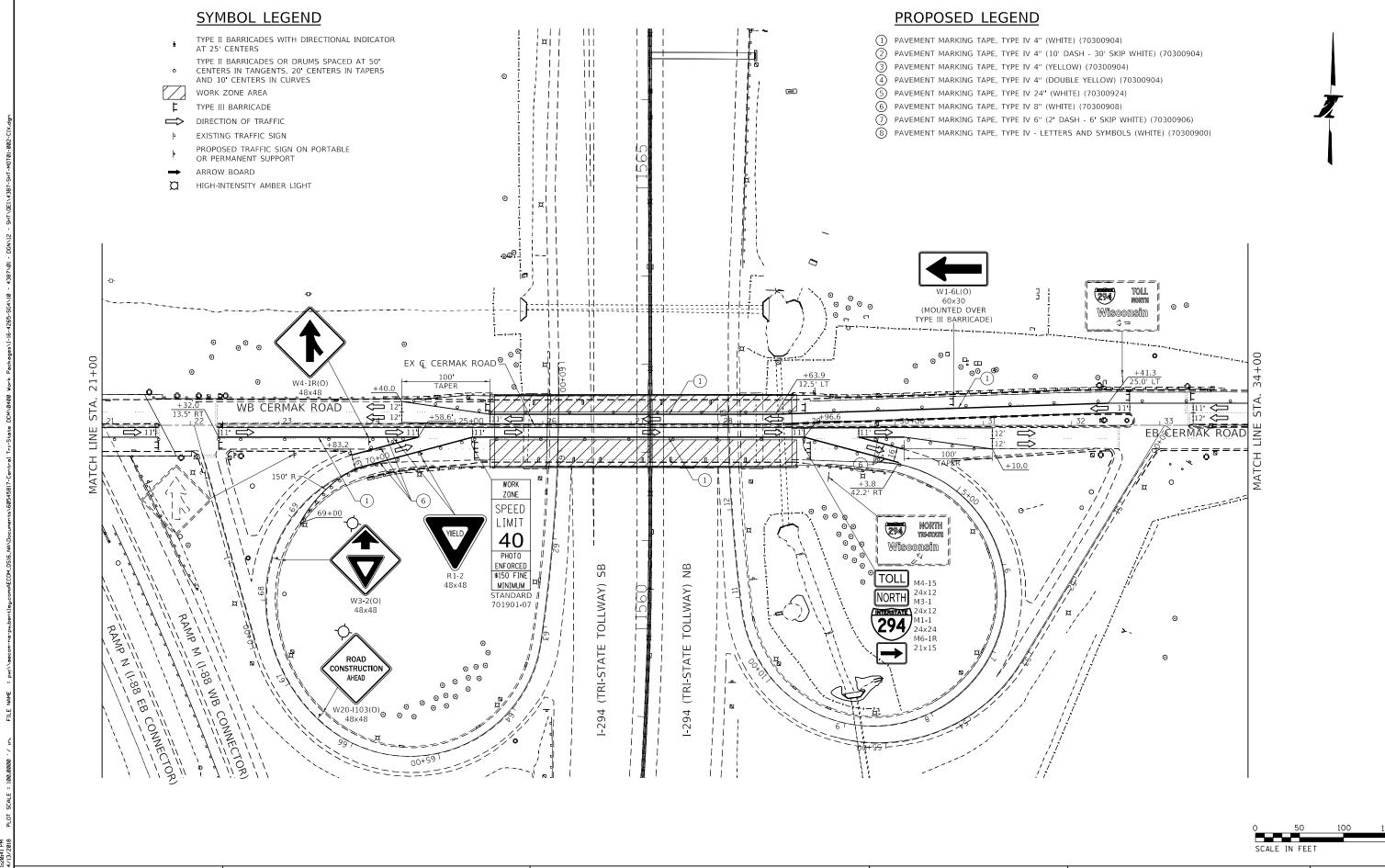












C

4/17/2018

DATE 4/17/2018

CHECKED BY DNM

Civiltech Engineering, Inc.

WWW.civiltechinc.com

Two Pierce Place, Suite 1400 | Itasca, IL 60143

Phone: 680.773.3930 | Fas: 630.773.3975

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 OGDEN AVENUE

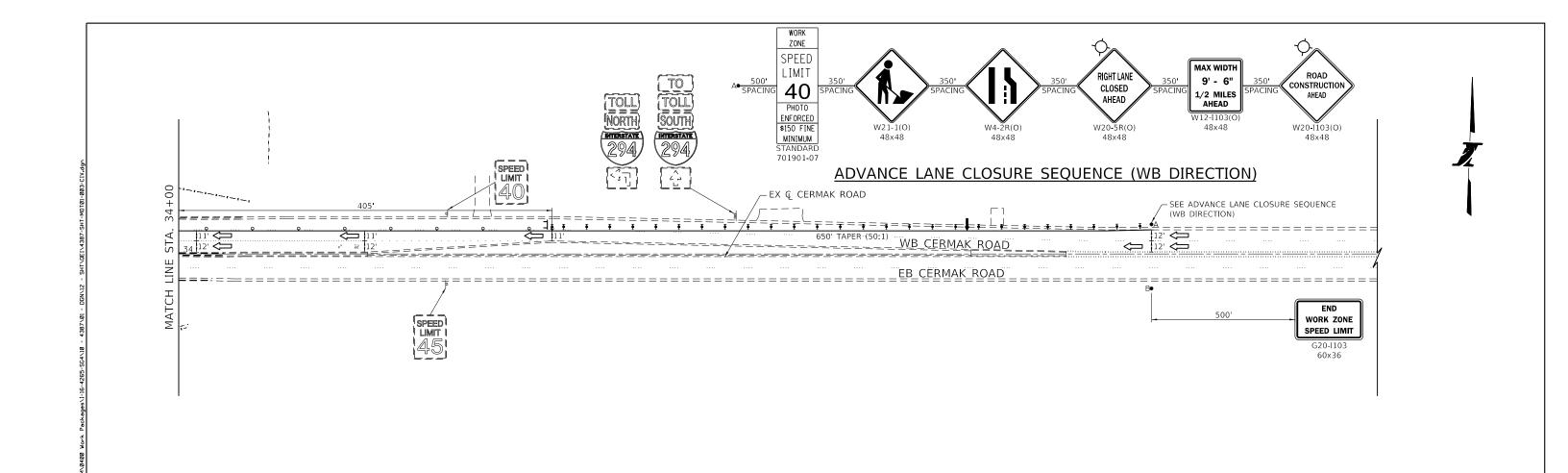
DOWNERS GROVE,

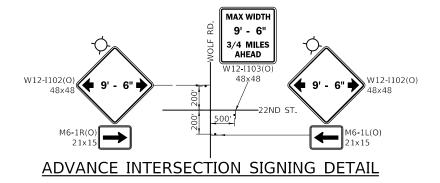
ILLINOIS 6 0 5 1 5

CONTRACT NO. RR-18-4387 M203-01B

CERMAK ROAD (BN 203) STAGE 1

SUGGESTED MAINTENANCE OF TRAFFIC 39 OF 175





SYMBOL LEGEND

- TYPE II BARRICADES WITH DIRECTIONAL INDICATOR AT 25' CENTERS
- TYPE II BARRICADES OR DRUMS SPACED AT 50' CENTERS IN TANGENTS, 20' CENTERS IN TAPERS AND 10' CENTERS IN CURVES

WORK ZONE AREA

TYPE III BARRICADE

DIRECTION OF TRAFFIC

- EXISTING TRAFFIC SIGN
- PROPOSED TRAFFIC SIGN ON PORTABLE OR PERMANENT SUPPORT
- ARROW BOARD
- HIGH-INTENSITY AMBER LIGHT

PROPOSED LEGEND

- PAVEMENT MARKING TAPE, TYPE IV 4" (WHITE) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (10' DASH 30' SKIP WHITE) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (YELLOW) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (DOUBLE YELLOW) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 24" (WHITE) (70300924)
- PAVEMENT MARKING TAPE, TYPE IV 8" (WHITE) (70300908)
- PAVEMENT MARKING TAPE, TYPE IV 6" (2' DASH 6' SKIP WHITE) (70300906)
- PAVEMENT MARKING TAPE, TYPE IV LETTERS AND SYMBOLS (WHITE) (70300900)

4/17/2018 CHECKED BY DATE 4/17/2018







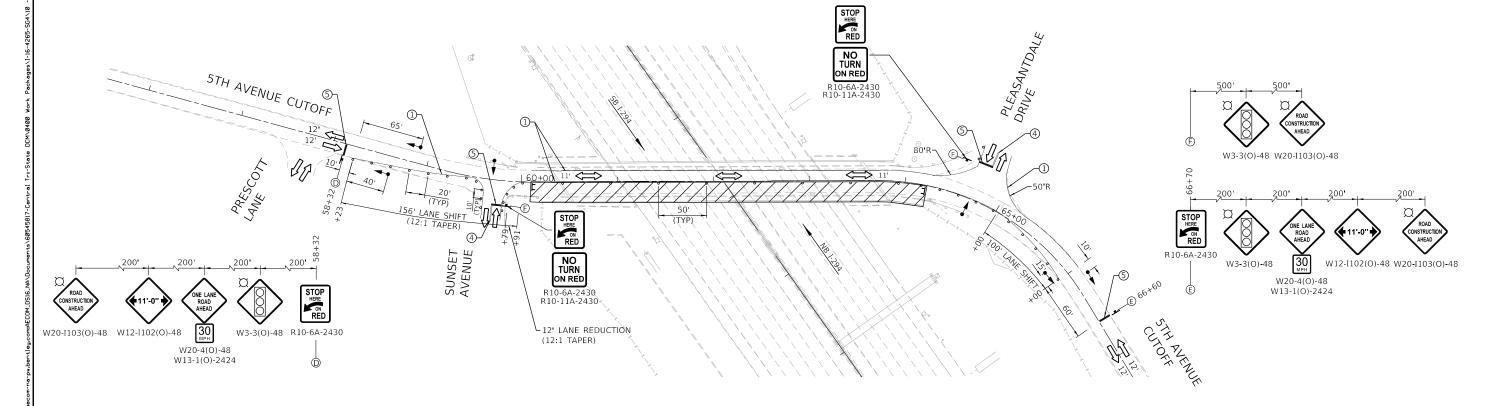
REVISIONS			CONTRACT NO. RR-18-4387	M203-01C
٥.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	M203-01C
			CERMAK ROAD (BN 203) STAGE 1	DRAWING NO.
\neg			` ,	40 OF 175
			SUGGESTED MAINTENANCE OF TRAFFIC	40 OF 175

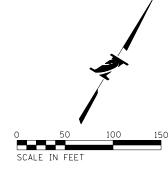
MOT SYMBOL LEGEND

- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE SPACED AT 50' CENTERS IN TANGENTS, 20' CENTERS IN TAPERS AND 10' CENTERS IN CURVES
- WORK AREA
- TYPE III BARICADE
- DIRECTION OF TRAFFIC
 - SIGN ON PORTABLE OR PERMANENT SUPPORT
- α HIGH-INTESITY AMBER LIGHT
- TEMPORARY TRAFFIC SIGNAL

MOT PROPOSED LEGEND

- PAVEMENT MARKING TAPE, TYPE IV 4" (WHITE) (70300904)
- 2 PAVEMENT MARKING TAPE, TYPE IV 4" (10' SKIP-30' DASH WHITE) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (YELLOW) (70300904)
- 4 PAVEMENT MARKING TAPE, TYPE IV 4" (DOUBLE YELLOW) (70300904)
- (5) PAVEMENT MARKING TAPE, TYPE IV 24" (WHITE) (70300924)
- PAVEMENT MARKING TAPE, TYPE IV 8" (WHITE) (70300908)
- PAVEMENT MARKING TAPE, TYPE IV 8" (3'-DASH 9'-SKIP WHITE) (70300908)

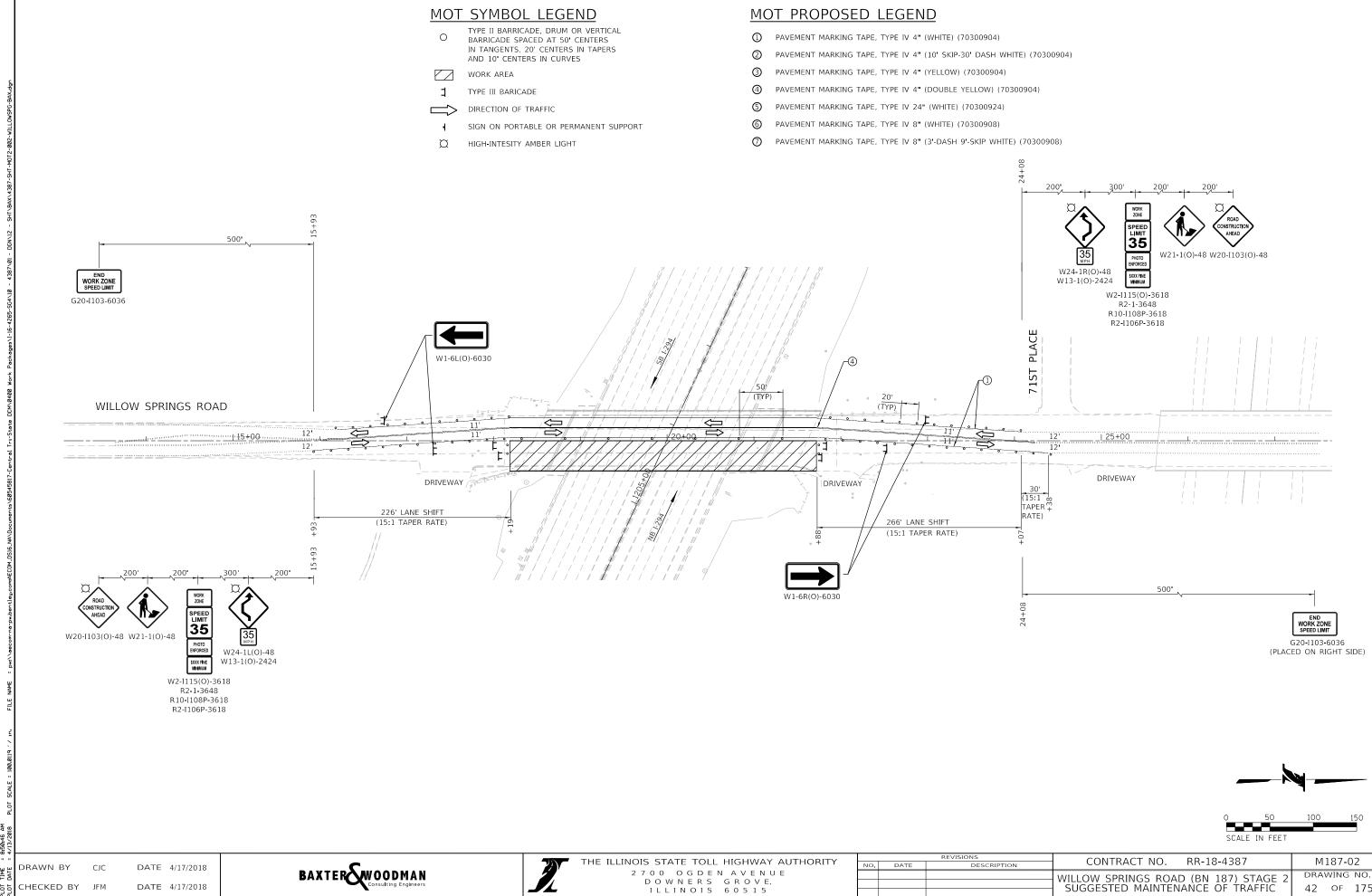




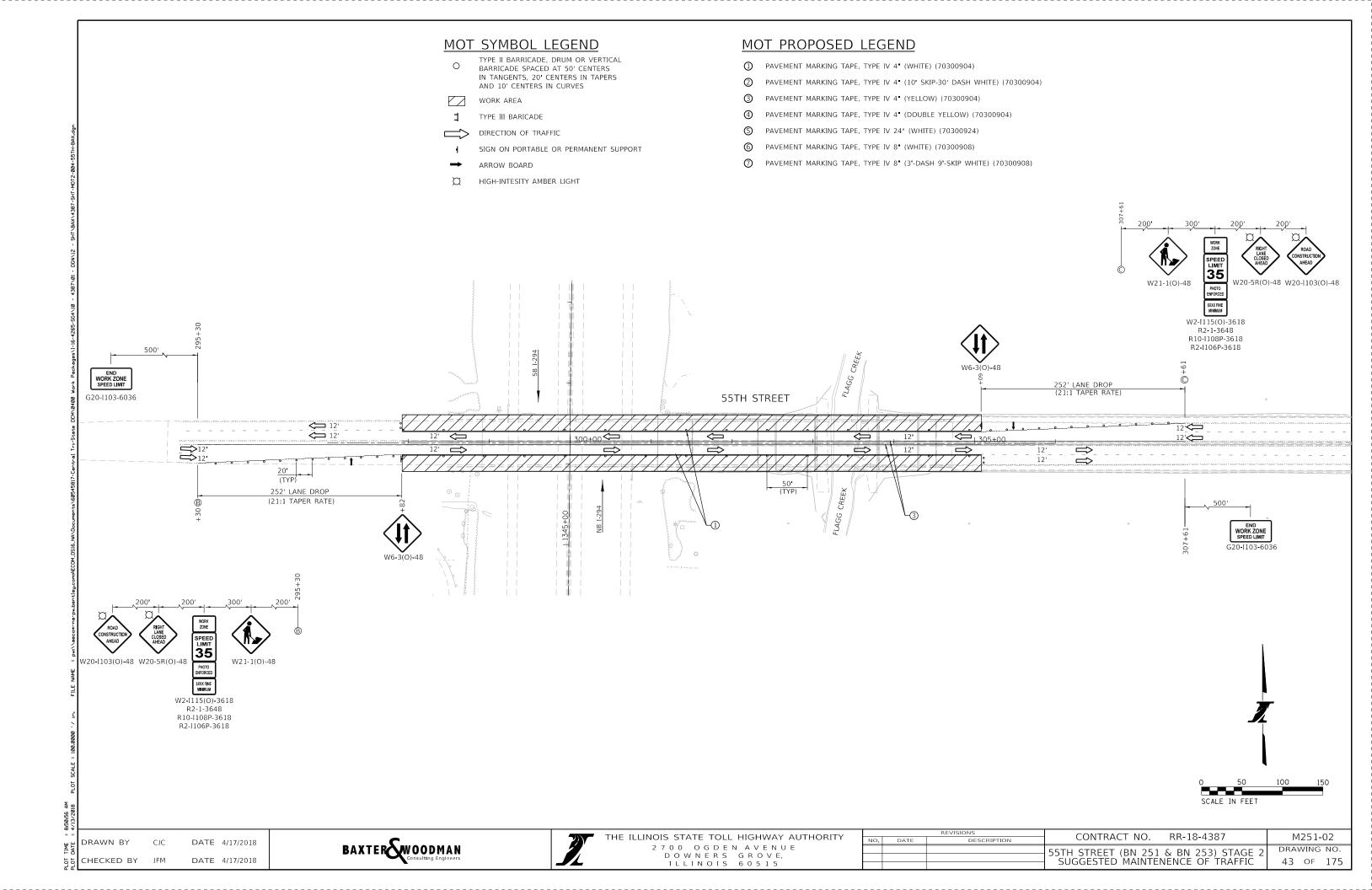
DATE 4/17/2018 CHECKED BY JFM

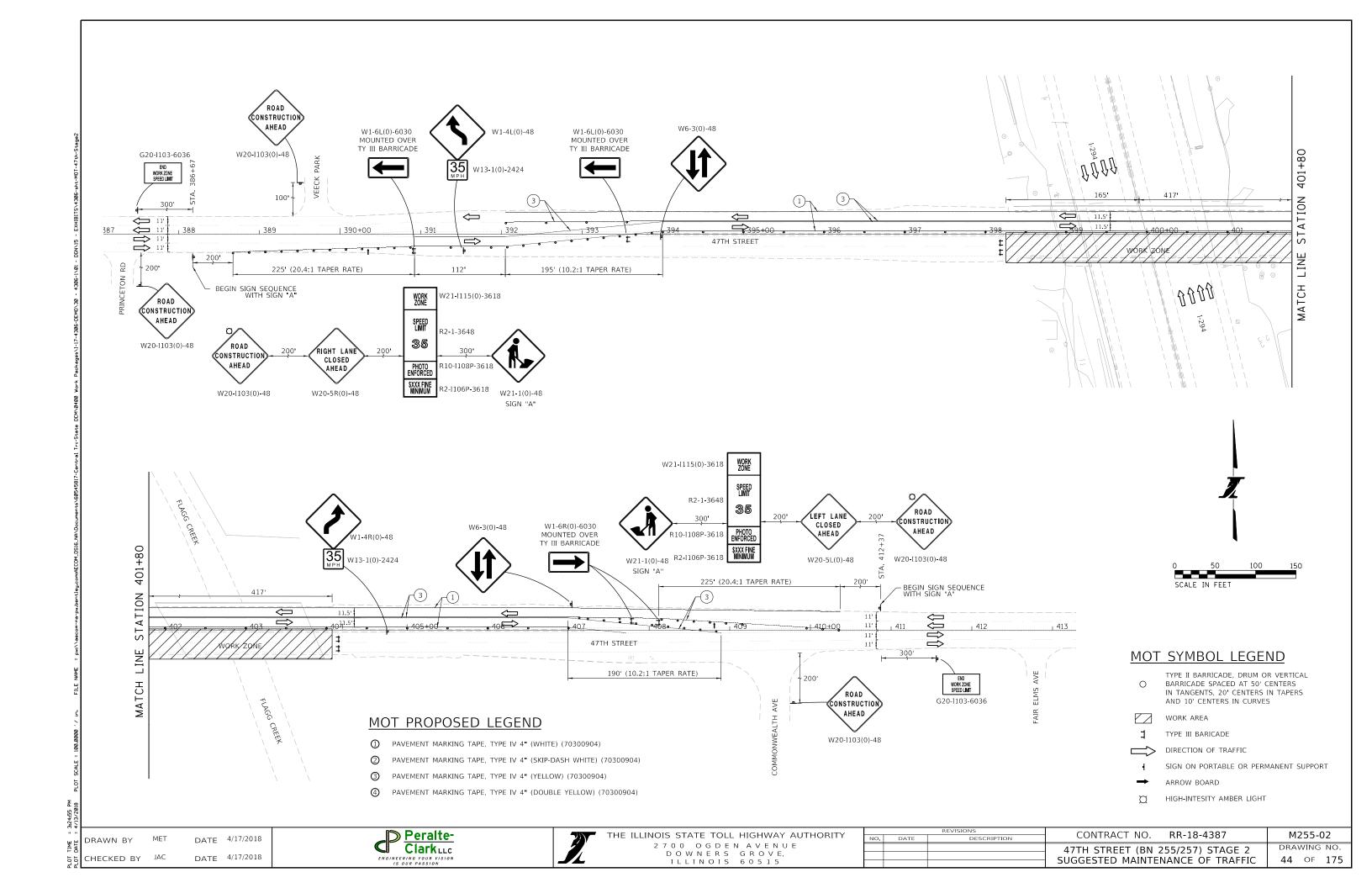


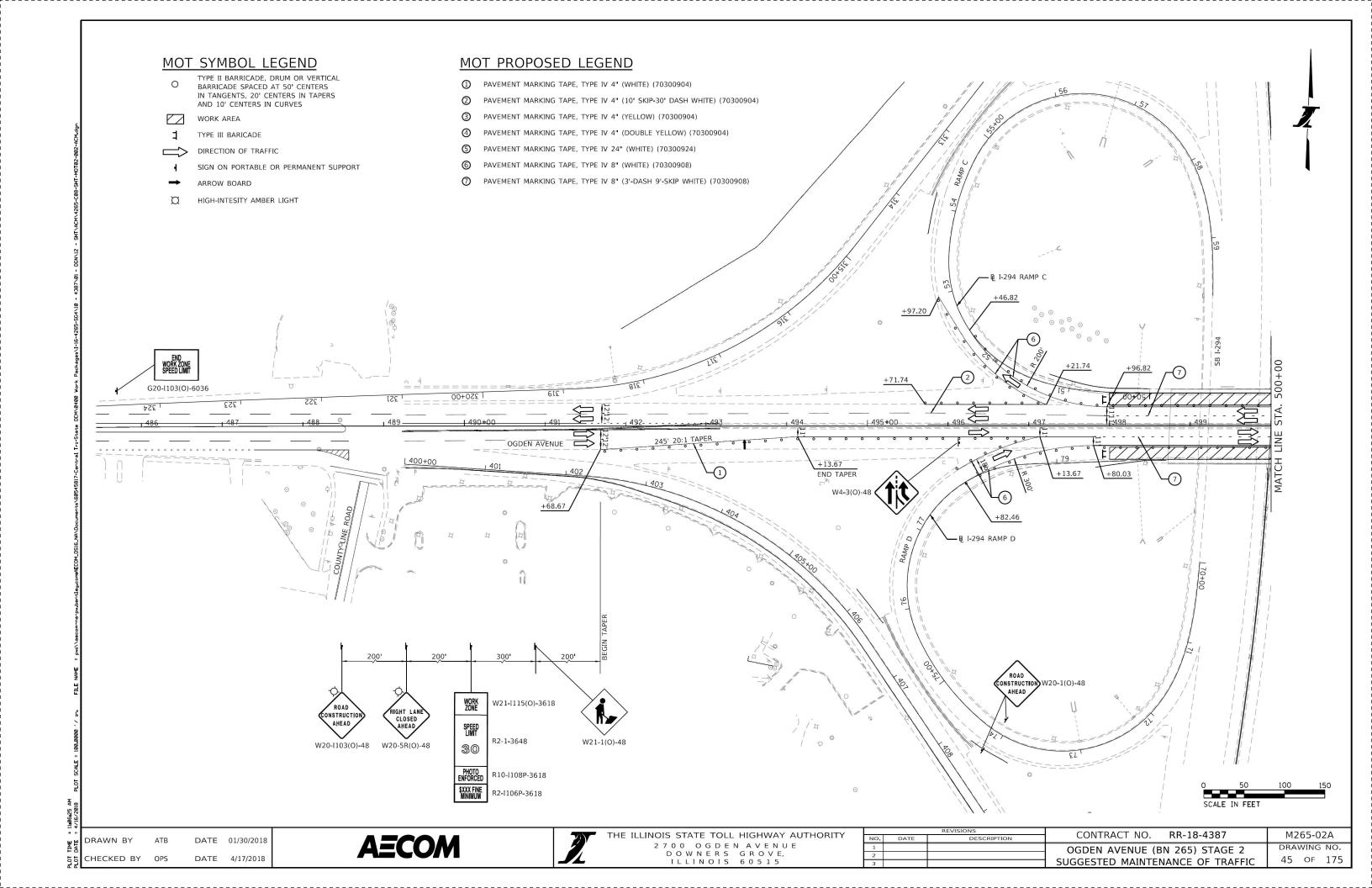
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

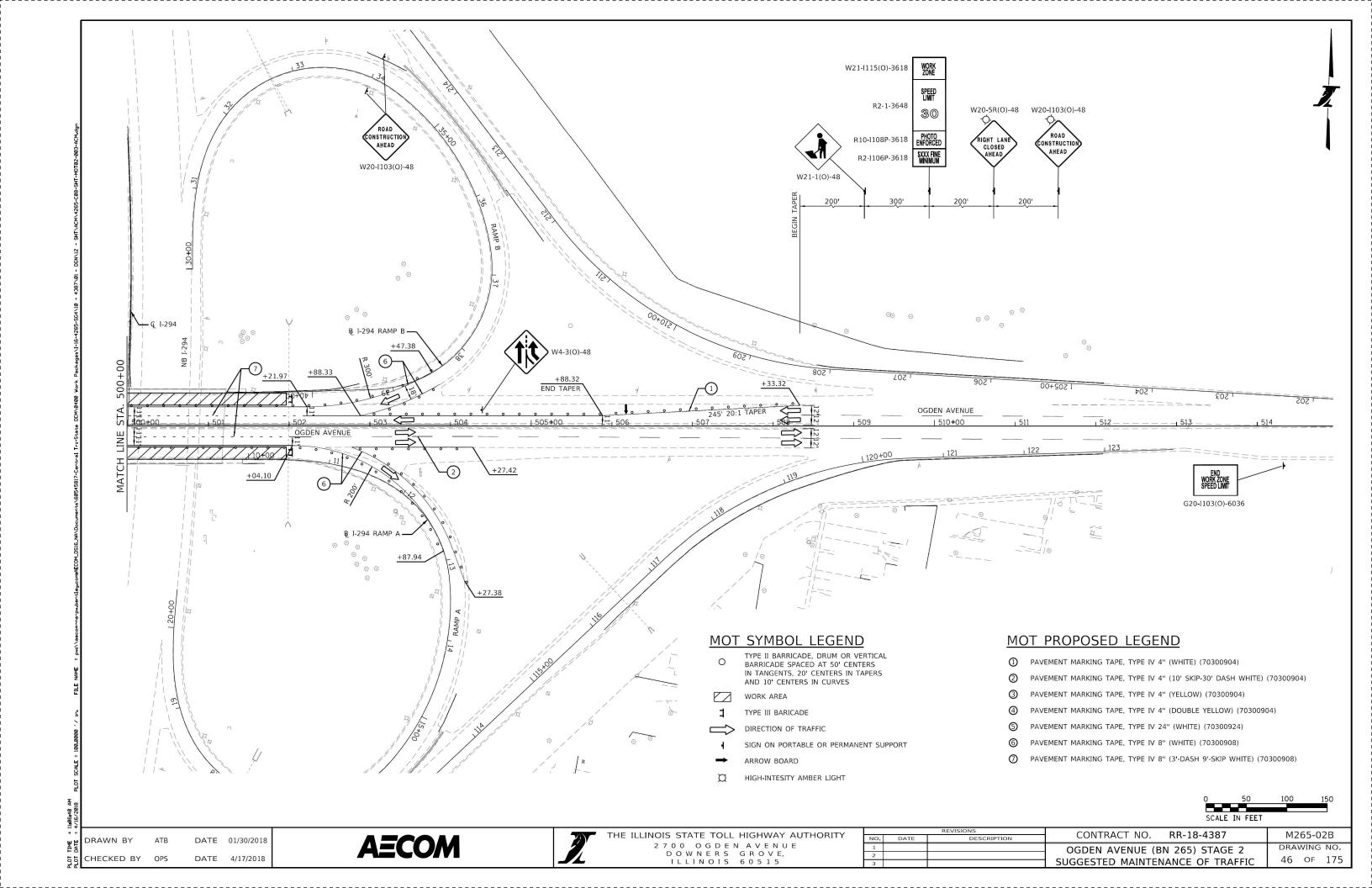


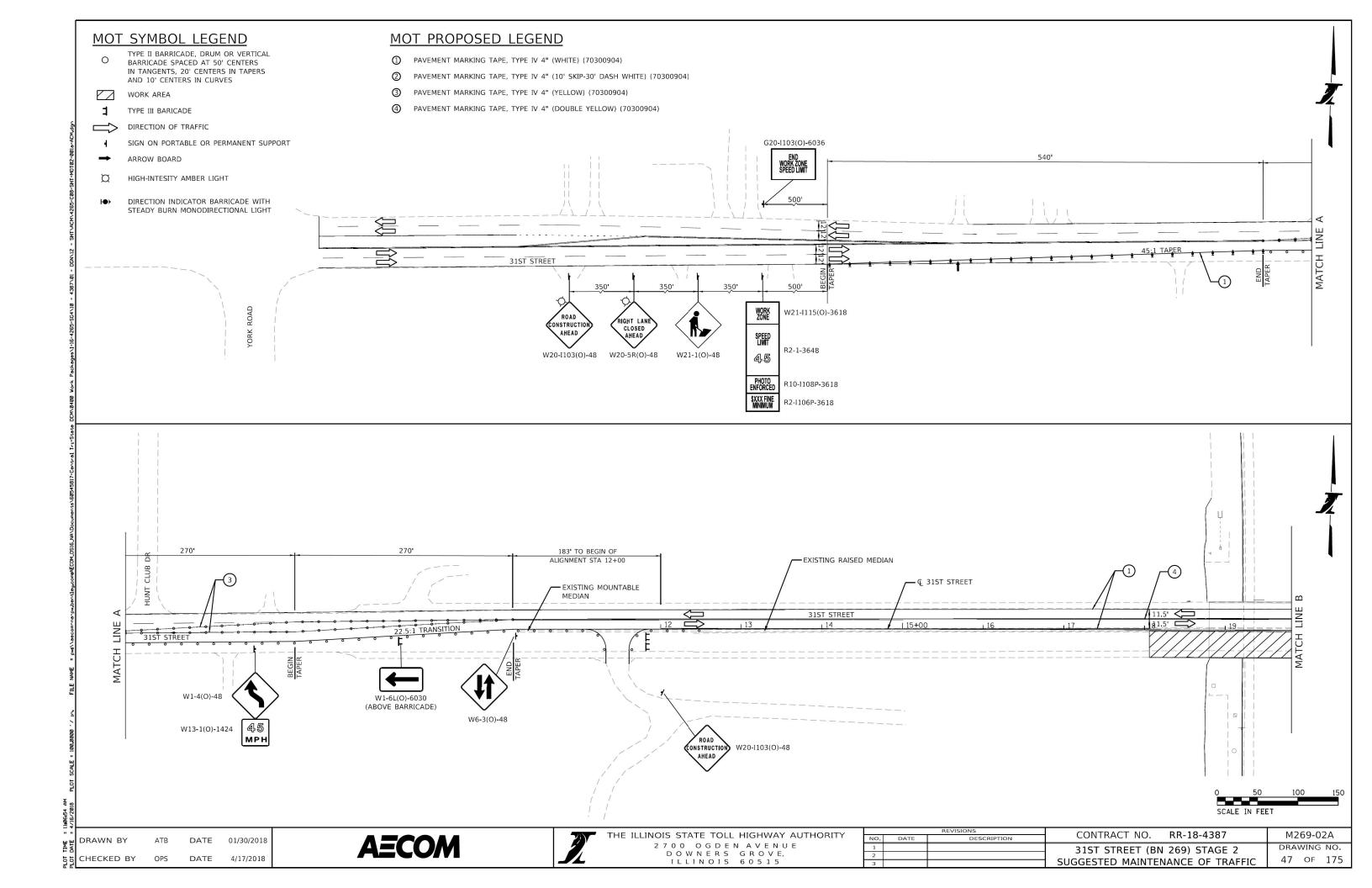
CHECKED BY JFM DATE 4/17/2018 BAXTER WOODMAN Consulting Engineers

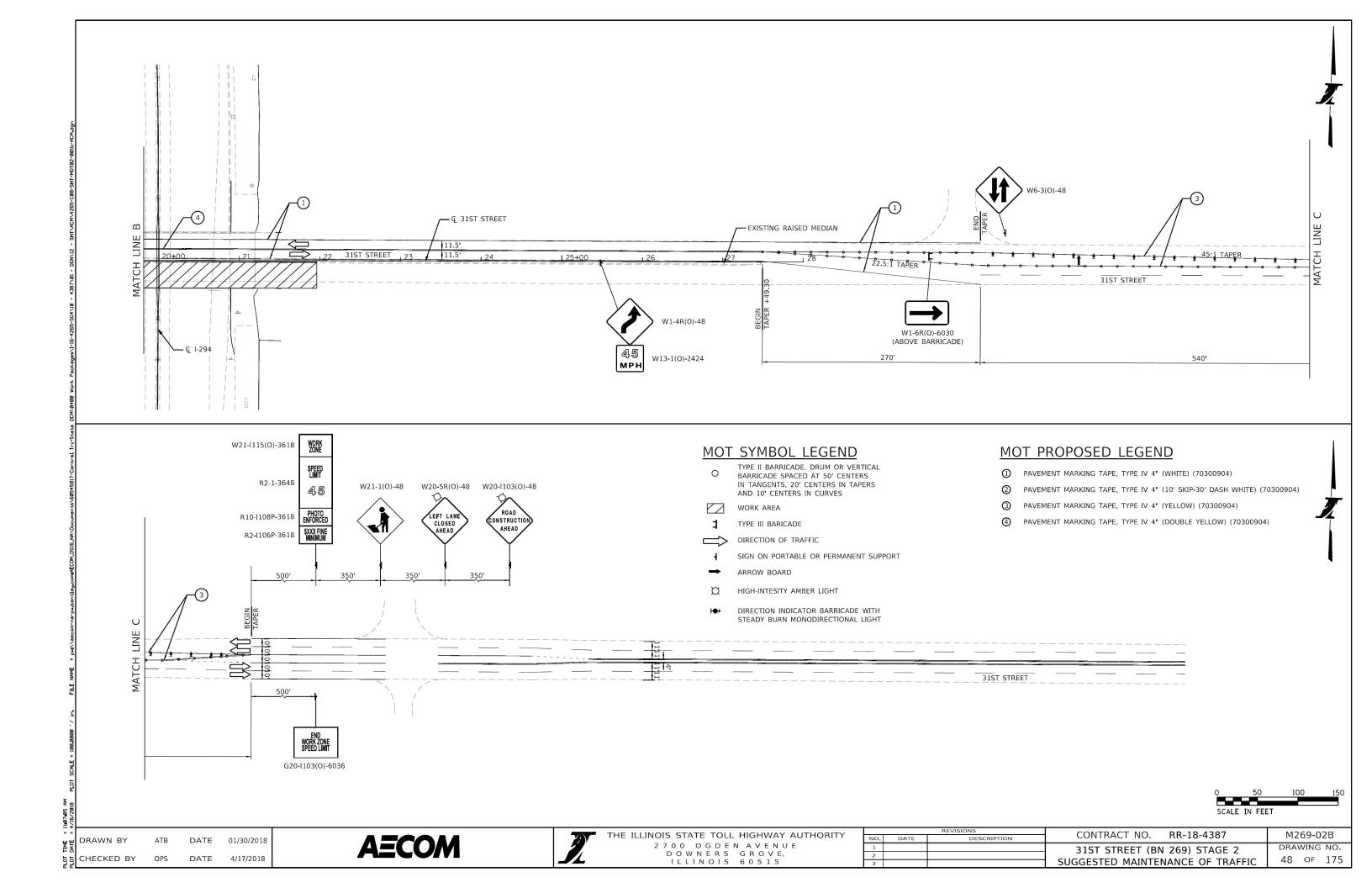


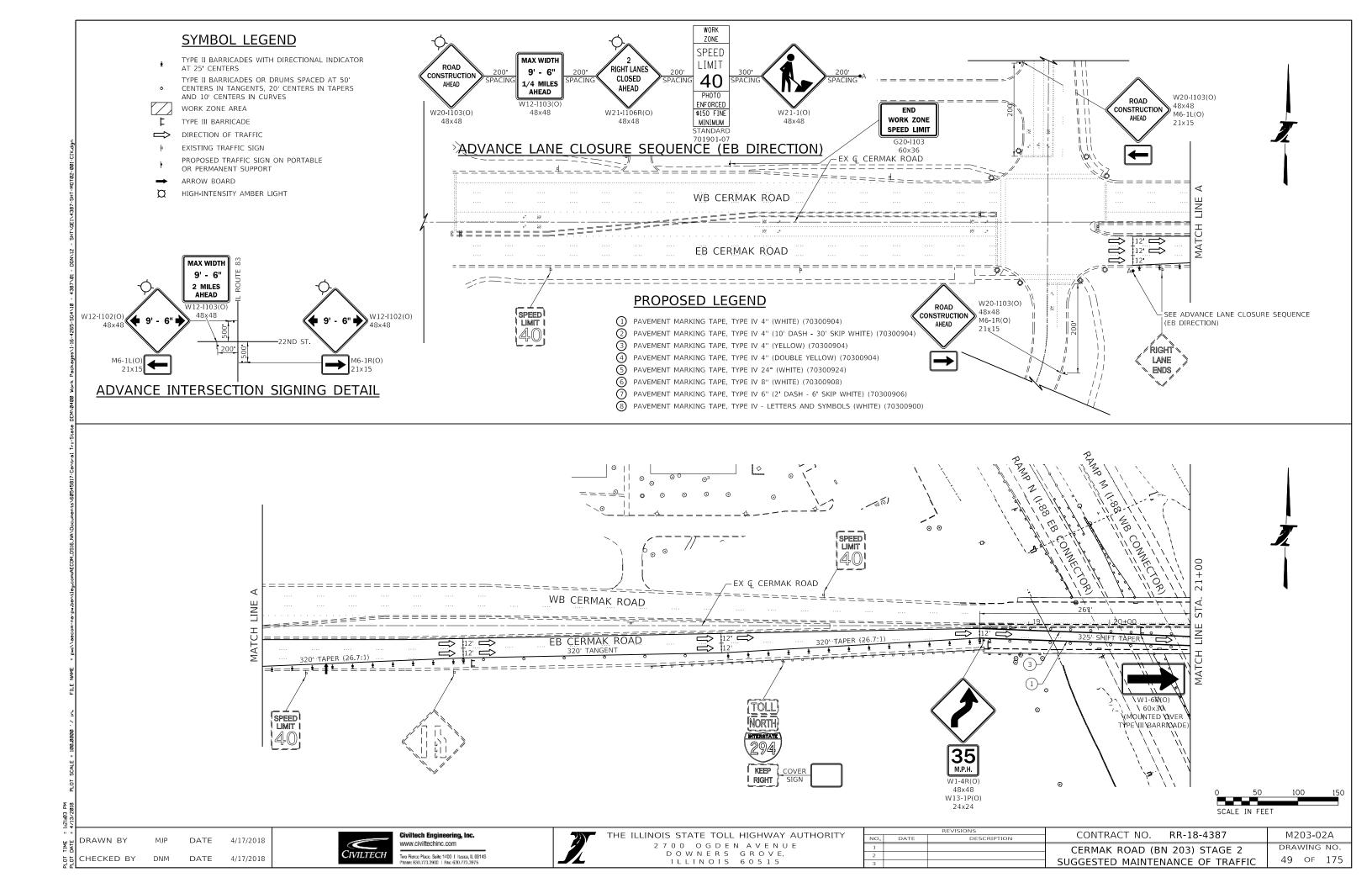


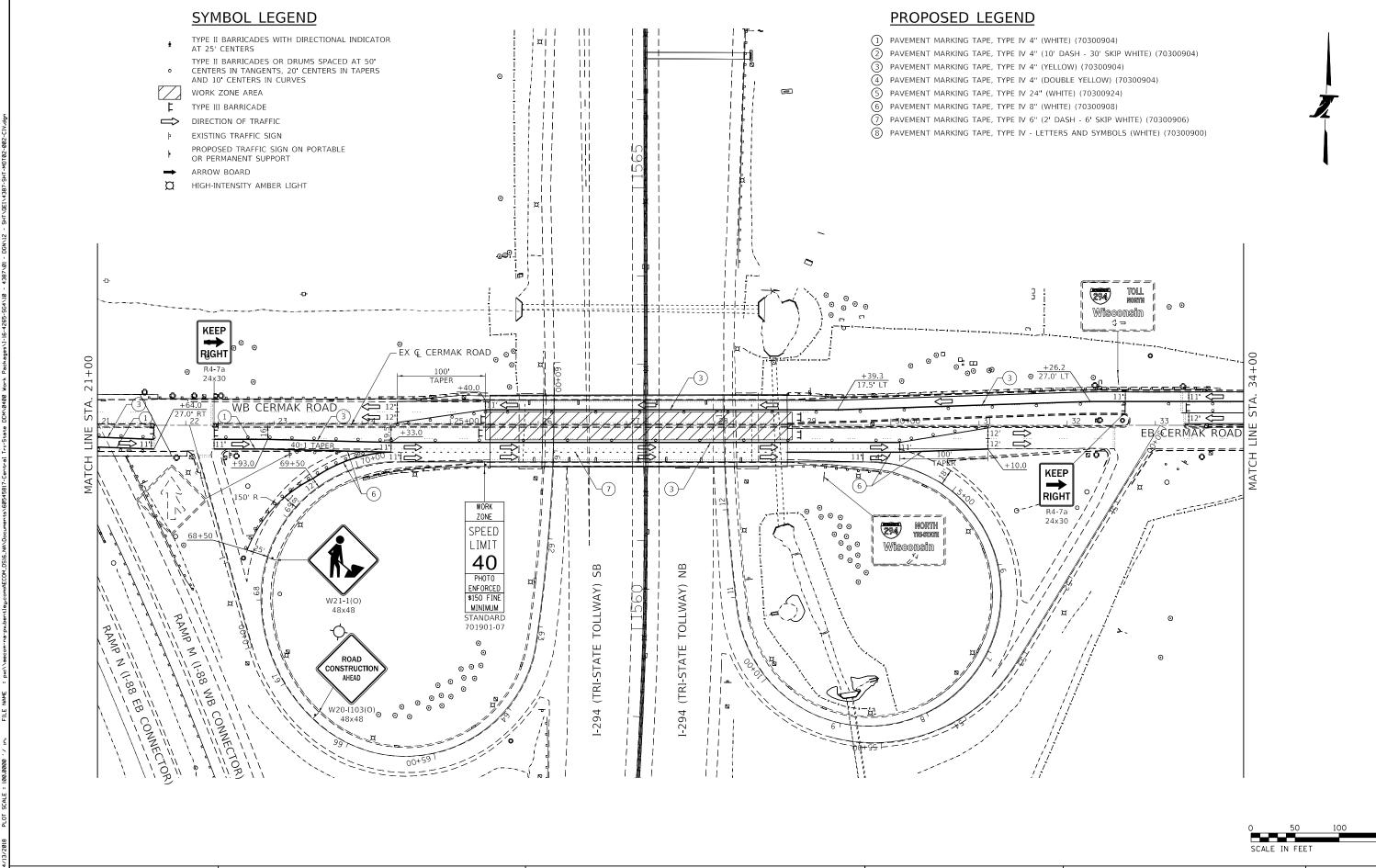












PLOT TIME = 1,21,13 | PLOT DATE = 4/13/20

DRAWN BY MJP DATE 4/17/2018

CHECKED BY DNM DATE 4/17/2018

Civiltech Engineering, Inc.
www.civiltechinc.com

Two Fierce Place, Suite 1400 1 Ibasca, IL 60143
Phone: 830.773.3930 1 Fac: 630.773.3975

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

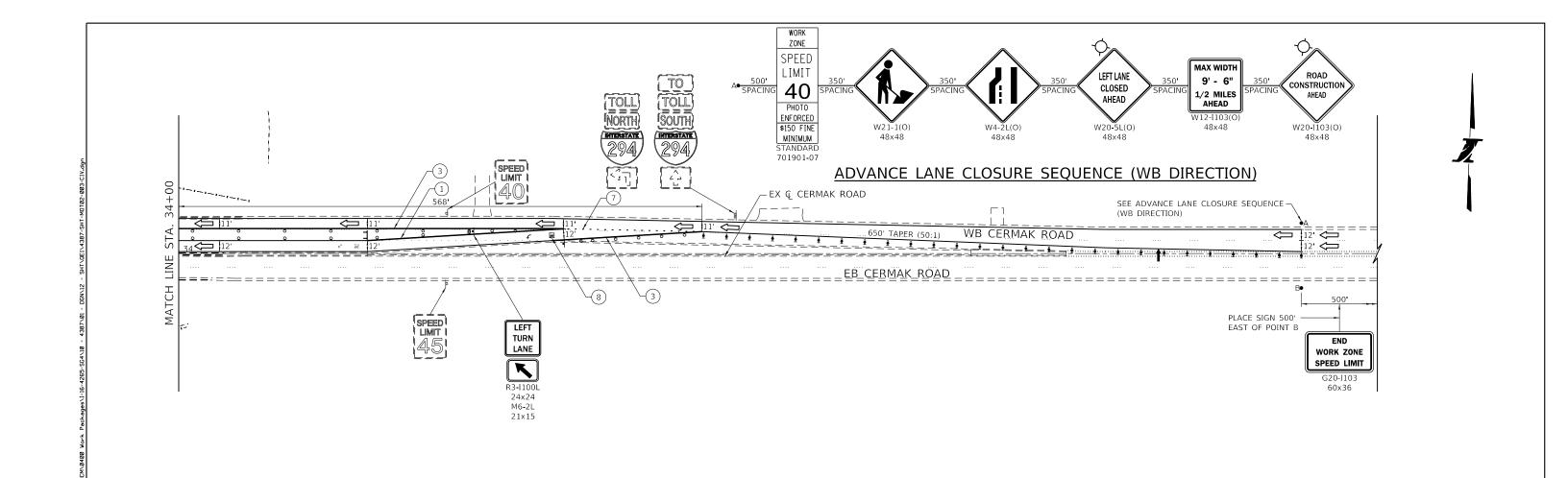
REVISIONS CONTRACT NO.

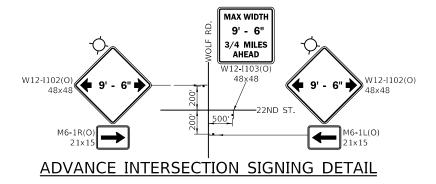
CERMAK ROAD (
SUGGESTED MAINT

CONTRACT NO. RR-18-4387 M203-02B

CERMAK ROAD (BN 203) STAGE 2

SUGGESTED MAINTENANCE OF TRAFFIC 50 OF 175





SYMBOL LEGEND

- TYPE II BARRICADES WITH DIRECTIONAL INDICATOR AT 25' CENTERS
- TYPE II BARRICADES OR DRUMS SPACED AT 50'
 CENTERS IN TANGENTS, 20' CENTERS IN TAPERS AND 10' CENTERS IN CURVES

WORK ZONE AREA

F TY

TYPE III BARRICADE

DIRECTION OF TRAFFIC

- EXISTING TRAFFIC SIGN
- PROPOSED TRAFFIC SIGN ON PORTABLE OR PERMANENT SUPPORT
- → ARROW BOARD
- HIGH-INTENSITY AMBER LIGHT

PROPOSED LEGEND

- 1) PAVEMENT MARKING TAPE, TYPE IV 4" (WHITE) (70300904)
- PAVEMENT MARKING TAPE, TYPE IV 4" (10' DASH 30' SKIP WHITE) (70300904)
- (3) PAVEMENT MARKING TAPE, TYPE IV 4" (YELLOW) (70300904)
- 4 PAVEMENT MARKING TAPE, TYPE IV 4" (DOUBLE YELLOW) (70300904)
- 5) PAVEMENT MARKING TAPE, TYPE IV 24" (WHITE) (70300924)
- 6 PAVEMENT MARKING TAPE, TYPE IV 8" (WHITE) (70300908)
- PAVEMENT MARKING TAPE, TYPE IV 6" (2' DASH 6' SKIP WHITE) (70300906)
- 8 PAVEMENT MARKING TAPE, TYPE IV LETTERS AND SYMBOLS (WHITE) (70300900)

0 50 100 150
SCALE IN FEET

 DRAWN BY
 MJP
 DATE
 4/17/2018

 CHECKED BY
 DNM
 DATE
 4/17/2018

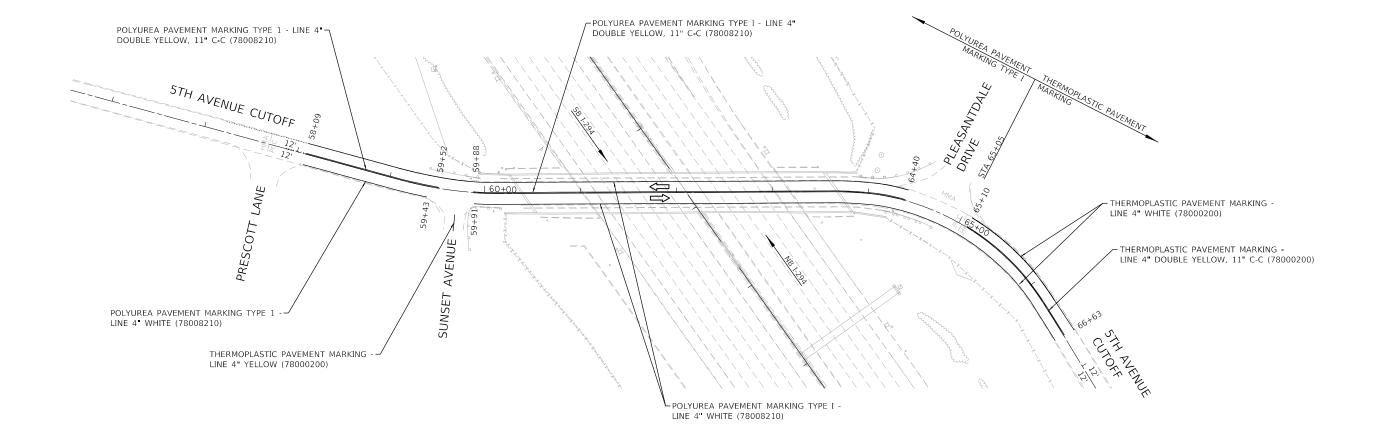


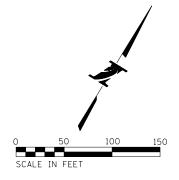




REVISIONS			CONTRACT NO. RR-18-4387	M203-02C
⊃.	DATE	DESCRIPTION	CONTRACT NO. KK-10-4307	M203-02C
			CERMAK ROAD (BN 203) STAGE 2	DRAWING NO.
			` ,	51 OF 175
			SUGGESTED MAINTENANCE OF TRAFFIC	J1 OF 1/5
_				

PAVEMENT MARKING MATERIAL PLACED ON HMA PAVEMENT SHALL BE THERMOPLASTIC, PAVEMENT MARKING MATERIALS PLACED ON PCC PAVEMENT SHALL BE PREFORMED PLASTIC PLAVEMENT MARKING TYPE B, WITH GROOVING FOR RECESSED PAVEMENT MARKING ON THE LANE LINES AND POLYURE PAVEMENT MARKING, TYPE I ON ALL OTHER LINES.





DRAWN BY CJC DATE 4/17/2018

CHECKED BY JFM DATE 4/17/2018





THORITY	NO.	

PAVEMENT MARKING MATERIAL PLACED ON HMA PAVEMENT SHALL BE THERMOPLASTIC, PAVEMENT MARKING MATERIALS PLACED ON PCC PAVEMENT SHALL BE PREFORMED PLASTIC PLAVEMENT MARKING TYPE B, WITH GROOVING FOR RECESSED PAVEMENT MARKING ON THE LANE LINES AND POLYURE PAVEMENT MARKING, TYPE I ON ALL OTHER LINES. THERMOPLASTIC PAVEMENT POLYUREA PAVEMENT MARKING | MARKING TYPE I POLYUREA PAVEMENT MARKING TYPE I - LINE 4" POLYUREA PAVEMENT MARKING TYPE I DOUBLE YELLOW, 11" C-C (78008210) LINE 4" WHITE (78008210) PLACE -THERMOPLASTIC PAVEMENT MARKING - LINE 4" DOUBLE YELLOW, 11" C-C (78000200) - THERMOPLASTIC PAVEMENT MARKING -WILLOW SPRINGS ROAD LINE 4" WHITE (78000200) L 25+00 /=>/ DRIVEWAY DRIVEWAY DRIVEWAY THERMOPLASTIC PAVEMENT MARKING - LINE 12"--THERMOPLASTIC PAVEMENT MARKING - LINE 4" YELLOW, DIAGONAL 45°, AT 30" C-C (78000600) DOUBLE YELLOW, 11" C-C (78000200) THERMOPLASTIC PAVEMENT MARKING -LINE 4" WHITE (78000200) - THERMOPLASTIC PAVEMENT MARKING - LINE 12" WHITE, DIAGONAL 45°, AT 75' C-C (78000600) POLYUREA PAVEMENT | THERMOPLASTIC PAVEMENT MARKING TYPE I MARKING

DATE 4/17/2018

DATE 4/17/2018

BAXT

CHECKED BY JFM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

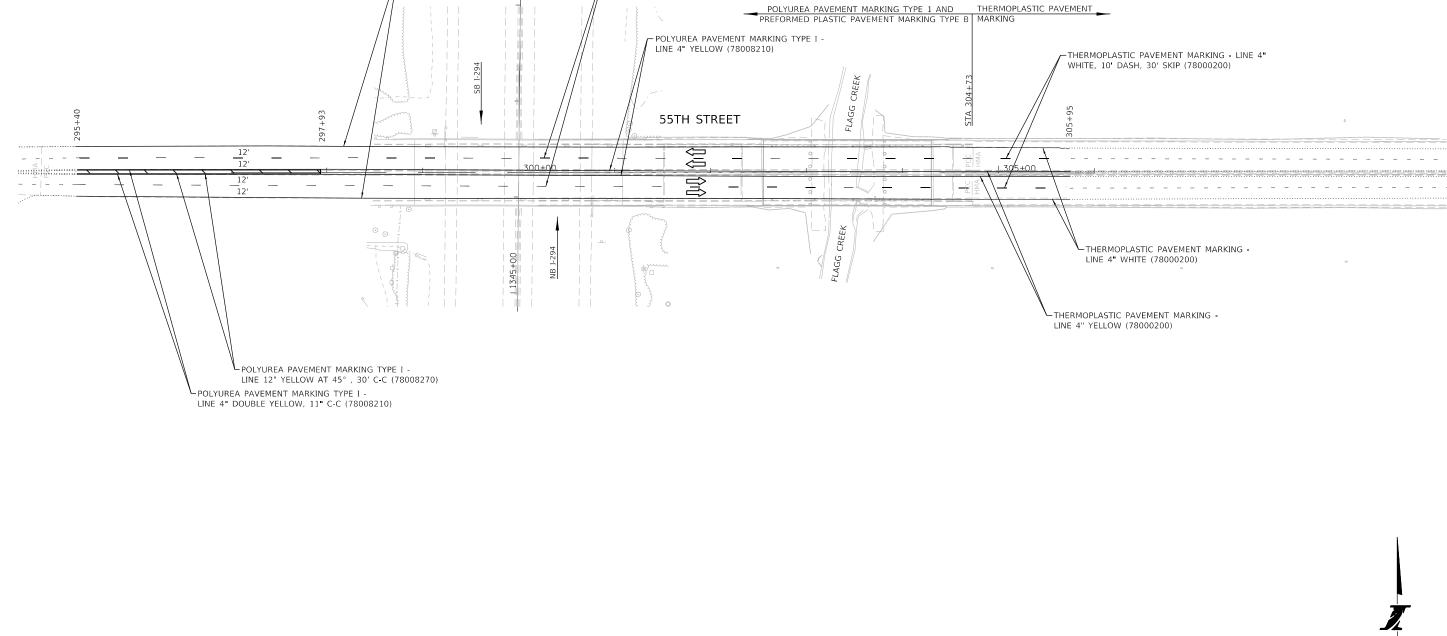
C,	DESCRIPTION	DATE	NO.
\//			
] ""			

CONTRACT NO. RR-18-4387 BPMK-02
WILLOW SPRINGS ROAD (BN 187)
PAVEMENT MARKING PLANS 53 OF 175

BAXTER WOODMAN Consulting Engineers

NOTE:

PAVEMENT MARKING MATERIAL PLACED ON HMA PAVEMENT SHALL BE THERMOPLASTIC, PAVEMENT MARKING MATERIALS PLACED ON PCC PAVEMENT SHALL BE PREFORMED PLASTIC PLAVEMENT MARKING TYPE B, WITH GROOVING FOR RECESSED PAVEMENT MARKING ON THE LANE LINES AND POLYURE PAVEMENT MARKING, TYPE I ON ALL OTHER LINES.



PREFORMED PLASTIC PAVEMENT MARKING TYPE B - LINE 7" WHITE, 10' DASH, 30' SKIP (X2700004) WITH GROOVING FOR

RECESSED PAVEMENT MARKING 8"

- POLYUREA PAVEMENT MARKING TYPE I -

LINE 4" WHITE (78008210)

BAXTER WOODMAN Consulting Engineers



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

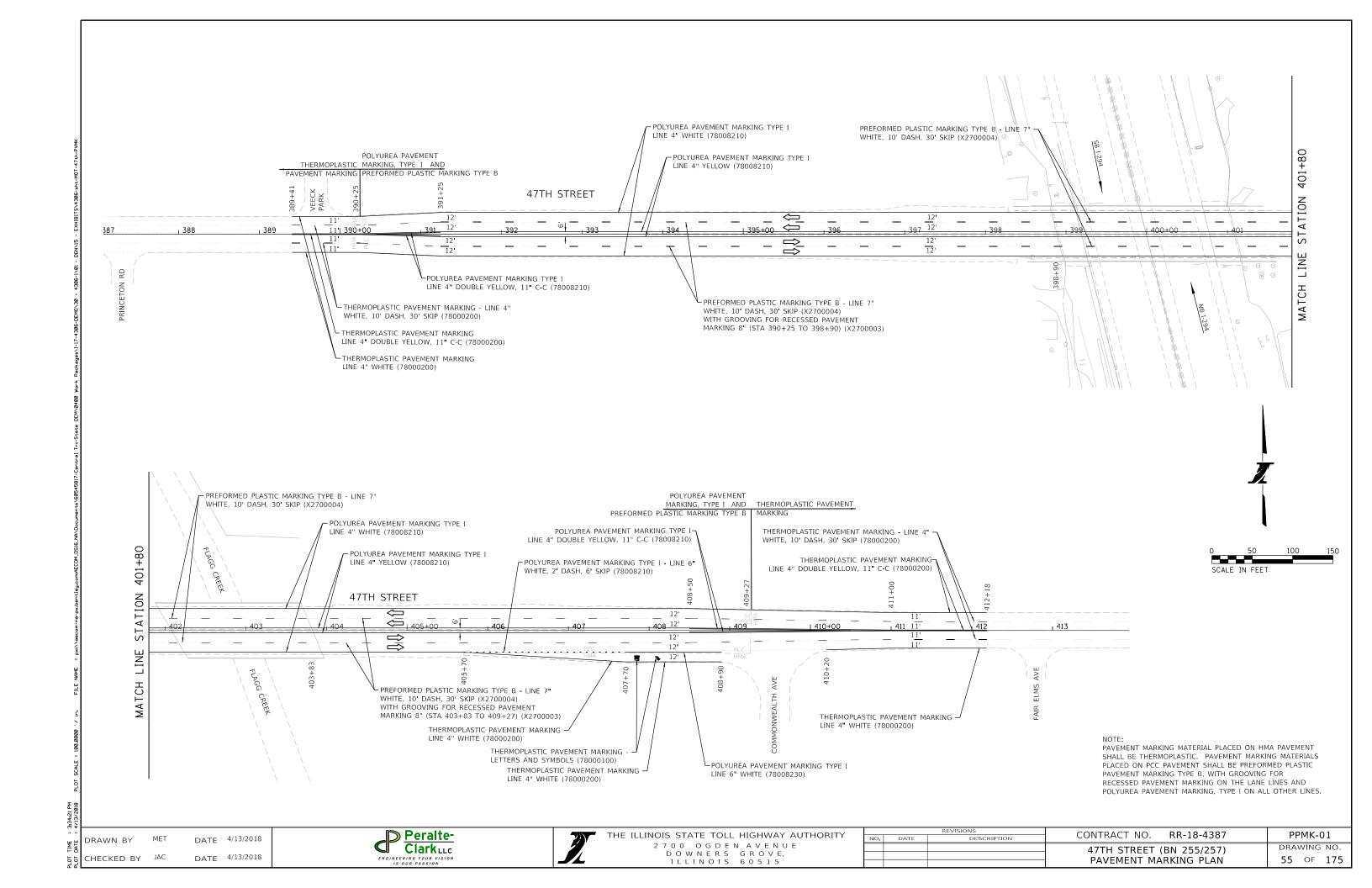
I L L I N O I S 6 0 5 1 5

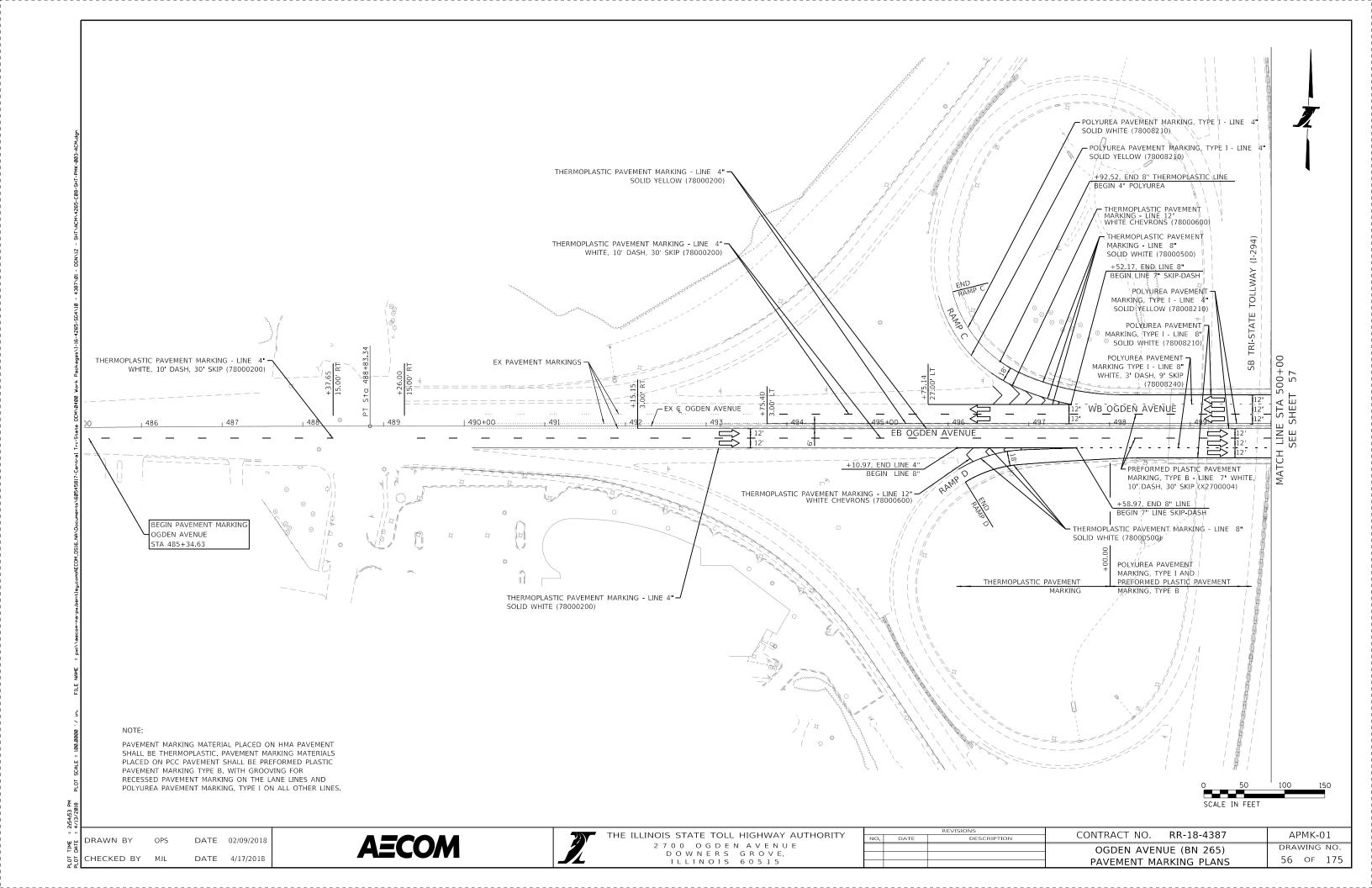
CONTRACT NO. RR-18-4387 BPMK-03

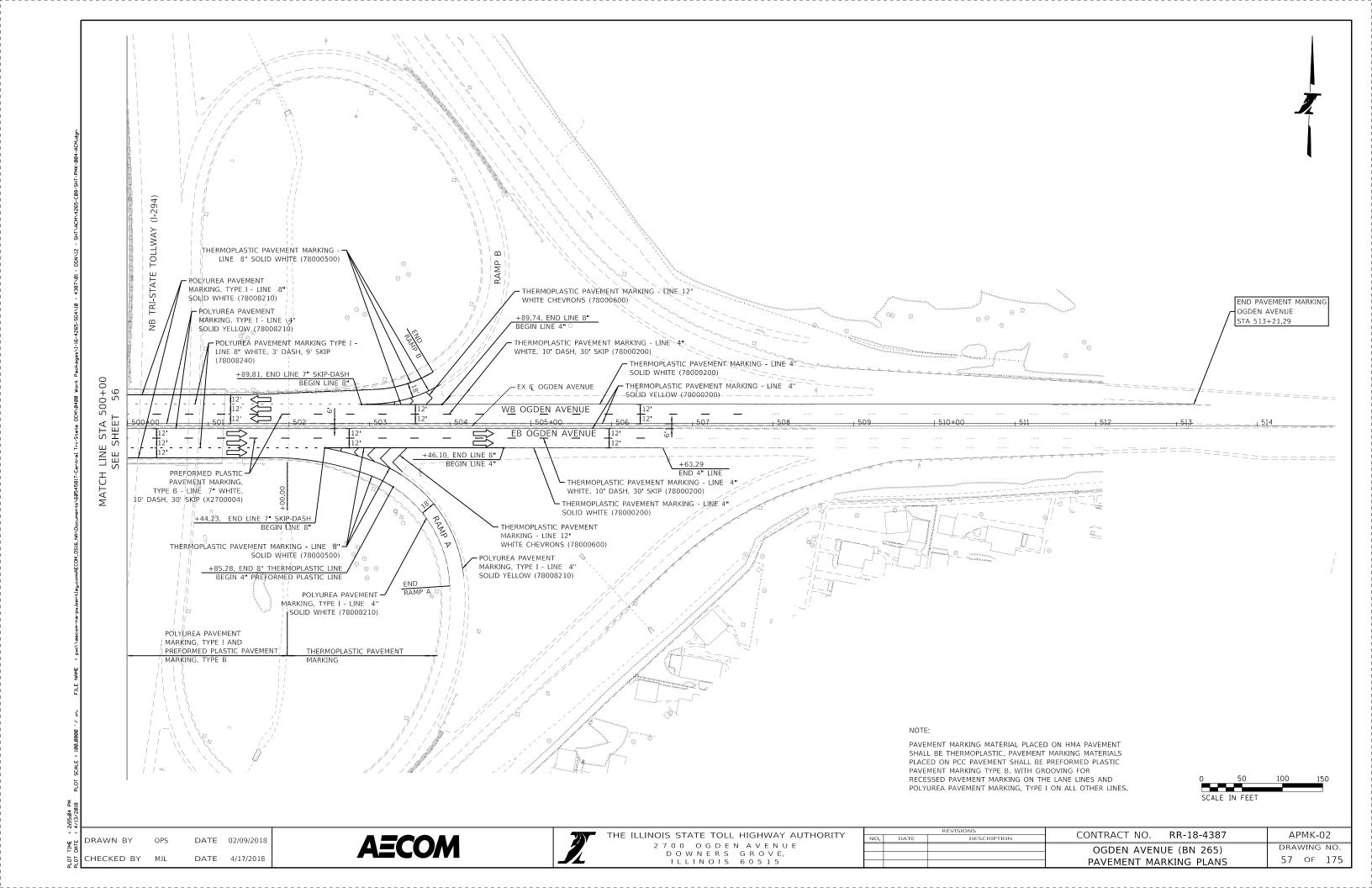
DATE DESCRIPTION CONTRACT NO. RR-18-4387 BPMK-03

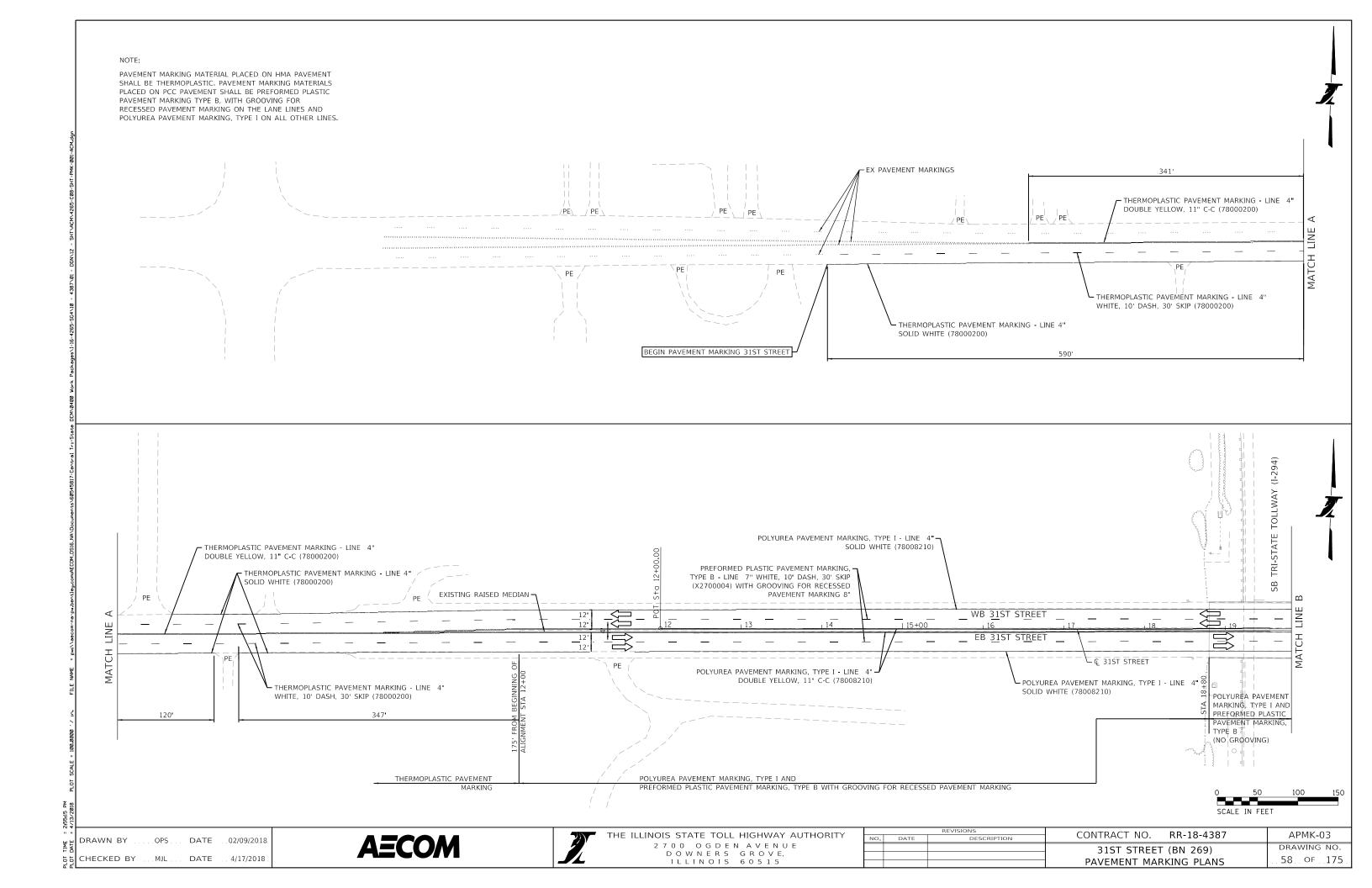
55TH STREET (BN 251 & 253) DRAWING NO. PAVEMENT MARKING PLANS 54 OF 175

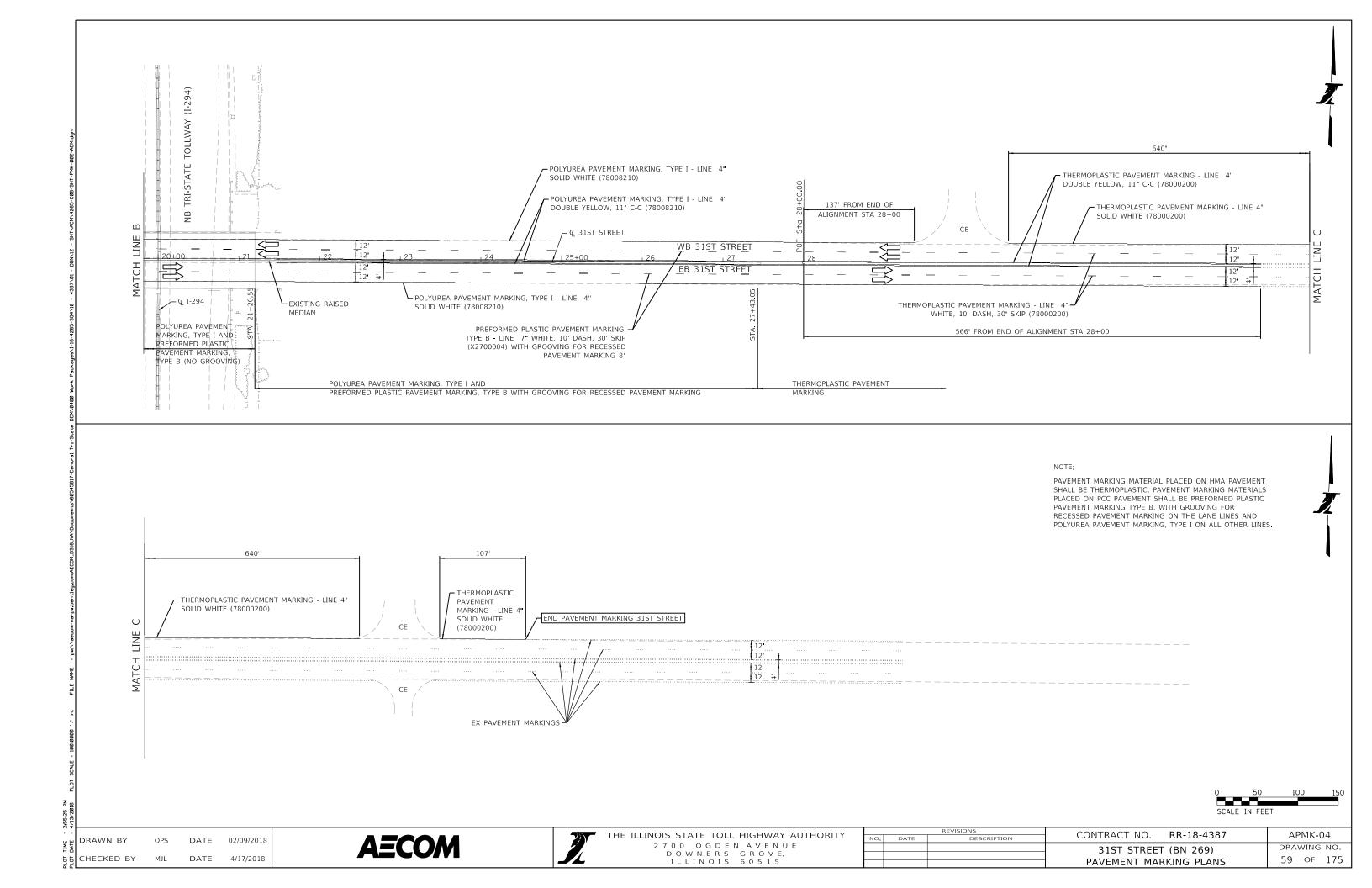
SCALE IN FEET

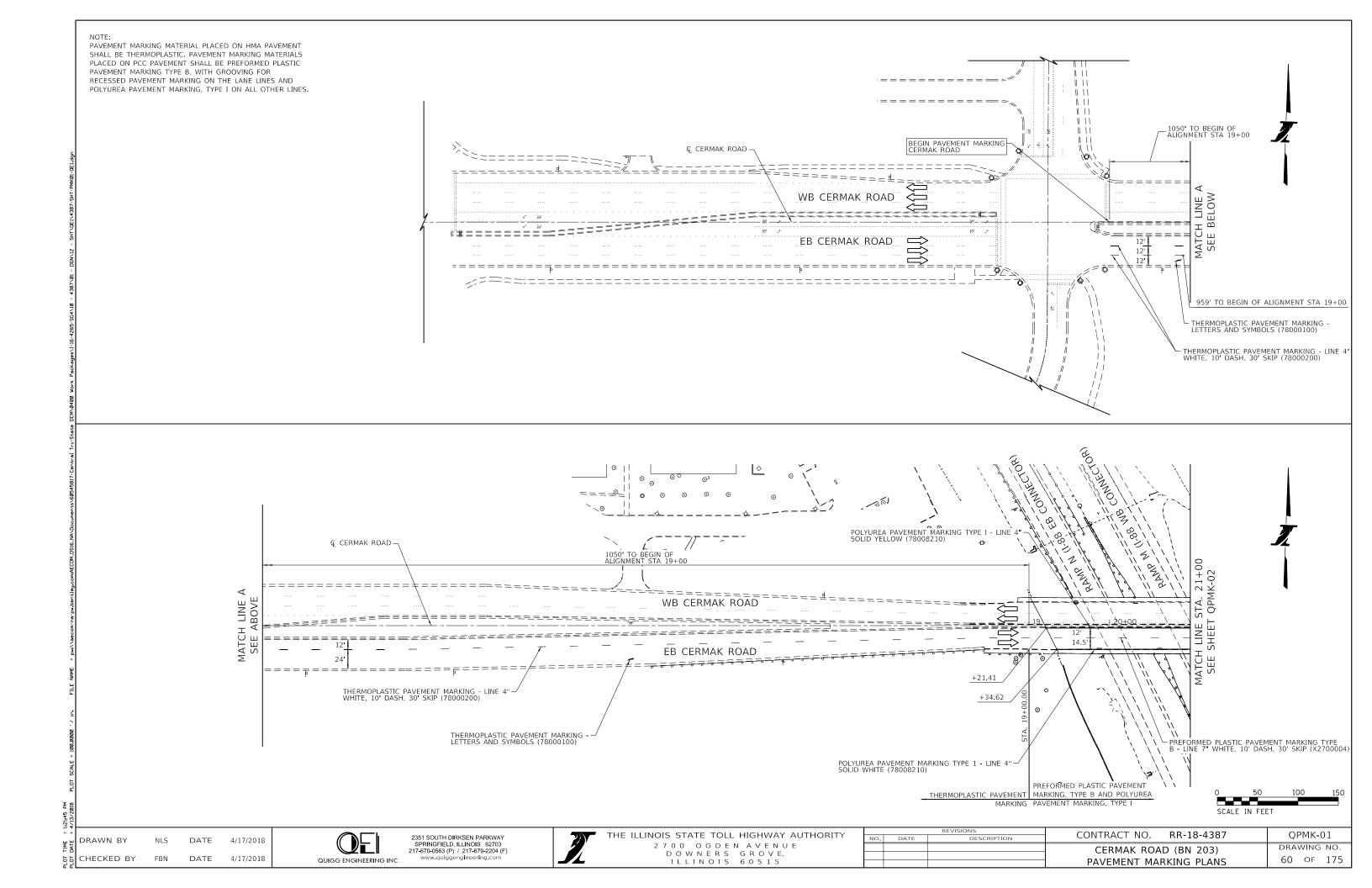












PAVEMENT MARKING MATERIAL PLACED ON HMA PAVEMENT SHALL BE THERMOPLASTIC. PAVEMENT MARKING MATERIALS PLACED ON PCC PAVEMENT SHALL BE PREFORMED PLASTIC PAVEMENT MARKING TYPE B, WITH GROOVING FOR RECESSED PAVEMENT MARKING ON THE LANE LINES AND POLYUREA PAVEMENT MARKING, TYPE I ON ALL OTHER LINES. NB SB PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"-WHITE, 10' DASH, 30' SKIP (X2700004) χl (TRI-STATE - POLYUREA PAVEMENT MARKING, TYPE I - LINE 4" SOLID YELLOW (78008210) - POLYUREA PAVEMENT MARKING TYPE I - LINE 4" SOLID YELLOW **⊙**o; j - PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7" WHITE, 10' DASH, 30' SKIP (X2700004) POLYUREA PAVEMENT MARKING, TYPE I - LINE 6" SOLID WHITE (78008230) - PREFORMED PLASTIC PAVEMENT MARKING TYPE B - LINE 7" WHITE, 10' DASH, 30' SKIP (X2700004) POLYUREA PAVEMENT MARKING, TYPE I - LINE 4" SOLID WHITE (78008210) - POLYUREA PAVEMENT I MARKING, TYPE I - LINE 4" SOLID WHITE (78008210)—:— +64.21 POLYUREA PAVEMENT
MARKING, TYPE I LINE 8"
SOLID WHITE (78008240) POLYUREA PAVEMENT MARKING TYPE I | SOLID WHITE (78008210) CERMAK ROAD STA. 34+00 QPMK-03 +83.07, END LINE 4" BEGIN LINE 8" +29.80 HINE S Φ LINE EB CERMAK ROAD +07.93 MATCH SEE S <u>₽₽</u> ্র চক RAMP THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PER Ø POLYUREA PAVEMENT MARKING, TYPE I - LINE 24"3 SOLID WHITE (78008270) +04.11 - POLYUREA PAVEMENT MARKING, TYPE I - LINE 8" SOLID WHITE (78008240) 0.0 POLYUREA PAVEMENT MARKING, TYPE I - LINE 4" SOLID YELLOW (78008210) 11 POLYUREA PAVEMENT MARKING, TYPE POLYUREA PAVEMENT MARKIN |TYPE I - LINE 8" WHITE, 3 D |9 SKIP (78008240) 11 0 \Box - +82.55, END 6" DOTTED BEGIN LINE 8" POLYUREA PAVEMENT MA SOLID WHITE (78008210) MÄRKING, TYPE 1 - LINE 4" 89 SCALE IN FEET

4/17/2018 CHECKED BY FBN DATE 4/17/2018

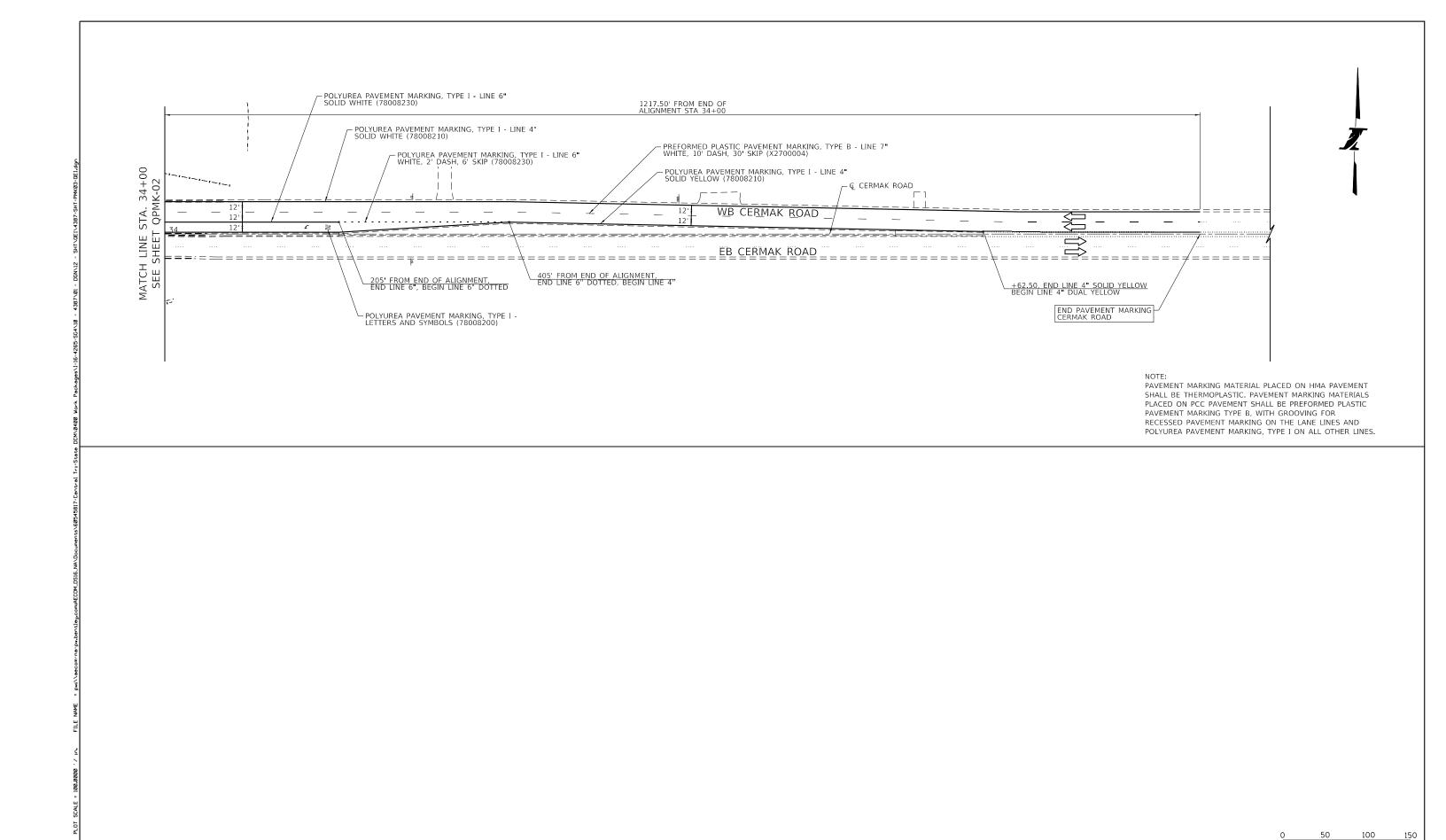
QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CONTRACT NO.

