002

03-06-2020 LETTING ITEM 002

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 45 + 2 = 47 TOTAL SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505 BR(11)	COOK	45	1
	ILLINOIS	CONTRACT NO. 60R66		

PROPOSED
HIGHWAY PLANS

F.A.U. RTE. 1398 / CHICAGO AVENUE
SECTION: 0505–BR(11)
PROJECT: STP–GHSR(655)
OVER DES PLAINES RIVER
BRIDGE DECK OVERLAY AND BRIDGE JOINT REPAIR
COUNTY: COOK

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA
FUNCTIONAL CLASSIFICATION: URBAN COLLECTOR
2018 ADT = 8,950
DESIGN SPEED: 35 M.P.H.
SPEED LIMIT: 35 M.P.H.

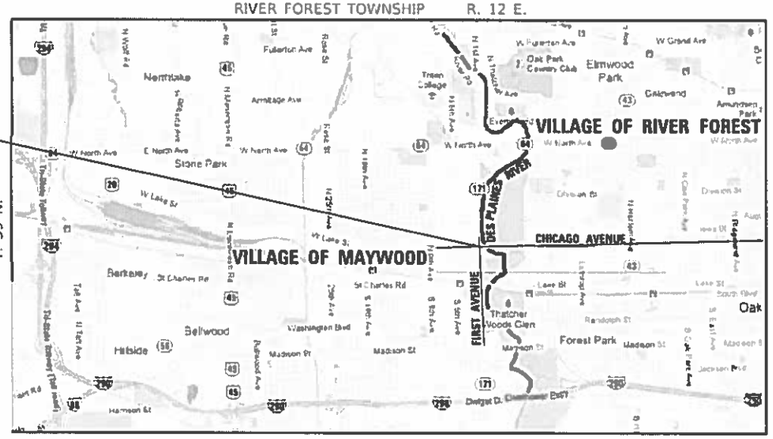
PROJECT LOCATED IN THE VILLAGE OF MAYWOOD AND VILLAGE OF RIVER FOREST

PROJECT BEGINS
STA. 31 + 09.00

BRIDGE
S.N. 016–0863

PROJECT ENDS
STA. 38 + 54.50

C–91–199–12

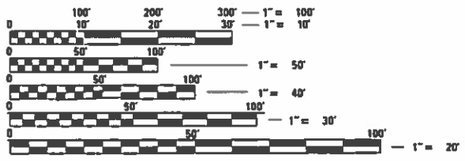


LOCATION MAP

GROSS LENGTH OF PROJECT = 745.50 FEET = 0.141 MILES
NET LENGTH OF PROJECT = 745.50 FEET = 0.141 MILES

D-91-199-12

LOCATION OF SECTION INDICATED THUS: –■–



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

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

design firm no. 184001036
whks
engineers + planners + land surveyors

SCOTT D. SANFORD
062–051324
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS
Expires: 11/30/2021
12-9-19

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED DECEMBER 9, 2019
REGIONAL ENGINEER
JAN 31, 2020
ENGINEER OF DESIGN AND ENVIRONMENT
JAN 31, 2020
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DISTRICT ONE – DESIGN
PROJECT MANAGER : FAWAD AQUEEL, PE, PTOE (847) 705–4247
PROJECT ENGINEER : PRAVEEN KAINI, PE (847) 705–4237

CONTRACT NO. 60R66

REV. - MS

INDEX OF SHEETS

ILLINOIS DOT HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
604006-05	FRAME AND GRATE, TYPE 3
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-16	TRAFFIC BARRIER TERMINAL, TYPE 6
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT ONE STANDARDS*

BD-32	BUTT JOINTS AND HMA TAPER
BD-34	DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY 1 SPL
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-11	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS (1 & 2 OF 7 SHEETS)
TS-07	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

* INCLUDED AS SHEETS 36-45.

GENERAL NOTES

1. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
3. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS.
4. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
5. IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
6. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
7. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
10. THE RESIDENT ENGINEER SHALL CONTACT KYLIE VOGRIN, AREA TRAFFIC FIELD ENGINEER, AT KYLIE.VOGRIN@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
11. ANY SIGNAGE, PAVEMENT MARKINGS AND REFLECTORS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
12. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC.
13. DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF MAYWOOD AND AMERICAN TRAFFIC SOLUTIONS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF MAYWOOD	AMERICAN TRAFFIC SOLUTIONS
40 MADISON STREET	2737 HEREFORD AVENUE
MAYWOOD, IL 60153	ST. LOUIS, MO 63139
(708) 450-6300	(314) 664-9898

THE VILLAGE OF MAYWOOD OR AMERICAN TRAFFIC SOLUTIONS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION.

14. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

LOCATION	20200500	FOR INFORMATION ONLY		20400800
	EARTH EXCAVATION (WIDENING)	EXCAVATION TO BE USED IN EMBANKMENT (ADJUSTED FOR SHRINKAGE) (EXC. x 0.85)	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE(+) AND SHORTAGE (-)
	CU. YD.	CU. YD.	CU. YD.	CU. YD.
STA. CL 34+50.00 TO STA. CL 37+25.00	143	122	56	66
STA. LT 37+25.00 TO STA. LT 38+50.00	37	31	1	30
TOTAL	180	153	57	96

EARTH EXCAVATION SHRINKAGE FACTOR = 15%

REV. - MS

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	CHECKED - CWC	REVISED	
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PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, LIST OF ILLINOIS DOT HIGHWAY STANDARDS AND GENERAL NOTES – CHICAGO AVENUE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	2
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0047
20200500	EARTH EXCAVATION (WIDENING)	CU YD	180	180
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	12	12
25200110	SODDING, SALT TOLERANT	SQ YD	12	12
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	255	255
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	88	88
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	571	571
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	265	265
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	156	156
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	156	156
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	67	67
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	637	637
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	260	260
44000600	SIDEWALK REMOVAL	SQ FT	637	637
44004250	PAVED SHOULDER REMOVAL	SQ YD	10	10

REV. - MS

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engineers + planners + land surveyors

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PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 1 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	3
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0047
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	208	208
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	255	255
50102400	CONCRETE REMOVAL	CU YD	12.9	12.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.1	14.1
50300260	BRIDGE DECK GROOVING	SQ YD	915	915
50300300	PROTECTIVE COAT	SQ YD	1318	1318
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2090	2090
50800515	BAR SPLICERS	EACH	12	12
52000110	PREFORMED JOINT STRIP SEAL	FOOT	134	134
60250600	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE	EACH	2	2
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	303	303
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	350	350
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 2 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	4
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0047
	63200310	GUARDRAIL REMOVAL	FOOT	78	78
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	143	143
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4
	67100100	MOBILIZATION	L SUM	1	1
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	90	90
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	96	96
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	32	32
	70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	73	73
	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	5444	5444
	70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	145	145

* SPECIALTY ITEM

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PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 3 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	5
		CONTRACT NO. 60R66		
		ILLINOIS FED. AID PROJECT		

				URBAN	CONSTRUCTION CODE 80% FED 20% STATE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0047
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5
	70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2
	70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1389	1389
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1177	1177
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	16	16
*	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	8	8
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	38	38
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
*	88600100	DETECTOR LOOP, TYPE I	FOOT	58	58
*	89502376	REBUILD EXISTING HANDHOLE	EACH	1	1
	X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	80	80

* SPECIALTY ITEM

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PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 4 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	6
		CONTRACT NO. 60R66		
		ILLINOIS FED. AID PROJECT		

				URBAN	CONSTRUCTION CODE 80% FED 20% STATE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0047
	X0327176	WOOD GUARDRAIL REMOVAL	FOOT	733	733
*	X0327638	STREAM GAUGE	EACH	1	1
	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	867	867
*	X2700003	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	518	518
*	X2700005	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 7"	FOOT	140	140
☐	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	38	38
	X6431220	REMOVE AND REPLACE IMPACT ATTENUATOR SAND MODULE	EACH	3	3
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1960	1960
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	10	10
	Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	962	962
	Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	962	962
	Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	1	1
	Z0016702	DETOUR SIGNING	L SUM	1	1
☐	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2

* SPECIALTY ITEM ☐ NON-PARTICIPATING - 100% STATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 5 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	7
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0047
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	64	64
Z0062458	TEMPORARY PAVEMENT (VARIABLE DEPTH)	TON	13	13
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1