RR-18-4387 OPMK-02 DRAWING NO. CERMAK ROAD (BN 203) 61 OF 175 PAVEMENT MARKING PLANS



4/17/2018 CHECKED BY DATE 4/17/2018 QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

CONTRACT NO. RR-18-4387

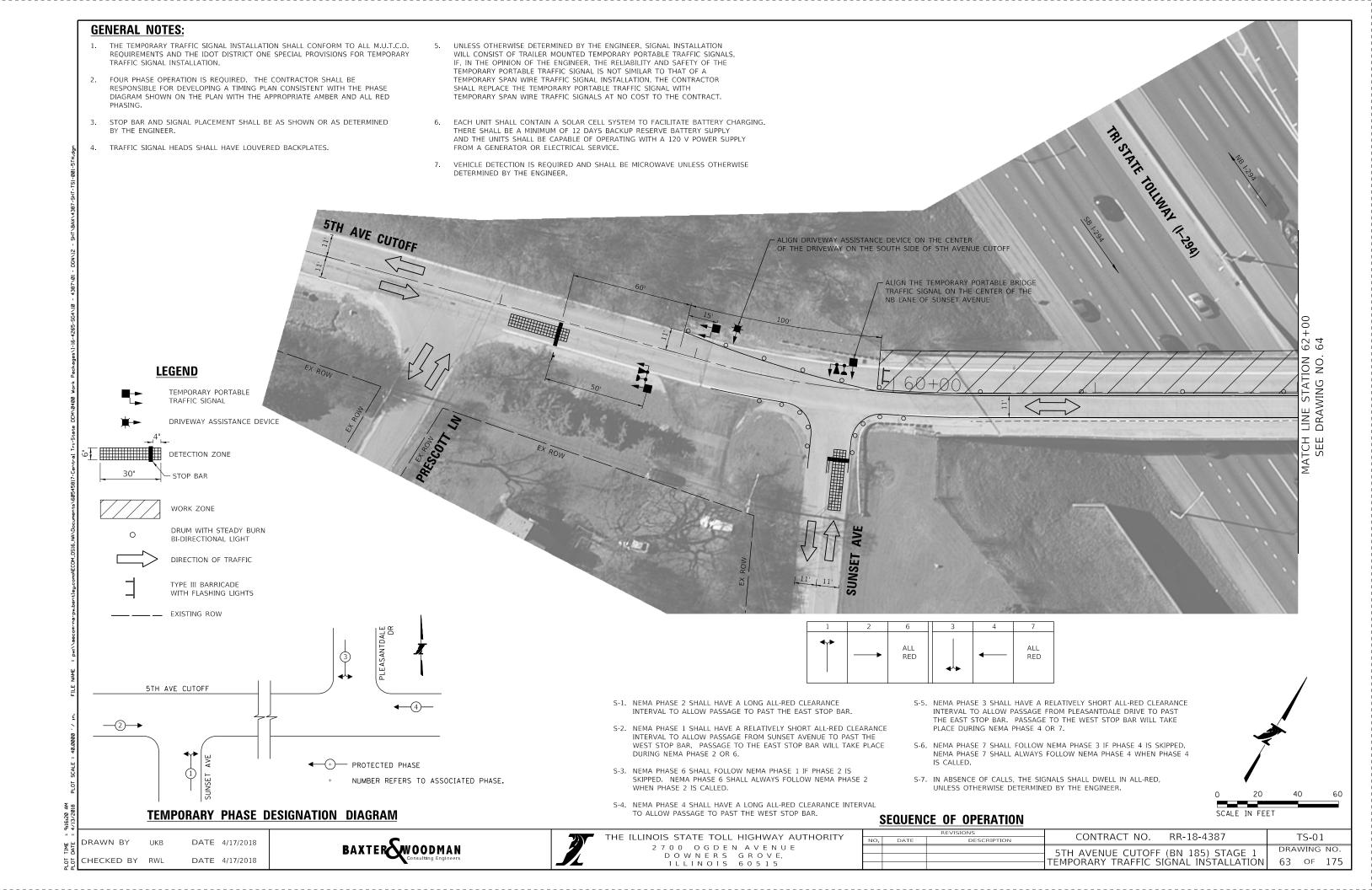
DRAWING NO. 62 OF 175

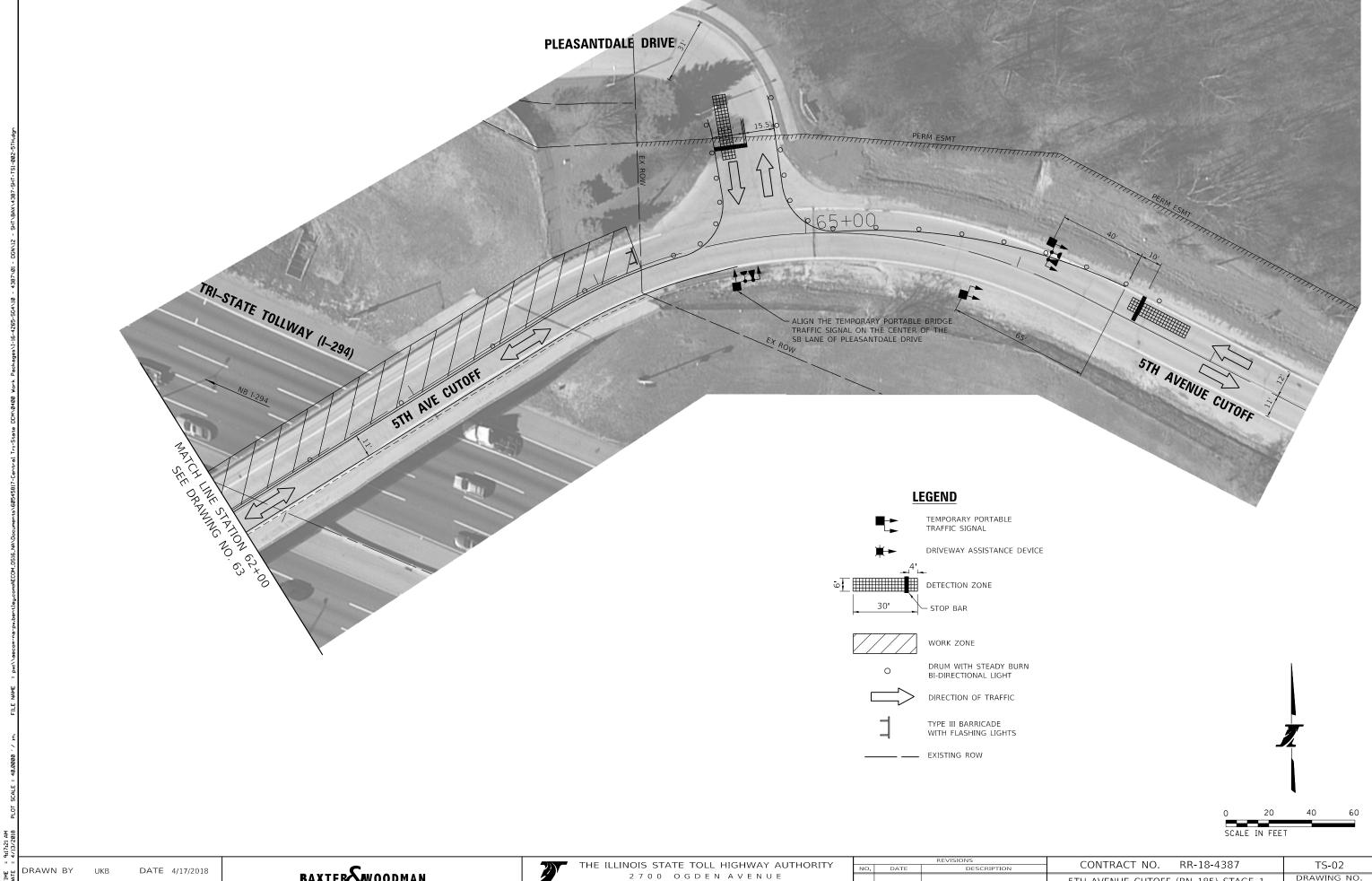
OPMK-03

SCALE IN FEET

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CERMAK ROAD (BN 203) PAVEMENT MARKING PLANS





BAXTER WOODMAN Consulting Engineers

CHECKED BY RWL

DATE 4/17/2018

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

DRAWING NO. 5TH AVENUE CUTOFF (BN 185) STAGE 1 TEMPORARY TRAFFIC SIGNAL INSTALLATION 64 OF 175



PLOT TIME = 9:18:
PLOT DATE = 4/13

DRAWN BY UKB
CHECKED BY RWL

B DATE 4/17/2018

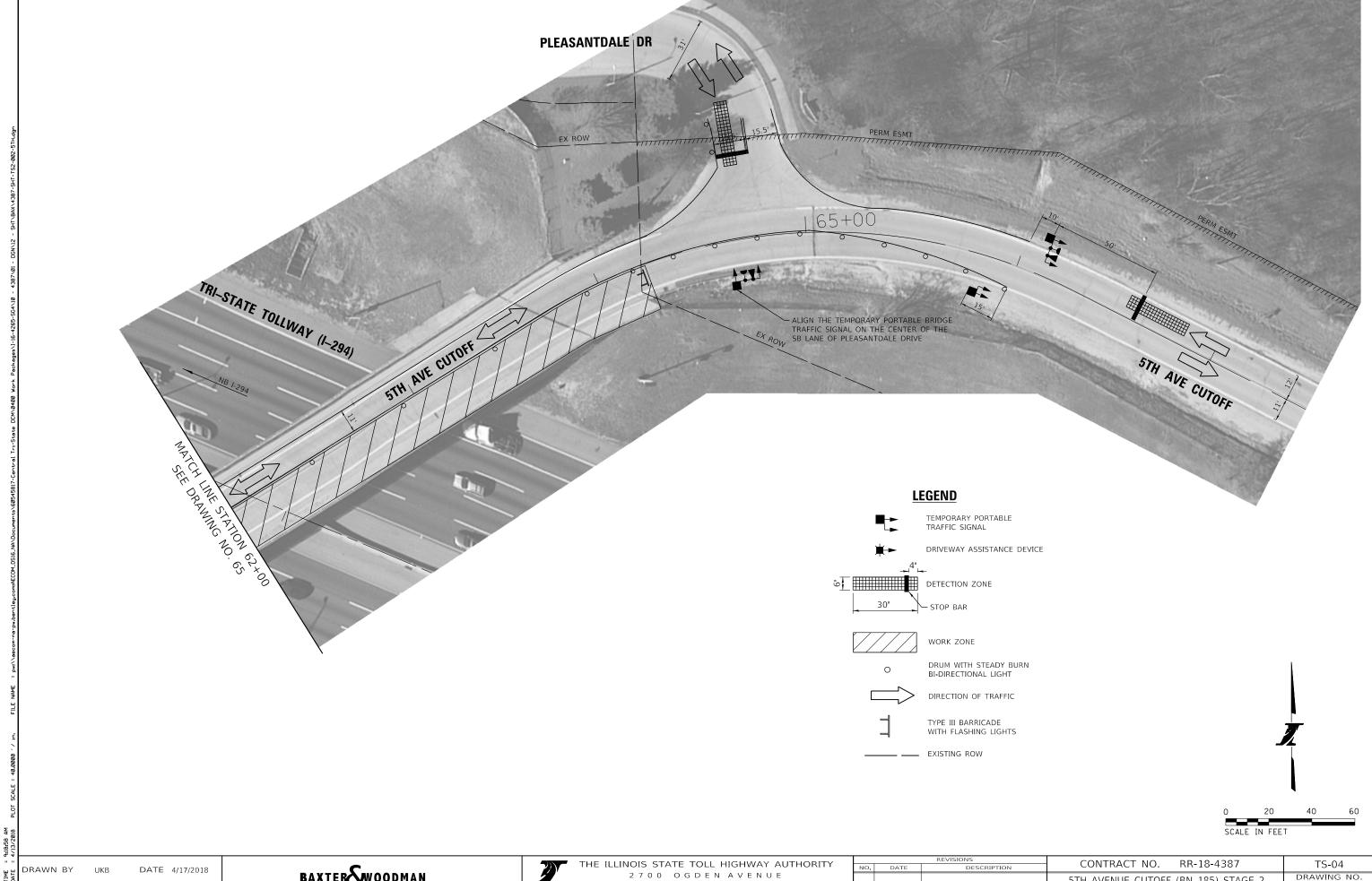
'L DATE 4/17/2018

BAXTER WOODMAN Consulting Engineers

2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515 CONTRACT NO. RR-18-4387

STH AVENUE CUTOFF (BN 185) STAGE 2
TEMPORARY TRAFFIC SIGNAL INSTALLATION

DRAWING NO. 65 OF 175



BAXTER WOODMAN Consulting Engineers

CHECKED BY RWL

DATE 4/17/2018

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

5TH AVENUE CUTOFF (BN 185) STAGE 2 TEMPORARY TRAFFIC SIGNAL INSTALLATION 66 OF 175

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

<u>[TEM</u>	EXISTING	<u>PROPOSED</u>	ITEM	EXISTING	<u>PROPOSED</u>	ITEM	EXISTING	PROPOS E D
CONTROLLER CABINET	\boxtimes	X	HANDHOLE -SQUARE -ROUND			S]GNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y	R R Y
COMMUNICATION CABINET	ECC	СС	HEAVY DUTY HANDHOLE				<u> </u>	G G ←Y ←Y ←G ←G
MASTER CONTROLLER	EMC	мс	-SQUARE -ROUND	⊞ 🚯	⊞ ⊕		-	€ G € G
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE		•••	SIGNAL HEAD WITH BACKPLATE		R R R
UNINTERRUPTABLE POWER SUPPLY	Ø	Ø	JUNCTION BOX	0	0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
SERVICE INSTALLATION -(P) POLE MOUNTED	- <u></u> ₽	- = -P	RAILROAD CANTILEVER MAST ARM	XOX X	I ci I			G G G G G G G G G G G G G G G G G G G
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	∑O ∑	X+X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G}\boxtimes^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE	X 0X >	I+I-	PEDESTRIAN SIGNAL HEAD	()	₽
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	★	*	AT RAILROAD INTERSECTIONS		
STEEL MAST ARM ASSEMBLY AND POLE	0	•—	RAILROAD CONTROLLER CABINET	⊠	≯ ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C S	₽ C ∱ D
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			ILLUMINATED SIGN		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o¤—	• ×	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO R[GHT TURN"		9
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	 ● BM 	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.	_5_	
WOOD POLE	8	8	INTERSECTION 1TEM	Ι	ΙP	ALL DETECTOR LOOP CABLE TO BE SHIELDED	<i>—</i>	_
GUY WIRE	≻	÷	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	(1 * 6)
SIGNAL HEAD	-⊳	→	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	_	_ 1
SIGNAL HEAD WITH BACKPLATE	#⊳	+►	ABANDON ITEM CONTROLLER CABINET AND		Α	COAXIAL CABLE	-/	<u>—</u> ©—
SIGNAL HEAD OPTICALLY PROGRAMMED	-> P +> P	P +P	FOUNDATION TO BE REMOVED		RC F	COAMAL CABLE	— <u>©</u> —	_
FLASHER INSTALLATION	o⇔ ^F o⇔ ^{FS}	F FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE	_ V	
-(FS) SOLAR POWERED	ope oper	F FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RP F	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
PEDESTRIAN SIGNAL HEAD	-0	4	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62,5/125, MM12F		12 F
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON		@ @ APS	PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		24F
RADAR DETECTION SENSOR	R	R ■	SAMPLING (SYSTEM) DETECTOR	[<u>\$]</u> (§)	s s			—36F)—
VIDEO DETECTION CAMERA	(V)	:	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	[IS] (IS)	IS (IS)			
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	[0S] (0S)	os (s)	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	ਰੰ ਹੈ ਹੈ ਹੈ	†° † [™] † [₽] † ^S
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ[]	₽TZ	WIRELESS DETECTOR SENSOR	®	0	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	\bowtie	◄	WIRELESS ACCESS POINT	\Box	-			
CONFIMATION BEACON	o()	H						
	∞- 1∰	•-1 						
WIRELESS INTERCONNECT								

FILE NAME =	USER NAME = leyso	DESIGNED	-]P	REVISED -	
ts85.dgn		DRAWN	-]P	REVISED -	
	PLOT SCALE = 50.0000 '/ in.	CHECKED	-	LP	REVISED -	
Default	PLOT DATE = 9/29/2016	DATE	-	9/29/2016	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

COL
CONT
PROJE
_

 DRAWN BY
 CJC
 DATE
 4/17/2018

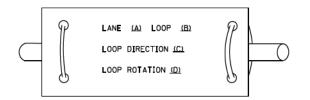
 CHECKED BY
 JFM
 DATE
 4/17/2018



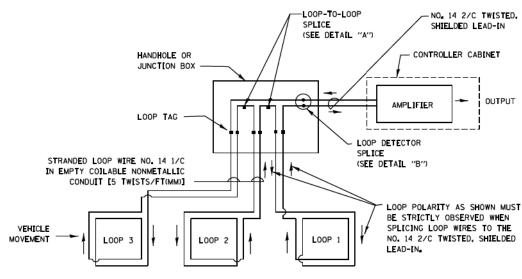


- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

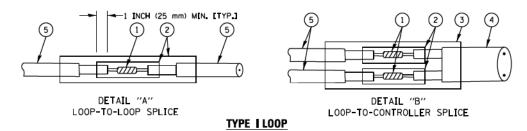


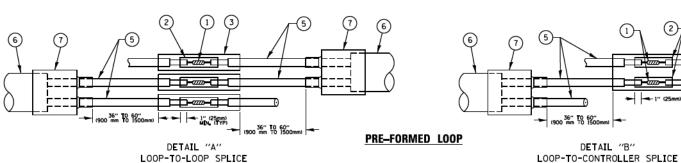
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP "1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "[N" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm)
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





LOOP DETECTOR SPLICE

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

- 5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

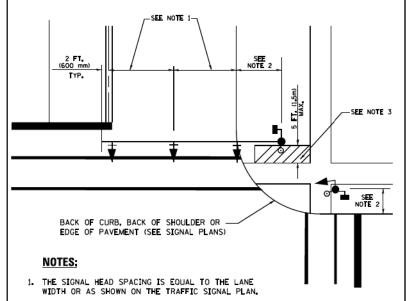
4 NO. 14 2/C TWISTED, SHIELDED CABLE.

Γ	ILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14			DISTRICT ONE	F.A.	SECTION	COUNTY o	TOTAL SHEET SHEETS NO.
	:\pw_work\pwidot\footamj\d0108315\ts05	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS			NIL.		+ + + + + + + + + + + + + + + + + + + +	311113 140
		PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05	CONTRACT	NO.
		PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS STA. TO STA.	FED. ROAD	D DIST, NO. 1 ILLINOIS FED.		

DATE 4/17/2018 CHECKED BY JFM DATE 4/17/2018

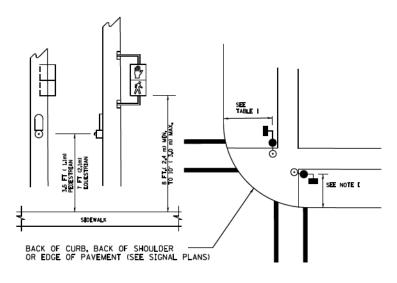






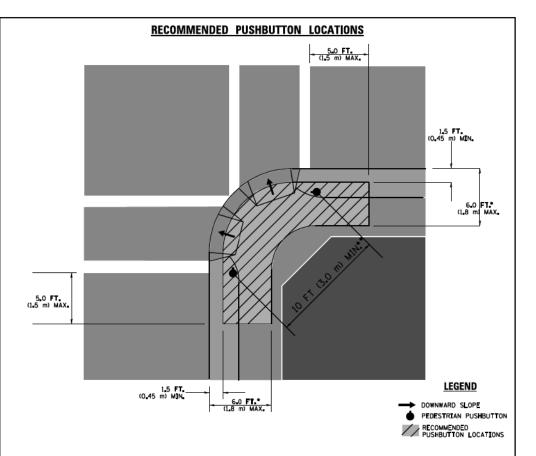
- REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND

PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT [MPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF
- THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1,8m)	SHOULDER WIDTH + 2 FT (0,6m), MINIMUM 10 FT (3,0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1,2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1₄8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
		·

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
c:\pw_work\pwidot\footemj\d0	108315\ts05-dgn	DRAWN - BCK	REVISED -
PLOT SCALE = 50.0000 '/ in.		CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS					RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							TS-05	CONTRACT	NO.	
	SCALE: NONE	SHEET NO. 3 OF 7	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT		

DATE 4/17/2018

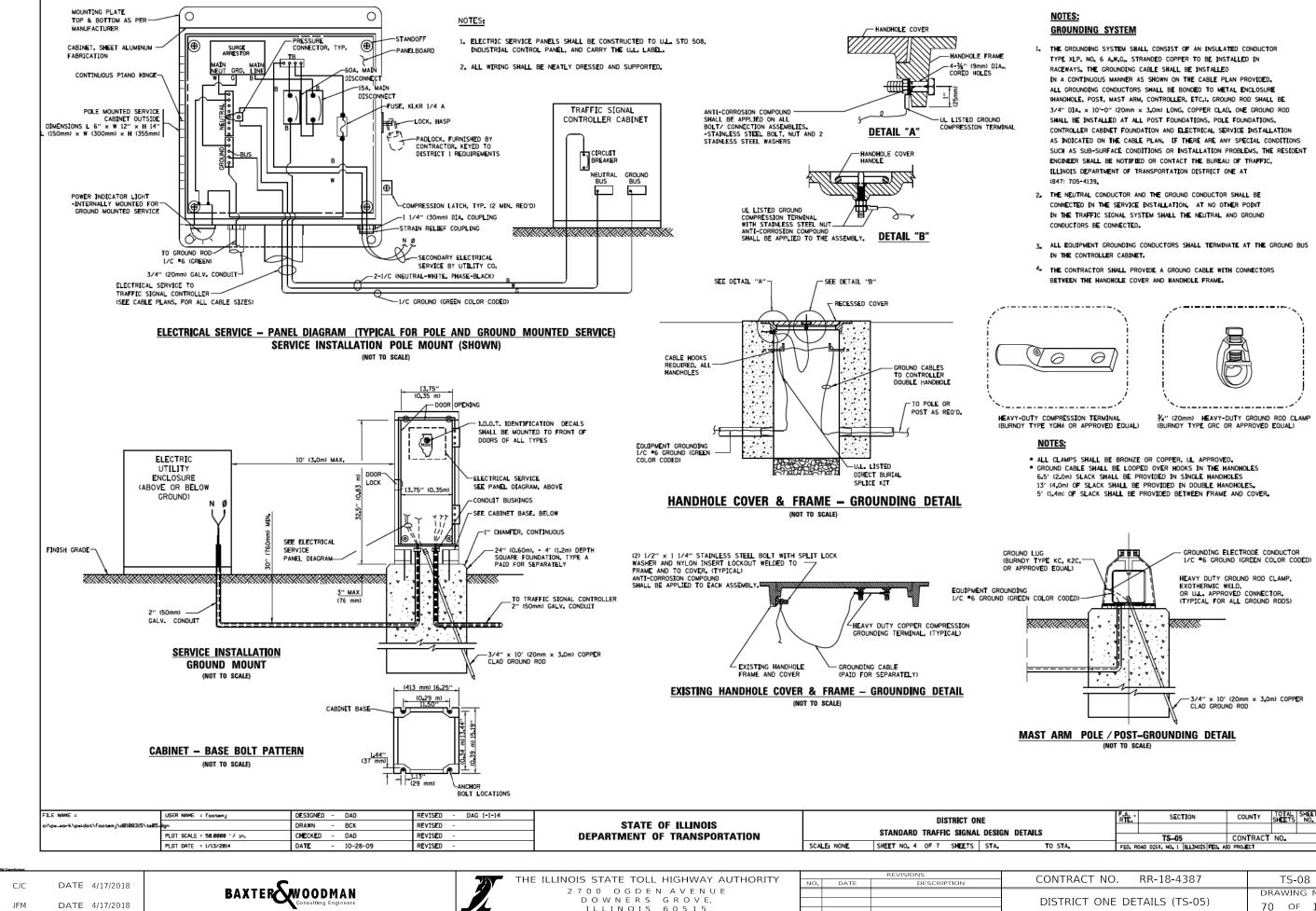
BAXTER WOODMAN



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE. ILLINOIS 60515

CONTRACT NO. RR-18-4387 TS-07 DRAWING NO. DISTRICT ONE DETAILS (TS-05) 69 OF 175

CJC CHECKED BY JFM



CHECKED BY JFM

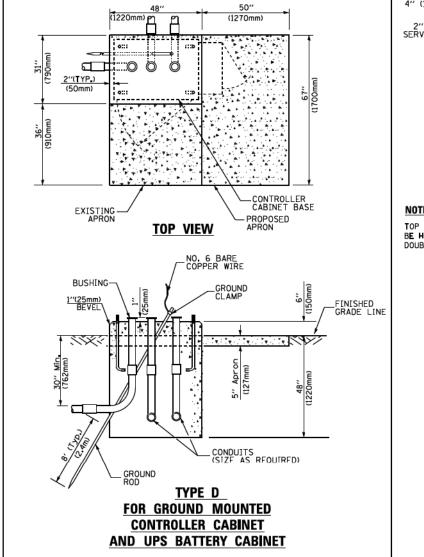
DATE 4/17/2018

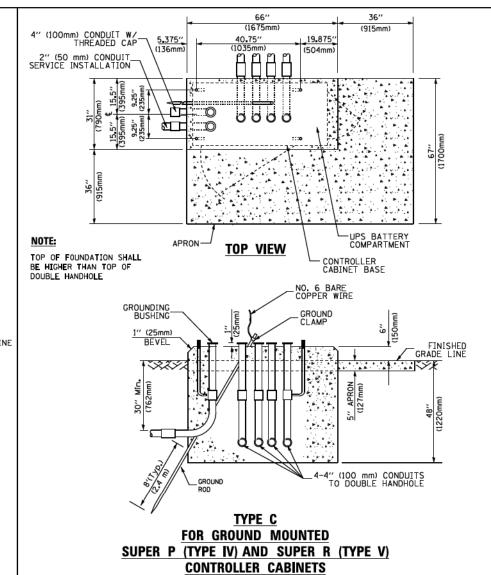




DRAWING NO.

70 OF 175





SEE NOTE 5 (1651mm) 49" (SEE NOTE 3) (1245mm) 44" (19mm) TREATED PHYWOOD DECK (1651mm) 49" (SEE NOTE 4) (1651mm) 49" (SEE NOTE 3) (1245mm) 44" (19mm) TREATED PHYWOOD DECK

TREATED WOOD
48" MIN. [12" MI
6" x 6" (152mm x 152mm) TREATED WOOD POSTS
BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED

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

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

Most Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3-4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 . 6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	CTATE OF HUMBIO		E	F.A.	SECTION	COUNTY	TOTAL SHEET	
c:\pw_work\pw1dot\footemj\d0108315\ts05	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS			NIE.			31213 110	
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05	CONTRACT	NO.	
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	FED. ROAD D			

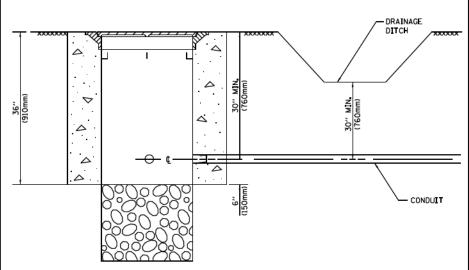
DATE 4/17/2018 CHECKED BY JFM

BAXTER WOODMAN Consulting Engineers



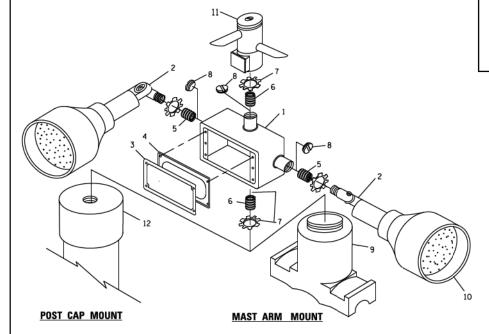
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

	REVISIONS	CONTRACT NO. RR-18-4387	TC 00
DATE	DESCRIPTION	CONTRACT NO. RR-16-4367	TS-09
			DRAWING NO.
		DISTRICT ONE DETAILS (TS-05)	71 OF 175



- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

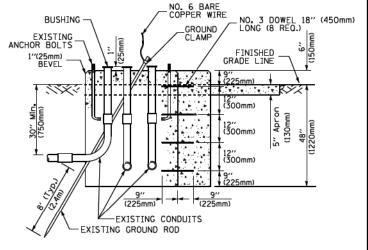
HANDHOLE WITH MINIMUM CONDUIT DEPTH



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

FILE NAME =	USER NAME = footemj	DESIGNED	-	DAD	REVISED	-	DAG 1-1-14
c:\pw_work\pwidot\footemj\d0108315\ts05	DRAWN	-	BCK	REVISED	-		
	PLOT SCALE = 50.0000 '/ 10.	CHECKED	-	DAD	REVISED	-	
	PLOT DATE = 1/13/2014	DATE	-	10-28-09	REVISED	-	

(1675mm) (915mm) 19.875" 5.375" 40.75" (1035mm) (504mm) o::: a dO -CONTROLLER CABINET BASE TOP VIEW
(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

RUBBER COVER GASKET

IDENTIFICATION 1 OUTLET BOX- CALV. 21 CU.IN. (0.000344 CU-M)
2 LAMP HOLDER AND COVER
3 OUTLET BOX COVER

ITEM NO.

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS *2 AND *11 SHALL BE ALUM[NUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM *2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT

7 34 119 mm) LOCKNUT

8 34"(19 mm) HOLE PLUG

9 SADDLE BRACKET - GALV.

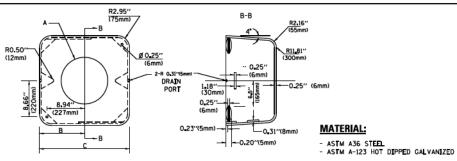
10 6 WATT PAR 38 LED FLOOD LAMP

11 DETECTOR UNIT

12 POST CAP [18 FT. (5.4 m) POST MIN.]

3. WHEN POST MOUNTING IS SPECIFIED, ITEM *9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

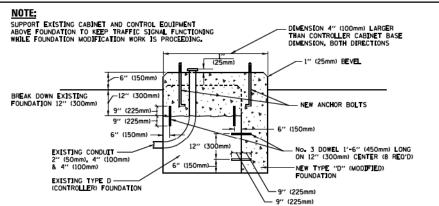
> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**



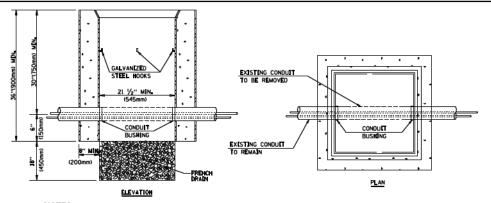
А	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13 _• 0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



MODIFY EXISTING TYPE "D" FOUNDATION



- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

DISTRICT ONE					R TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS									
STANDARD THATTIC SIGNAL DESIGN DETAILS					TS-05	CONTRACT	NO.		
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.						DAD DIST, NO. 1 ILLINOIS FED. A	D PROJECT		

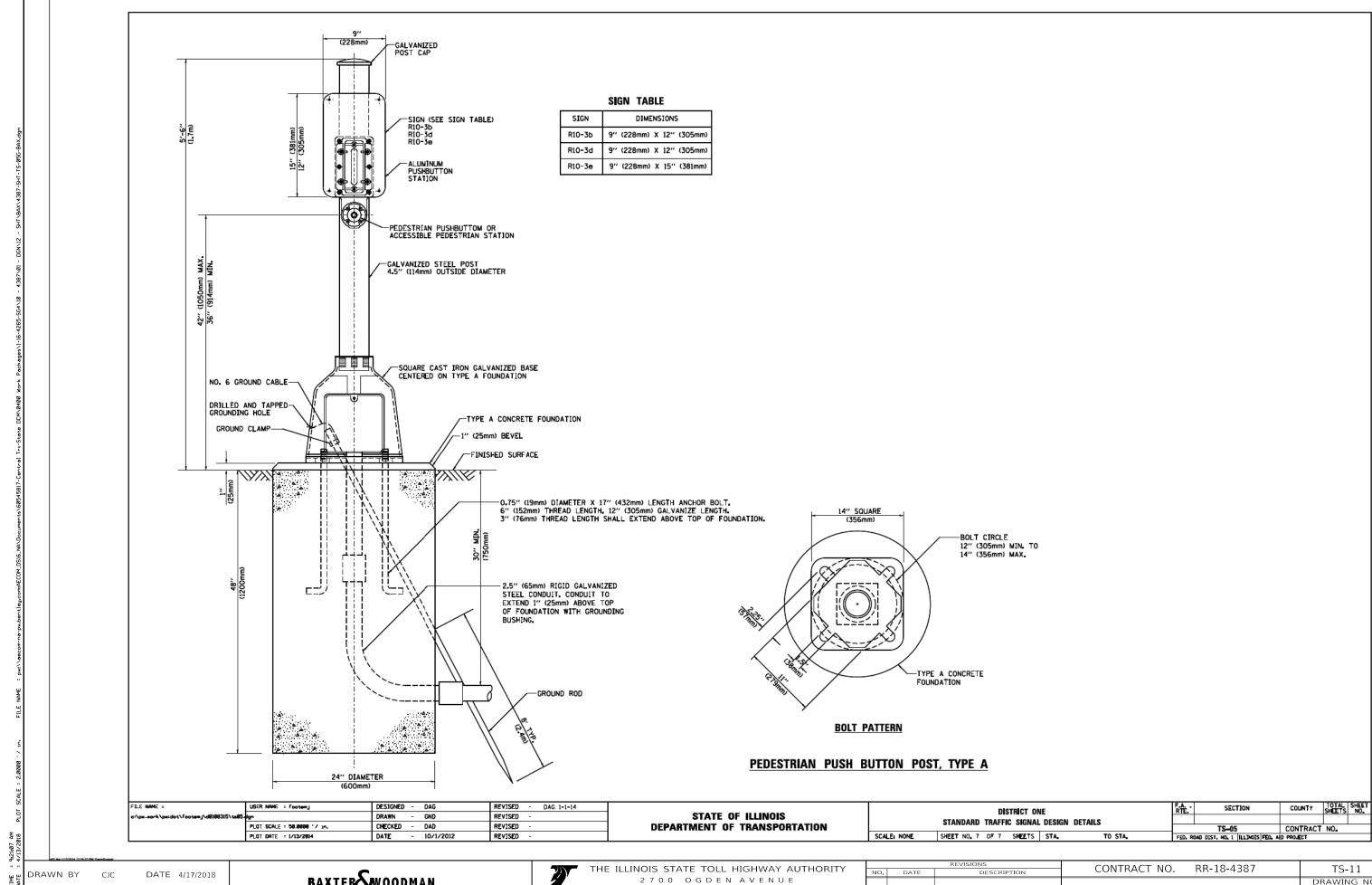
DATE 4/17/2018 CJC CHECKED BY JFM DATE 4/17/2018

BAXTER WOODMAN Consulting Engineers



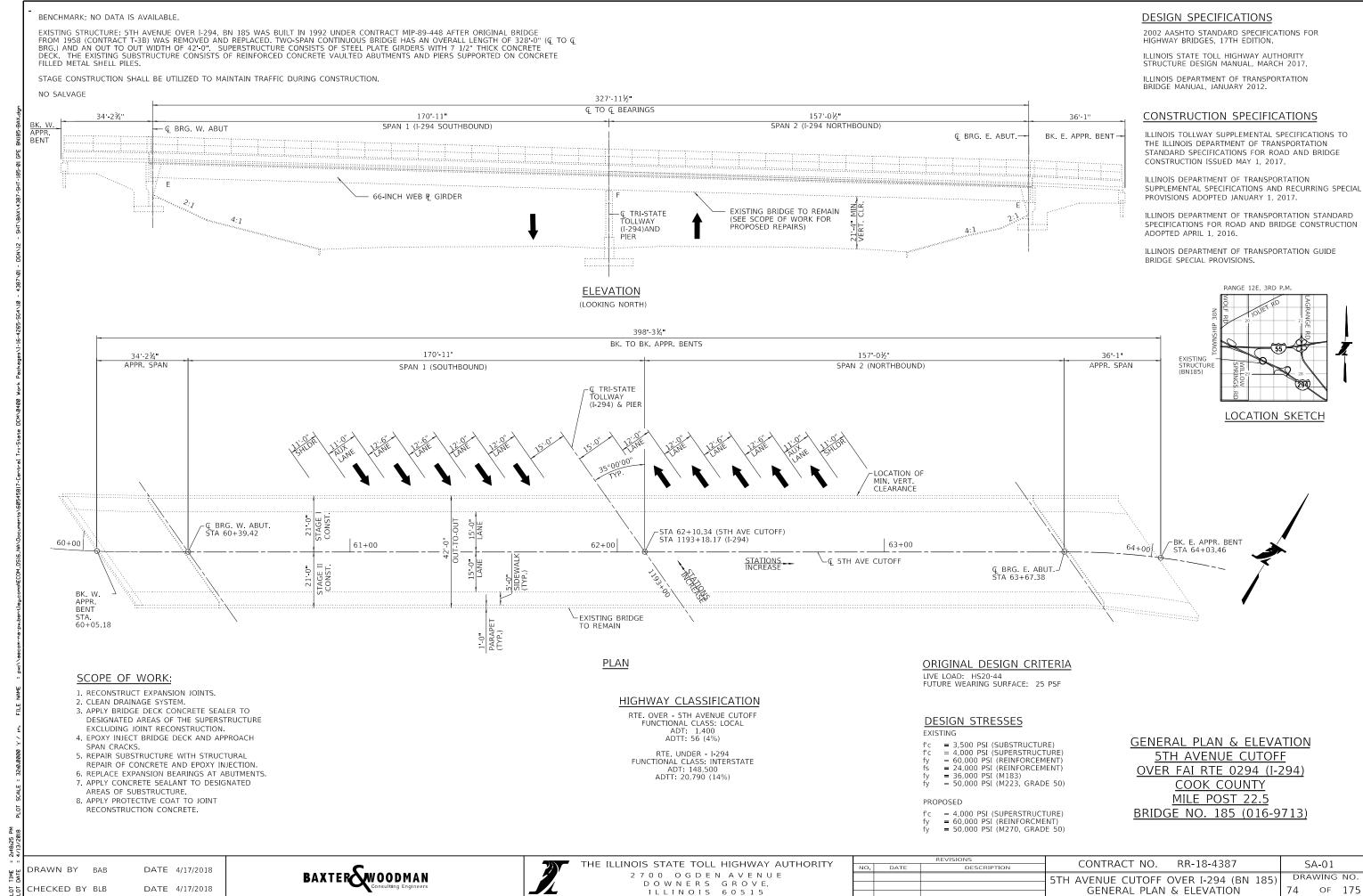
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

		REVISIONS	CONTRACT NO. RR-18-4387	TC 10
	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	TS-10
٦				DRAWING NO.
			DISTRICT ONE DETAILS (TS-05)	72 OF 175



CHECKED BY JFM DATE 4/17/2018 BAXTER WOODMAN Consulting Engineers









		REVISIONS	CONTRACT NO. RR-18-4387	_	Λ Ω 1	
Ю.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307		A-01	
			5TH AVENUE CUTOFF OVER I-294 (BN 185)	DRA	WING	NO.
			GENERAL PLAN & FLEVATION	74	OF	175

GENERAL NOTES

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A $rac{3}{4}$ " X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E) SHALL BE EPOXY COATED.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES", ACI 315.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2 INCHES FOR ALL OTHER SURFACES UNLESS OTHERWISE

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE

CONCRETE SEALANT SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS, INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS. SEALANT SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS IN THE MEDIAN OR PIERS AND ABUTMENTS THAT ARE ADJACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

COST OF SAWCUTTING IS INCLUDED WITH CONCRETE REMOVAL.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S

MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

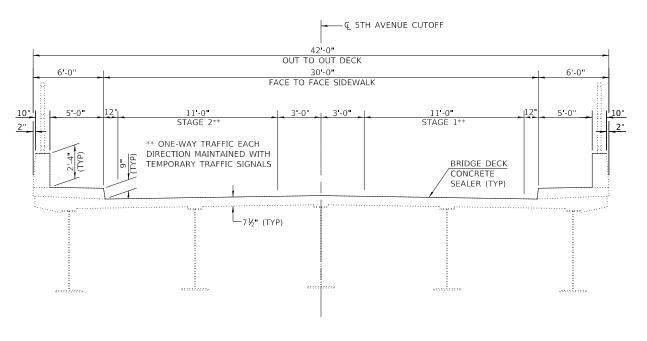
	TOTAL BILL OF MATERIAL							
PAY ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY				
50102400	CONCRETE REMOVAL	CU YD	14.4					
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.6					
50300300	PROTECTIVE COAT	SQ YD	39					
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,650					
50800515	BAR SPLICERS	EACH	14					
52000110	PREFORMED JOINT STRIP SEAL	FOOT	102					
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	10					
JS121101	DRILL AND GROUT DOWEL BARS AND ANCHOR RODS	EACH	20					
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	714					
JT503040	STRUCTURAL REPAIR OF CONCRETE	SQ FT	9					
	(DEPTH EQUAL TO OR LESS THAN 5 IN.)							
JT524010	APPLY CONCRETE SEALANT	SQ FT	2,987					
JT602831	CLEAN DRAINAGE SYSTEM, LOCATION NO. 1	EACH	1					
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	22,046					
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	10					

ABBREVIATIONS

ABUT.	ABUTMENT	EX.	EXISTING
APPR.	APPROACH	IN.	INCH
AVE.	AVENUE	MIN.	MINIMUM
BK	BACK	N	NORTH
BN	BRIDGE NUMBER	NB	NORTHBOUND
BRG.	BEARING	NO.	NUMBER
C&G	CURB AND GUTTER	RD.	ROAD
CLR.	CLEAR	S	SOUTH
CONST.	CONSTRUCTION	SB	SOUTHBOUND
CTS.	CENTERS	SHLDR.	SHOULDER
DIA.	DIAMETER	SQ.	SQUARE
E	EAST	STA.	STATION
EB	EASTBOUND	TYP.	TYPICAL
EST.	ESTIMATED	VERT.	VERTICAL
EX.	EXISTING	W	WEST
		WB	WESTBOUND

INDEX OF SHEETS

SA-01.	GENERAL PLAN & ELEVATION
SA-02.	GENERAL NOTES & BILL OF MATERIAL
SA-03.	ABUTMENT REPAIR DETAILS
SA-04.	PIER REPAIR DETAILS
SA-05.	BEARING REPLACEMENT DETAILS
SA-06.	EXISTING BEARING DETAILS
SA-07	DECK REPAIR DETAILS
SA-08.	EXPANSION JOINT REPAIRS I
SA-09.	EXPANSION JOINT REPAIRS II
SA-10.	PREFORMED JOINT STRIP SEAL
SA-11.	BAR SPLICER DETAILS



CROSS SECTION

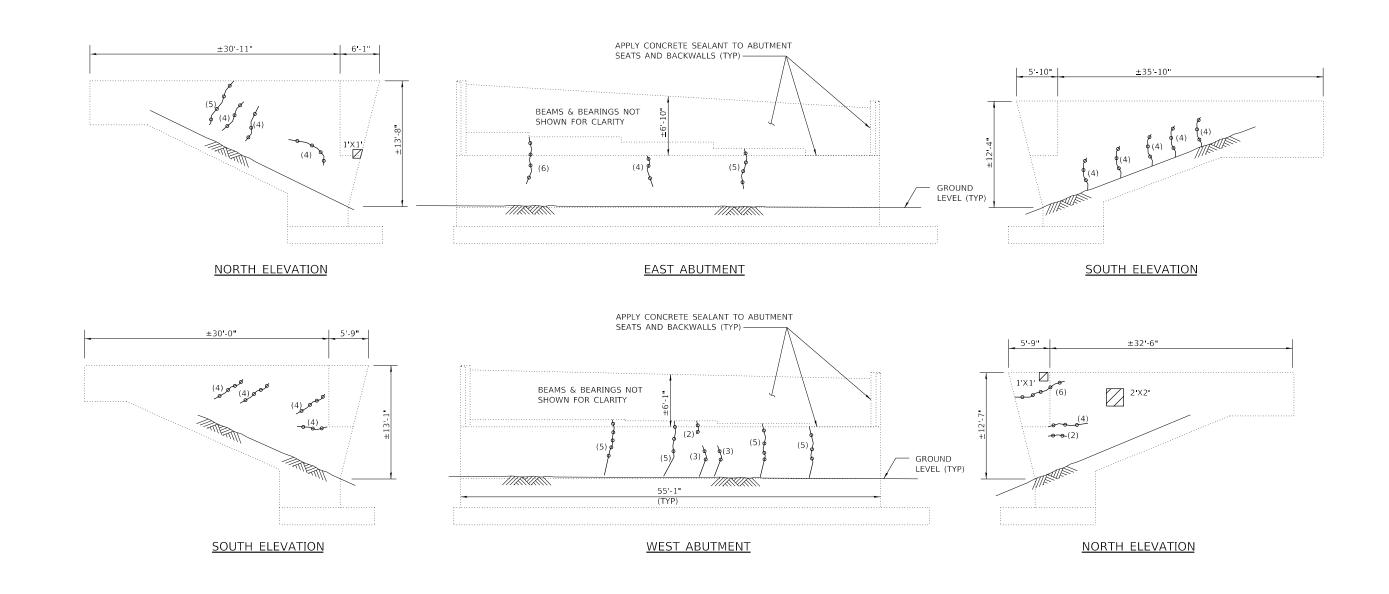
DRAWN BY DATE 4/17/2018





CHECKED BY BLB

DATE 4/17/2018



<u>NOTES</u>

REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.

<u>LEGEND</u>



STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)



LOW PRESSURE EPOXY INJECTION (EST. LENGTH IN FEET)

TOTAL BILL OF MATERIAL

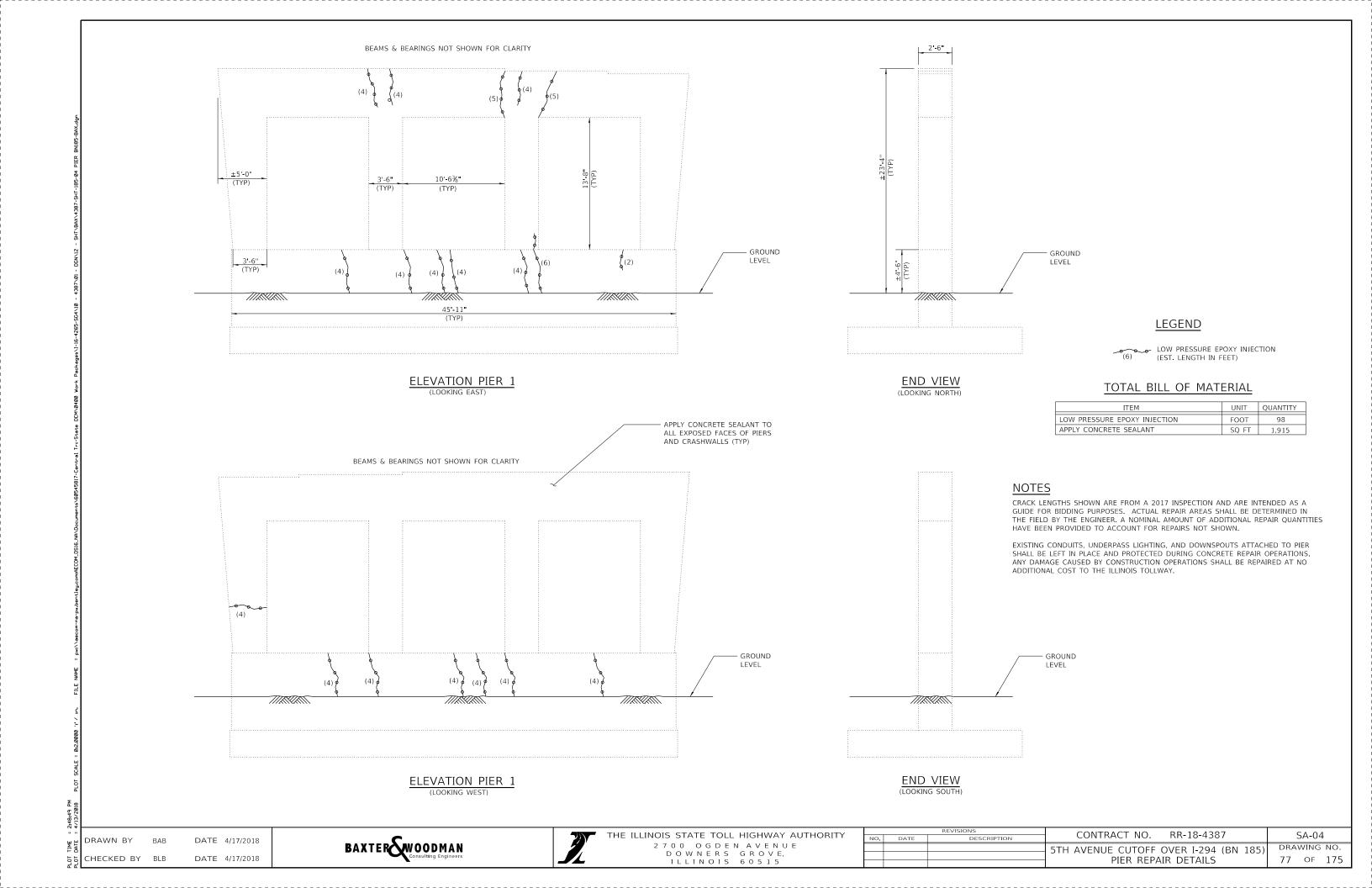
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	9
LOW PRESSURE EPOXY INJECTION	FOOT	135
APPLY CONCRETE SEALANT	SQ FT	1,072

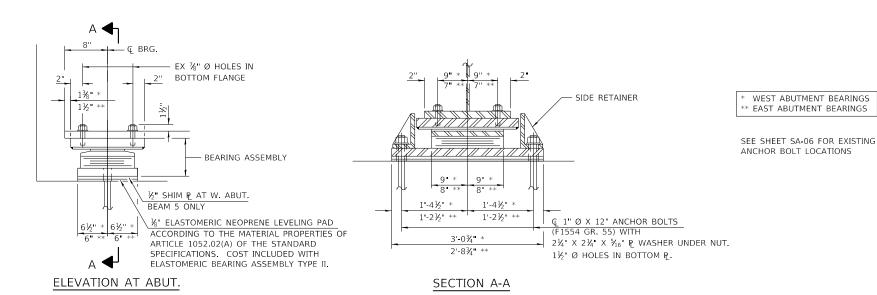
DRAWN BY BAB DATE 4/17/2018

CHECKED BY BLB DATE 4/17/2018







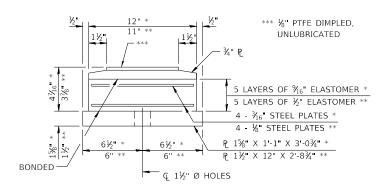


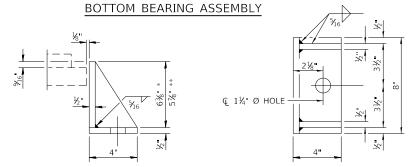
TYPE II ELASTOMERIC EXP. BRG.

1-11/4 * 1-1" ** P 113/16" X 1'-11/4" X 2'-41/2" * 91/4" * P VARIES 1¾" TO 2½" X 1'-1" X 2'-0½" **

HEX. NUT. (4 REQ'D.) ¼" MAX. C.F.W. 6" STAINLESS STEEL

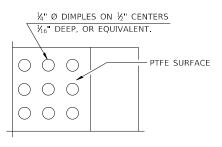
TOP BEARING ASSEMBLY





SIDE RETAINER

EQUIVALENT ROLLED ANGLE WITH STIFFENERS WILL BE ALLOWED IN LIEU OF WELDED PLATES.



BEAM REACTIONS

(K)

(K)

R TOTAL

(K) 95.8

(K) 164.9

59.1

10.0

W. ABUT. E. ABUT.

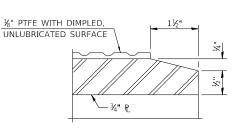
79.9

55.6

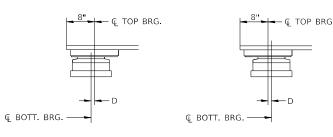
9.8

145.3

PLAN-PTFE SURFACE



SECTION THRU PTFE



BELOW 50°F. D=%" PER EACH 100' OF EXPANSION FOR EVERY 15° TEMP. CHANGE FROM THE NORMAL TEMP. OF 50°F.

EXPANSION BEARING ORIENTATION

THE ABOVE DIAGRAMS ARE FOR INFORMATIONAL PURPOSES ONLY TO SHOW THE AMOUNT OF EXPECTED OFFSET "D" FOR THE CURRENT TEMPERATURE IN THE FIELD.

BAXTER WOODMAN Consulting Engineers



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

REVISIONS	CONTRACT NO. RR-18-4387	CAOE		
NO. DATE DESCRIPTION	CONTRACT NO. RR-10-4307	SA-05		
	5TH AVENUE CUTOFF OVER I-294 (BN 185)	DRAWING NO.		
	BEARING REPLACEMENT DETAILS	78 OF 175		
	DEARING REFLACEMENT DETAILS	78 0 173		

DIAPHRAGM REMOVAL AND REINSTALLATION MAY BE REQUIRED TO FACILITATE DRILLING HOLES. COST INCLUDED WITH ELASTOMERIC BEARING ASSEMBLY, TYPE II.

PRIOR TO ORDERING ANY MATERIAL, THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL BEARING HEIGHT AND SHIM THICKNESS DIMENSIONS. ADJUSTMENT MUST ACCOUNT FOR DECK HEAVE DUE TO PACK RUST (IF PRESENT).

MIN. JACK CAPACITY = 125 TONS.

ANCHOR BOLTS SHALL BE ASTM F1554 ALL-THREAD (OR AN ENGINEER-APPROVED ALTERNATE MATERIAL) OF THE GRADE(S) AND DIAMETER(S) SPECIFIED. THE CORRESPONDING SPECIFIED GRADE OF AASHTO M314 ANCHOR BOLTS MAY BE USED IN LIEU OF ASTM F1554.

SIDE RETAINERS AND OTHER STEEL MEMBERS REQUIRED FOR THE ELASTOMERIC BEARING ASSEMBLY SHALL BE INCLUDED IN THE

COST OF ELASTOMERIC BEARING ASSEMBLY, TYPE II.
THE STRUCTURAL STEEL PLATES OF THE BEARING ASSEMBLY
SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270 GRADE 50.

THE $\frac{1}{2}$ " PTFE SHEET SHALL BE BONDED DIRECTLY TO THE TOP STEEL PLATE WITH A TWO-COMPONENT, MEDIUM VISCOSITY EPOXY RESIN, CONFORMING TO THE REQUIREMENTS OF THE FEDERAL SPECIFICATION MMM-A-134, TYPE I. THE BOND AGENT SHALL BE APPLIED ON THE FULL AREA OF THE CONTACT SURFACES. COST INCLUDED WITH ELASTOMERIC BEARING

BONDING OF %" PTFE SHEET DURING VULCANIZING PROCESS WILL BE PERMITTED PROVIDED THE PROCESS AND METHOD OF ADJUSTING ASSEMBLY HEIGHT IS APPROVED BY THE ENGINEER. COST INCLUDED WITH ELASTOMERIC BEARING ASSEMBLY.

BILL OF MATERIAL

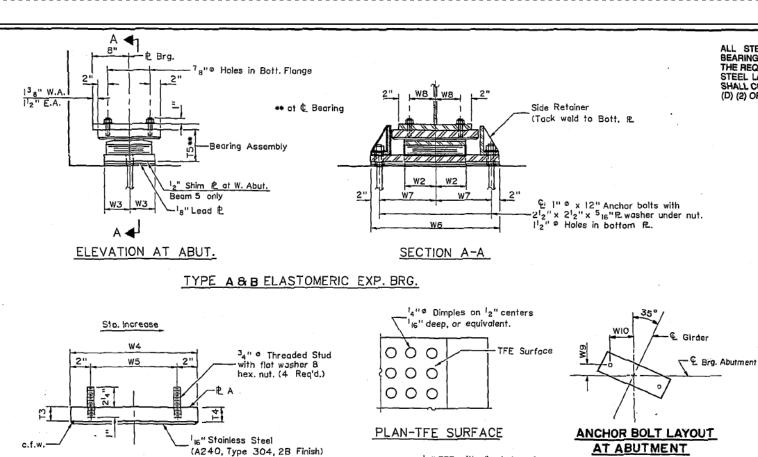
ITEM	UNIT	TOTAL
JACK AND REMOVE EXISTING BEARINGS	EACH	10
ELASTOMERIC BEARING ASSEMBLY TYPE II	EACH	10
DRILL AND GROUT DOWEL BARS AND ANCHOR RODS	EACH	20

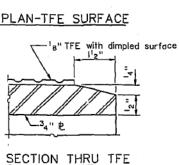
CHECKED BY BLB

¾" Ø THREADED STUD

WITH FLAT WASHER &

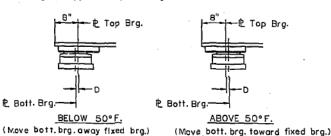
DATE 4/17/2018 DATE 4/17/2018





Note: The $^{1}8^{"}$ TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of $^{\rm I}{\rm g}^{\rm w}$ TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SETTING ANCHOR BOLTS AT EXP. BRG.

D=1g" per each 100 of expansion for every 15° temp.
change from the normal temp. of 50°F.

P. 2³4"x23"x9"

P. 3"x32¹2"x18"

18" Shim P. req'd for Beam 2

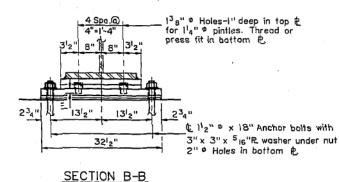
2⁵8"

18" Lead P.

B. T. Shim P. req'd for Beam 3

Notes: Anchor bolts at fixed bearings may be built into the masonry.

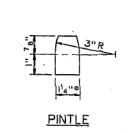
See sheet #8 for Anchor Bolt installation.

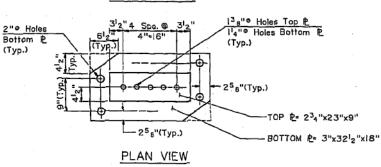


ELEVATION AT PIER

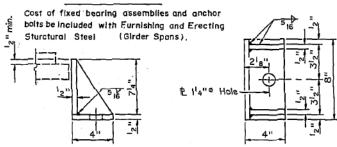
ALL STEEL PLATES USED AS COMPONENTS OF FIXED BEARINGS, AND ELASTOMERIC BEARINGS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M223 EXCEPT THE INTERNAL

STEEL LAMINATES OF THE ELASTOMERIC BEARINGS WHICH SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1115.2 (D) (2) OF THE STANDARD SPECIFICATIONS.





FIXED BEARING



SIDE RETAINER Equivalent ralled angle with stiffeners will be allowed in lieu of welded plates. Total number required = 20

SCHEDULE OF BEARING DIMENSIONS

	20.1		<u> </u>		11110			10.10					
TYPE	LOCATION	No. REQ'D	WI	W2	W3	W4	₩5	W6	W7.	8W	W9	WIO	
Α	W. ABUT.	5	12"	9"	612"	1314"	914"	321 ₂ 1	144"	9"	8 '8"	11 5 ₆ "	_
В	E. ABUT.	5	11"	8"	6"	13"	8"	28121	1214"	7"	7 "	10"	
								·					_

17 is" 112" 2" 178" 75 is" Varies 2" to 178" X34" X24" 112" X3212" X13" 378" 138" 218" 138" 75 is" Varies 214" to 134" X13" X20" 138" X2812" X12"

BILL OF MA	TERIAL	
Item	Unit	Total
Elastomeric Bearings Type A	Each	5
Elastomeric Bearings Type B	Each	5

	Elastomeric Type B	Bear ings	ĺ
D-STEE	L P's		_

ISSUED FOR CONSTRUCTION

1 1992

II OF 23

DRAWING NO.

CHECKED. BGH. SCALE.NO. SCALE.

TOP BEARING ASSEMBLY

BOTTOM BEARING ASSEMBLY

COST OF BEARING ASSEMBLIES, SIDE RETAINERS, MASONRY PLATES, SOLE PLATES, SHIM PLATES, LEAD PLATES AND ANCHOR BOLTS SHALL BE INCLUDED IN THE UNIT PRICE PER EACH FOR ELASTOMERIC BEARING OF THE TYPE SPECIFIED.

5 Layers of C"

Elastomer (55 Durometer)

MTA INCORPORATED

CONSULTING ENGINEERS

CHICAGO - SPRINGFIELD - INDIANAPOLIS



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

TYPE TI T2 T3 T4 T5

EAST - WEST TOLLWAY AND MIDWEST ROAD OAK BROOK, ILLINOIS 6052!

9-G-94 RECORD PRAYING
A. C. O.L. STORMER PRODUCTION
9-G-94 RECORD PRAWING

CONTRACT MIP-89-448

5-TH AVENUE OVER
TRI-STATE TOLLWAY
BEARING DETAILS

/55.0F.274

FOR INFORMATION ONLY

 DRAWN BY
 AS
 DATE
 4/17/2018

 CHECKED BY
 BLB
 DATE
 4/17/2018

BAXTER WOODMAN Consulting Engineers

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

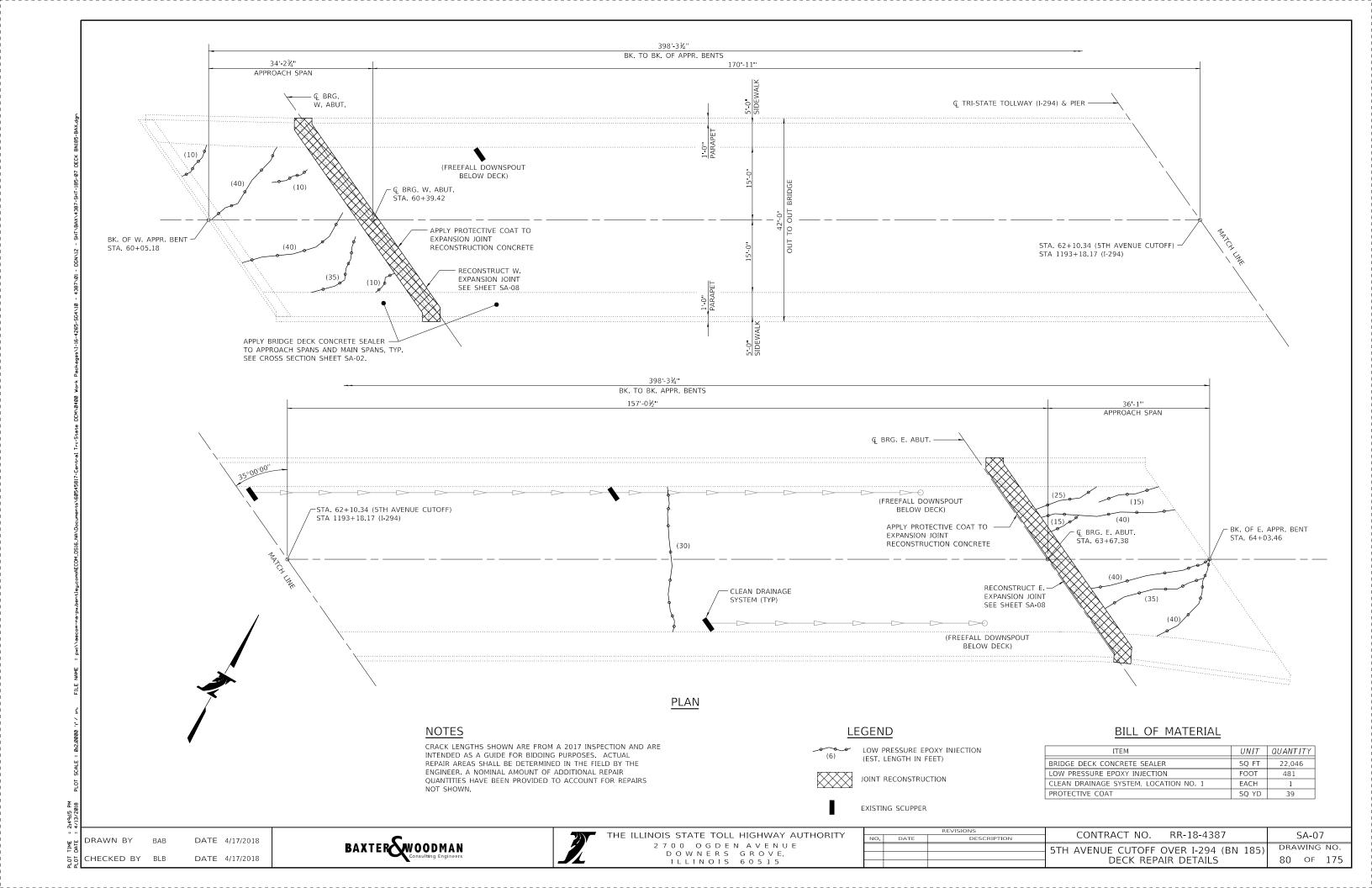
2 7 0 0 0 G D E N A V E N U E

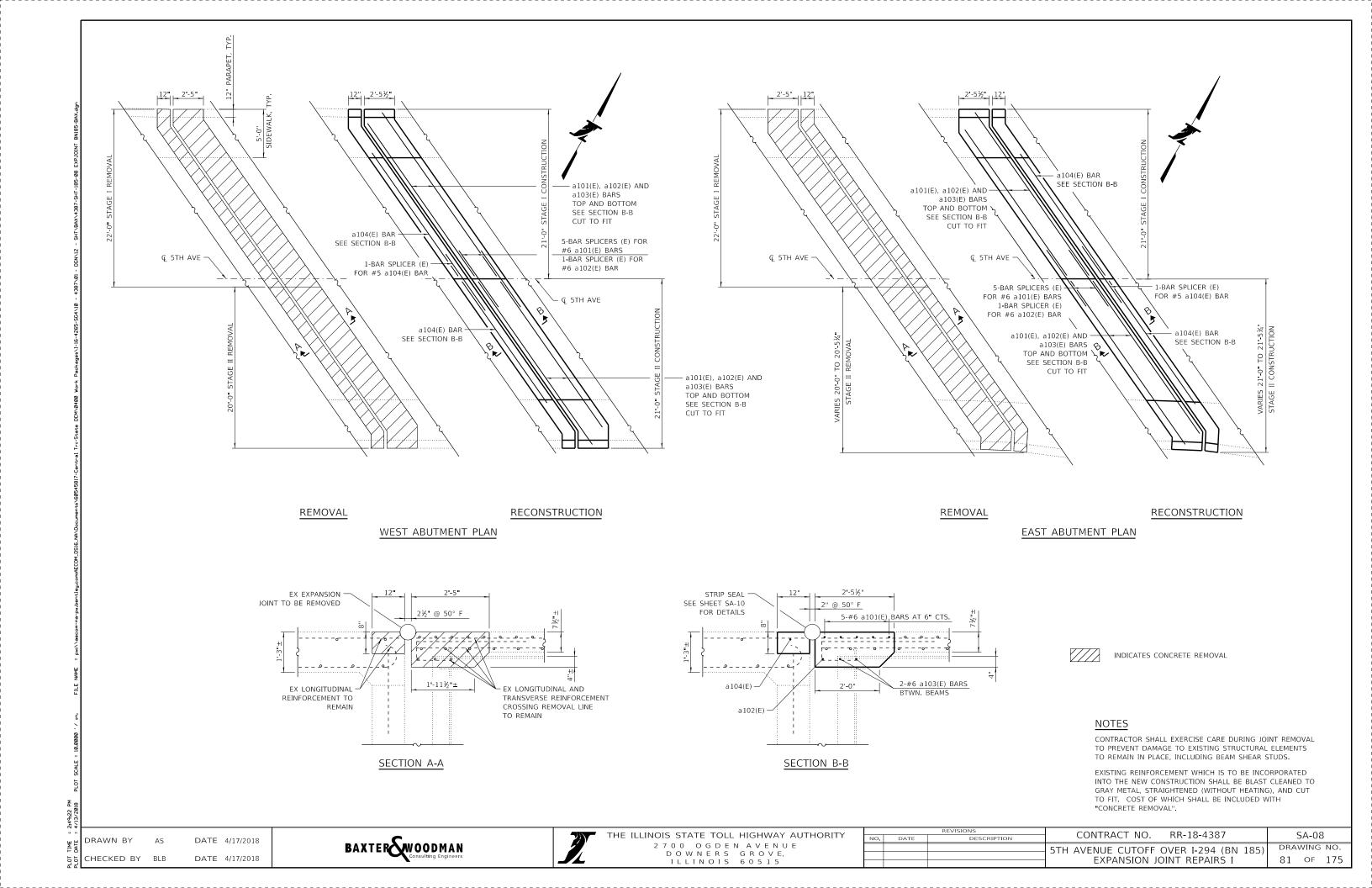
D O W N E R S G R O V E,

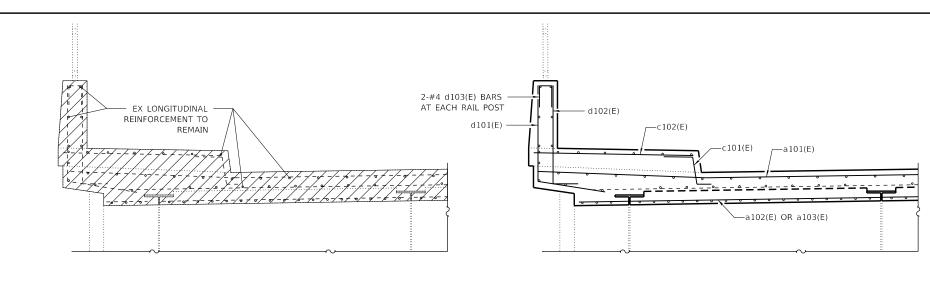
I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SA-06

STH AVENUE CUTOFF OVER I-294 (BN 185)
EXISTING BEARING DETAILS 79 OF 175







REMOVAL

RECONSTRUCTION

NOTE

EXISTING FENCE POSTS AND ANCHORAGE DEVICES ADJACENT TO EXPANSION JOINTS SHALL BE MAINTAINED IN PLACE, CLEANED AND INCORPORATED INTO NEW CONSTRUCTION, TYP. 2 POSTS EACH CORNER. COST INCLUDED WITH CONCRETE REMOVAL.

AT BRIDGE DECK 2-#4 d103(E) BARS AT EACH RAIL POST REMAIN 2-0" REMAIN TRANSVERSE BAR TRANSVERSE BAR

SECTION THRU SIDEWALK, PARAPET & SOFFIT

INDIC

a101(E) 20

a102(E) 8

SUPERSTRUCTURE

EXPANSION JOINT REPAIRS

BILL OF MATERIAL

SIZE

#6

#6

#5

#5

#5

#4

#6

#4

#6 25'-0"

23'-7**"**

10'-2"

18 -8"

2'-5"

6-11

5 - 4"

4 - 3

2'-1"

CU. YD.

POUND

EACH

CU. YD.

14.4

1,650

14

14.6

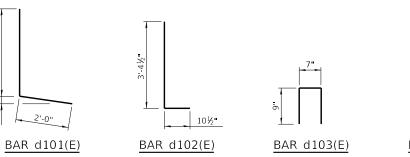
INDICATES CONCRETE REMOVAL

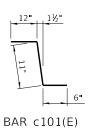
3-#5 c101(E) BARS @ 12" CTS. 3-#5 c102(E) BARS @ 12" CTS. CUT TO FIT 3-#6 d102(E) BARS @ 12" CTS. (I.F.) 3-#4 d101(E) BARS @ 12" CTS. (O.F.)

RECONSTRUCTION PLAN

SOUTH END OF JOINT AT WEST ABUTMENT SHOWN; OTHERS SIMILAR

SECTION THRU SIDEWALK, PARAPET & SOFFIT AT APPROACH SPAN





RECONSTRUCTION

	a103(E)	16
	a104(E)	4
	c101(E)	12
	c102(E)	16
	d101(E)	12
	d102(E)	12
	d103(E)	16
ı	CONCRETE	REMOVA
_	REINFORCE	MENT B
	EPOXY COA	TED
	BAR SPLICE	RS
	CONCRETE	

 DRAWN BY
 AS
 DATE
 4/17/2018

 CHECKED BY
 BLB
 DATE
 4/17/2018

BAXTER WOODMAN Consulting Engineers



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

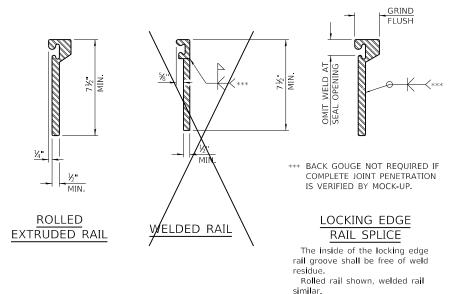
REMOVAL

	REVISIONS	CONTRACT NO.	RR-18-4387		C A . O.C	`
DATE	DESCRIPTION	CONTRACT NO.	NN-10-4307		SA-09	9
		5TH AVENUE CUTOES (OVER I-294 (BN 185)	DRA	WING	NO.
		5TH AVENUE CUTOFF OVER I-294 (BN 185) FXPANSION JOINT REPAIRS II		ดว	OF	175
		LAFANSION JO	IIII KLFAIKS II	02	Oi	1/5

SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT

GRANULAR OR SOLID FLUX FILLED HEADED STUDS CONFORMING TO ARTICLE 1006.32 OF THE STD. SPECS., AUTOMATICALLY END WELDED.



¾" Ø X 8" STUDS TOP OF SIDEWALK EDGE RAIL

TYPICAL END TREATMENT AT SIDEWALK

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 CONCEPTUAL ONLY, EXCEPT FOR THE MINIMUM DIMENSIONS SHOWN. THE ACTUAL CONFIGURATION OF THE LOCKING EDGE RAILS AND MATCHING STRIP SEAL MAY VARY FROM MANUFACTURER TO MANUFACTURER. FLANGED EDGE RAILS WILL NOT BE ALLOWED. LOCKING EDGE RAILS MAY BE SPLICED AT SLOPE DISCONTINUITIES.

THE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS SHALL BE FOLLOWED.

THE WELDED RAIL EXPANSION JOINT ALTERNATE IS NOT ALLOWED FOR BRIDGE NUMBER 185.

ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION ACCORDING TO ARTICLE 520.03 OF THE STANDARD SPECIFICATIONS. MAXIMUM SPACE BETWEEN RAIL SEGMENTS SHALL BE 3/16",

SEALED WITH A SUITABLE SEALANT. JOINTS IN RAILS WITHIN 10 FT. OF CURBS SHALL BE WELDED.

SHOP DRAWINGS FOR THE STRIP SEAL EXPANSION JOINTS SHALL BE SUBMITTED TO THE COOK COUNTY DEPARTMENT OF TRANSPORTATION AND HIGHWAYS FOR REVIEW AND APPROVAL PRIOR TO JOINT FABRICATION.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
PREFORMED JOINT STRIP SEAL	FOOT	102

BAXTER WOODMAN Consulting Engineers



LOCKING EDGE RAILS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

CONTRACT NO. RR-18-4387 SA-10 DRAWING NO. 5TH AVENUE CUTOFF OVER I-294 (BN 185) PREFORMED JOINT STRIP SEAL 83 OF 175

CHECKED BY BLB

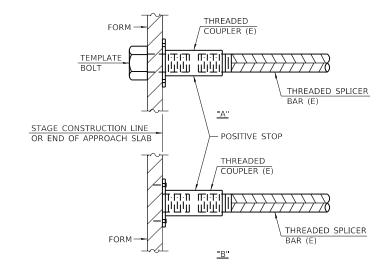
DATE 4/17/2018 DATE 4/17/2018

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + $1\frac{1}{2}$ " + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
JOINT RECONSTRUCTION	#5	2	3'-3"
JOINT RECONSTRUCTION	#6	12	3'-10"



INSTALLATION AND SETTING METHODS

"A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT. "B": SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.

(E): INDICATES EPOXY COATING.

NOTES

SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.

ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS
FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS. SEE IDOT "QUALIFIED PRODUCTS LIST" OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

AS DATE 4/17/2018 DATE 4/17/2018





DRAWN BY CHECKED BY BLB

BENCHMARK: NO DATA IS AVAILABLE. EXISTING STRUCTURE: WILLOW SPRINGS ROAD OVER I-294. BN 187 WAS BUILT IN 1992 UNDER CONTRACT MIP-90-456 AFTER ORIGINAL BRIDGE FROM 1958 (CONTRACT T-3B) WAS REMOVED AND REPLACED. TWO-SPAN BRIDGE HAS OVERALL LENGTH OF 241-6" (Q TO Q BRG.) AND AN OUT TO OUT WIDTH OF 70'-0". SUPERSTRUCTURE CONSISTS PRECAST CONCRETE GIRDERS WITH 7 1/2" THICK CONCRETE DECK. THE EXISTING SUBSTRUCTURE CONSISTS OF REINFORCED CONCRETE VAULTED ABUTMENTS AND PIERS SUPPORTED ON CONCRETE FILLED METAL SHELL PILES. € TO € BEARINGS 41 9% STAGE CONSTRUCTION SHALL BE UTILIZED TO MAINTAIN TRAFFIC 120'-9" 120 9 APPR SPAN SPAN 1 (I-294 SOUTHBOUND) SPAN 2 (I-294 NORTHBOUND) APPR. SPAN © BRG. N. ABUT. DURING CONSTRUCTION. G TRI-STATE TOLLWAY BK. N. APPR. (Ī-294) AND PIER ℚ BRG. S. ABUT. NO SALVAGE. BENT BENT *ELEV. 685.59 EXISTING BRIDGE TO REMAIN 63-INCH 14 - 11½ MIN. (SEE SCOPE OF WORK FOR STEEL P PROPOSED REPAIRS) VERT. CLR. GIRDER **ELEVATION** (LOOKING WEST) 316'-7¾" Ç TO Ç APPR. BENTS 33'-3%" 41 9% APPR. SPAN SPAN 1 (SOUTHBOUND) SPAN 2 (NORTHBOUND) APPR. SPAN LOCATION OF – MIN. VERT. CLEARANCE (BN187) TYP BK. S. APPR. BENT - Ç WILLOW SPRINGS RD. STA 18+45.27 21+00 STATIONS STA 19+99.34 (WILLOW SPRINGS RD.) - Ç BRG. S. ABUT. STA 18+78.59 - C BRG. N. ABUT. - BK. N. APPR. BENT INCREASE STA 1205+80.32 (I-294) STA 21+20.09 STA 21+61.91 TRI-STATE TOLLWAY (Ī-294) AND PIER — EXISTING BRIDGE TO REMAIN PLAN SCOPE OF WORK: 1. RECONSTRUCT EXPANSION JOINTS. HIGHWAY CLASSIFICATION 2. CLEAN DRAINAGE SYSTEM. 3. APPLY BRIDGE DECK CONCRETE CRACK SEALER RTE. OVER - WILLOW SPRINGS ROAD TO APPROACH SLABS. FUNCTIONAL CLASS: MINOR ARTERIAL 4. APPLY BRIDGE DECK CONCRETE SEALER TO ADT: 10,300 DESIGNATED AREAS OF THE SUPERSTRUCTURE ADTT: 206 (2%) EXCLUDING JOINT RECONSTRUCTION 5. APPLY CONCRETE SEALANT TO DESIGNATED RTE. UNDER - I-294 AREAS OF SUBSTRUCTURE. FUNCTIONAL CLASS: INTERSTATE 6. REPAIR CONCRETE CURB. ADT: 137.000

DESIGN SPECIFICATIONS

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS STATE TOLL HIGHWAY AUTHORITY STRUCTURE DESIGN MANUAL, MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, JANUARY 2012.

CONSTRUCTION SPECIFICATIONS

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS.



ORIGINAL DESIGN CRITERIA

LIVE LOAD: HS20-44 FUTURE WEARING SURFACE: 25 PSF

DESIGN STRESSES

EXISTING

= 3,500 PSI (SUBSTRUCTURE)

3,500 PSI (SUPERSTRUCTURE)

= 5,000 PSI (36" PPC BEAMS)

4,000 PSI (36" PPC BEAMS)

6,000 PSI (63" PPC BEAMS)

5,000 PSI (63" PPC BEAMS)

60,000 PSI (REINFORCEMENT)

= 36,000 PSI (M183)

= 270,000 PSI (0.5 O STRESS RELIEVED)

= 189,000 PSI (0.5 ° Ø STRESS RELIEVED)

f'c = 4,000 PSI (SUPERSTRUCTURE)fy = 60,000 PSI (REINFORCEMENT)

GENERAL PLAN & ELEVATION WILLOW SPRINGS ROAD OVER FAI RTE 0294 (I-294) COOK COUNTY MILE POST 22.8 BRIDGE NO. 187 (016-0538)

DATE 4/17/2018 DATE 4/17/2018 CHECKED BY BLB

9. SCARIFY BRIDGE DECK.

7. REPAIR SUBSTRUCTURE WITH STRUCTURAL

8. CLEAN & PAINT EXPANSION BEARINGS.

11. APPLY PROTECTIVE COAT TO JOINT RECONSTRUCTION CONCRETE.

REPAIR OF CONCRETE AND EPOXY INJECTION.

10. APPLY THIN POLYMER BRIDGE DECK OVERLAY.





THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

ADTT: 19,180 (14%)

	REVISIONS	CONTRACT NO. RR-18-4387		CD O	1
DATE	DESCRIPTION	CONTRACT NO. RR-18-4387		SB-0	1
		WILLOW SPRINGS RD OVER I-294 (BN 187)	DRA'	WING	NO.
		GENERAL PLAN & ELEVATION	85	OF	175
		SEIVELVILE FEXITY & EEEEVITTON	0.5		1,5

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE, CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2 INCHES FOR ALL OTHER SURFACES UNLESS OTHERWISE

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED. BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER

CONCRETE SEALANT SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS SEALANT SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS (INCLUDING DIAPHRAGMS) IN THE MEDIAN OR PIERS AND ABUTMENTS THAT ARE ADJACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

COST OF SAWCUTTING IS INCLUDED WITH CONCRETE REMOVAL.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF UNIESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR, SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE. AND THE RISK OF MAKING EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

ABBREVIATIONS

ABUT.	ABUTMENT	EX.	EXISTING
APPR.	APPROACH	IN.	INCH
AVE.	AVENUE	MIN.	MINIMUM
BK	BACK	N	NORTH
BN	BRIDGE NUMBER	NB	NORTHBOUND
BRG.	BEARING	NO.	NUMBER
C&G	CURB AND GUTTER	RD.	ROAD
CLR.	CLEAR	S	SOUTH
CONST.	CONSTRUCTION	SB	SOUTHBOUND
CTS.	CENTERS	SHLDR.	SHOULDER
DIA.	DIAMETER	SQ.	SQUARE
E	EAST	STA.	STATION
EB	EASTBOUND	TYP.	TYPICAL
EST.	ESTIMATED	VERT.	VERTICAL
EX.	EXISTING	W	WEST
		WB	WESTBOUND

TOTAL BILL OF MATERIAL PAY ITEM DESCRIPTION UNIT **ESTIMATED** RECORD **OUANTITY OUANTITY** NO. 50102400 CONCRETE REMOVAL CU YD CONCRETE SUPERSTRUCTURE 50300255 CU YD 8.3 50300300 PROTECTIVE COAT SQ YD 30 50800205 REINFORCEMENT BARS, EPOXY COATED POUND 1.080 50800515 BAR SPLICERS EACH PREFORMED JOINT STRIP SEAL 52000110 FOOT 151 LOW PRESSURE EPOXY INJECTION FOOT 130 JS121200 JT503040 STRUCTURAL REPAIR OF CONCRETE SQ FT 10 (DEPTH FOUAL TO OR LESS THAN 5 INCHES) JT503050 SHALLOW CONCRETE REPAIR JT524010 APPLY CONCRETE SEALANT SO FT 4.610 JT602832 CLEAN DRAINAGE SYSTEM, LOCATION NO. 2 EACH X0325747 BRIDGE DECK CONCRETE CRACK SEALER 44 FOOT X0326331 CLEANING AND PAINTING BEARINGS FΔCH 24 X5870015 BRIDGE DECK CONCRETE SEALER SO FT 9.374 Z0012102 | CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH SQ YD 2,017 BRIDGE DECK THIN POLYMER OVERLAY 3/8" Z0012193 SO YD 2,017 70012754 STRUCTURAL REPAIR OF CONCRETE SO FT 30

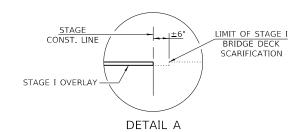
INDEX OF SHEETS

(DEPTH EQUAL TO OR LESS THAN 5 INCHES)

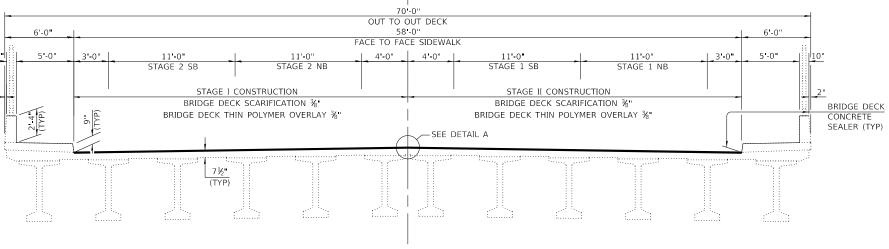
SB-01.	GENERAL PLAN & ELEVATION
SB-02.	GENERAL NOTES & BILL OF MATERIAL
SB-03.	ABUTMENT REPAIR DETAILS
SB-04.	PIER REPAIR DETAILS
SR-05	DECK REPAIR DETAILS

EXPANSION JOINT REPAIRS I SB-06. EXPANSION JOINT REPAIRS II PREFORMED JOINT STRIP SEAL

SB-09. BAR SPLICER DETAILS EXISTING BEARING DETAILS







CROSS SECTION (LOOKING NORTH)

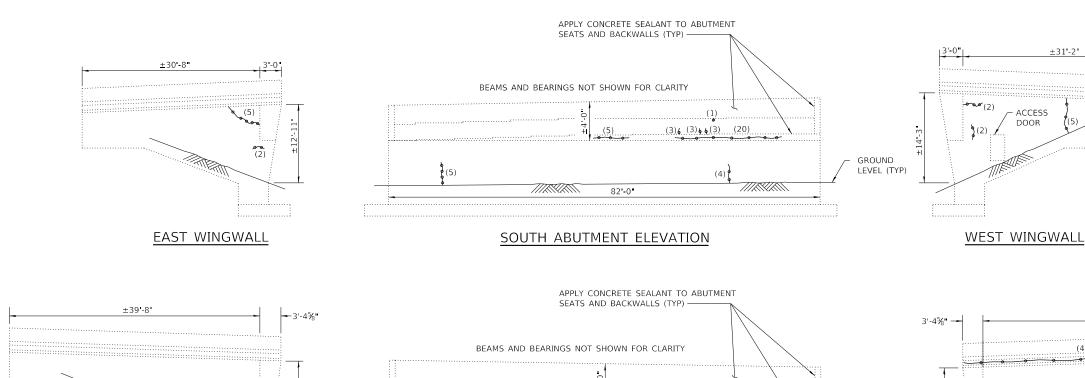
DRAWN BY DATE 4/17/2018 BAXTER

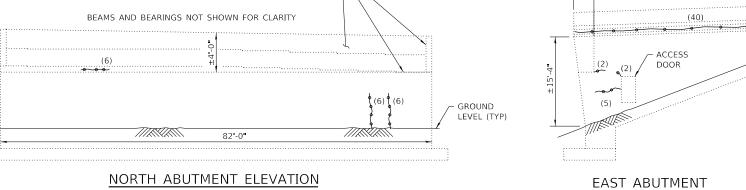
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE. ILLINOIS 60515

CONTRACT NO. RR-18-4387 SB-02 DRAWING NO. WILLOW SPRINGS RD OVER I-294 (BN 187) GENERAL NOTES & BILL OF MATERIAL 86 OF 175

CHECKED BY BLB

DATE 4/17/2018





NOTES

WEST WINGWALL

REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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")



LOW PRESSURE EPOXY INJECTION (EST. LENGTH IN FEET)

BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
*	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	5
	LOW PRESSURE EPOXY INJECTION	FOOT	109
	APPLY CONCRETE SEALANT	SQ FT	1,103

* TOLLWAY ITEM JT503040

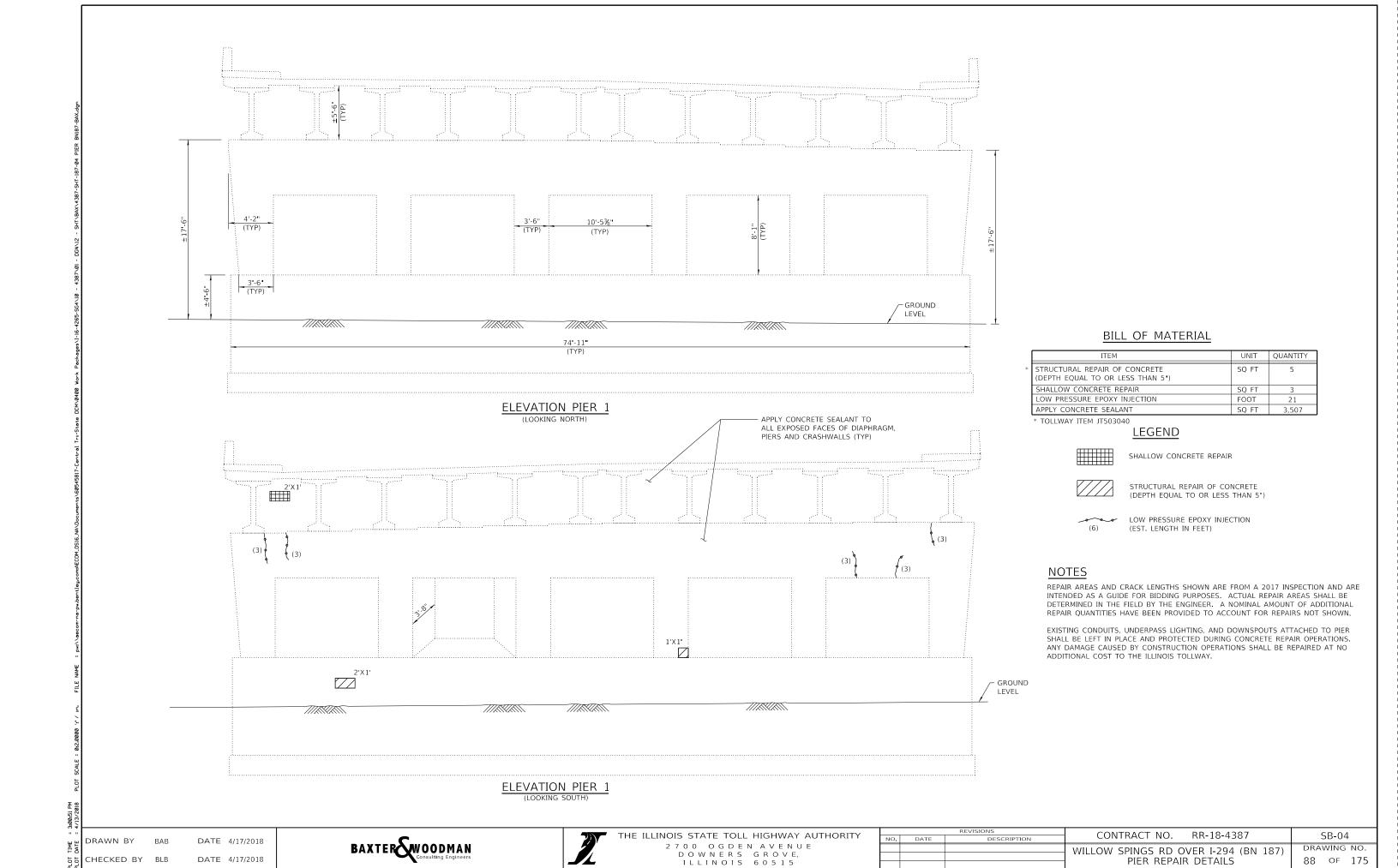
±31'-2"

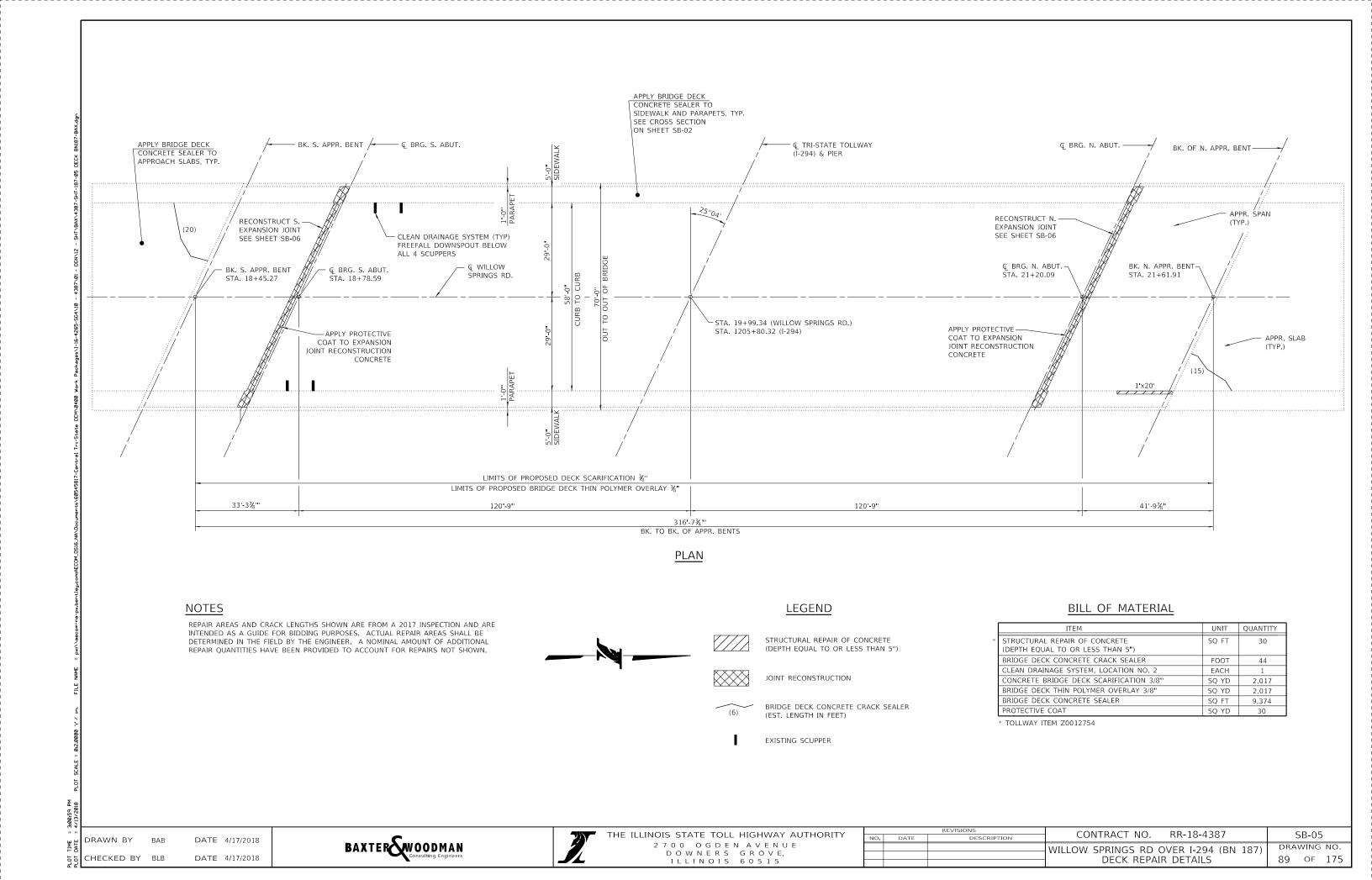
DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018

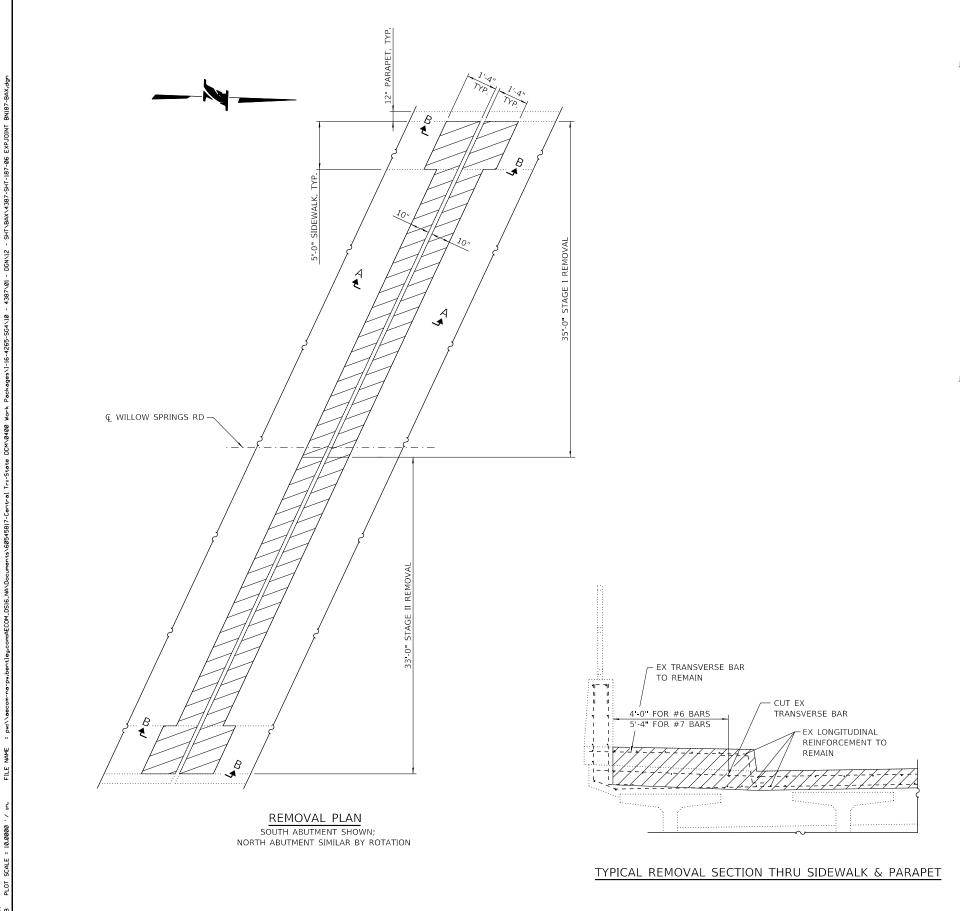


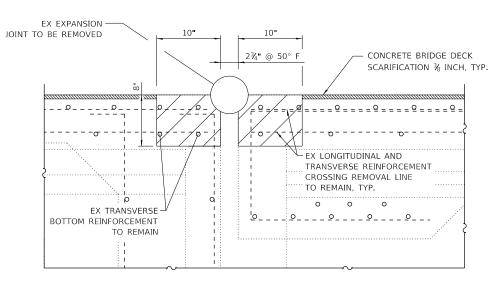
1'X3'



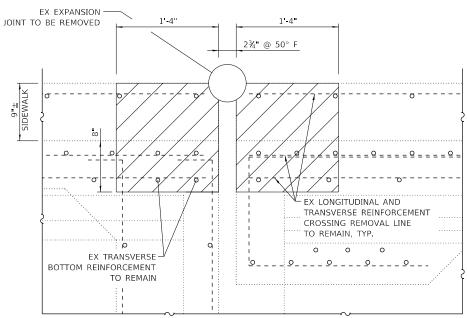








SECTION A-A



SECTION B-B



INDICATES CONCRETE REMOVAL

NOTES

CONTRACTOR SHALL EXERCISE CARE DURING JOINT REMOVAL TO PREVENT DAMAGE TO EXISTING STRUCTURAL ELEMENTS TO REMAIN IN PLACE, INCLUDING BEAM SHEAR REINFORCEMENT.

EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GRAY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL".

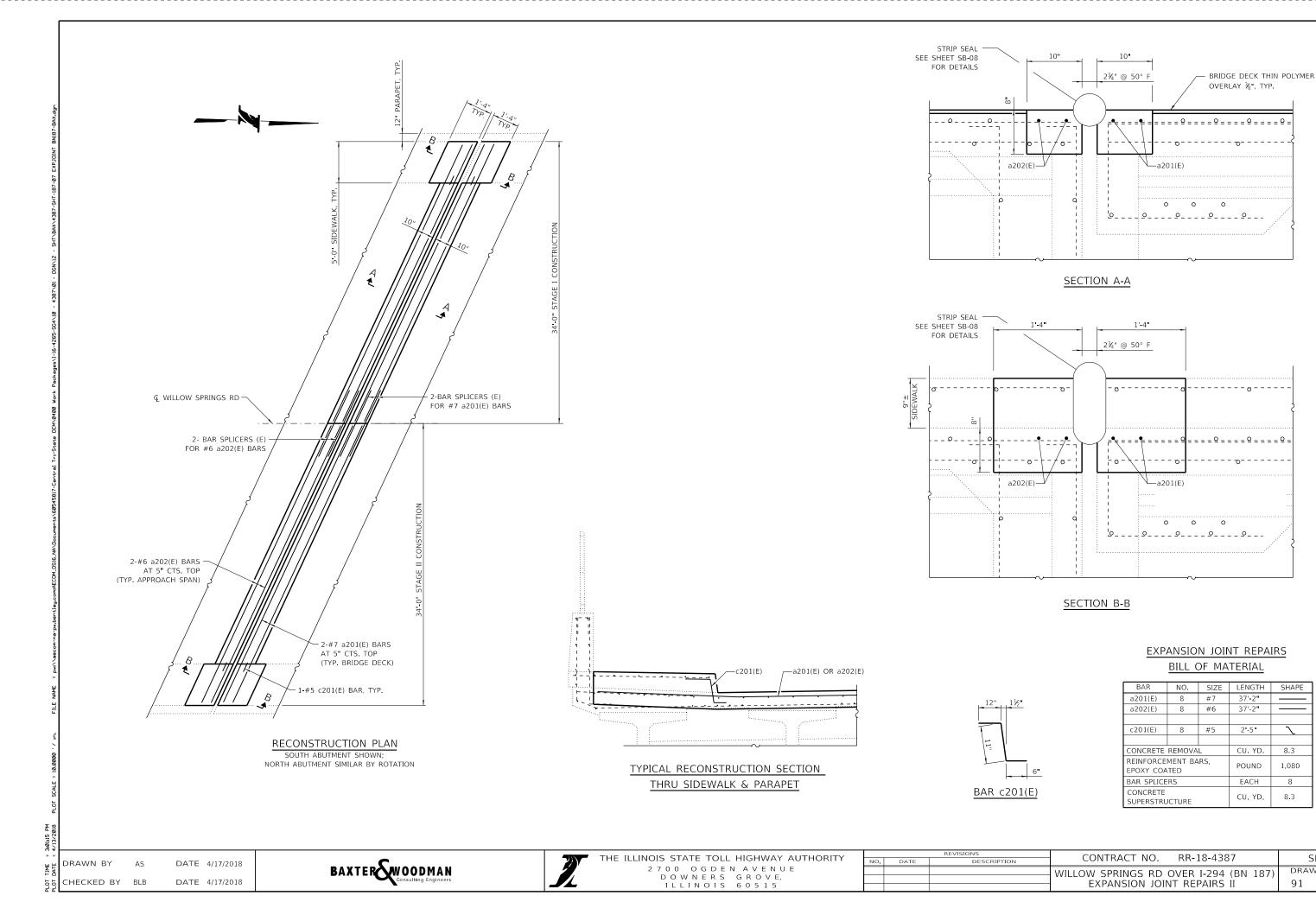
BAXTER WOODMAN Consulting Engineers



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SB-06 DRAWING NO. WILLOW SPRINGS RD OVER I-294 (BN 187) EXPANSION JOINT REPAIRS I 90 OF 175

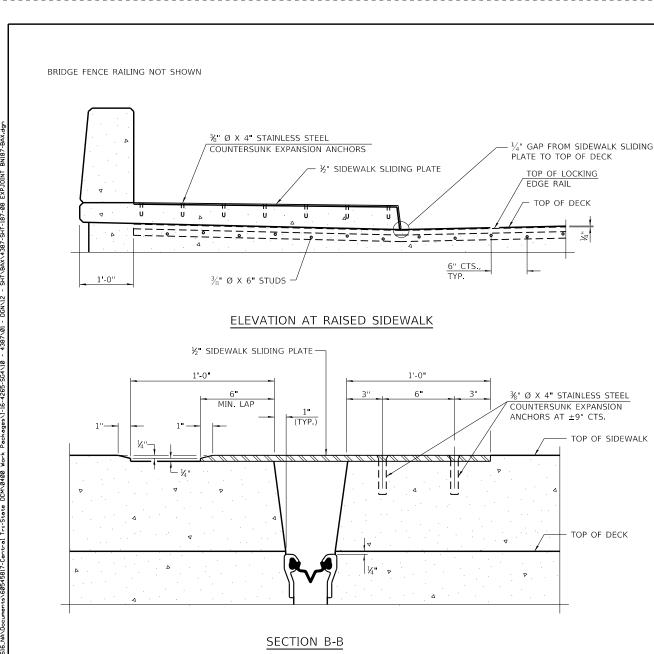
DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018

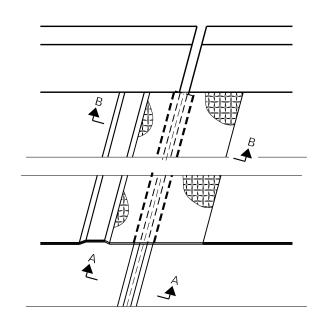


SB-07

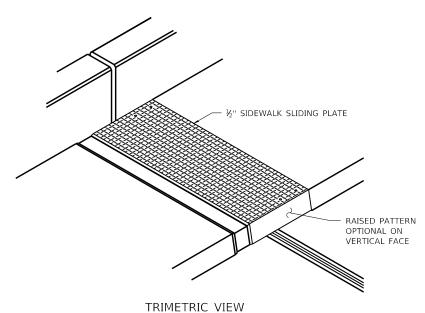
DRAWING NO.

91 OF 175





PLAN AT RAISED SIDEWALK



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 4½" MAXIMUM DEPTH PROVIDED THE ANCHORAGE SYSTEM IS REVISED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

THE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS

SHALL BE FOLLOWED.