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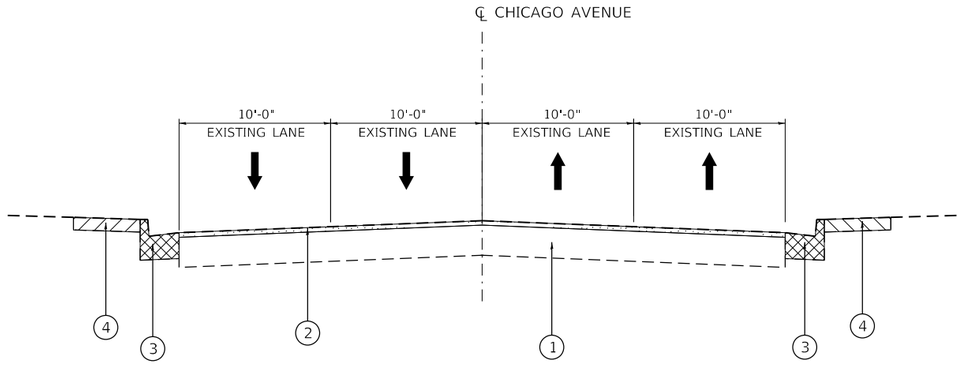
PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 6 OF 6 SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	8
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		

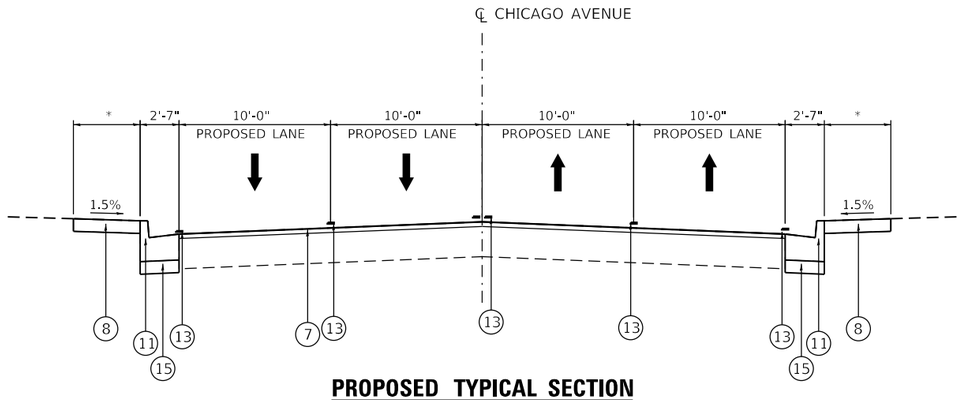


EXISTING TYPICAL SECTION

(LOOKING EAST)
STA. 31+16.00 TO STA. 31+82.96

LEGEND

1. EXISTING PAVEMENT
2. SURFACE REMOVAL - BUTT JOINT
3. COMBINATION CURB AND GUTTER REMOVAL
4. SIDEWALK REMOVAL
5. PAVED SHOULDER REMOVAL
6. GUARDRAIL REMOVAL
7. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1¾")
8. PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
9. AGGREGATE SHOULDERS, TYPE B 8"
10. HOT-MIX ASPHALT SHOULDERS, 8"
11. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
12. PROPOSED GUARDRAIL
13. PAVEMENT MARKING - LINE 4"
14. EARTH SHOULDERS
15. SUBBASE GRANULAR MATERIAL, TYPE B 4"
16. AGGREGATE SUBGRADE IMPROVEMENT 12"



PROPOSED TYPICAL SECTION

(LOOKING EAST)
STA. 31+16.00 TO STA. 31+82.96

* MATCH EXISTING WIDTH

MIXTURE TYPE	AIR VOIDS @ N_{DES}	QMP
SURFACE COURSE		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1.75")	4% @ 50 GYR.	QC/QA
HMA SHOULDERS, 8"		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (2")	4% @ 50 GYR.	QC/QA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (6")	4% @ 50 GYR.	QC/QA
TEMPORARY PAVEMENT (VARIABLE DEPTH)		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	4% @ 50 GYR.	QC/QA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

NOTES:

1 THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

2 THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

3 FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

4 SEE BUTT JOINT AND HMA TAPER DETAILS FOR ADDITIONAL NOTES AND DETAILS.

5 QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

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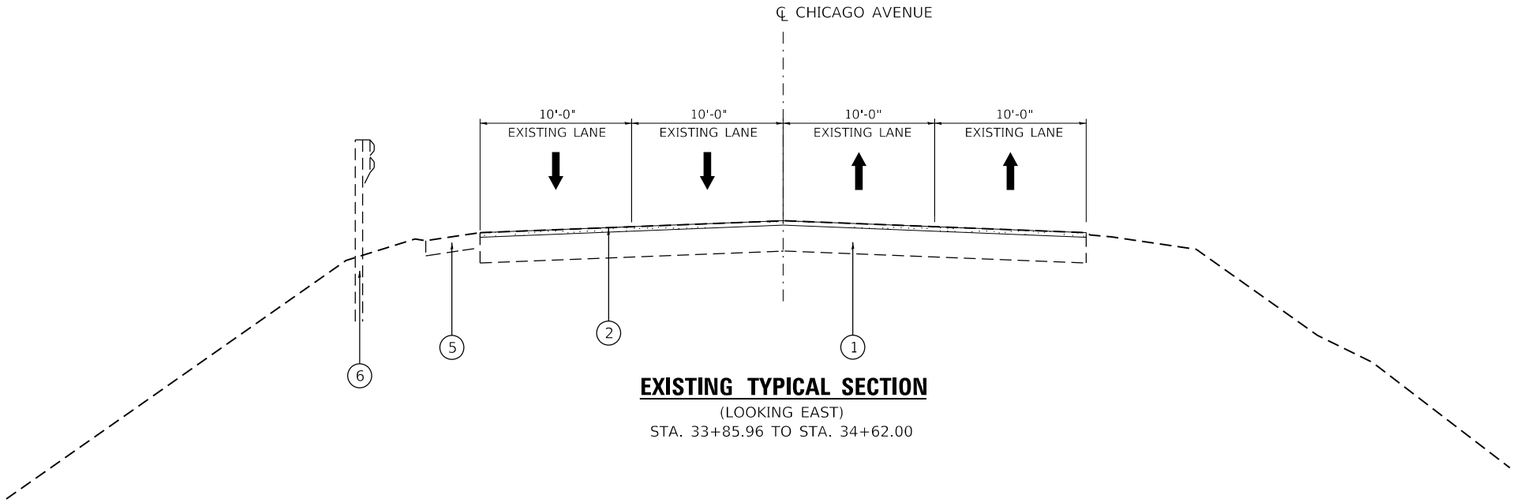
	CHECKED - CWC	REVISED	
PLOT SCALE = 10.0000 ' / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
CHICAGO AVENUE

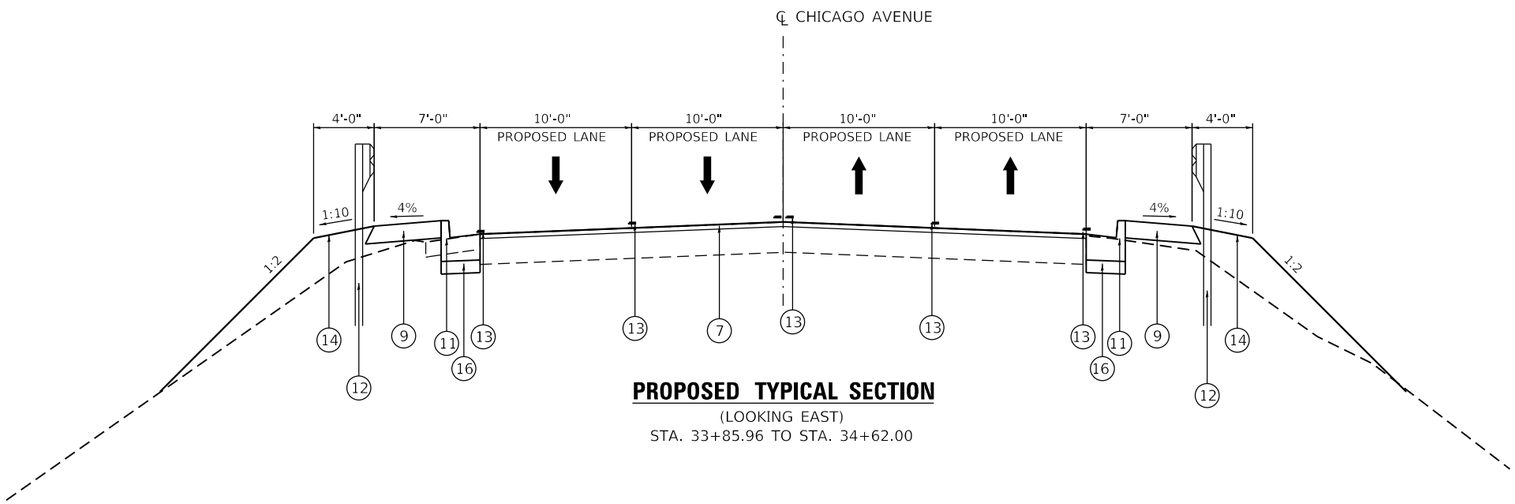
SCALE: 1" = 5' | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	9
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION

(LOOKING EAST)
STA. 33+85.96 TO STA. 34+62.00



PROPOSED TYPICAL SECTION

(LOOKING EAST)
STA. 33+85.96 TO STA. 34+62.00

LEGEND

1. EXISTING PAVEMENT
2. SURFACE REMOVAL - BUTT JOINT
3. COMBINATION CURB AND GUTTER REMOVAL
4. SIDEWALK REMOVAL
5. PAVED SHOULDER REMOVAL
6. GUARDRAIL REMOVAL
7. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1¾")
8. PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
9. AGGREGATE SHOULDERS, TYPE B 8"
10. HOT-MIX ASPHALT SHOULDERS, 8"
11. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
12. PROPOSED GUARDRAIL
13. PAVEMENT MARKING - LINE 4"
14. EARTH SHOULDERS
15. SUBBASE GRANULAR MATERIAL, TYPE B 4"
16. AGGREGATE SUBGRADE IMPROVEMENT 12"

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whks engineers + planners + land surveyors

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	CHECKED - CWC	REVISED	
PLOT SCALE = 10.0000 ' / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
CHICAGO AVENUE

SCALE: 1" = 5' | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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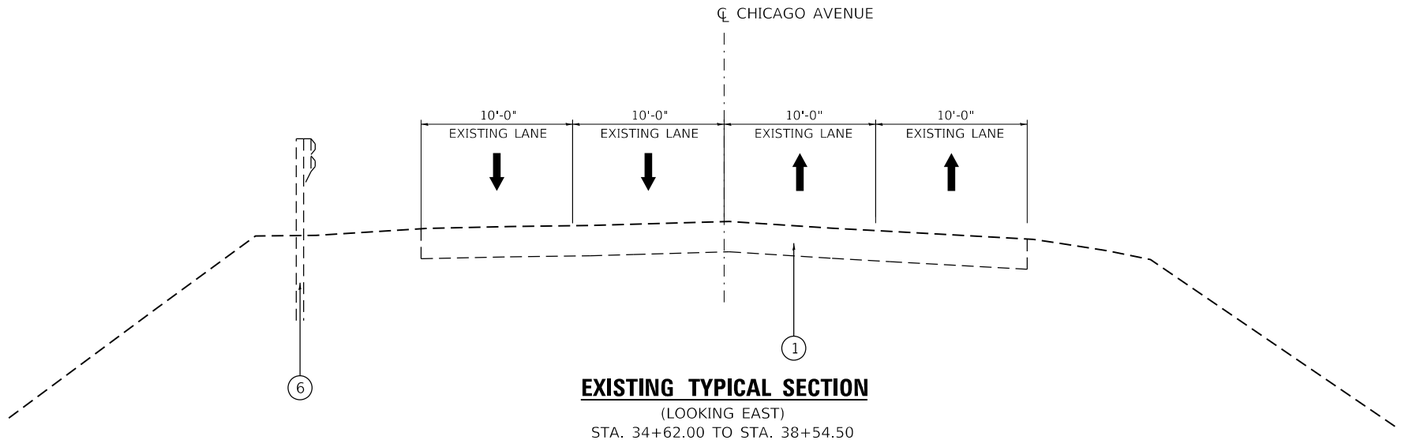
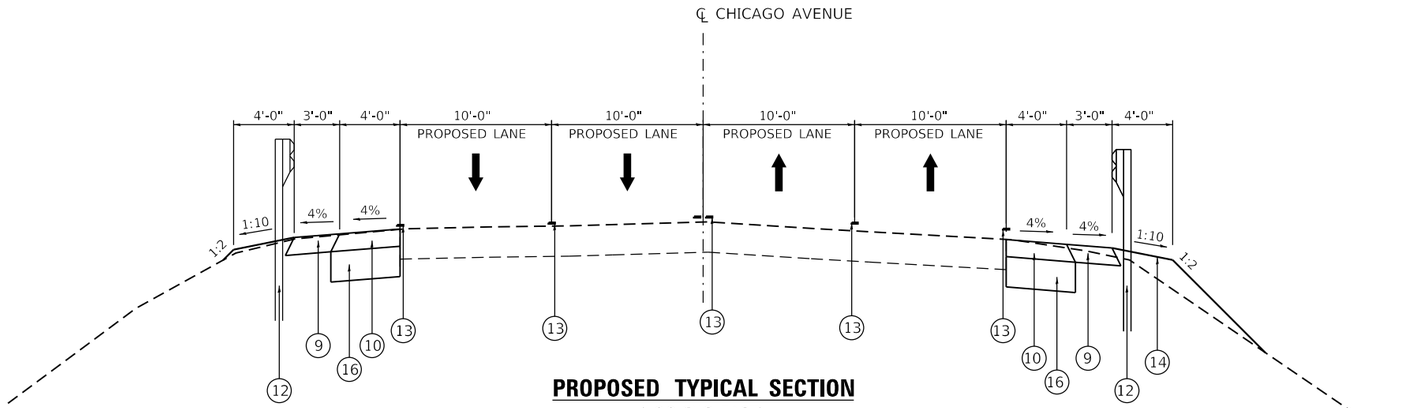
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	