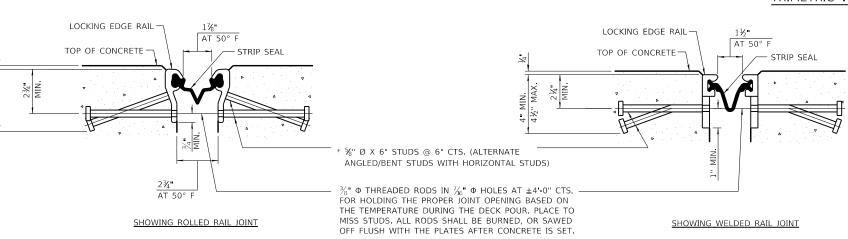
ALL STEEL COMPONENTS SHALL BE GALVANIZED AFTER FABRICATION ACCORDING TO ARTICLE 520.03 OF THE STANDARD SPECIFICATIONS.

THE MAXIMUM SPACE BETWEEN LOCKING EDGE RAIL SEGMENTS SHALL BE $\frac{1}{16}$ " 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.
THE TOP SURFACE OF SIDEWALK SLIDING PLATES SHALL HAVE A RAISED PATTERN ACCORDING TO ASTM A786.

COST OF PARAPET SLIDING PLATES, SIDEWALK SLIDING PLATES, EMBEDDED PLATES, ANCHORAGE STUDS, AND EXPANSION ANCHORS INCLUDED WITH PREFORMED 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.



SECTION A-A

* GRANULAR OR SOLID FLUX FILLED HEADED STUDS CONFORMING TO ARTICLE 1006.32 OF THE STD. SPECS., AUTOMATICALLY END WELDED.

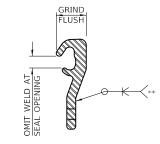


7₁₆"

(EXTRUDED) RAIL

** BACK GOUGE NOT REQUIRED IF COMPLETE JOINT PENETRATION IS VERIFIED BY MOCK-UP.

WELDED RAIL



LOCKING EDGE RAIL SPLICE THE INSIDE OF THE LOCKING EDGE RAIL

GROOVE SHALL BE FREE OF WELD RESIDUE. ROLLED RAIL SHOWN, WELDED RAIL SIMILAR.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
PREFORMED JOINT STRIP SEAL	FOOT	151

RAWN BY DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018





THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

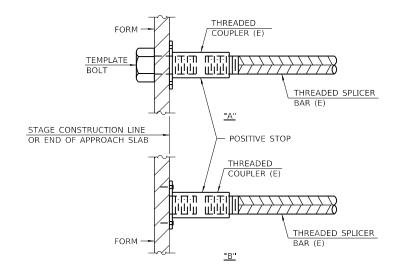
REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387		SB-08		
10.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307		00-00		
			WILLOW SPRINGS RD OVER I-294 (BN 187)	DRA	AWING	NO.	
			PREFORMED JOINT STRIP SEAL	92	OF	175	
			FREFORMED JOINT STRIF SEAL	92	Oi	1/3	

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + $1\frac{1}{2}$ " + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
JOINT RECONSTRUCTION	#6	4	3'-10"
JOINT RECONSTRUCTION	#7	4	5'-2 "



INSTALLATION AND SETTING METHODS

"A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT. "B" : SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.

(E): INDICATES EPOXY COATING.

NOTES

SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.

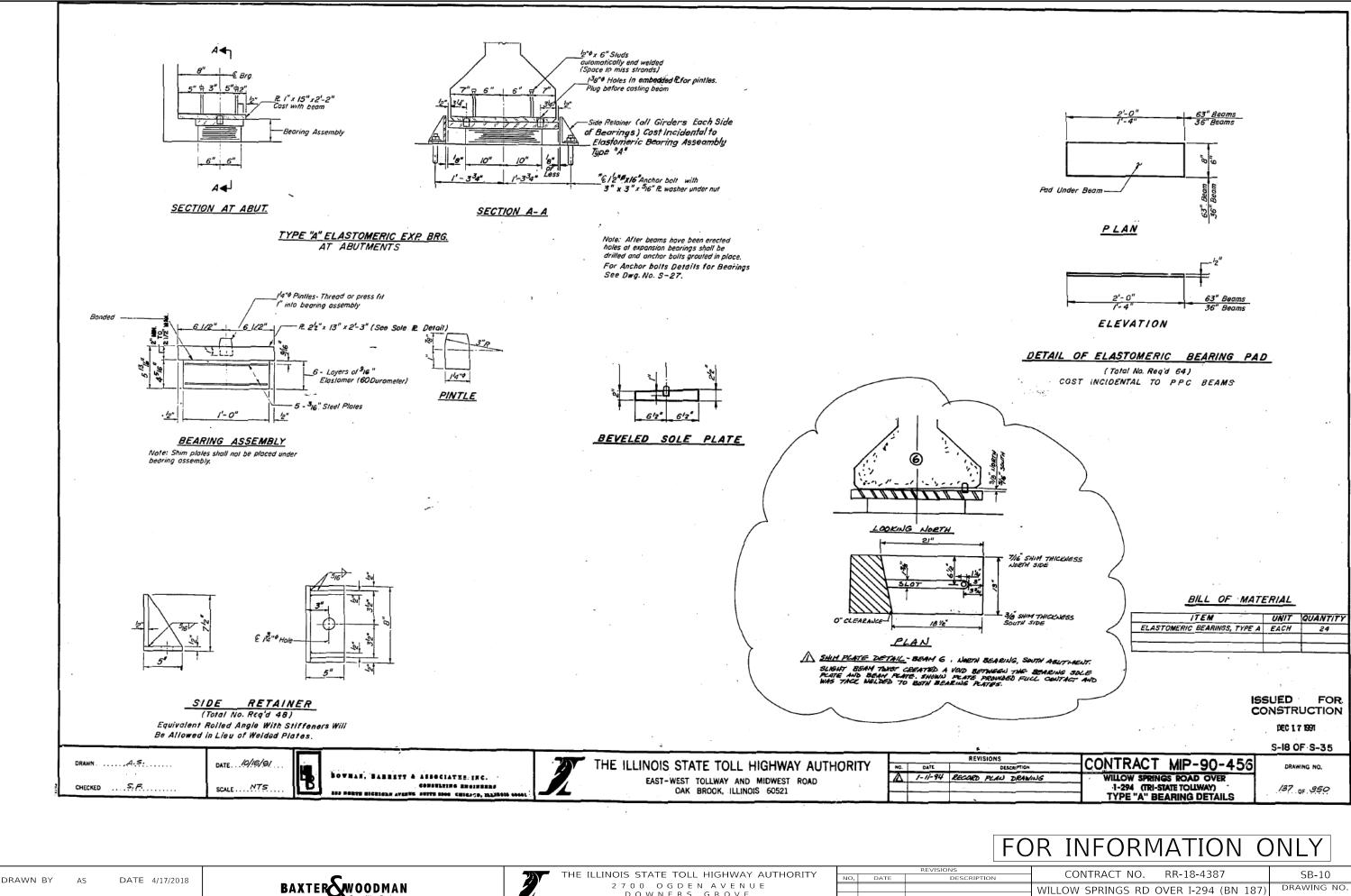
ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.

BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS
FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS. SEE IDOT "QUALIFIED PRODUCTS LIST" OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

DRAWN BY AS DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018







CHECKED BY BLB DATE 4/17/2018 BAXTER WOODMAN Consulting Engineers

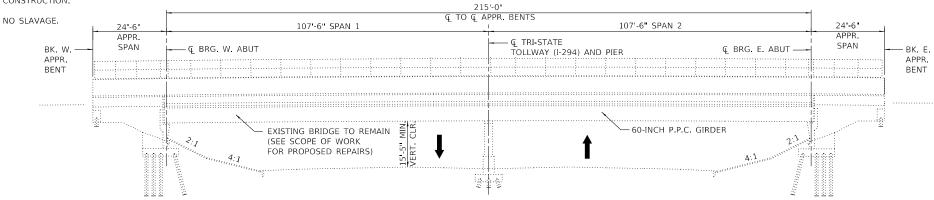


2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

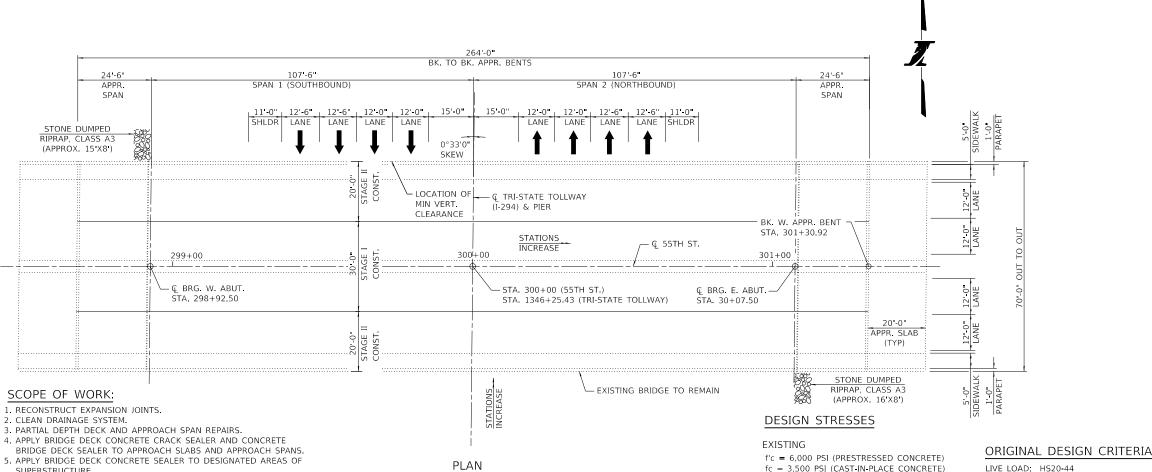
EXISTING BEARING DETAILS 94 OF 175 BENCHMARK: NO DATA IS AVAILABLE.

EXISTING STRUCTURE: 55TH STREET OVER I-294. BN 251 WAS BUILT UNDER CIP-660 AFTER ORIGINAL BRIDGE FROM 1958 (CONTRACT T-5A) WAS REMOVED AND REPLACED. TWO-SPAN BRIDGE HAS OVERALL LENGTH OF THE BRIDGE IS 264-0" BACK TO BACK APPROACH BENTS AND OUT TO OUT WIDTH OF 70'-0". SUPERSTRUCTURE CONSISTS OF 60" DEEP PRECAST PRESTRESSED CONCRETE GIRDERS WITH 7 1/2" CONCRETE DECK. THE EXISTING SUBSTRUCTURE CONSISTS OF REINFORCED CONCRETE VAULTED ABUTMENT AND PIERS SUPPORTED ON STEEL H-PILES.

STAGE CONSTRUCTION SHALL BE UTILIZED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.



ELEVATION



- 5. APPLY BRIDGE DECK CONCRETE SEALER TO DESIGNATED AREAS OF SUPERSTRUCTURE.
- 6. REPAIR DESIGNATED AREAS OF SUBSTRUCTURE.
- 7. CLEAN & PAINT EXPANSION BEARINGS.
- 8. APPLY CONCRETE SEALANT TO DESIGNATED AREAS OF SUBSTRUCTURE.
- 9 SCARIEY BRIDGE DECK
- 10. APPLY THIN POLYMER BRIDGE DECK OVERLAY.
- 11. STONE DUMPED RIPRAP AT LOCATIONS SHOWN ABOVE.

DESIGN SPECIFICATIONS

2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

ILLINOIS STATE TOLL HIGHWAY AUTHORITY STRUCTURE DESIGN MANUAL, MARCH 2017.

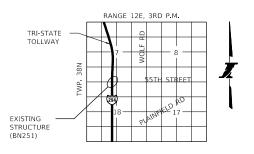
ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, JANUARY 2012.

CONSTRUCTION SPECIFICATIONS

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED MAY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.
ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS.



LOCATION SKETCH

HIGHWAY CLASSIFICATION

RTE. OVER - 55TH STREET FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 19,000 ADTT: 380 (2%)

RTE. UNDER - I-294 FUNCTIONAL CLASS: INTERSTATE ADT: 184,500 ADTT: 25,830 (14%)

GENERAL PLAN & ELEVATION 55TH STREET OVER FAI RTE 0294 (I-294) COOK COUNTY MILE POST 25.4 BRIDGE NO. 251 (016-2610)

fc = 3,500 PSI (CAST-IN-PLACE CONCRETE) LIVE LOAD: HS20-44 fy = 60,000 PSI (REINFORCEMENT)

FUTURE WEARING SURFACE: 25 PSF

DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

PROPOSED

f'c = 4.000 PSI

fy = 60,000 PSI

REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387	SD-01		
Ю.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	3D-01		
			55TH ST OVER I-294 (BN 251)	DRAWING NO.		
			GENERAL PLAN & ELEVATION	95 OF 175		
			GENERAL PLAN & ELEVATION	95 OF 17		

GENERAL NOTES

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A $\frac{3}{4}$ " X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2 INCHES FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE OUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE.

CONCRETE SEALANT SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS, INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS. SEALANT SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS (INCLUDING DIAPHRAGMS) IN THE MEDIAN OR PIERS AND ABUTMENTS THAT ARE ADJACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

COST OF SAWCUTTING IS INCLUDED WITH CONCRETE REMOVAL.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10' BEYOND THE INDICATED. LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS INDICATED IN THE FIELD, WHICHEVER IS GREATER.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

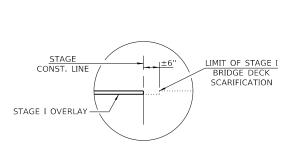
AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

PAY ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
28100805	STONE DUMPED RIPRAP, CLASS A3	SQ YD	28	
50102400	CONCRETE REMOVAL	CU YD	7.5	
50157300	PROTECTIVE SHIELD	SQ YD	164	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.5	
50300300	PROTECTIVE COAT	SQ YD	27	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	740	
50800515	BAR SPLICERS	EACH	12	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	136	
JT503040	STRUCTURAL REPAIR OF CONCRETE	SQ FT	5	
	(DEPTH EQUAL TO OR LESS THAN 5 IN.)			
JT503050	SHALLOW CONCRETE REPAIR	SQ FT	28	

TOTAL BILL OF MATERIAL

ABBREVIATIONS

ABUT.	ABUTMENT	EX.	EXISTING
APPR.	APPROACH	IN.	INCH
AVE.	AVENUE	MIN.	MINIMUM
BK	BACK	N	NORTH
BN	BRIDGE NUMBER	NB	NORTHBOUND
BRG.	BEARING	NO.	NUMBER
C&G	CURB AND GUTTER	RD.	ROAD
CLR.	CLEAR	S	SOUTH
CONST.	CONSTRUCTION	SB	SOUTHBOUND
CTS.	CENTERS	SHLDR.	SHOULDER
DIA.	DIAMETER	SQ.	SQUARE
E	EAST	STA.	STATION
EB	EASTBOUND	TYP.	TYPICAL
EST.	ESTIMATED	VERT.	VERTICAL
EX.	EXISTING	W	WEST
		WB	WESTBOUND



X0326331

X5870015

Z0012102

Z0016200

Z0012193

X0325747

INDEX OF SHEETS

GENERAL PLAN & ELEVATION GENERAL NOTES & BILL OF MATERIAL SD-03 ABUTMENT REPAIR DETAILS SD-04 PIER REPAIR DETAILS SD-05. DECK REPAIR DETAILS SD-06 EXPANSION JOINT REPAIRS EXPANSION JOINT REPAIRS II SD-07 SD-08 PREFORMED JOINT STRIP SEAL BAR SPLICER DETAILS EXISTING BEARING DETAILS

SO FT

EACH

EACH

FOOT

SO FT

SQ YD

SQ YD

SQ YD

3.843

598

10,492

1,149

1,149

DETAIL A

JT524010 APPLY CONCRETE SEALANT

CLEAN DRAINAGE SYSTEM, LOCATION NO. :

CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH

BRIDGE DECK THIN POLYMER OVERLAY 3/8 INCH

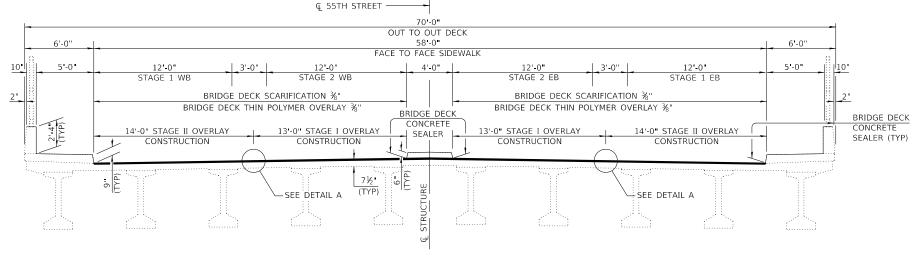
CLEANING AND PAINTING BEARINGS

BRIDGE DECK CONCRETE SEALER

DECK SLAB REPAIR (PARTIAL)

BRIDGE DECK CONCRETE CRACK SEALER

EASTBOUND SIDE SHOWN
WESTBOUND SIMILAR BUT MIRRORED



CROSS SECTION (LOOKING EAST)

RAWN BY BAB DATE 4/17/2018

DATE 4/17/2018

CHECKED BY BLB



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

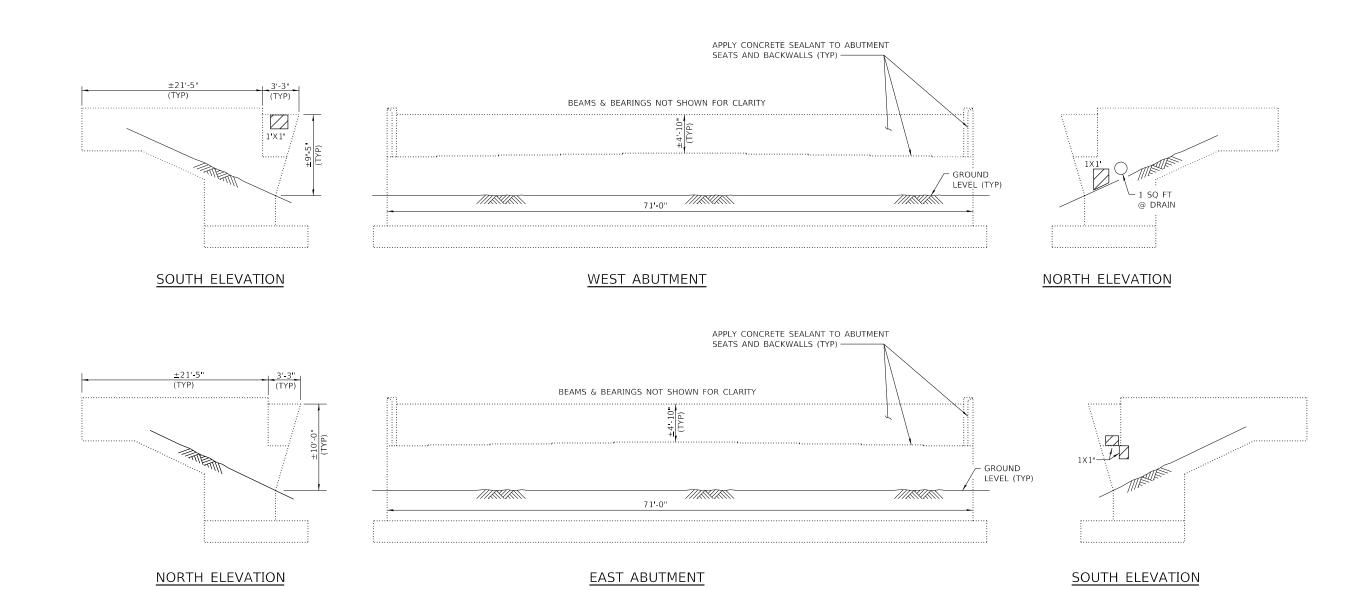
CONTRACT NO. RR-18-4387 SD-02

SD-02

SD-02

STH ST OVER I-294 (BN 251)

GENERAL NOTES & BILL OF MATERIAL



NOTES

REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.

<u>LEGE</u>ND



STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")

BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
*	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	5
	APPLY CONCRETE SEALANT	SQ FT	1,030

* TOLLWAY ITEM JT503040

DRAWN BY BAB DATE 4/17/2018

CHECKED BY BLB DATE 4/17/2018





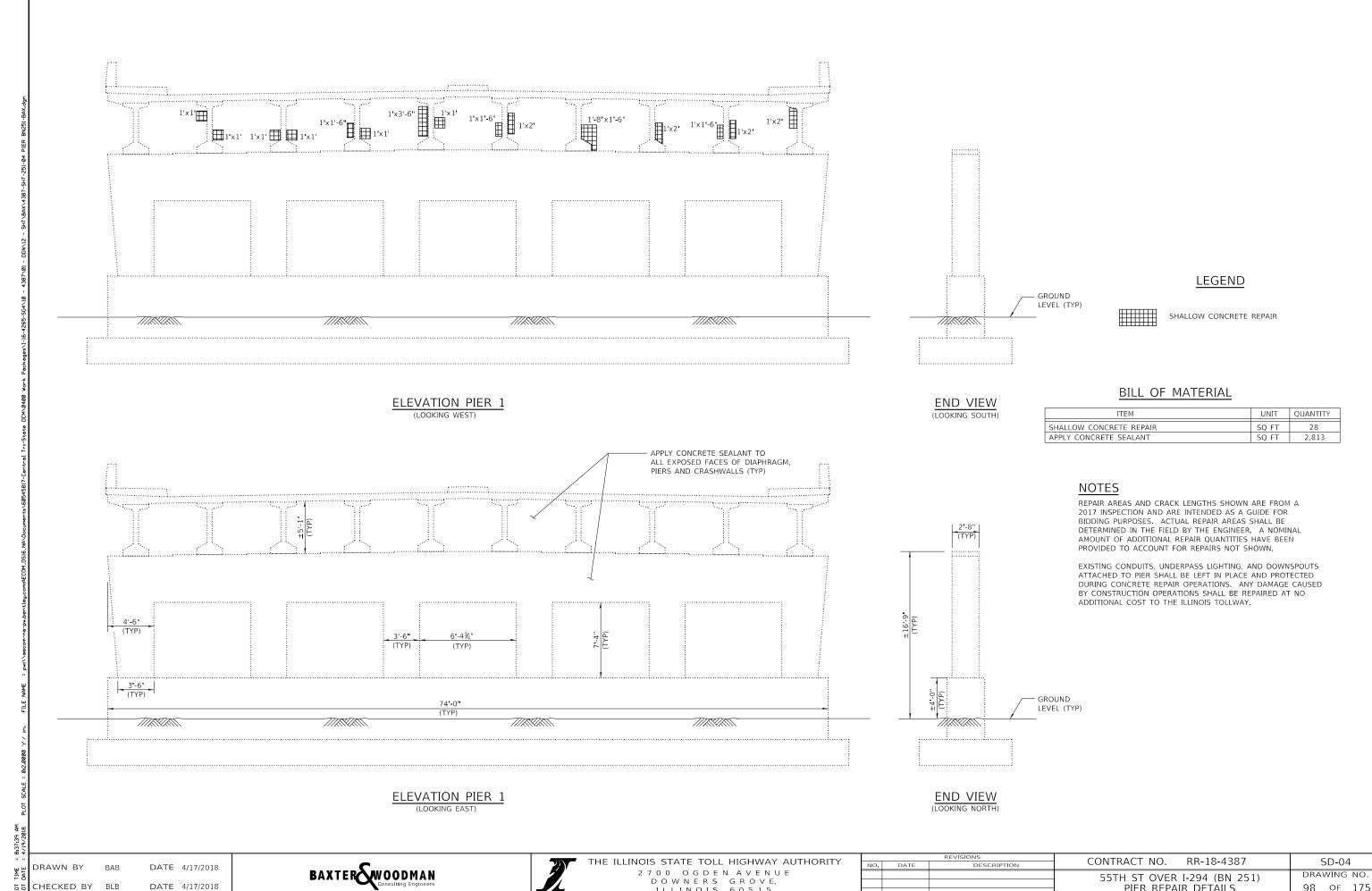
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

	REVISIONS	CONTRACT NO. RR-18-4387	CD 03
DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	SD-03
		55TH ST OVER I-294 (BN 251)	DRAWING NO.
		ABUTMENT REPAIR DETAILS	97 OF 175
		ADDIMENT REPAIR DETAILS	1 3/ 0, 1/3

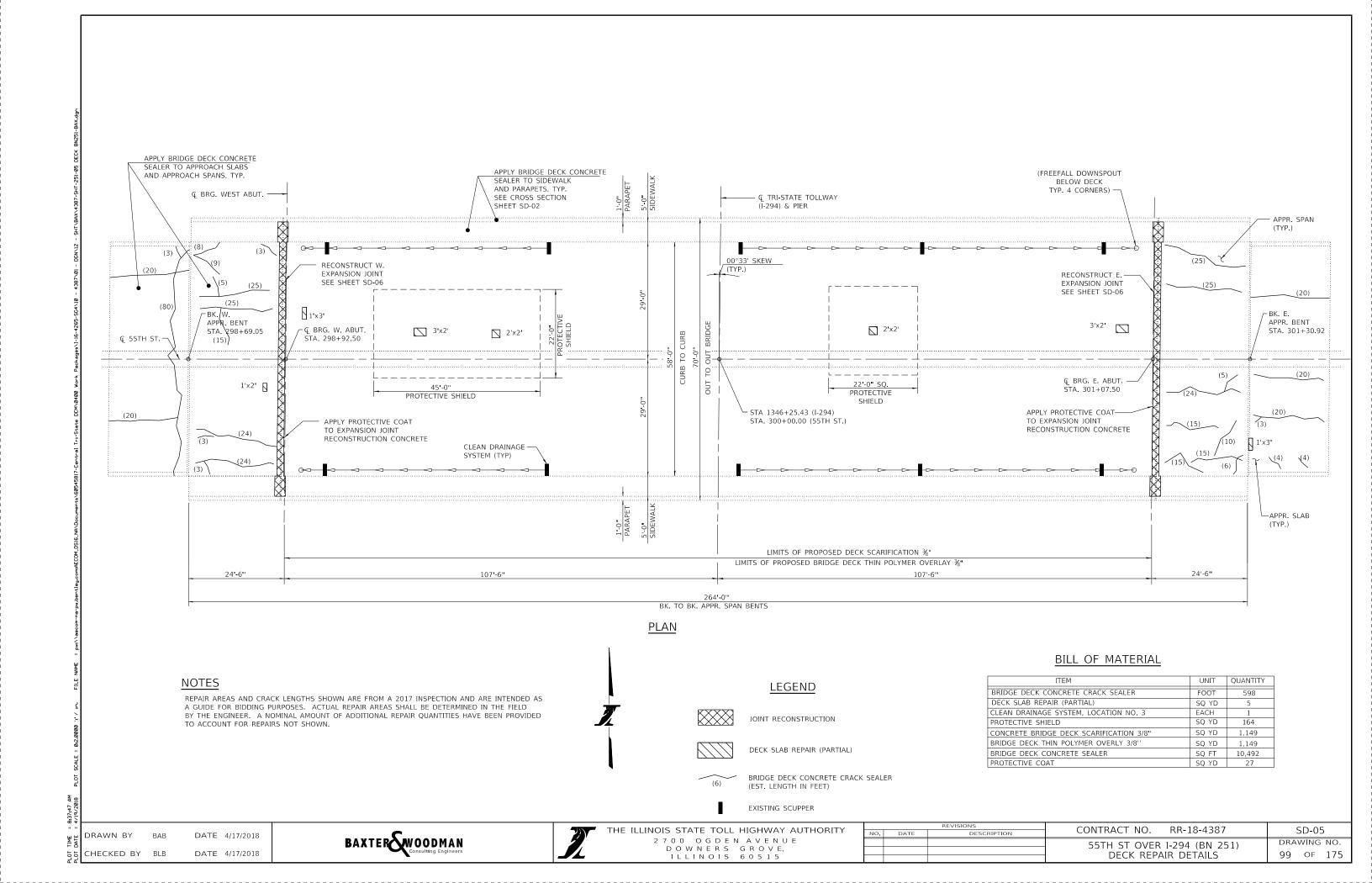


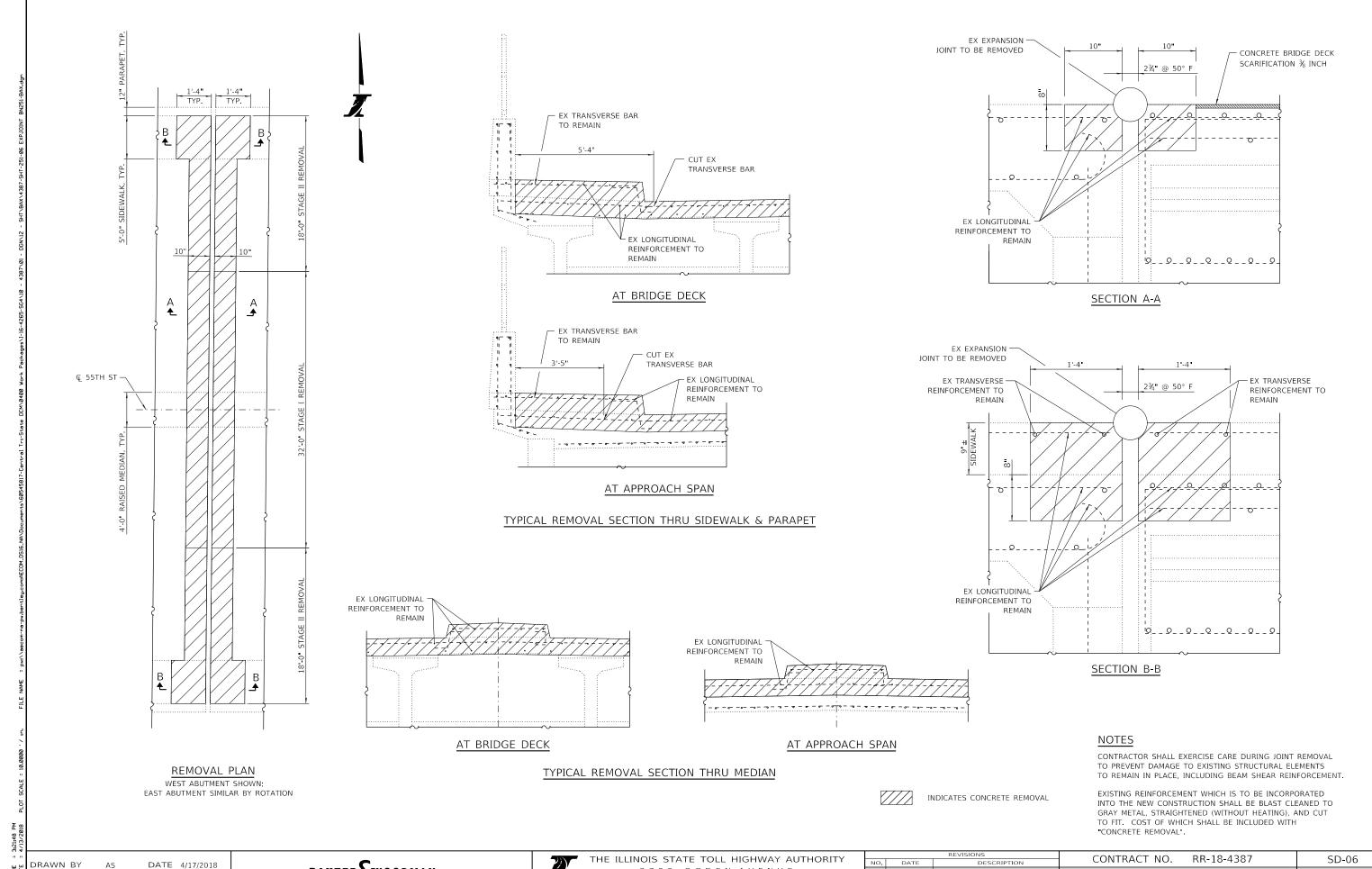
DATE 4/17/2018

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

	KE 41310143			
NO.	DATE	DESCRIPTION	,	

55TH ST OVER I-294 (BN 251) PIER REPAIR DETAILS 98 OF 175





CHECKED BY BLB DATE 4/17/2018

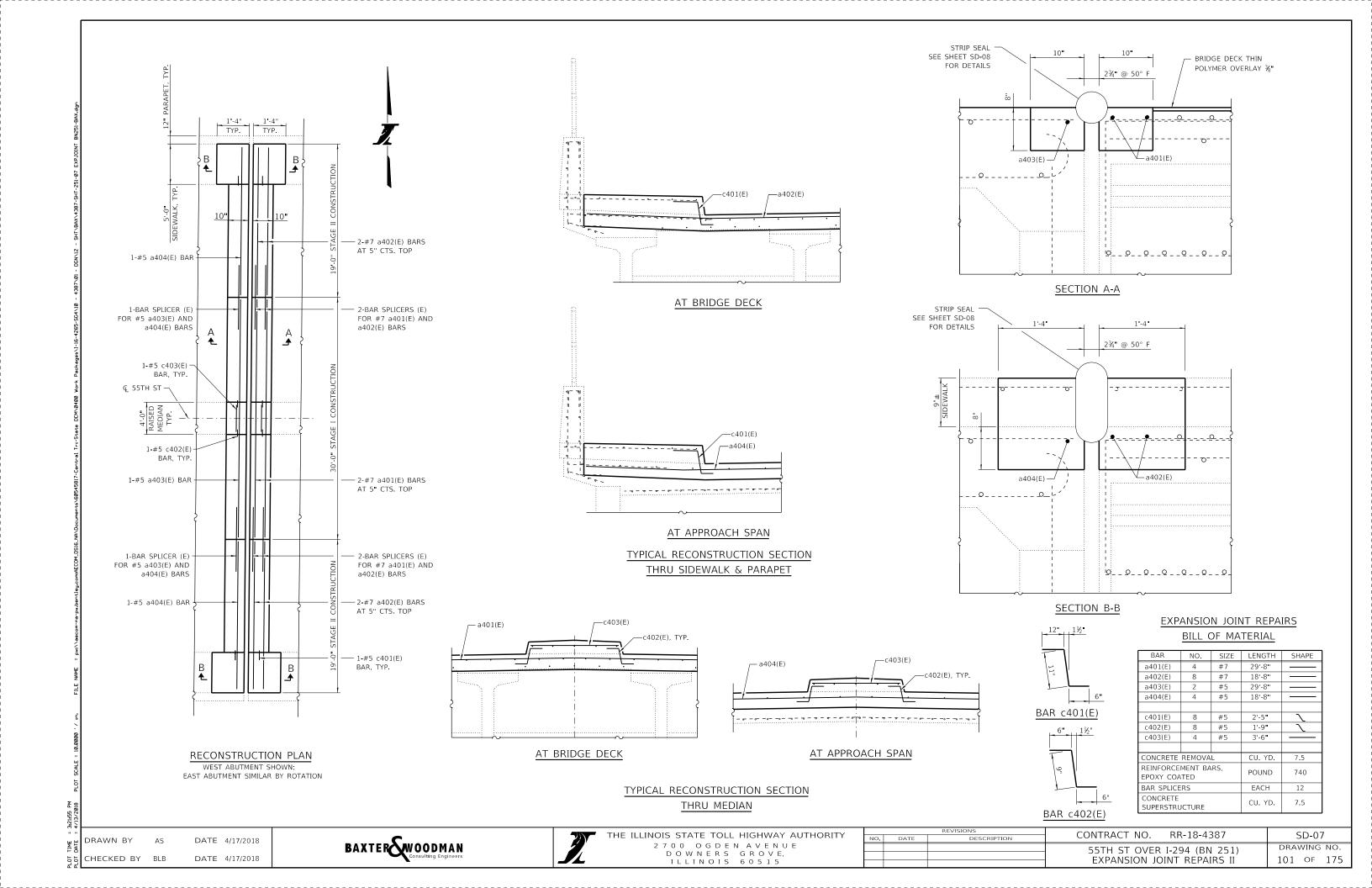
BAXTER WOODMAN Consulting Engineers

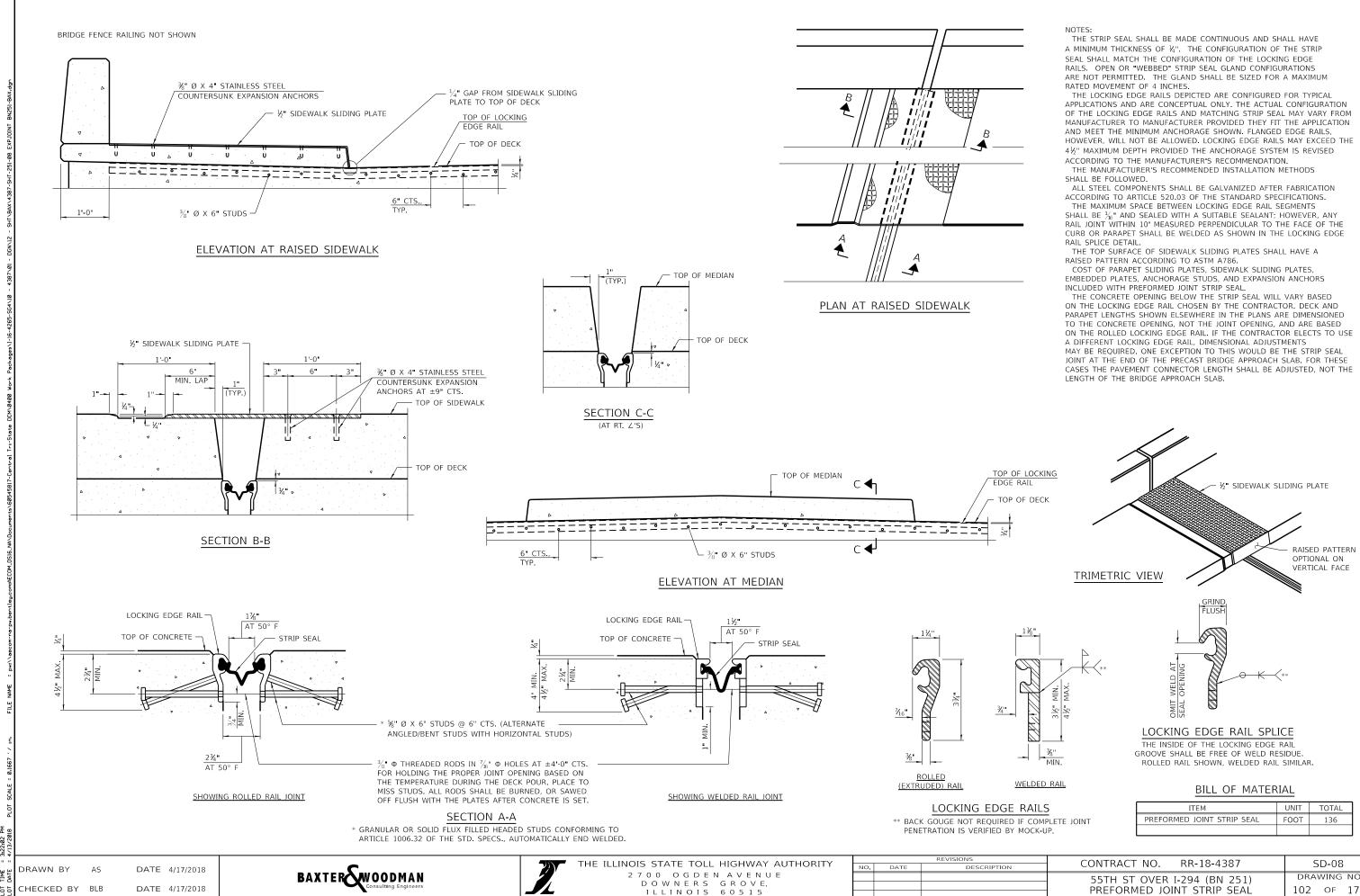
2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515 NO. DATE DESCRIPTION

55TH ST OVER I-294 (BN 251)
EXPANSION JOINT REPAIRS I

SD-06

DRAWING NO.
100 OF 175





CHECKED BY BLB

DATE 4/17/2018



2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

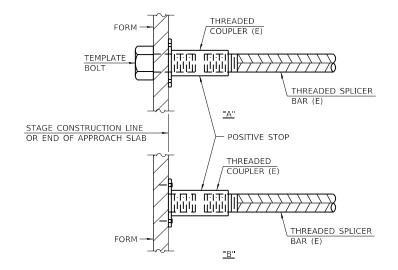
DRAWING NO. 55TH ST OVER I-294 (BN 251) PREFORMED JOINT STRIP SEAL 102 OF 175

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + $1\frac{1}{2}$ " + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
JOINT RECONSTRUCTION	#5	4	3'-3"
JOINT RECONSTRUCTION	#7	8	5'-2"



INSTALLATION AND SETTING METHODS

"A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT. "B" : SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS. (E): INDICATES EPOXY COATING.

NOTES

SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.

ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.

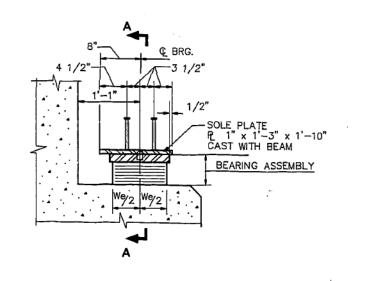
BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS

FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
SEE IDOT "QUALIFIED PRODUCTS LIST" OF BAR SPLICER ASSEMBLIES AND MECHANICAL
SPLICERS FOR ALTERNATIVES.

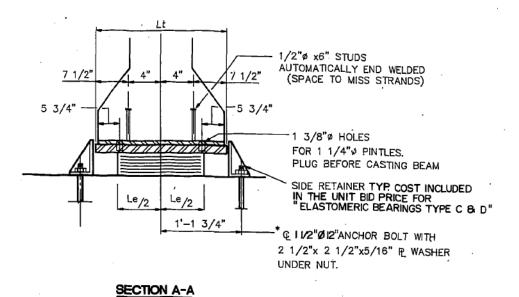
DRAWN BY AS DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018

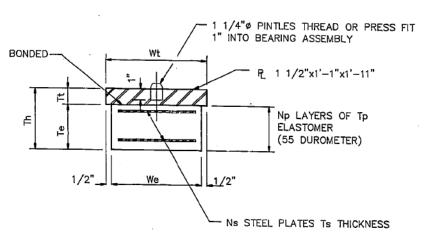






SECTION AT ABUT.

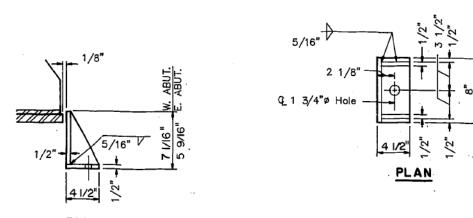




BEARING ASSEMBLY

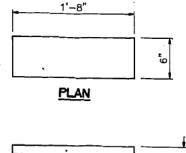
SHIM PLATES SHALL NOT BE PLACED UNDER BEARING ASSEMBLY

TYPE C or D ELASTOMERIC EXP. BRG.



SIDE RETAINER EQUIVALENT ROLLED ANGLE WITH STIFFENERS WILL BE

ALLOWED IN LIEU OF WELDED PLATES.
NO. OF SIDE RETAINERS AT EACH ABUT. = 20



ELEVATION

DETAIL OF FABRIC PAD

AT PIER COST INCIDENTAL TO ITEM 502 A-5 TOTAL NO. REQ'D: 20

	TYPE C E.ABUT.	TYPE D WABUT
W _e L _e	12"	12"
Le	18"	18"
Τp	9/16"	9/16"
Νp	5	7
Ts	3/16"	3/16"
N _s	4	6
T e	3 9/16"	5 1/16"
Wt	13"	13"
Lt	1'-11"	1'-11"
Τt	1 1/2"	1 1/2"
T _h	5 1/16"	6 9/16"

NOTES:

AFTER BEAMS HAVE BEEN ERECTED, HOLES AT EXPANSION BEARING SHALL BE DRILLED AND ANCHOR BOLTS GROUTED IN PLACE. SEE SHT. S3-22 FOR ANCHOR BOLT DETAILS.

BILL OF			
DESCRIPTION	UNIT	QTY.	
ELASTOMERIC BEARINGS TYPE C	EACH	10	
ELASTOMERIC BEARINGS TYPE D	EACH	10 CC	UED FOR NSTRUCTION

J.H.B./H.A.S. CHECKED M.S.H. /P.G.M. DATE 1-22-92 SCALE NONE

1 1/4"ø

PINTLE

MIDWEST CONSULTING ENGINEERS,INC. 5151 NORTH HARLEM AVENUE CHICAGO, ILLINOIS 60656



TOTAL = 40

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

EAST-WEST	TOLLWAY	AND M	DWECT	2012	1
FW21-44F21	IULLWAT	AND M	IDMF21	KUAD	
OVE	BROOK, I	LLINOIS	COROL		
UAN	DROOK,	LTIMO12	00321		
_					

			SHEET S3-12 OF S3-24
Ь.		REVISIONS	CONTRACT OID COO
NO.	DATE	DESCRIPTION	CONTRACT CIP-660
			55TH STREET OVER TRI-STATE TOLLWAY
			STRUCTURE NOS. 251-EW
			BEARING DETAILS

DRAWING NO. 338 _{OF} 43/

FOR INFORMATION ONLY

DATE 4/17/2018 CHECKED BY BLB DATE 4/17/2018

BAXTER WOODMAN Consulting Engineers



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SD-10 DRAWING NO. 55TH ST OVER I-294 (BN 251) EXISTING BEARING DETAILS 104 OF 175

BENCHMARK: NO DATA IS AVAILABLE. DESIGN SPECIFICATIONS EXISTING STRUCTURE: 55TH STREET OVER FLAGG CREEK. BN253 WAS CONSTRUCTED IN 1958 UNDER CONTRACT T-5A AND REHABILITATED IN 1972 (CONTRACT GRRS-72-152) AND IN 1992 (CONTRACT CIP-660). THREE-SPAN BRIDGE HAS AN OVERALL LENGTH OF 180-8" BACK TO BACK ABUTMENTS AND 2002 AASHTO STANDARD SPECIFICATIONS FOR AN OUT TO OUT WIDTH OF 70'-0". SUPERSTRUCTURE CONSISTS OF BRIDGE SUPERSTRUCTURE CONSISTS OF 48" PRECAST PRESTRESSED CONCRETE GIRDERS HIGHWAY BRIDGES. 17TH EDITION. WITH 7 1/2" CONCRETE DECK, SUBSTRUCTURE CONSISTS OF REINFORCED CONCRETE VAULTED ABUTMENTS ON CONCRETE FILLED METAL SHELL PILES AND PIERS SUPPORTED ON PRECAST CYLINDER PILE SHELLS. ILLINOIS STATE TOLL HIGHWAY AUTHORITY STRUCTURE DESIGN MANUAL, MARCH 2017. STAGE CONSTRUCTION SHALL BE UTILIZED — BK. E. ABUT. 51-4 78 -0" 51'-4" TO MAINTAIN TRAFFIC DURING ILLINOIS DEPARTMENT OF TRANSPORTATION CONSTRUCTION. — Q PIER 1 — Ç PIER 2 BK. W. ABUT. -BRIDGE MANUAL, JANUARY 2012. NO SALVAGE. CONSTRUCTION SPECIFICATIONS ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED MAY 1, 2017. ILLINOIS DEPARTMENT OF TRANSPORTATION EXISTING BRIDGE TO REMAIN SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL (SEE SCOPE OF WORK FOR PROVISIONS ADOPTED JANUARY 1, 2017. PROPOSED REPAIRS) H.W. EL. 637.93 ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION EXIST. AGGREGATE ADOPTED APRIL 1, 2016. SLOPE PAVING ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE HIGHWAY CLASSIFICATION BRIDGE SPECIAL PROVISIONS. RTE. OVER - 55TH STREET FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 19.000 SCOPE OF WORK: ADTT: 380 (2%) EXIST. CONCRETE RECONSTRUCT EXPANSION JOINTS.
 PARTIAL DEPTH DECK SLAB REPAIRS.
 CLEAN DRAINAGE SYSTEM. SLOPE WALL 4. REPAIR AREAS OF MEDIAN. FLAGG CREEK 5. SCARIFY BRIDGE DECK. 6. APPLY THIN POLYMER BRIDGE DECK OVERLAY. **ELEVATION** 7. APPLY CONCRETE BRIDGE DECK SEALER TO DESIGNATED AREAS OF SUPERSTRUCTURE. (LOOKING NORTH) ORIGINAL DESIGN CRITERIA 180'-8" BK. TO BK. ABUTMENT LIVE LOAD: HS20-44 NO ALLOWANCE FOR FUTURE WEARING SURFACE 51-4 78'-0" 51-4 SPAN 1 SPAN 2 SPAN 3 DESIGN STRESSES ----Q BRG. W. ABUT. --- € PIER 1 --- Q FLAGG CREEK — Ç PIER 2 Ç BRG. E. ABUT. → f'c = 6,000 PSI (PRESTRESSED CONCRETE) fc = 3,500 PSI (CAST-IN-PLACE CONC) fy = 60,000 PSI (REINFORCEMENT) 20'-0" f'c = 4,000 PSIAPPR. SLAB fy = 60,000 PSIAPPR, SLAB RANGE 12E, 3RD P.M. TRI-STATE G BRG. W. ABUT. STA. 303+42.36 (55TH ST) € 55TH ST. STA. 302+53.94 STA. 303+03.35 303+0 304+00 STATIONS INCREASE © BRG. E. ABUT. PIFR 2 STA. 304+30.77 STA. 303+81.35 LOCATION SKETCH GENERAL PLAN & ELEVATION 55TH STREET OVER FLAGG CREEK - EXISTING BRIDGE OVER FAI RTE 0294 (I-294) TO REMAIN COOK COUNTY MILE POST 25.4 PLAN BRIDGE NO. 253 (016-1032) CONTRACT NO. RR-18-4387 THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY SE-01 BAXTER WOODMAN Consulting Engineers DATE 4/17/2018 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, DRAWING NO. 55TH ST OVER FLAGG CREEK (BN 253) DATE 4/17/2018 CHECKED BY BLB 105 OF 175 GENERAL PLAN & ELEVATION ILLINOIS 60515

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING OF REINFORCED CONCRETE STRUCTURES*, ACI 315.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2 INCHES FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING WILL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER

COST OF SAWCUTTING IS INCLUDED WITH CONCRETE REMOVAL.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

NO WORK WILL BE ALLOWED WITHIN FLAGG CREEK.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING. MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF UNLESS NOTED OTHERWISE. A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

TOTAL BILL OF MATERIAL						
PAY ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY		
50102400	CONCRETE REMOVAL	CU YD	7.5			
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.4			
50300300	PROTECTIVE COAT	SQ YD	27			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	610			
50800515	BAR SPLICERS	EACH	16			
52000110	00110 PREFORMED JOINT STRIP SEAL		136			
JT602834	CLEAN DRAINAGE SYSTEM, LOCATION NO. 4	EACH	1			
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	70			
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	6,352			
Z0005876	BONDED PREFORMED JOINT SEALER, 4 INCH	FOOT	132			
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ YD	1,025			
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8 INCH	SQ YD	1,025			
Z0012754	STRUCTURAL REPAIR OF CONCRETE	SQ FT	10			
	(DEPTH EQUAL TO OR LESS THAN 5 INCHES)					
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	3			
Z0041895	POLYMER CONCRETE	CU FT	0.5			

INDEX OF SHEETS

SE-01.

SF-02. SE-03.

SE-04.

SE-06.

SE-07

SE-08

GENERAL PLAN & ELEVATION

EXPANSION JOINT REPAIRS

EXPANSION JOINT REPAIRS I

BRIDGE DRAINAGE DETAILS

PREFORMED JOINT STRIP SEAL

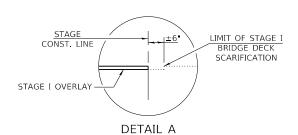
DECK REPAIR DETAILS

BAR SPLICER DETAILS

GENERAL NOTES & BILL OF MATERIAL

ABBREVIATIONS

ABUT. APPR. AVE. BK BN BRG. C&G CLR. CONST. CTS. DIA. E EB EST. EX.	ABUTMENT APPROACH AVENUE BACK BRIDGE NUMBER BEARING CURB AND GUTTER CLEAR CONSTRUCTION CENTERS DIAMETER EAST EASTBOUND ESTIMATED EXISTING	EX. IN. MIN. N NB NO. RD. S SB SHLDR. SQ. STA. TYP. VERT. W WB	EXISTING INCH MINIMUM NORTH NORTHBOUND NUMBER ROAD SOUTH SOUTHBOUND SHOULDER SQUARE STATION TYPICAL VERTICAL WEST WESTBOUND
---	---	--	---



EASTBOUND SIDE SHOWN

WESTBOUND SIMILAR BUT MIRRORED

Q 55TH STREET OUT TO OUT DECK 6 0 FACE TO FACE SIDEWALK 5'-0" 5 0 4 -0 STAGE 1 WB STAGE 2 WB STAGE 1 EB BRIDGE DECK SCARIFICATION ¾" BRIDGE DECK SCARIFICATION %" BRIDGE DECK THIN POLYMER OVERLAY %" BRIDGE DECK THIN POLYMER OVERLAY %" BRIDGE DECK CONCRETE CONCRETE 13'-0" STAGE I OVERLAY 13'-0" STAGE I OVERLAY 14'-0" STAGE II OVERLAY 14'-0" STAGE II OVERLAY SEALER SEALER (TYP) CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION (TYP) SEE DETAIL A SEE DETAIL A

> CROSS SECTION (LOOKING FAST

DATE 4/17/2018

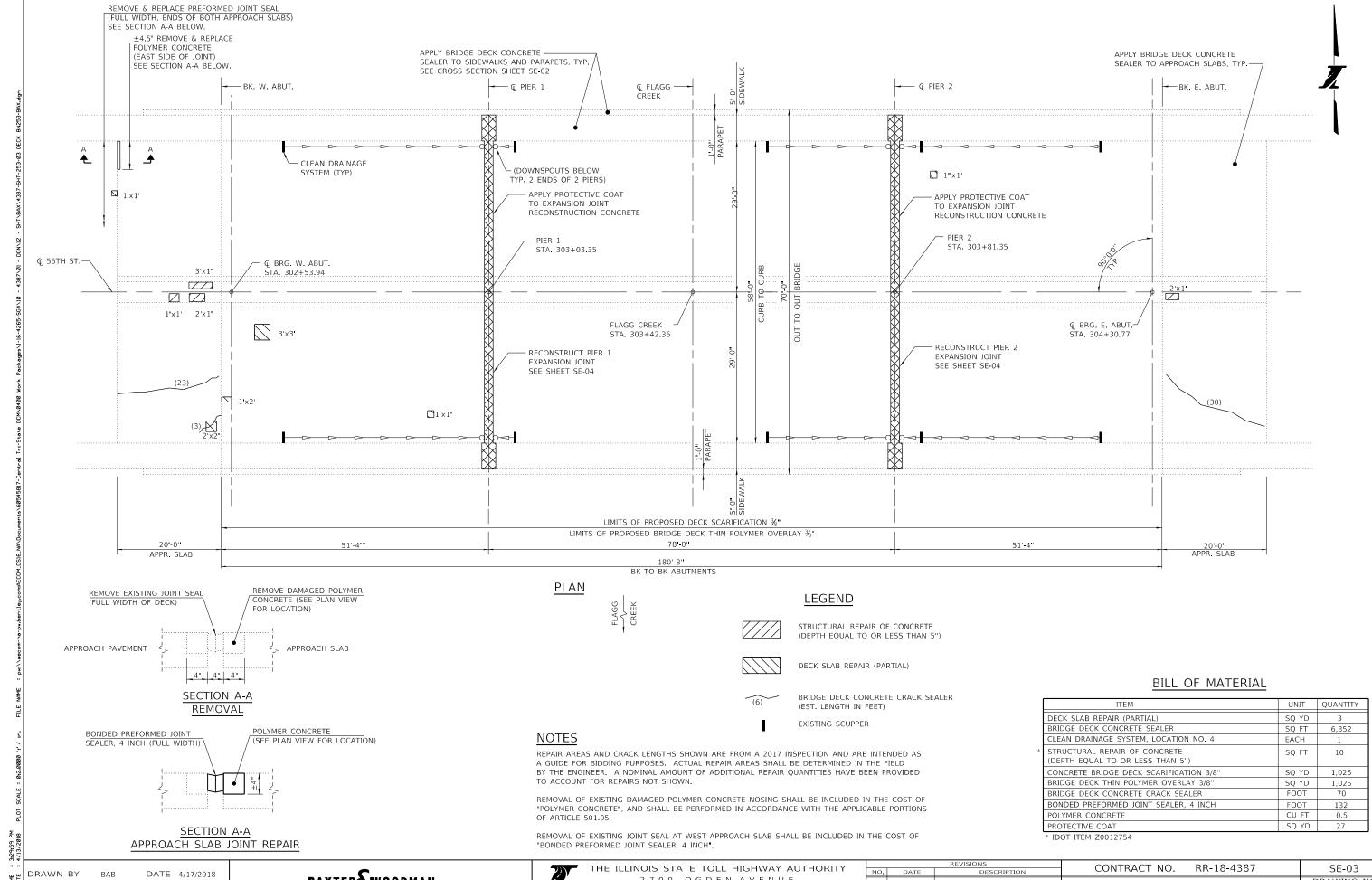
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE. ILLINOIS 60515

CONTRACT NO. RR-18-4387 SE-02 DRAWING NO. 55TH AVE OVER FLAGG CREEK (BN 253) GENERAL NOTES & BILL OF MATERIAL 106 OF 175

CHECKED BY BLB

DATE 4/17/2018

BAXTER WOODMAN



DATE 4/17/2018

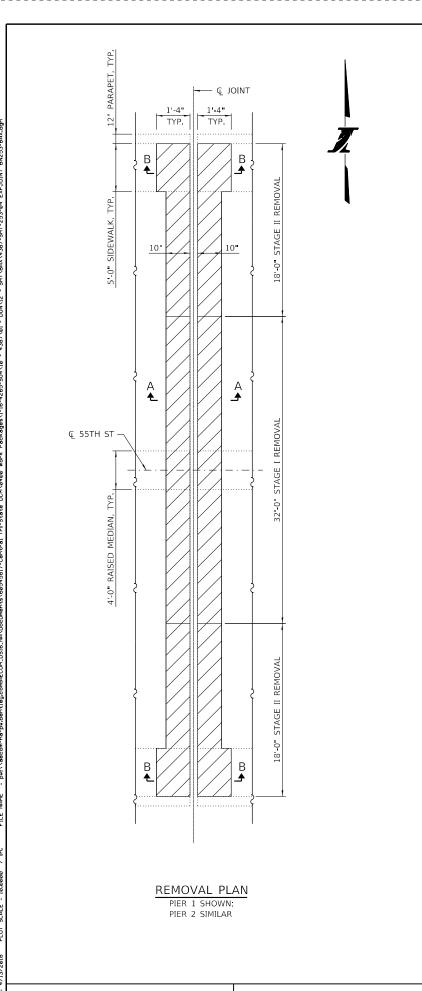
CHECKED BY BLB

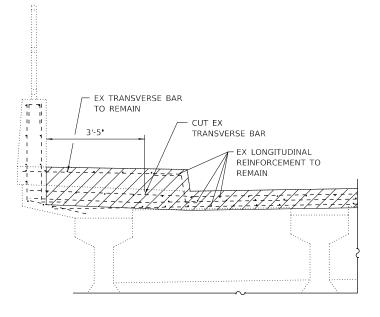
BAXTER WOODMAN Consulting Engineers

THI

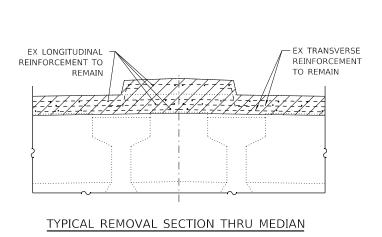
HE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
2700 OGDEN AVENUE
DOWNERS GROVE,
ILLINOIS 60515

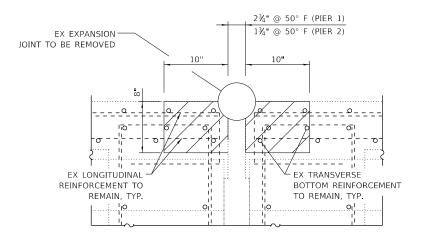
		REVISIONS	CONTRACT NO. RR-18-4387	CE 03	
NO.	DATE	DESCRIPTION	CONTRACT NO. RR-18-4387	SE-03	
			55TH ST OVER FLAGG CREEK (BN 253)	DRAWING NO.	
			DECK REPAIR DETAILS	107 OF 175	



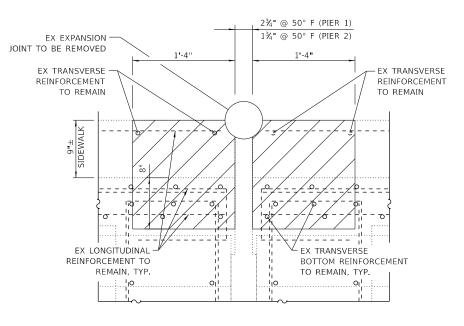


TYPICAL REMOVAL SECTION THRU SIDEWALK & PARAPET





SECTION A-A



SECTION B-B

INDICATES CONCRETE REMOVAL

NOTES

CONTRACTOR SHALL EXERCISE CARE DURING JOINT REMOVAL TO PREVENT DAMAGE TO EXISTING STRUCTURAL ELEMENTS TO REMAIN IN PLACE, INCLUDING BEAM SHEAR REINFORCEMENT.

EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GRAY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL".

DRAWN BY AS DATE 4/17/2018

CHECKED BY BLB DATE 4/17/2018





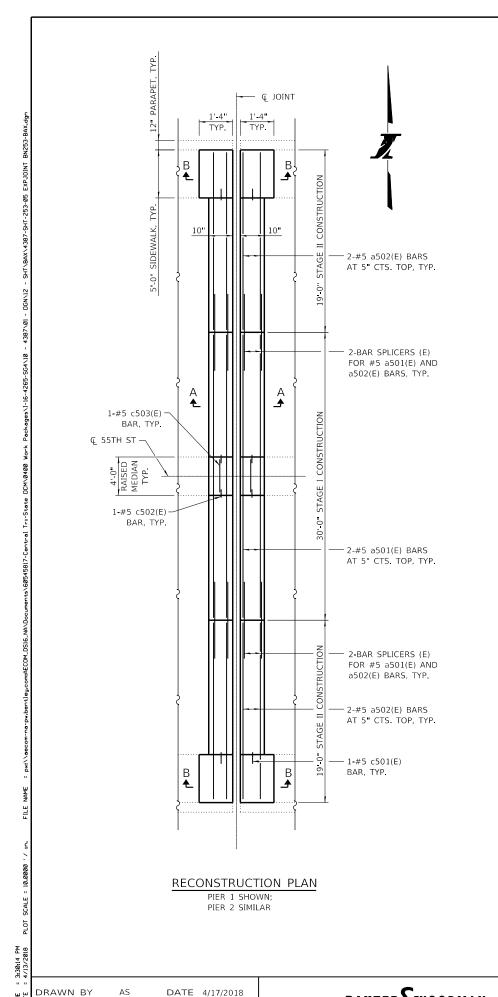
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

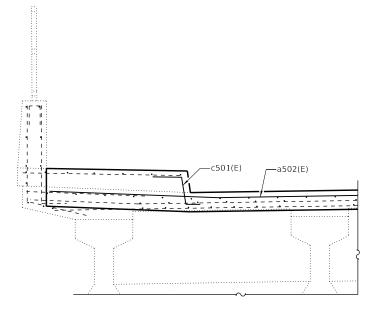
I L L I N O I S 6 0 5 1 5

REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387	SF-04
Ю.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	36-04
			55TH ST OVER FLAGG CREEK (BN 253) EXPANSION JOINT REPAIRS I	DRAWING NO.
				108 OF 175
				100 01 1/3

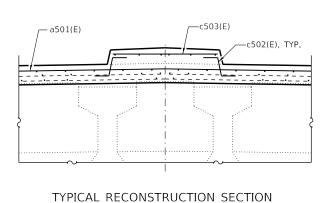


CHECKED BY BLB

DATE 4/17/2018



TYPICAL RECONSTRUCTION SECTION THRU SIDEWALK & PARAPET



THRU MEDIAN

STRIP SEAL SEE SHEET SE-06 1'-4" (PIER 1) FOR DETAILS 1'-3¹⅓₁₆" (PIER 2)

STRIP SEAL

10" (PIER 1)

9¹/₁₆" (PIER 2)

SEE SHEET SE-06 FOR DETAILS

SECTION B-B

SECTION A-A

EXPANSION JOINT REPAIRS BILL OF MATERIAL

∟_{a502(E), TYP.}

2¾" @ 50° F (PIER 1)

2¾" @ 50° F (PIER 2)

∟_{a501(E),} TYP.

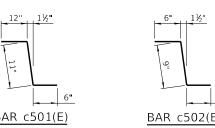
2¾" @ 50° F (PIER 1) 2¾" @ 50° F (PIER 2)

1'-4" (PIER 1)

1-3¹1/₁₆ (PIER 2)

10" (PIER 1)

9¹½₁₆" (PIER 2)



BAR	NO.	SIZE	LENGTH	SHAPE
a501(E)	8	#5	29'-8"	
a502(E)	16	#5	18'-8"	
c501(E)	8	#5	2'-5 "	\
c502(E)	8	#5	1'-9"	/
c503(E)	4	#5	3'-6"	
CONCRETE REMOVAL			CU. YD.	7.5
REINFORCEMENT BARS, EPOXY COATED		POUND	610	
BAR SPLICERS			EACH	16
CONCRETE SUPERSTRUCTURE			CU. YD.	7.4

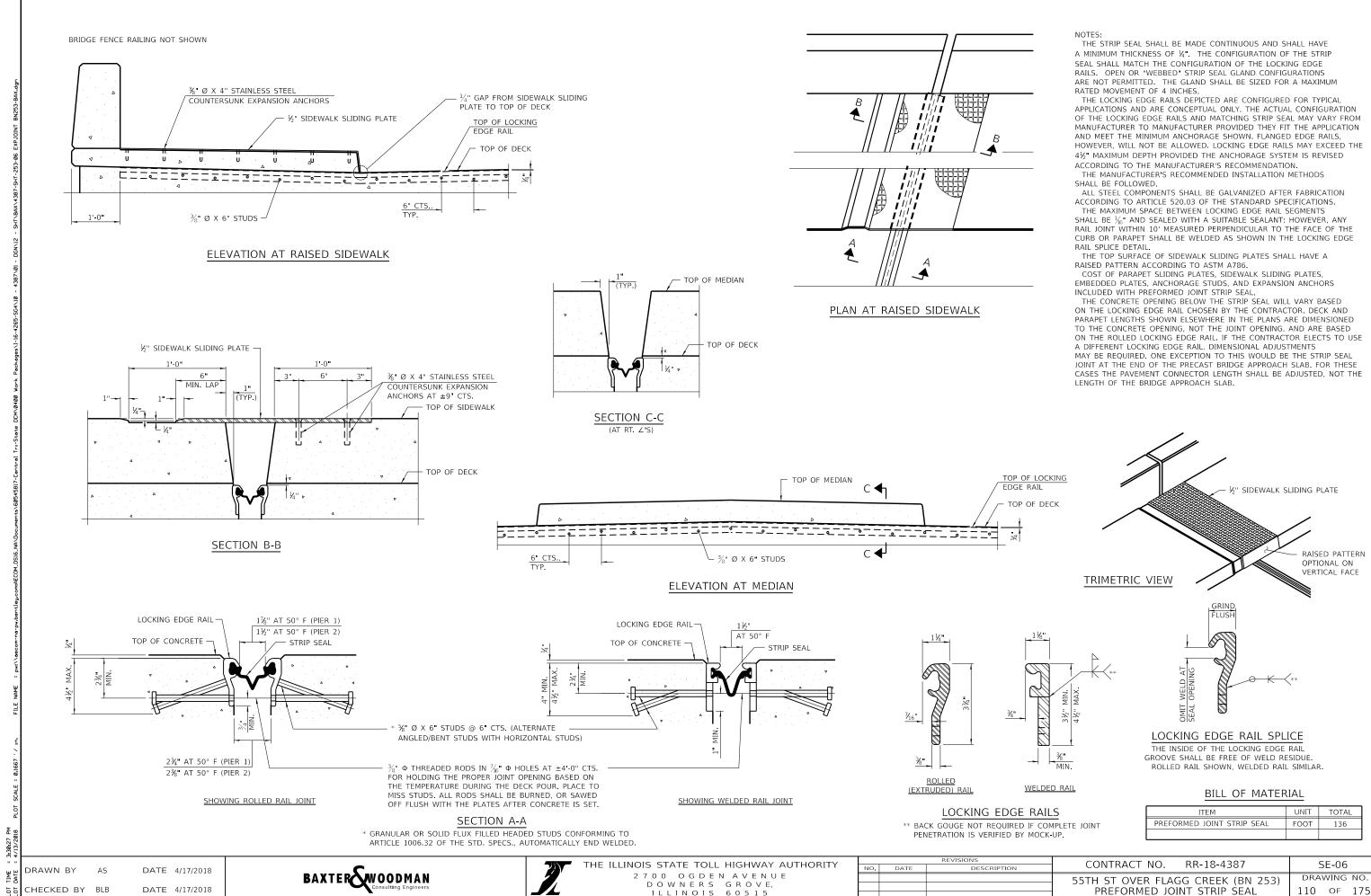
BAR c501(E)

BAR c502(E)

CONTRACT NO. RR-18-4387 SE-05 DRAWING NO. 55TH ST OVER FLAGG CREEK (BN 253) EXPANSION JOINT REPAIRS II 109 OF 175

BAXTER WOODMAN Consulting Engineers

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5



CHECKED BY BLB

DATE 4/17/2018

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

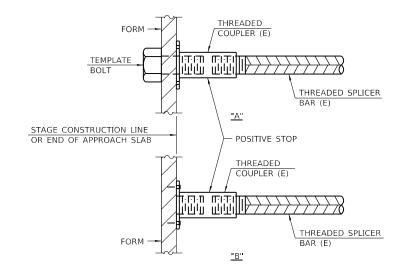
55TH ST OVER FLAGG CREEK (BN 253) PREFORMED JOINT STRIP SEAL 110 OF 175

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + $1\frac{1}{2}$ " + THREAD LENGTH

 * EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
JOINT RECONSTRUCTION	#5	16	3'-3"



INSTALLATION AND SETTING METHODS

"A" : SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT. "B" : SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS. (E) : INDICATES EPOXY COATING.

NOTES

SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI

YIELD STRENGTH.

ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.

BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS. SEE IDOT "QUALIFIED PRODUCTS LIST" OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

DATE 4/17/2018 DATE 4/17/2018



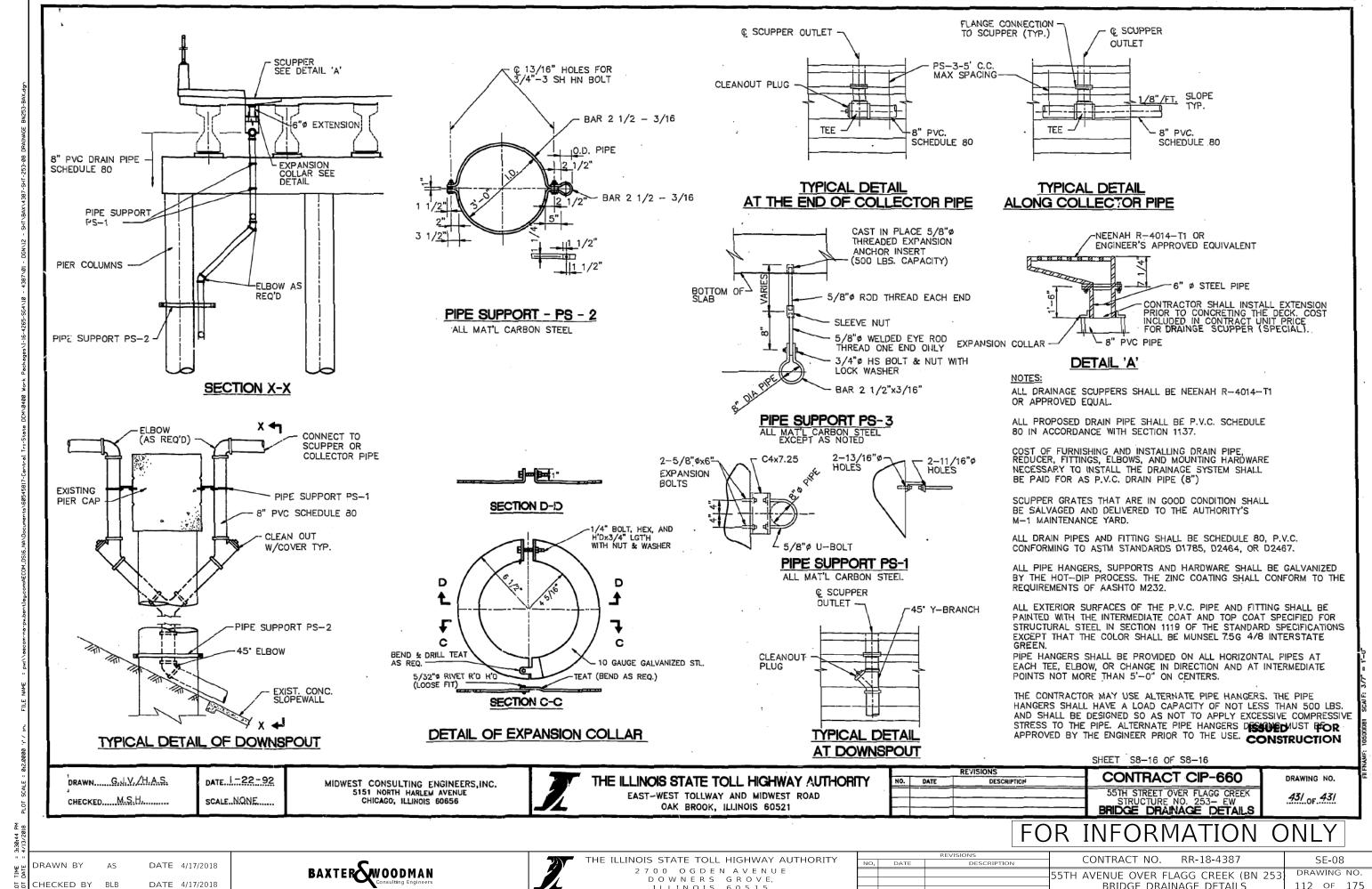


2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

DRAWN BY

CHECKED BY BLB

AS



DATE 4/17/2018

BAXTER WOODMAN Consulting Engineers



2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387	CE 00	
	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	SE-08	
			55TH AVENUE OVER FLAGG CREEK (BN 253)	DRAWING NO.	
			BRIDGE DRAINAGE DETAILS	112 OF 175	
			BRIDGE DRAINAGE DETAILS	112 01 173	

BENCHMARK: NO BENCHMARK DATA IS AVAILABLE.

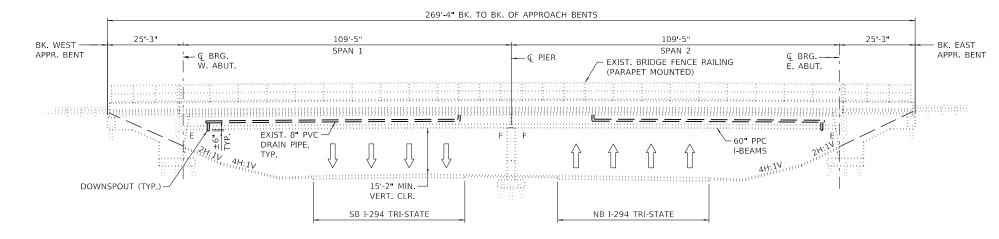
EXISTING STRUCTURE: BRIDGE NO. 255 (IDOT S.N. 016-2609) WAS BUILT IN 1992. THE EXISTING STRUCTURE IS A TWO-SPAN BRIDGE WITH AN OUT-TO-OUT DECK WIDTH OF 70'-0" MEASURING 269'-4" FROM BACK-TO-BACK OF APPROACH BENTS. EACH APPROACH SPAN MEASURES 25'-3" FROM CENTERLINE OF APPROACH BENT TO CENTERLINE OF BEARING, AND EACH SPAN MEASURES 109'-5" CENTERLINE TO CENTERLINE OF BEARINGS. THE SUPERSTRUCTURE CONSISTS OF TEN(10) 60" DEEP PRECAST PRESTRESSED CONCRETE I-BEAMS WITH A REINFORCED CONCRETE DECK, AND IS SUPPORTED BY VAULTED ABUTMENTS AND A MULTI-COLUMN PIER ALL FOUNDED ON STEEL H-PILES. THE BRIDGE CARRIES TWO LANES OF TRAFFIC IN

STAGE CONSTRUCTION SHALL BE UTILIZED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

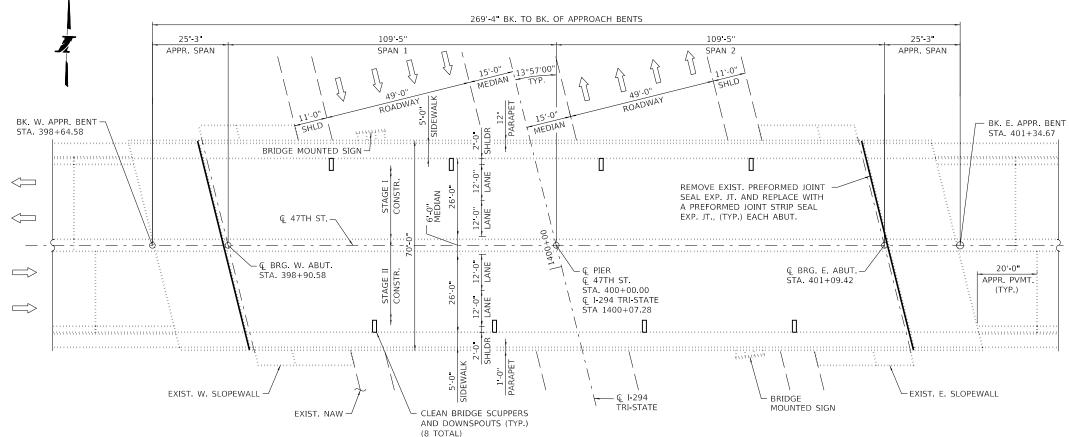
NO SALVAGE

SCOPE OF WORK

- REPAIR ALL OPEN CRACKS 1/16" WIDE OR WIDER.
- REPAIR ALL CONCRETE SPALLS IN THE SUPERSTRUCTURE AND SUBSTRUCTURE.
- CLEAN AND PAINT THE BEARING PLATES AND SIDE RETAINERS AT BOTH ABUTMENTS.
- APPLY CONCRETE SEALANT TO BOTH ABUTMENT SEATS AND BACKWALL AND ALL THE EXPOSED SURFACE AREAS OF THE PIER.
- REPLACE THE BRIDGE DECK EXPANSION JOINT AT EACH ABUTMENT.
- SCARIFY THE EXISTING BRIDGE DECK.
- REPAIR DECK SLAB.
- APPLY A THIN POLYMER OVERLAY TO THE DECK SURFACE.
- APPLY BRIDGE DECK CONCRETE SEALER TO THE SURFACES OF THE APPROACH SPANS, MEDIAN, SIDEWALKS AND THE TOP AND INSIDE VERTICAL FACE OF THE PARAPETS.
- 10. CLEAN ALL THE DRAINAGE SCUPPERS AND DOWNSPOUTS.



ELEVATION



<u>PLAN</u>

HIGHWAY CLASSIFICATION

RTE. OVER - 47TH STREET FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 9,800 (2014); 8,755 (2032) ADTT: 392 (2014); 350 (2032)

RTE. UNDER - I-294 FUNCTIONAL CLASS: INTERSTATE ADT: 191,800 (2016); 153,985 (2032) ADTT: 24,934 (2016); 20,018 (2032)

DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

STRUCTURE DESIGN MANUAL, ILLINOIS TOLLWAY, MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL DATED JANUARY 2012.

CONSTRUCTION SPECIFICATIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS.

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED MAY 1, 2017.

ILLINOIS DEPARMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2018.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION

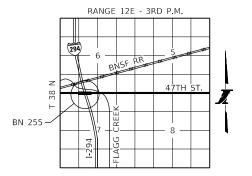
f'c = 4,000 PSIfy = 60,000 PSI (REINFORCEMENT)

FIELD UNITS (EXISTING CONSTRUCTION)

CAST-IN-PLACE CONCRETE f'c = 3,500 PSI fy = 60,000 PSI (REINFORCEMENT)

PRECAST PRESTRESSED CONCRETE f'c = 6,000 PSI

LOADING HS 20-44



LOCATION MAP

GENERAL PLAN AND ELEVATION 47TH STREET OVER TRI-STATE TOLLWAY (I-294) **COOK COUNTY** MILE POST 26.5 BRIDGE NO. 255 (016-2609)

4/17/2018 CHECKED BY DATE 4/17/2018

Mesia Engineers, Inc.

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CONTRACT NO. RR-18-4387 47TH ST OVER I-294 (BN 255)

DRAWING NO. 113 OF 175 GENERAL PLAN AND ELEVATION

GENERAL NOTES

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REOUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES". ACI 315.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS **TOLLWAY**

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS"AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE."

EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL.

THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.

CONCRETE SEALER SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS, INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS. SEALER SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS IN THE MEDIAN OR PIERS ABUTMENTS AND WINGWALLS THAT ARE ADIACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES. THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

TOTAL BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY	
50102400	CONCRETE REMOVAL	CU. YD.	9.2	
50157300	PROTECTIVE SHIELD	SQ. YD.	49	
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	9.2	
50300300	PROTECTIVE COAT	SQ. YD.	42	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	820	
50800515	BAR SPLICERS	EACH	6	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	141	
59000200	EPOXY CRACK INJECTION	FOOT	3	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	1	
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ. YD.	1,315	
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ. YD.	1,315	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR	SQ. FT.	4	
	LESS THAN 5 INCHES)			
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	1	
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	153	
X0326331	CLEANING AND PAINTING BEARINGS	EACH	20	
X5870015	BRIDGE DECK CONCRETE SEALER	SQ.FT.	8,299	
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	20	
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR	SQ. FT.	23	
	LESS THAN 5 IN.)			
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	3,493	
JT602835	CLEAN DRAINAGE SYSTEM, LOCATION NO. 5	EACH	1	

INDEX OF SHEETS

SF-1	GENERAL PLAN AND ELEVATION
CF 3	CENEDAL NIOTES AND DULL OF MATER

GENERAL NOTES AND BILL OF MATERIAL

CONSTRUCTION STAGING

SF-4 WEST ABUTMENT REPAIRS EAST ABUTMENT REPAIRS

SF-5 PIER REPAIRS

SF-7 DECK REPAIRS

SF-8 PARAPET REPAIRS

SF-9 EXPANSION JOINT REPAIRS

SF-10 EXPANSION JOINT REPAIRS

PREFORMED JOINT STRIP SEAL DETAILS

BAR SPLICER DETAILS

EXISTING BEARING DETAILS

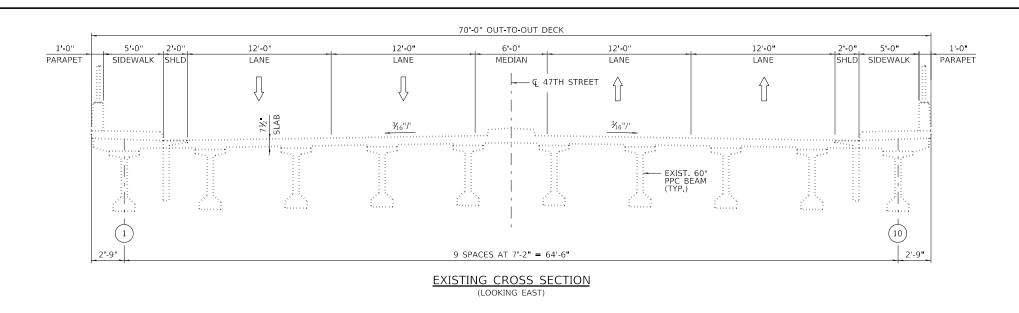
ABBREVIATIONS

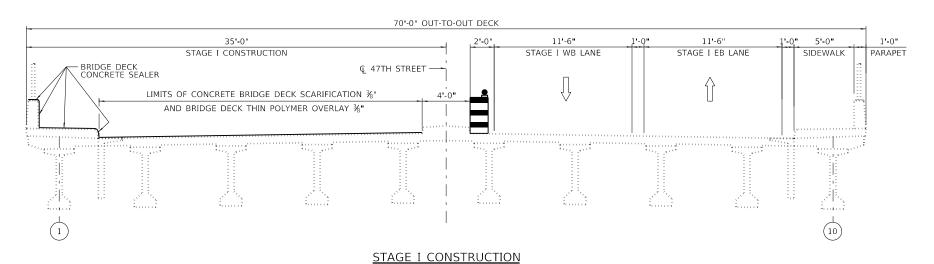
ABUT.	ABUTMENT	NAW	NOISE ABATEMENT WALL
APPR.	APPROACH	N.B.L.	NORTH BOUND LANES
B/	BOTTOM OF	O.F.	OUTSIDE FACE
B.F.	BACK FACE	PVMT.	PAVEMENT
BK	BACK	P.G.L.	PROFILE GRADE LINE
BRG.	BEARING	P.J.F.	PREFORMED JOINT FILLER
CLR.	CLEARANCE	P.J.S.	PREFORMED JOINT SEALER
CONC.	CONCRETE	PPC	PRECAST PRESTRESSED CONCRETE
CONSTR.	CONSTRUCTION	PROP.	PROPOSED
DIA.	DIAMETER	REINF.	REINFORCEMENT
E.F.	EACH FACE	RT.	RIGHT
E.	EAST	SHLDR.	SHOULDER
EB	EAST BOUND	S. ABUT.	SOUTH ABUTMENT
EXIST.	EXISTING	S.B.L.	SOUTH BOUND LANES
EXP.	EXPANSION	STA.	STATION
F.F.	FRONT FACE	T/	TOP OF
HORIZ.	HORIZONTAL	TYP.	TYPICAL
I.F.	INSIDE FACE	V.I.F.	VERIFY IN FIELD
JT.	JOINT	VERT.	VERTICAL
MIN.	MINIMUM	W.	WEST
N. ABUT.	NORTH ABUTMENT		WEST BOUND

2700 OGDEN AVENUE

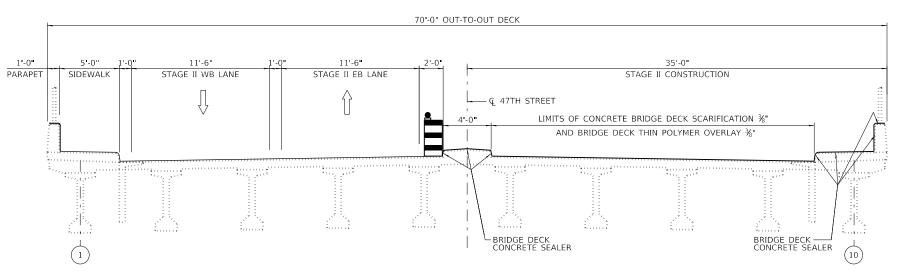
DOWNERS GROVE.

ILLINOIS 60515





(LOOKING EAST)



STAGE II CONSTRUCTION (LOOKING EAST)

NOTES

- 1. SEE ROADWAY DRAWINGS FOR MAINLINE MAINTENANCE OF TRAFFIC DETAILS.
- 2. FOR MAINTENANCE OF TRAFFIC DETAILS AND DEVICES REQUIRED FOR 47TH STREET, SEE ROADWAY PLAN DRAWINGS 24,31&44.
- 3. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE SIDEWALKS, MEDIAN, FACE OF CURBS, AND THE TOP AND TRAFFIC FACE OF PARAPETS. ALL SURFACES TO BE SEALED SHALL BE THOROUGHLY CLEANED PRIOR TO SEALER APPLICATION ACCORDING TO MANUFACTURER'S RECOMMENDATION.

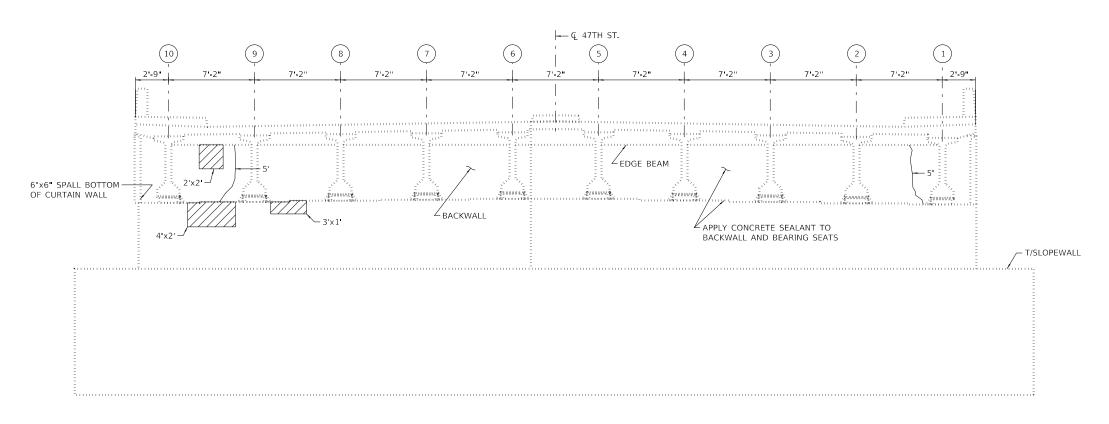
DATE 4/17/2018 CHECKED BY MR DATE 4/17/2018

Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

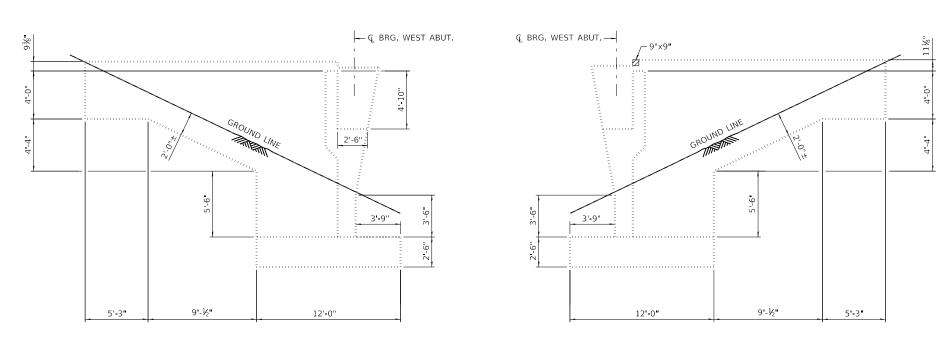


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

	REVISIONS		CONTRACT NO. RR-18-4387	SF-3
10.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	3F - 3
			47TH STREET OVER I-294 (BN 255)	DRAWING NO.
			, ,	115 175
			CONSTRUCTION STAGING	115 OF 175



ELEVATION - WEST ABUTMENT (LOOKING WEST)



ELEVATION - SOUTH CURTAIN WALL (LOOKING NORTH)

ELEVATION - NORTH CURTAIN WALL (LOOKING SOUTH)

<u>LEGEND</u>

LOW PRESSURE EPOXY INJECTION

SPALL (DEPTH EQUAL TO OR LESS THAN 5 IN.)

R IV B Rubinos & Mesia Engineers, Inc.

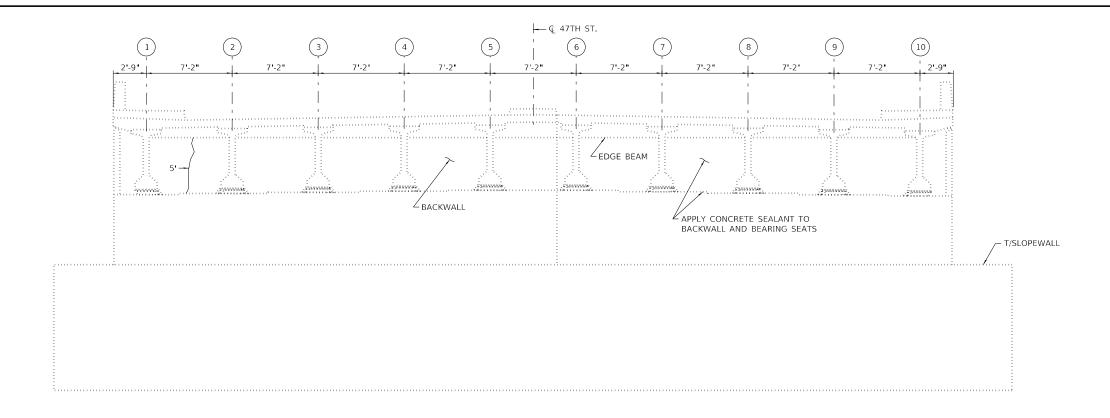
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

SF-4 CONTRACT NO. RR-18-4387 DRAWING NO. 47TH STREET OVER I-294 (BN 255) 116 OF 175 WEST ABUTMENT REPAIRS

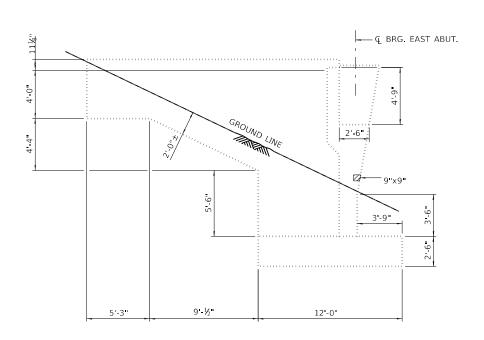
BILL OF MATERIAL

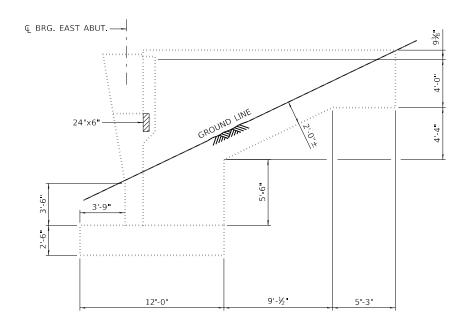
PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	10
JT503040	STRUCTURAL REPAIR OF CONCRETE	SQ. FT.	16
	(DEPTH EQUAL TO OR LESS THAN 5 IN.)		
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	530

DATE 4/17/2018 CHECKED BY MR DATE 4/17/2018



ELEVATION - EAST ABUTMENT (LOOKING EAST)





ELEVATION - SOUTH CURTAIN WALL (LOOKING NORTH)

BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	5
JT503040	STRUCTURAL REPAIR OF CONCRETE	SQ. FT.	2
	(DEPTH EQUAL TO OR LESS THAN 5 IN.)		
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	523

<u>LEGEND</u>

6'

LOW PRESSURE EPOXY INJECTION



CHECKED BY MR

SPALL (DEPTH EQUAL TO OR LESS THAN 5 IN.)

DATE 4/17/2018

DATE 4/17/2018

R IV B Rubinos & Mesia Engineers, Inc.

ELEVATION - NORTH CURTAIN WALL



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

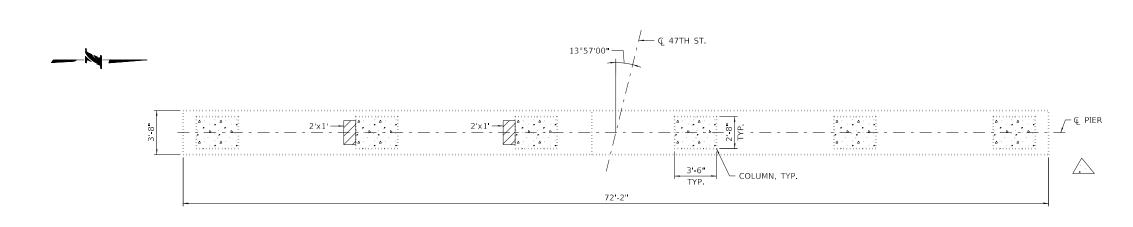
I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SF-5

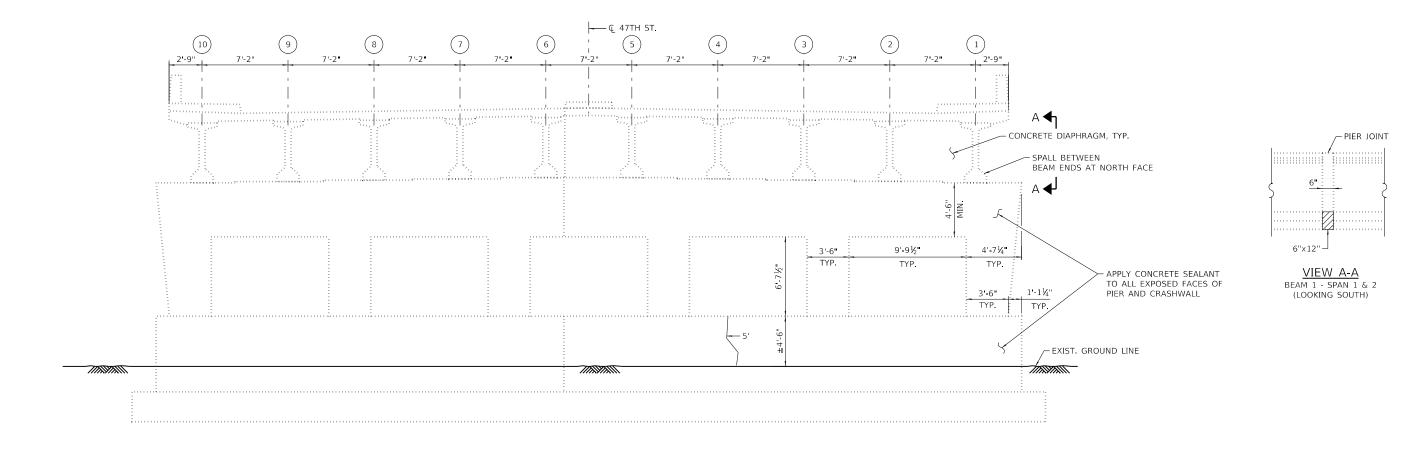
DATE DESCRIPTION CONTRACT NO. RR-18-4387 SF-5

47TH STREET OVER I-294 (BN 255) DRAWING NO.

EAST ABUTMENT REPAIRS 117 OF 175



<u>PLAN - CRASHWALL</u>



ELEVATION - PIER (LOOKING WEST)

BILL OF MATERIAL

<u>LEGEND</u>	
6'	LOW PRESSURE EPOXY INJECTION
	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	5
JT503040	STRUCTURAL REPAIR OF CONCRETE	SQ. FT.	5
	(DEPTH EQUAL TO OR LESS THAN 5 IN.)		
JT524010	APPLY CONCRETE SEALANT	SQ. FT.	2,440

DRAWN BY AMV DATE 4/17/2018

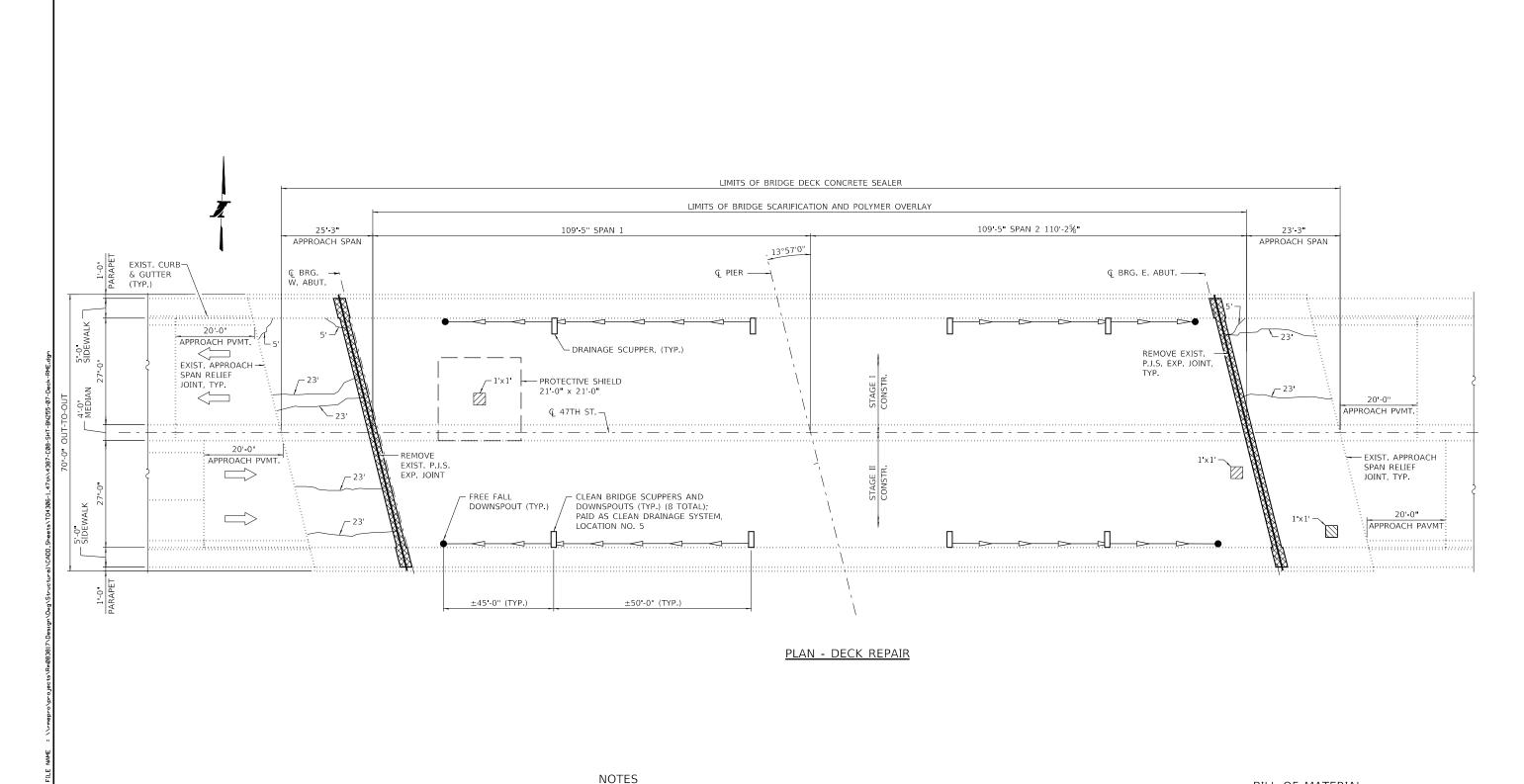
CHECKED BY MR DATE 4/17/2018





THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
2700 OGDEN AVENUE
DOWNERS GROVE,
ILLINOIS 60515

REVISIONS			CONTRACT NO. RR-18-4387	SF-6	
	DATE	DESCRIPTION	CONTRACT NO. RR-18-4387	21-0	
			47TH STREET OVER I-294 (BN 255)	DRAWING NO.	
			PIER REPAIRS	118 OF 175	



- 1. DECK REPAIR QUANTITY IS ESTIMATED, ACTUAL REPAIR AREAS AND LOCATIONS SHALL BE DETERMINED BY THE ENGINEER AND SHOWN ON AS-BUILT PLANS.
- CONCRETE BRIDGE DECK SCARIFICATION 3/8" AND BRIDGE DECK THIN POLYMER OVERLAY, 3/8" SHALL BE PERFORMED OVER THE LIMITS OF THE BRIDGE DECK, EXCLUDING THE TRANSVERSE JOINT RECONSTRUCTION AREAS AND MEDIAN.
- 3. SEE DRAWING NO. 55 FOR PAVEMENT MARKING PLANS.

4. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE FOLLOWING SURFACES: SIDEWALKS, MEDIAN AND TOP AND INSIDE VERTICAL FACE OF THE PARAPETS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE TRAFFIC SURFACE OF EACH APPROACH SPAN. BRIDGE DECK CONCRETE SEALER SHALL NOT BE APPLIED TO NEW BRIDGE DECK OVERLAY AND NEW CONCRETE IN RECONSTRUCTED EXPANSION JOINTS. SEE SHEET SF-3.

BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
50157300	PROTECTIVE SHIELD	SQ. YD.	49
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	1
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ. YD.	1,315
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ. YD.	1,315
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	1
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	153
X5870015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	8,299
JT602835	CLEAN DRAINAGE SYSTEM, LOCATION NO. 5	EACH	1

<u>LEGEND</u>



DECK SLAB REPAIR (PARTIAL)

(PARTIAL DEPTH)

APPROACH SLAB REPAIR



AND REPLACEMENT

BRIDGE DECK CONRETE CRACK SEALER

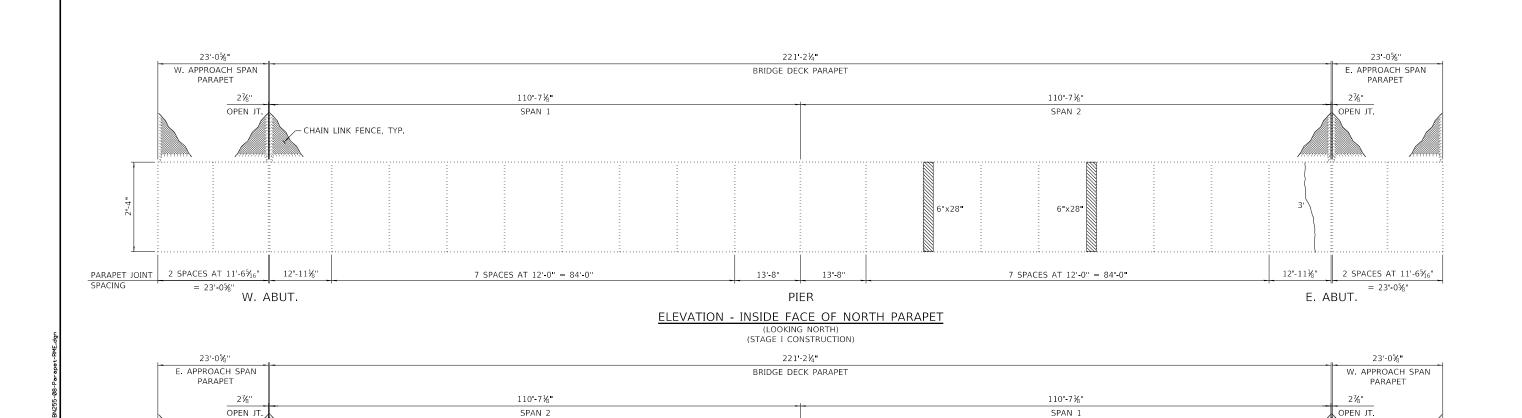
4/17/2018 CHECKED BY MR DATE 4/17/2018

Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

		REVISIONS	CONTRACT NO. RR-18-4387	SF-7
10.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	3F - 7
			47TH STREET OVER I-294 (BN 255)	DRAWING NO.
			,	110 05 175
			DECK REPAIRS	119 OF 175



PIER **ELEVATION - INSIDE FACE OF SOUTH PARAPET**

13'-8"

13'-8"

(LOOKING SOUTH) (STAGE II CONSTRUCTION)

PAY ITEM NO.

59000200

Z0012754

7 SPACES AT 12'-0" = 84'-0"

LEGEND

SPACING

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)

DATE 4/17/2018

DATE 4/17/2018

PARAPET JOINT 2 SPACES AT 11'-6\(\frac{1}{2}\)6"

E. ABUT.

6' → EPOXY CRACK INJECTION

R IV IB Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

7 SPACES AT 12'-0" = 84'-0"

CHAIN LINK FENCE, TYP.

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SF-8 DRAWING NO. 47TH STREET OVER I-294 (BN 255) 120 OF 175 PARAPET REPAIRS

EPOXY CRACK INJECTION

2 SPACES AT 11'-61/16"

UNIT

FOOT

SQ. FT.

QUANTIT'

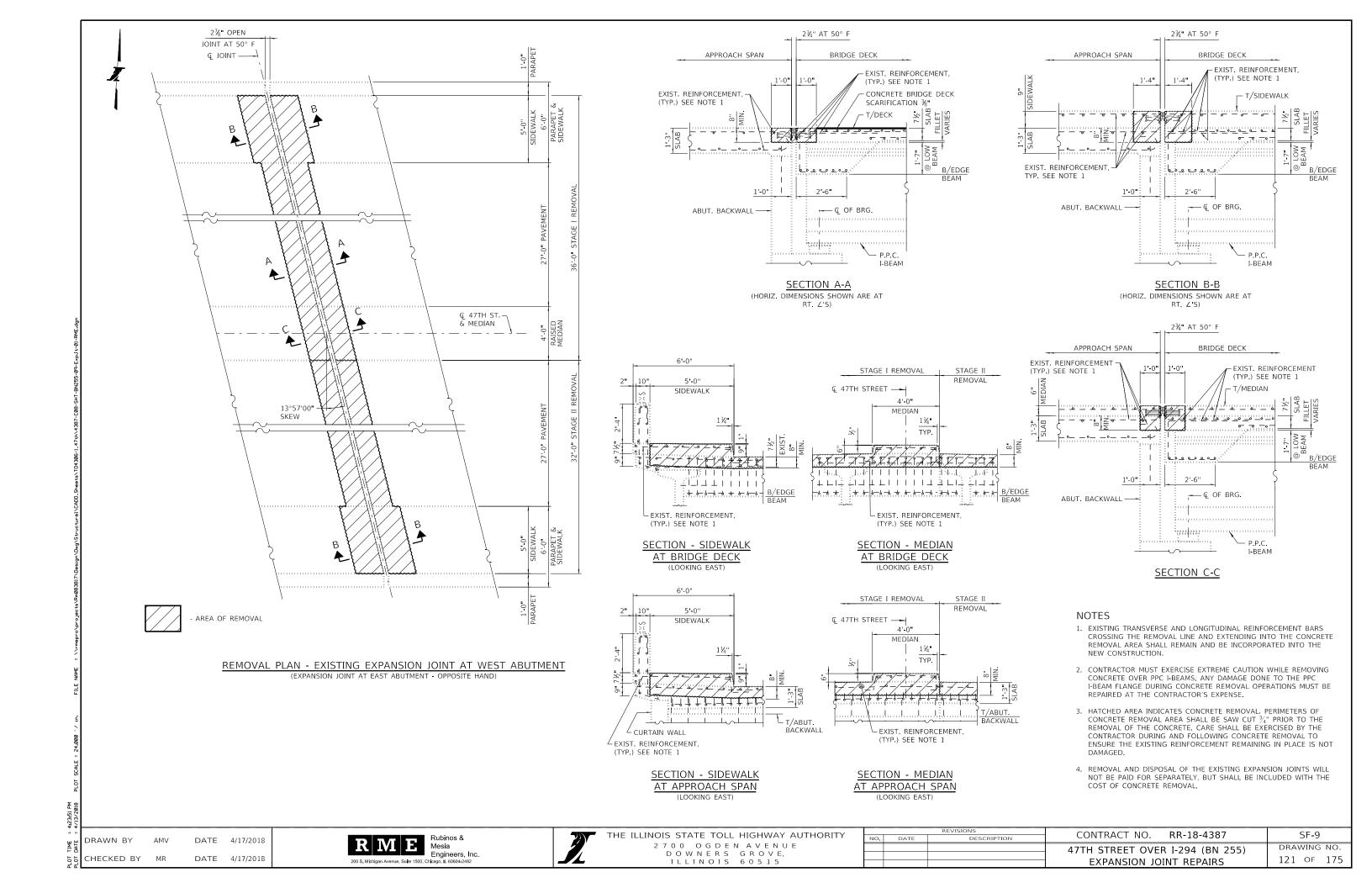
4

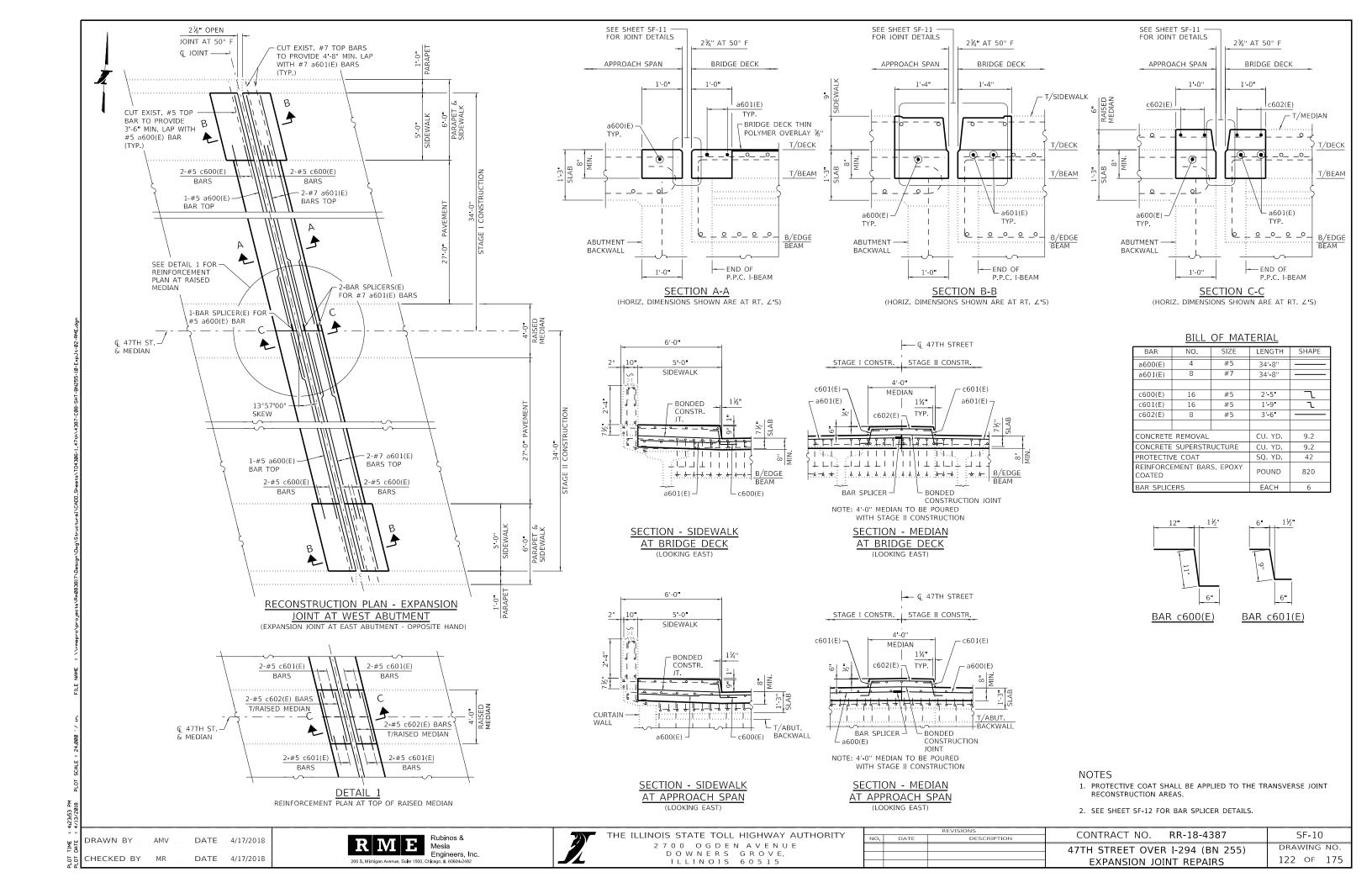
BILL OF MATERIAL

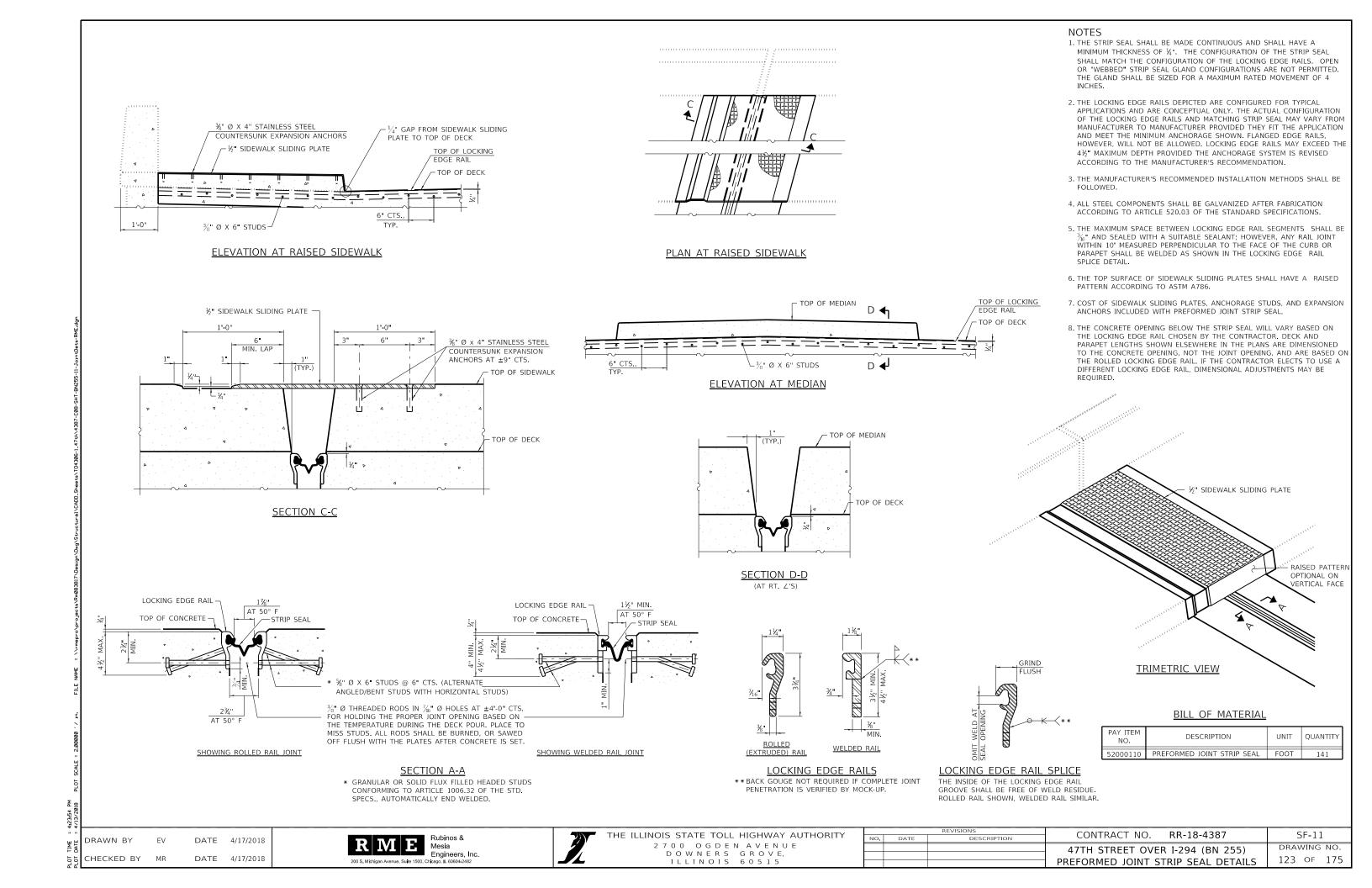
DESCRIPTION

STRUCTURAL REPAIR OF CONCRETE (DEPTH

EQUAL TO OR LESS THAN 5 INCHES)





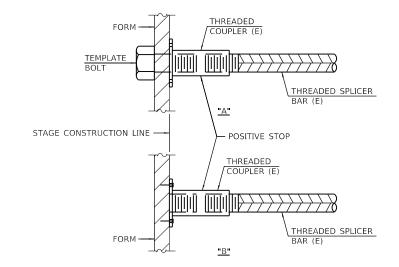


STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1½" + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
W. ABUT. EXP. JT.	#7	2	4'-8"
W. ABUT. EXP. JT.	#5	1	3'-6"
E. ABUT. EXP. JT.	#7	2	4 '- 8"
E. ABUT. EXP. JT.	#5	1	3'-6"



INSTALLATION AND SETTING METHODS

"A": SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT.
"B": SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS. (E): INDICATES EPOXY COATING.

NOTES

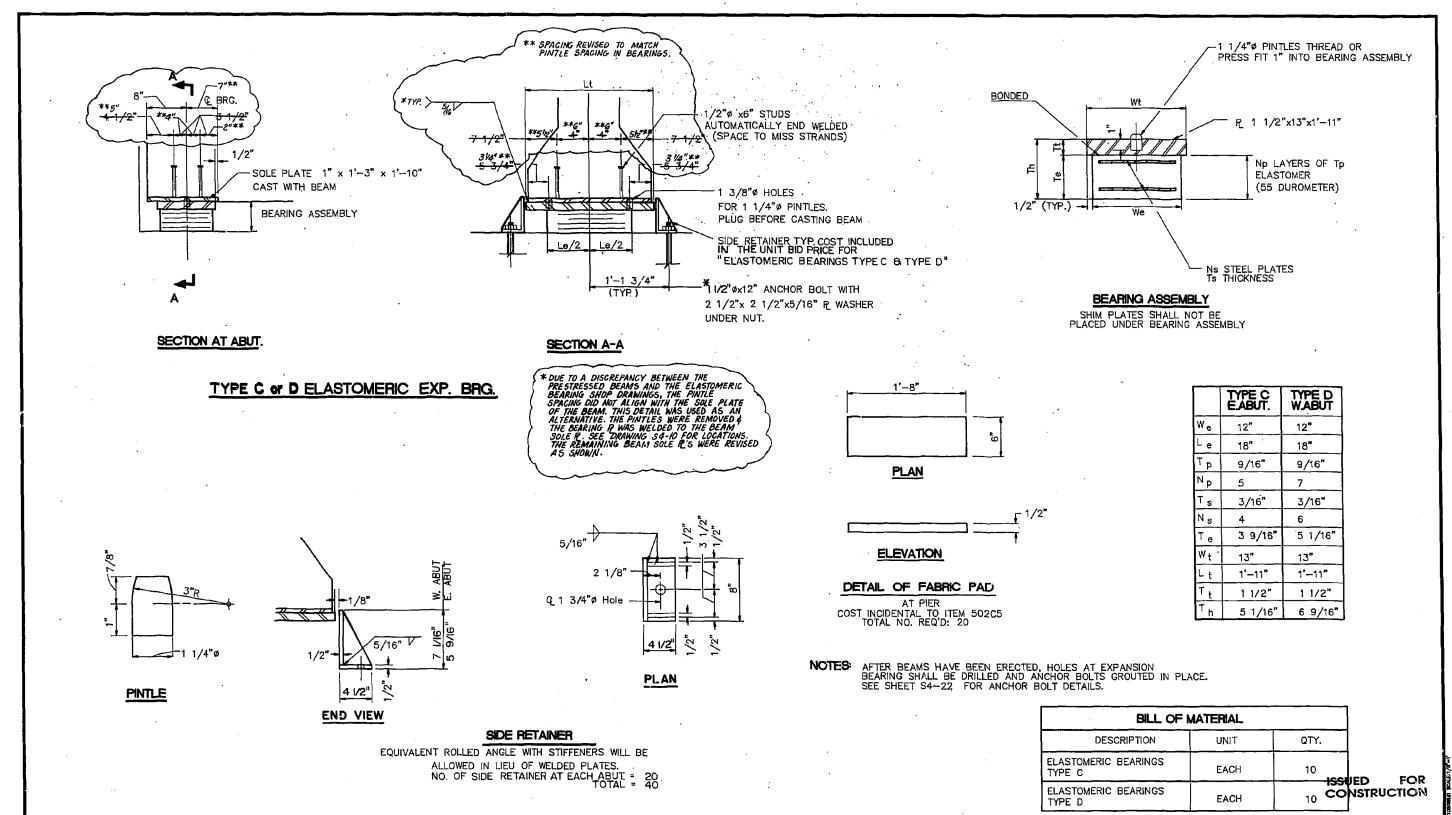
- 1. SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- 2. ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- 3. BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD
- 4. SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

DRAWN BY 4/17/2018 CHECKED BY MR DATE 4/17/2018





FOR INFORMATION ONLY



DRAWN BY AMV DATE 4/17/2018
CHECKED BY MR DATE 4/17/2018

CHECKED ... M.S.H.

J.H.B.

DATE 1-22-92

SCALE NONE

R IV IF Rubinos & Mesia Engineers, Inc.

MIDWEST CONSULTING ENGINEERS, INC. 5151 NORTH HARLEM AVENUE

CHICAGO, ILLINOIS 60656



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

EAST-WEST TOLLWAY AND MIDWEST ROAD

OAK BROOK, ILLINOIS 60521

NO. DATE

A 3-3-94 RECORD DRAWING

DESCRIPTION

	REVISIONS	CONTRACT NO. RR-18-4387	SF-13
DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	21-12
		47TH STREET OVER I-294 (BN 255)	DRAWING NO.
		, ,	125 OF 175
		EXISTING BEARING DETAILS	125 OF 175

SHEET S4-12 OF S4-24

DRAWING NO.

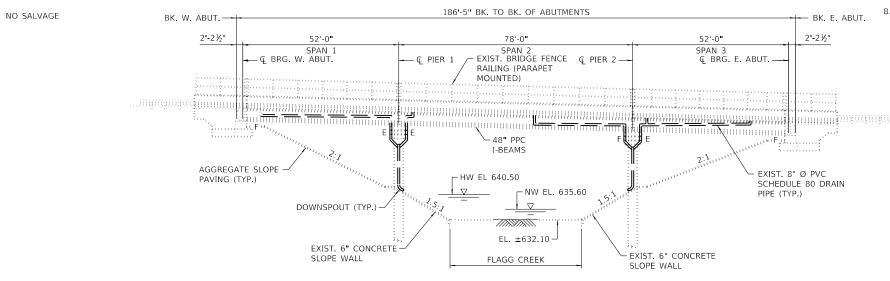
362 OF 431

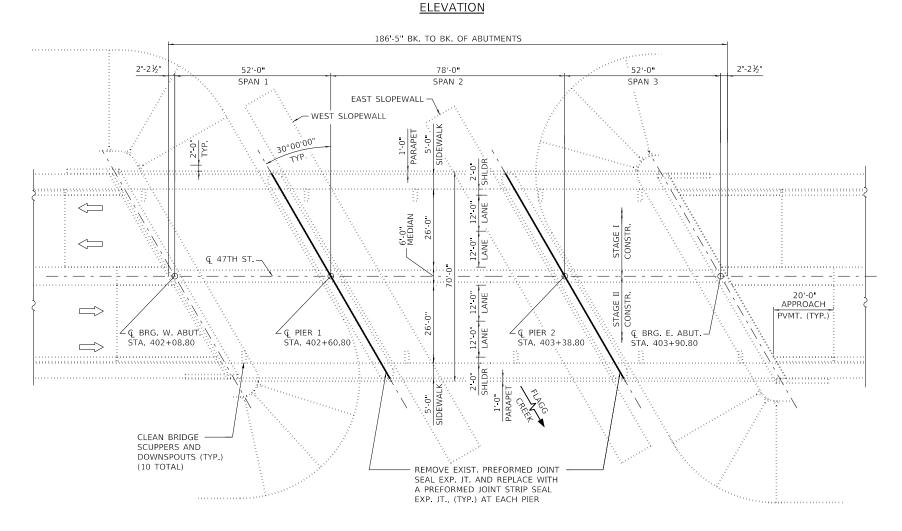
CONTRACT CIP-660

7TH STREET OVER TRI-STATE TOLLWAY STRUCTURE NO. 255-EW **BEARING DETAILS** BENCHMARK: NO BENCHMARK DATA IS AVAILABLE.

EXISTING STRUCTURE: BRIDGE NO 257 (IDOT S.N. 016-0883) WAS ORIGINALLY BUILT IN 1958. THE CONCRETE DECK, EXPANSION BEARINGS AND APPROACH PAVEMENT WERE REPLACED IN 1992. THE EXISTING STRUCTURE IS A THREE-SPAN, SIMPLY SUPPORTED BRIDGE. THE SUPERSTRUCTURE CONSISTS OF TEN(10) 48" DEEP PRECAST PRESTRESSED CONCRETE I BEAMS WITH A REINFORCED CONCRETE DECK, AND IS SUPPORTED BY PILE BENT ABUTMENTS ON CONCRETE-FILLED METAL SHELL PILES AND TWO PILE BENT PIERS. FROM WEST TO EAST, THE SPAN LENGTHS ARE 52'-0", 78'-0", AND 52'-0" MEASURED CENTERLINE TO CENTERLINE OF BEARINGS. THE BRIDGE DECK WIDTH IS 70'-0" OUT TO OUT. THE BRIDGE CARRIES TWO LANES OF TRAFFIC IN EACH DIRECTION.

STAGE CONSTRUCTION SHALL BE UTILIZED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.





<u>PLAN</u>

SCOPE OF WORK

- REPAIR ALL OPEN CRACKS $\frac{1}{16}$ " WIDE OR WIDER IN THE SUPERSTRUCTURE.
- REPAIR ALL CONCRETE SPALLS IN THE SUPERSTRUCTURE
- REPLACE THE BRIDGE DECK EXPANSION JOINT AT EACH PIER.
- SCARIFY THE EXISTING BRIDGE DECK.
- REPAIR DECK SLAB.
- APPLY A THIN POLYMER OVERLAY TO THE DECK SURFACE.
- APPLY BRIDGE DECK CONCRETE SEALER TO THE SURFACES OF THE APPROACH PAVEMENTS, MEDIAN, SIDEWALKS AND THE TOP AND INSIDE
- VERTICAL FACE OF THE PARAPETS.

 8. CLEAN ALL THE DRAINAGE SCUPPERS AND DOWNSPOUTS.

HIGHWAY CLASSIFICATION

FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 9,800 (2014); 8,755 (2032) ADTT: 392 (2014); 350 (2032)

DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION.

STRUCTURE DESIGN MANUAL, ILLINOIS TOLLWAY, MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL DATED JANUARY 2012.

CONSTRUCTION SPECIFICATIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS.

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED MAY 1, 2017.

ILLINOIS DEPARMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2018.

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016.

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION

f'c = 4,000 PSI fy = 60,000 PSI (REINFORCEMENT)

FIELD UNITS (EXISTING CONSTRUCTION)

CAST-IN-PLACE CONCRETE SUBSTRUCTURE

f'c = 3,000 PSI fs = 20,000 PSI (REINFORCEMENT)

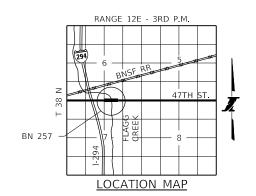
SUPERSTRUCTURE

f'c = 3,500 PSI

fy = 60,000 PSI (REINFORCEMENT)

PRECAST PRESTRESSED CONCRETE f'c = 5,000 PSI

LOADING HS 20-44



GENERAL PLAN AND ELEVATION 47TH STREET OVER **FLAGG CREEK** COOK COUNTY MILE POST 26.5

BRIDGE NO. 257 (016-0883)

4/17/2018 CHECKED BY DATE 4/17/2018

Mesia Engineers, Inc. Avenue, Suite 1500, Chicago, IL 60604-2482

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CONTRACT NO. RR-18-4387 SG-1 DRAWING NO. 47TH STREET OVER FLAGG CREEK (BN 257) 126 OF 175 GENERAL PLAN AND ELEVATION

GENERAL NOTES

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

BARS NOTED THUS. 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES. FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS"AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE."

EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GREY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL."

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

NO WORK WILL BE ALLOWED WITHIN FLAGG CREEK.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

TOTAL BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	
50102400	CONCRETE REMOVAL	CU. YD.	10.3	
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	10.3	
50300300	PROTECTIVE COAT	SQ. YD.	47	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	750	
50800515	BAR SPLICERS	EACH	8	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	158	
59000200	EPOXY CRACK INJECTION	FOOT	2	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	1	
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ. YD.	1,081	
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ. YD.	1,081	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR	SQ. FT.	3	
	LESS THAN 5 INCHES)			
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	1	
X5870015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	8,145	
JT602836	CLEAN DRAINAGE SYSTEM, LOCATION NO. 6	EACH	1	

INDEX OF SHEETS

SG-1 GENERAL PLAN AND ELEVATION

GENERAL NOTES & BILL OF MATERIAL CONSTRUCTION STAGING

SG-3

DECK REPAIRS

SG-5 PARAPET REPAIRS

SG-6 EXPANSION JOINT REPAIRS

EXPANSION JOINT REPAIRS SG-7

SG-8 PREFORMED JOINT STRIP SEAL DETAILS BAR SLICER DETAILS

SG-10 EXISTING BRIDGE DRAINAGE DETAILS

ABBREVIATIONS

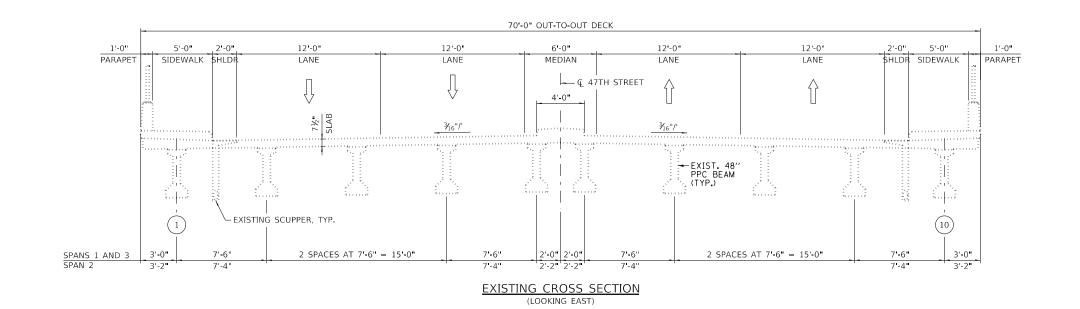
Mesia Engineers, Inc.

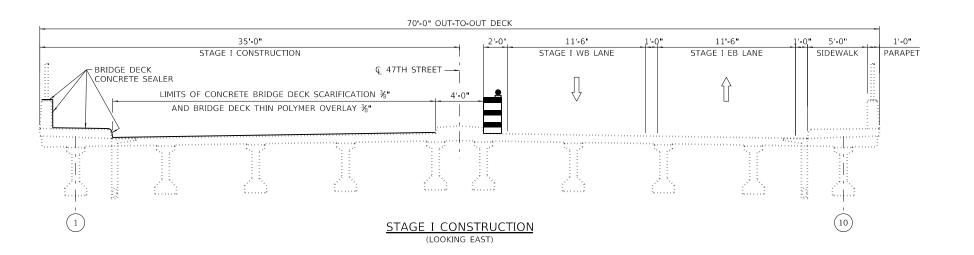


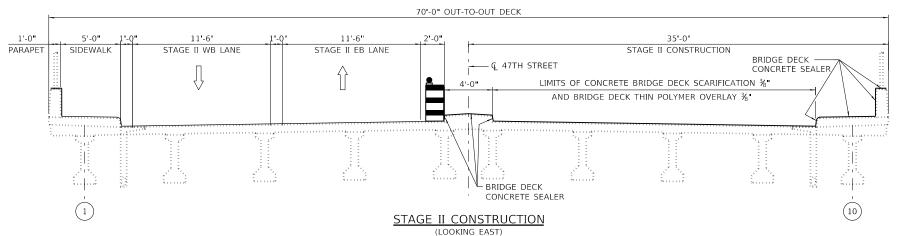
2700 OGDEN AVENUE

DOWNERS GROVE.

ILLINOIS 60515







NOTES

- SEE ROADWAY DRAWINGS FOR MAINLINE MAINTENANCE OF TRAFFIC DETAILS.
- 2. FOR MAINTENANCE OF TRAFFIC DETAILS AND DEVICES REQUIRED FOR 47TH STREET, SEE DRAWING NOS. 24, 31 & 44.
- 3. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE SIDEWALKS, MEDIAN, FACE OF CURBS, AND THE TOP AND TRAFFIC FACE OF PARAPETS. ALL SURFACES TO BE SEALED SHALL BE THOROUGHLY CLEANED PRIOR TO SEALER APPLICATION ACCORDING TO MANUFACTURER'S RECOMMENDATION.

DRAWN BY AMV DATE 4/17/2018

CHECKED BY MR DATE 4/17/2018

Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Suie 1500, Chicago, IL 60604-2482



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

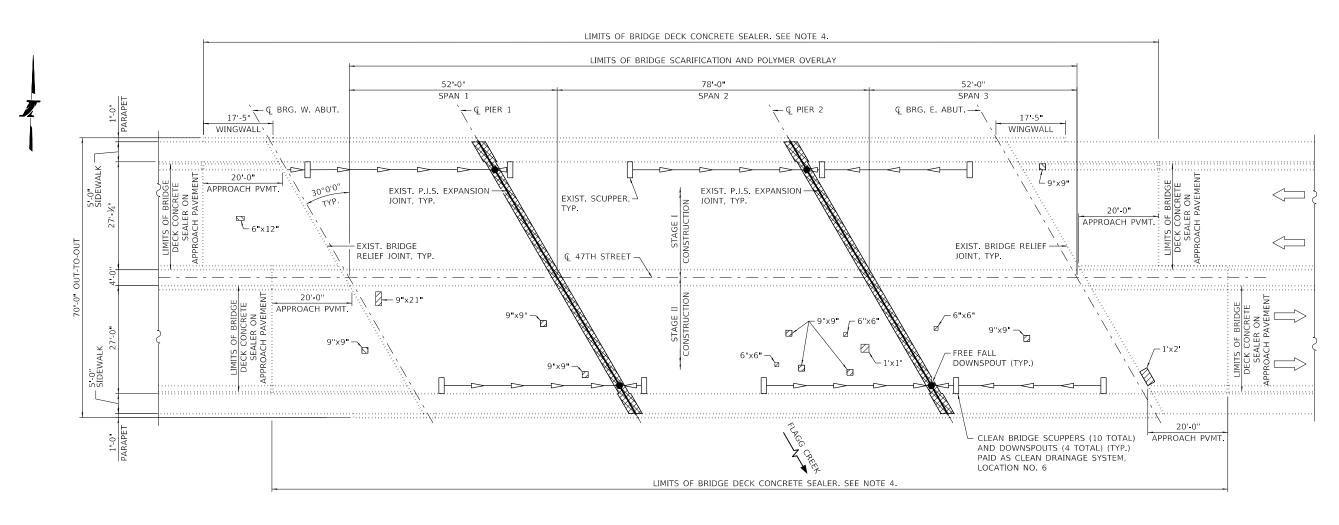
CONTRACT NO. RR-18-4387 SG-3

DATE DESCRIPTION

47TH STREET OVER FLAGG CREEK (BN 257)

CONSTRUCTION STAGING

DRAWING NO.
128 OF 175



PLAN - DECK REPAIR

NOTES

- DECK REPAIR QUANTITY IS ESTIMATED, ACTUAL REPAIR AREAS AND LOCATIONS SHALL BE DETERMINED BY THE ENGINEER AND SHOWN ON AS-BUILT PLANS.
- 2. CONCRETE BRIDGE DECK SCARIFICATION ¾" AND BRIDGE DECK THIN POLYMER OVERLAY, %" SHALL BE PERFORMED OVER THE LIMITS OF THE BRIDGE DECK, EXCLUDING THE TRANSVERSE JOINT RECONSTRUCTION AREAS AND MEDIAN.
- 3. SEE DRAWING NO. 55 FOR PAVEMENT MARKING PLANS.
- 4. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE FOLLOWING SURFACES: SIDEWALKS, MEDIAN AND TOP AND INSIDE VERTICAL FACE OF THE PARAPETS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO THE TRAFFIC SURFACE OF EACH APPROACH PAVEMENT. BRIDGE DECK CONCRETE SEALER SHALL NOT BE APPLIED TO NEW BRIDGE DECK OVERLAY AND NEW CONCRETE IN RECONSTRUCTED EXPANSION JOINTS. SEE SHEET SG-3.

BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	1
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SQ. YD.	1,081
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ. YD.	1,081
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	1
X5870015	BRIDGE DECK CONCRETE SEALER	SQ. FT.	8,145
JT602836	CLEAN DRAINAGE SYSTEM, LOCATION NO. 6	EACH	1

LEGEND

DECK SLAB REPAIR (PARTIAL)



APPROACH SLAB REPAIR (PARTIAL DEPTH)

EXPANSION JOINT REMOVAL AND REPLACEMENT



CONTRACT NO. RR-18-4387 SG-4 DRAWING NO. 47TH STREET OVER FLAGG CREEK (BN 257) 129 OF 175 **DECK REPAIRS**

CHECKED BY MR

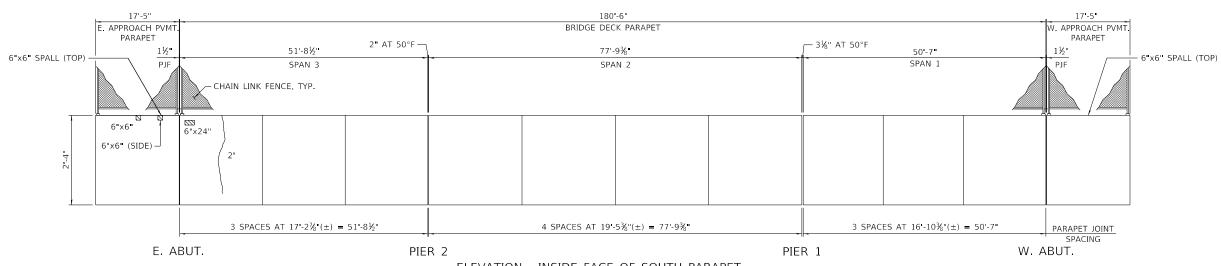
4/17/2018 DATE 4/17/2018

Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

17 -5 180'-6" 17'-5" W. APPROACH PVMT BRIDGE DECK PARAPET . APPROACH PVMT. PARAPET PARAPET __ 2" AT 50°F 3%" AT 50°F -51 -8½ 77 9% 50'-7" PJF SPAN 1 SPAN 2 SPAN 3 PIF CHAIN LINK FENCE, TYP. 6"x18" 3 SPACES AT 17'-2 $\frac{7}{8}$ "(±) = 51'-8 $\frac{1}{2}$ " 3 SPACES AT $16'-10\%''(\pm) = 50'-7"$ 4 SPACES AT $19'-5\%''(\pm) = 77'-9\%''$ PARAPET JOINT SPACING W. ABUT. PIER 1 PIER 2 E. ABUT.

ELEVATION - INSIDE FACE OF NORTH PARAPET

(LOOKING NORTH)
(STAGE I CONSTRUCTION)



ELEVATION - INSIDE FACE OF SOUTH PARAPET
(LOOKING SOUTH)
(STAGE II CONSTRUCTION)

BILL OF MATERIAL

PAY ITEM NO.	DESCRIPTION	UNIT	QUANTITY
59000200	EPOXY CRACK INJECTION	FOOT	2
Z0012754	STRUCTURAL REPAIR OF CONCRETE	SQ. FT.	3
	(DEPTH EQUAL TO OR LESS THAN 5 INCHES)		

<u>LEGEND</u>

CHECKED BY MR

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)

DATE 4/17/2018

DATE 4/17/2018

6' - EPOXY CRACK INJECTION

R IVI B Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482



CONTRACT NO. RR-18-4387 SG-5

ATH STREET OVER FLAGG CREEK (BN 257)

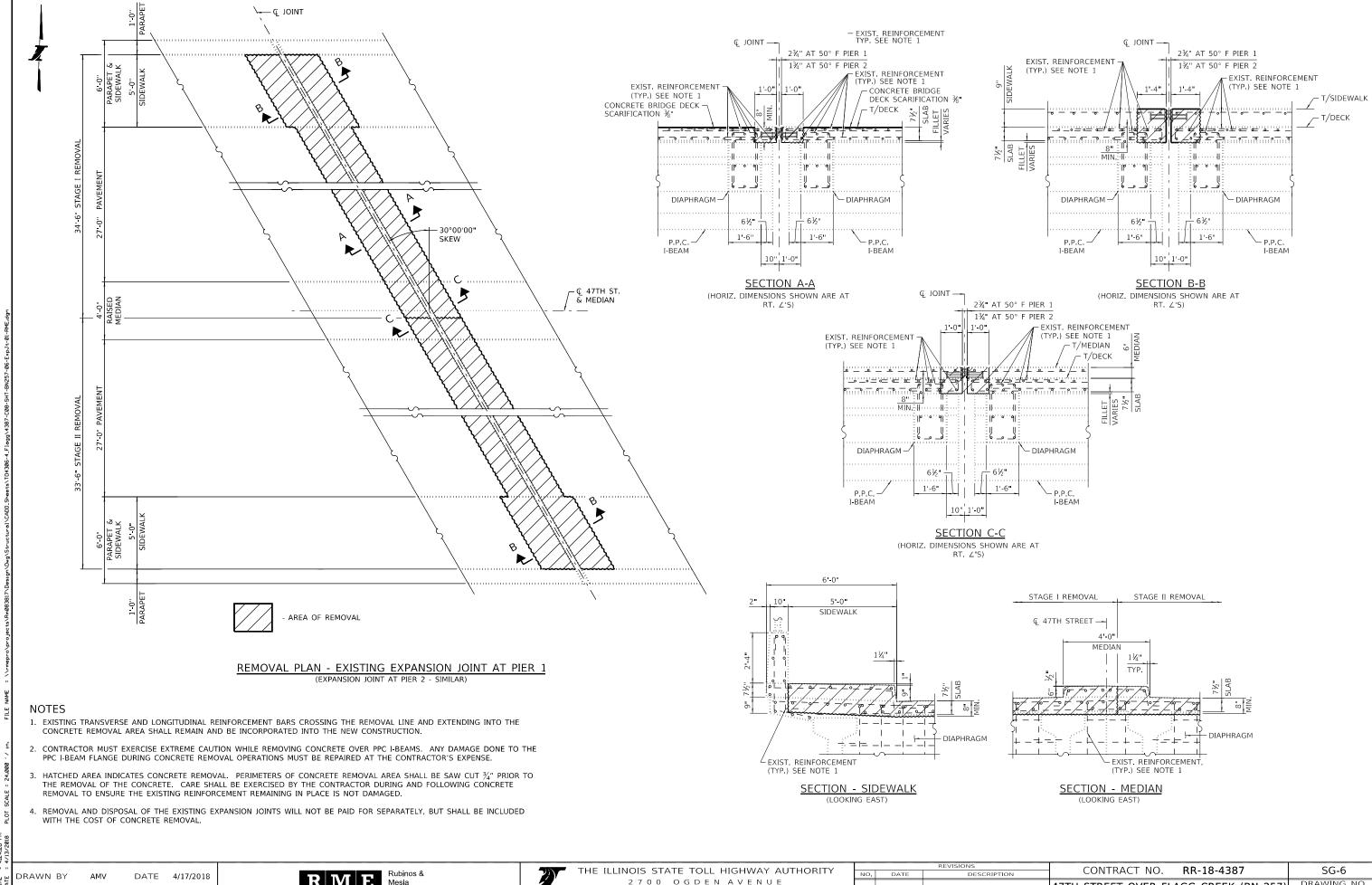
PARAPET REPAIRS

REVISIONS

SG-5

DRAWING NO.

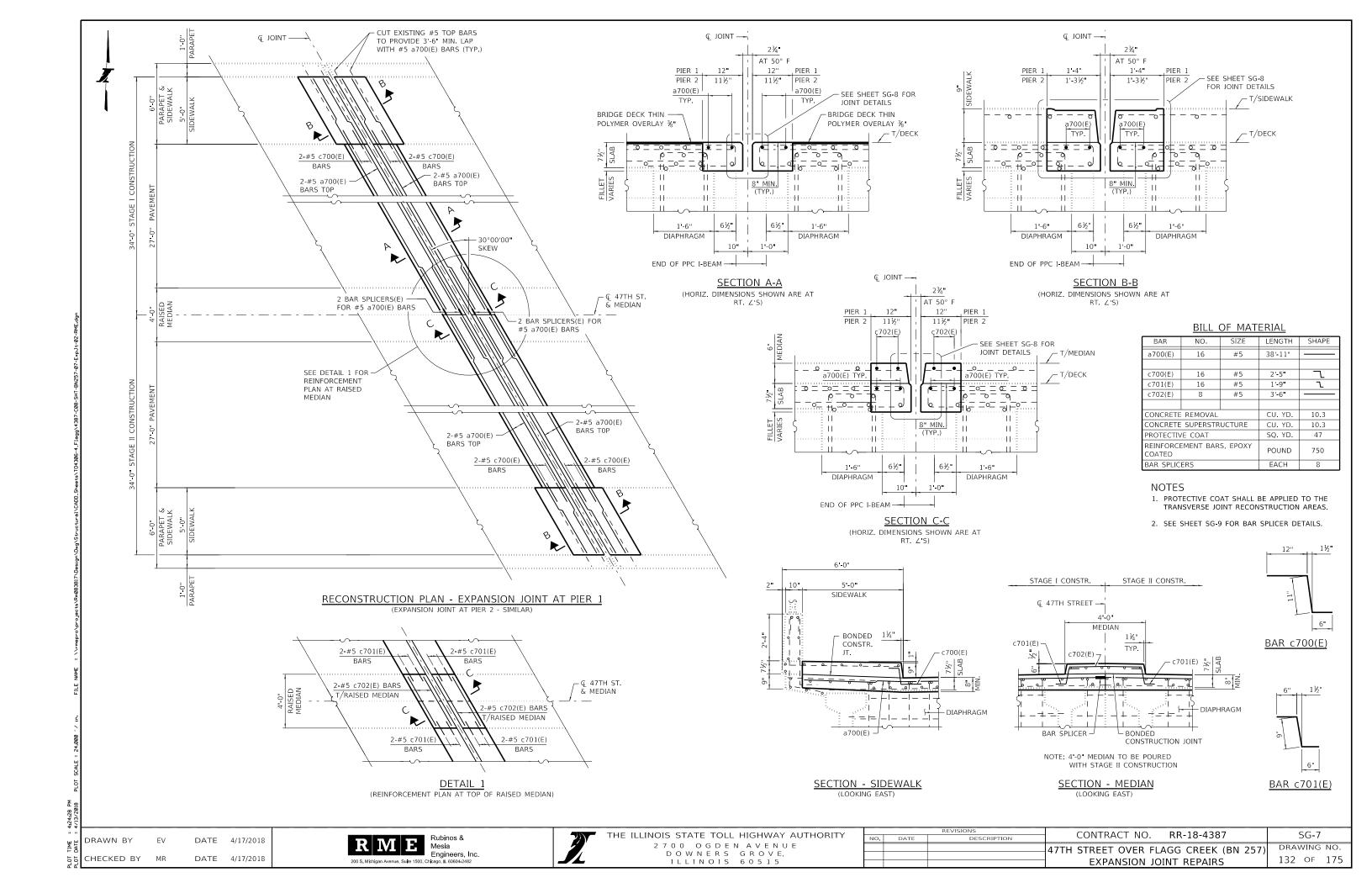
130 OF 175

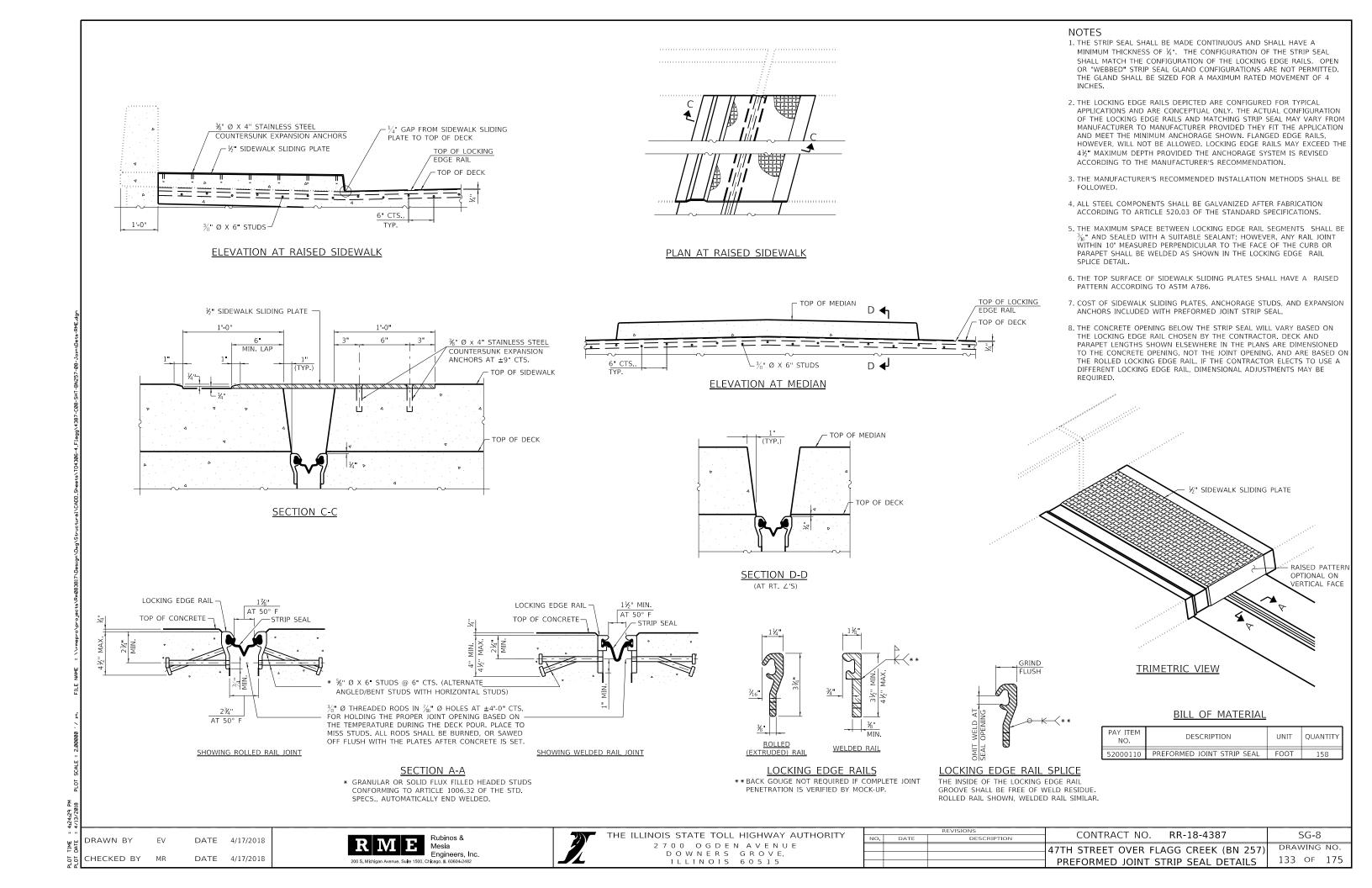


CHECKED BY

DATE 4/17/2018

Mesia Engineers, Inc. gan Avenue, Suite 1500, Chicago, IL 60604-2482



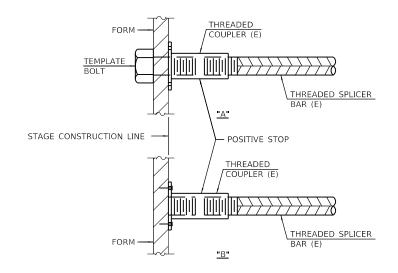


STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1½" + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
PIER 1 EXP. JT.	#5	4	3'-6"
PIER 2 EXP. JT.	#5	4	3'-6"



INSTALLATION AND SETTING METHODS

"A": SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT.
"B": SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.

(E): INDICATES EPOXY COATING.

NOTES

- 1. SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- 2. ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- 3. BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
- 4. SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

DRAWN BY AMV DATE 4/17/2018

CHECKED BY MR DATE 4/17/2018





THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

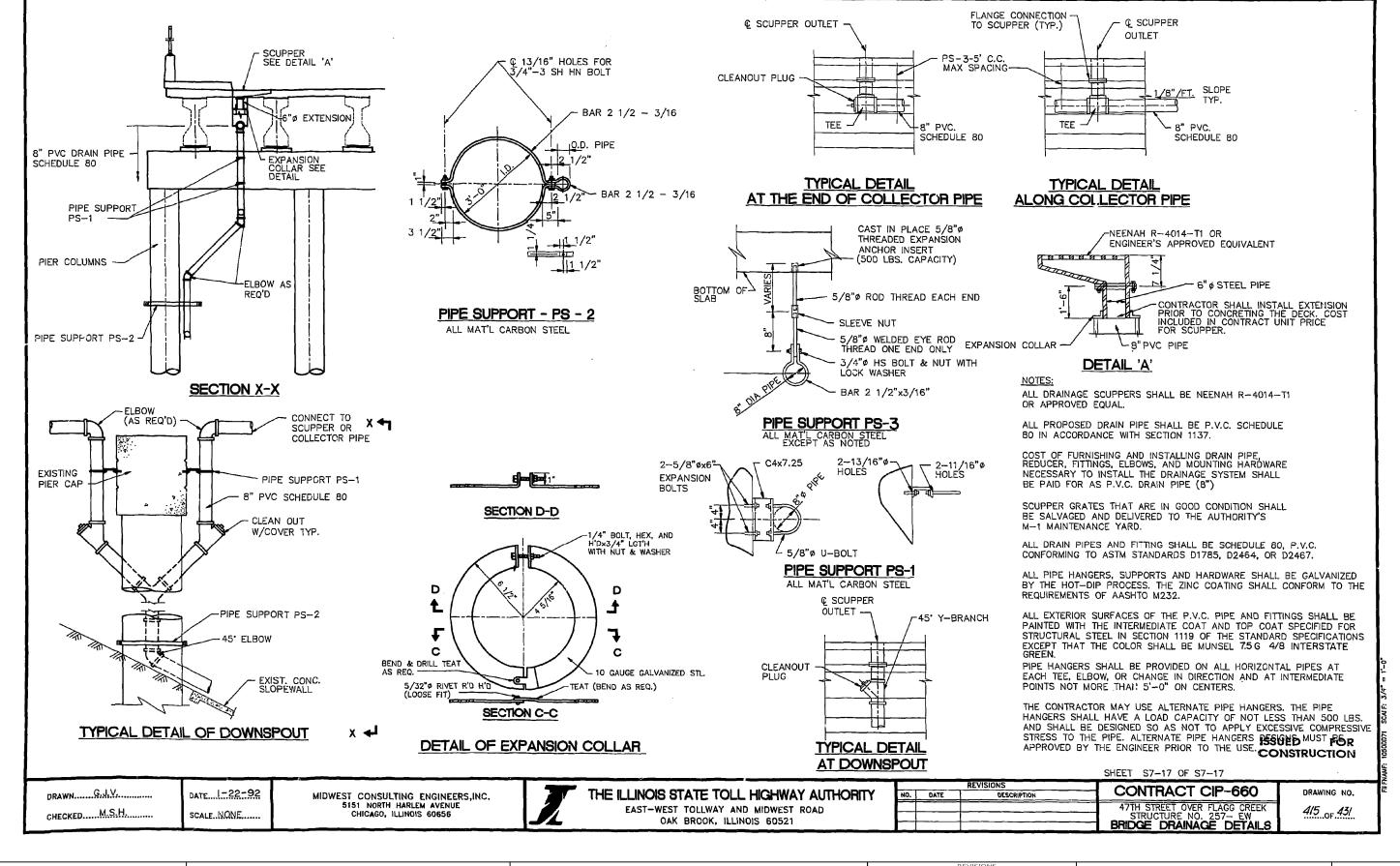
2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

REVISIONS			CONTRACT NO. RR-18-4387	SG-9
ю.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	3G-9
			47TH STREET OVER FLAGG CREEK (BN 257)	DRAWING NO.
			,	134 OF 175
			BAR SPICER DETAILS	134 OF 173

FOR INFORMATION ONLY



DRAWN BY AMV DATE 4/17/2018

CHECKED BY MR DATE 4/17/2018

Rubinos & Mesia Engineers, Inc. 200 S. Michigan Avenue, Sule 1500, Chicago, IL 60604-2482



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

REVISIONS		CONTRACT NO. RR-18-4387	CC 10	
DATE DESCRIPTION		CONTRACT NO. RR-10-4307	SG-10	
		47TH STREET OVER FLAGG CREEK (BN 257)	DRAWING NO.	
		EXISTING BRIDGE DRAINAGE DETAILS	135 OF 175	

SCOPE OF WORK CONSTRUCTION SPECIFICATIONS BENCHMARK: CHISELED "+" IN SIDEWALK N.W. CORNER OF BRIDGE (SEE PLAN FOR LOCATION). INSTALL PROTECTIVE SHIELD. ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS EXISTING STRUCTURE: OGDEN AVENUE OVER I-294, B.N. 265 WAS BUILT IN 1992 UNDER CONTRACT CIP-661 REPLACE DECK EXPANSION JOINT SEALS. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AFTER ORIGINAL BRIDGE FROM 1958 (CONTRACT T-5A) WAS REMOVED AND REPLACED. TWO-SPAN CLEAN AND PAINT EXISTING BEARINGS. AND BRIDGE CONSTRUCTION, ADOPTED MAY 1, 2017. CONTINUOUS BRIDGE HAS ON OVERALL LENGTH OF 246'-4" (BACK TO BACK OF ABUT.). THE EXISTING SURFACE REPAIR OF SELECT BEAMS. SUPERSTRUCTURE CONSISTS OF PRESTRESSED CONCRETE BULB-TEE GIRDERS WITH 7½" THICK CONCRETE CONCRETE SURFACE REPAIR AND CRACK SEALING OF PIER COLUMNS, CAP, DIAPHRAGMS, ABUTMENTS AND WINGWALLS. ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS DECK. THE EXISTING SUBSTRUCTURE CONSISTS OF REINFORCED CONCRETE AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2017. CLEAN DRAINAGE SYSTEM. VAULTED ABUTMENTS AND PIER SUPPORTED ON STEEL PILE FOUNDATION. SCARIFY AND APPLY THIN POLYMER OVERALL TO DECK SURFACE. ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR CLEAN AND SEAL CURB, SIDEWALK AND PARAPET. TRAFFIC CONTROL: TRAFFIC TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION. ROAD AND BRIDGE CONSTRUCTION, ADOPTED APRIL 1, 2016. APPLY CONCRETE SEALANT TO SUBSTRUCTURE AND APPROACH SLAB. NO SALVAGE 10. PERFORM PARTIAL DEPTH DECK REPAIRS. ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS (GBSP). 246'-4" BK. TO BK. ABUTMENTS MEASURED ALONG 1'-2" 125 0 119 0 © OGDEN AVE. SPAN 1 SPAN 2 CLEAN AND PAINT CLEAN AND PAINT © BRG. W. ABUT **©** I-294 TRI-STATE TOLLWAY Q BRG. E. ABUT EXISTING BEARINGS € PIER EXISTING BEARINGS BACK OF E. BACK OF W -APPR. BENT APPR. BENT 63" PPC BULB-TEE BEAMS BACK OF W. ABUTMENT - BACK OF E. ABUTMENT 15'-3" MIN. VERTICAL CL. VARIES : VARIES NB I-294 4.0% SB I-294 EL. 657.0 — EL. 658.0 42" R.C.P. -— FXIST PILES -EXIST. PILES (CONTRACT T-5A) FXIST PILES -(CONTRACT T-5A) (CONTRACT T-5A) **ELEVATION** 298'-0" BACK TO BACK OF APPROACH BENTS SPAN 1 SPAN 2 APPROACH SLAB APPROACH SLAB 15'-0" | MEDIAN 61'-0" REPLACE ← Ç I-294 TRI-STATE TOLLWAY REPLACE CATCH BASIN TYPE A, DECK DECK 4 DIAM, TYPE B-24 EXP. JOINT EXP. JOINT FRAME & GRATE, TYP. 50' APPROACH EXIST, SIGN, TYP. PAVEMENT SPECIAL (TYP.) DRAINAGE SCUPPER, TYP. Ç W. ABUT. BRG. G E ABUT BRG. STA. 498+75.00 STA. 501+19.00 BK. E BK. W. ABUT. ABUT. € OGDEN AVE. 499+00 500 + 00501+00 STA. 500+00.00 (@ OGDEN AVE) € BACK OF E. STA. 1453+69.58 (q. I-294) APPR. BENT BACK OF W. STA. 501+45.50 APPR. BENT STA. 498+47.50 POINT OF MIN. VERT. CLEARANCE CLEAN DRAINAGE SYSTEM PLAN NOTE: DIMENSIONS AND DATA TAKEN FROM EXISTING PLANS. THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY DATE 01/24/2018

DESIGN SPECIFICATIONS

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. 17TH EDITION.

STRUCTURE DESIGN MANUAL, ILLINOIS TOLLWAY, MARCH 2017.

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL JANUARY 2012.

DESIGN STRESSES

f'c = 6,500 PSI (PRESTRESSED CONCRETE)fc = 3,500 PSI (CAST-IN-PLACE CONC.)

fy = 60,000 PSI (REINFORCEMENT)

f'c = 4,000 PSI (CAST-IN-PLACE CONCRETE)

ORIGINAL DESIGN CRITERIA

LIVE LOAD: HS20-44 FUTURE WEARING SURFACE: 25 PSF

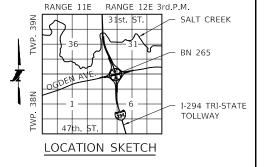
HIGHWAY CLASSIFICATION

ROUTE: OGDEN AVENUE FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL ADT: 32,600 (2015)

ROUTE: TRI-STATE TOLLWAY (I-294) ADT: 182,609 (2015) ADTT: NA

LEGEND

EXISTING FENCE EXISTING GUARDRAIL



GENERAL PLAN & ELEVATION OGDEN AVENUE OVER FAI RTE 0294 (I-294) COOK COUNTY MILE POST 22.4 BRIDGE NO. 265 (SN 016-0223)

CHECKED BY DATE 4/17/2018 **AECOM**



2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CONTRACT NO. RR-18-4387 OGDEN AVE. OVER I-294 (BN 265) GENERAL PLAN & ELEVATION

SH-01 DRAWING NO. 136 OF 175

CAST-IN-PLACE CONCRETE

ALL EXPOSED CONCRETE EDGES SHALL HAVE A $\frac{3}{4}$ " X 45º CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE OUIANTITY ACTIVALLY FURNISHED AT THE UNIT PRICE FOR THE WORK

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS"AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CARLE."

THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS"PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

TOTAL BILL OF MATERIAL

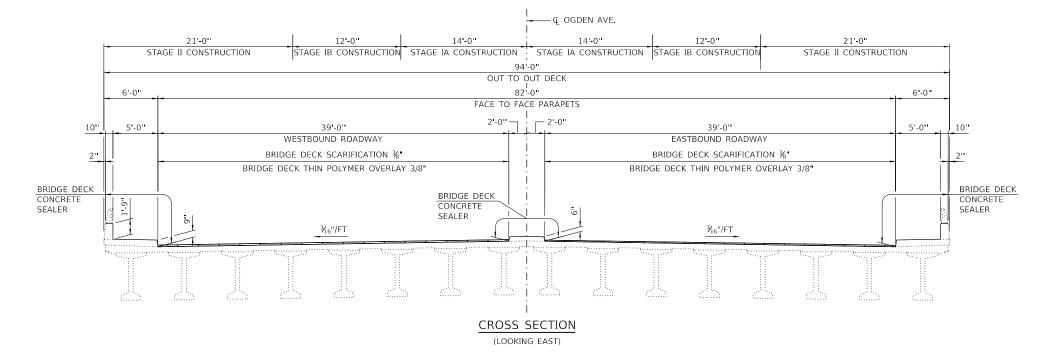
		UNIT	QUANTITY	
ITEM	DESCRIPTION		BN 265	RECORD
50157300	PROTECTIVE SHIELD	SQ YD	584	
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	45	
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	568	
X0326331	CLEANING AND PAINTING BEARINGS	EACH	32	
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	10263	
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	4	
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	2	
JT503050	SHALLOW CONCRETE REPAIR		40	
JT524010	APPLY CONCRETE SEALANT	SQ FT	4926	
JT525235	BONDED PREFORMED JOINT SEAL REPLACEMENT, 4 IN.		194	
JT602837	CLEAN DRAINAGE SYSTEM, LOCATION NO. 7		1	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)		1	
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8"		2131	
Z0012193	CONCRETE BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	2131	
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	86	

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF	MIN.	MINIMUM
	STATE HIGHWAY AND	N.	NORTH
	TRANSPORTATION OFFICIALS	N.B.	NORTHBOUND
ABUT.	ABUTMENT	NO.	NUMBER
APPR.	APPROACH	PAR.	PARAPET
BK.	BACK	PGL	PROFILE GRADE LINE
₿	BASELINE	P.P.C.	PRECAST PRESTRESSED
вотт.	BOTTOM		CONCRETE
BRG.	BEARING	PVMT.	PAVEMENT
Q.	CENTERLINE	REM.	REMOVAL
CTS.	CENTERS	RD.	ROAD
CL.	CLEARANCE	S.	SOUTH
CONC.	CONCRETE	S.P.	SPECIAL PROVISION
CONST.	CONSTRUCTION	S.B.	SOUTHBOUND
CU. FT.	CUBIC FOOT	SDWK.	SIDEWALK
0	DIAMETER	SF	SQUARE FOOT
E.	EAST	SHLDR.	SHOULDER
EA.	EACH	SPECS.	SPECIFICATIONS
E.B.	EASTBOUND	STD.	STANDARD
ELEV.	ELEVATION	STA.	STATION
EXIST.	EXISTING	STG.	STAGE
EXP.	EXPANSION	STR.	STRUCTURE
EXP. JT.	EXPANSION JOINT	SUB.	SUBSTRUCTURE
F	FAHRENHEIT	SUPER.	SUPERSTRUCTURE
FT.	FOOT	SY	SQUARE YARD
L SUM	LUMP SUM	TYP.	TYPICAL
LBS.	POUNDS	W.	WEST
LF	LINEAR FOOT	W.B.	WESTBOUND
MED.	MEDIAN		

INDEX OF SHEETS

SH-01 GENERAL PLAN AND ELEVATION
SH-02 GENERAL NOTES, TOTAL BOM
SH-03 WEST ABUTMENT REPAIRS
SH-04 EAST ABUTMENT REPAIRS
SH-05 PIER REPAIRS
SH-06 BEAM REPAIRS
SH-07 DECK REPAIRS
SH-08 EXISTING JOINT DETAILS
SH-09 EXISTING DRAINAGE SYSTEM 1 OF 2
SH-10 EXISTING DRAINAGE SYSTEM 2 OF 2



DRAWN BY GF DATE 01/24/2018
CHECKED BY MK DATE 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

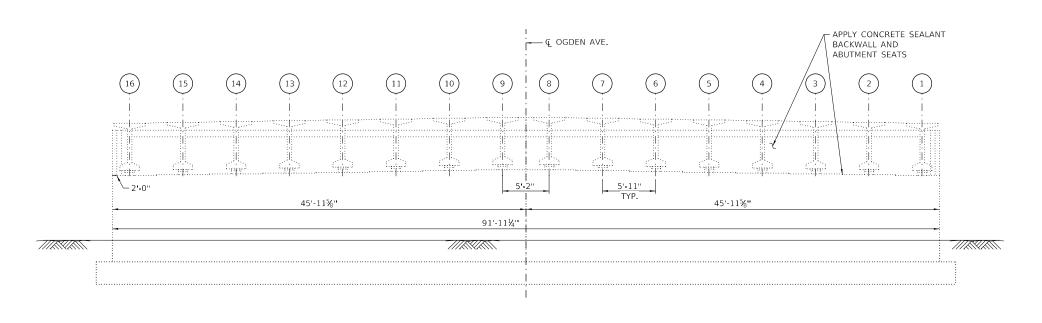
D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SH-02

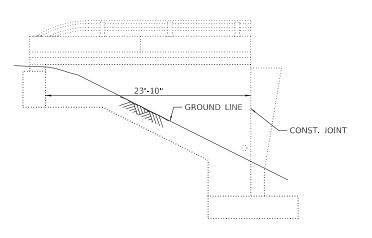
OLDATE DESCRIPTION CONTRACT NO. RR-18-4387 SH-02

OGDEN AVE. OVER I-294 (BN 265)
GENERAL NOTES, TOTAL BOM 137 OF 175

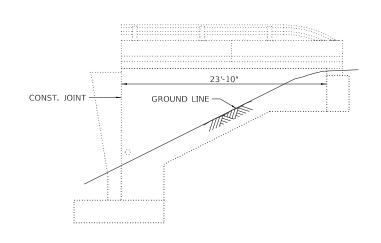


WEST ABUTMENT ELEVATION

(LOOKING WEST)



SOUTH CURTAIN WALL ELEVATION (LOOKING NORTH)



NORTH CURTAIN WALL ELEVATION (LOOKING SOUTH)

1. REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.

2'-5<u>7</u>"

TYPICAL SECTION

2. DIMENSIONS TAKEN FROM EXISTING PLANS.

LEGEND

NOTES:

LOW PRESSURE EPOXY INJECTION

BILL OF MATERIAL

ITEM	DESCRIPTION		QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION		2
JT524010	APPLY CONCRETE SEALANT		647
-			

 DRAWN BY
 GF
 DATE
 01/24/2018

 CHECKED BY
 MK
 DATE
 4/17/2018

AECOM



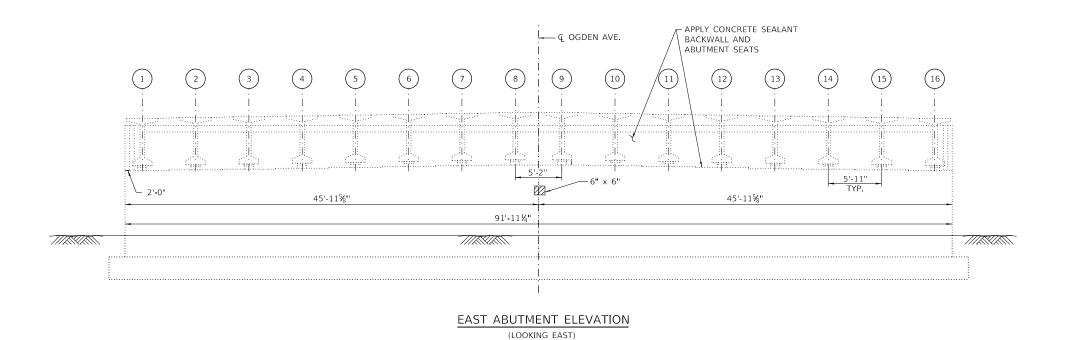
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

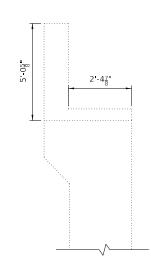
2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

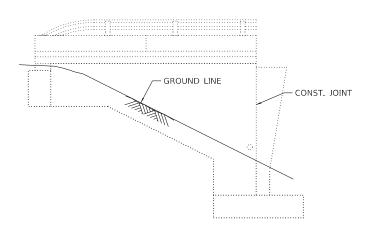
I L L I N O I S 6 0 5 1 5

REVISIONS			CONTRACT NO. RR-18-4387	SH-03	
٥.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	3H-U3	
			OGDEN AVE. OVER I-294 (BN 265)	DRAWING NO.	
			,	138 OF 175	
			WEST ABUTMENT REPAIRS	130 0 173	

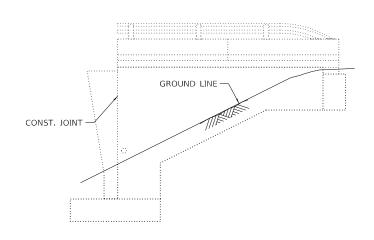




TYPICAL SECTION



NORTH CURTAIN WALL ELEVATION (LOOKING SOUTH)



SOUTH CURTAIN WALL ELEVATION (LOOKING NORTH)

NOTES:

- 1. REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.
- 2. DIMENSIONS TAKEN FROM EXISTING PLANS.

LEGEND



STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)

LOW PRESSURE EPOXY INJECTION

BILL OF MATERIAL

ITEM	DESCRIPTION		QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	2
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	2
JT524010	APPLY CONCRETE SEALANT	SQ FT	639

DRAWN BY GF DATE 01/25/2018

CHECKED BY MK DATE 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SH-04

OGDEN AVE. OVER I-294 (BN 265)

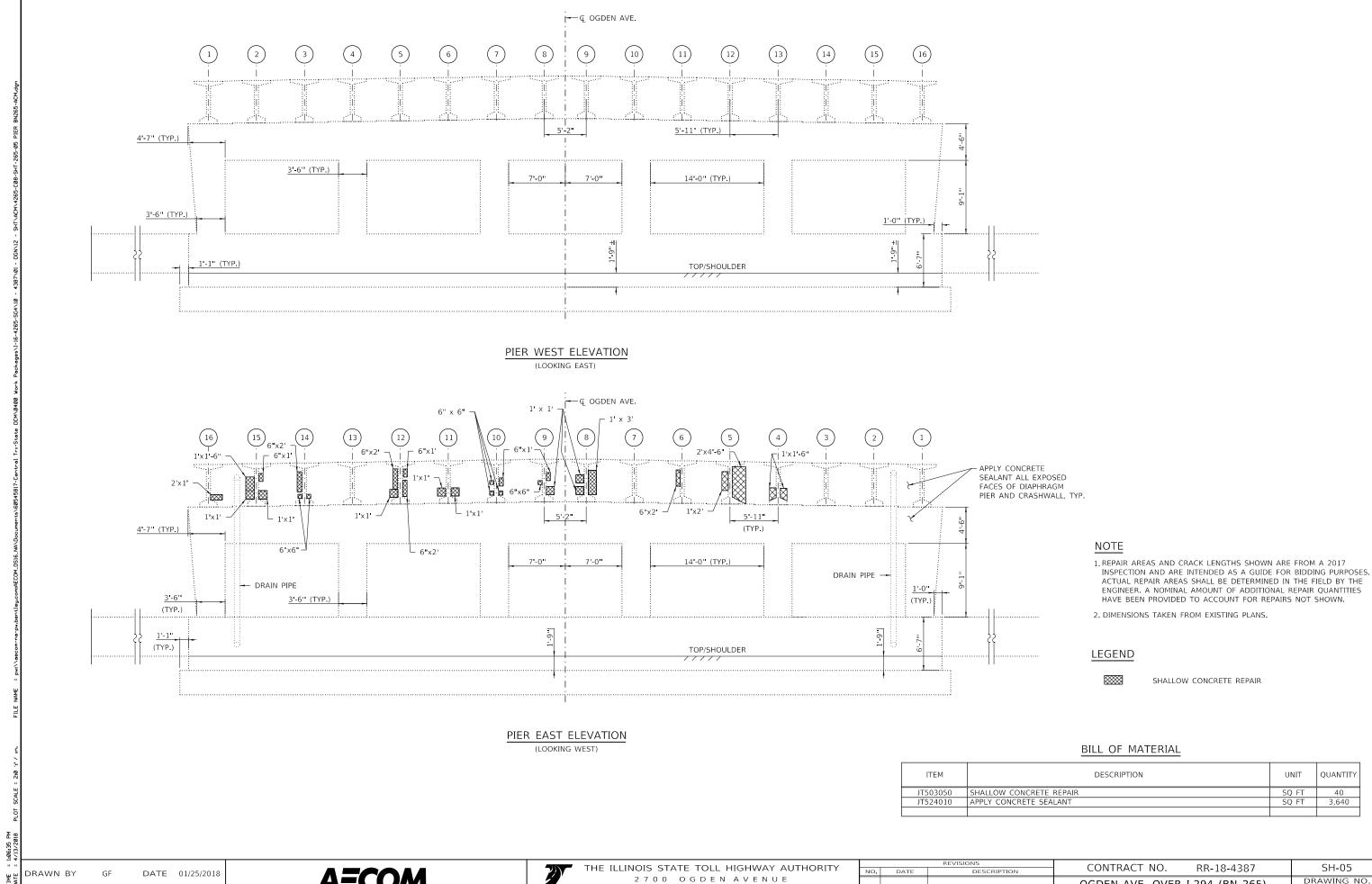
EAST ABUTMENT REPAIRS

REVISIONS

OGDEN AVE. OVER I-294 (BN 265)

EAST ABUTMENT REPAIRS

139 OF 175



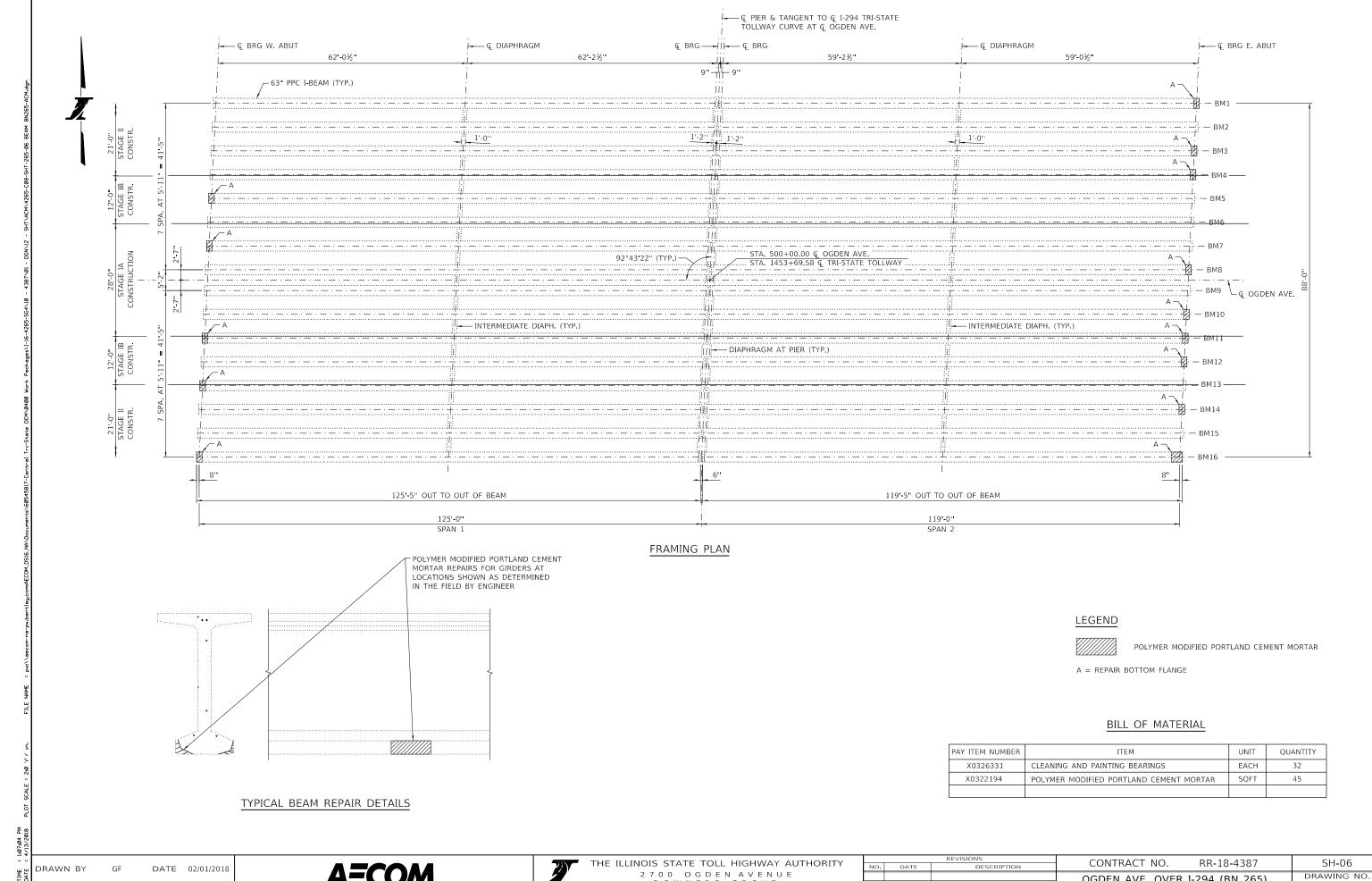
CHECKED BY MK

DATE 4/17/2018

AECOM

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

DRAWING NO. OGDEN AVE. OVER I-294 (BN 265) 140 OF 175 PIER REPAIRS



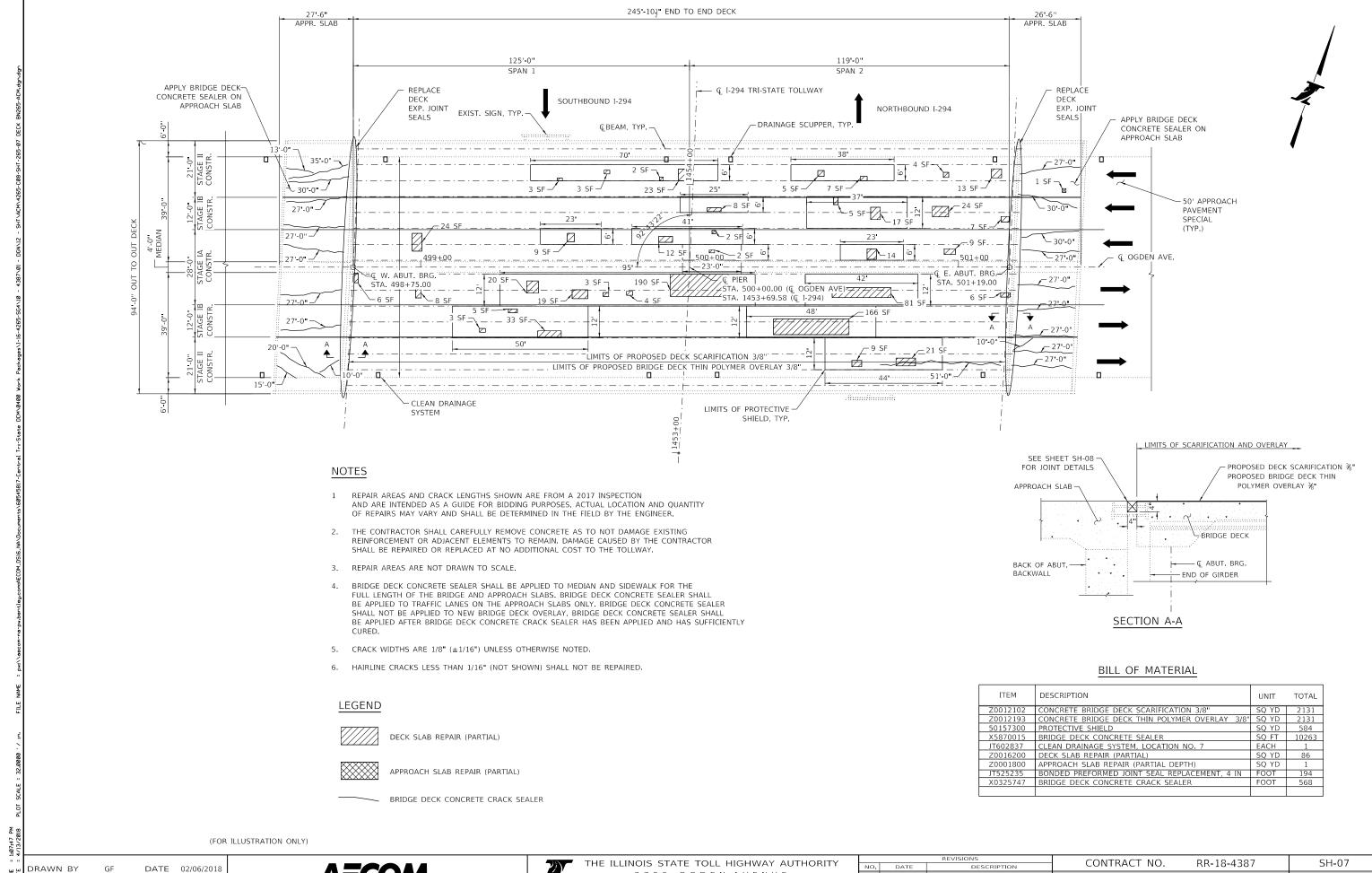
CHECKED BY MK

DATE 4/17/2018

AECOM

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

DRAWING NO. OGDEN AVE. OVER I-294 (BN 265) BEAM REPAIRS 141 OF 175



DRAWN BY
CHECKED BY

DATE 02/06/2018

DATE 4/17/2018

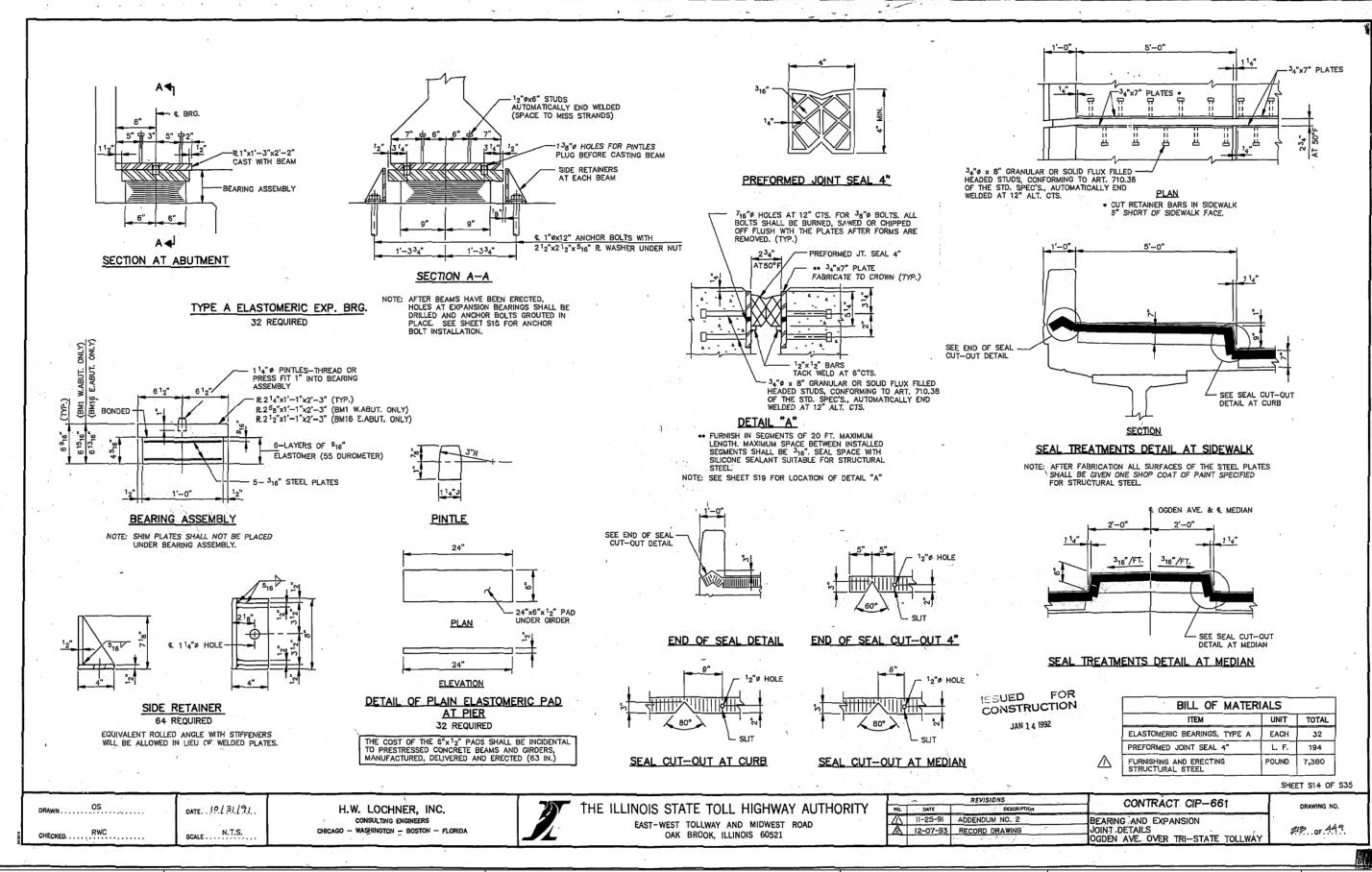
AECOM



2 7 0 0 G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387		SH-07	
10.	DATE	DESCRIPTION	CONTRACT NO.	RR-10-4307	30-07	
			OGDEN AVE. OVER I-294 (BN 265) DECK REPAIR		DRAWING 1	NO.
					142 OF 1	175
			DECK RE	PAIR	142 01 .	1/5

FOR INFORMATION ONLY



PLOT TIME = 1:08:14 F

•

 DRAWN BY
 GF
 DATE
 01/30/2018

 CHECKED BY
 MK
 DATE
 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E RS G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SH-08

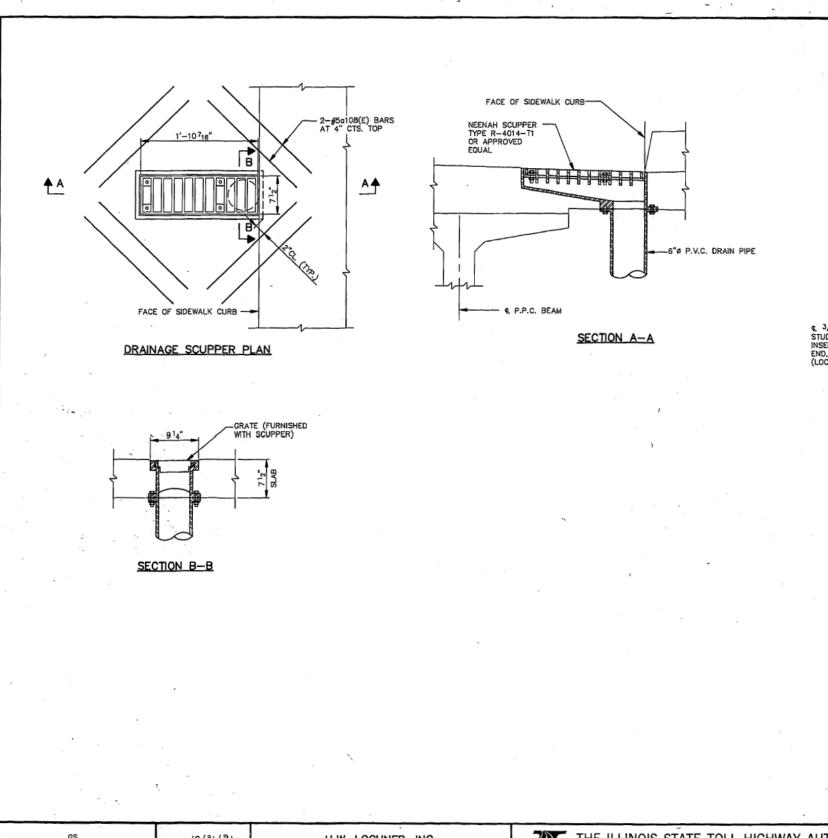
OGDEN AVE. OVER I-294 (BN 265)

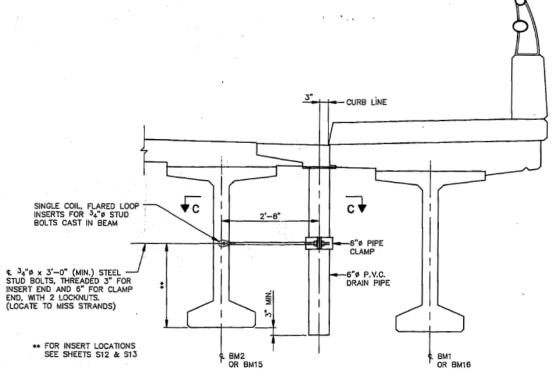
EXISTING JOINT DETAILS

ORDEN AVE. OVER I-294 (BN 265)

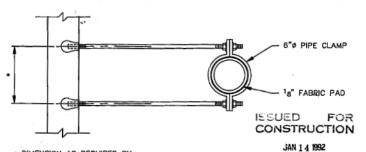
143 OF 175

FOR INFORMATION ONLY





ELEVATION AT SCUPPER



DIMENSION AS REQUIRED BY PIPE CLAMP

SECTION C-C

NOTES

- 1. THE CLAMPING DEVICE AND INSERTS SHALL BE
 GALVANIZED IN ACCORDANCE WITH AASHTO M-232.

 2. REINFORCEMENT BARS BILLED WITH DECK PLAN.
 SEE SHEET S16

 3. FOR SCUPPER LOCATIONS SEE DECK PLAN SHEET S16

 4. THE COST OF THE 34 STUD BOLTS AND PIPE CLAMPS
 IS INCIDENTAL TO PVC DRAIN PIPE (6 IN.).

 5. ALL EXTERIOR SURFACES OF THE PVC PIPE AND FITTINGS
 SHALL BE PAINTED WITH THE INTERMEDIATE COAT AND TOP
 COAT SPECIFIED FOR STRUCTURAL STEEL IN SECTION III9
 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE
 COLOR SHALL BE MUNSELL LOY 7/1 LIGHT GREY.

COLOR SHALL BE MUNSELL IOY 7/1 LIGHT GREY.

BILL OF MATERIALS			
ITEM	UNIT	TOTAL	
DRAINAGE SCUPPERS (SPECIAL)	EACH	8	
PVC DRAIN PIPE (6 IN.)	L.F.	148	
	<u> </u>		

SHEET S22 OF S35

DATE .. 10/31/91

H.W. LOCHNER, INC. CONSULTING ENGINEERS CHICAGO - WASHINGTON - BOSTON - FLORIDA



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY EAST-WEST TOLLWAY AND MIDWEST ROAD

OAK BROOK, ILLINOIS 60521

REVISIONS		REVISIONS	CONTRACT CIP-661	
Y	NO.	DATE	DESCRIPTION	0011111101 011 001
	\wedge	12-07-93	RECORD DRAWING	SCUPPER DETAILS
				OGDEN AVE. OVER TRI-STATE TOLLWAY
			4 1997 F. F. 1999	CODEN ATEL OTER INI-STATE TOLERAT

221 OF 449

DRAWN BY DATE 01/26/2018 CHECKED BY DATE 4/17/2018

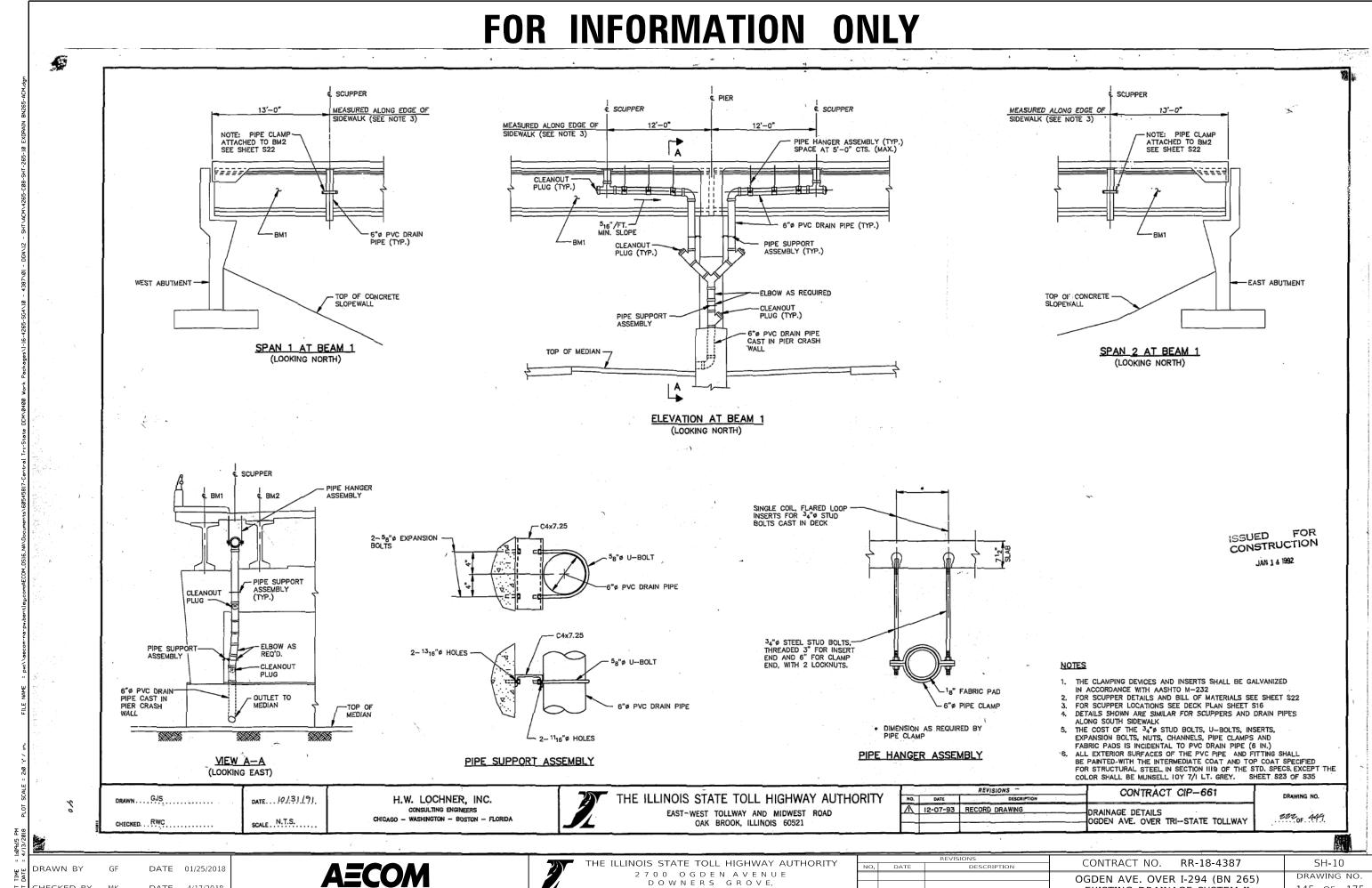
AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

CONTRACT NO. OGDEN AVE. OVER I-294 (BN 265) EXISTING DRAINAGE SYSTEM I

RR-18-4387 SH-09 DRAWING NO. 144 OF 175



CHECKED BY DATE 4/17/2018

ILLINOIS 60515

EXISTING DRAINAGE SYSTEM II

145 OF 175

SCOPE OF WORK CONSTRUCTION SPECIFICATIONS BENCHMARK: R.R. SPIKE IN S. SIDE P.P. N. SIDE OF 31ST STREET. E. END OF BRIDGE. ELEV. 668.99 **DESIGN SPECIFICATIONS** AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY RECONSTRUCT DECK EXPANSION JOINT SEALS WITH SHALLOW ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS EXISTING STRUCTURE: 31ST STREET OVER I-294 WAS BUILT IN 1992 UNDER CONTRACT CIP-661, AFTER ORIGINAL BRIDGE FROM 1958 (CONTRACT T-5A) WAS REMOVED AND REPLACED. TWO-SPAN STRUCTURE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD BRIDGES. 17TH EDITION. CLEAN AND PAINT EXISTING BEARINGS. AND BRIDGE CONSTRUCTION, ADOPTED MAY 1, 2017. HAS AN OVERALL LENGTH OF 240'-4" (BK. TO BK. OF ABUTMENTS). EXISTING SUPERSTRUCTURE CONSISTS SURFACE REPAIR OF SELECT BEAMS. STRUCTURE DESIGN MANUAL, ILLINOIS TOLLWAY, OF PRESTRESSED CONCRETE GIRDERS WITH 7 1/2" THICK CONCRETE DECK. THE EXIST. SUBSTRUCTURE CONCRETE SURFACE REPAIR AND CRACK SEALING OF PIER ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS MARCH 2017 CONSISTS OF VAULTED ABUTMENTS AND PIER SUPPORTED ON METAL SHELL PILES. COLUMNS, CAP, DIAPHRAGMS, ABUTMENTS AND WINGWALLS. SCARIFY AND APPLY THIN POLYMER OVERLAY ON DECK. AND RECURRING SPECIAL PROVISIONS, ADOPTED JANUARY 1, 2017. ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL TRAFFIC CONTROL: TRAFFIC TO BE MAINTAINED UTILIZING STAGE CONSTRUCTION. APPLY CONCRETE SEALANT TO SUBSTRUCTURE AND APPROACH SLAB. ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR JANUARY 2012. CLEAN AND SEAL PARAPET. ROAD AND BRIDGE CONSTRUCTION, ADOPTED APRIL 1, 2016. NO SALVAGE. ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL **DESIGN STRESSES** PROVISIONS (GBSP). 240'-4" BK. TO BK. ABUTMENTS f'c = 6,500 PSI (PRESTRESSED CONCRETE)CLEAN AND PAINT 1 2 fc = 3,500 PSI (CAST-IN-PLACE CONC.)EXISTING BEARINGS fy = 60,000 PSI (REINFORCEMENT)CLEAN AND PAINT VAULTED ABUT. - G BRG. W. ABUT G BRG. E. ABUT. EXIST. SIGN, TYP. EXISTING BEARINGS AND PIER f'c = 4,000 PSI (CAST-IN-PLACE CONCRETE) fy = 60,000 PSI (REINFORCEMENT)APPR. BENT APPR. BENT ORIGINAL DESIGN CRITERIA ─ 60" PPC I-BEAMS 15'-3" MIN. BACK OF W. ABUTMENT BACK OF E. ABUTMENT VERTICAL CL. LIVE LOAD: HS20-44 FUTURE WEARING SURFACE: 25 PSF _1.5% VARIES EL. 664.00 S.B. PGL HIGHWAY CLASSIFICATION 54" R.C.C.P. EL. 656.00 EXIST. EXIST ROUTE: 31ST STREET EXIST. PILES 36" R.C.C.P. FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 15,900 (2014) (CONTRACT T-5A) ADTT: NA EXIST. PILES **ELEVATION** (CONTRACT T-5A) ROUTE: TRI-STATE TOLLWAY (I-294) ADT: 182,609 (2015) ADTT: NA ፍ I-294 TRI-STATE TOLLWAY LEGEND 290'-6" BACK TO BACK OF APPROACH BENTS EXISTING FENCE APPROACH SLAB APPROACH SLAB EXISTING GUARDRAIL RECONSTRUCT DECK-EXPANSION JOINT SEALS MEDIAN | MEDIAN RECONSTRUCT DECK EXPANSION JOINT SEALS Q W. ABUT. BRG. POINT OF MIN. € E. ABUT. BRG. € S.B. P.G.L.-— Ç N.B. P.G.L. STA. 18+81.00 VERT. CLEARANCE STA. 21+19.00 BK W — BK F ABUT. ABUT. Q 31ST STREET 19+00 21+00 RANGE 11E RANGE 12E 3rd.P.M. I-294 TRI-STATE -TOLLWAY STA. 20+00.00 (Q 31ST STREET) BACK OF E. STA. 1509+03.48 (Q I-294) APPR. BENT 50' APPROACH PAVEMENT, TYP. LOCATION SKETCH EXIST. SIGN, TYP. BACK OF W. APPR. BENT GENERAL PLAN & ELEVATION 31ST STREET PLAN OVER FAI RTE 0294 (I-294) COOK COUNTY DIMENSIONS AND DATA TAKEN FROM EXISTING MILE POST 28.50 AS-BUILT PLANS. BRIDGE NO. 269 (SN 016-0867) CONTRACT NO. THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY DATE 01/29/2018 **AECOM** 2700 OGDEN AVENUE CHECKED BY DATE 4/17/2018



RR-18-4387 DRAWING NO. 31ST STREET OVER I-294 (BN 269) 146 OF 175 GENERAL PLAN & ELEVATION

- SALT CREEK

OGDEN AVE.

SI-01

ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

BARS NOTED THUS, 3X2-#5 INDICATES 3 LINES OF BARS WITH 2 LENGTHS OF BARS PER LINE.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES. PRIOR TO STARTING CONSTRUCTION. CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS"AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER

THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10' BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5' BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES, THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING. MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE. A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR'S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, "STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS"PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR'S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR "AS BUILT" PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE. AND THE RISK OF MAKING EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

ABBREVIATIONS

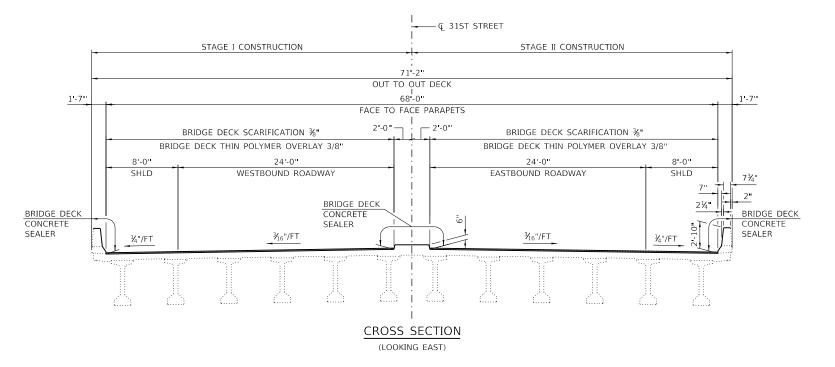
AASHTO	AMERICAN ASSOCIATION OF	MIN.	MINIMUM
	STATE HIGHWAY AND	N.	NORTH
	TRANSPORTATION OFFICIALS	N.B.	NORTHBOUND
ABUT.	ABUTMENT	NO.	NUMBER
APPR.	APPROACH	PAR.	PARAPET
BK.	BACK	PGL	PROFILE GRADE LINE
₽ <u> </u>	BASELINE	P.P.C.	PRECAST PRESTRESSED
BOTT.	ВОТТОМ		CONCRETE
BRG.	BEARING	PVMT.	PAVEMENT
Œ.	CENTERLINE	REM.	REMOVAL
CTS.	CENTERS	RD.	ROAD
CL.	CLEARANCE	S.	SOUTH
CONC.	CONCRETE	S.P.	SPECIAL PROVISION
CONST.	CONSTRUCTION	S.B.	SOUTHBOUND
CU. FT.	CUBIC FOOT	SDWK.	SIDEWALK
Ø	DIAMETER	SF	SQUARE FOOT
E.	EAST	SHLDR.	SHOULDER
EA.	EACH	SPECS.	SPECIFICATIONS
E.B.	EASTBOUND	STD.	STANDARD
ELEV.	ELEVATION	STA.	STATION
EXIST.	EXISTING	STG.	STAGE
EXP.	EXPANSION	STR.	STRUCTURE
EXP. JT.	EXPANSION JOINT	SUB.	SUBSTRUCTURE
F	FAHRENHEIT	SUPER.	SUPERSTRUCTURE
FT.	FOOT	SY	SQUARE YARD
L SUM	LUMP SUM	TYP.	TYPICAL
LBS.	POUNDS	W.	WEST
LF	LINEAR FOOT	W.B.	WESTBOUND
MED.	MEDIAN		

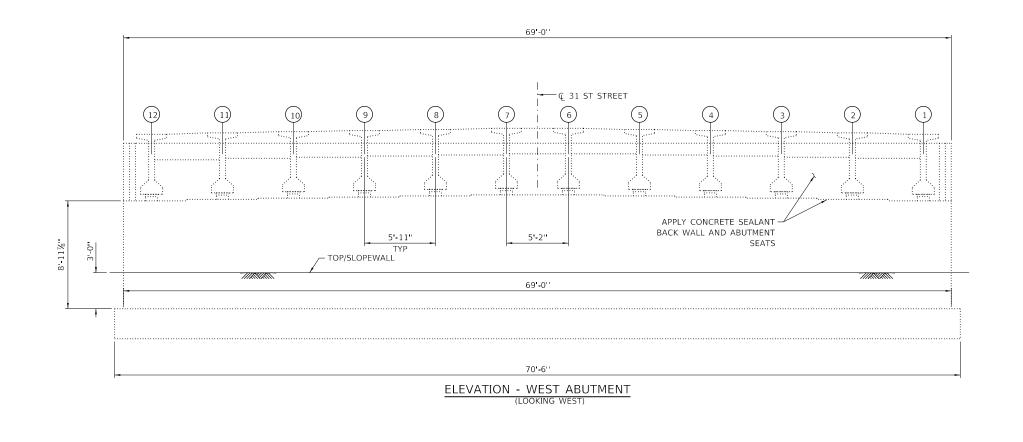
TOTAL BILL OF MATERIAL

			QUAN	YTITY
ITEM	DESCRIPTION		BN 269	RECORD
50102400	CONCRETE REMOVAL	CU YD	7.2	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7.2	
50300300	PROTECTIVE COAT	SQ YD	29	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	920	
50800515	BAR SPLICERS	EACH	8	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	144	
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ:FT	29	
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	283	
X0326331	CLEANING AND PAINTING BEARINGS	EACH	24	
X5870015	BRIDGE DECK CONCRETE SEALER	SQ-FT	6517	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ ⁻ YD	1	
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8"	SQ YD	1706	
Z0012193	CONCRETE BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	1706	
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	27	
JT503050	SHALLOW CONCRETE REPAIR	SQ FT	38	
JT524010	APPLY CONCRETE SEALANT	SQ FT	3568	
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	13	

INDEX OF SHEETS

SI-01 GENERAL PLAN AND ELEVATION SI-02 GENERAL NOTES, TOTAL BOM SI-03 WEST ABUTMENT REPAIRS SI-04 EAST ABUTMENT REPAIRS SI-05 PIER REPAIRS SI-06 BEAM REPAIRS SI-07 DECK REPAIRS SI-08 JOINT PLAN SI-09 JOINT DETAILS SI-10 BAR SPLICER DETAILS





3'-3%"

NOTES:

1. REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.

TYPICAL SECTION

2'-45"

2. DIMENSIONS TAKEN FROM EXISTING PLANS.

LEGEND



STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)

LOW PRESSURE EPOXY INJECTION

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY
JS121200	LOW PRESSURE EPOXY INJECTION	FOOT	5
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	2
JT524010	APPLY CONCRETE SEALANT	SQ FT	469

SOUTH WINGWALL

21'-4"

NORTH WINGWALL (LOOKING SOUTH)

21'-4"

DRAWN BY GF DATE 01/25/2018

CHECKED BY MK DATE 4/17/2018



AECOM

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

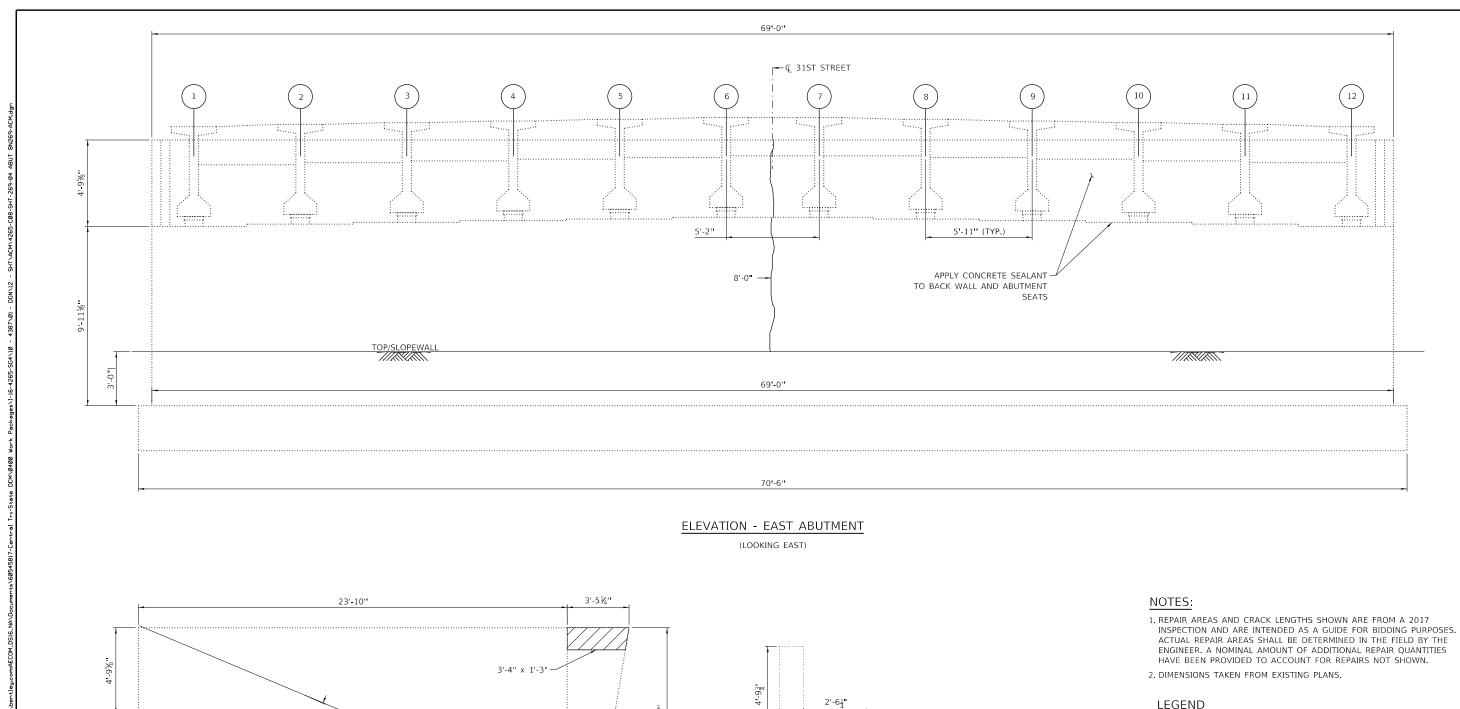
D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SI-03

DATE DESCRIPTION CONTRACT NO. RR-18-4387 SI-03

31ST STREET OVER I-294 (BN 269)
WEST ABUTMENT REPAIRS 148 OF 175



LEGEND

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)

LOW PRESSURE EPOXY INJECTION

BILL OF MATERIAL

ITEM		DESCRIPTION	UNIT	QUANTITY
JS12120	00	LOW PRESSURE EPOXY INJECTION	FOOT	8
JT50304	40	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	5
JT52401	10	APPLY CONCRETE SEALANT	SQ FT	479

AECOM DATE 01/25/2018 CHECKED BY MK DATE 4/17/2018



1 -91/8

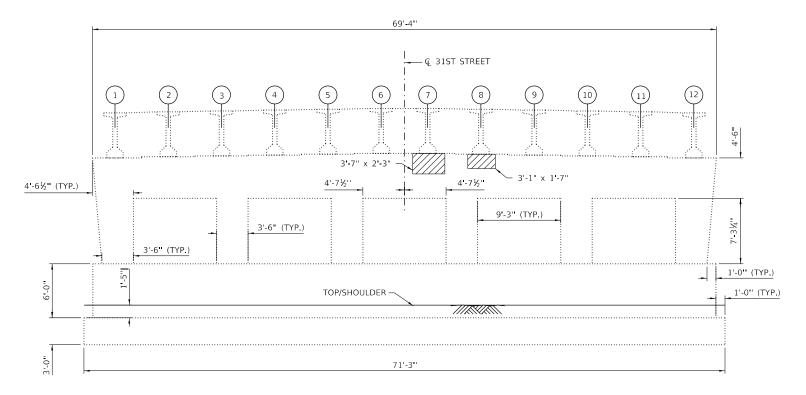
4 9

NORTH WINGWALL

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

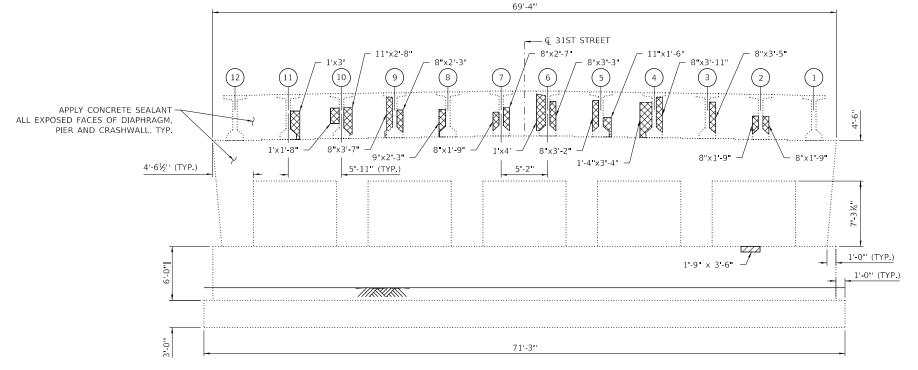
TYPICAL SECTION

		REVISIONS	CONTRACT NO. RR-18-4387	SI-04
NO.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	31-04
			31ST STREET OVER I-294 (BN 269)	DRAWING NO.
			,	149 OF 175
			EAST ABUTMENT REPAIRS	149 OF 175



ELEVATION - MEDIAN PIER

(LOOKING EAST)



ELEVATION - MEDIAN PIER

(LOOKING WEST)

NOTES:

- 1. REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND 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.
- 2. DIMENSIONS TAKEN FROM EXISTING PLANS.

LEGEND

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)

SHALLOW CONCRETE REPAIR

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY
JT503040	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN.)	SQ FT	20
JT524010	APPLY CONCRETE SEALANT	SQ FT	2620
JT503050	SHALLOW CONCRETE REPAIR	SQ FT	38

DRAWN BY GF DATE 01/25/2018
CHECKED BY MK DATE 4/17/2018





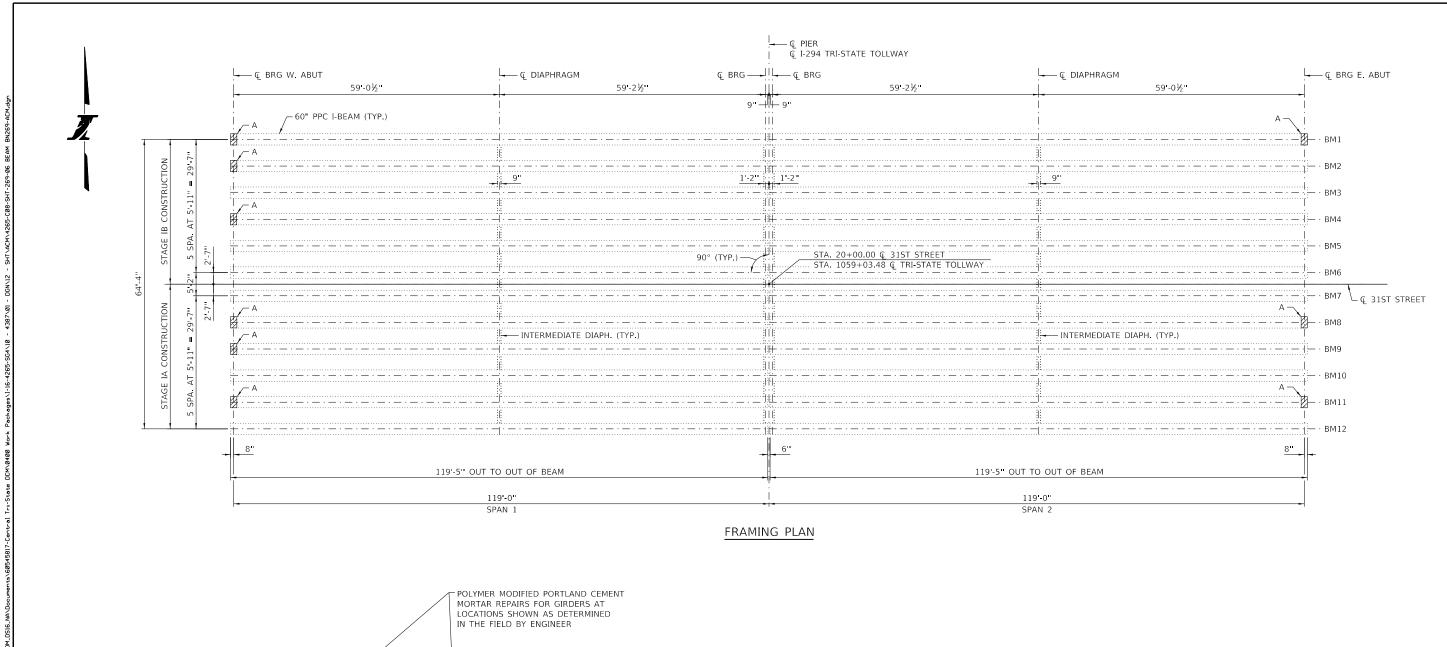
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

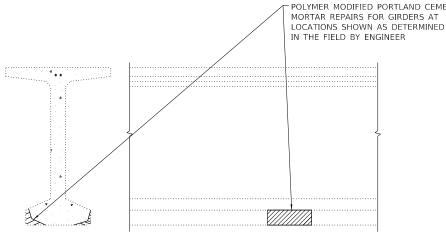
2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

		REVISIONS	CONTRACT NO. RR-18-4387	SI-05
vo.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	31-03
			31ST STREET OVER I-294 (BN 269)	DRAWING NO.
			PIER REPAIRS	150 of 175
_				





TYPICAL BEAM REPAIR DETAILS

<u>LEGEND</u>

POLYMER MODIFIED PORTLAND CEMENT MORTAR

A = REPAIR BOTTOM FLANGE

BILL OF MATERIAL

PAY ITEM NUMBER	ITEM	UNIT	QUANTITY
X0326331	CLEANING AND PAINTING BEARINGS	EACH	24
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQFT	29

 DRAWN BY
 GF
 DATE
 01/31/2018

 CHECKED BY
 MK
 DATE
 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

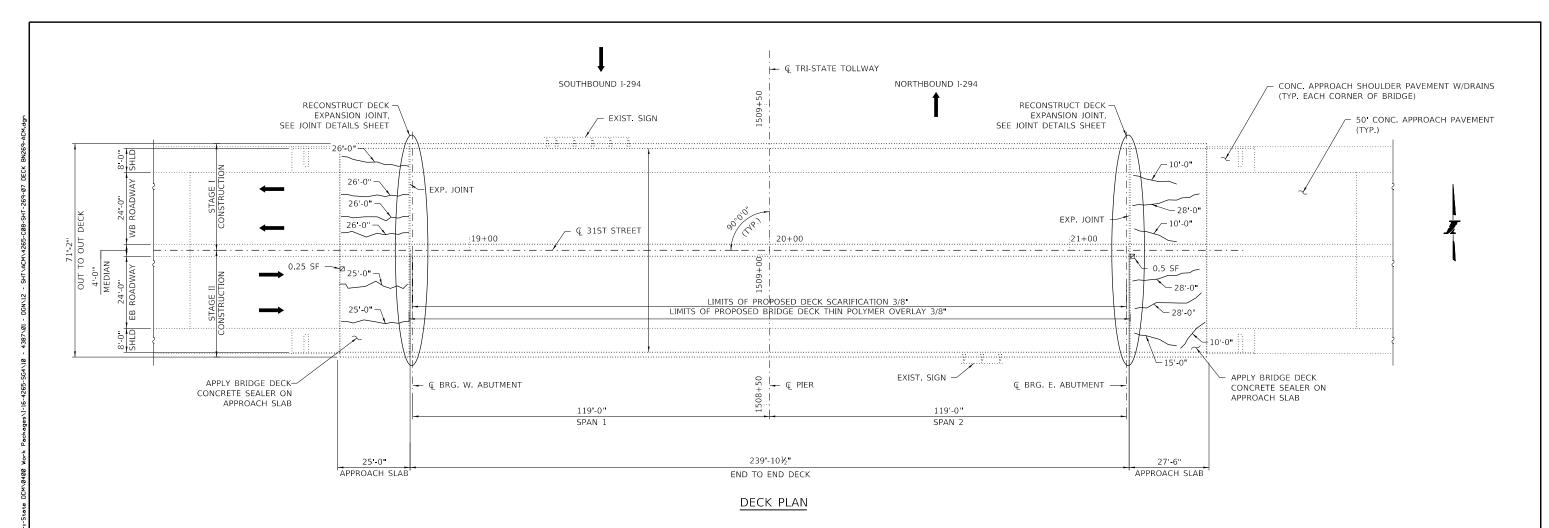
2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SI-06

DATE DESCRIPTION SISTEMATION OF SITEMATION OF SITEMATIO



NOTES

- 1 REPAIR AREAS AND CRACK LENGTHS SHOWN ARE FROM A 2017 INSPECTION AND ARE INTENDED AS A GUIDE FOR BIDDING PURPOSES. ACTUAL LOCATION AND QUANTITY OF REPAIRS MAY VARY AND SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL CAREFULLY REMOVE CONCRETE AS TO NOT DAMAGE EXISTING REINFORCEMENT OR ADJACENT ELEMENTS TO REMAIN. DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.
- 3. REPAIR AREAS ARE NOT DRAWN TO SCALE.
- 4. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO MEDIAN AND SIDEWALK FOR THE FULL LENGTH OF THE BRIDGE AND APPROACH SLABS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO TRAFFIC LANES ON THE APPROACH SLABS ONLY. BRIDGE DECK CONCRETE SEALER SHALL NOT BE APPLIED TO NEW BRIDGE DECK OVERLAY, NEW CONCRETE IN PARAPET SECTIONS AND NEW CONCRETE AT JOINT SECTIONS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED AFTER BRIDGE DECK CONCRETE CRACK SEALER HAS BEEN APPLIED AND SUFFICIENTLY CURED.
- 5. CRACK WIDTHS ARE 1/8" (\pm 1/16") UNLESS OTHERWISE NOTED.
- 6. HAIRLINE CRACKS LESS THAN 1/16" (NOT SHOWN) SHALL NOT BE REPAIRED.

LEGEND

APPROACH SLAB REPAIR (PARTIAL)

BRIDGE DECK CONCRETE CRACK SEALER

BILL OF MATERIAL

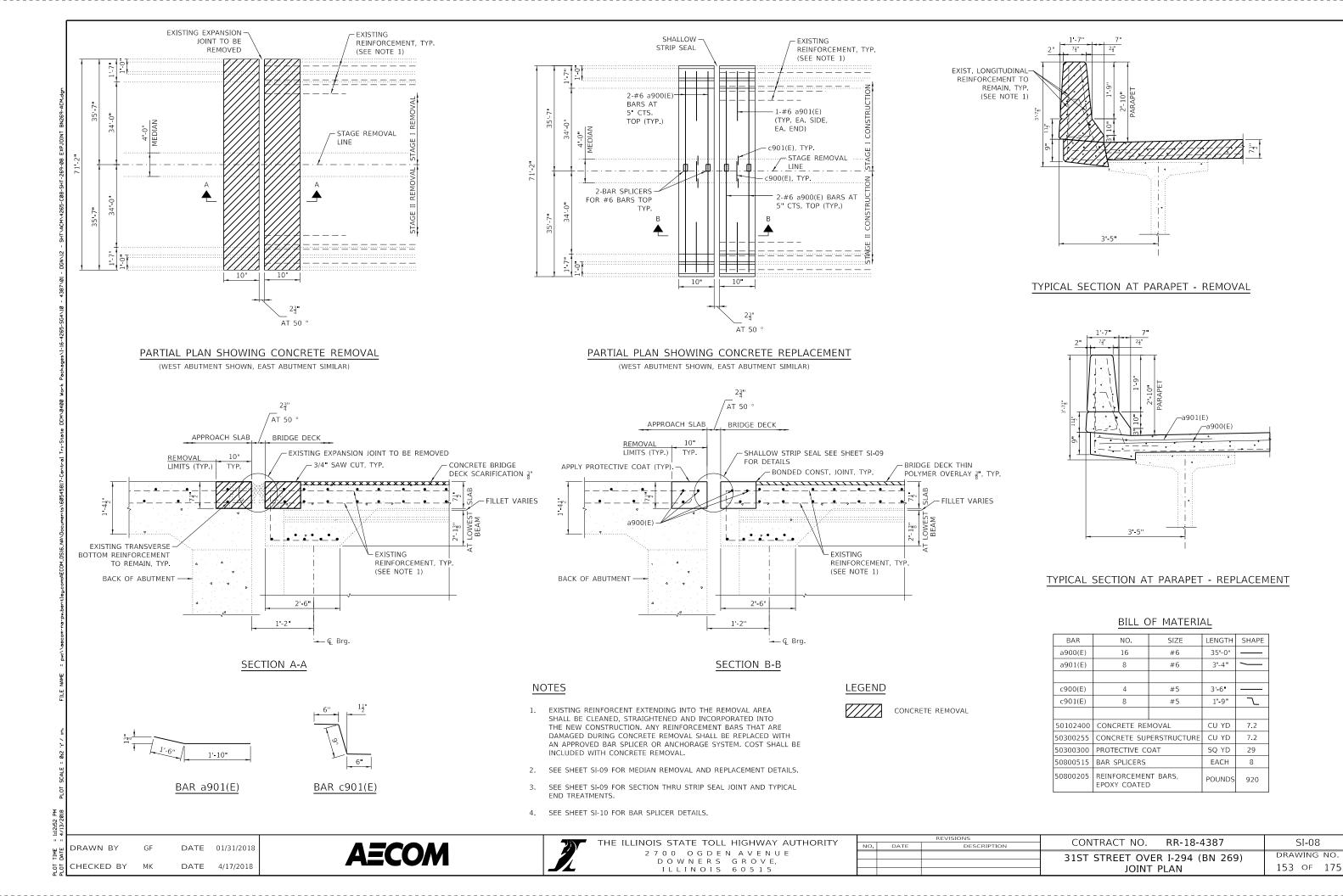
ITEM	DESCRIPTION	UNIT	TOTAL
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8"	SQ YD	1706
Z0012193	CONCRETE BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	1706
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	6517
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	1
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	283

 DRAWN BY
 GF
 DATE
 01/25/2018

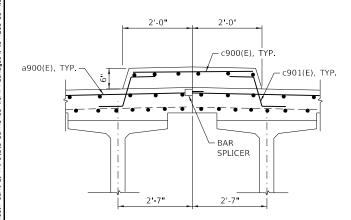
 CHECKED BY
 MK
 DATE
 4/17/2018

AECOM





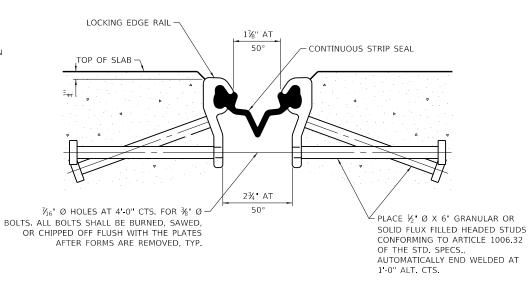
TYPICAL SECTION AT MEDIAN - REMOVAL



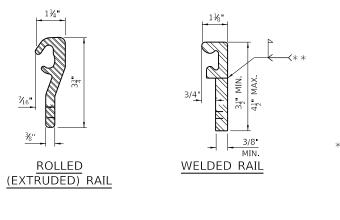
TYPICAL SECTION AT MEDIAN - REPLACEMENT

NOTES

- 1. EXISTING REINFORCENT EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM.
- 2. SEE SHEET SI-08 FOR BILL OF MATERIAL.



SECTION THRU SHALLOW STRIP SEAL JOINT



LOCKING EDGE RAILS

** BACK GOUGE NOT REQUIRED IF COMPLETE JOINT PENETRATION IS VERIFIED BY MOCK-UP.

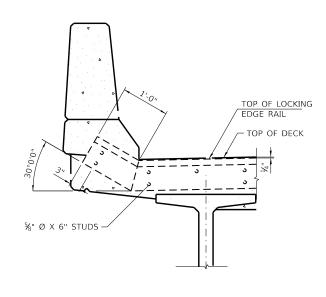
LOCKING EDGE RAIL SPLICE

* OMIT WELD AT SEAL OPENING.

FLUSH

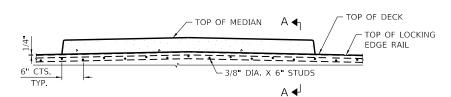
NOTES

- 1. 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.
- 2. THE HEIGHT AND THICKNESS OF THE LOCKING EDGE RAILS SHOWN ARE MINIMUM DIMENSIONS. THE ACTUAL CONFIGURATION OF THE LOCKING EDGE RAILS AND MATCHING STRIP SEAL MAY VARY FROM MANUFACTURER TO MANUFACTURER. FLANGED EDGE RAILS WILL NOT BE ALLOWED.
- 3. THE INSIDE OF THE LOCKING EDGE RAIL GROOVE SHALL BE FREE OF WELD RESIDUE.
- LOCKING EDGE RAILS MAY BE SPLICED AT SLOPE DISCONTINUITIES AND STAGE CONSTRUCTION JOINTS.
- 5. THE MANUFACTURER'S RECOMMENDED INSTALLATION METHODS SHALL BE FOLLOWED.
- . ALL STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION ACCORDING TO ARTICLE 520.03 OF THE STANDARD SPECIFICATIONS.

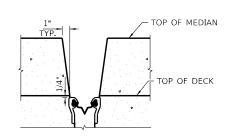


ELEVATION AT PARAPET

TYPICAL END TREATMENTS



ELEVATION AT MEDIAN



SECTION A-A

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	TOTAL
52000110	PREFORMED JOINT STRIP SEAL	FOOT	144

DRAWN BY GF DATE 01/31/2018

CHECKED BY MK DATE 4/17/2018

AECOM



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SI-09

31ST STREET OVER I-294 (BN 269)
JOINT DETAILS

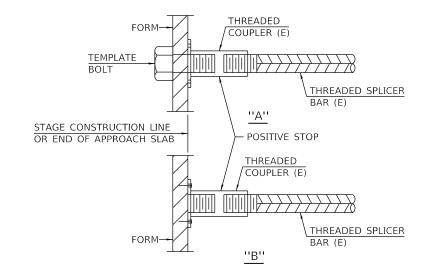
DRAWING NO.
154 OF 175

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1½" + THREAD LENGTH

* EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
JOINT RECONSTRUCTION	#6	8	3'-10"



INSTALLATION AND SETTING METHODS

"A": SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT.
"B": SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS.

(E): INDICATES EPOXY COATING.

NOTES

- 1. SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- 2. ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- 3. BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
- 4. SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.





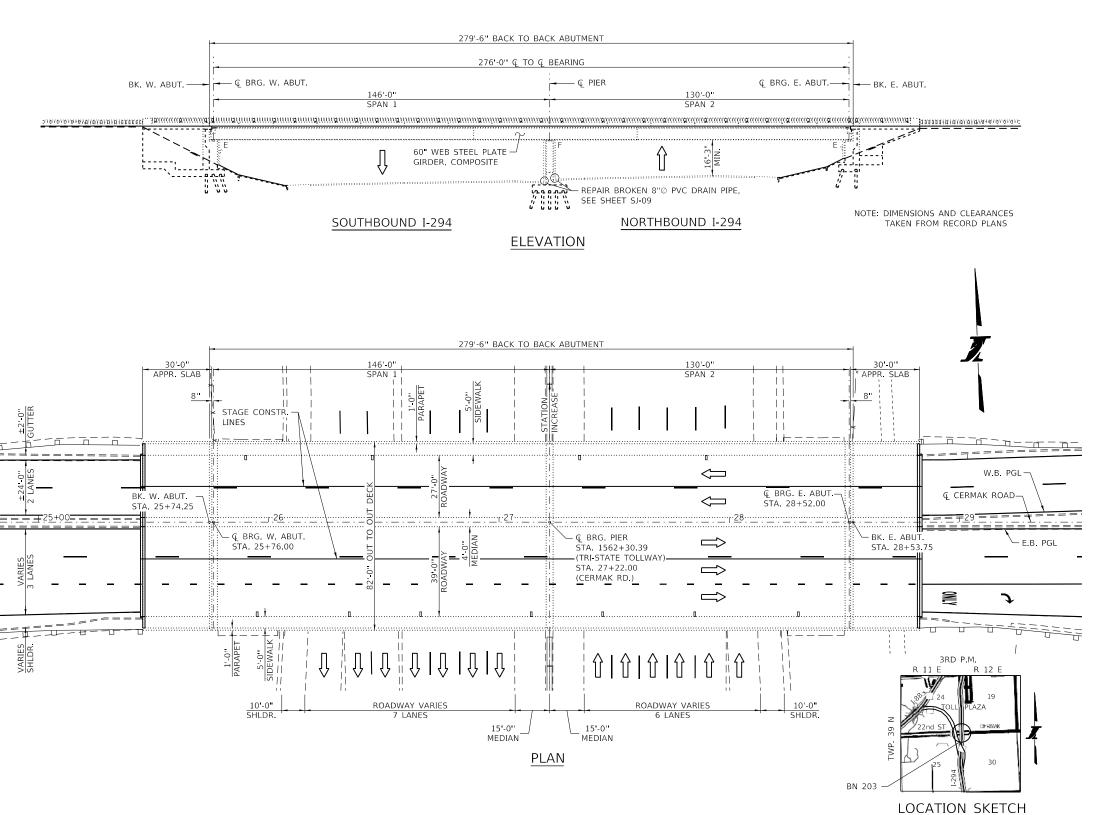
BENCHMARK

NO BENCHMARK DATA IS AVAILABLE

EXISTING STRUCTURE

BRIDGE NO 203 WAS ORIGINALLY BUILT IN 2006. THE EXISTING STRUCTURE IS A TWO SPAN BRIDGE WITH AN OUT-TO-OUT WIDTH OF 82'-0" AND MEASURES 279'-6" FROM BACK TO BACK ABUTMENTS. THE COMPOSITE SUPERSTRUCTURE CONSISTS OF A REINFORCED CONCRETE DECK AND 10 LINES OF GIRDERS. BEAMS ARE 60" WEB WELDED PLATE GIRDERS. THE SEMI-INTEGRAL ABUTMENTS AND MULTI-COLUMN PIERS ARE FOUNDED ON FOOTINGS SUPPORTED BY PILES. THE BRIDGE CARRIES TWO LANES OF WESTBOUND TRAFFIC AND THREE LANES OF EASTBOUND TRAFFIC. TRAFFIC TO BE MAINTAINED USING STAGE CONSTRUCTION

NO SALVAGE



SCOPE OF WORK

- 1. REPLACE APPROACH SLAB TRANSVERSE EXPANSION JOINTS
- 2. APPLY CONCRETE SEALERS
- 3. REBUILD WEST APPROACH PARAPET
- 4. SCARIFY DECK AND APPLY POLYMER CONCRETE OVERLAY 5. PARTIAL DEPTH REPAIR TO BRIDGE DECK AND APPROACH
- 6. CLEAN AND REPAIR DRAINAGE SYSTEM
- 7. REPAIR GUARDRAIL AND GUARDRAIL ATTACHMENTS AT NORTHWEST APPROACH

DESIGN SPECIFICATIONS

2002 AASHTO STD. SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION

ILLINOIS TOLLWAY STRUCTURE DESIGN MANUAL DATED MARCH 2017

ILLINOIS DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL DATED JANUARY 2012

CONSTRUCTION SPECIFICATIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION GUIDE BRIDGE SPECIAL PROVISIONS

ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

ILLINOIS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ISSUED JANUARY 1, 2018

ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ISSUED APRIL 1, 2016

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

f'c = 4,000 psi

fy = 60,000 psi (Reinforcement)

FIELD UNITS (EXISTING CONSTRUCTION)

fy = 60,000 psi (Reinforcement)

LOADING HS20-44

HIGHWAY CLASSIFICATION

FUNCTIONAL CLASS: MINOR ARTERIAL ADT: 12,550 (2014) 29,973 (2032) ADTT: 251 (2014) 600 (2032)

RTE. UNDER: F.A.I. 294 FUNCTIONAL CLASS: INTERSTATE ADT: 144,300 (2016) 131,634 (2032) ADTT: 20,202 (2016) 18,429 (2032)

GENERAL PLAN AND ELEVATION CERMAK ROAD OVER TRI-STATE TOLLWAY (I-294) COOK COUNTY MILE POST 29.52 BRIDGE NO. 203 (016-2854)

4/17/2018 CHECKED BY SCD DATE 4/17/2018 QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CONTRACT NO. RR-18-4387 CERMAK ROAD OVER I-294 (BN 203) GENERAL PLAN AND ELEVATION

SJ-01 DRAWING NO. 156 OF 175

REINFORCEMENT BARS, INCLUDING EPOXY-COATED REINFORCEMENT BARS, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 (ASTM A706), GRADE 60, DEFORMED BARS.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED

REINFORCEMENT BAR BENDING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES",

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST FARTH AND 2" FOR ALL OTHER SURFACES UNLESS. OTHERWISE SHOWN.

CONSTRUCTION

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIEY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE FOR THE WORK.

CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES, SCALES SHOWN ARE FOR INFORMATION ONLY.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS SHALL BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR MAY REQUEST COPIES OF EXISTING CONSTRUCTION PLANS THAT ARE CURRENTLY ON FILE WITH THE ILLINOIS TOLLWAY. THE REQUEST SHALL BE IN WRITING WITH THE UNDERSTANDING THAT ANY REPRODUCTION COST WILL BE AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY.

NO CONCRETE CUTTING SHALL BE PERMITTED UNTIL THE CUTTING LIMITS HAVE BEEN OUTLINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIEY THE LOCATION OF ALL UTILITIES PRIOR TO STARTING CONSTRUCTION, CONTACT J.U.L.I.E., 800-892-0123.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATION PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST ILLINOIS TOLLWAY UTILITIES LOCATE" FORM FILLED IN ONLINE AT THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS" AT LEAST FOUR (4) BUSINESS DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN THE GENERAL AREA OF THE FIBER OPTIC CABLE.

EXISTING REINFORCEMENT WHICH IS TO BE INCORPORATED INTO THE NEW CONSTRUCTION SHALL BE BLAST CLEANED TO GRAY METAL, STRAIGHTENED (WITHOUT HEATING), AND CUT TO FIT. COST OF WHICH SHALL BE INCLUDED WITH "CONCRETE REMOVAL" UNLESS OTHERWISE NOTED.

WHENEVER ANY MATERIAL IS DEPOSITED INTO A DRAINAGE SYSTEM OR DRAINAGE STRUCTURES. THE DEPOSITED MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS DEPOSITED DURING THE VARIOUS CONSTRUCTION OPERATIONS.

THE PROTECTIVE SHIELD SYSTEM SHALL EXTEND A MINIMUM OF 10"BEYOND THE INDICATED LIMITS OF REPAIR SHOWN IN THE PLANS OR 5"BEYOND THE ACTUAL LIMITS OF PARTIAL OR FULL DEPTH REPAIR AS IDENTIFIED IN THE FIELD, WHICHEVER IS GREATER.

CONCRETE SEALER SHALL BE APPLIED TO THE SURFACES OF ALL PIER AND ABUTMENT SEATS, INCLUDING BACKWALLS LOCATED BELOW ROADWAY EXPANSION JOINTS. SEALER SHALL ALSO BE APPLIED TO ALL EXPOSED SURFACES OF PIERS IN THE MEDIAN OR PIERS, ABUTMENTS AND WINGWALLS THAT ARE ADJACENT TO THE ROADWAY. EXISTING SURFACES SHALL BE POWER WASHED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 592 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SUPPLEMENTAL GENERAL NOTES

STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR'S MEANS AND METHODS

A STRUCTURAL ENGINEER, LICENSED IN THE STATE OF ILLINOIS, SHALL PREPARE AND SUBMIT STRUCTURE ASSESSMENT REPORTS (SARS) FOR THE PROPOSED WORK ASSOCIATED WITH REMOVING, MODIFYING OR RECONSTRUCTING EXISTING STRUCTURES OR PORTIONS THEREOF. UNLESS NOTED OTHERWISE, A SAR SHALL BE REQUIRED WHEN THE CONTRACTOR"S MEANS AND METHODS APPLY LOADS TO THE STRUCTURE OR CHANGE ITS STRUCTURAL BEHAVIOR. A SAR SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING THE WORK, IN ACCORDANCE WITH THE LATEST IDOT GUIDE BRIDGE SPECIAL PROVISION, ""STRUCTURAL ASSESSMENT REPORTS FOR CONTRACTOR"S MEANS AND METHODS" PRIOR TO BEGINNING THE WORK COVERED BY THAT SAR. SEPARATE PORTIONS OF THE WORK MAY BE COVERED BY SEPARATE SARS WHICH MAY BE SUBMITTED AT DIFFERENT TIMES OR AS DICTATED BY THE CONTRACTOR"S SCHEDULE.

AN EXISTING STRUCTURE INFORMATION PACKAGE (ESIP) WILL BE PROVIDED BY THE ILLINOIS TOLLWAY TO THE CONTRACTOR UPON REQUEST. THIS PACKAGE WILL TYPICALLY INCLUDE EXISTING OR ""AS BUILT""PLANS, AND THE LATEST NATIONAL BRIDGE INSPECTION STANDARDS (NBIS) INSPECTION REPORT. THE AVAILABILITY OF STRUCTURAL INFORMATION FROM THE ILLINOIS TOLLWAY IS SOLELY FOR THE CONVENIENCE AND INFORMATION OF THE CONTRACTOR AND SHALL NOT RELIEVE THE CONTRACTOR OF THE DUTY TO MAKE, AND THE RISK OF MAKING, EXAMINATIONS AND INVESTIGATIONS AS REQUIRED TO ASSESS CONDITIONS AFFECTING THE WORK. ANY DATA FURNISHED IN THE ESIP IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A PART OF THE CONTRACT. THE ILLINOIS TOLLWAY MAKES NO REPRESENTATION OR WARRANTY. EXPRESS OR IMPLIED, AS TO THE INFORMATION CONVEYED OR AS TO ANY INTERPRETATIONS MADE FROM THE DATA.

TOTAL BILL OF MATERIAL

PAY ITEM			ESTIMATED	RECORD
NUMBER	DESCRIPTION	UNIT	QUANTITY	QUANTITY
50102400	CONCRETE REMOVAL	CU YD	15.5	
50157300	PROTECTIVE SHIELD	SQ YD	913	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	15.5	
50300300	PROTECTIVE COAT	SQ YD	38	
50800205	REINFORCEMENT BARS, EPOXY COATED	LB	1,150	
50800515	BAR SPLICERS	EACH	28	
59000200	EPOXY CRACK INJECTION	FOOT	5	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	50	
63200310	GUARDRAIL REMOVAL	FOOT	50	
X0325747	BRIDGE DECK CONCRETE CRACK SEALER	FOOT	29	
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	11,175	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	13	
Z0005876	BONDED PREFORMED JOINT SEALER, 4 INCH	FOOT	146	
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION % INCH	SQ YD	2,034	
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY %"	SQ YD	2,034	
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	82	
JI505040	REPAIR BRIDGE DRAINAGE SYSTEM	EACH	1	
JT524010	APPLY CONCRETE SEALANT	SQ FT	2,572	
JT602838	CLEAN DRAINAGE SYSTEM, LOCATION NO. 8	EACH	1	

INDEX OF SHEETS

SHEET NO.	TITLE
SJ-01	GENERAL PLAN AND ELEVATION
SJ-02	GENERAL NOTES & BILL OF MATERIAL
SJ-03	CONSTRUCTION STAGING
SJ-04	DECK AND APPROACH PAVEMENT REPAIRS
SJ-05	EXPANSION JOINT REPLACEMENT
SJ-06	DECK AND EXPANSION JOINT DETAILS
SJ - 07	PARAPET REPAIRS
SJ-08	GUARDRAIL REPAIRS
SJ-09	DRAINAGE SYSTEM REPAIRS
SJ-10	BAR SPLICER DETAILS
SJ-11	EXISTING DRAINAGE SYSTEM DETAILS
SJ-12	EXISTING PIER DETAILS

AMERICANI ACCOCIATION OF

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF	MIN.	MINIMUM
	STATE HIGHWAY AND	N.	NORTH
	TRANSPORTATION OFFICIALS	N.B.	NORTHBOUND
ABUT.	ABUTMENT	NO.	NUMBER
APPR.	APPROACH	PAR.	PARAPET
BK.	BACK	PGL	PROFILE GRADE LINE
₽.	BASELINE	P.P.C.	PRECAST PRESTRESSED
вотт.	ВОТТОМ		CONCRETE
BRG.	BEARING	PVMT.	PAVEMENT
Œ.	CENTERLINE	REM.	REMOVAL
CTS.	CENTERS	RD.	ROAD
CL.	CLEARANCE	S.	SOUTH
CONC.	CONCRETE	S.P.	SPECIAL PROVISION
CONST.	CONSTRUCTION	S.B.	SOUTHBOUND
CU. FT.	CUBIC FOOT	SDWK.	SIDEWALK
Ø	DIAMETER	SF	SQUARE FOOT
E.	EAST	SHLDR.	SHOULDER
EA.	EACH	SPECS.	SPECIFICATIONS
E.B.	EASTBOUND	STD.	STANDARD
ELEV.	ELEVATION	STA.	STATION
EXIST.	EXISTING	STG.	STAGE
EXP.	EXPANSION	STR.	STRUCTURE
EXP. JT.	EXPANSION JOINT	SUB.	SUBSTRUCTURE
F	FAHRENHEIT	SUPER.	SUPERSTRUCTURE
FT.	FOOT	SY	SQUARE YARD
L SUM	LUMP SUM	TYP.	TYPICAL
LBS.	POUNDS	W.	WEST
LF	LINEAR FOOT	W.B.	WESTBOUND
MED.	MEDIAN		

RR-18-4387

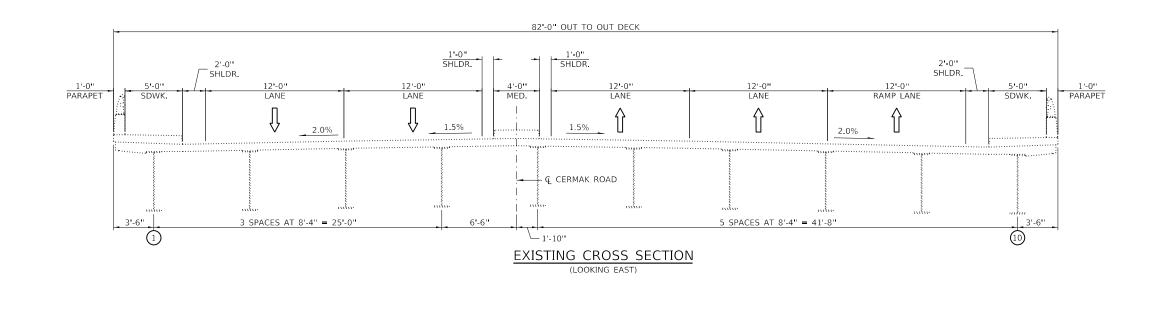
SJ-02

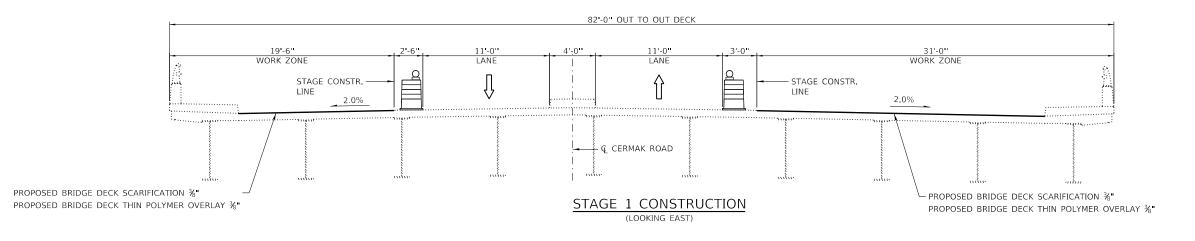
DRAWING NO.

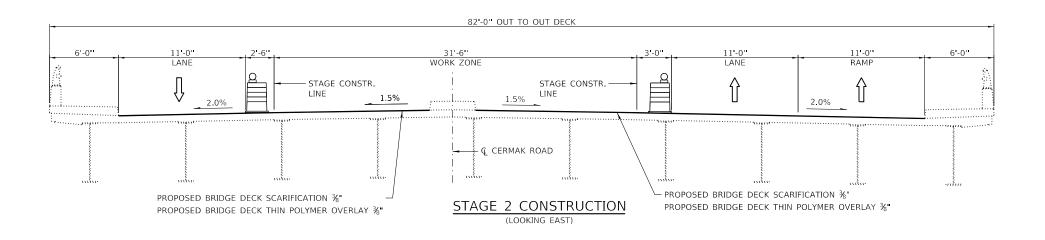
157 OF 175

CFS

4/17/2018







NOTES

1. SEE MOT DRAWINGS FOR MAINLINE MAINTENANCE OF TRAFFIC.

 DRAWN BY
 CFS
 DATE
 4/17/2018

 CHECKED BY
 SCD
 DATE
 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) INC www.quiggengineering.com



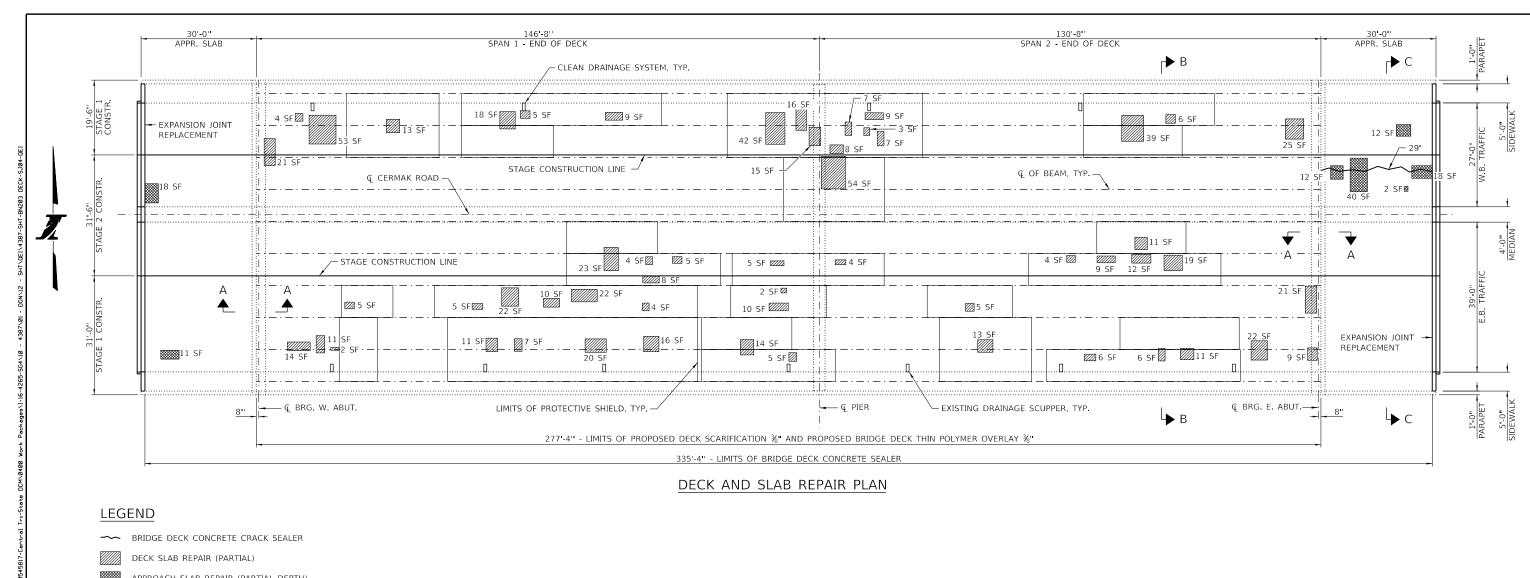
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2 7 0 0 O G D E N A V E N U E

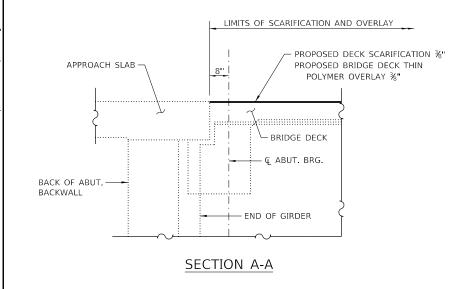
D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

REVISIONS		CONTRACT NO. RR-18-4387	SJ-03
DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	31-03
		CERMAK ROAD OVER I-294 (BN 203)	DRAWING NO.
		` '	158 OF 175
		CONSTRUCTION STAGING	136 OF 173



APPROACH SLAB REPAIR (PARTIAL DEPTH)



NOTES

- 1. AREAS OF DECK REPAIR ARE ESTIMATED. ACTUAL TYPE, LOCATION AND DIMENSIONS OF DECK REPAIRS ARE TO BE DETERMINED DURING CONSTRUCTION.
- 2. CRACK WIDTHS ARE $\frac{1}{16}$ " ($\pm\frac{1}{16}$ ") UNLESS OTHERWISE NOTED.
- 3. HAIRLINE CRACKS LESS THAN $rac{1}{16}$ " (NOT SHOWN) SHALL NOT BE REPAIRED.
- 4. FOR SECTION B-B, SECTION C-C AND BILL OF MATERIAL SEE SHEET SJ-06.
- 5. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO MEDIAN AND SIDEWALK FOR THE FULL LENGTH OF THE BRIDGE AND APPROACH SLABS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO TRAFFIC LANES ON THE APPROACH SLABS ONLY. BRIDGE DECK CONCRETE SEALER SHALL NOT BE APPLIED TO NEW BRIDGE DECK OVERLAY, NEW CONCRETE IN PARAPET SECTIONS AND NEW CONCRETE AT JOINT SECTIONS.

DRAWN BY CFS DATE 4/17/2018

CHECKED BY SCD DATE 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

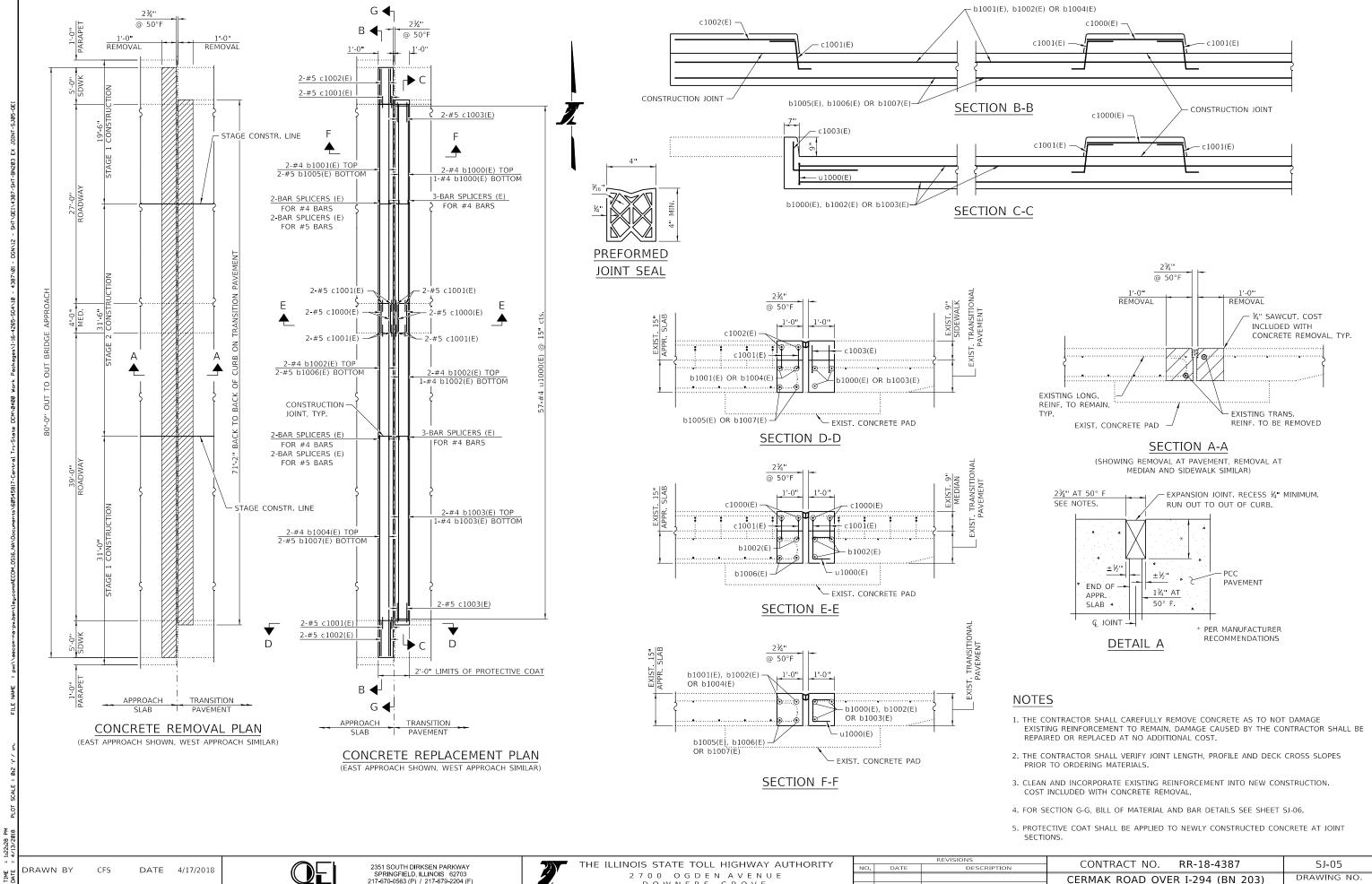
2 7 0 0 0 G D E N A V E N U E

D O W N E R S G R O V E,
I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 SJ-04

CERMAK ROAD OVER I-294 (BN 203) DRAWING NO.

DECK AND APPROACH PAVEMENT REPAIRS 159 OF 175

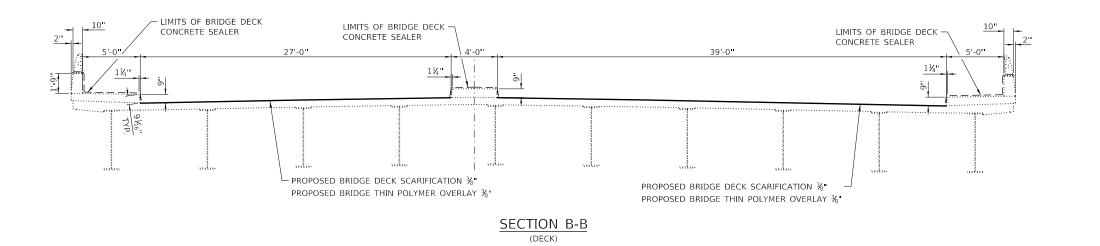


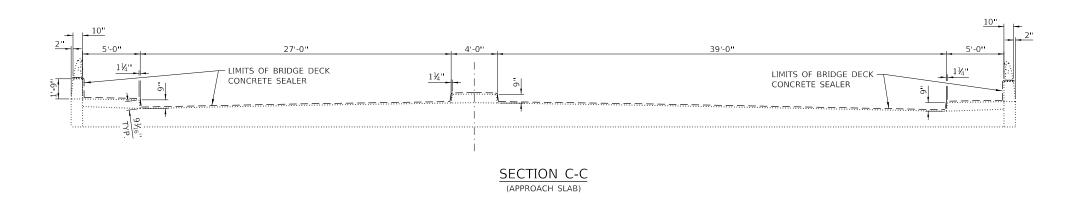
CHECKED BY SCD DATE 4/17/2018 QUIGG ENGINEERING INC

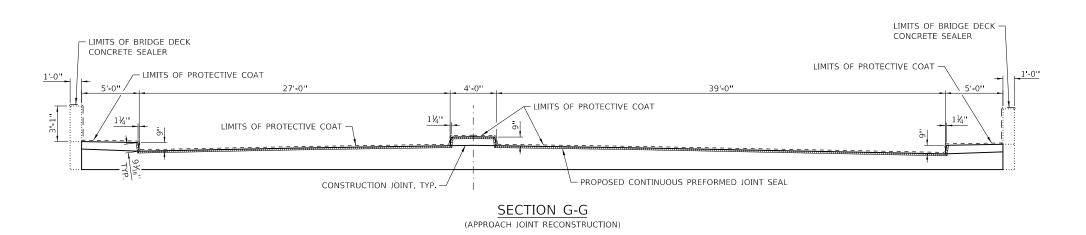
2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com

2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, ILLINOIS 60515

CERMAK ROAD OVER I-294 (BN 203) 160 OF 175 **EXPANSION JOINT REPLACEMENT**

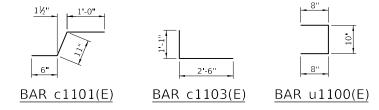






NOTES

- 1. THE JOINT OPENING SHALL BE ADJUSTED FOR TEMPERATURE PER ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS. HOWEVER, SINCE THIS DETAIL IS FOR JOINTLESS STRUCTURES, THE LENGTH OF BRIDGE USED TO CALCULATE THE ADJUSTMENT SHALL BE EQUAL TO HALF THE TOTAL BRIDGE LENGTH PLUS THE LENGTH OF THE BRIDGE APPROACH SLAB.
- 2. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO MEDIAN AND SIDEWALK FOR THE FULL LENGTH OF THE BRIDGE AND APPROACH SLABS. BRIDGE DECK CONCRETE SEALER SHALL BE APPLIED TO TRAFFIC LANES ON THE APPROACH SLABS ONLY. BRIDGE DECK CONCRETE SEALER SHALL NOT BE APPLIED TO NEW BRIDGE DECK OVERLAY, NEW CONCRETE IN PARAPET SECTIONS AND NEW CONCRETE AT JOINT SECTIONS.



BILL OF MATERIAL - DECK & JOINT REPAIR

BAR	NO.	SIZE	LENGTH		SHAPE
b1000(E)	6	#4	13'-6"	-	
b1001(E)	4	#4	18'-4"	-	
b1002(E)	10	#4	31'-3"	-	
b1003(E)	6	#4	25'-0"	-	
b1004(E)	4	#4	29'-10"	-	
b1005(E)	4	#5	18'-4"	-	
b1006(E)	4	#5	31'-3"	-	
b1007(E)	4	#5	29'-10"	-	
c1000(E)	8	#5	3'-9"		
c1000(E)	24	#5	2'-5"		
c1001(E)	8	#5	4'-9"		
c1002(E)	8	#5	3'-7"		1
C1003(L)	8	#3	3-7		
u1000(E)	114	#4	2'-2"		
	ITI	EM		UNIT	QUANTITY
CONCRETE REMOVAL				CU YD	14.8
PROTECTIVE SHIELD				SQ YD	913
CONCRETE SUP	ERSTRUCTURE			CU YD	14.8
PROTECTIVE CO	DAT			SQ YD	35
REINFORCEMEN	T BARS, EPOX	(Y COATED		LB	1,150
BAR SPLICERS				EACH	28
BRIDGE DECK (CONCRETE CR	ACK SEALER		FOOT	29
BRIDGE DECK (CONCRETE SEA	ALER		SQ FT	11,175
APPROACH SLAB REPAIR (PARTIAL DEPTH)					13
BONDED PREFORMED JOINT SEALER, 4 INCH				FOOT	146
CONCRETE BRIDGE DECK SCARIFICATION ¾ INCH				SQ YD	2,034
BRIDGE DECK THIN POLYMER OVERLAY ¾"				SQ YD	2,034
DECK SLAB REF	PAIR (PARTIAL))		SQ YD	82

SJ-06

DRAWING NO.

161 OF 175

DRAWN BY CFS DATE 4/17/2018

CHECKED BY SCD DATE 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

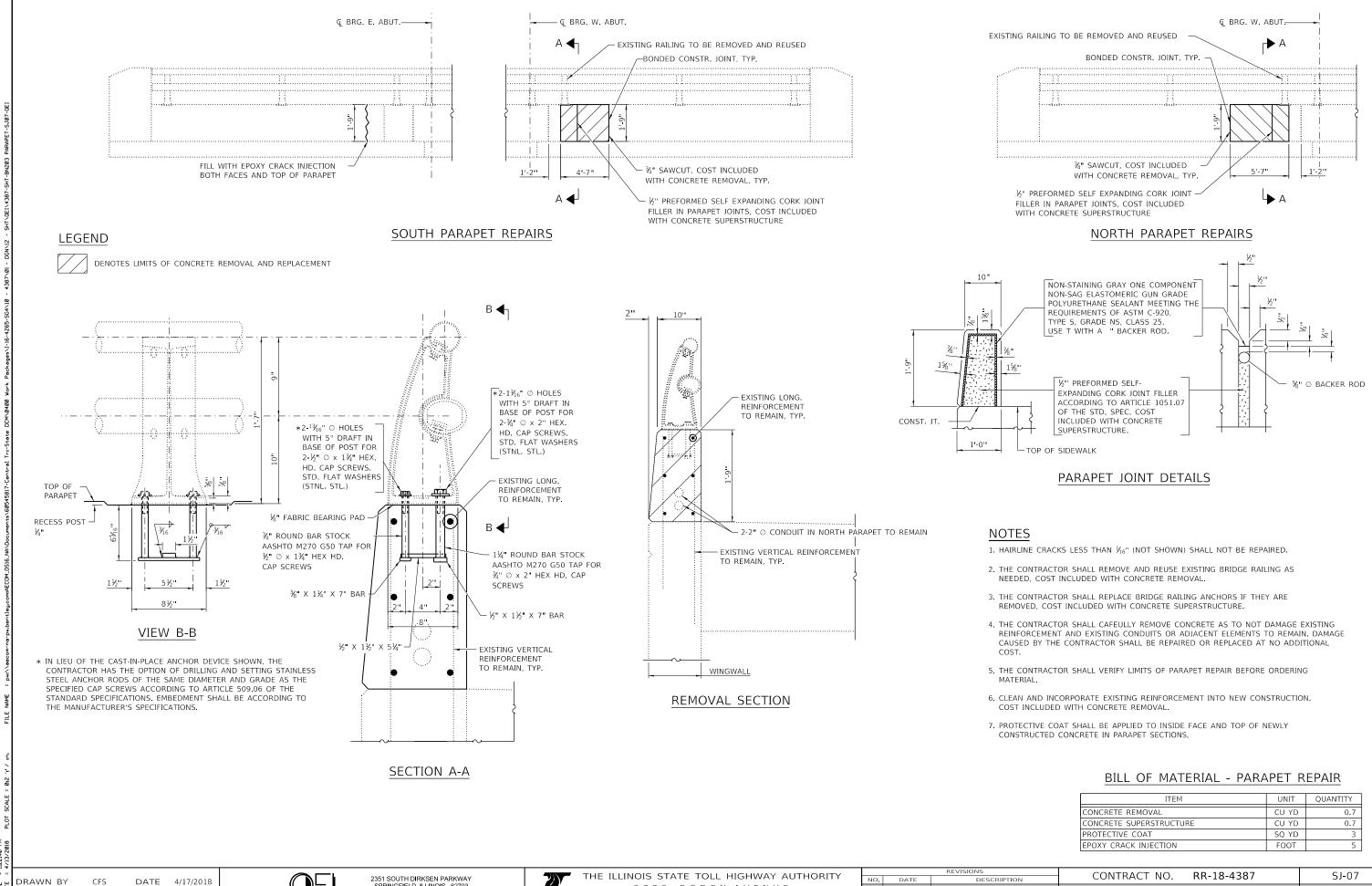
2 7 0 0 O G D E N A V E N U E

D O W N E R S G R O V E,

I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387

CERMAK ROAD OVER I-294 (BN 203)
DECK AND EXPANSION JOINT DETAILS



CHECKED BY SCD DATE 4/17/2018

QUIGG ENGINEERING INC

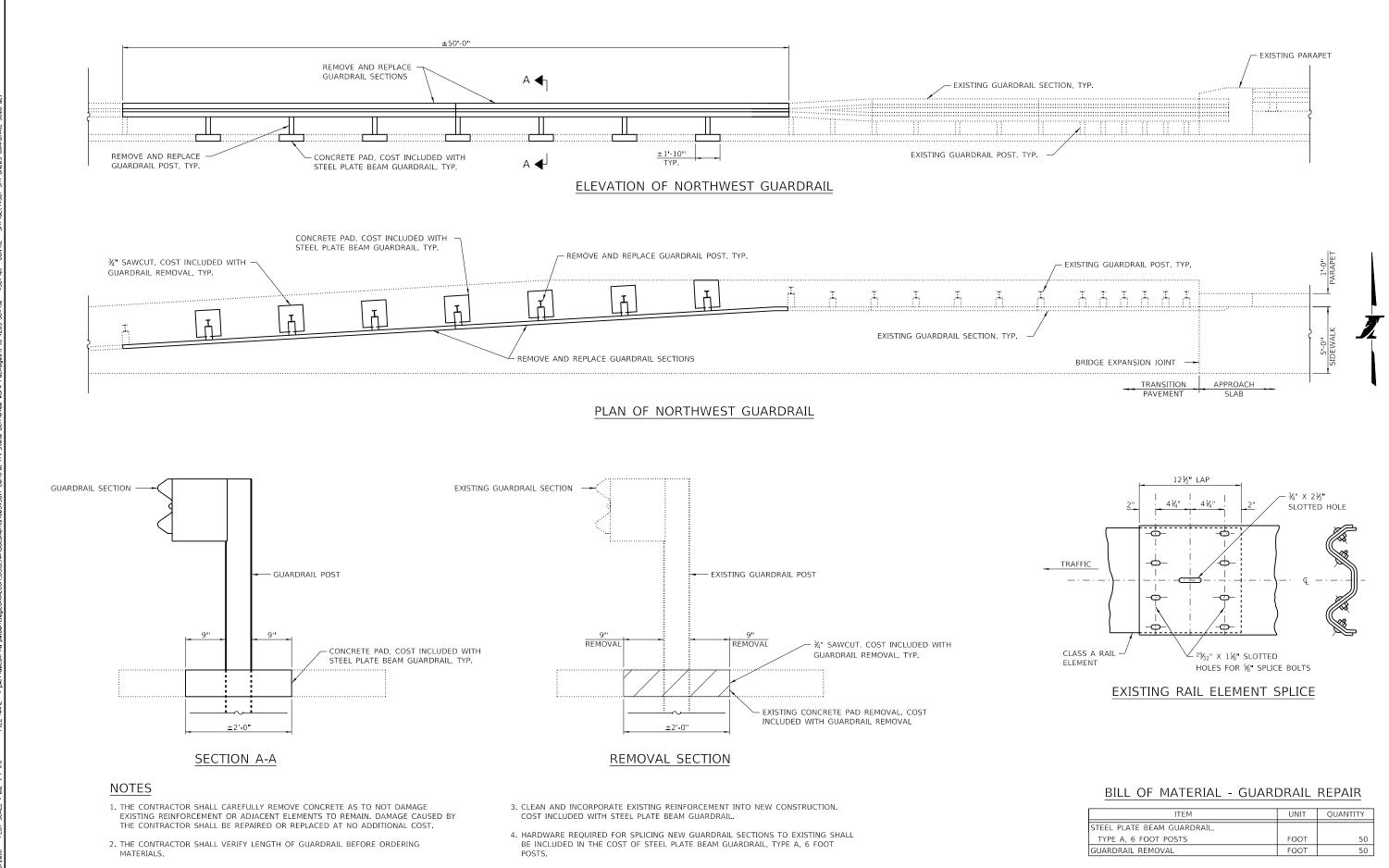
2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com



TE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
2700 OGDEN AVENUE
DOWNERS GROVE,
ILLINOIS 60515

CONTRACT NO. RR-18	REVISIONS		
CONTRACT NO. RR-18	DESCRIPTION	DATE	NO.
CERMAK ROAD OVER I-294			
PARAPET REPAIR			

OVER I-294 (BN 203) DRAWING NO. PET REPAIRS 162 OF 175



CHECKED BY SCD

4/17/2018

DATE 4/17/2018

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com QUIGG ENGINEERING INC



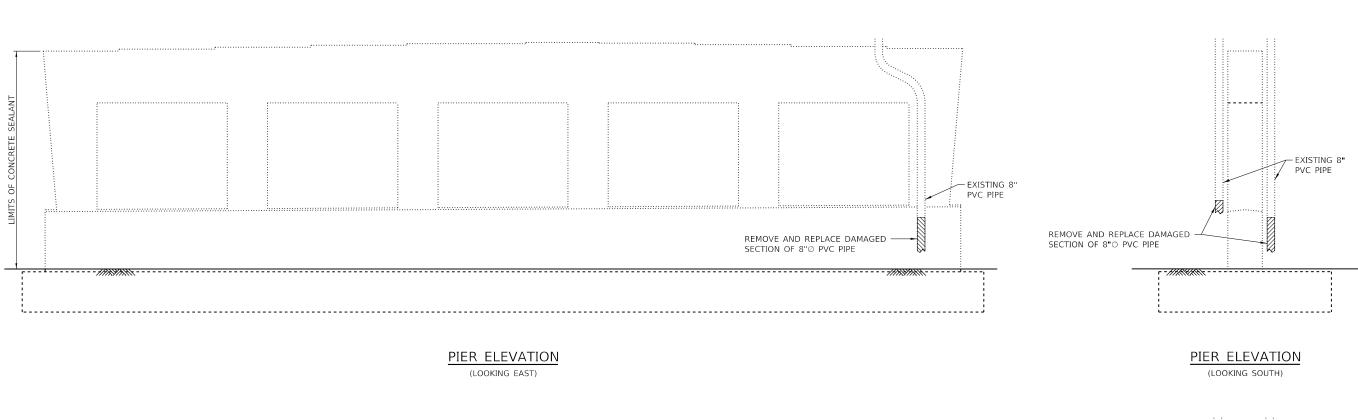
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

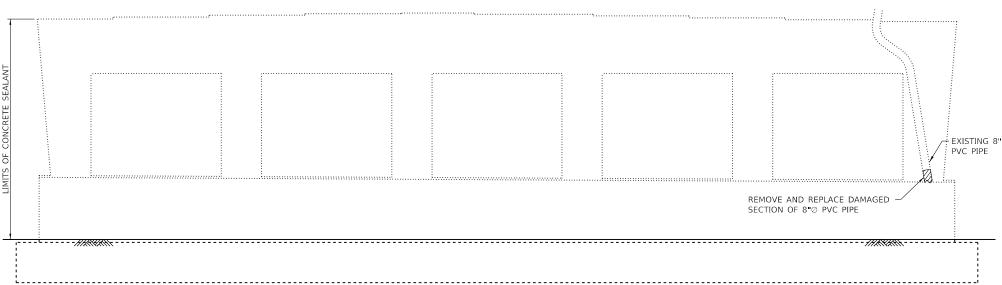
REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387	
NO.	DATE	DESCRIPTION	CONTRACT NO. KK-10-4307	
			CERMAK ROAD OVER I-294 (BN 203)	
			GUARDRAIL REPAIRS	

SJ-08

DRAWING NO.

163 OF 175





- NEW 8"O PVC PIPE

PIER ELEVATION (LOOKING SOUTH)

NOTES

- 1. ALL STAINLESS STEEL HARDWARE FOR DRAINAGE SYSTEMS SHALL BE COATED WITH ANTISEIZE COMPOUND.
- 2. DRAIN PIPE FOR BRIDGE DRAINAGE SYSTEM, INCLUDING ALL PIPING, FITTINGS, SUPPORT BRACKETS, INSERTS, BOLTS, AND SPLASH BLOCKS SHOWN, SHALL BE AS SPECIFIED IN THE LATEST IDOT GBSP FOR DRAINAGE SYSTEM, EXCEPT AS MODIFIED HEREIN.
- 3. POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE 8" DIAMETER SCHEDULE 80 MEETING THE REQUIREMENTS OF ASTM D1785 (F441), D2464 AND D2467 COLORED TO MATCH THE ADJACENT BEAM AND/OR COLUMN AS APPROVED BY THE ENGINEER.

PIER ELEVATION

(LOOKING WEST)

- 4. REPAIR OF THE EXISTING DRAINAGE SYSTEM SHALL INCLUDE BUT MAY NOT BE LIMITED TO THE LOCATIONS SHOWN. THE FINAL REPAIR LIMITS WILL BE DETEMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO REPAIR.
- 5. ALL WORK SHOWN ON THIS SHEET SHALL BE INCLUDED WITH REPAIR BRIDGE DRAINAGE SYSTEM.
- 6. IN ADDITION TO THE REPAIRS SHOWN ON THIS SHEET, THE DRAINAGE SYSTEM SHALL BE CLEANED. COST INCLUDED WITH CLEAN DRAINAGE SYSTEM, LOCATION NO. 8.
- 7. APPLY CONCRETE SEALANT TO ALL EXPOSED SURFACES OF PIER BELOW THE BEARING SEATS.

BILL OF MATERIAL-DRAINAGE REPAIR

ITEM	UNIT	QUANTITY
REPAIR BRIDGE DRAINAGE SYSTEM	EACH	1
APPLY CONCRETE SEALANT	SQ FT	2,572
CLEAN DRAINAGE SYSTEM, LOCATION NO. 8	EACH	1

CFS 4/17/2018 CHECKED BY SCD DATE 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

REVISIONS		REVISIONS	CONTRACT NO. RR-18-4387
NO.	DATE	DESCRIPTION	CONTRACT NO. RR-18-4387
			CERMAK ROAD OVER I-294 (BN 2
			DRAINAGE SYSTEM REPAIRS

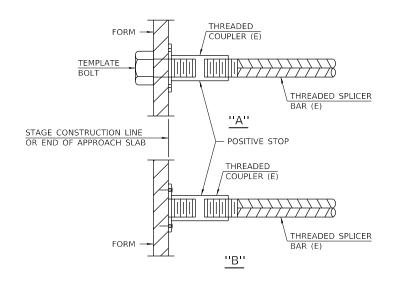
SJ-09 DRAWING NO. 203) 164 OF 175

STANDARD BAR SPLICER ASSEMBLY

THREADED SPLICER BAR LENGTH = MIN. LAP LENGTH + 1½" + THREAD LENGTH

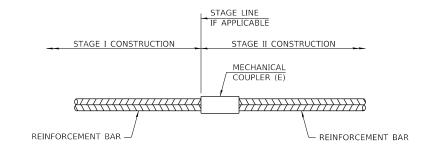
 * EPOXY NOT REQUIRED ON BAR SPLICER ASSEMBLY COMPONENTS USED IN CONJUNCTION WITH BLACK BARS.

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED	MINIMUM LAP LENGTH
EB TRAFFIC	#4	10	2 '- 5"
WB TRAFFIC	#4	10	2'-5"
EB TRAFFIC	#5	4	3'-6"
WB TRAFFIC	#5	4	3'-6"



INSTALLATION AND SETTING METHODS

"A": SET BAR SPLICER ASSEMBLY BY MEANS OF A TEMPLATE BOLT. "B": SET BAR SPLICER ASSEMBLY BY NAILING TO WOOD FORMS OR CEMENTING TO STEEL FORMS. (E): INDICATES EPOXY COATING.



STANDARD MECHANICAL SPLICER

LOCATION	BAR SIZE	NO. ASSEMBLIES REQUIRED

NOTES

- 1. SPLICER BARS SHALL BE DEFORMED WITH THREADED ENDS AND HAVE A MINIMUM 60 KSI YIELD STRENGTH.
- 2. ALL REINFORCEMENT SHALL BE LAPPED AND TIED TO THE SPLICER BARS.
- 3. BAR SPLICER ASSEMBLIES SHALL BE EPOXY COATED ACCORDING TO THE REQUIREMENTS FOR REINFORCEMENT BARS. SEE SECTION 508 OF THE STANDARD SPECIFICATIONS.
- 4. SEE APPROVED LIST OF BAR SPLICER ASSEMBLIES AND MECHANICAL SPLICERS FOR ALTERNATIVES.

CFS 4/17/2018 CHECKED BY SCD DATE 4/17/2018

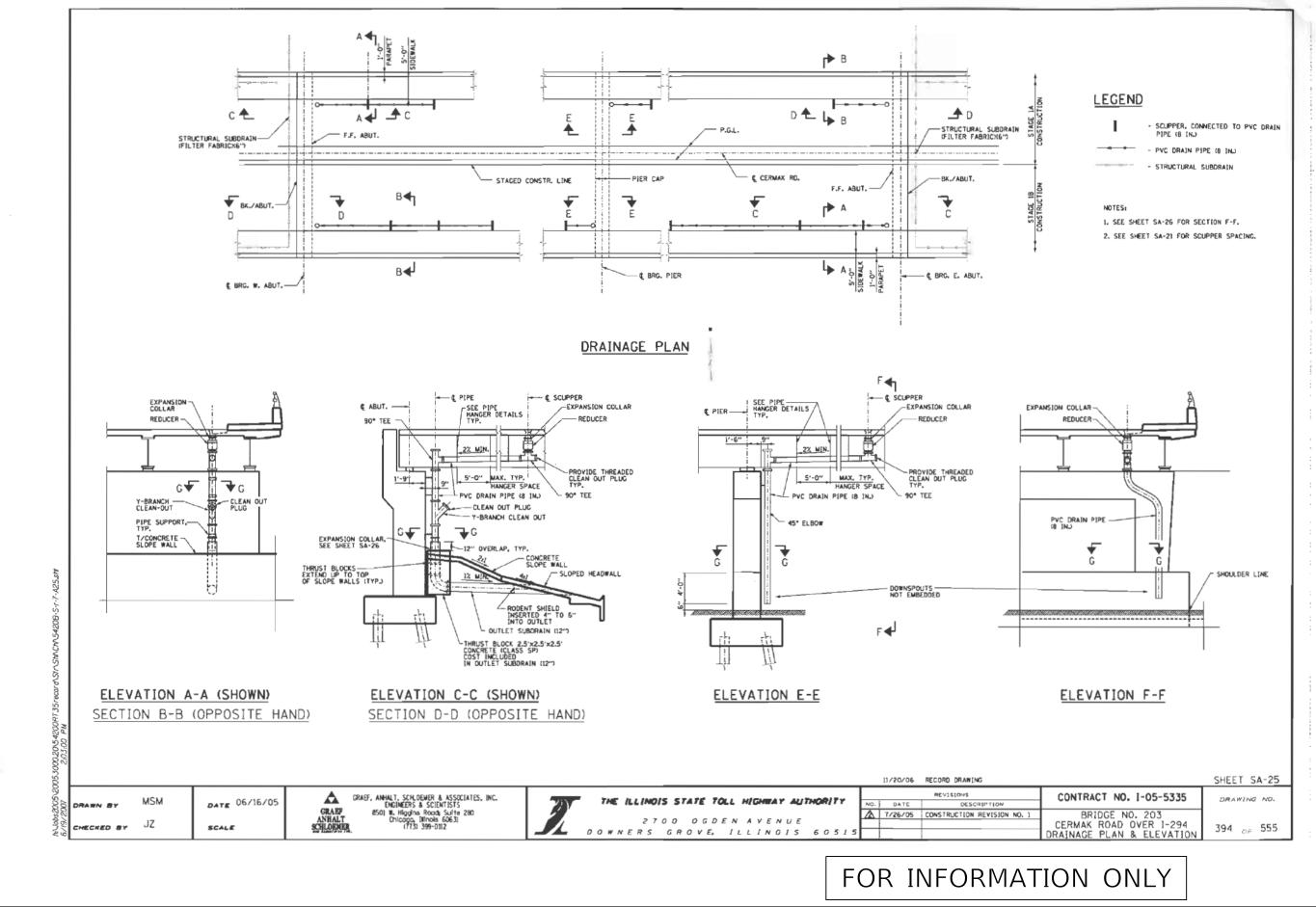


2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

REVISIONS			CONTRACT NO. RR-18-4387	C L 10	
NO.	DATE	DESCRIPTION	CONTRACT NO. RR-10-4307	SJ-10	
			CERMAK ROAD OVER I-294 (BN 203)	DRAWING NO.	
				165 OF 175	
			BAR SPLICER DETAILS	1/3	



THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

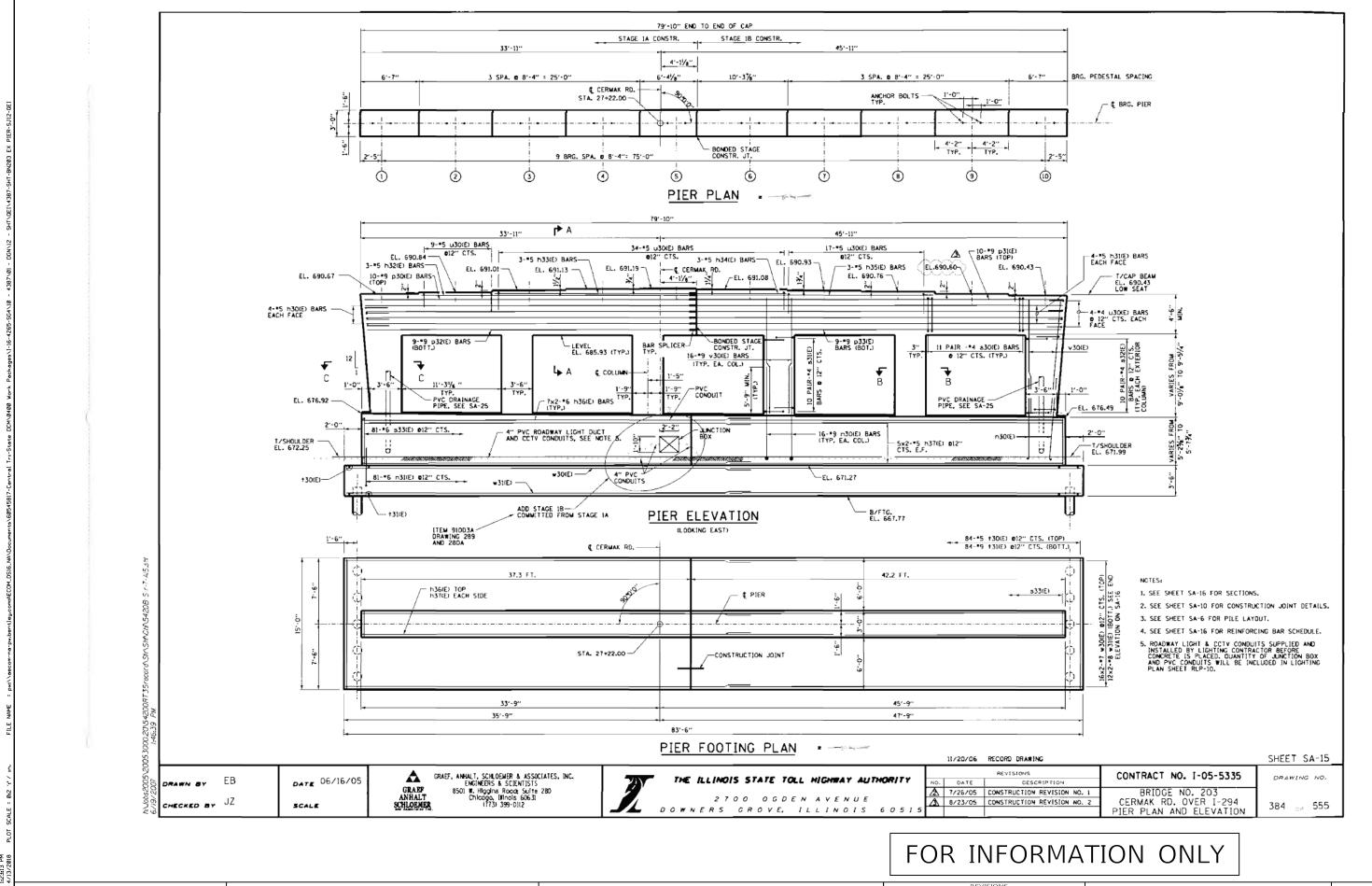
CONTRACT NO. RR-18-4387 SJ-11 DRAWING NO. CERMAK ROAD OVER I-294 (BN 203) 166 OF 175 EXISTING DRAINAGE SYSTEM DETAILS

4/17/2018 CHECKED BY SCD DATE 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com





 DRAWN BY
 CFS
 DATE
 4/17/2018

 CHECKED BY
 SCD
 DATE
 4/17/2018

QUIGG ENGINEERING INC

2351 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62703 217-670-0563 (P) / 217-679-2204 (F) www.quiggengineering.com THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2700 OGDEN AVENUE

DOWNERS GROVE,

ILLINOIS 60515

HORITY NO.

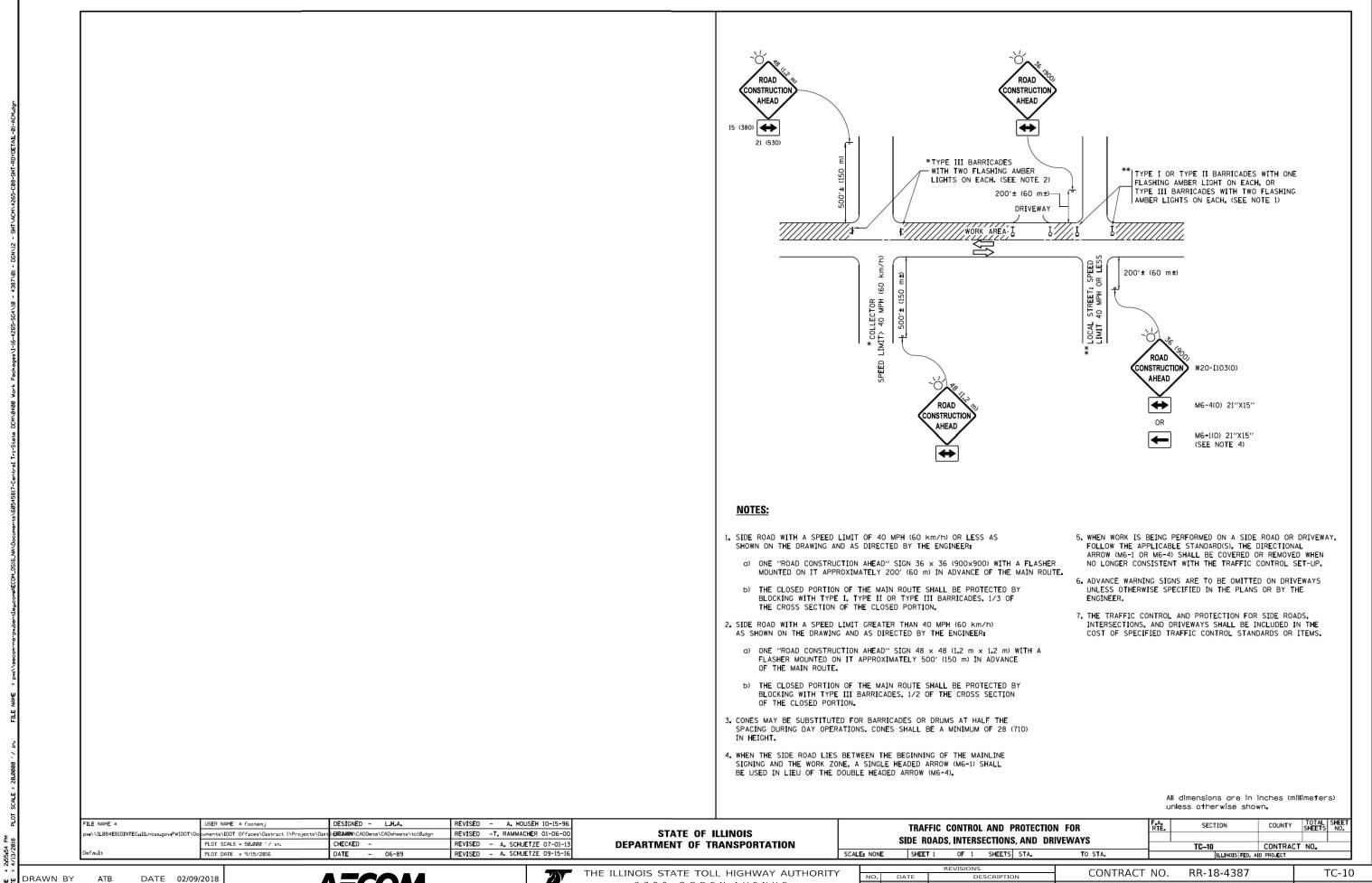
CONTRACT NO. RR-18-4387 SJ-12

CERMAK ROAD OVER I-294 (BN 203)

EXISTING PIER DETAILS

CONTRACT NO. RR-18-4387

DRAWING NO. 167 OF 175

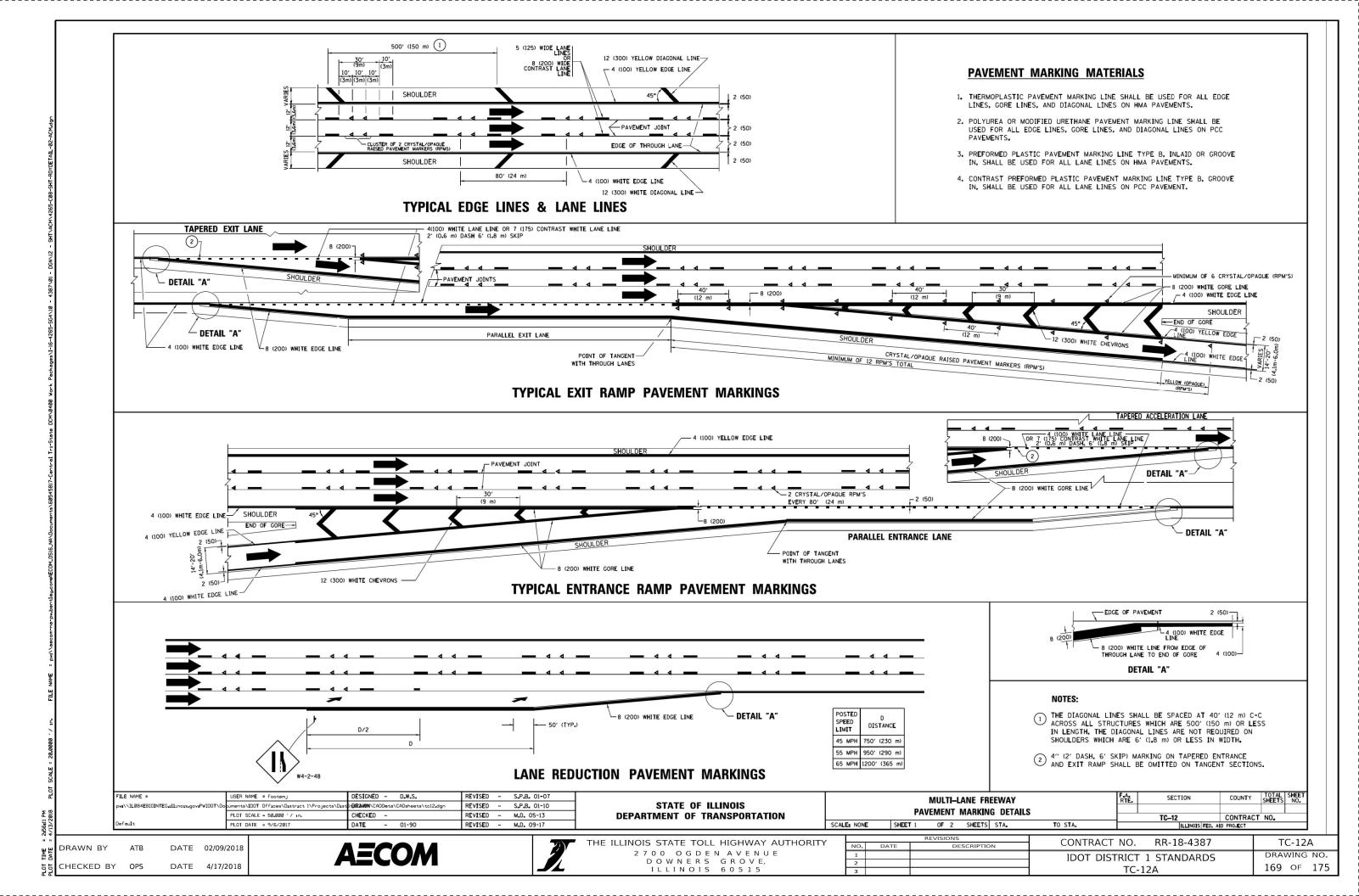


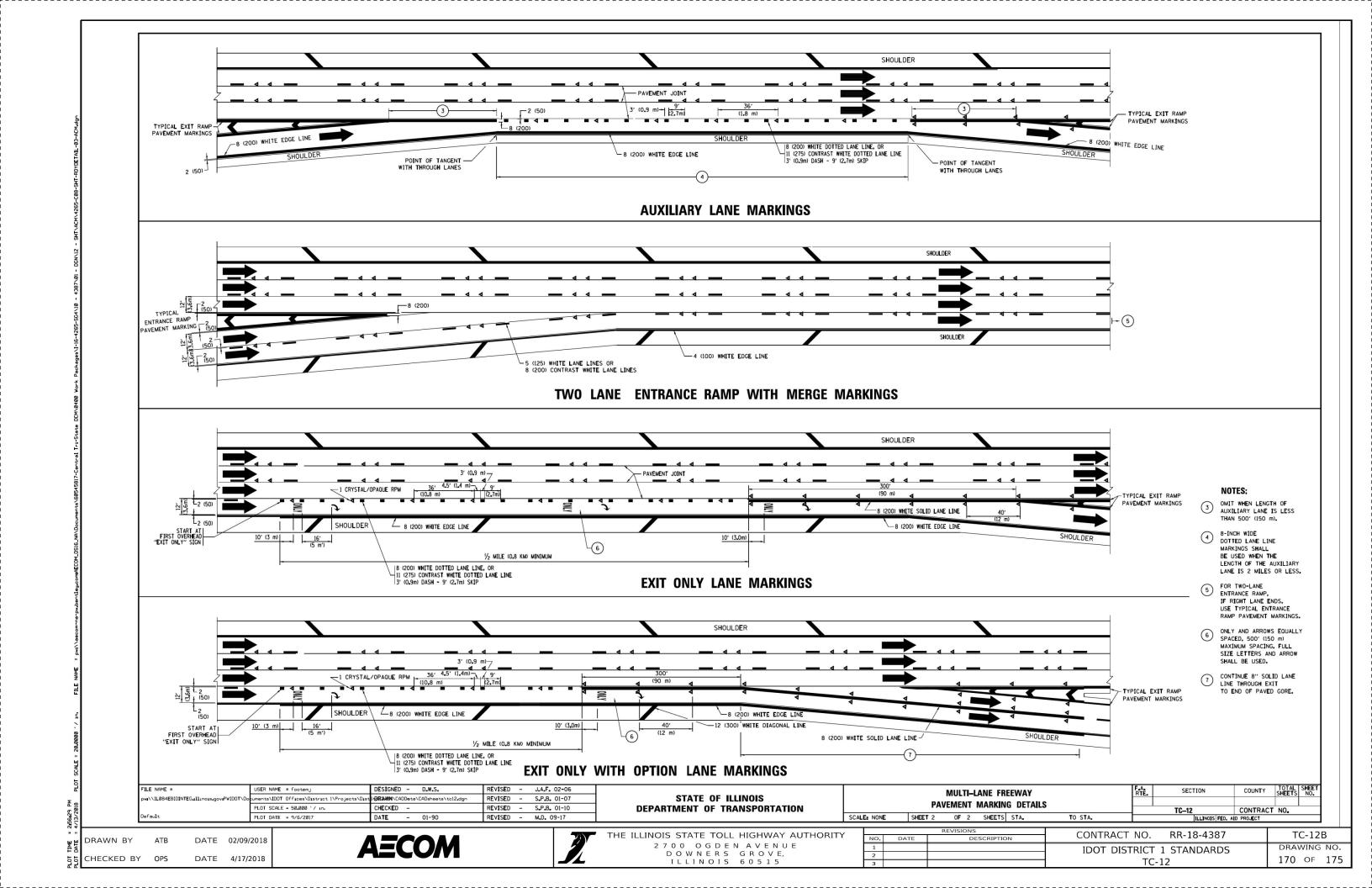
DATE 02/09/2018 DATE 4/17/2018

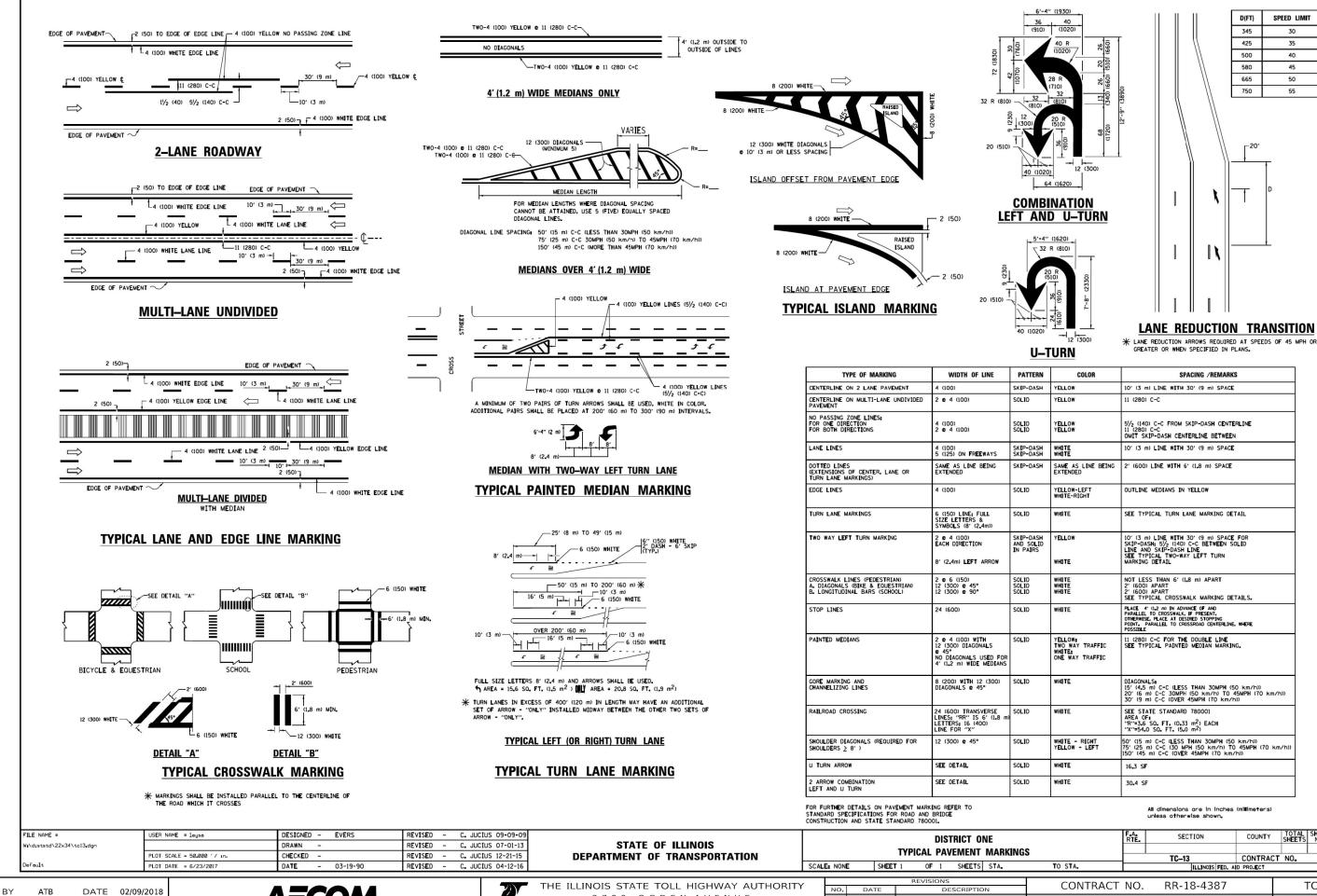
CHECKED BY OPS

2700 OGDEN AVENUE DOWNERS GROVE, ILLINOIS 60515

CONTRACT NO. RR-18-4387 DRAWING NO. IDOT DISTRICT 1 STANDARDS 168 OF 175 TC-10







PLOT TIME = 245 PLOT DATE = 47

CHECKED BY OPS DATE 4/17/2018

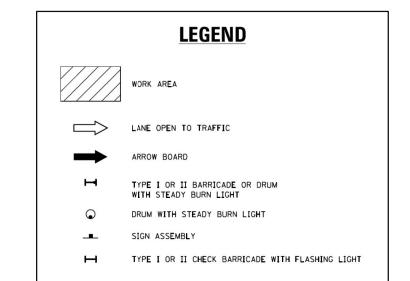
AECOM

2 7 0 0 G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

	,	REVISIONS	CONTRACT NO. RR-18-4387	TC 12
.0	DATE	DESCRIPTION	CONTRACT NO. RR-18-4387	IC-13
1			IDOT DISTRICT 1 STANDARDS	DRAWING NO.
2				171 OF 175
3			TC-13	1/1 0- 1/3

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

24"X30"



4" YELLOW REFLECTIVE PAVEMENT -MARKING TAPE (REMOVE CONFLICTING WHITE SKIP-DASH LINES FIRST.)

ARROW BOARD

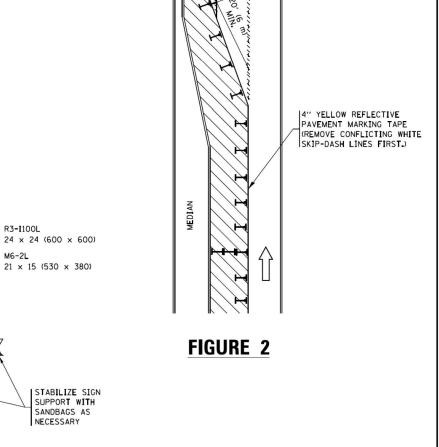
NOTES:

- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE
- B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. 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.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

CONFLICTING

PAVEMENT MARKING REMOVAL (TYP.)



DETAIL A

5' (1.5 m) MIN. (SEE NOTE 7)

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

TOTAL SHEETS

CONTRACT NO.

SECTION

- SEE DETAIL "A"

6" WHITE REFLECTIVE

PAVEMENT MARKING TAPE

FILE NAME = USER NAME = footemj REVISED -T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS STATE OF ILLINOIS ws\\ILØ84EBIDINTEG.:111:n ments\IDOT Offices\District 1\Projects\D 研EXISECIADDoto CAQuitta USEH144時07-95 REVISED - A. SCHUETZE 07-01-13 (TO REMAIN OPEN TO TRAFFIC) PLOT SCALE = 50.0000 ' / 10. REVISED - A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 **DEPARTMENT OF TRANSPORTATION** PLOT DATE = 9/15/2016 REVISED -T. RAMMACHER 01-06-00 REVISED -OF 1 SHEETS STA. SCALE: NONE SHEET 1 TO STA.

DRAWN BY DATE 02/09/2018 CHECKED BY OPS

FIGURE 1

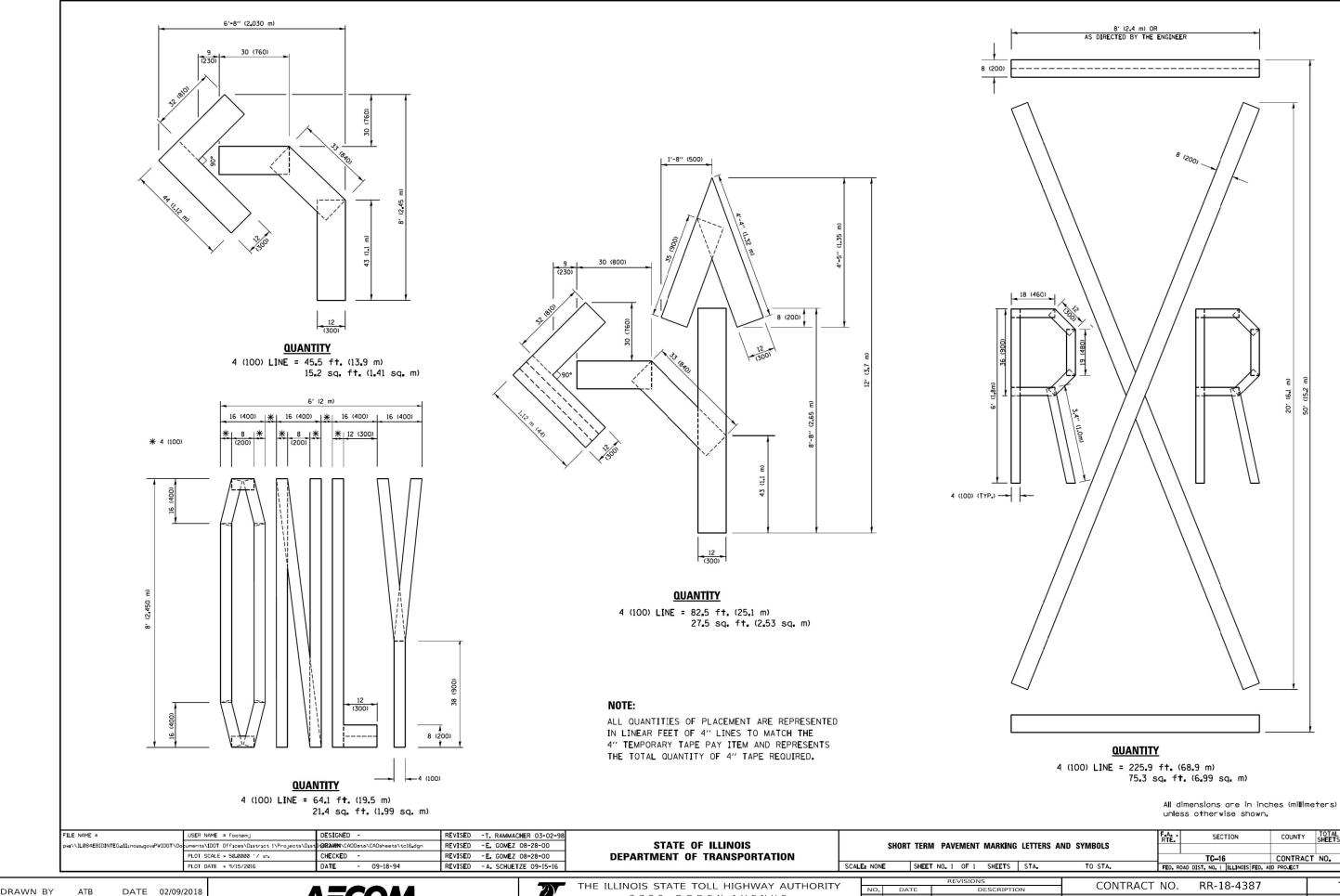


THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY 2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

CONTRACT NO. RR-18-4387 TC-14 DRAWING NO. **IDOT DISTRICT 1 STANDARDS** 172 OF 175 TC-14

DATE 4/17/2018

SEE DETAIL "A"



DATE 02/09/2018 CHECKED BY OPS DATE 4/17/2018

AECOM



2 7 0 0 O G D E N A V E N U E D O W N E R S G R O V E, I L L I N O I S 6 0 5 1 5

200	REVISIONS	CONTRACT NO. RR-18	1207
DATE	DESCRIPTION	CONTRACT NO. KK-10)-430/
		IDOT DISTRICT 1 STAN	DARD
		IDOT DISTRICT I STAN	DAILD
		TC-16	

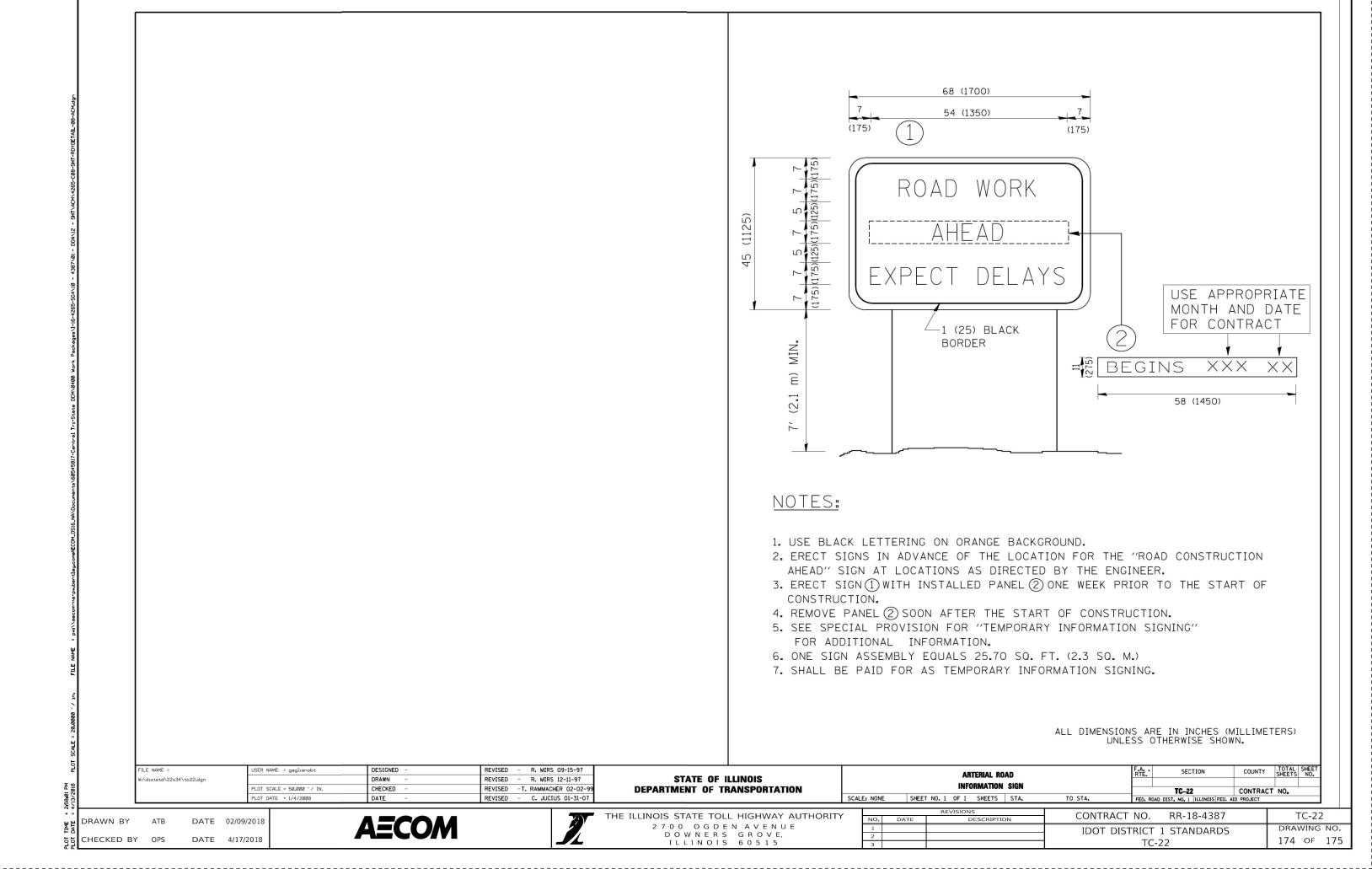
COUNTY TOTAL SHEETS

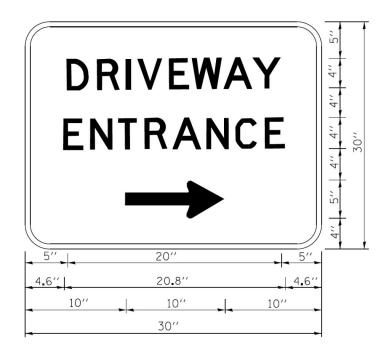
TC-16

DRAWING NO.

173 OF 175

CONTRACT NO.





3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07	
c:\pw_work\pwidot\gaglianobt\d0108315\tc	26.dgn	DRAWN -	REVISED -	
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED -	
	PLOT DATE = 12/13/2012	DATE -	REVISED -	

STATI	E OF ILLINOIS	
DEPARTMENT	OF TRANSPORTATION	

		DRIVEWAY	ENTRANC	E SIGNING		RTE.	SECTION	COUNTY	SHEETS	
							TC-26	CONTRACT	NO.	
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO S		TO STA.	FED. R	OAD DIST. NO.	D PROJECT					
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.					FED, R	OAD DIST. NO.	ID PROJECT			

DRAWN BY ATB DATE 02/09/2018

CHECKED BY OPS DATE 4/17/2018

AECOM

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY

2700 OGDEN AVENUE

DOWNERS GROVE,

ILLINOIS 60515

CONTRACT NO. RR-18-4387 TC-26

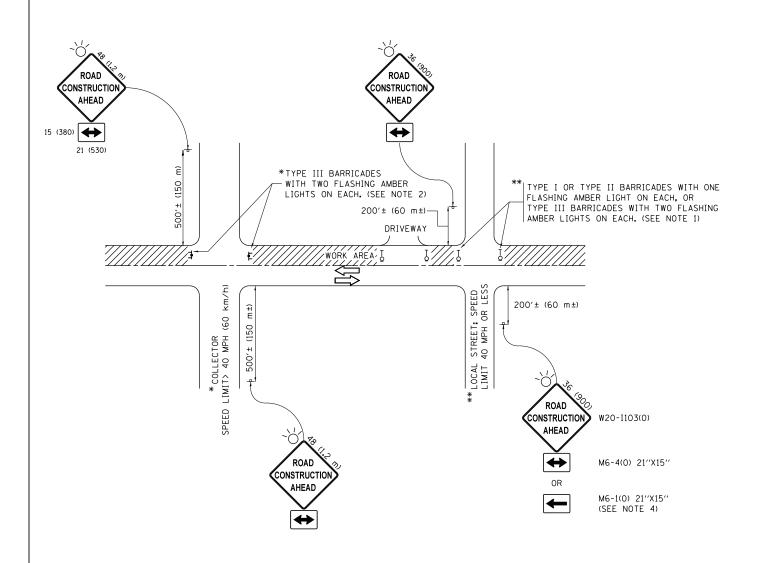
IDOT DISTRICT 1 STANDARDS
TC-26

TC-26

TC-26

TC-26

TC-26



NOTES:

- 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)
- 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).

SCALE: NONE

- 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.

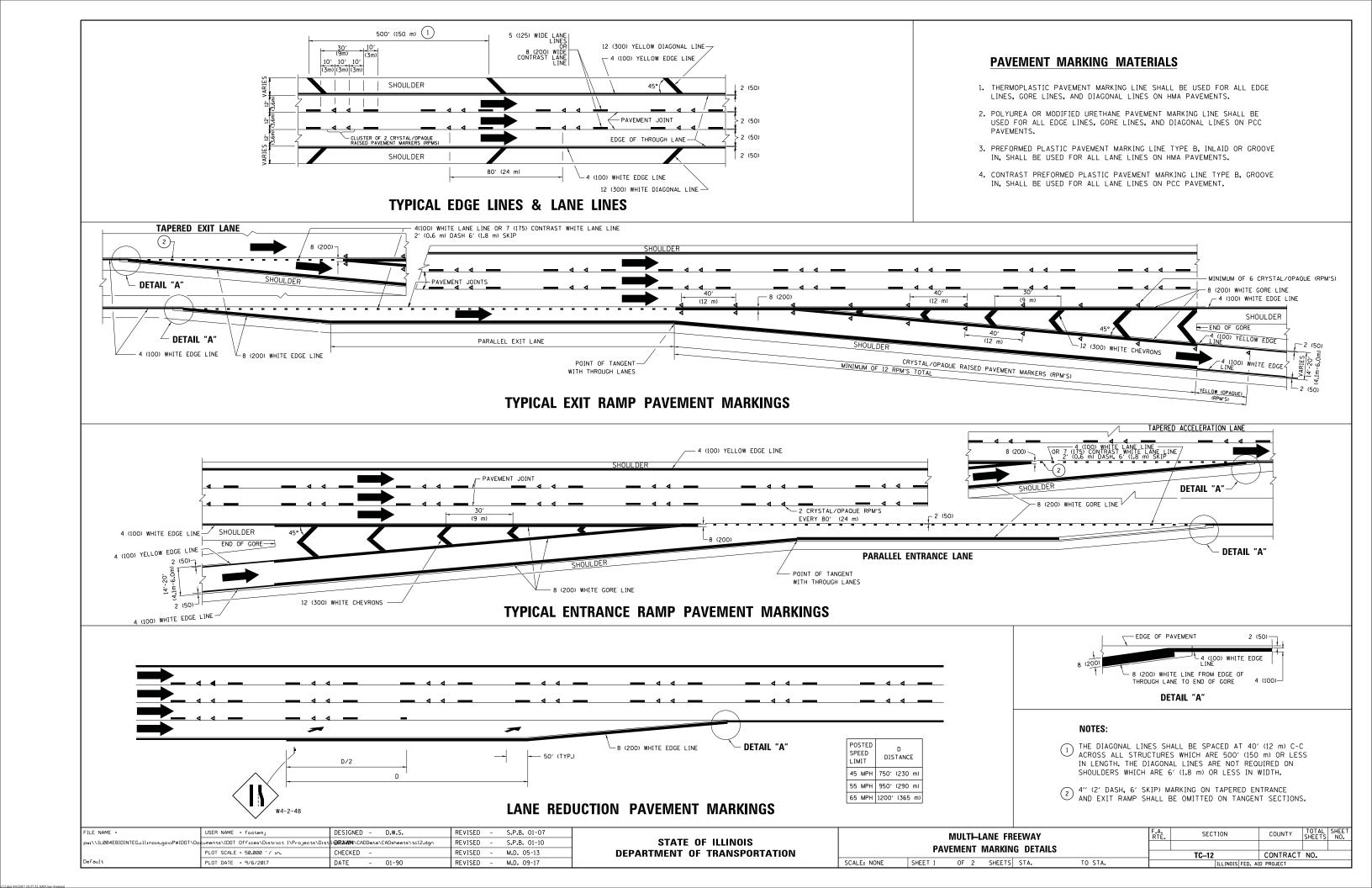
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED	- A	. HOUSEH 10-15-96
pw:\\IL084EBIDINTEG.:ll:no:s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	CADData\CADbata\taleats\tc10.dgn	REVISED	-T. RA	MMACHER 01-06-00
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED	- A.	SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A.	SCHUETZE 09-15-16

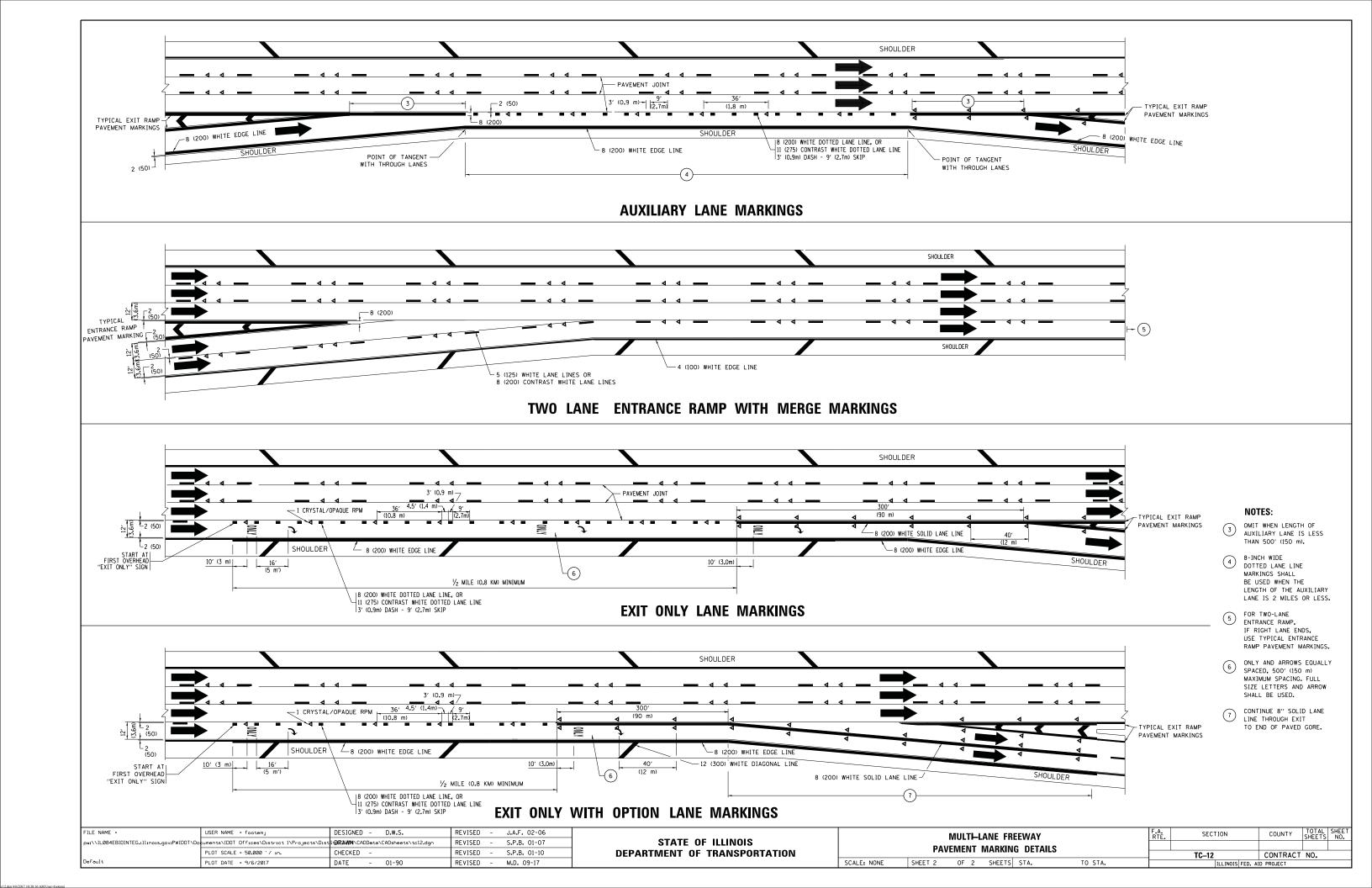
STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

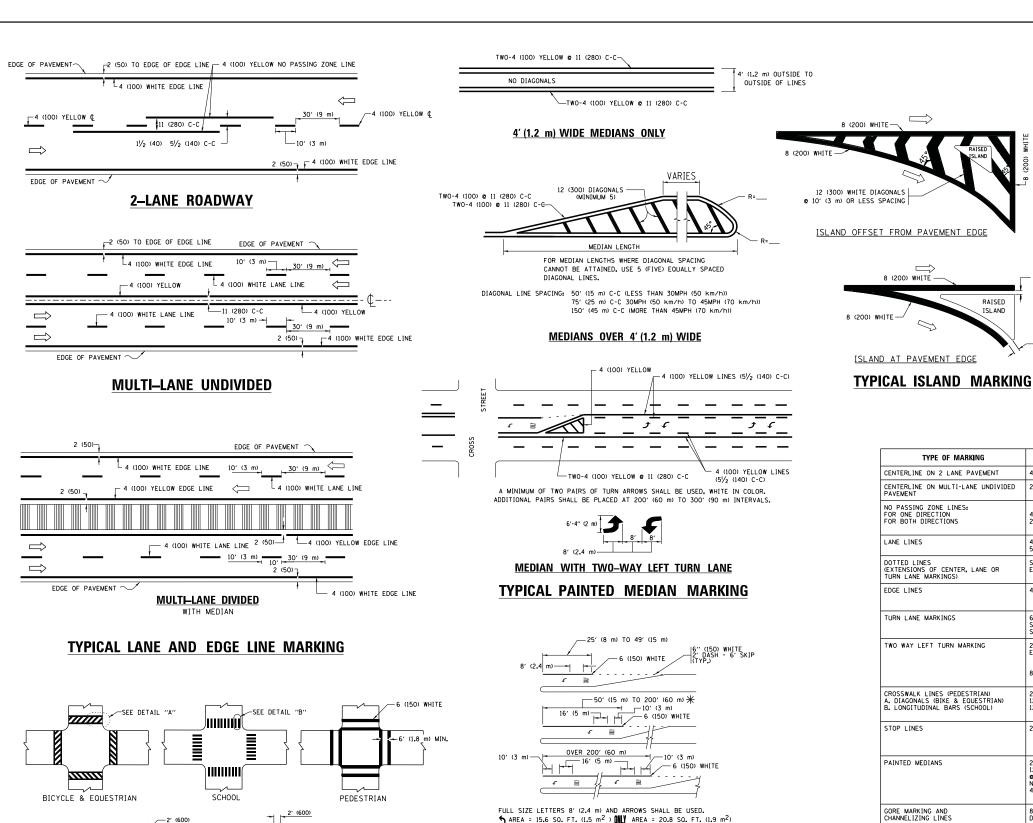
	TRAFFIC (CONTROL	. AND PROTECTIO	N FOR	F.A. RTE.	SECTION
СI	DE BUYDS	INITERS	ECTIONS, AND DR	IVEWAVS		
31	DE HOADS	, III I LIIO		TC-10		
	SHEET 1	OF 1	SHEETS STA.	TO STA.		ILLINOIS FE

F.A. SECTION COUNTY TOTAL SH. SHEETS N

TC-10 CONTRACT NO.







6 (150) WHITE

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

DETAIL "A"

USER NAME = leysa

LOT SCALE = 50.000 '/ in.

PLOT DATE = 6/23/2017

FILE NAME :

W:\diststd\22x34\tc13.dar

-12 (300) WHITE

DESIGNED - EVERS

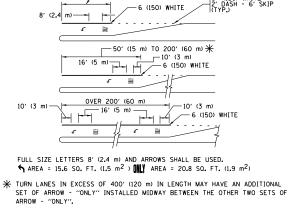
03-19-90

DETAIL "B"

DRAWN

DATE

CHECKED



TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

C. JUCIUS 09-09-0

C. JUCIUS 07-01-13

C. JUCIUS 12-21-15

C. JUCIUS 04-12-16

REVISED -

REVISED -

REVISED

REVISED -

SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²) 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h)) SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS \geq 8′) 12 (300) @ 45° SOLID WHITE - RIGHT YELLOW - LEFT U TURN ARROW SOLID SEE DETAIL WHITE 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. SECTION COUNTY DISTRICT ONE STATE OF ILLINOIS TYPICAL PAVEMENT MARKINGS **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. SCALE: NONE TO STA. SHEET 1 OF 1 SHEETS STA

6'-4" (1930)

40 (1020)

40 (1020)

PATTERN

SKIP-DASH

SOLID

SOLID SOLID

SKIP-DASH SKIP-DASH

SKIP-DASH

SOLID

SOLID

SOLID SOLID

SOLID

SOLID

SOLID

— 2 (50)

2 (50)

WIDTH OF LINE

4 (100) 5 (125) ON FREEWAYS

SAME AS LINE BEING EXTENDED

6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)

8' (2.4m) LEFT ARROW

2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS

24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 LETTERS; 16 (400) LINE FOR "X"

2 @ 4 (100) EACH DIRECTION

2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°

24 (600)

4 (100)

2 @ 4 (100)

4 (100) 2 **e** 4 (100)

4 (100)

RAISED

ISLAND

TYPE OF MARKING

CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT

CENTERLINE ON 2 LANE PAVEMENT

DOTTED LINES
(EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)

NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS

LANE LINES

EDGE LINES

STOP LINES

PAINTED MEDIANS

GORE MARKING AND CHANNELIZING LINES

RAILROAD CROSSING

TURN LANE MARKINGS

TWO WAY LEFT TURN MARKING

CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)

8 (200) WHITE -

COMBINATION

LEFT AND U-TURN

5'-4" (1620)

√ 32 R (810)

U-TURN

YELLOW

YELLOW

YELLOW YELLOW

COLOR

SAME AS LINE BEING EXTENDED

YELLOW-LEFT WHITE-RIGHT

YELLOW

WHITE

WHITE

WHITE

YELLOW: TWO WAY TRAFFIC

WHITE: ONE WAY TRAFFIC

D(FT)

345

425

500

580

665

750

−20′

LANE REDUCTION TRANSITION

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

SPACING / REMARKS

10' (3 m) LINE WITH 30' (9 m) SPACE

5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN

10' (3 m) LINE WITH 30' (9 m) SPACE

2' (600) LINE WITH 6' (1.8 m) SPACE

SEE TYPICAL TURN LANE MARKING DETAIL

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

SEE TYPICAL CROSSWALK MARKING DETAILS.

PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALVA, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE

11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.

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))

NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART

OUTLINE MEDIANS IN YELLOW

11 (280) C-C

SPEED LIMIT

45

50

55

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

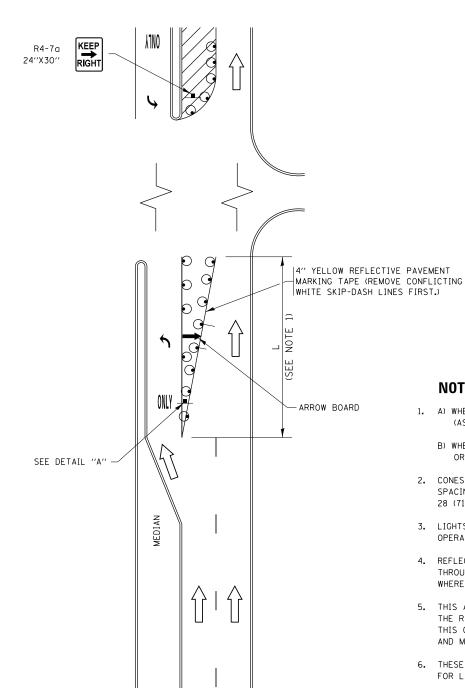


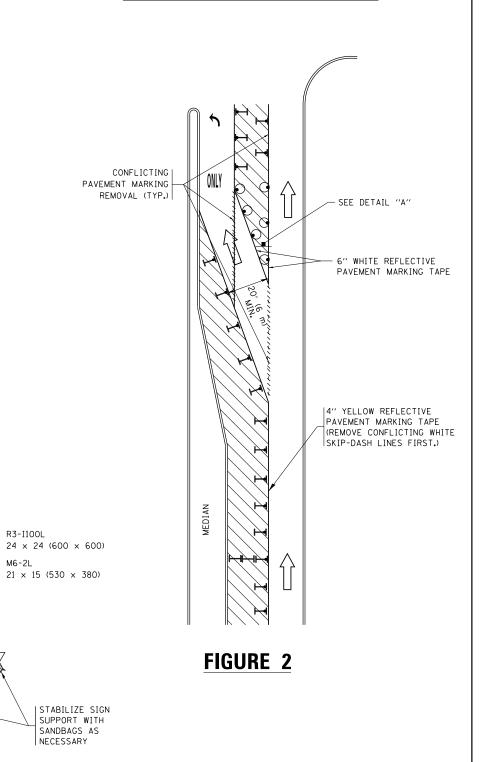
FIGURE 1

LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

- 1. A) WHEN "L" IS < THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. 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.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 \times 15 (530 \times 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



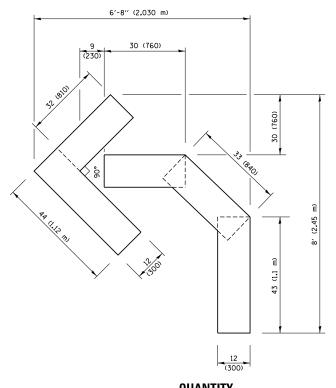
DETAIL A

TURN

LANE

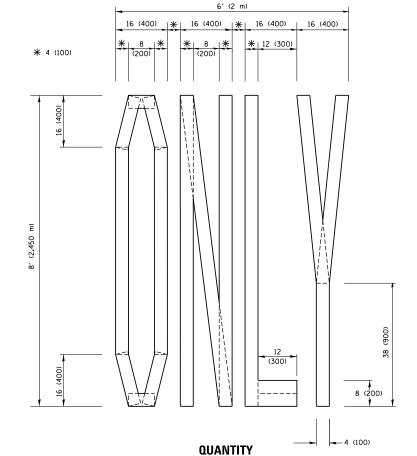
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	REVISED	-T. RAMMACHER 09-08-94	REVISED	- R. BORO 09-14-09		TRA	FFIC CONT	TROL A	AND F	PROTE	ECTION AT T	IIRN RAYS	RTF.	SECTION	COUNTY	SHEETS NO.
pw:\\ILØ84EBIDINTEG.:ll:no:s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	19121112111111111111111111111111111111	DData\C#QsH 40USEH141 Ug07-95	REVISED	- A. SCHUETZE 07-01-13	STATE OF ILLINOIS	1										
	PLOT SCALE = 50.0000 ' / in.	REVISED	- A. HOUSEH 10-12-96	REVISED	- A. SCHUETZE 09-15-16	DEPARTMENT OF TRANSPORTATION		(10	KEIVI	AIN U	UPEN	TO TRAFFIC)			TC-14	CONTRACT	NO.
Default	PLOT DATE = 9/15/2016	REVISED	-T. RAMMACHER 01-06-00	REVISED	-		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.						ID PROJECT				

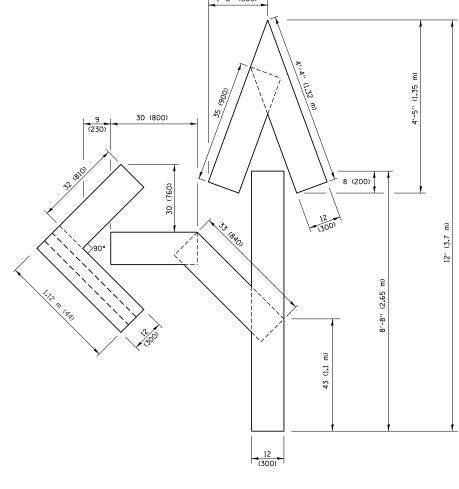


<u>QUANTITY</u>

4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

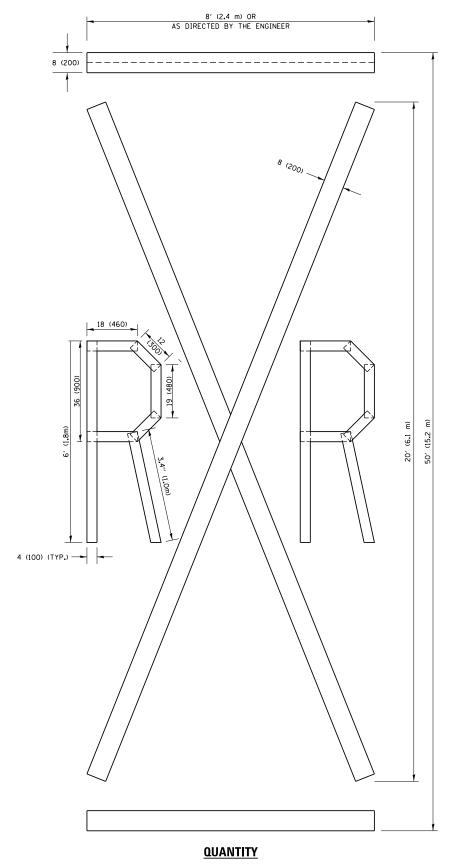


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



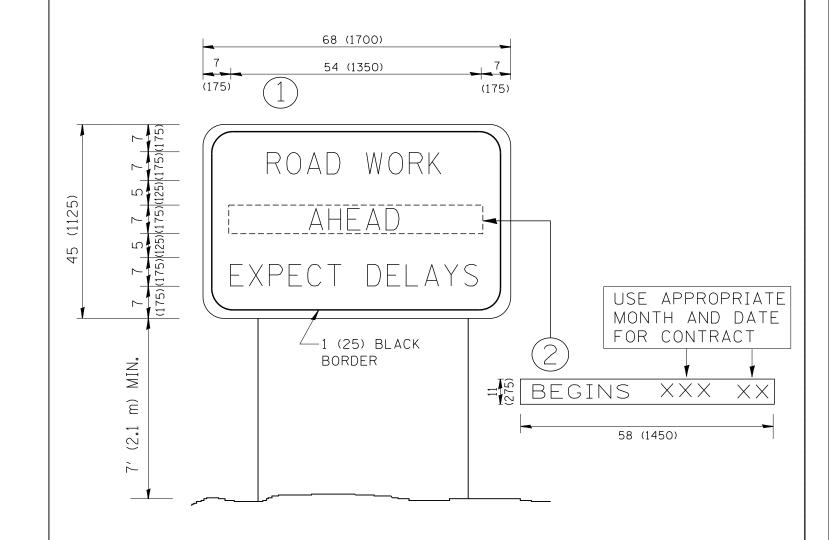
4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED	-T. RAMMACHER 03-02-9
pw:\\IL084EBIDINTEG.:ll:no:s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	t @R‰wm \CADData\CADsheets\tcl6.dgn	REVISED	-E. GOMEZ 08-28-00
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	-E. GOMEZ 08-28-00
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS						SECTION	COUNTY	COUNTY TOTAL SHEI	
SHOKI	MAKKING	LETTERS AND	SAMBOR						
						TC-16	CONTRACT	NO.	
CALE NONE	CHEET NO. 1 OF 1	CHEETC	CTA	TO CTA					

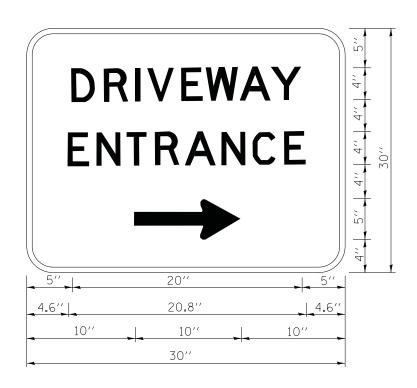


NOTES:

- 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 () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97	ARTERIAL ROAD		ADTEDIAL DOAD	F.A.	• SECTION	COUNTY	TOTAL	SHEET
W:\diststd\22x34\to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			11112			Janeer 3	110.
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		TC-22	CONTRACT	T NO.	
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED.	ROAD DIST. NO. 1 ILLINOIS F	FED. AID PROJECT		



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
c:\pw_work\pwidot\gaglianobt\d0108315\tc	26 . dgn	DRAWN -	REVISED -
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING							F.A SECTION		TOTAL SHEETS	SHEET NO.	
l											
ļ							TC-26 CONTRACT NO.				
l	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT			
7											

TRAFFIC SIGNAL LEGEND

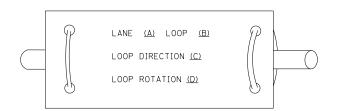
(NOT TO SCALE)

ITEM EXISTING CONTROLLER CABINET COMMUNICATION CABINET MASTER CONTROLLER MASTER MASTER CONTROLLER UNINTERRUPTABLE POWER SUPPLY SERVICE INSTALLATION -(P) POLE MOUNTED SERVICE INSTALLATION	PROPOSED CC MC MMC MMC	ITEM HANDHOLE -SOUARE -ROUND HEAVY DUTY HANDHOLE -SOUARE -ROUND DOUBLE HANDHOLE JUNCTION BOX	EXISTING	PROPOSED	ITEM SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	EXISTING R R C C C C C C C C C C C C C C C C C	PROPOSED R
COMMUNICATION CABINET ECC MASTER CONTROLLER MASTER MASTER CONTROLLER UNINTERRUPTABLE POWER SUPPLY SERVICE INSTALLATION -(P) POLE MOUNTED SERVICE INSTALLATION	CC MC MMC	-SQUARE -ROUND HEAVY DUTY HANDHOLE -SQUARE -ROUND DOUBLE HANDHOLE	H (1)	⊞ ⊕		M M	
MASTER CONTROLLER MASTER MASTER CONTROLLER UNINTERRUPTABLE POWER SUPPLY SERVICE INSTALLATION -(P) POLE MOUNTED SERVICE INSTALLATION	MC MMC	HEAVY DUTY HANDHOLE -SQUARE -ROUND DOUBLE HANDHOLE					G G G ←Y ← G ← G
MASTER MASTER CONTROLLER UNINTERRUPTABLE POWER SUPPLY SERVICE INSTALLATION (P) POLE MOUNTED SERVICE INSTALLATION	MMC P	-SQUARE -ROUND DOUBLE HANDHOLE					4 G 4 G
SERVICE INSTALLATION SERVICE INSTALLATION SERVICE INSTALLATION	9					P	P
SERVICE INSTALLATION (P) POLE MOUNTED SERVICE INSTALLATION	P	JUNCTION BOX			SIGNAL HEAD WITH BACKPLATE		R R R
SERVICE INSTALLATION	- - -P			0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		$\begin{bmatrix} R \\ Y \end{bmatrix}$ $\begin{bmatrix} R \\ Y \end{bmatrix}$ $\begin{bmatrix} R \\ Y \end{bmatrix}$
SERVICE INSTALLATION	—	RAILROAD CANTILEVER MAST ARM	X OX X	X eX X			Y
	0 04	RAILROAD FLASHING SIGNAL	X O X	X • X		P RB	P RB
(G) GROUND MOUNTED (GM) GROUND MOUNTED METERED $^{G} \boxtimes^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE	202 >	X•⊁ -	PEDESTRIAN SIGNAL HEAD		₽
ELEPHONE CONNECTION	T	RAILROAD CROSSBUCK	75	*	AT RAILROAD INTERSECTIONS		
TEEL MAST ARM ASSEMBLY AND POLE	•	RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC),		≯ ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	● C ★ D	₽ C ★ D
LUMINUM MAST ARM ASSEMBLY AND POLE		GALVANIZED STEEL			ILLUMINATED SIGN		
TEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINAIRE	•)	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST (BM) BARREL MOUNTED - TEMPORARY	 ◆ BM 	SYSTEM ITEM INTERSECTION ITEM	S I	SP IP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
WOOD POLE ⊗	•	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	(1#6)	(1 * 6)
CUY WIRE >	>	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER	-	
SIGNAL HEAD →	-	ABANDON ITEM		А	NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE +C>	+ ► P P	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	<u> </u>	<u> </u>
SIGNAL HEAD OPTICALLY PROGRAMMED>' +->' FLASHER INSTALLATION	- → ` + → ` F FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		
FLASHER INSTALLATION -(FS) SOLAR POWERED F FS FS	F FS FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
PEDESTRIAN SIGNAL HEAD -	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F		— <u>(12F)</u> —
PEDESTRIAN PUSH BUTTON @ @ APS (APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	@ @ APS	PREFORMED DETECTOR LOOP	[P] (P)	РР	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		<u>24F</u>
RADAR DETECTION SENSOR	R	SAMPLING (SYSTEM) DETECTOR	$[\overline{s}]$ (\widehat{s})	s s		— <u>(36F)</u> —	—(36F)—
VIDEO DETECTION CAMERA	v •	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		IS (IS)			
RADAR/VIDEO DETECTION ZONE		QUEUE AND SAMPLING	[0 <u>5</u>] (0 <u>5</u>)	as (s)	GROUND ROD -(C) CONTROLLER	<u> </u>	<u>CMPS</u>
PAN, TILT, ZOOM (PTZ) CAMERA	₽TZ¶	(SYSTEM) DETECTOR WIRELESS DETECTOR SENSOR	(i)	®	-(M) MAST ARM -(P) POST -(S) SERVICE		
MERGENCY VEHICLE LIGHT DETECTOR	~	WIRELESS ACCESS POINT		—			
ONFIMATION BEACON O-()	⊷ (_			
WIRELESS INTERCONNECT 0+1 -	•+ + 						

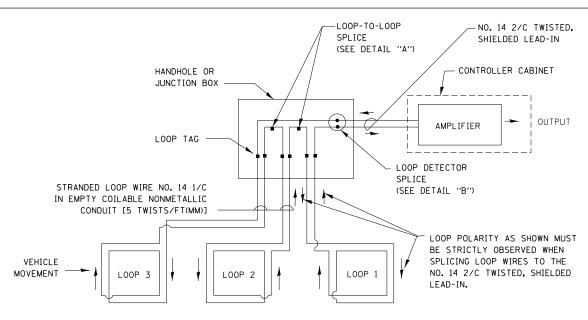
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

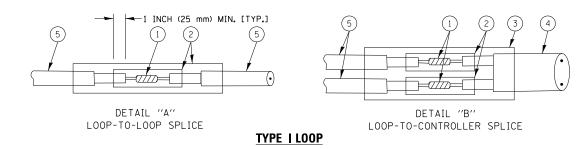


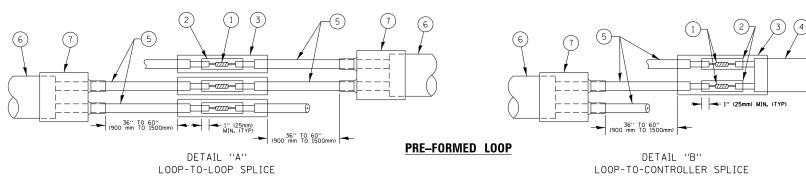
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

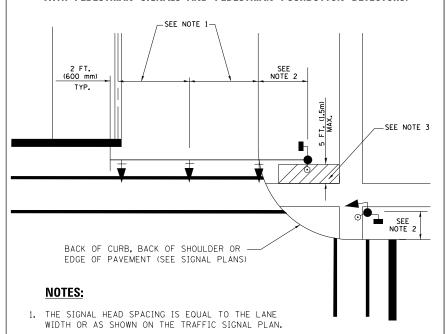
- 5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR
 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED	-	DAD	REVISED	-	DAG 1-1-14
c:\pw_work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN	-	BCK	REVISED	-	
	PLOT SCALE = 50.0000 '/ in.	CHECKED	-	DAD	REVISED	-	
	PLOT DATE = 1/13/2014	DATE	-	10-28-09	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		DI	STRICT OF	JE		F.A RTE.	SECTION	COUNTY	COUNTY TOTAL SH		
STANDARD TRAFFIC SIGNAL DESIGN DETAILS											
	STANDALD	IIIAII	IC SIGNAL	DESIGN	DETAILS	TS-05 CONTRACT NO					
	SHEET NO. 2	OF 7	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.

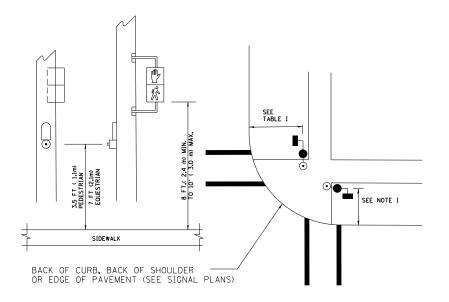


- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

NOTES:

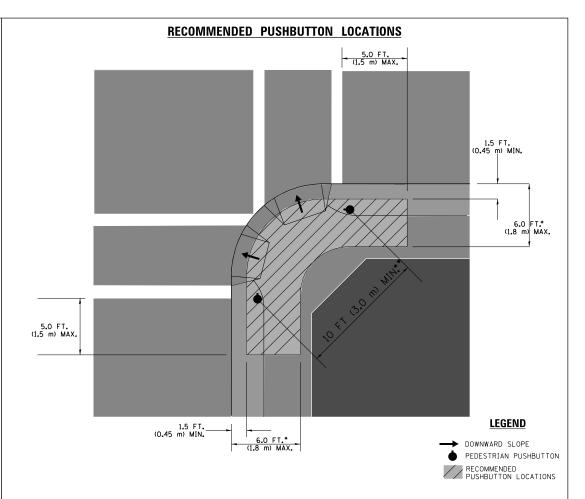
- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAYEMENT.

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- •• WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)				
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)				
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)				
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)				
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)				
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)				
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.				
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.				

NOTES:

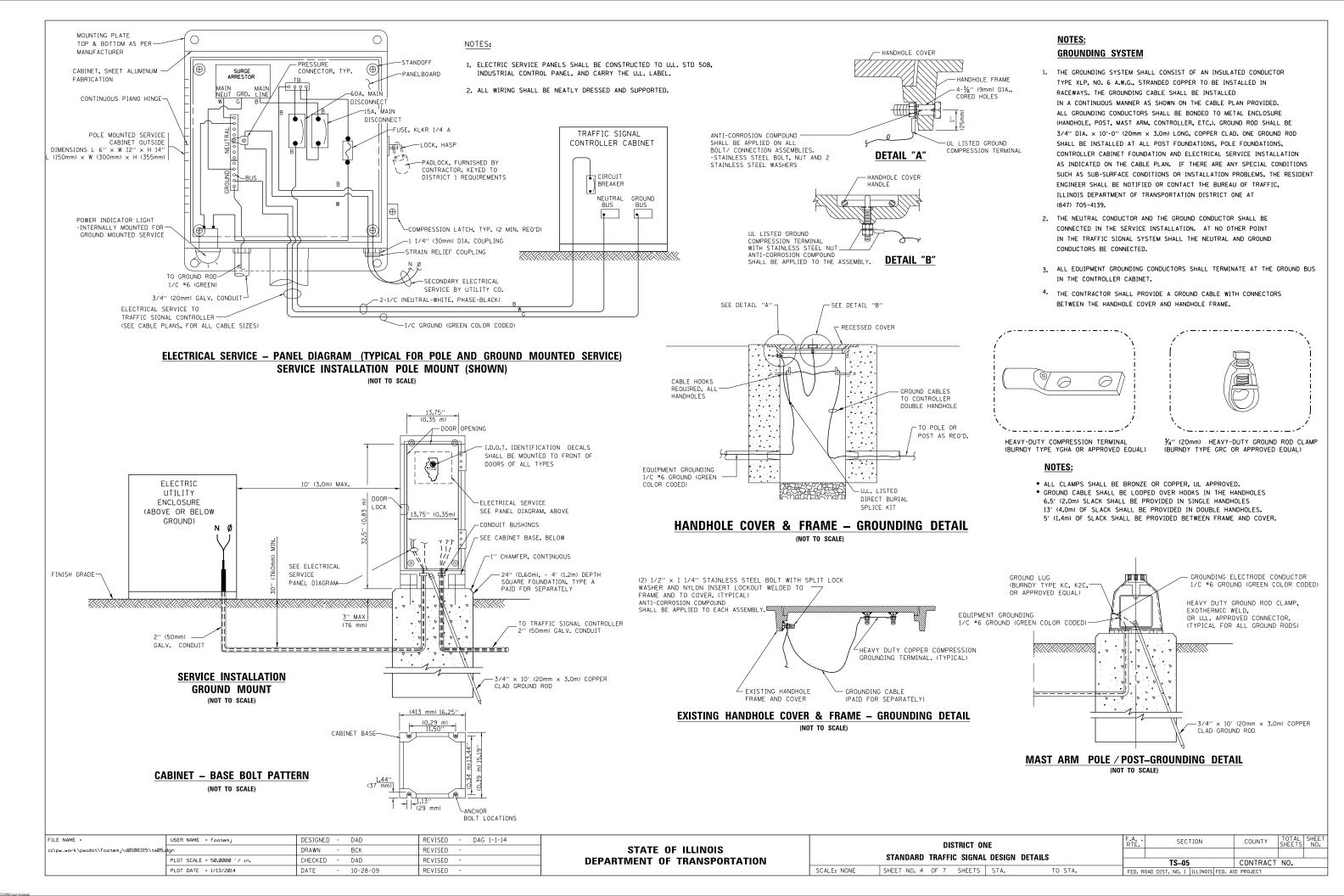
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

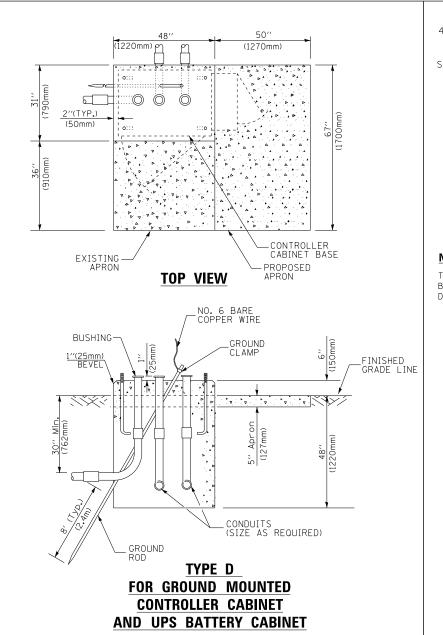
SCALE: NO

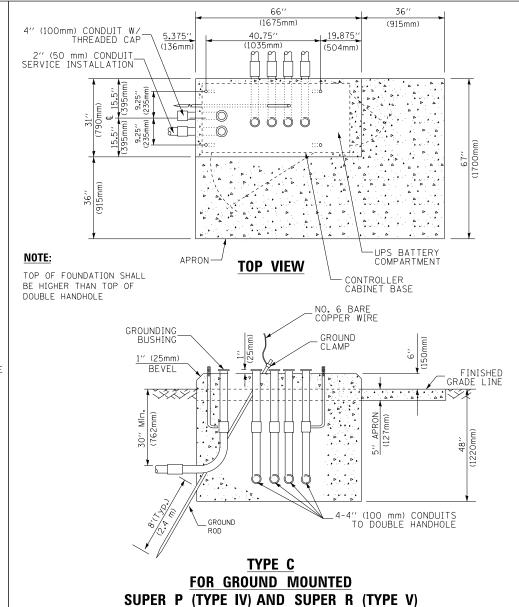
DESIGNED - DAD DAG 1-1-14 FILE NAME = REVISED USER NAME = footemj c:\pw_work\pwidot\footem.j\d0108315\ts05 DRAWN BCK REVISED LOT SCALE = 50.0000 '/ in. CHECKED DAD REVISED PLOT DATE = 1/13/2014 DATE 10-28-09 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

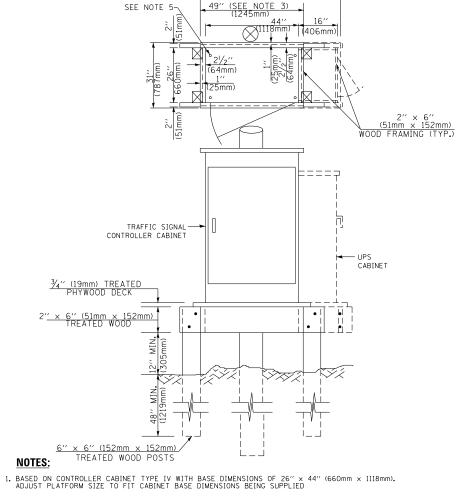
							F.A. · SECTION		COUNTY TOTAL SHEETS		SHEET NO.	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS												
						TS-05 CONTRACT NO.						
NONE	SHEET NO. 3	OF 7	SHEETS	STA.	TO	STA.	FED. R	DAD DIST. NO. 1 ILLINOIS	FED. A	ID PROJECT		







CONTROLLER CABINETS



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

TEMPORARY SIGNAL CONTROLLER **WOOD SUPPORT PLATFORM**

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

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

CABLE SLACK		

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

DEPTH OF FOUNDATION

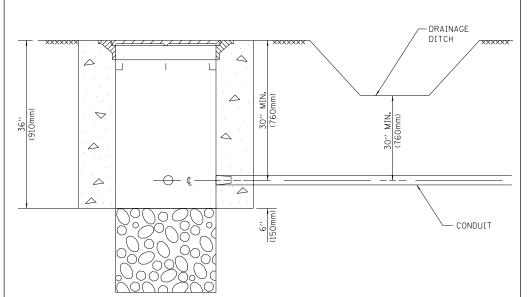
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30'' (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36'' (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 50′ (15.2 m) and up to 55′ (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42'' (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65′ (19.8 m) and up to 75′ (22.9 m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

NOTES:

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

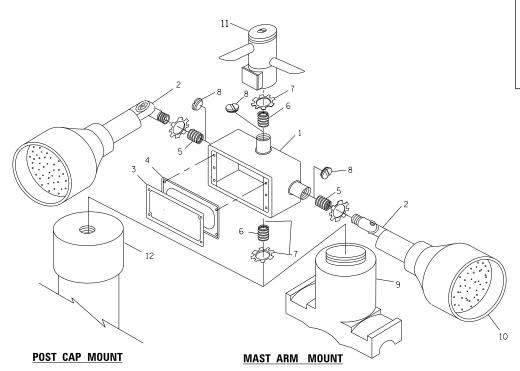
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	·		DISTRICT ON		F.A	SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\footemj\d0108315\ts05.	lgn .	DRAWN - BCK	REVISED -	STATE OF ILLINOIS				13.1			SHEETS NO.
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNA	L DESIGN DETAILS		TS-05	CONTRACT	NO.
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS	FED. AID PROJECT	



- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH



PROPOSED -APRON -CONTROLLER CABINET BASE **TOP VIEW** NO. 3 DOWEL 18" (450mm) LONG (8 REQ.) BUSHING -_GROUND CLAMP / EXISTING ANCHOR BOLTS FINISHED GRADE LINE 1''(25mm) BEVEL (ŽOOmm) (300mm) -EXISTING CONDUITS EXISTING GROUND ROD

(1675mm)

40.75"

(1035mm)

5.375"

(136mm

(915mm) 19.875"

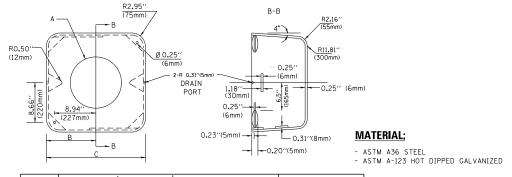
(504mm)

MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

ITEM	NO IDENTIFICATION
TIEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾′′(19 mm) CLOSE NIPPLE
7	¾4′′(19 mm) LOCKNUT
8	¾′′(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

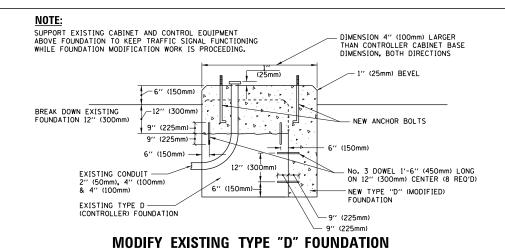
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP. EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

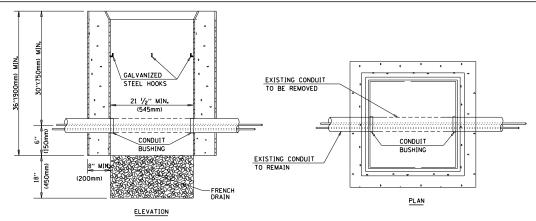


А	В	С	HEIGHT	WEIGHT
VARIES	9.5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7'' (178mm) - 12'' (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5''(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

- 1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.





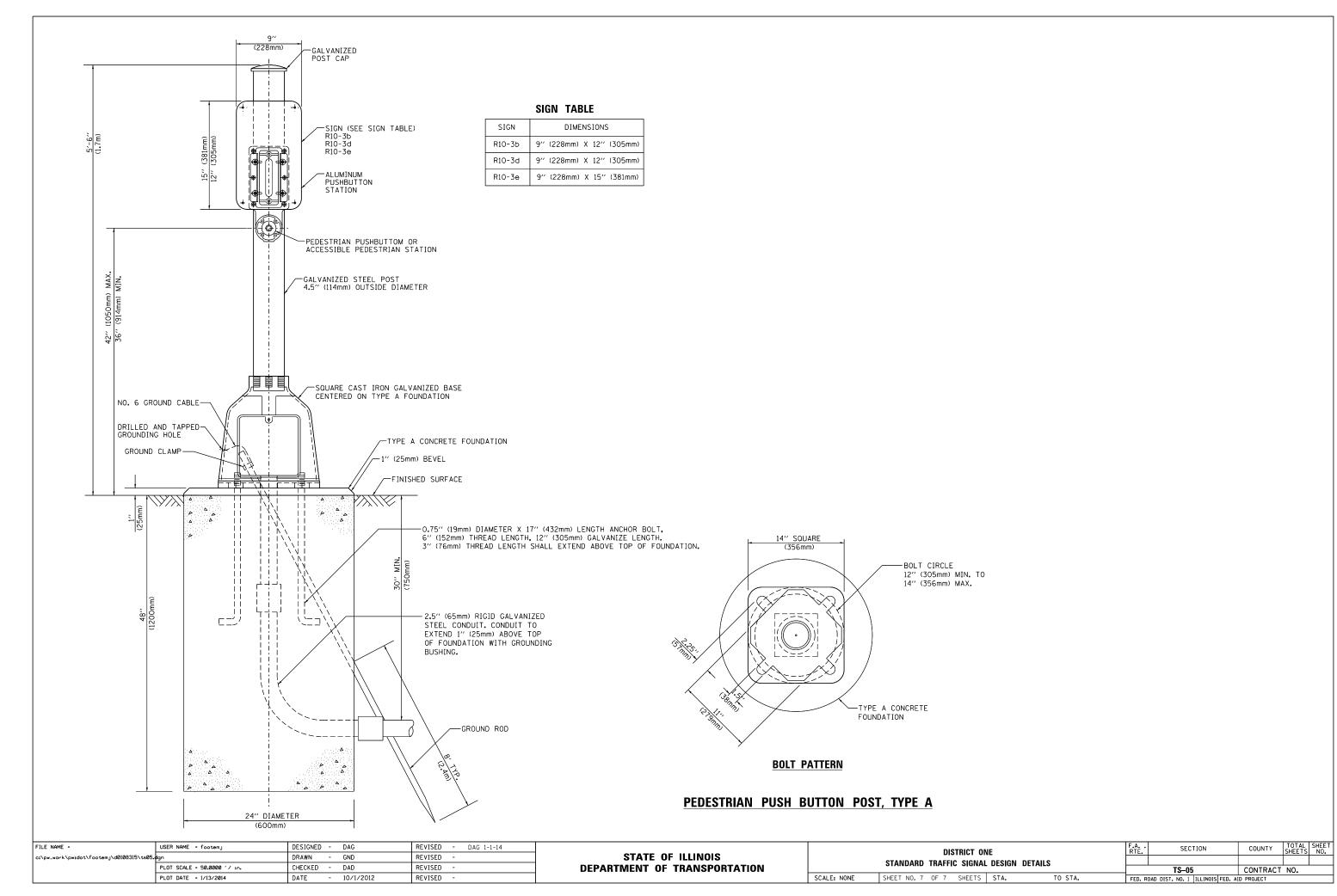
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

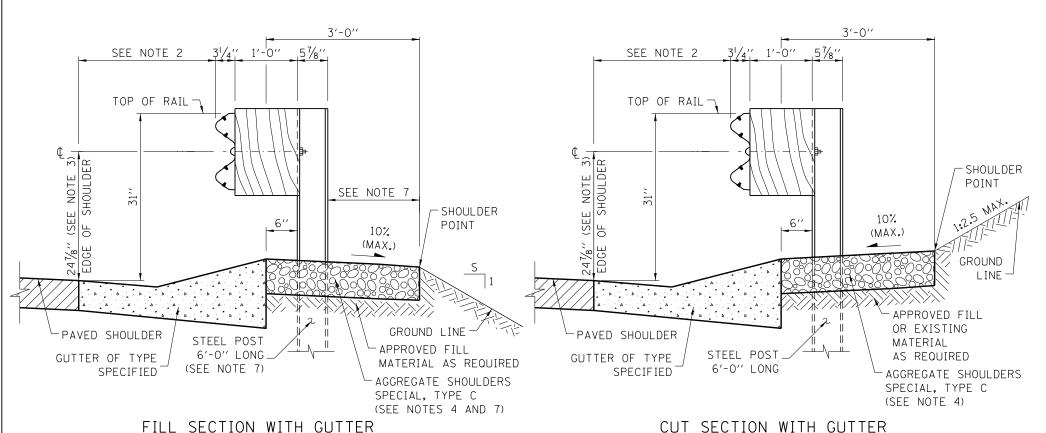
HANDHOLE TO INTERCEPT EXISTING CONDUIT

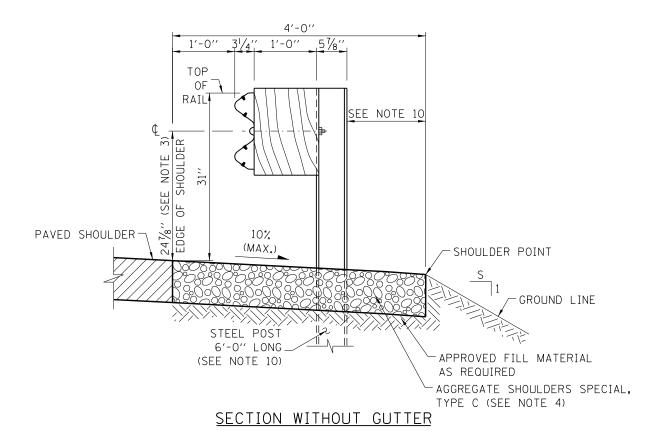
REVISED DAG 1-1-14 FILE NAME : DESIGNED -DRAWN BCK REVISED CHECKED DAD REVISED PLOT DATE = 1/13/2014 DATE 10-28-09 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	DI	STRICT OF	NE.		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	STANDARD TRAFF	C SIGNAL	DESIGN	DETAILS					
	JIANUAND INAIT	U SIGNAL	. DESIGN	DETAILS		TS-05	CONTRACT	NO.	
SCALE: NONE	SHEET NO. 6 OF 7	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		







GUARDRAIL INSTALLATION DETAILS

NOTES:

- 1. 1'-O'' OFFSET FROM EDGE OF PAVED SHOULDER TO FACE OF RAIL IS TYPICAL FOR ALL INSTALLATIONS WITHOUT GUTTER EXCEPT AS OTHERWISE DETAILED IN THE PLAN DRAWINGS.
- 2. WHERE GUTTERS SUCH AS TYPE G-2, G-3 ARE REQUIRED IN FRONT OF THE GUARDRAIL, THE POSTS SHALL BE LOCATED 6" BEHIND THE GUTTER, OR AS OTHERWISE DETAILED IN THE PLANS. THE OFFSET FROM THE EDGE OF SHOULDER TO THE FACE OF THE GUARDRAIL SHALL BE AS SHOWN ON STANDARD B28.
- 3. THE 247%" TYPICAL RAIL HEIGHT IS MEASURED FROM EXISTING SURFACE 1'-O" IN FRONT OF RAIL, OR FROM EDGE OF SHOULDER/EDGE OF GUTTER WHEN EDGE IS MORE THAN 1'-O" IN FRONT OF RAIL TO CENTER OF RAIL.
- 4. WHERE GUTTER IS PROPOSED WITH GUARDRAIL, A 6" MINIMUM THICKNESS OF AGGREGATE SHOULDERS SPECIAL, TYPE C SHALL BE PLACED BEHIND GUTTER. FOR GUARDRAIL WITHOUT GUTTER, AGGREGATE SHOULDER, TYPE C, OF THE SAME THICKNESS AS PAVED SHOULDER SHALL BE PLACED FROM THE EDGE OF PAVED SHOULDER SLOPING AWAY TO A 6" MIN. THICKNESS.
- 5. GUARDRAIL POSTS SHALL NOT BE ATTACHED TO ANY STRUCTURE.
- 6. PLASTIC BLOCK-OUTS SHALL NOT BE ALLOWED AS A SUBSTITUTE FOR WOOD BLOCK-OUTS ON NEW INSTALLATIONS.
- 7. WHEN S IS LESS THAN OR EQUAL TO 3 AND 3'-O'' AGGREGATE SHOULDER WIDTH CANNOT BE MET, THE POST LENGTH SHALL BE 9'-O'' AND THE AGGREGATE SHOULDER WIDTH SHALL BE 1'-O'' MIN. BEHIND THE POST TO THE SHOULDER POINT.
- 8. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENTS (V:H).
- 9. UNDER NO CIRCUMSTANCES SHALL AN EXISTING GUARDRAIL, THAT WAS DESIGNED USING A PREVIOUS STANDARD, BE EXTENDED, ATTACHED TO OR MODIFIED IN ANYWAY FROM ITS ORIGINAL DESIGN. IF ANY MODIFICATION IS REQUIRED AND A PROPER BARRIER WARRANT HAS BEEN COMPLETED, THE ENTIRE BARRIER INSTALLATION SHALL BE COMPLETELY REMOVED AND REPLACED WITH A NEW SYSTEM THAT CONFORMS TO THE CURRENT STANDARD.
- 10. WHEN S IS LESS THAN OR EQUAL TO 3, THE POST LENGTH SHALL BE 9'-O'' AND 4'-O'' AGGREGATE SHOULDER WIDTH MAINTAINED.
- 11. THE GUARDRAIL SYSTEM HAS BEEN PERFORMANCE-TESTED FOR CRASHWORTHINESS UNDER PROCEDURES DEFINED IN THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350. NO MODIFICATION TO THIS STANDARD DRAWING SHALL BE PERMITTED.
- 12. GUARDRAIL POSTS SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALT PAVEMENT. WHEN NECESSARY USE LEAVE-OUT DETAIL ON SHEET 3 OF 4 OF THIS SERIES.

SHEET 1 OF 4

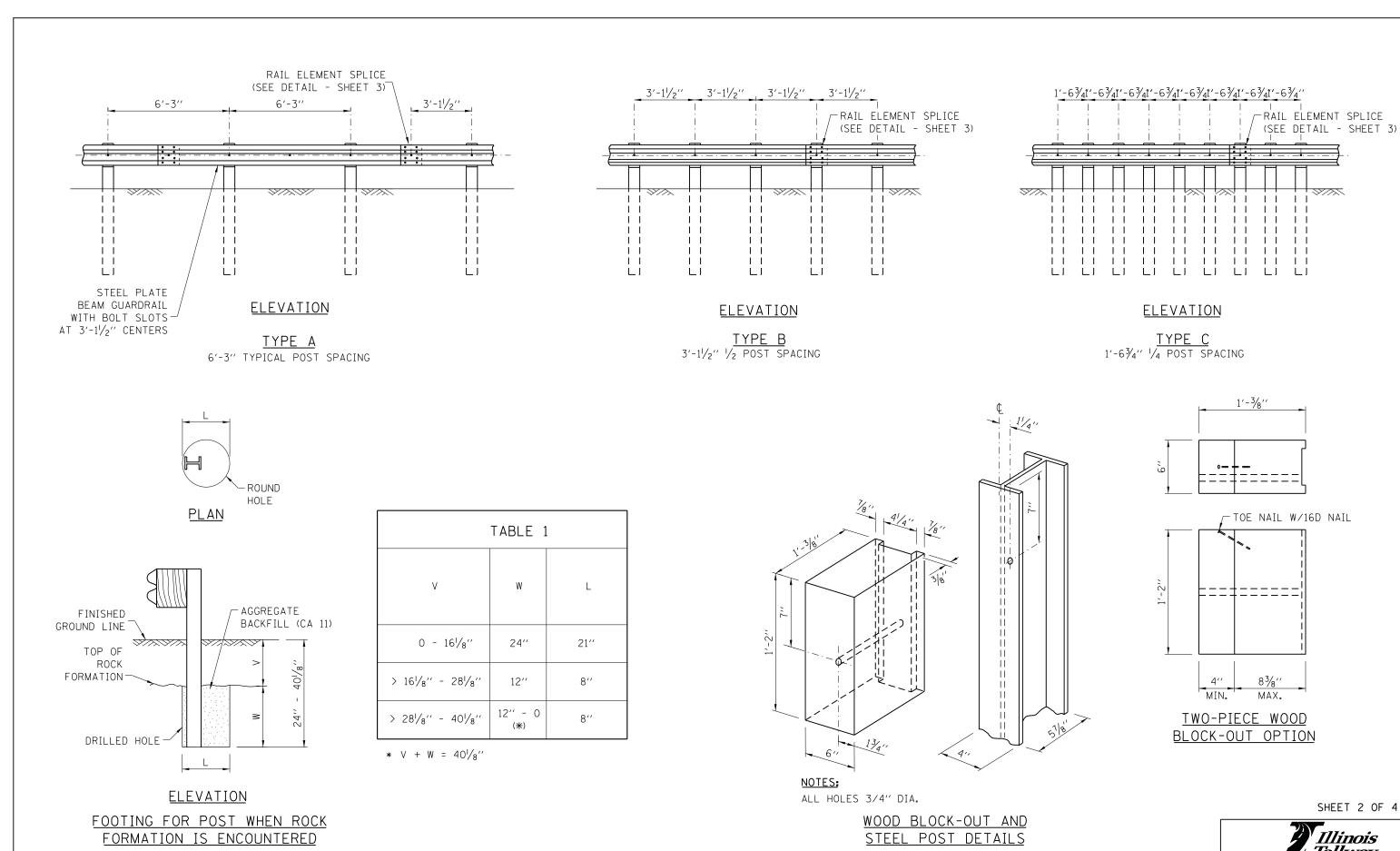
Illinois Tollway

	REVISIONS	DATE
	MODIFIED AGGREGATE	11-01-12
	SHOULDERS	
	REMOVED SECONDARY HOLE	03-31-14
G A	FROM POST AND UPDATED	
	NOTES.	
	ADDED SECTION, REV'D SHLDR	03-31-16
	REVISED NOTES	03-31-17
	CORRECTED NOTES, ADDED	03-01-18
	TABLES 2A AND 2B.	

GALVANIZED STEEL PLATE BEAM GUARDRAIL

STANDARD C1-10

APPROVED. ... CHIÉF ÉNGINÉERING OFFICER 5-1-2009



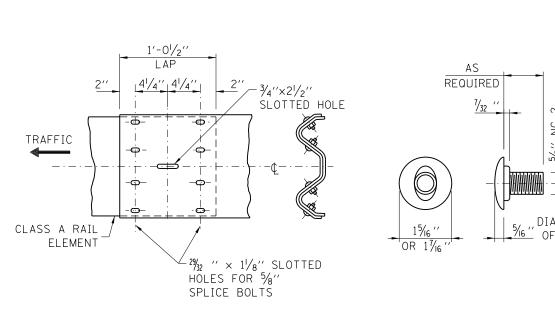
Paul Koracs

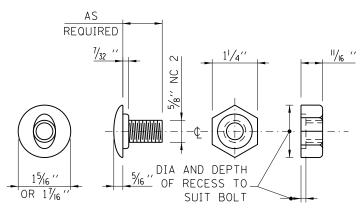
CHIEF ENGINEERING OFFICER 5-1-2009

Illinois Tollway

GALVANIZED STEEL PLATE BEAM GUARDRAIL

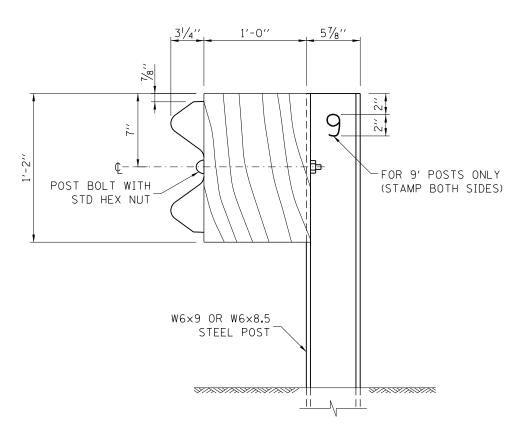
STANDARD C1-10





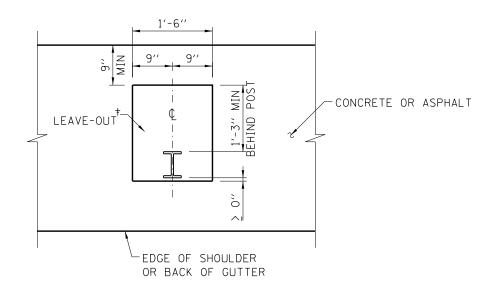
RAIL ELEMENT SPLICE

POST OR SPLICE BOLT & NUT

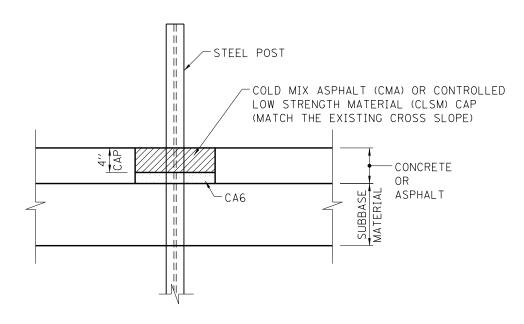


STEEL POST CONSTRUCTION





<u>PLAN</u>



ELEVATION

LEAVE-OUTS

† THE AREA AROUND THE POST THAT IS EITHER OMITTED FROM THE NEW CONSTRUCTION OR REMOVED FROM THE EXISTING CONCRETE OR ASPHALT.

SHEET 3 OF 4



GALVANIZED STEEL PLATE BEAM GUARDRAIL

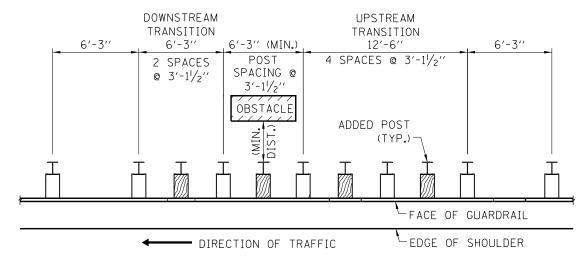
STANDARD C1-10

TABLE 2A BARRIER CLEARANCE DISTANCE (MGS) NEW CONSTRUCTION/RECONSTRUCTION

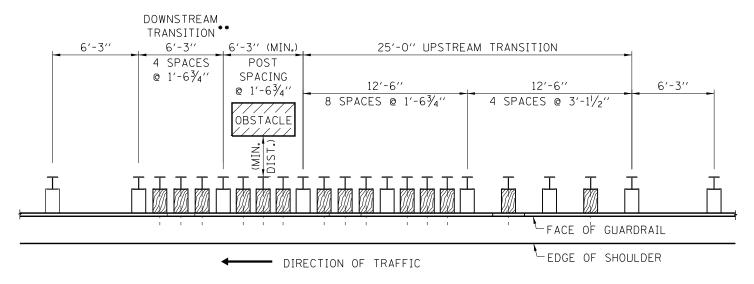
GUARDRAIL SYSTEM	POST SPACING	MINIMUM DISTANCE
TYPE A	6′-3′′	39''
TYPE B 1/2 POST SPACING	3'-1 1/2"	34′′
TYPE C 1/4 POST SPACING	1′-6 ¾′′	26′′

TABLE 2B BARRIER CLEARANCE DISTANCE (MGS) REHABILITATION

KEINBIETTKTION						
		MINIMUM DISTANCE				
GUARDRAIL	POST	EXISTING BREAKAWAY	ALL OTHER OBSTACLES			
SYSTEM	SPACING	LIGHT POLES	NCHRP 350	MASH		
TYPE A	6′-3′′	20′′	28′′	39''		
TYPE B 1/2 POST SPACING	3'-1 1/2"	N/A	23''	34′′		
TYPE C 1/4 POST SPACING	1'-6 3/4''	N/A	14''	26′′		



TRANSITION TO 1/2-POST SPACING



TRANSITION TO 1/4-POST SPACING

** WHEN LENGTH OF OBSTACLES IS 1'-3" OR LESS, THE DOWNSTREAM TRANSITION SHALL BE OMITTED.

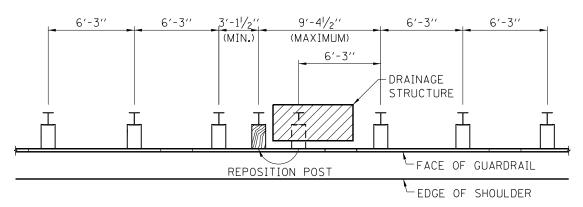
POST SPACING TRANSITIONS

NOTE: NO MODIFICATIONS OF ANY KIND TO THE TRANSITION POST SPACING ARE ALLOWED.

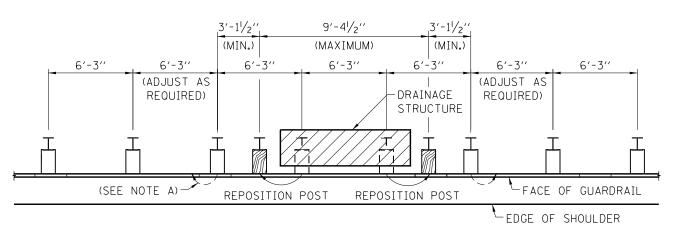
Paul Koracs

APPROVED CHIEF ENGINEERING OFFICER

DATE 5-1-2009



TYPE A GUARDRAIL-DRAINAGE STRUCTURE CONFLICT ONE POST



TYPE A GUARDRAIL - DRAINAGE STRUCTURE CONFLICT
TWO POSTS

DRAINAGE STRUCTURE CONFLICTS

NOTES:

- A. GUARDRAIL POSTS SHALL NOT BE ELIMINATED; ALL POSTS MUST BE USED. POSTS ADJACENT TO REPOSITIONED POSTS MAY NEED TO BE MOVED TO KEEP 3'-11/2" MINIMUM SPACING.
- B. GUARDRAIL POSTS SHALL NOT BE SET BACK TO AVOID CONFLICTS WITH A DRAINAGE STRUCTURE.
- C. THIS DETAIL ALSO APPLIES TO OTHER UNDERGROUND CONFLICTS.

SHEET 4 OF 4



GALVANIZED STEEL PLATE BEAM GUARDRAIL

STANDARD C1-10

SURVEY AND ROADWAY ITEMS EROSION & SEDIMENT CONTROL, LANDSCAPING ITEMS EXIST<u>ING</u> **PROPOSED EXISTING** PROPOSED **PROPOSED** EXISTING CLEARING & GRADING LIMITS CONSTRUCTION JOINT W/DOWEL BARS (LIMITS OF CONSTRUCTION) DIVERSION DIKE \bowtie \boxtimes EROSION CONTROL BLANKET BENCHMARK DRAINAGE DIVIDE DRAINAGE PATH CANTILEVER SIGN STRUCTURE OVER SEEDING CLASS B1 BUTTERFLY SIGN STRUCTURE SEDIMENT BASIN OVER SEEDING CLASS B2 • • DOUBLE COLUMN GROUND MOUNTED SIGN AGGREGATE BERM CULVERT INLET SINGLE COLUMN GROUND MOUNTED SIGN PROTECTION-STONE SEEDING CLASS A1 CULVERT INLET ∇ SPAN TYPE SIGN STRUCTURE PROTECTION-FENCE DB SEEDING CLASS A2 DEWATERING BASIN TRIPLE COLUMN GROUND MOUNTED SIGN $\begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$ - FIPB -FILTER FABRIC SEEDING CLASS A3 000000000 INLET PROTECTION, BASKET TYPE RUMBLE STRIP FILTER FABRIC DRAINAGE AND UTILITY ITEMS; ROADWAY LIGHTING AND SIGNS INLET PROTECTION, COVER TYPE SEEDING CLASS A4 — FB —— FB — FLOTATION BOOM PROPOSED EXISTING (C) INITIAL CONSTRUCTION ITEM SEEDING CLASS A5 -RIP-BOX CULVERT WITH HEADWALL RECTANGULAR INLET PROTECTION CABLE IN DUCT W/O GROUND SEEDING CLASS A6 LOW POINT TEMPORARY ROCK CHECK DAM OVERHEAD ELECTRICAL SEEDING CLASS D1 TEMPORARY DITCH CHECK OVERHEAD TELEPHONE PIPE CULVERT SODDING (SALT TOLERANT) Œ LAKE OR POND **(1)** QUARRY SEDIMENT BASIN TEMPORARY GROUND COVER STREAM SWAMP * * * * * * * SILT FENCE $\langle A \rangle$ CABLE OR CONDUIT TAG _____SSF____ SUPER SILT FENCE TURF REINFORCEMENT MAT [E] $[\mathsf{E}]$ ELECTRICAL MANHOLE STABILIZED CONSTRUCTION ENTRANCE []LD LIGHT-DUTY BOX STONE OUTLET STRUCTURE SEDIMENT TRAP ROADWAY LUMINAIRE STREAM DIVERSION <u>_____</u> TEMPORARY PIPE SLOPE DRAIN M TEMPORARY RIPRAP STEEL TOWER -**√-**TS-**√-**[T]T TEMPORARY SWALE TELEPHONE MANHOLE 0 TREES AND STUMP UNDERPASS LUMINAIRE TREE PROTECTION SHEET 1 OF 3 0 WATER POINT [W] W WATERMAIN VALVE VAULT Illinois TEMPORARY STREAM CROSSING \bigcirc *Tollway* WATER WELL \otimes WOOD POLE DATFREVISIONS SYMBOLS AND PATTERNS REVISED SYMBOL & PATTERNS ADDED NEW SYMBOLS Paul Koracs 3-11-2015 ADDED NEW SYMBOL 3-31-2016 UPDATED DITCH CHECK SYMBO

DATE 7-1-2009

CHIEF ENGINEER

STANDARD D2-04

ELECTRICAL AND MECHANICAL ITEMS

				EXISTING	PROPOSED	
	HOME RUN TO PANEL AS NOTED	<u></u>	STANDBY GENERATOR	——— А ———	— А —	COMPRESSED AIR (A)
⊗ ⊚	INDICATES CIRCUIT TURNING DOWN INDICATES CIRCUIT TURNING UP	 > _P	PANEL CIRCUIT BREAKER	AR	AR	ACID RESISTANT WASTE OR DRAIN
(•)	GROUND ROD	С	MECHANICALLY HELD LIGHTING COIL	ARV	ARV	ACID RESISTANT VENT
	GROUNDING TRIAD	CR	CONTROL RELAY COIL	——— DS ———	DS	STORM SEWER (DOWNSPOUT)
⊘ •		\$	SINGLE-POLE SWITCH	G		GAS LINE
V	TRANSFORMER	\ominus	DUPLEX RECEPTACLE	——— нс ———	——— нс ———	HOT GAS BYPASS LINE (HG)
	MOTOR	© ^c	4P, 4W, WEATHERPROOF RECEPTACLE WITH SPRING DOOR, BACK BOX, & ANGLE ADAPTER	HHWR	——— нн w R ———	HEATING HOT WATER RETURN (HHWR)
O /O ATSA ATSAP,_W	AUTOMATIC TRANSFER SWITCH (ATS)	\bigcirc B	4P, 4W, WEATHERPROOF RECEPTACLE WITH SPRING DOOR & BACK BOX	———— ннws ————	——— нн w s ———	HEATING HOT WATER SUPPLY (HHWS)
JB OR J	JUNCTION BOX	GEI	DUPLEX RECEPTACLE WITH GROUND FAULT PROTECTION	IA	IA	DRY COMPRESSED AIR (IA-INSTRUMENT AIR)
	DISCOUNTED SWITCH	A	CONTROL BUILDING LIGHTING 1' X 4' INDUSTRIAL FLUORESCENT FIXTURE, PORCELAIN REFLECTOR, ELECTRONIC BALLAST.	——— Р ———	—— Р ——	PROCESS WATER ("P" WATER) LINE
A	DISCONNECT SWITCH	В	COMPACT WALL-MOUNTED LOW WATTAGE HPS FIXTURE WITH WIRE GUARD & SINGLE FACTORY INSTALLED FUSE	———— PW ————	PW	PROTECTED WATER OR PLANT WATER (PW)
A \	CIRCUIT BREAKER	¢ 开	EMERGENCY LIGHT UNIT WITH 2-6 VOLT, 12 WATT SEALED BEAM HALOGEN LAMPS WITH WALL MOUNTING BRACKET	RD	RD	REFRIGERANT DISCHARGE LINE (RD)
A	MANUAL TRANSFER SWITCH	D	LANE LIGHTING - HEAVY DUTY ALUMINUM HOUSING WITH ENCLOSED REFLECTOR & TEMPERED GLASS LENS W/AUTO REGULATOR BALLAST. ASYMMETRIC PATTERN	RS	RS	REFRIGERANT SUCTION LINE (RS)
sw.		\\-	WIRE	V	v	VENT LINE (V)
(WH)	SELF CONTAINED UTILITY METERING	<u> </u>	CONDUIT			

SHEET 2 OF 3



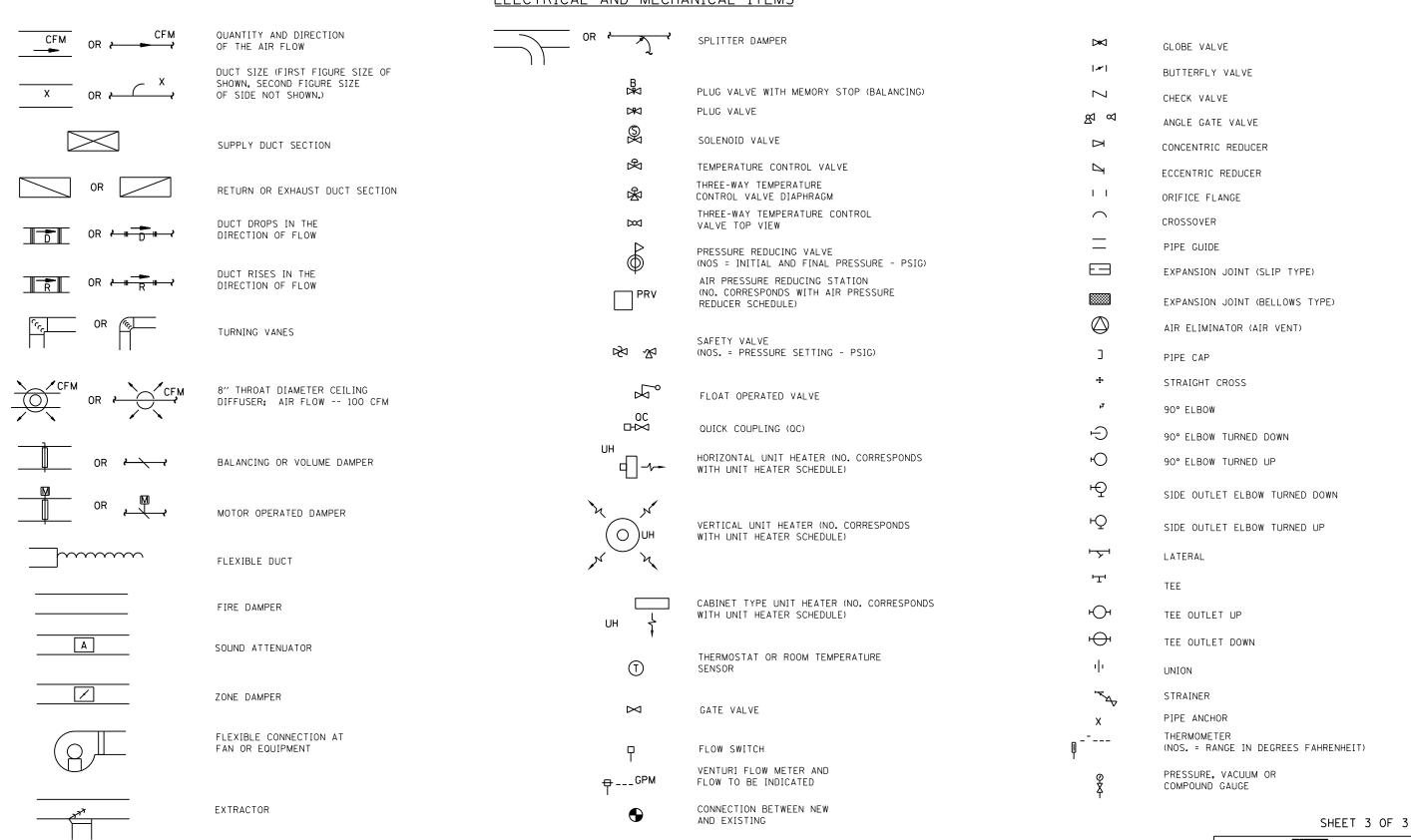
NOTE:

ALL SYMBOLS AND PATTERNS ON THIS DRAWING ARE PROPOSED UNLESS OTHERWISE NOTED.

STANDARD D2-04

SYMBOLS AND PATTERNS

ELECTRICAL AND MECHANICAL ITEMS



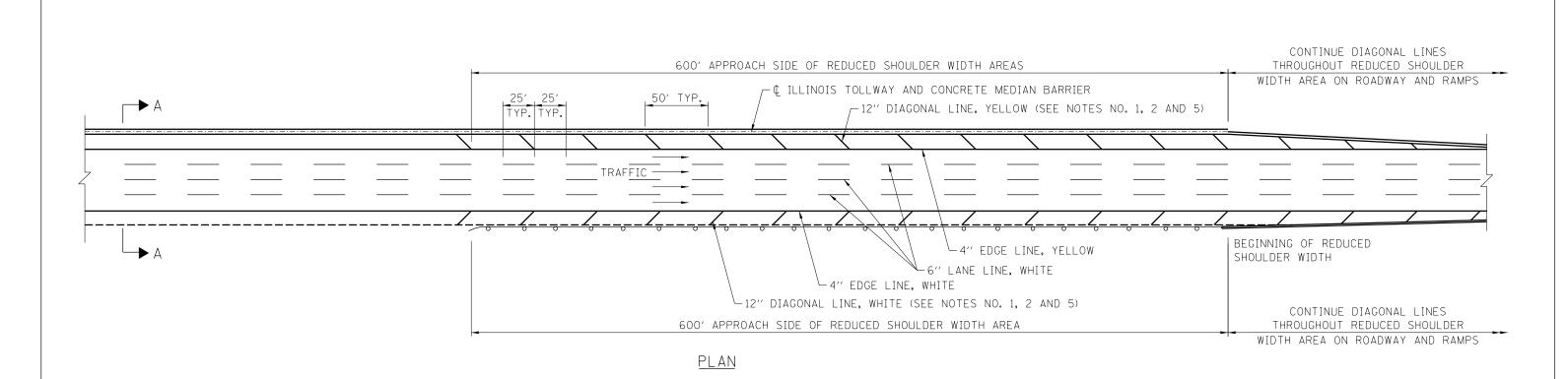


NOTE:

ALL SYMBOLS AND PATTERNS ON THIS DRAWING ARE PROPOSED UNLESS OTHERWISE NOTED.

SYMBOLS AND PATTERNS

STANDARD D2-04



¢ ILLINOIS TOLLWAY 49'-0" OUTSIDE MEDIAN SHOULDER SHOULDER 12'-0" 12'-0'' 12'-0'' 13'-0'' 4" SOLID YELLOW 4" SOLID WHITE (GROOVED) -(GROOVED) 6" WHITE SKIP DASH (GROOVED)

SECTION A-A

ROADWAY AND SHOULDER STRIPING - NEW CONSTRUCTION

GENERAL NOTES:

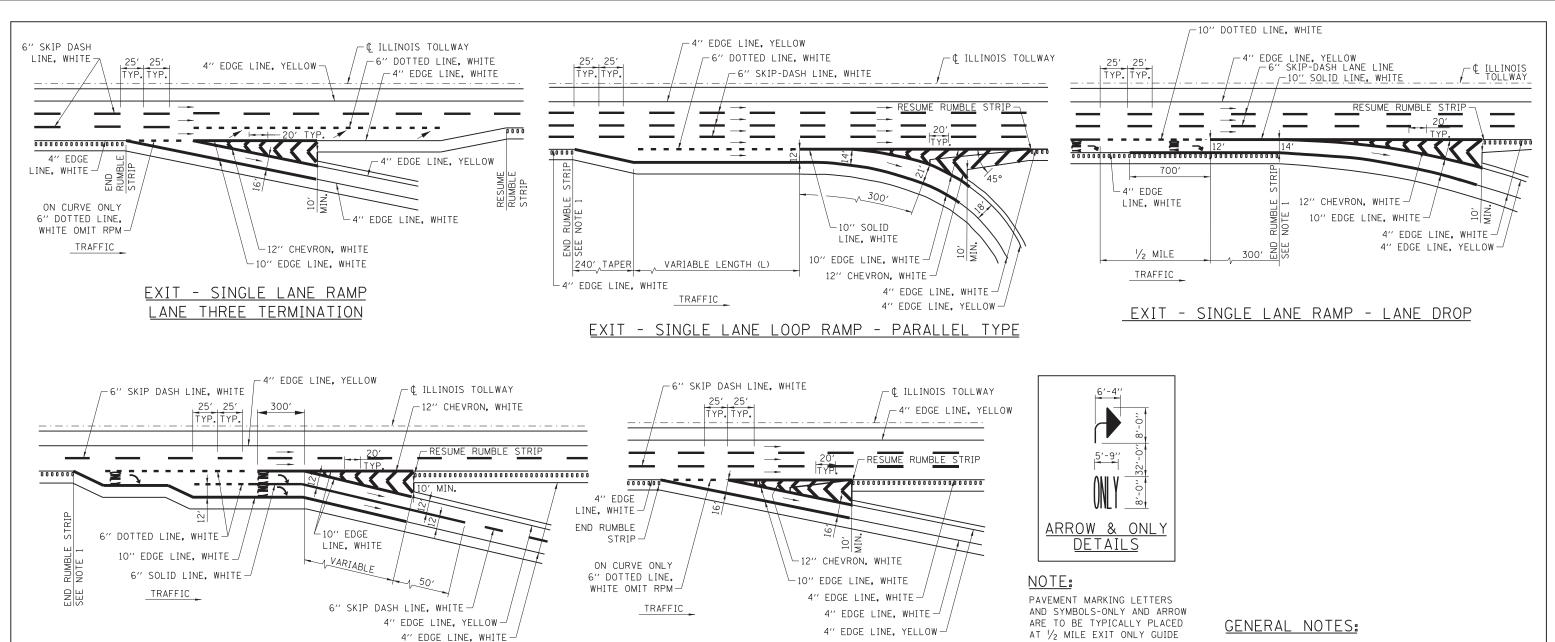
- 1. DIAGONAL SHOULDER STRIPING REQUIRED WHERE THE SHOULDER WIDTH IS LESS THAN STANDARD.
- 2. ROADWAY MARKING MATERIALS TO BE USED ON FINISHED CONCRETE SURFACE AND ASPHALT SURFACE SHALL BE AS SHOWN ON THE PLANS.
- 3. WHERE THE GUARDRAIL ENCROACHES ON THE SHOULDER THE DIAGONAL MARKINGS SHALL EXTEND AS CLOSE TO THE FACE OF THE RAIL AS POSSIBLE.
- 4. ALL PERMANENT LANE LINES AND EDGE LINES SHALL BE GROOVED, ON ROADWAY SURFACES, UNLESS OTHERWISE NOTED.
- 5. DIAGONAL STRIPING SHALL BE SURFACE APPLIED.
- 6. GORE STRIPING (CHEVRON) SHALL BE SURFACE APPLIED.
- 7. ALL LANE LINES AND EDGE LINES SHALL BE SURFACE APPLIED ON BRIDGES.
- 8. PAVEMENT MARKINGS SHALL NOT BE GROOVED AT THE CASH SIDE OF MAINLINE TOLL PLAZAS OR THE OPEN ROAD TOLLING (ORT), 100' CONTINUOUSLY REINFORCED CONCRETE (CRC) PAVEMENT SECTION OF MAINLINE UNDER MONOTUBES.

		Illinois Tollway
DATE	REVISIONS	
7-01-09	ADDED LINE GROOVING NOTES	PERMANENT PAVEMENT
2-07-12	REVISED NOTES	MARKINGS
11-01-12	REVISED EDGELINE OFFSET, REVISED NOTES	
3-31-14	REVISED NOTES	
3-31-16	REVISED NOTES	STANDARD D5-06
		JIANDAND DJ 00

POUL KOVACS

APPROVED.... CHIEF ENGINEER

DATE 7-1-2009



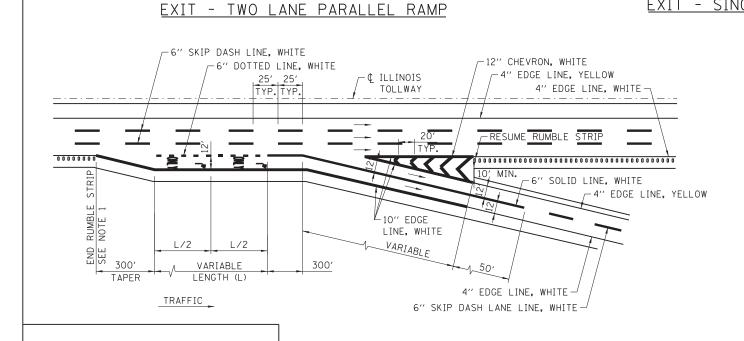
EXIT - SINGLE LANE RAMP - TAPER TYPE

SIGN, AT GORE EXIT GUIDE SIGN AND APPROXIMATELY HALFWAY BETWEEN THE TWO.

- RUMBLE STRIPS SHALL BE INSTALLED BETWEEN THE THEORETICAL GORE AND TAPER WHEN LENGTHS (L) OF AUXILIARY LANES, ACCELERATION LANES OR DECELERATION LANES, ARE GREATER THAN 1000'.
- ROADWAY MARKING MATERIALS TO BE USED ON FINISHED CONCRETE SURFACE AND ASPHALT SURFACE SHALL BE AS SHOWN ON THE PLANS.
- 3. ALL LANE LINES AND EDGE LINES SHALL BE GROOVED.
- GORE STRIPING (CHEVRON) SHALL BE SURFACE APPLIED.
- LETTERS AND SYMBOL MARKING SHALL BE SURFACE
- 6. DOTTED LINES SHALL CONSIST OF 3' LINE AND 9' GAPS.

SHEET 1 OF 3

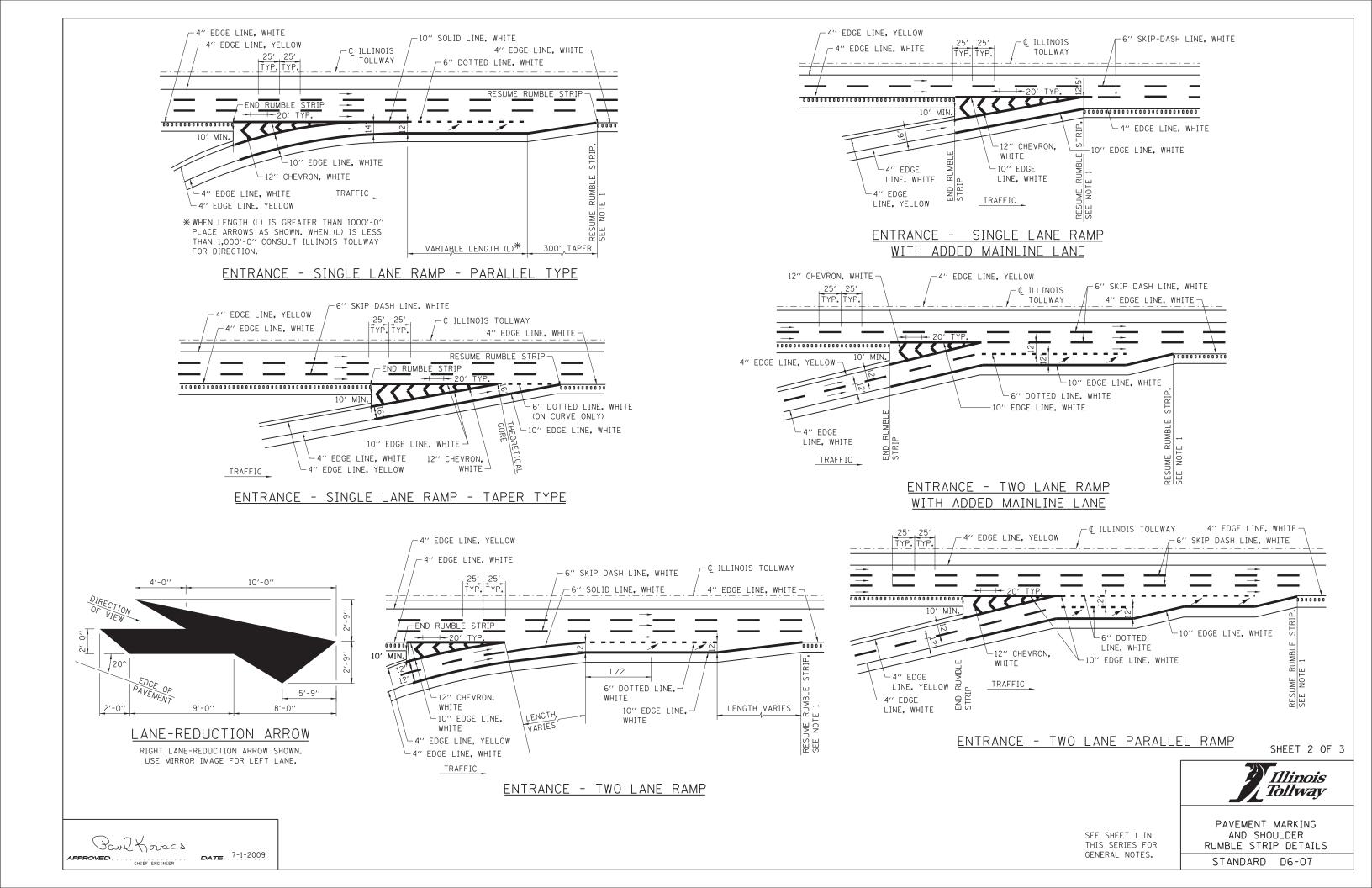
DATE	REVISIONS	Illinois Tollway
11-01-12	REVISED NOTES AND ADDED DOTTED LINE	
03-01-13	REVISED SINGLE LANE LOOP RAMP DETAILS	B
03-31-14	ADDED LANE REDUCTION MARKINGS	PAVEMENT MARKING
3-11-2015	REVISED DETAILS, ADDED LANE-REDUCTION	AND SHOULDER
	ARROWS AND SHEET 3	RUMBLE STRIP DETAILS
3-31-2016	REVISED NOTES, ADDED IPO PAVEMENT MARKING	RUMBLE SIRIP DETAILS
	DETAIL.	STANDARD D6-07
3-31-2017	REVISED NOTES	3 I ANDARD DO-01

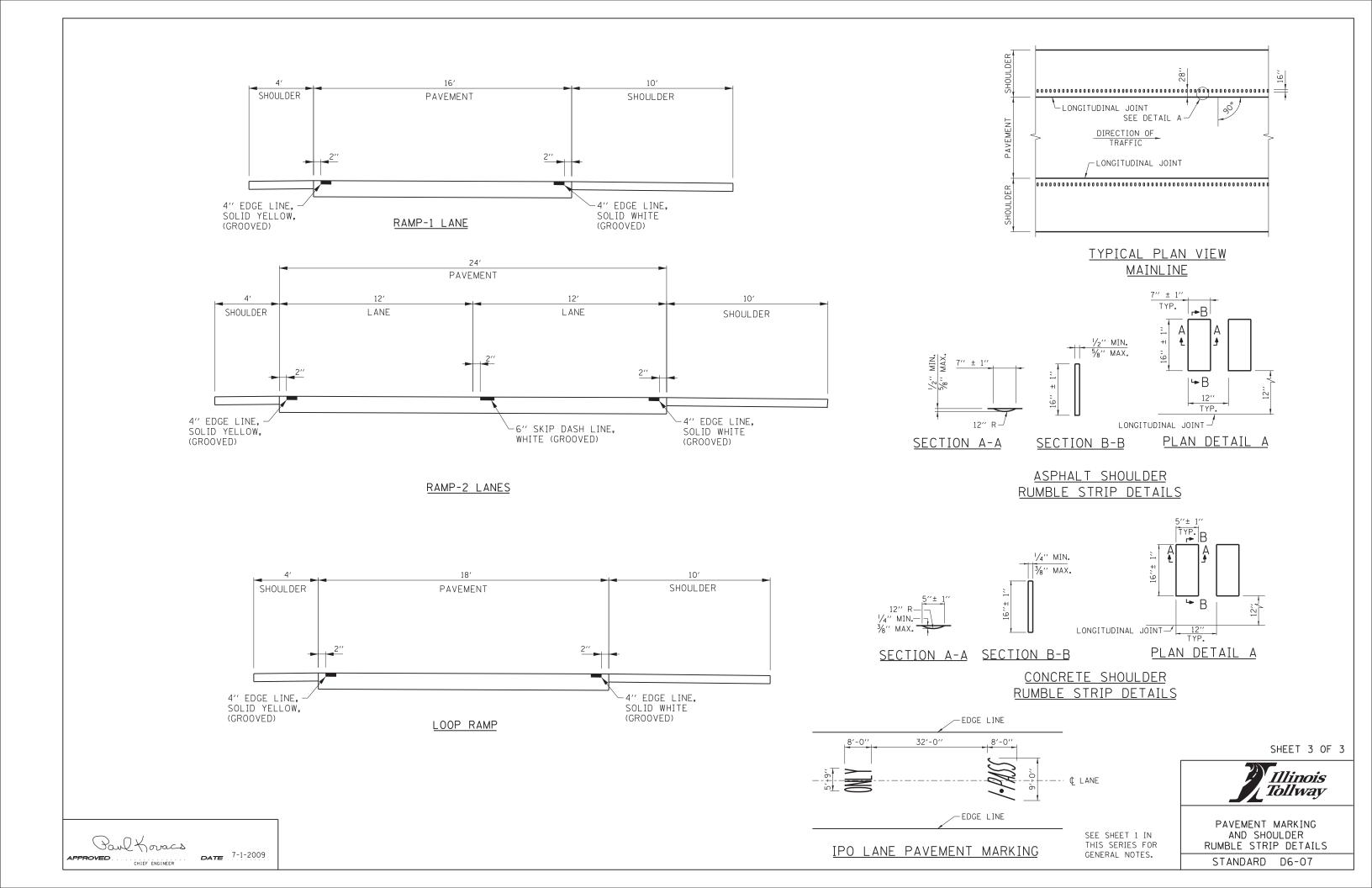


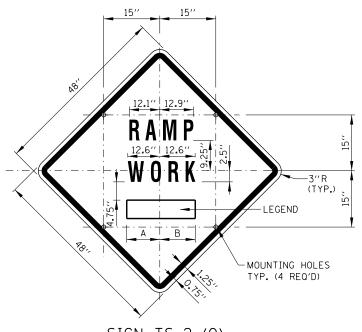
EXIT - TWO LANE RAMP

Paul Foracs

DATE 7-1-2009







SIGN NO.	LEGEND	Α	В
TS-2A	AHEAD	15.50"	15 . 50''
TS-2B	500 FT	14.25"	15.13''
TS-2C	1000 FT	14.88′′ <i>L</i> 2	15.75" <i>L</i> 2
TS-2D	1500 FT	14.88" L2	15.75" L2
TS-2E	√ ₂ MILE	15.75′′ ∠3	15.75" L3
TS-2F	1 MILE	13.06′′	13.06′′

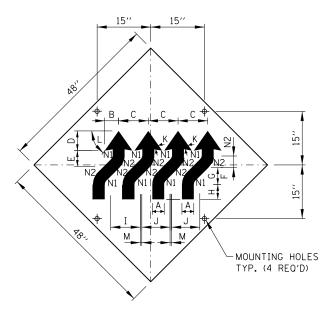
SIGN TS-2 (0)

COLOR: BACKGROUND - FLUORESCENT ORANGE (0) BORDER AND SYMBOL - BLACK

SIZE: 48"×48"

LETTERING: 7" FEDERAL SERIES D

MOUNTING HOLES: 16" DIA., 4 HOLES SPACED AS SHOWN

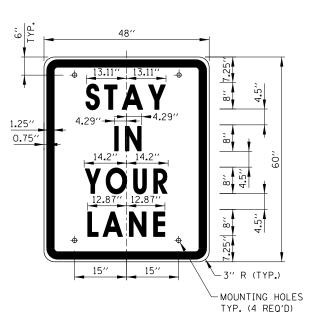


Α	41/2"
В	4 ¹ / ₂ '' 5 ³ / ₄ ''
С	121/2"
D	73/4′′
D E F	7 ³ / ₄ '' 6 ¹ / ₂ '' 4 ¹ / ₂ '' 6 ¹ / ₂ ''
F	41/2"
G	61/2"
Н	6′′
I	123/4′′
J	12''
K	45°
L	55°
М	3/4′′
N1	2''
N2	61/2′′

SIGN W1-4dR (0)

COLOR: BACKGROUND-FLUORESCENT ORANGE (0) TYPE A REFLECTIVE SHEETING PER STANDARD SPECIFICATIONS (* A) BORDER AND LETTERS-BLACK

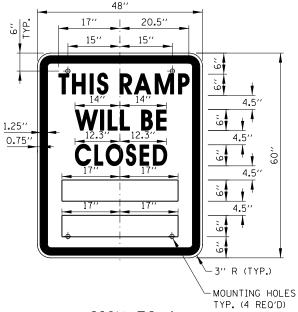
MOUNTING HOLES: $\frac{7}{16}$ " DIA., 4 HOLES SPACED AS SHOWN.



SIGN TS-3

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A) BORDER AND LETTERS - BLACK

LETTERING: LEGEND - 8" FEDERAL SERIES D MOUNTING HOLES: $\frac{7}{6}$ " DIA., 4 HOLES, SPACED AS SHOWN



SIGN TS-4

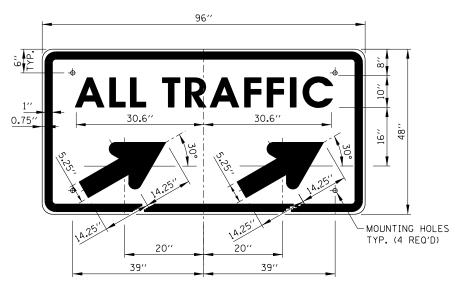
COLOR: BACKGROUND - WHITE (REFLECTORIZED)(* A) BORDER AND LETTERS - BLACK

SIZE: 48"x60"

LETTERING: LEGEND - 6" FEDERAL SERIES C MOUNTING HOLES: 1/6" DIA., 4 HOLES, SPACED AS SHOWN

RAMP CLOSURE ADVANCE INFORMATION SIGN

THE VARIABLE MESSAGE WITH DATES FOR THE BOTTOM TWO LINES SHALL BE DETERMINED BY THE ENGINEER AND GIVEN TO THE CONTRACTOR BEFORE THE REQUIRED FIELD ERECTION DATE.



SIGN TS-5a & TS-5b

COLOR: BACKGROUND - WHITE (REFLECTORIZED)(* A) BORDER AND LETTERS - BLACK

ARROW - BLACK

SIZE: 96"×48"

LETTERING: 10" FEDERAL SERIES D

MOUNTING HOLES: $\frac{7}{16}$ " DIA., 4 HOLES, SPACED AS SHOWN NOTE: SIGN TS-5a IS SHOWN, SUBSTITUTE

LEGEND "#" FOR "##" FOR SIGN TS-5b

DATE

REVISIONS

ELETED FLASHING ARROW BOARDS

DED SIGN COLOR DESIGNATION
LETED SIGN TS-1

REVISED FINE SIGN NUMBER AND DDED LED SPEED LIMIT DISPLAY REVISED NOTES

REVISED END WZSL SIGN COLOR

NOTES:

- ALL LETTERING IS DESIGNATED BY SIZE AND SERIES IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. LETTERING SPACING SHALL BE IN ACCORDANCE WITH THIS GUIDE EXCEPT WHERE NOTED.
- 2. SYMBOLS AND ARROWS SHALL CONFORM TO THE DETAILS SHOWN IN THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS" AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- 3. SEE THE CONTRACT REQUIREMENTS FOR ADDITIONAL NOTES AND SPECIFICATIONS. FLUORESCENT ORANGE REFLECTIVE SHEETING PER THE STANDARD SPECIFICATIONS.
 - (*A) REFLECTIVE SHEETING PER THE STANDARD SPECIFICATIONS.
- 4. DIMENSIONS INDICATED THUS L ARE BASED ON A REDUCTION IN STANDARD LETTERING SPACING AS SHOWN BELOW:
 - L1 SPACING REDUCED BY 25%
 - L2 SPACING REDUCED BY 40%
 - L3 SPACING REDUCED BY 50%

SHEET 1 OF 2

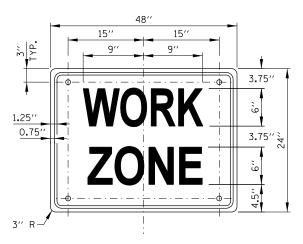


CONSTRUCTION SIGNS

STANDARD E1-06



DATE 5-1-2009



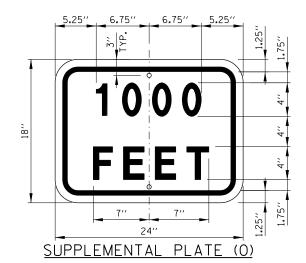
SIGN G20-I102 (0)

COLOR: BACKGROUND - FLUORESCENT ORANGE (0) BORDER AND LETTERS - BLACK

SIZE: 48"x24"

LETTERING: 6" FEDERAL SERIES C

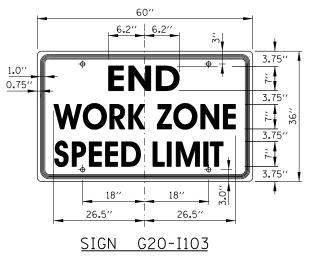
MOUNTING HOLES: $\frac{1}{16}$ " DIA., 4 HOLES SPACED AS SHOWN



BACKGROUND - FLUORESCENT ORANGE (0) BORDER AND LETTTERS - BLACK

SIZE: 24"×18"

LETTERING: 4" FEDERAL SERIES D MOUNTING HOLES: 1/16" DIA., 2 HOLES SPACED AS SHOWN

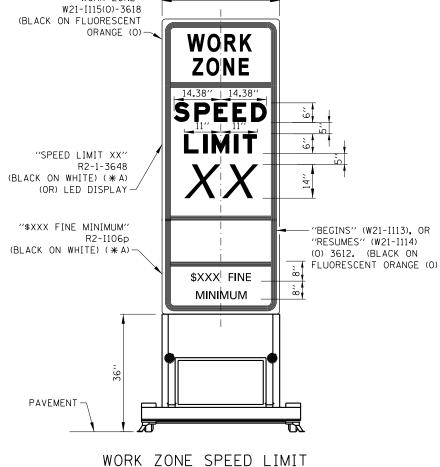


COLOR: BACKGROUND - WHITE (REFLECTORIZED) (* A)

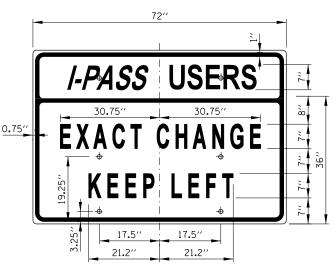
BORDER AND LETTERS - BLACK SIZE: 60"x36"

LETTERING: 6" FEDERAL SERIES C

MOUNTING HOLES: $\frac{7}{16}$ " DIA., 4 HOLES SPACED AS SHOWN



"WORK ZONE"



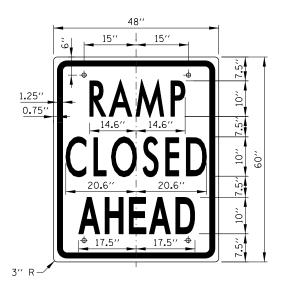
SIGN TS-7

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (* A) BORDER AND LETTTERS - BLACK

SIZE: 72"x36"

LETTERING: 7" FEDERAL SERIES C

MOUNTING HOLES: 1/16" DIA., 4 HOLES SPACED AS SHOWN



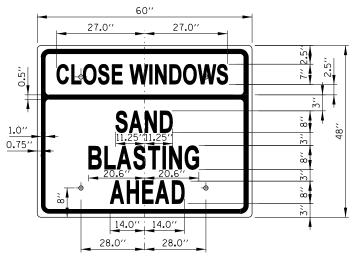
SIGN TS-9

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (* A)

BORDER AND LETTTERS - BLACK

SIZE: 48"x60"

LETTERING: 10" FEDERAL SERIES C
MOUNTING HOLES: 76" DIA., 4 HOLES SPACED AS SHOWN



SIGN TS-10 (0)

COLOR: BACKGROUND - FLUORESCENT ORANGE (0) BORDER AND LETTTERS - BLACK

SIZE: 60"x48"

LETTERING: 8" FEDERAL SERIES C, 7" FEDERAL SERIES B MOUNTING HOLES: 76" DIA., 4 HOLES SPACED AS SHOWN

SIGN TS-6

60′′

SIGN ASSEMBLY

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (* A)

BORDER AND LETTTERS - BLACK

SIZE: 60"x24"

LETTERING: 8" FEDERAL SERIES C MOUNTING HOLES: 1/6" DIA., 4 HOLES SPACED AS SHOWN

SHEET 2 OF 2



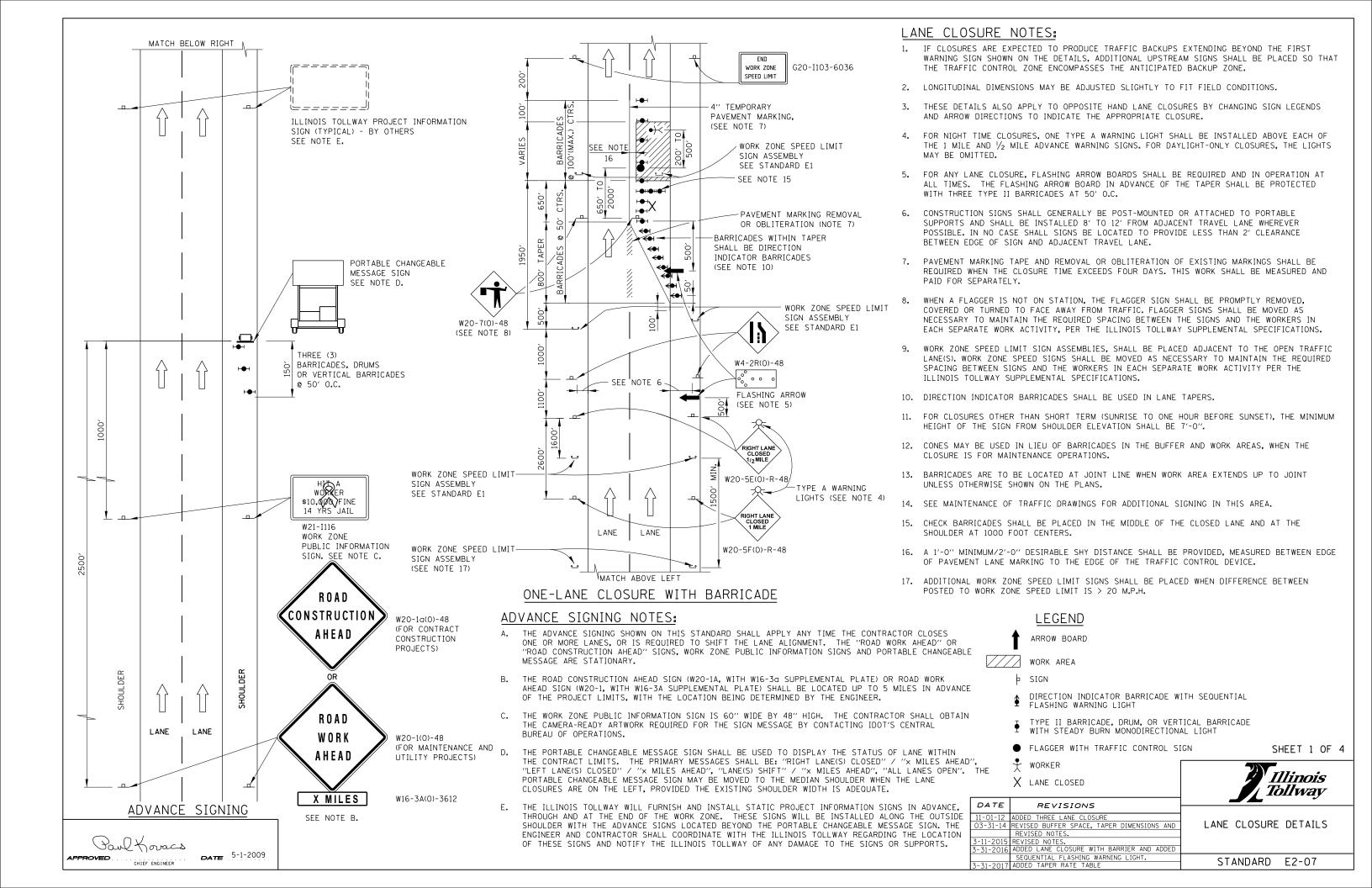
CONSTRUCTION SIGNS

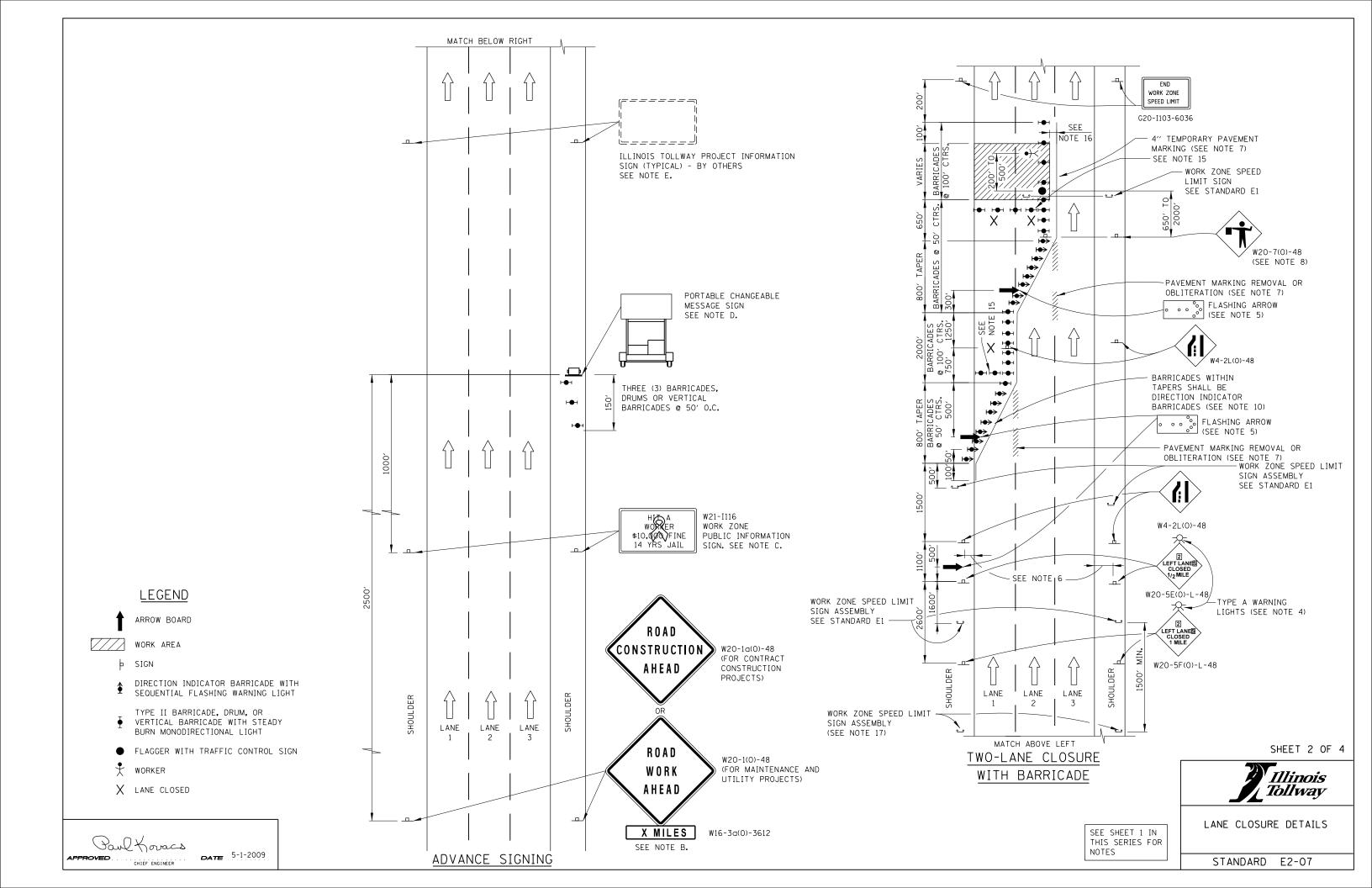
SEE SHEET 1 OF THIS SERIES FOR NOTES.

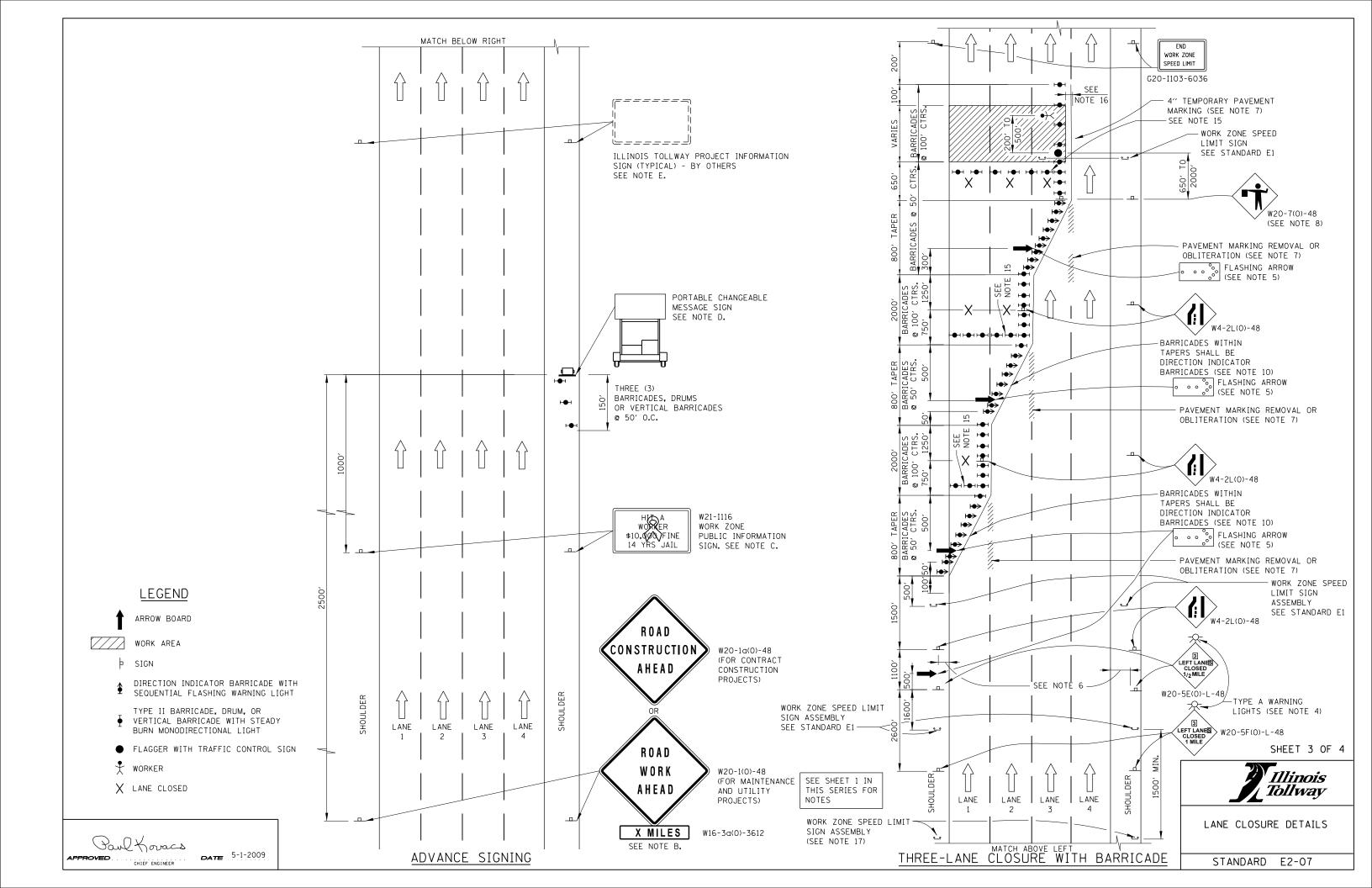


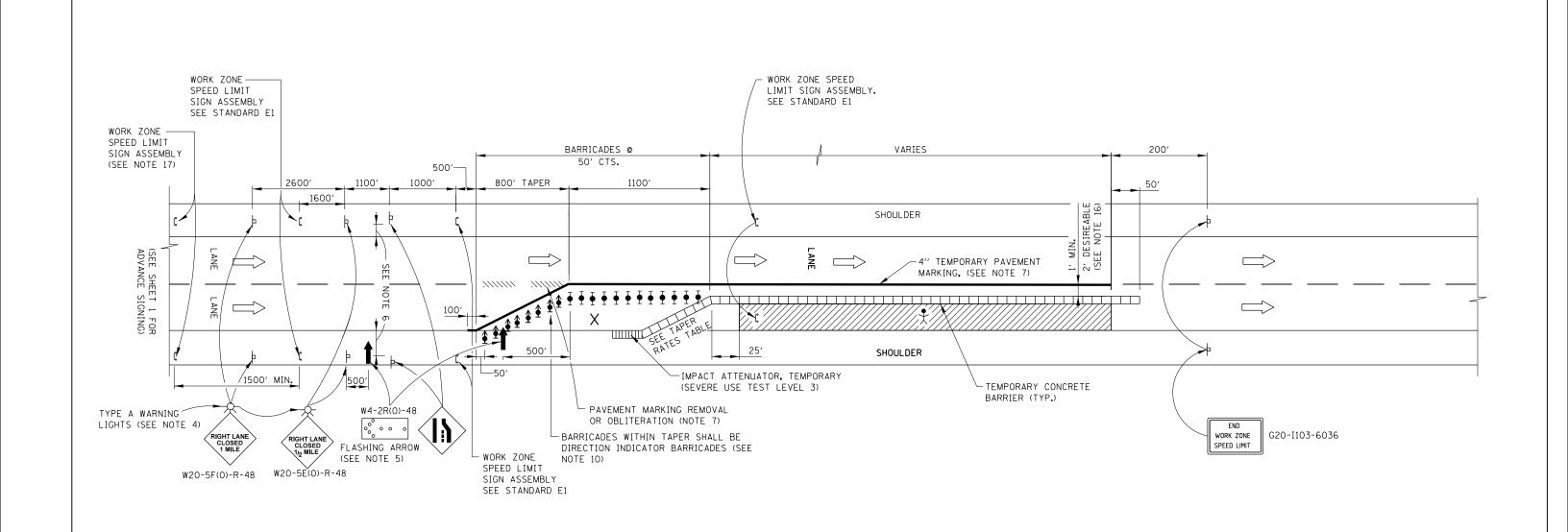
DATE 5-1-2009

STANDARD E1-06









ONE-LANE CLOSURE WITH BARRIER

TAPER RATES

WORK			BARRIER
ZONE		BARRIER	AT OR
SPEED	SHY LINE	INSIDE	BEYOND
(mph)	(f+.)	SHY LINE	SHY LINE
65	8.5	28:1	19:1
60	8	26:1	18:1
55	7	24:1	16:1
50	6.5	21:1	14:1
45	6	18:1	12:1
40	5	16:1	10:1
35	4.5	15:1	9:1
30	4	13:1	8:1

LEGEND ARROW BOARD

WORK AREA

⊨ SIGN

PORTABLE CHANGEABLE MESSAGE

DIRECTION INDICATOR BARRICADE WITH SEQUENTIAL FLASHING WARNING LIGHT

TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT

★ WORKER

X LANE CLOSED

NOTE:

SEE SHEET 1 OF THIS SERIES FOR NOTES.

SHEET 4 OF 4

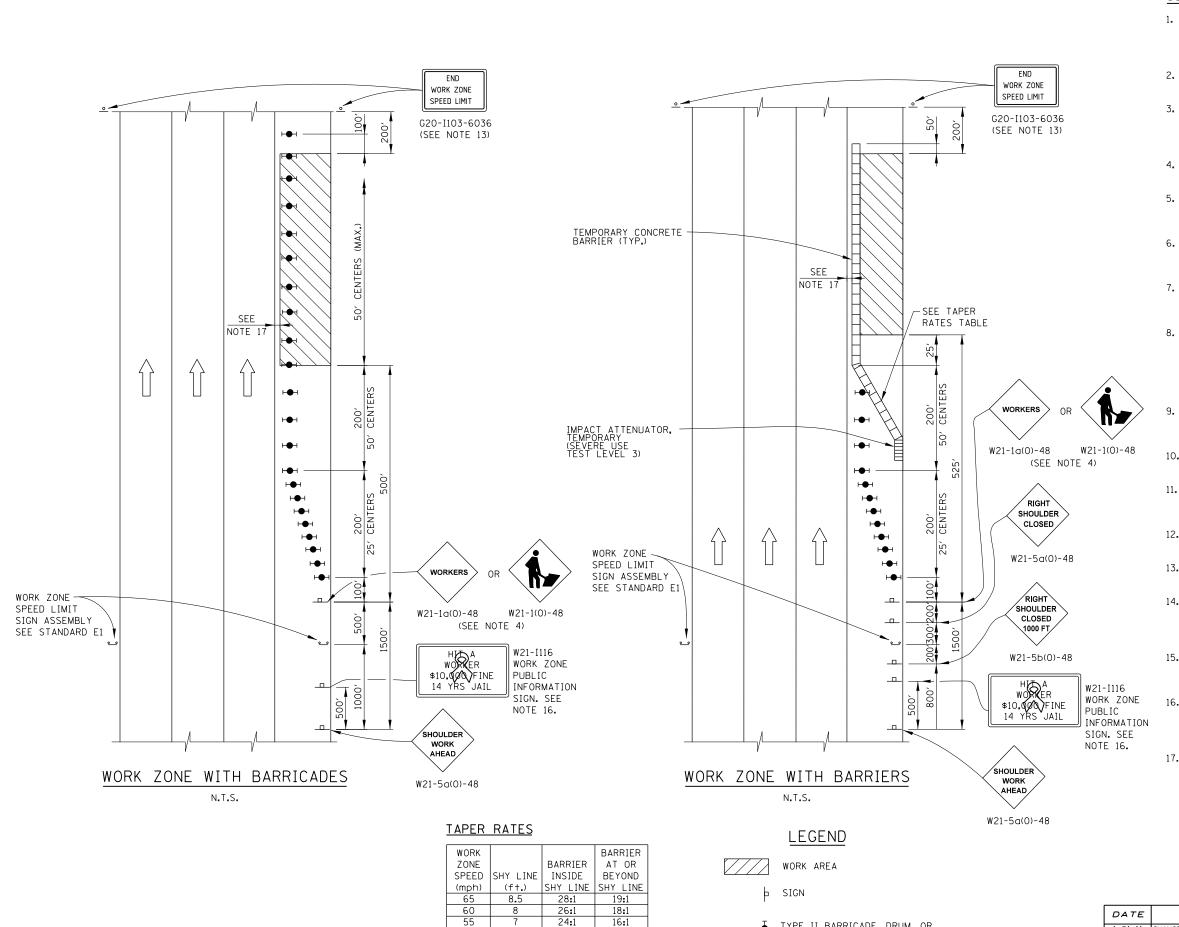


LANE CLOSURE DETAILS

STANDARD E2-07

Paul Koracs CHIEF ENGINEER

DATE 3-31-2016



16:1

14:1

12:1

10:1

9:1

8:1

50

45

40

35 30

Paul Koracs

CHIEF ENGINEER

DATE 5-1-2009

6.5

4.5

21:1

18:1

16:1

15:1

13:1

GENERAL NOTES:

- 1. THE SHOULDER SHALL BE CLOSED WHEN A WORK ACTIVITY REQUIRING 15 OR MORE MINUTES IS PERFORMED AT A DISTANCE WHICH IS LESS THAN 15 FEET BUT NO CLOSER THAN 2 FEET FROM THE EDGE OF PAVEMENT.
- 2. THE ADJACENT EXTERIOR LANE SHALL BE CLOSED WHEN WORK IS PERFORMED WITHIN 2 FEET FROM THE EDGE OF PAVEMENT.
- THE CHANNELIZING DEVICES WHICH SEPARATE THE WORK SPACE FROM THE ADJACENT TRAVEL LANE SHALL BE SPACED AT 25' FOR (200 FEET) AND AT A MAXIMUM OF 50' FOR ALL ADDITIONAL DEVICES.
- WHEN THE WORKSITE IS UNATTENDED, SUBSTITUTE -"SHOULDER WORK AHEAD" SIGN.
- WORKER SIGNS OR SHOULDER WORK SIGNS AND CHANNELIZATION DEVICES ARE PLACED ONLY ON THE SIDE OF THE ROADWAY ON WHICH THE ACTIVITY IS PERFORMED.
- FOR SHOULDER CLOSURE EXTENDING OVERNIGHT. BARRICADE TYPE II WITH STEADY BURNING LIGHT, TYPE C SHALL BE
- 7. FOR SHORT TERM CLOSURE (SUNRISE TO ONE HOUR BEFORE SUNSET) NOT EXTENDING INTO DARKNESS, CONES MAY BE
- ONE WORK ZONE SPEED LIMIT SIGN ASSEMBLY SHALL BE PLACED AT A DISTANCE OF 500' TO 2,500' MAXIMUM IN ADVANCE OF WORKERS THROUGHOUT THE SHOULDER CLOSURE. MOVING OPERATIONS MAY REQUIRE CONTINUOUS ADJUSTMENT OF THE SIGN ASSEMBLY LOCATION TO MAINTAIN THE ABOVE INTERVAL.
- AN ADDITIONAL SIGN ASSEMBLY SHALL BE PLACED 500' BEYOND THE LAST ENTRANCE RAMP FOR EACH INTERCHANGE THAT FALLS WITHIN THE 2,500'.
- 10. THE SIGN ASSEMBLY SHALL BE PLACED NO CLOSER THAN 500 TO ANY OTHER SIGN.
- THE WORK ZONE SPEED LIMIT SIGNS AND SIGN ASSEMBLY SHALL BE PROMPTLY REMOVED OR COVERED WHEN SHOULDER CLOSURE IS NOT IN USE.
- ALL CONFLICTING SPEED LIMIT SIGNS SHALL BE COVERED OR
- 13. "END WORK ZONE SPEED LIMIT" SIGNS SHALL BE IN PLACE ONLY WHEN THE EXISTING POSTED SPEED > 55MPH.
- FOR SHOULDER REPAIRS OR REPLACEMENT THE CHANNELIZING DEVICES SHALL BE PLACED AT THE EDGE OF PAVEMENT WHENEVER THE WORK ACTIVITIES RESULT IN A DROPOFF AT THE EDGE OF PAVEMENT.
- 15. ANY UNATTENDED OBSTACLE OR EXCAVATION LEFT ON THE SHOULDER OVERNIGHT SHALL BE IN COMPLIANCE WITH THE ROADWAY TRAFFIC CONTROL AND COMMUNICATIONS MANUAL.
- THE WORK ZONE PUBLIC INFORMATION SIGN IS 60" WIDE BY 48" HIGH. THE CONTRACTOR SHALL OBTAIN THE CAMERA-READY ARTWORK REQUIRED FOR THE SIGN MESSAGE BY CONTACTING IDOT'S CENTRAL BUREAU OF OPERATIONS.
- 17. A 1'-0" MINIMUM/2'-0" DESIRABLE SHY DISTANCE SHALL BE PROVIDED, MEASURED BETWEEN EDGE OF PAVEMENT LANE MARKING TO THE EDGE OF THE TRAFFIC CONTROL DEVICE.

TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT

DATE	REVISIONS	
1-01-11	CHANGED SYMBOL DESIGNATION	
	REVISED NOTES	
3-31-14	REVISED WORKER SIGN NUMBERS PER	
	"MUTCD" AND REVISED NOTES.	

SHOULDER CLOSURE DETAILS

Illinois

Tollway

STANDARD E3-06

ABV	ABOVE	CU YD	CUBIC YARD	HD	HEAD	PED	PEDESTAL	STD	STANDARD
A/C	ACCESS CONTROL	CULV	CULVERT	HDW	HEADWALL	PNT	POINT	SBI	STATE BOND ISSUE
AC	ACRE	C&G	CURB & GUTTER	HDUTY	HEAVY DUTY	PC	POINT OF CURVATURE	SR	STATE ROUTE
ADJ	ADJUST	D	DEGREE OF CURVE	ha	HECTARE	PΙ	POINT OF INTERSECTION OF HORIZONTAL	STA	STATION
AS	AERIAL SURVEYS	DC	DEPRESSED CURVE	HMA	HOT MIX ASPHALT		CURVE	SPBGR	STEEL PLATE BEAM GUARDRAIL
AGG	AGGREGATE	DET	DETECTOR	HWY	HIGHWAY	PRC	POINT OF REVERSE CURVE	SS	STORM SEWER
АН	AHEAD	DIA	DIAMETER	HORIZ	HORIZONTAL	PT	POINT OF TANGENCY	STY	STORY
APT	APARTMENT	DIST	DISTRICT	HSE	HOUSE	POT	POINT ON TANGENT	ST	STREET
ASPH	ASPHALT	DOM	DOMESTIC	IL	ILLINOIS	POLYETH	POLYETHYLENE	STR	STRUCTURE
AUX	AUXILIARY	DBL	DOUBLE	IMP	IMPROVEMENT	PCC	PORTLAND CEMENT CONCRETE	е	SUPERELEVATION RATE
AGS	AUXILIARY GAS VALVE (SERVICE)	DSEL	DOWNSTREAM ELEVATION	IN DIA	INCH DIAMETER	PP	POWER POLE OR PRINCIPAL POINT	S.E. RUN.	SUPERELEVATION RUNOFF LENGTH
AVE	AVENUE	DSFL	DOWNSTREAM FLOWLINE	INL	INLET	PRM	PRIME	SURF	SURFACE
AX	AXIS OF ROTATION	DR	DRAINAGE OR DRIVE	INST	INSTALLATION	PE	PRIVATE ENTRANCE	SMK	SURVEY MARKER
BK	BACK	DI	DRAINAGE INLET OR DROP INLET	IDS	INTERSECTION DESIGN STUDY	PROF	PROFILE	T	TANGENT DISTANCE
В-В	BACK TO BACK	DRV	DRIVEWAY	INV	INVERT	PGL	PROFILE GRADELINE	T.R.	TANGENT RUNOUT DISTANCE
BKPL	BACKPLATE	DCT	DUCT	ΙP	IRON PIPE	PROJ	PROJECT	TEL	TELEPHONE
В	BARN	EA	EACH	IR	IRON ROD	P.C.	PROPERTY CORNER	TB	TELEPHONE BOX
BARR	BARRICADE	EB	EASTBOUND	JT	JOINT	PL	PROPERTY LINE	TP	TELEPHONE POLE
BGN	BEGIN	EOP	EDGE OF PAVEMENT	kg	KILOGRAM	PR	PROPOSED	TEMP	TEMPORARY
ВМ	BENCHMARK	E-CL	EDGE TO CENTERLINE	km	KILOMETER	R	RADIUS	TBM	TEMPORARY BENCH MARK
BIND	BINDER	E-E	EDGE TO EDGE	LS	LANDSCAPING	RR	RAILROAD	TD	TILE DRAIN
BIT	BITUMINOUS	EL	ELEVATION	LN	LANE	RRS	RAILROAD SPIKE	TBE	TO BE EXTENDED
ВТМ	BOTTOM	ENTR	ENTRANCE	LΤ	LEFT	RPS	REFERENCE POINT STAKE	TBR	TO BE REMOVED
BLVD	BOULEVARD	EXC	EXCAVATION	LP	LIGHT POLE	REF	REFLECTIVE	TBS	TO BE SAVED
BRK	BRICK	EX	EXISTING	LGT	LIGHTING	RCCP	REINFORCED CONCRETE CULVERT PIPE	TWP	TOWNSHIP
BBOX	BUFFALO BOX	EXPWAY	EXPRESSWAY	LF	LINEAL FEET OR LINEAR FEET	REINF	REINFORCEMENT	TR	TOWNSHIP ROAD
BLDG	BUILDING	E	EXTERNAL DISTANCE OF HORIZONTAL CURVE	L	LITER OR CURVE LENGTH	REM	REMOVAL	TS	TRAFFIC SIGNAL
CIP	CAST IRON PIPE	Ē _	OFFSET DISTANCE TO VERTICAL CURVE	LC	LONG CHORD	RC	REMOVE CROWN	TSCB	TRAFFIC SIGNAL CONTROL BOX
CB	CATCH BASIN	F-F FA	FACE TO FACE		LONGITUDINAL	REP	REPLACEMENT	TSC	TRAFFIC SYSTEMS CENTER
C-C	CENTER TO CENTER	FAI	FEDERAL AID FEDERAL AID INTERSTATE	L SUM MACH	LUMP SUM	REST RESURF	RESTAURANT RESURFACING	TRVS	TRANSVERSE TRAVEL
CL CL-E	CENTERLINE OR CLEARANCE CENTERLINE TO EDGE	F A I	FEDERAL AID INTERSTATE FEDERAL AID PRIMARY	MACH MB	MACHINE MAIL BOX	RET	RETAINING	TRVL TRN	TURN
CL-E	CENTERLINE TO EDGE CENTERLINE TO FACE	FAS	FEDERAL AID FRIMARY	MH	MANHOLE	RT	RIGHT	TY	TYPE
CTS	CENTERS	FAUS	FEDERAL AID URBAN SECONDARY	MATL	MATERIAL	ROW	RIGHT-OF-WAY	T-A	TYPE A
CERT	CERTIFIED	FP FP	FENCE POST	MED	MEDIAN	RD	ROAD	TYP	TYPICAL
CHSLD	CHISELED	FE	FIELD ENTRANCE	m .	METER	RDWY	ROADWAY	UNDGND	UNDERGROUND
CS	CITY STREET	FH	FIRE HYDRANT	METH	METHOD	RTE	ROUTE	USGS	U.S. GEOLOGICAL SURVEY
CP	CLAY PIPE	FL	FLOW LINE	M	MID-ORDINATE	SAN	SANITARY	USEL	UPSTREAM ELEVATION
CLSD	CLOSED	FB	FOOT BRIDGE	mm	MILLIMETER	SANS	SANITARY SEWER	USFL	UPSTREAM FLOWLINE
CLID	CLOSED LID	FDN	FOUNDATION	mm DIA	MILLIMETER DIAMETER	SEC	SECTION	UTIL	UTILITY
СТ	COAT OR COURT	FR	FRAME	MIX	MIXTURE	SEED	SEEDING	VBOX	VALVE BOX
сомв	COMBINATION	F&G	FRAME & GRATE	MBH	MOBILE HOME	SHAP	SHAPING	VV	VALVE VAULT
С	COMMERCIAL BUILDING	FRWAY	FREEWAY	MOD	MODIFIED	S	SHED	VLT	VAULT
CE	COMMERCIAL ENTRANCE	GAL	GALLON	MF T	MOTOR FUEL TAX	SH	SHEET	VEH	VEHICLE
CONC	CONCRETE	GALV	GALVANIZED		NAIL & BOTTLE CAP	SHLD	SHOULDER	VP	VENT PIPE
CONST	CONSTRUCT	G	GARAGE	N & C	NAIL & CAP	SW	SIDEWALK OR SOUTHWEST	VERT	VERTICAL
CONTD	CONTINUED	GM	GAS METER		NAIL & WASHER	SIG	SIGNAL	VC	VERTICAL CURVE
CONT	CONTINUOUS	GV	GAS VALVE	NOAA	NATIONAL OCEANIC ATMOSPHERIC	SOD	SODDING	VPC	VERTICAL POINT OF CURVATURE
COR	CORNER	GRAN	GRANULAR		ADMINISTRATION	SM	SOLID MEDIAN	VPI	VERTICAL POINT OF INTERSECTION
CORR	CORRUGATED	GR	GRATE	NC	NORMAL CROWN	SB	SOUTHBOUND	VPT	VERTICAL POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	GRVL	GRAVEL	NB	NORTHBOUND	SE	SOUTHEAST	WM	WATER METER
CNTY	COUNTY	GND	GROUND	NE	NORTHEAST	SPL	SPECIAL	WV	WATER VALVE
CH	COUNTY HIGHWAY	GUT	GUTTER	NW	NORTHWEST	SD	SPECIAL DITCH	WMAIN	WATER MAIN
CSE	COURSE	GP GW	GUY POLE	OLID	OPEN LID	SQ FT	SQUARE FEET	WB	WESTBOUND
XSECT	CROSS SECTION	GW	GUY WIRE	PAT	PATTERN	m 2	SOUARE METER	WILDFL	WILDFLOWERS
m ³	CUBIC MILLIMETER	HH	HANDHOLE	PVD	PAVED	mm 2	SOUARE MILLIMETER	W O	WITH
mm ³	CUBIC MILLIMETER	HATCH	HATCHING	PVMT PM	PAVEMENT PAVEMENT MARKING	SQ YD STB	SQUARE YARD STABILIZED	WO	WITHOUT
1				ı ıvl	I AVENIENT MANNING	טונ	STADILIZED		
1									

Illinois Department of Transportat	ion
PASSED January 1, 2011 Michael Brand ENGINEER OF POLICY AND PROCEDURES	ISSUED
APPROVED January 1. 2011 South 250 X ENCINEER OF DESIGN AND ENVIRONMENT	1-1-97

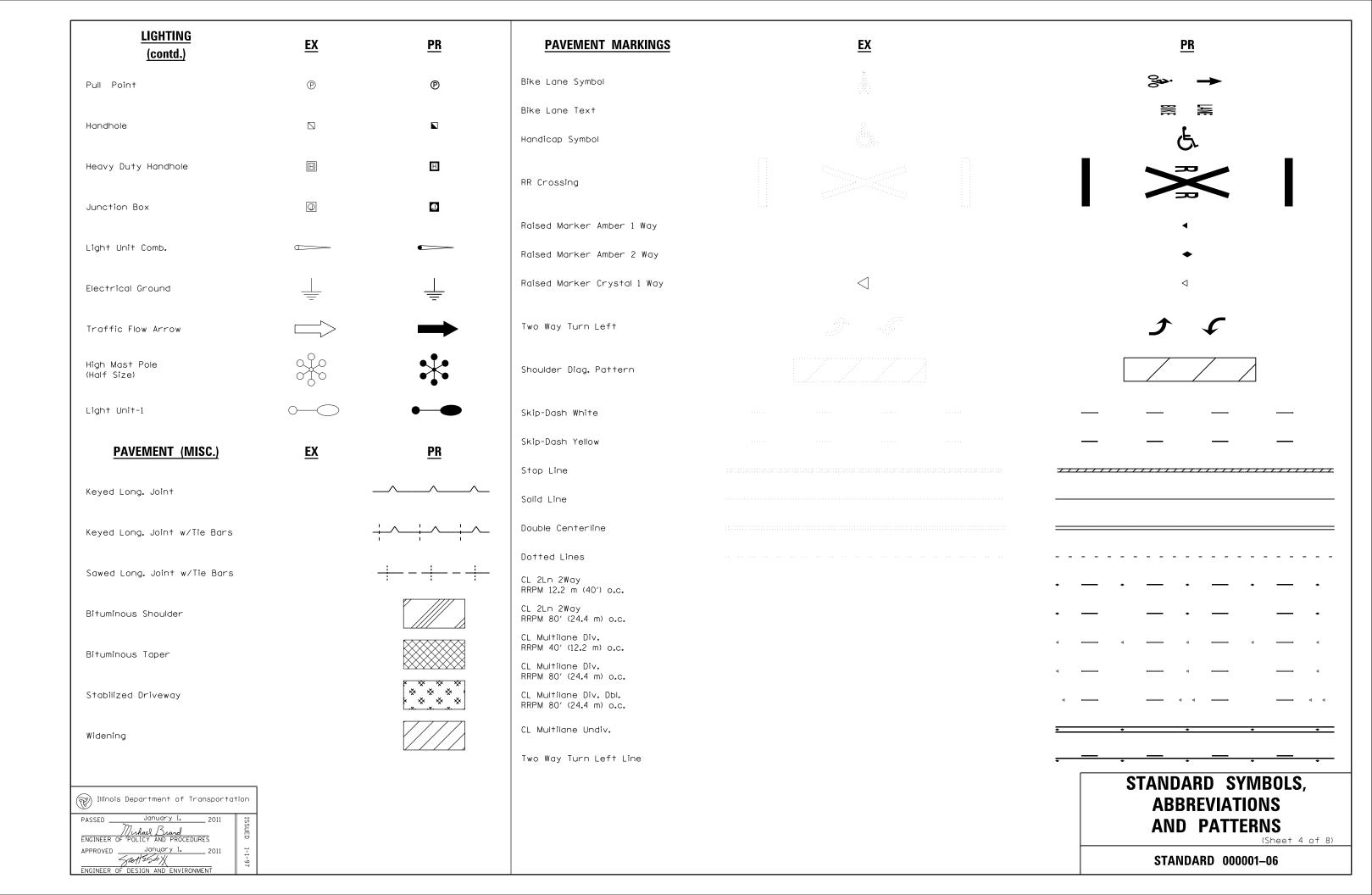
DATE	REVISIONS	
1-1-11	Updated abbreviations	
	and symbols.	
1-1-08	Updated abbreviations	
	and symbols.	
		1

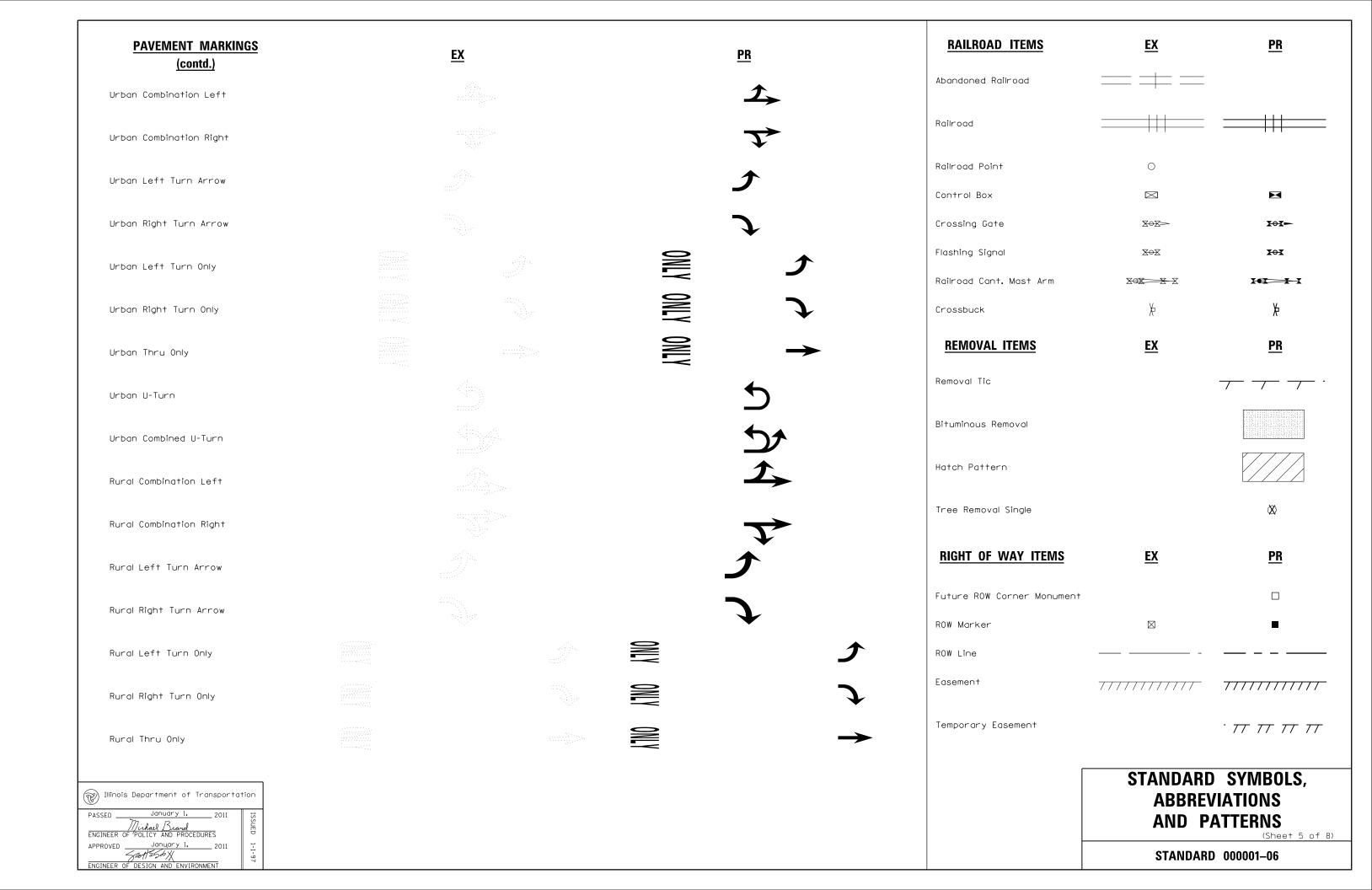
STANDARD SYMBOLS, **ABBREVIATIONS** AND PATTERNS (Sheet 1 of 8)

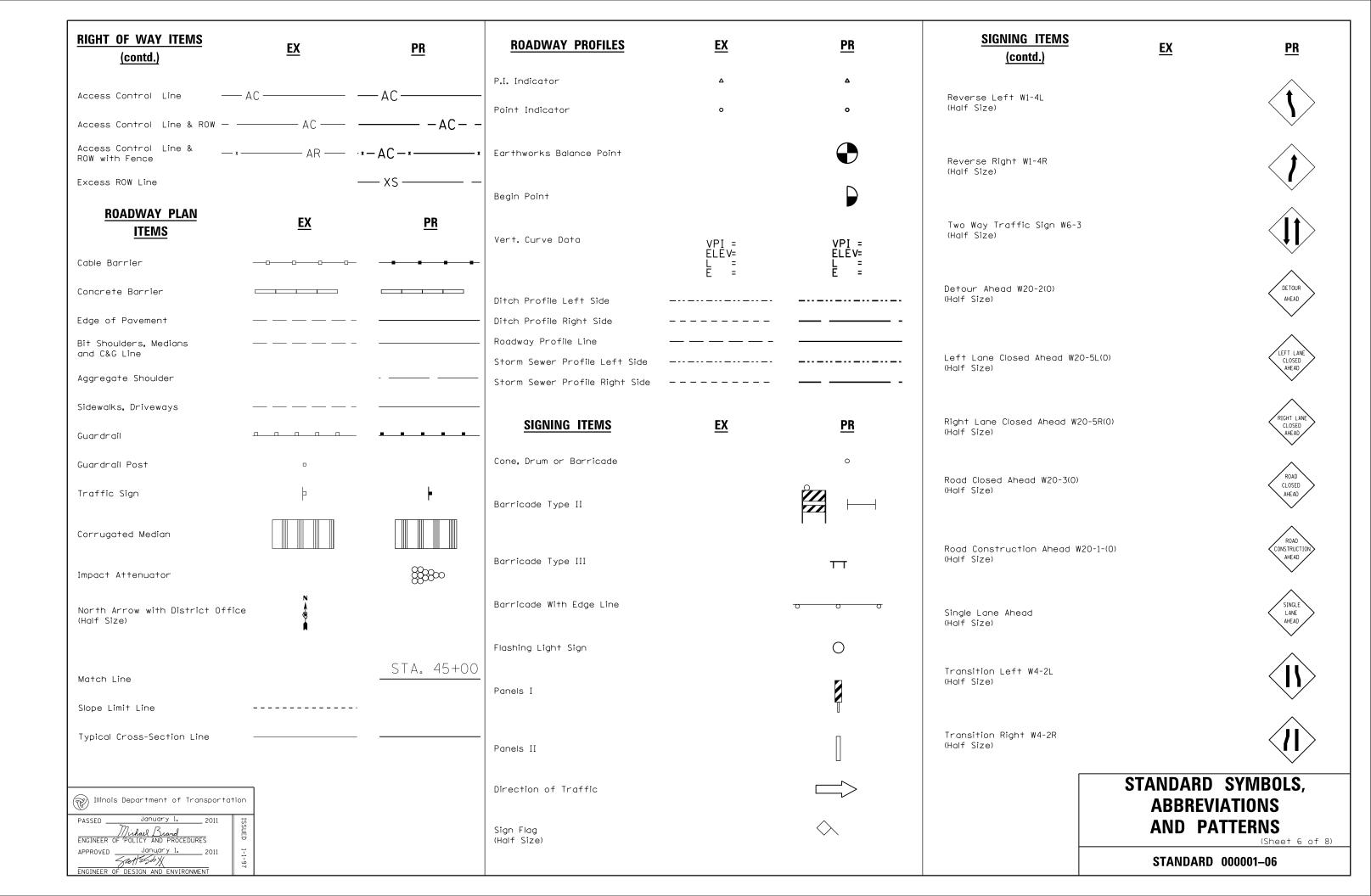
STANDARD 000001-06

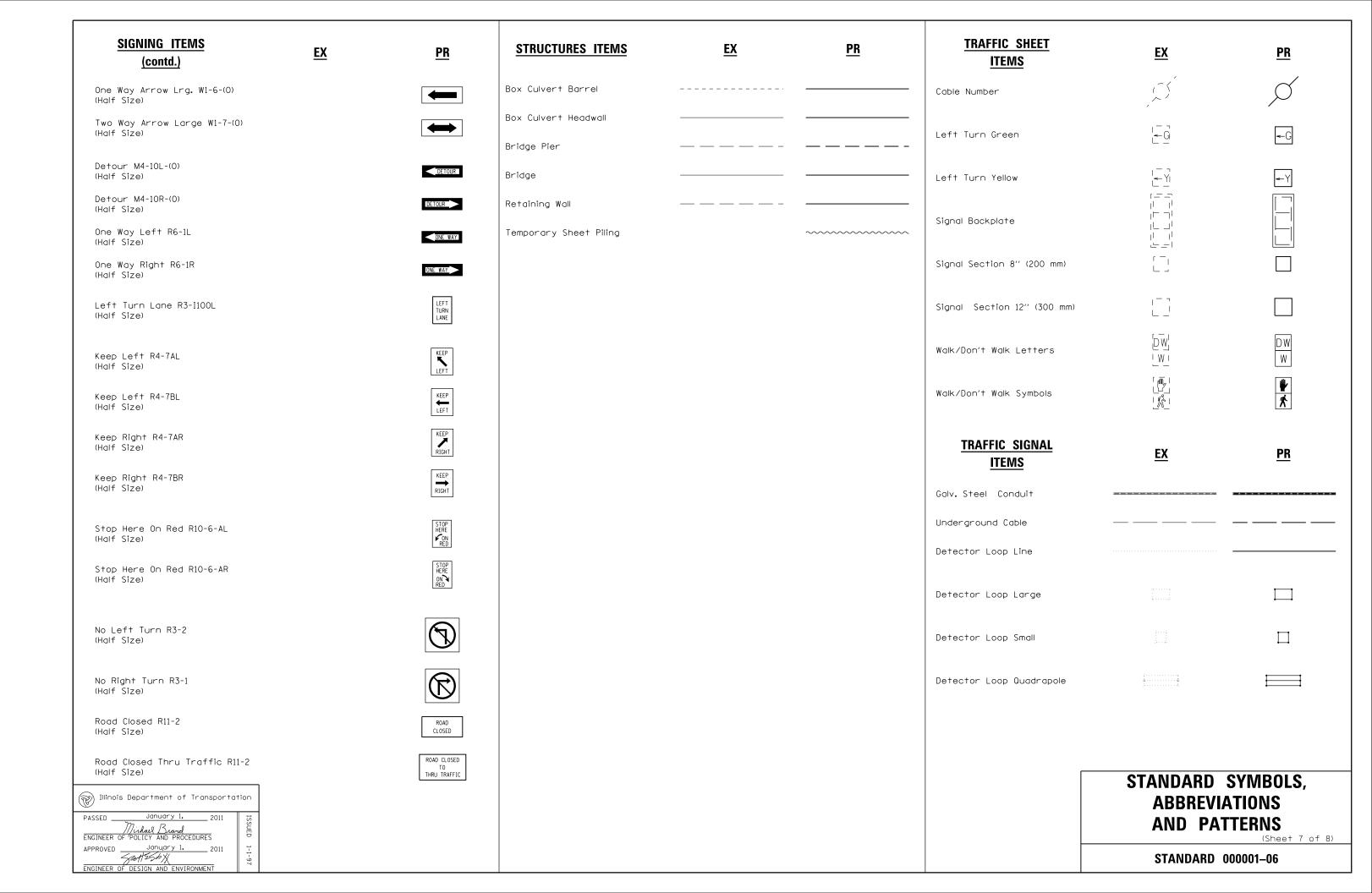
ADJUSTMENT ITEMS	<u>EX</u>	<u>PR</u>	ALIGNMENT ITEMS	<u>EX</u>	<u>PR</u>	CONTOUR ITEMS	<u>EX</u>	<u>PR</u>
Structure To Be Adjusted		ADJ	Baseline			Approx. Index Line		
			Centerline			Approx. Intermediate Line		
Structure To Be Cleaned		С	Centerline Break Circle	٥	\odot	Index Contour		
Main Structure To Be Filled		FM	Baseline Symbol	B	₽	Intermediate Contour		
			Centerline Symbol	<u>C</u>	\bigcirc	DRAINAGE ITEMS	EX	PR
Structure To Be Filled		F	PI Indicator	Δ	Δ	Channel or Stream Line		
Structure To Be Filled Special		FSP	Point Indicator	0	0	Culvert Line	HI	
Structure To Be Removed		R	Horizontal Curve Data (Half Size)	CURVE P.I. STA= △=	CURVE P.I. STA= △=	Grading & Shaping Ditches		
			(Hdit Size)	D= R= T=	Δ - D= R= T=	Drainage Boundary Line		
Structure To Be Reconstructed		REC		L= E= e= T R -	L= E= e= T.D	Paved Ditch	2-23-2- 2-23-2- 2-23-2-	ALASTED ALASTED ALASTED
Structure To Be Reconstructed Special		RSP		T.R.= S.E. RUN= P.C. STA= P.T. STA=	e= T.R.= S.E. RUN= P.C. STA= P.T. STA=	Aggregate Ditch	_Pintago Pintago Pintag	Bereick of Bereick
			BOUNDARIES ITEMS	<u>EX</u>	PR	Pipe Underdrain		
Frame and Grate To Be Adjusted		А	Dashed Property Line		<u></u>	Storm Sewer		
Frame and Lid To Be Adjusted		A	Solid Property/Lot Line			Flowline	£	ŧ
Domestic Service Box		\wedge	Section/Grant Line			Ditch Check	- ♦	-
To Be Adjusted		A	Quarter Section Line			Headwall	_	
Valve Vault To Be Adjusted		A	Quarter/Quarter Section Line			Inlet		-
Special Adjustment		(SP)	County/Township Line			Manhole	0	•
Special Adjustilieri			State Line			Summit	<+->	\longleftrightarrow
Item To Be Abandoned		AB	Iron Pipe Found	0		Roadway Ditch Flow	-√ >	- ∼>
Item To Be Moved		M	Iron Pipe Set	•		Swale		→
			Survey Marker			Catch Basin	0	•
Item To Be Relocated		REL	Property Line Symbol	P.		Culvert End Section	⊲	•
Pavement Removal and Replacement			Same Ownership Symbol (Half Size)	7		Water Surface Indicator	$\overline{\underline{iggr}}$	
		V / / / A	Northwest Quarter Corner	Z		Riprap		000000 000000 000000
Illinois Department of Transportation PASSED January 1. 2011 Milal Bund ENGINEER OF POLICY AND PROCEDURES			(Half Size) Section Corner (Half Size)				STANDARD ABBREVI AND PA	ATIONS
APPROVED JONUARY 1. 2011			Southeast Quarter Corner (Half Size)	(LC)m			STANDARD	

EROSION & SEDIMENT CONTROL ITEMS	<u>EX</u>	<u>PR</u>	NON-HIGHWAY IMPROVEMENT ITEMS	<u>EX</u>	<u>PR</u>	EXISTING LANDSCAPING ITEMS	<u>EX</u>	<u>PR</u>
Cleaning & Grading Limits			Noise Attn./Levee			(contd.) Seeding Class 5		
Dike			Field Line	——— E———		Second Green		
Erosion Control Fence Perimeter Erosion Barrier		~~~~~	Fence	_ x x x x x		Seeding Class 7		
Temporary Fence		- xxx - xxx - xxx - xxx -	Base of Levee			Seedlings Type 1		
Ditch Check Temporary			Mailbox	P		Seedlings Type 2		
Ditch Check Permanent		—	Multiple Mailboxes			Sodding		
Inlet & Pipe Protection		\bigoplus	Pay Telephone			Mowstake w/Sign		_•_
Sediment Basin			Advertising Sign	þ		Tree Trunk Protection		
Erosion Control Blanket		+++++	LANDSCAPING ITEMS	<u>EX</u>	<u>PR</u>	Evergreen Tree	=(E)	
Fabric Formed Concrete Revetment Mat			Contour Mounding Line				\mathcal{H}	4
Turf Reinforcement Mat			Fence Fence Post		— x — x — x — x —	Shade Tree	E	+
Mulch Temporary			Shrubs Mowline			<u>LIGHTING</u>	<u>EX</u>	<u>PR</u>
Mulch Method 1		+	Perennial Plants			Duct		
Mulch Method 2 Stabilized		本本本本本。 ********************************	Seeding Class 2			Conduit Electrical Aerial Cable	A	A
Mulch Method 3 Hydraulic		4444	Seeding Class 2A			Electrical Buried Cable	L	L
			Seeding Class 4			Controller	\boxtimes	=
						Underpass Luminaire Power Pole	-0-	=
PASSED January 1, 2011 IS Michael Brand ENGINEER OF POLICY AND PROCEDURES			Seeding Class 4 & 5 Combined				STANDARD ABBREV	SYMBOLS, IATIONS ATTERNS
APPROVED January 1. January 1. FINGINEER OF DESIGN AND ENVIRONMENT							STANDARD	(Sheet 3 of 8) 000001-06

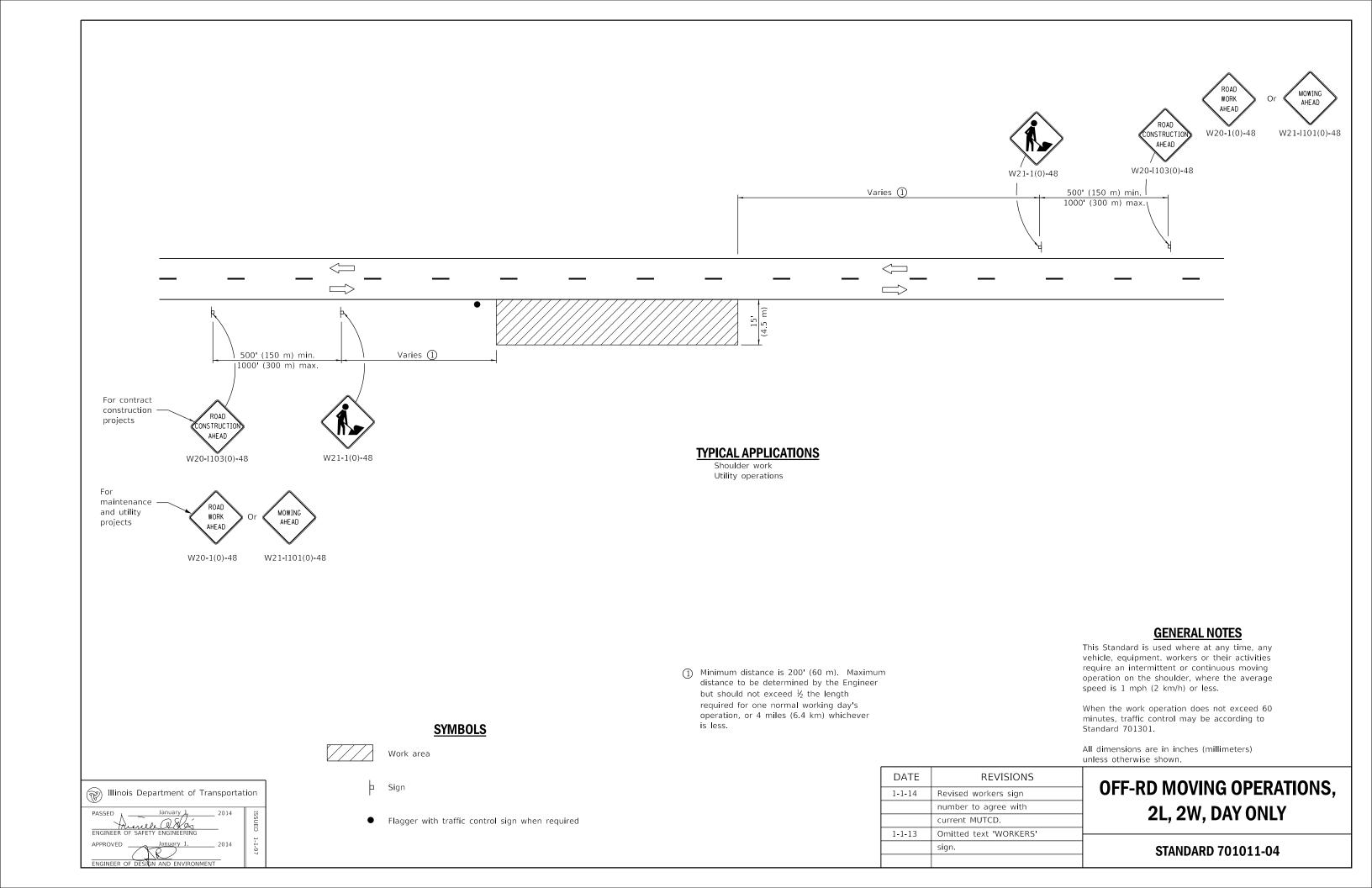


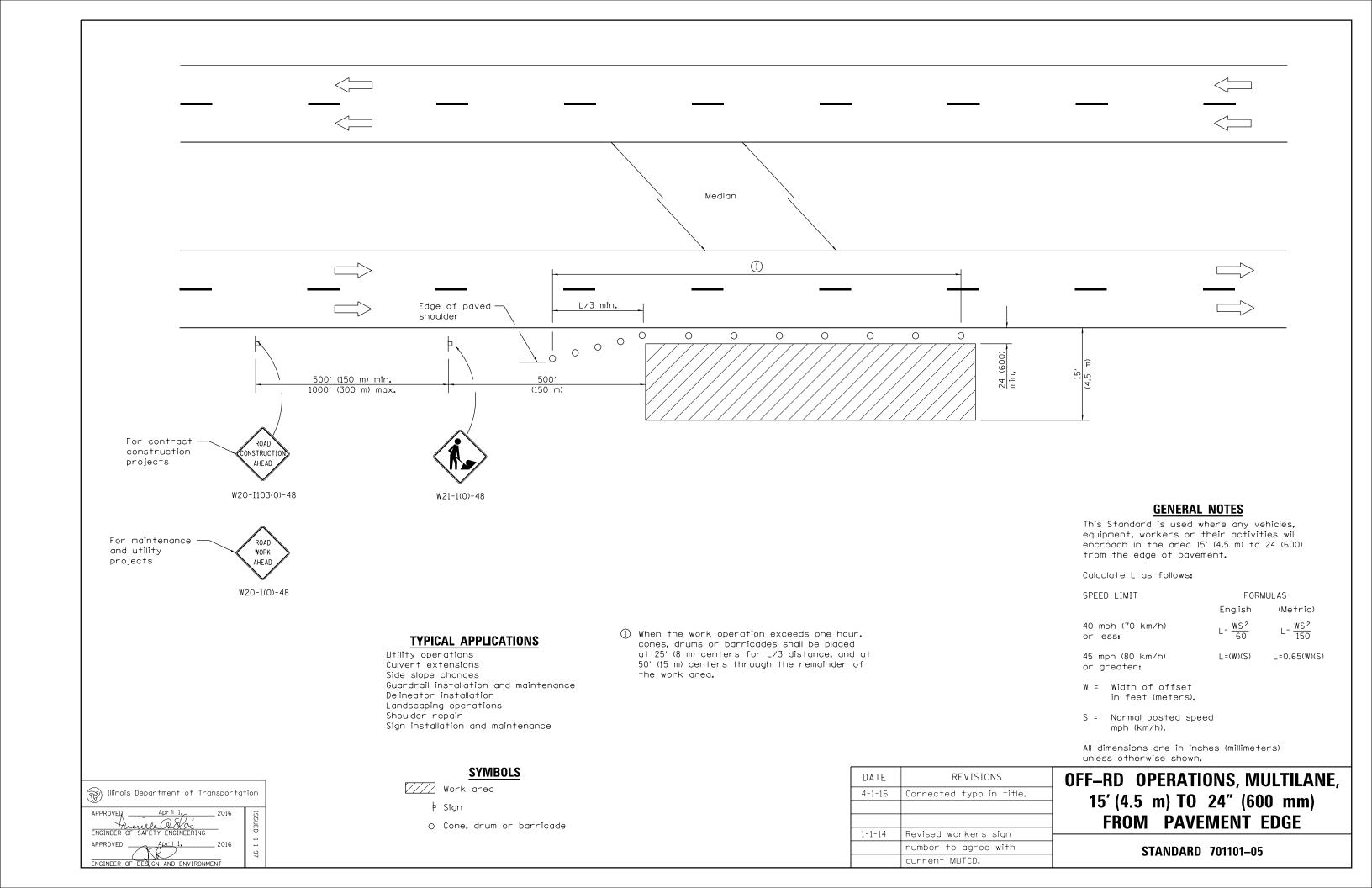


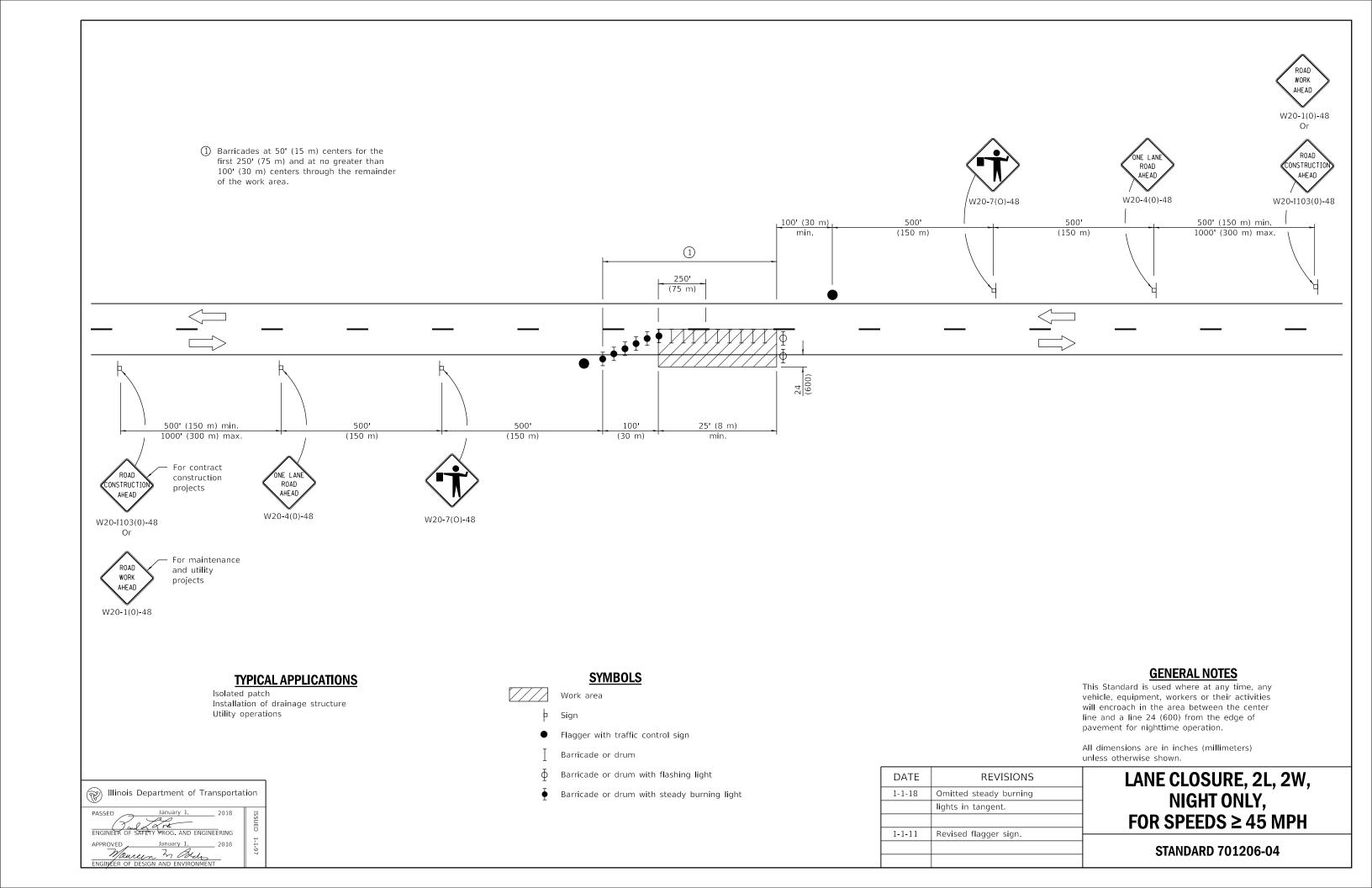


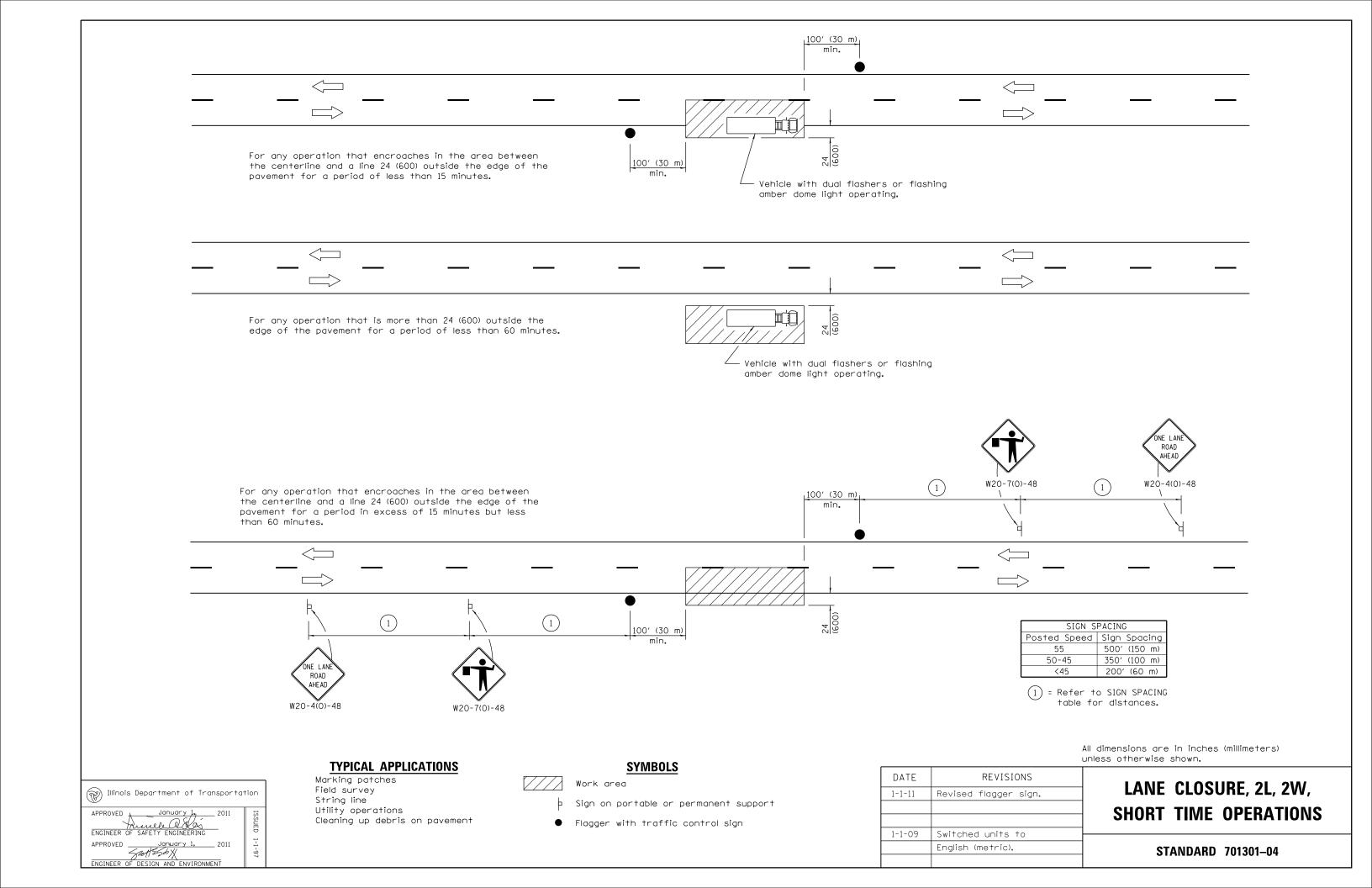


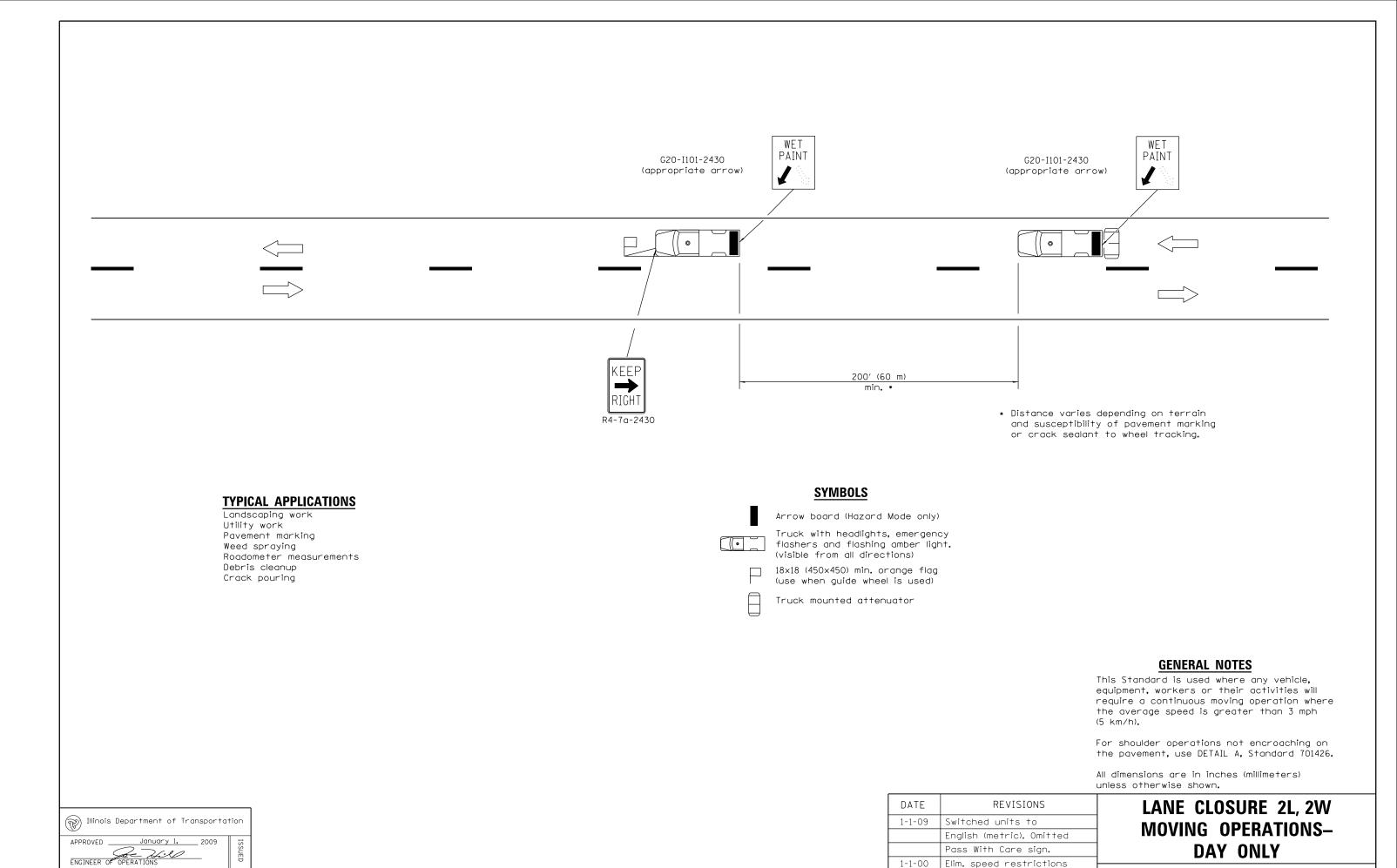
TRAFFIC SIGNAL ITEMS (contd.)	<u>EX</u>	<u>PR</u>	UNDERGROUND UTILITY ITEMS	<u>PR</u>	<u>ABANDONED</u>	UTILITY ITEMS (contd.)	<u>EX</u>	<u>PR</u>
Detector Raceway	"E"[Cable TV ——— CTV —	CTV	CTV	Traffic Signal	Ф	•
,			Electric Cable ————————————————————————————————————	— — Е — —	— — E — — —	Traffic Signal Control Box	[35]	
Aluminum Mast Arm	0		Fiber Optic —— FO —	F0	- -/ F0/	Water Meter	A	
Steel Mast Arm	O	•——	Gas Pipe ————————————————————————————————————	——— G ———	- -/	Water Meter Valve Box	0	•
			0il Pipe ————————————————————————————————————	——————————————————————————————————————	- -/	Profile Line		
Veh. Detector Magnetic		•—	Sanitary Sewer —)——)—	——————————————————————————————————————	>	Aerial Power Line	—— А ———— А	— A ———
Conduit Splice	•	•	Telephone Cable ————————————————————————————————————	—— т—	_ _/T/	VEGETATION ITEMS	<u>EX</u>	PR
Controller			Water Pipe ────────────────────────────────────	W	— / W I W I	VEGETATION TIEMS	<u>LA</u>	<u></u>
Gulfbox Junction	0	0				Deciduous Tree	©	
Wood Pole	\otimes	•	UTILITIES ITEMS	<u>EX</u>	<u>PR</u>	Bush or Shrub	0	
Temp. Signal Head		{>-	Controller	\boxtimes	⋈	Evergreen Tree	Φ	
Handhole			Double Handhole		N.	Stump	<u>Da</u>	
Double Handhole			Fire Hydrant	Q	*	Orchard/Nursery Line		
Heavy Duty Handhole	Н	H	GuyWire or Deadman Anchor	\rightarrow		Vegetation Line	$\sim\sim\sim\sim$	
Junction Box		•	Handhole			Woods & Bush Line		
Ped. Pushbutton Detector	©	©	Heavy Duty Handhole	H	H	<u>Water Feature</u> Items	<u>EX</u>	<u>PR</u>
Ped. Signal Head	-0	-1	Junction Box		•	Stream or Drainage Ditch		
Power Pole Service		+	Light Pole	¤	*	Waters Edge		
Priority Veh. Detector	≪	~	Manhole	©	⊙	Water Surface Indicator	$\overline{\underline{\nabla}}$	
Signal Head			Pipeline Warning Sign	þ		Water Point	<u> </u>	
Signal Head w/Backplate	+t>-	+►	Power Pole	-0-	•	Disappearing Ditch	<	
Signal Post	0	•	Power Pole with Light	ф		Marsh	, nultra	
Closed Circuit TV	Ch	<u>©</u> 1	Sanitary Sewer Cleanout			Marsh/Swamp Boundary		
Video Detector System		◯ •	Splice Box Above Ground		•	2		
PASSED	186150		Telephone Splice Box Above Ground Telephone Pole	⊞ -0-	-•-		STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS (Sheet 8 of 8)	
APPROVED January 1, 2011 South State ENGINEER OF DESIGN AND ENVIRONMENT	1-1-07						STANDARD 00000	







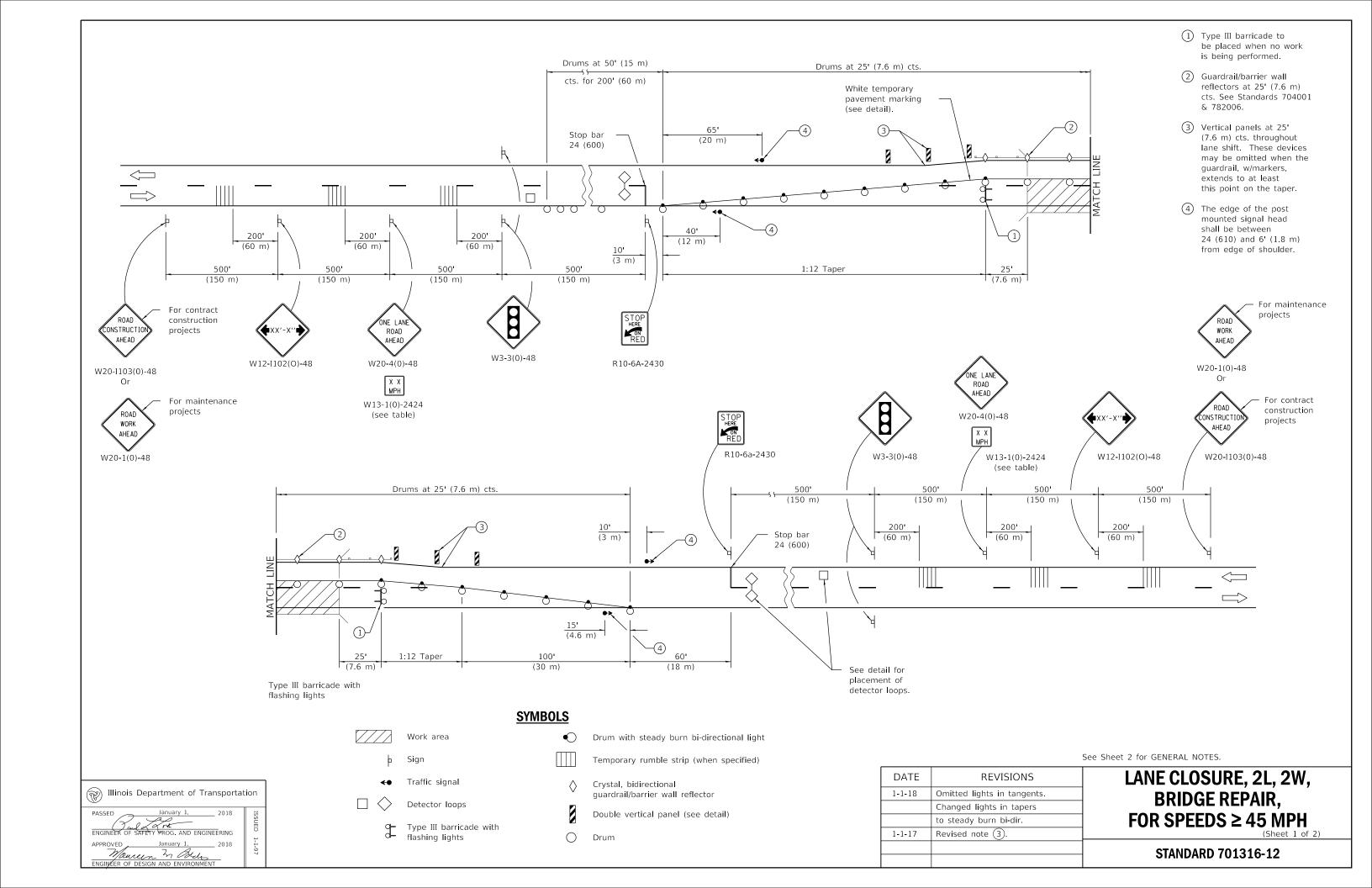


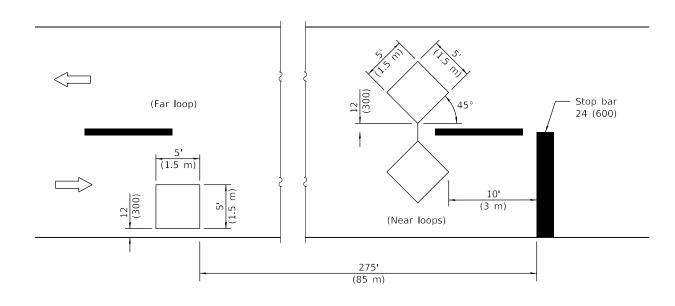


January 1,

EN E 76a_ ENGINEER OF DESIGN AND ENVIRONMENT STANDARD 701311-03

in Standard title.

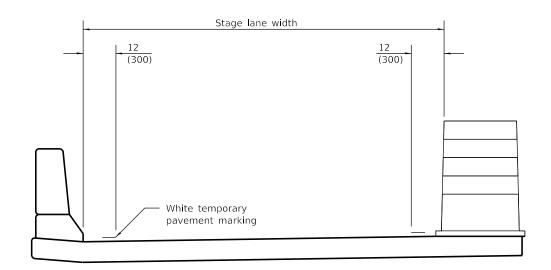




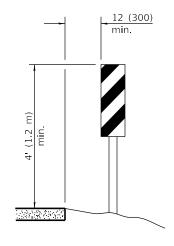
TRAFFIC SIGNAL SEQUENCE PHASE INTERVAL NORTHBOUND OR EASTBOUND SOUTHBOUND OR R R R G Y R

ADVISORY SPEED LIMIT			
NORMAL POSTED SPEED	ADVISORY SPEED		
55 - 45 mph	40 mph		
40 mph	35 mph		
35 - 30 mph	30 mph		

DETECTOR LOOPS



TEMPORARY PAVEMENT MARKING



VERTICAL PANELS (Post mounted, one each side)

GENERAL NOTES

This Standard is used where, at any time any vehicle, equipment, workers or their activities will encroach on one lane of a bridge and traffic signals are required.

When traffic signals are not in operation, flaggers shall be used and traffic control devices shall conform to Standard 701201 or 701206.

Existing or temporary pavement markings shall be on both sides of open lane from stop bar to stop bar.

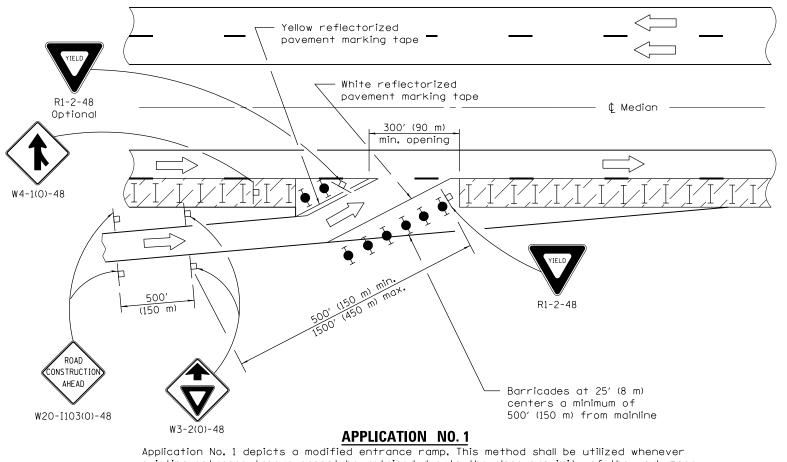
All dimensions are in inches (millimeters) unless otherwise shown.

LANE CLOSURE, 2L, 2W, **BRIDGE REPAIR, FOR SPEEDS ≥ 45 MPH**

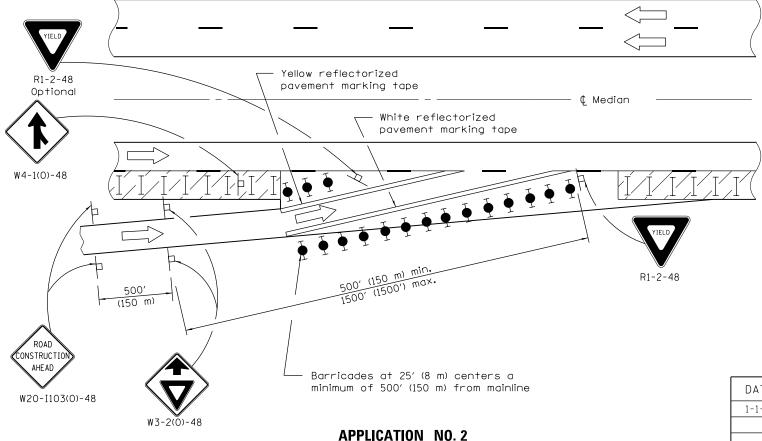
STANDARD 701316-12

Illinois Department of Transportation

January 1, Maurein In Bulls ENGINEER OF DESIGN AND ENVIRONMEN



existing entrance tapers cannot be retained due to the close proximity of the work zone. The entrance location may be shifted, with the approval of the Engineer, to perform work in the entrance area. Application No. 2 shall be put into effect as soon as possible.



Application No. 2 depicts a shortening of the normal entrance ramp. This method shall be used whenever the existing geometrics can be retained. Consideration should be given

to the entering motorists' line of sight, through, between, or over the delineation devices.

Illinois Department of Transportation

January 1.

Junele a Sta

APPROVED

SYMBOLS

Work area

⊨ Sign

Type II barricades or drums with steady burning monodirectional light

Type II barricades or drums

lack O Drums with steady burning monodirectional light

GENERAL NOTES

This Standard is used where, at any time any vehicle, equipment, workers or their activities require a lane closure in close proximity of an exit or entrance ramp and supplements other traffic control Standards for lane closures.

These applications also apply when work is being performed in the left lanes and the ramps enter and exit on the left. Under these conditions, the Exit sign arrow and the Side road symbol sign shall be changed.

Cones may be utilized during daylight operations, at one half the spacing of drums/barricades.

Use of these APPLICATION NO. 1 and APPLICATION NO. 3 shall be limited to five days per location.

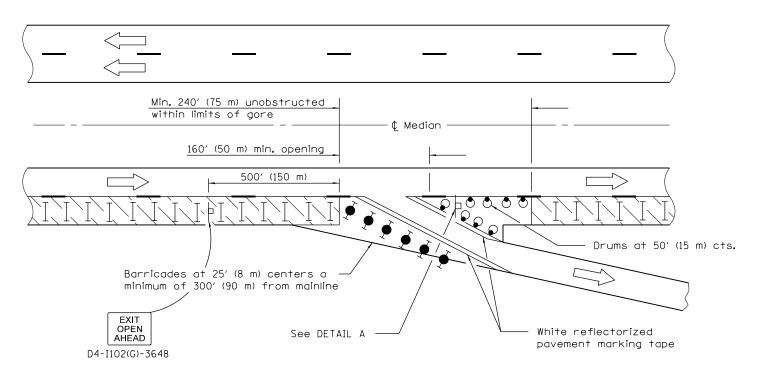
When work does not exceed five days, pavement marking tape may be omitted.

All dimensions are in inches (millimeters)

DATE	REVISIONS	
1-1-15	Revised gen. notes to limit	Δ
	App's 1 and 3 to five days,	
	omit pvt. tape for < 5 days.	
1-1-12	Revised merge sign to agree	
	with MUTCD. Dimensioned EXIT	
	OPEN AHEAD sign.	

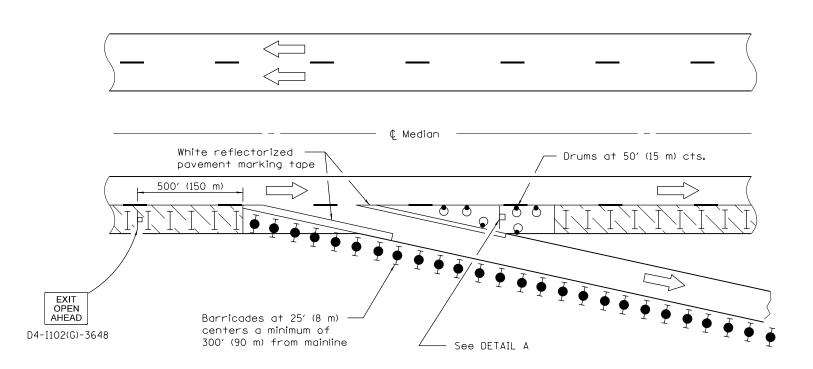
LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP. FOR SPEEDS \geq 45 MPH

STANDARD 701411-09



APPLICATION NO. 3

Application No. 3 depicts a modified exit ramp. The channelizing devices shall provide a clearly defined path for the exiting motorists. The minimum dimensions shown shall be increased as soon as the progress of the work will permit. The open portion of the ramp may be shifted, with the approval of the Engineer, to perform work in stages on the area adjacent to the ramp exit. Application No. 4 shall be put into effect as soon as possible.

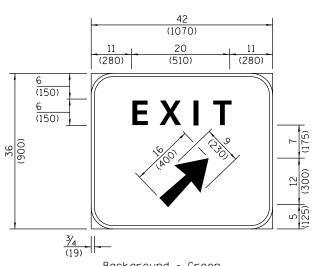


APPROVED January 1, 2015 ENGINEER OF SAFETY ENGINEERING APPROVED January 1, 2015

ENGINEER OF DESIGN AND ENVIRONMENT

APPLICATION NO. 4

Application No. 4 depicts an extension of the normal exit ramp. This method shall be used whenever existing geometrics can be retained. Consideration should be given to the exiting motorist's line of sight through, between or over the delineation devices.



Background - Green Border and legend - White "D" size letters

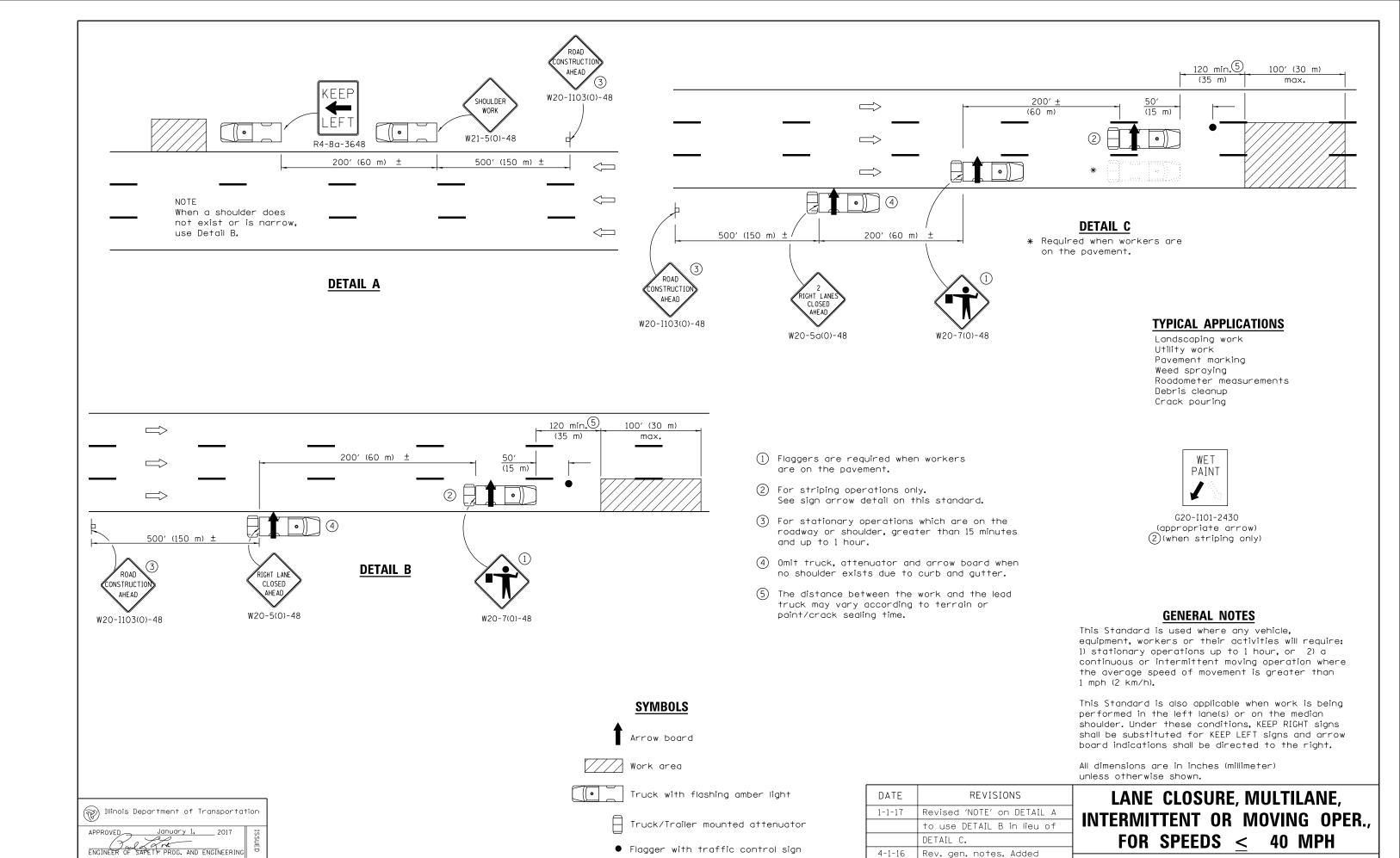
EXIT SIGN - SPECIAL

DETAIL A

(To be utilized where distance between the two rows of channelizing devices is 6' (1.8 m) in width.)

LANE CLOSURE, MULTILANE,
AT ENTRANCE OR EXIT RAMP,
FOR SPEEDS > 45 MPH
(Sheet 2 of 2)

STANDARD 701411-09



⊨ Sign

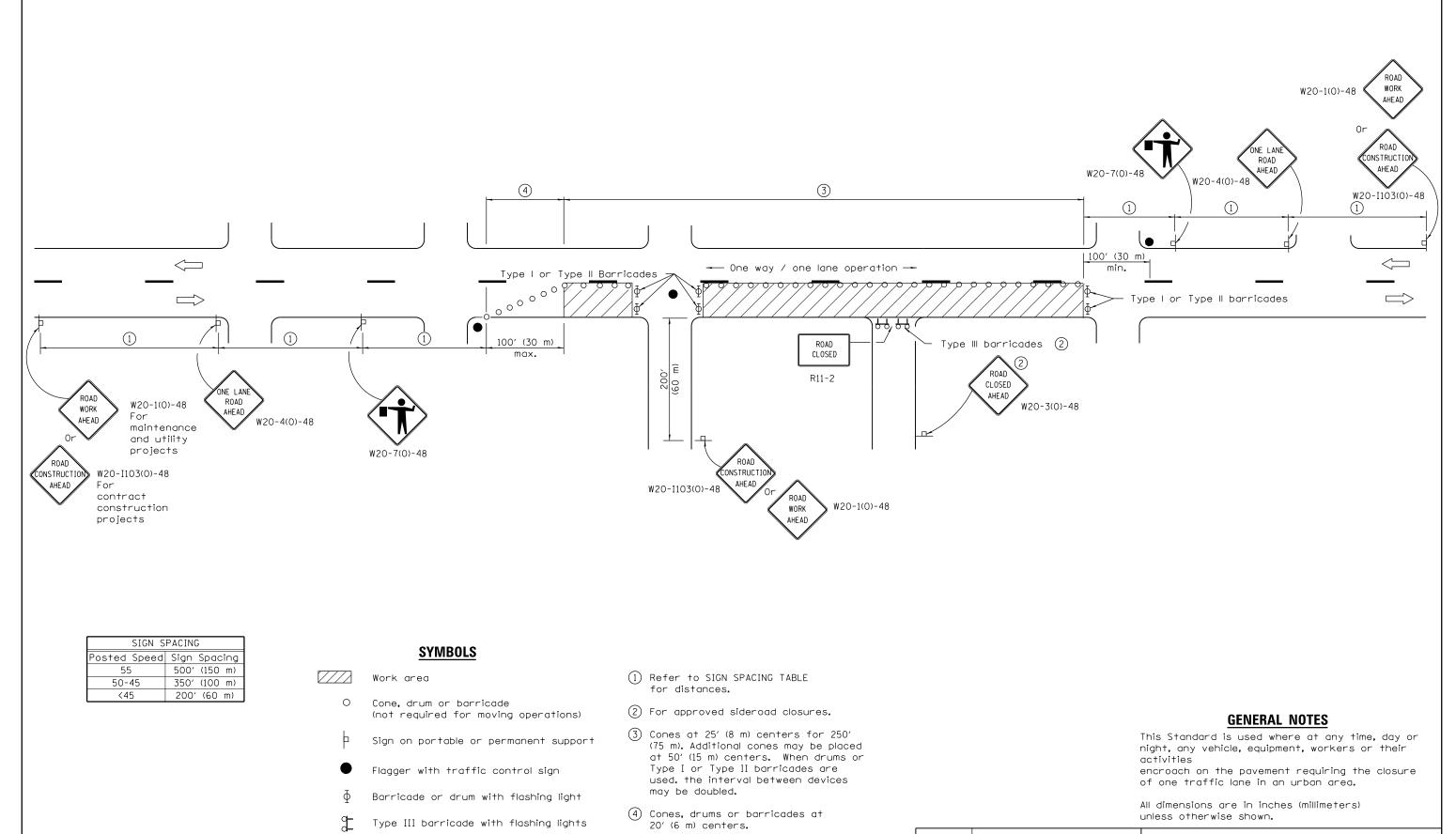
note (5). Rev. dist. between

work and lead truck.

STANDARD 701427-05

January 1,

Maurein In Blow WEER OF DESIGN AND ENVIRONMEN



Illinois Department of Transportation

NGINEER OF DESIGN AND ENVIRONMENT

APPROVED

DATE REVISIONS URBAN LANE CLOSURE. 1-1-11 Revised flagger sign.

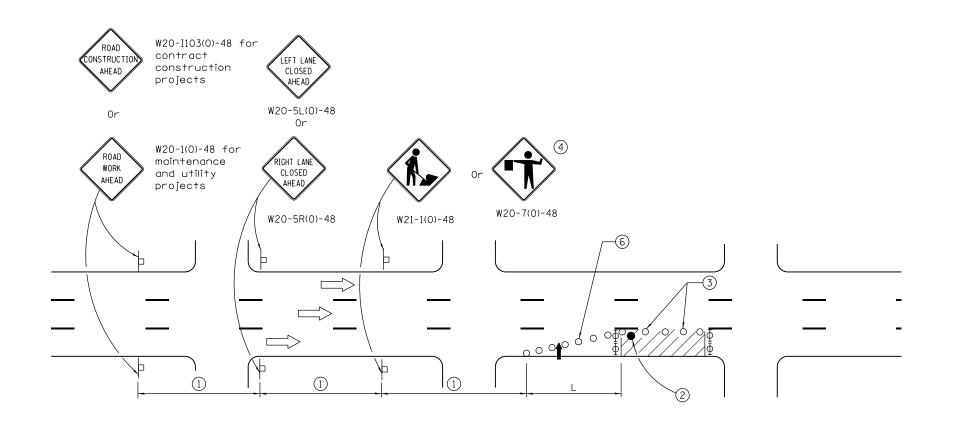
Switched units to

Corrected sign No.'s.

English (metric).

2L, 2W, UNDIVIDED

STANDARD 701501-06



SIGN SPACING			
Posted Speed	Sign Spacing		
55	500' (150 m)		
50-45	350' (100 m)		
<45	200' (60 m)		

SYMBOLS

Arrow board

Cone, drum or barricade

Sign on portable or permanent support

Work area

Barricade or drum with flashing light

Type III barricade with flashing lights

Flagger with traffic control sign.

- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 MPH
- Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50′ (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- 4 Use flagger sign only when flagger is
- (5) For approved sideroad closures.
- (6) Cones, drums or barricades at 20′ (6 m) in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in urban areas.

Calculate L as follows:

SPEED LIMIT FORMULAS

English (Metric)

 $L = \frac{WS^2}{150}$ 40 mph (70 km/h) or less:

45 mph (80 km/h) L=0.65(W)(S) L=(W)(S)

W = Width of offset in feet (meters).

or greater:

S = Normal posted speed mph (km/h).

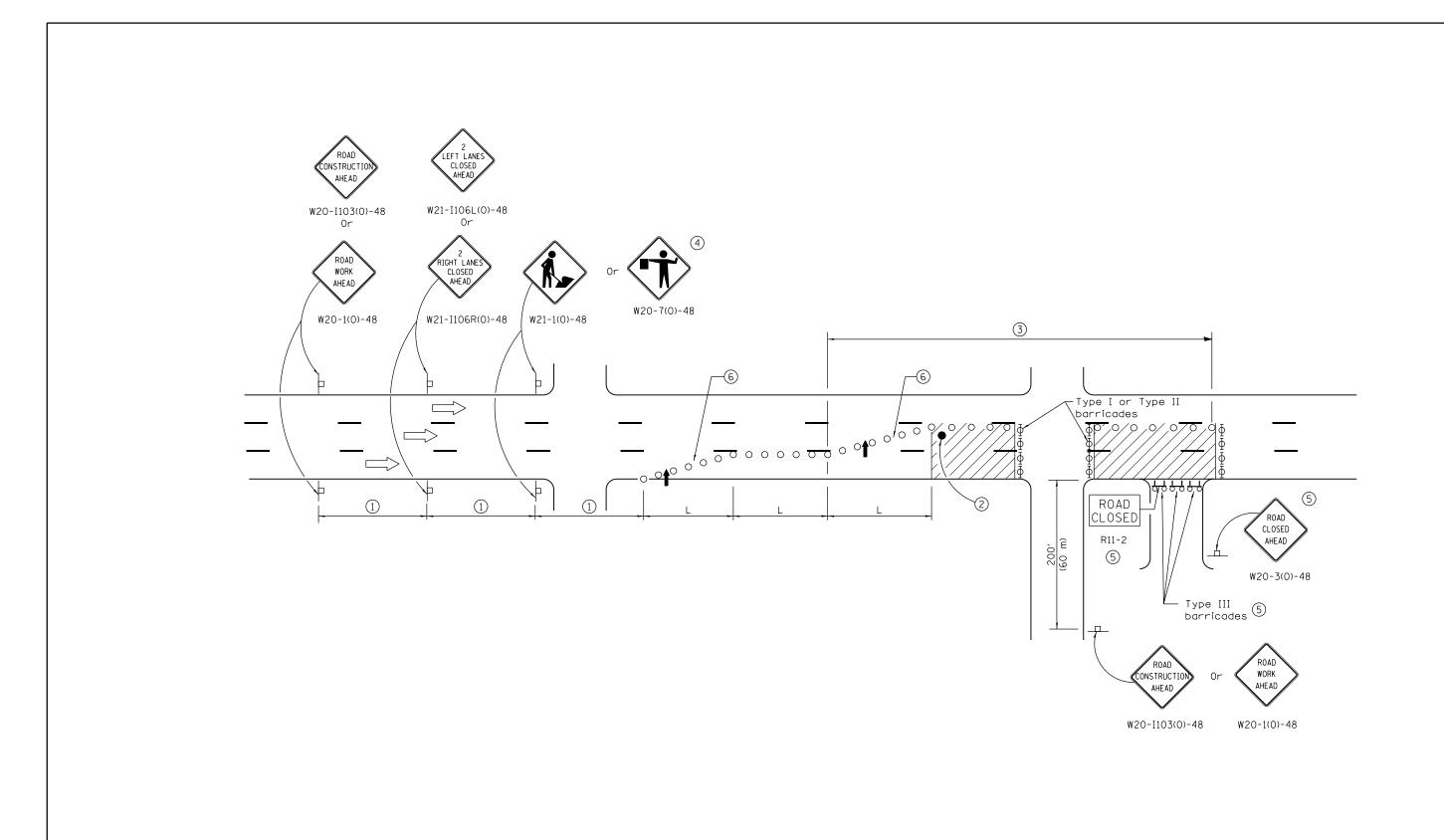
All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS	URBAN	LAN	E CL	.OSUI	RE,
1-1-14	Revised workers sign	MULTILANE ,	1W/	ΛR	2 Μ/	۱Λ/
	number to agree with	·				
	current MUTCD.	NONTRAV	ERS <i>P</i>	ABLE	MED)IAI
1-1-13	Omitted text 'WORKERS'				(Sheet	1 0
	sign.	NATO	DARD	70160	1 00	
		JIAN	DAND	70100	1-03	

Illinois Department of Transportation January 1, ENGINEER OF SAFETY ENGINEERING APPROVED

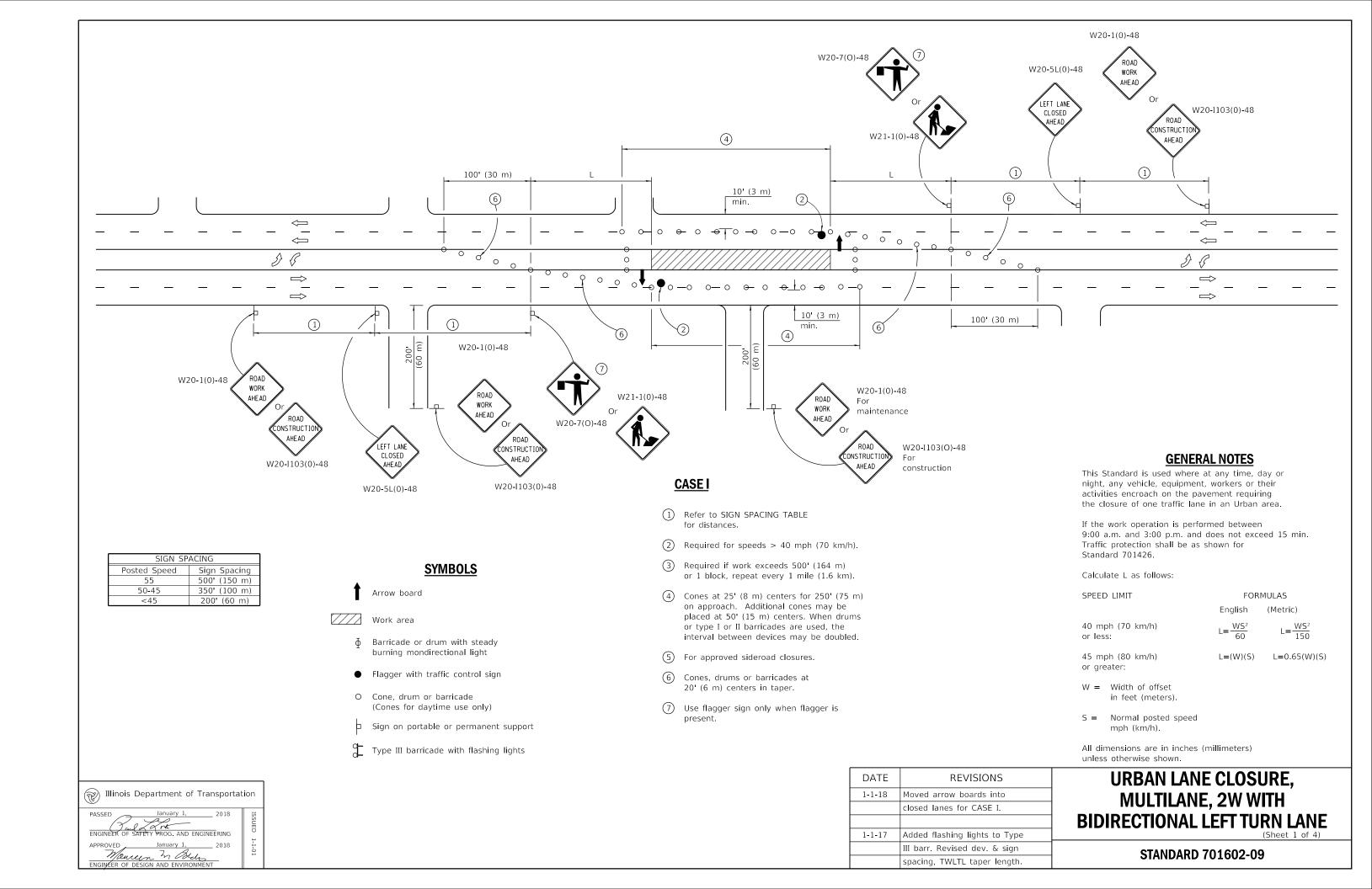
SABLE MEDIAN (Sheet 1 of 2)

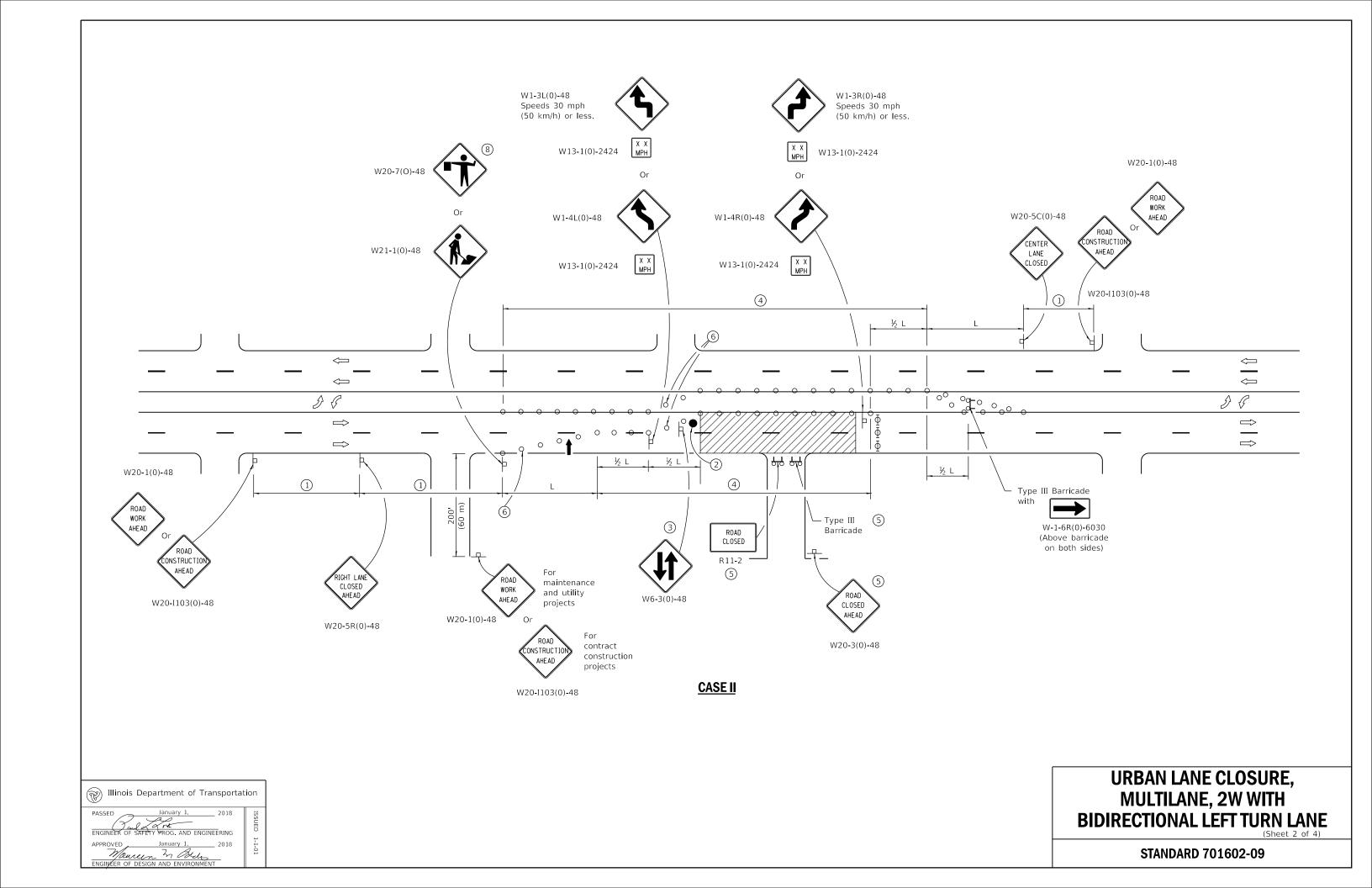
OR 2W WITH

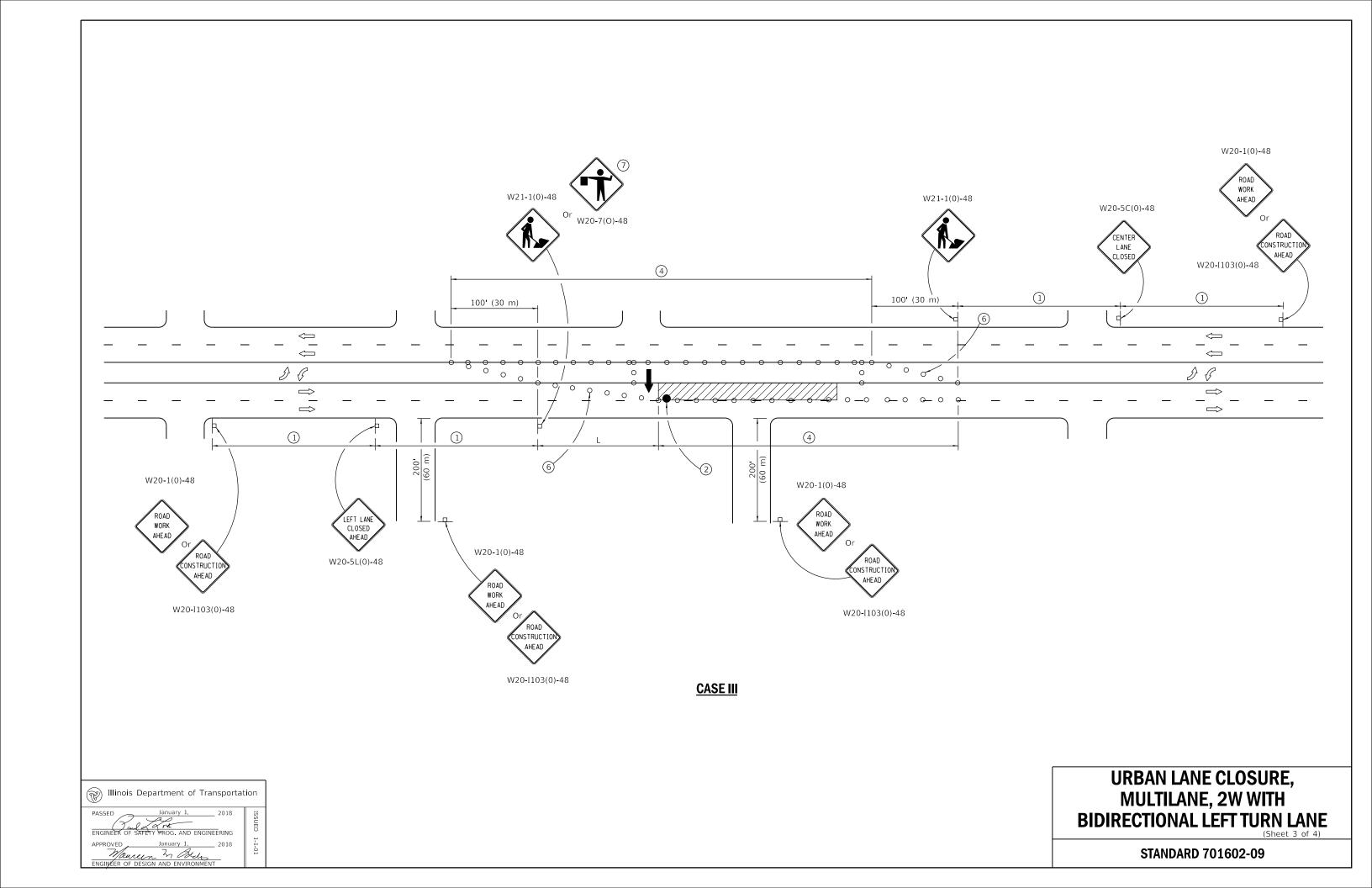


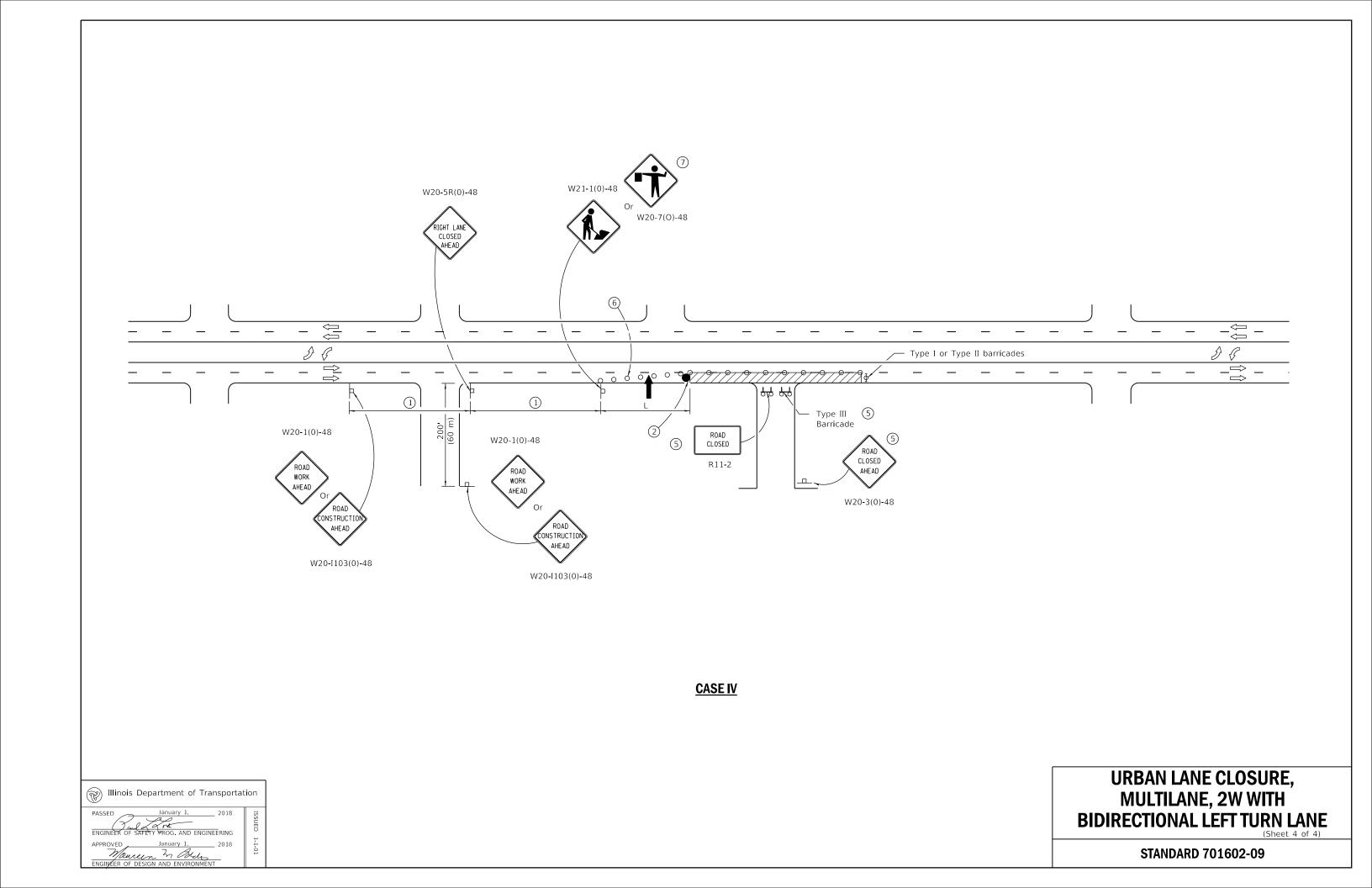
URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN (Sheet 2 of 2)

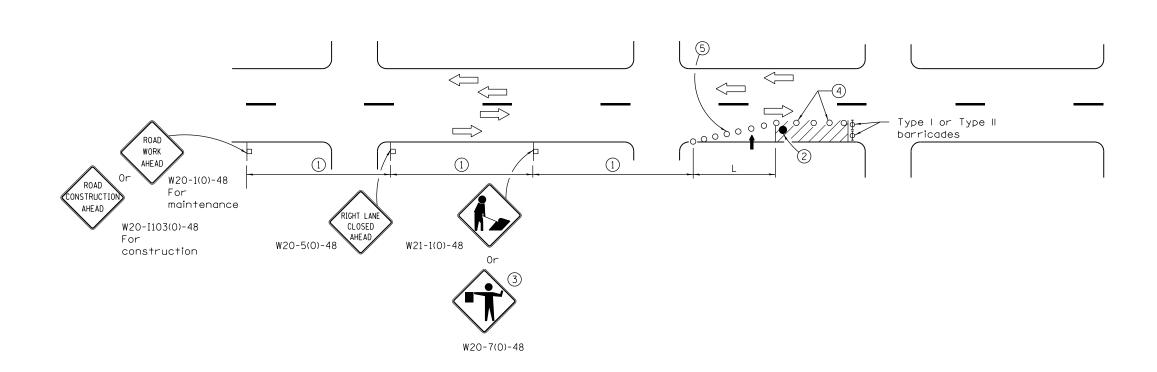
STANDARD 701601–09











SIGN SPACING			
Posted Speed	Sign Spacing		
55	500' (150 m)		
50-45	350' (100 m)		
<45	200' (60 m)		

SYMBOLS

Arrow board

Cone, drum or barricade

Sign on portable or permanent support

Work area

Barricade or drum with flashing light

Flagger with traffic control sign.

- 1) Refer to SIGN SPACING TABLE for distances.
- 2 Required for speeds > 40 mph.
- ③ Use flagger sign only when flagger is present.
- (4) Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- (5) Cones, drums or barricades at 20' (6 m) centers in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an Urban area.

Calculate L as follows:

SPEED LIMIT FORMULAS

English (Metric)

40 mph (70 km/h) $L = \frac{WS^2}{60}$ $L = \frac{WS^2}{150}$

45 mph (80 km/h) L=(W)(S) L=0.65(W)(S) or greater:

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

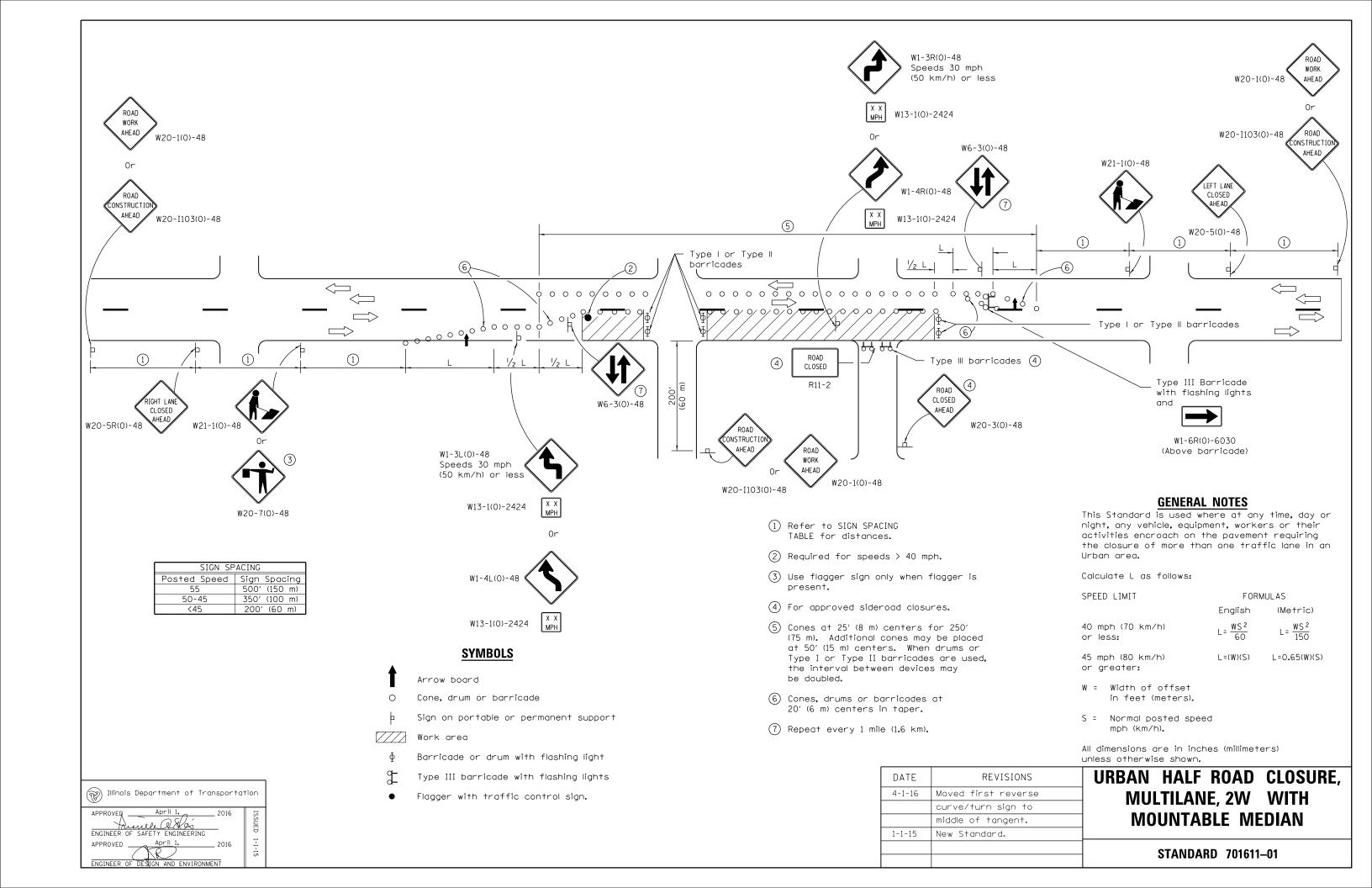
All dimensions are in inches (millimeters) unless otherwise shown.

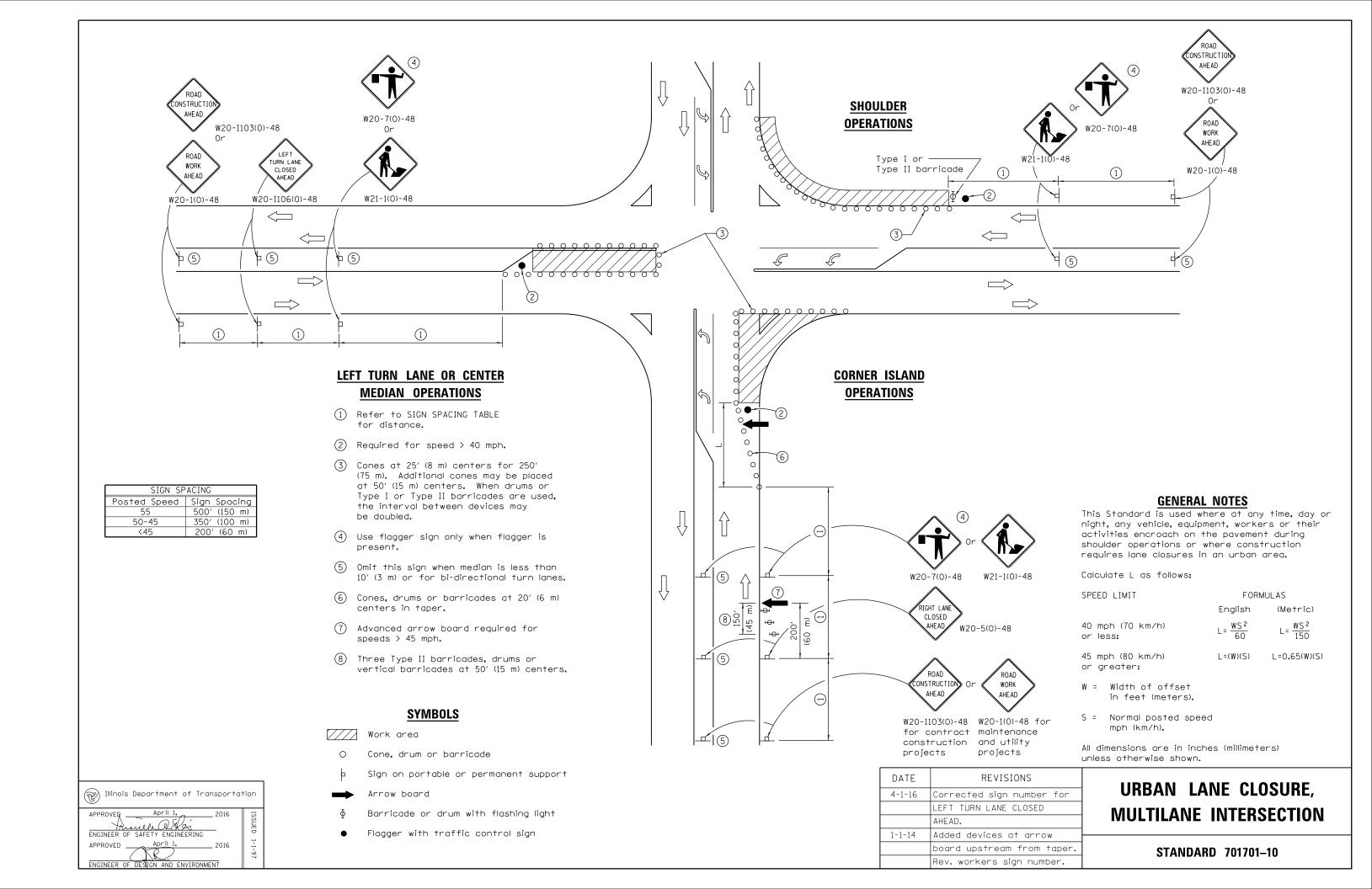
DATE	REVISIONS	l
1-1-15	Renamed standard. Moved	
	case on Sheet 2 to new	
	Highway Standard.	
1-1-14	Revised workers sign	L
	number to agree with	
·	current MUTCD.	

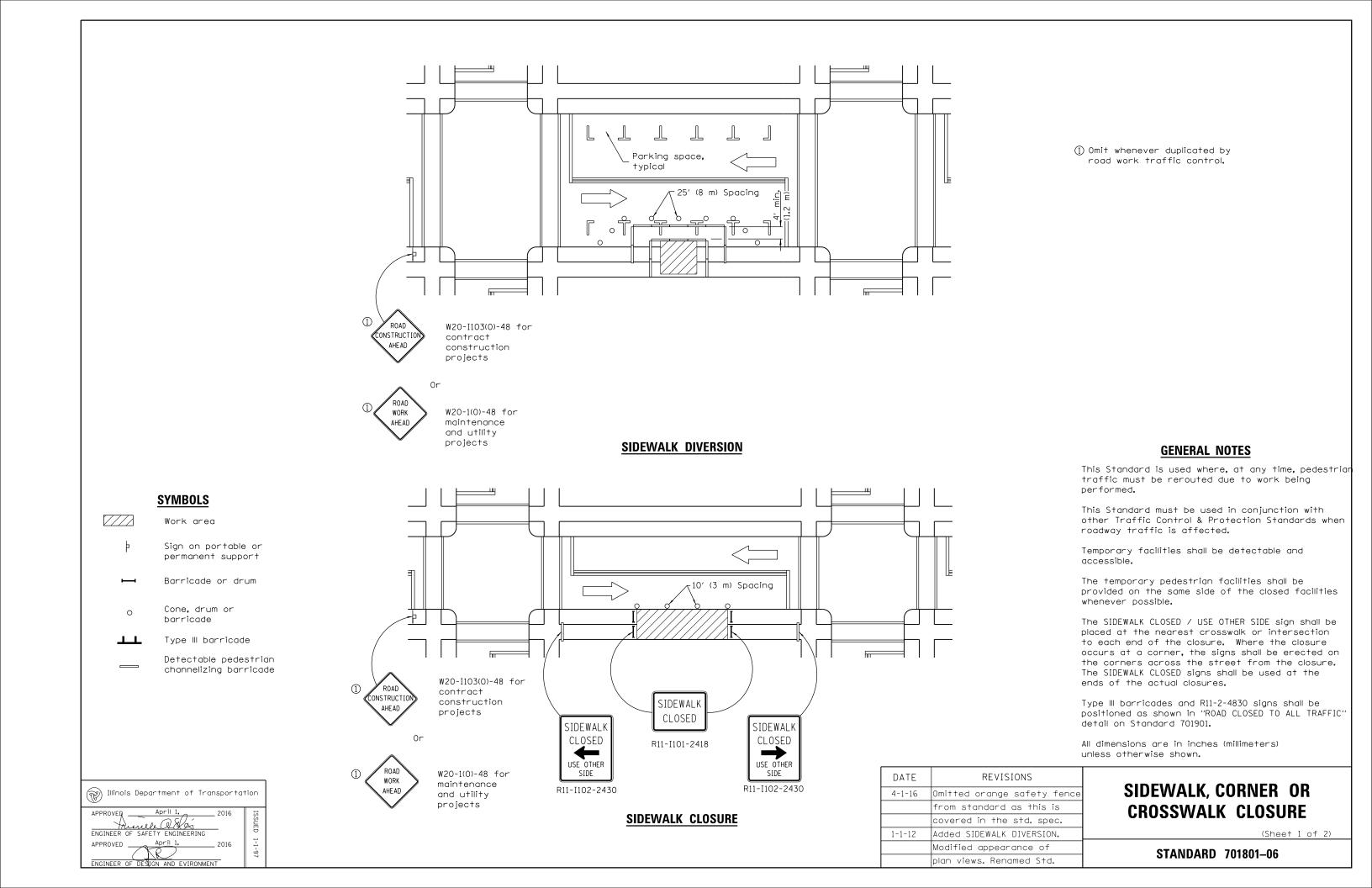
URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

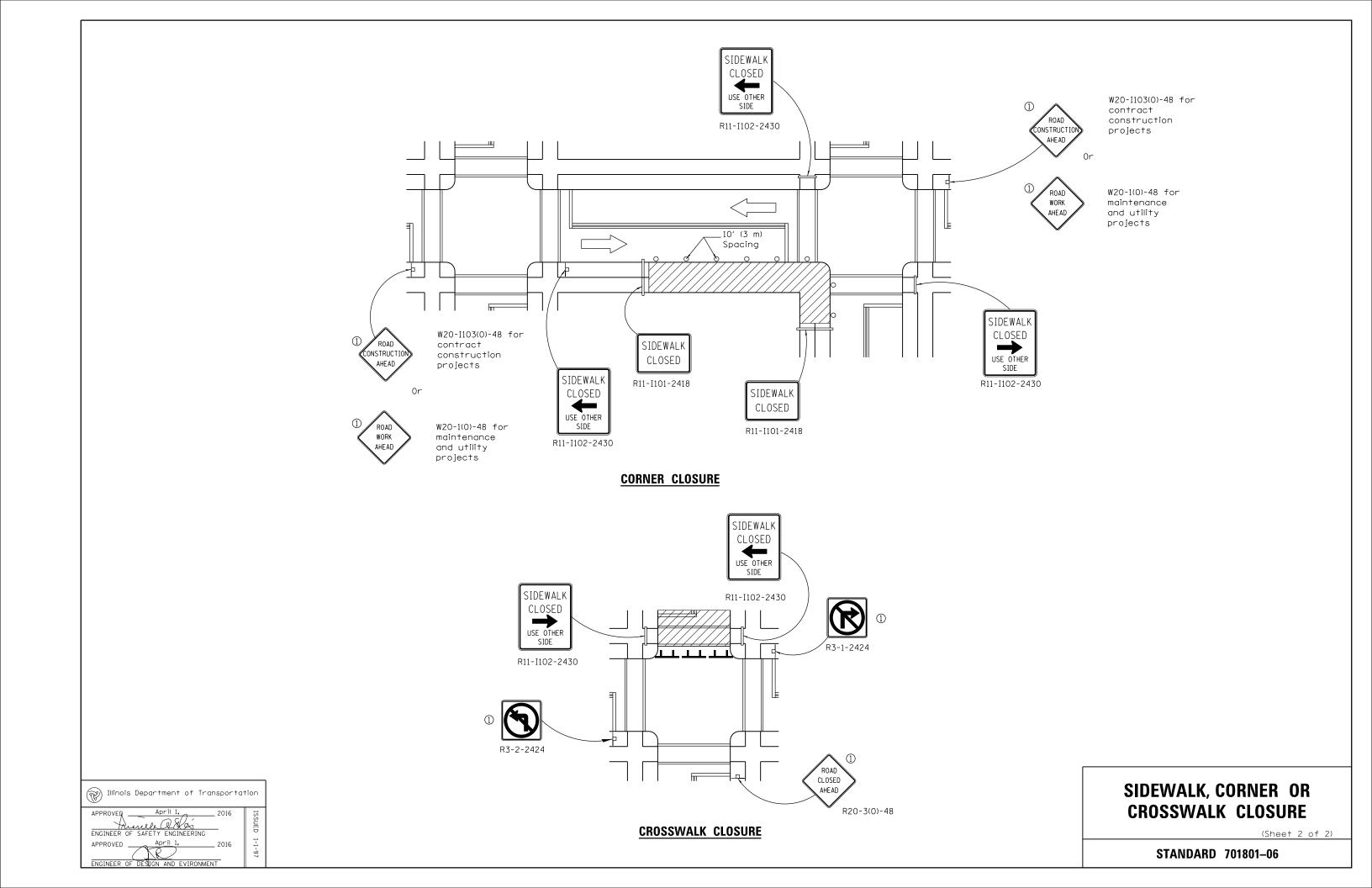
STANDARD 701606–10

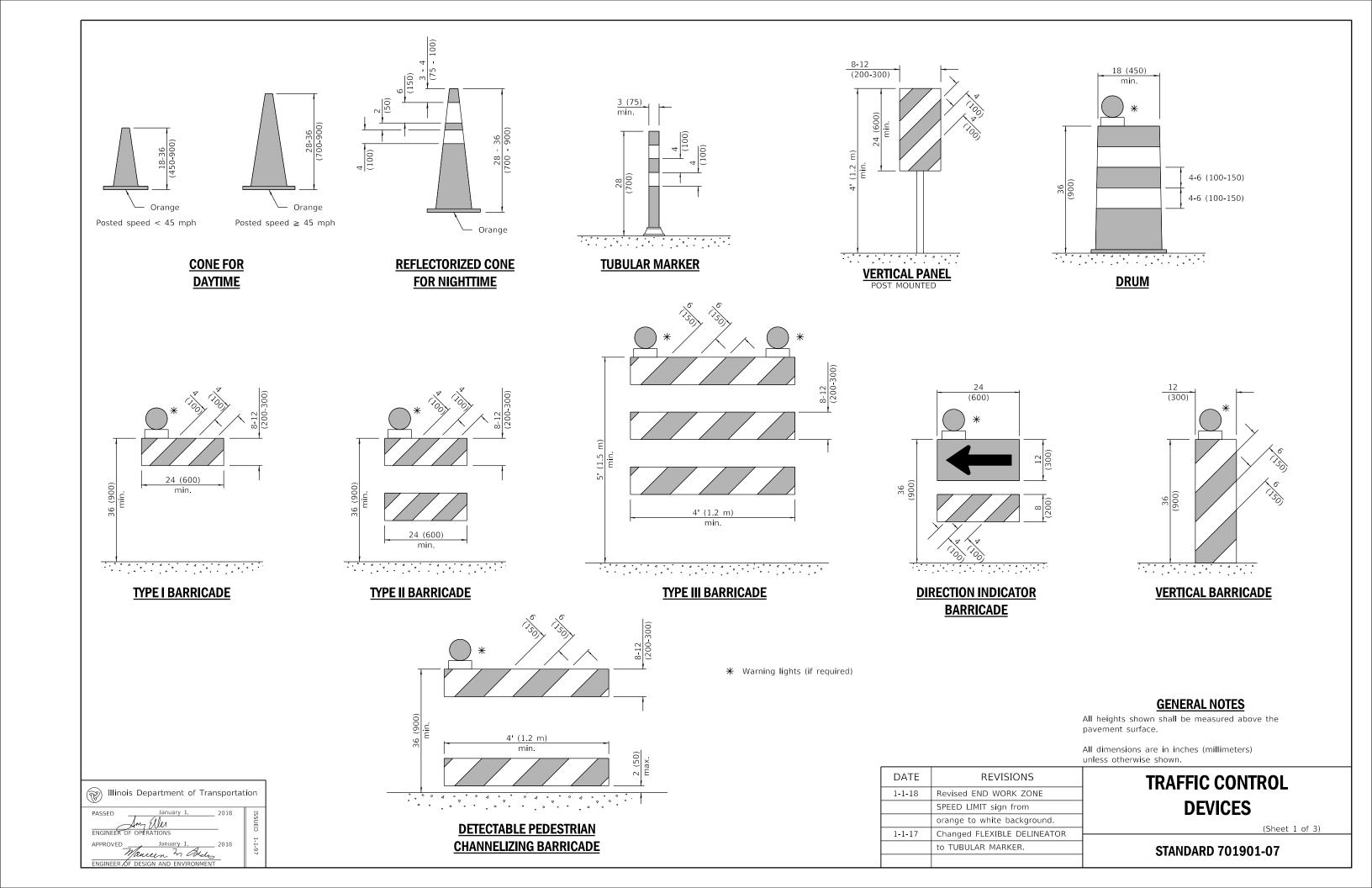
Illinois [epartment of Tr	ransportat	tion
	January 1, Well Olay SAFETY ENGINEERING	2015	Danssi
APPROVED	January 1,	2015	1-1-

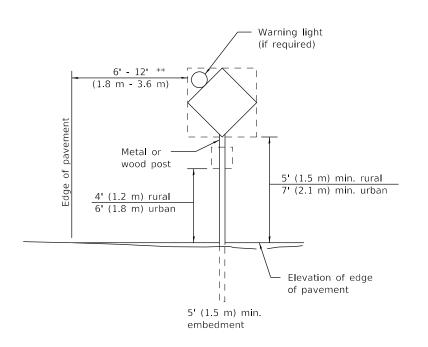






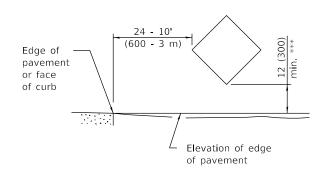






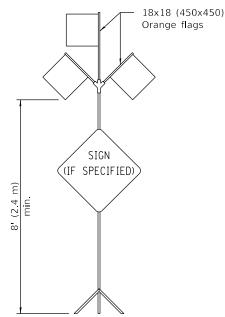
POST MOUNTED SIGNS

** When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.

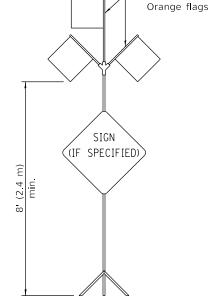


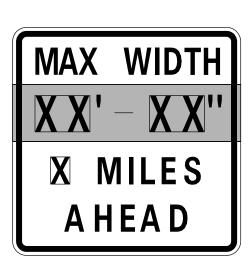
SIGNS ON TEMPORARY SUPPORTS

*** When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.



HIGH LEVEL WARNING DEVICE

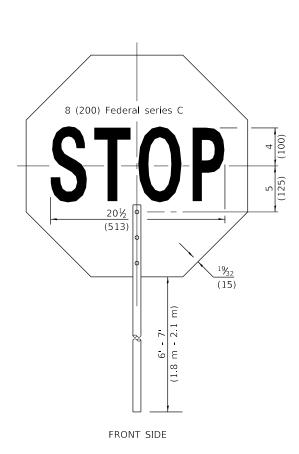


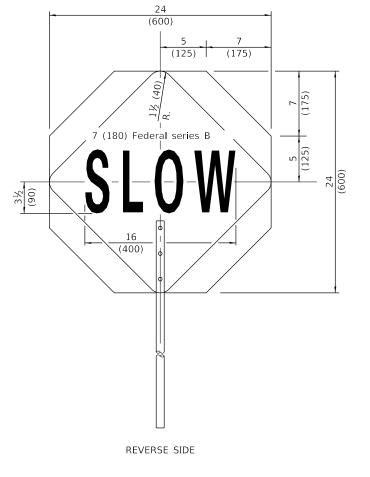


W12-I103-4848

WIDTH RESTRICTION SIGN

XX'-XX" width and X miles are variable.





FLAGGER TRAFFIC CONTROL SIGN

ROAD CONSTRUCTION NEXT X MILES

END CONSTRUCTION

G20-I104(0)-6036

G20-I105(0)-6024

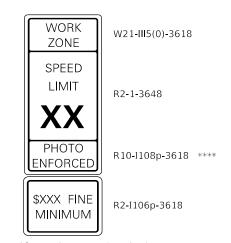
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multilane highways.

WORK LIMIT SIGNING



Sign assembly as shown on Standards or as allowed by District Operations.



G20-I103-6036

This sign shall be used when the above sign assembly is used.

HIGHWAY CONSTRUCTION **SPEED ZONE SIGNS**

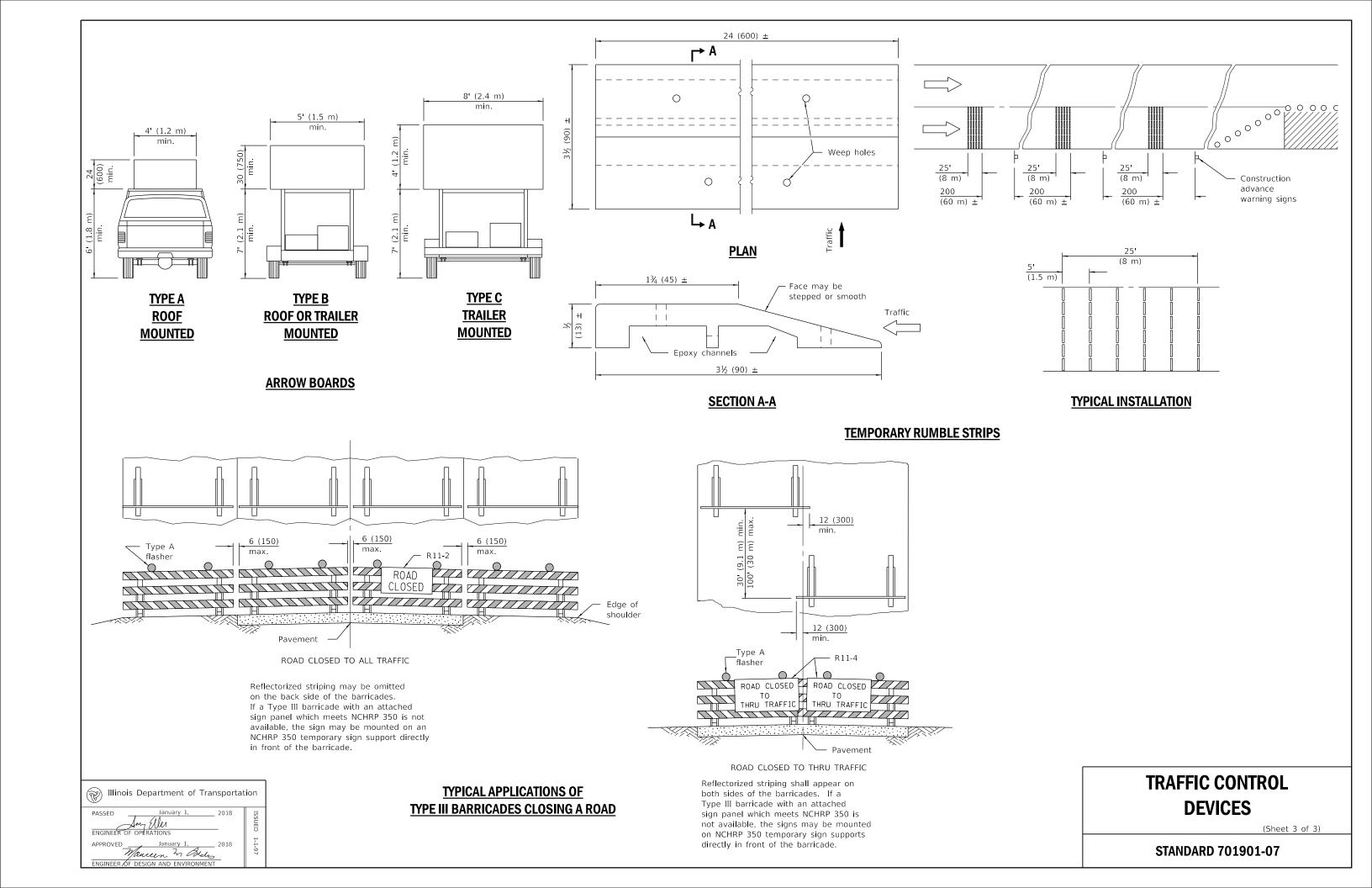
**** R10-I108p shall only be used along roadways under the juristiction of the State.

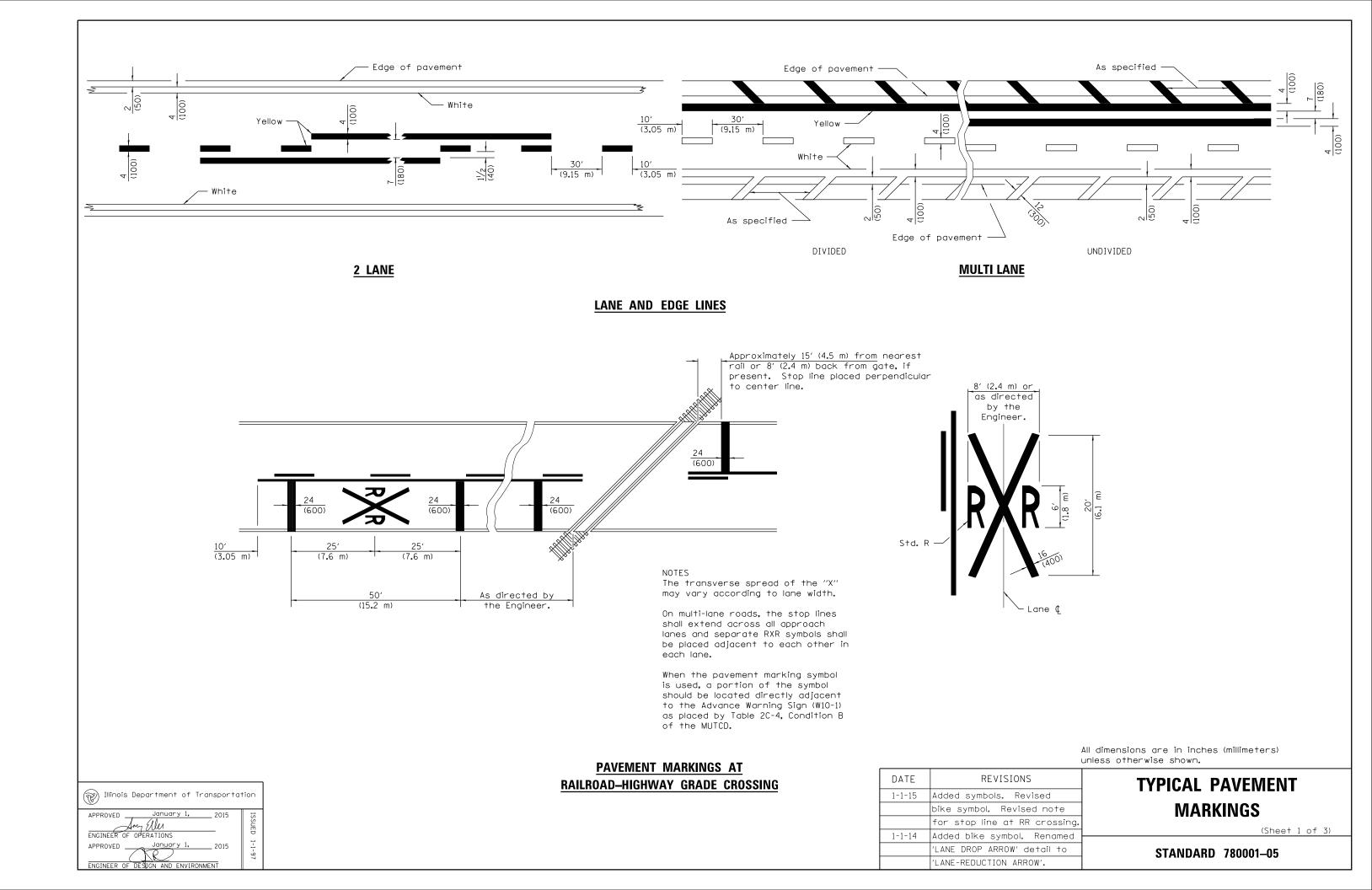
TRAFFIC CONTROL **DEVICES**

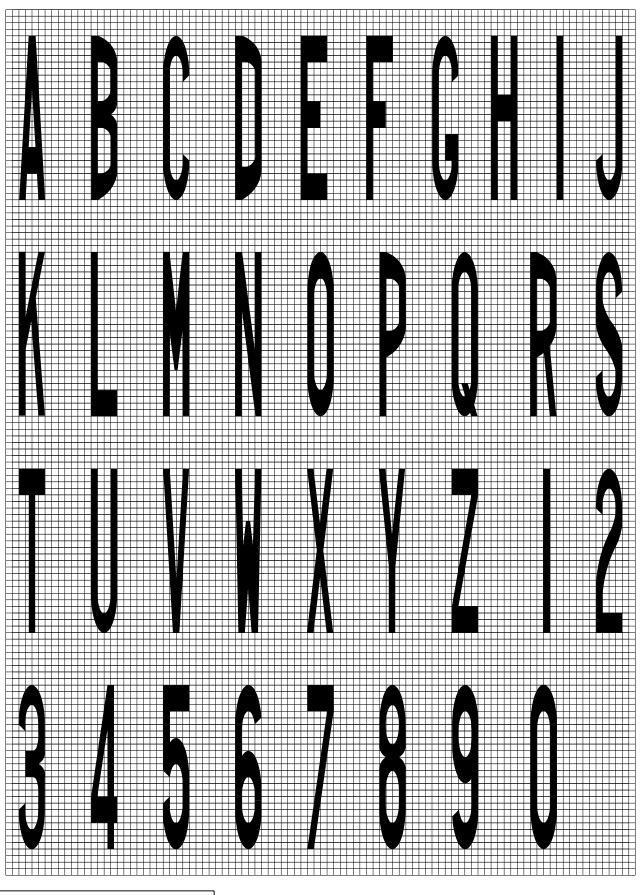
(Sheet 2 of 3)

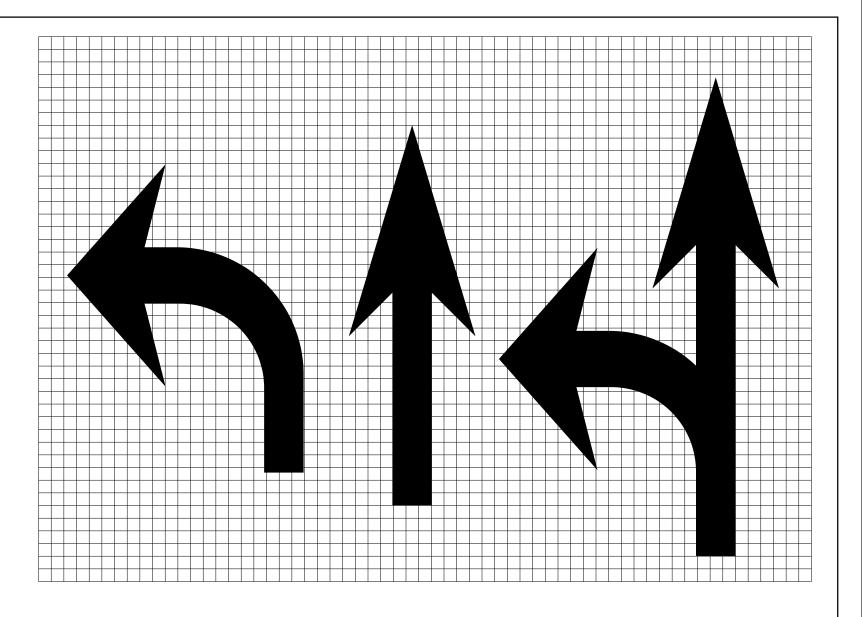
STANDARD 701901-07

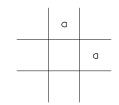












Legend Height	Arrow Size	а
6′ (1.8 m)	Small	2.9 (74)
8′ (2.4 m)	Large	3.8 (96)

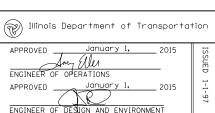
The space between adjacent letters or numerals should be approximately 3 (75) for 6' (1.8 m) legend and 4 (100) for 8' (2.4 m) legend.

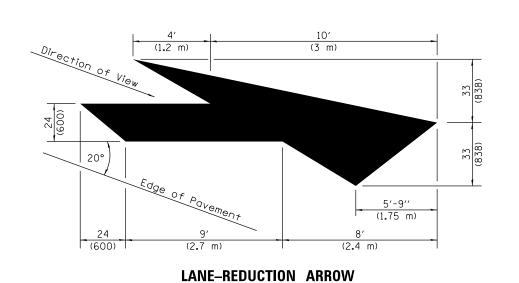
LETTER AND ARROW GRID SCALE

TYPICAL PAVEMENT MARKINGS

(Sheet 2 of 3)

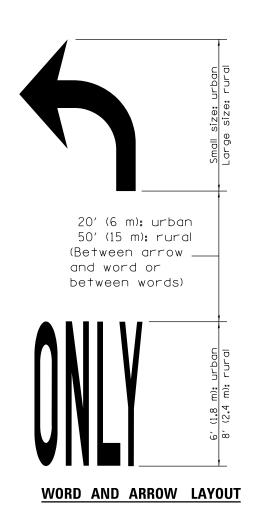
STANDARD 780001-05

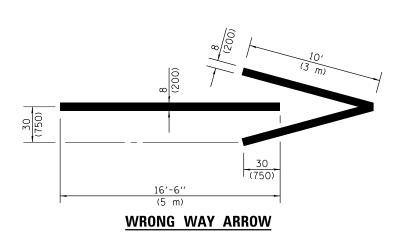




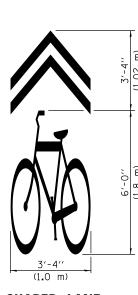
Right lane-reduction arrow shown.
Use mirror image for left lane.

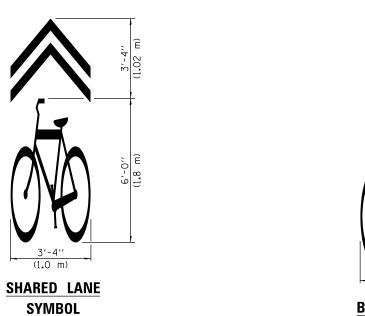
Illinois Department of Transportation

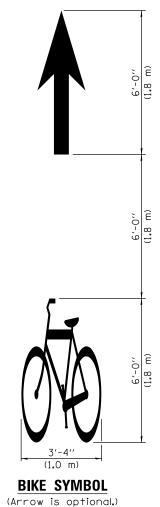












TYPICAL PAVEMENT MARKINGS

(Sheet 3 of 3)

STANDARD 780001-05