EXISTING TYPICAL SECTION

(LOOKING EAST)
STA. 34+62.00 TO STA. 38+54.50



PROPOSED TYPICAL SECTION

(LOOKING EAST)
STA. 34+62.00 TO STA. 38+54.50

LEGEND

1. EXISTING PAVEMENT
2. SURFACE REMOVAL - BUTT JOINT
3. COMBINATION CURB AND GUTTER REMOVAL
4. SIDEWALK REMOVAL
5. PAVED SHOULDER REMOVAL
6. GUARDRAIL REMOVAL
7. HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1¾")
8. PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
9. AGGREGATE SHOULDERS, TYPE B 8"
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12. PROPOSED GUARDRAIL
13. PAVEMENT MARKING - LINE 4"
14. EARTH SHOULDERS
15. SUBBASE GRANULAR MATERIAL, TYPE B 4"
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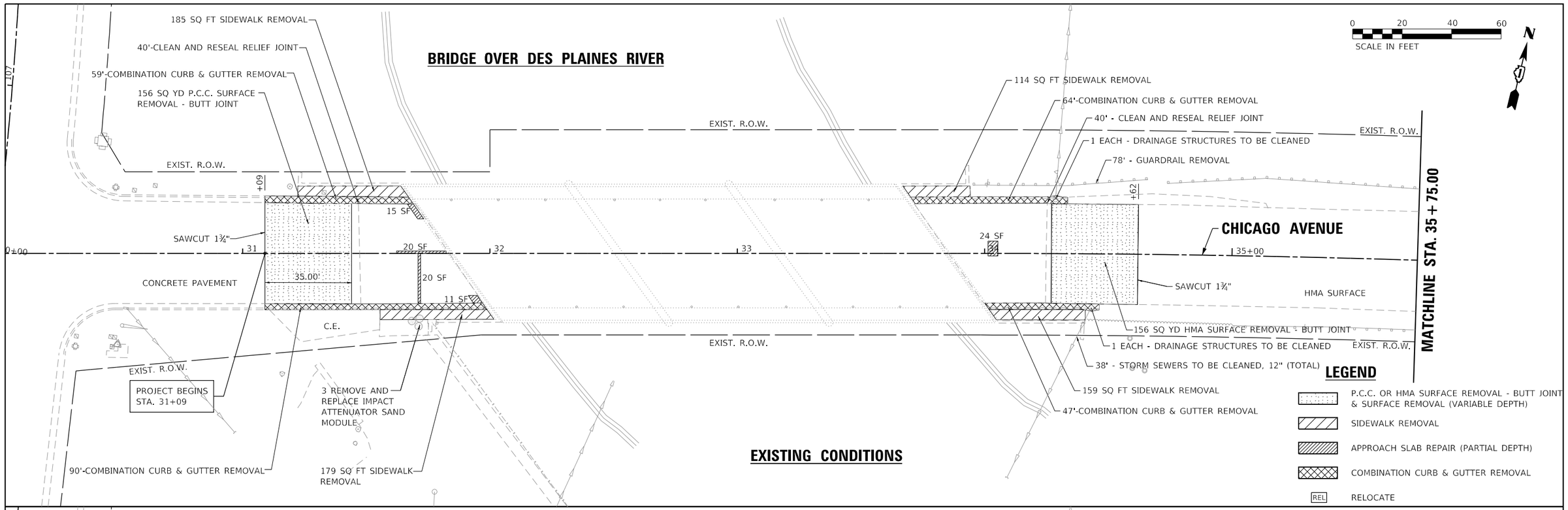
	CHECKED - CWC	REVISED	
PLOT SCALE = 10.0000 ' / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

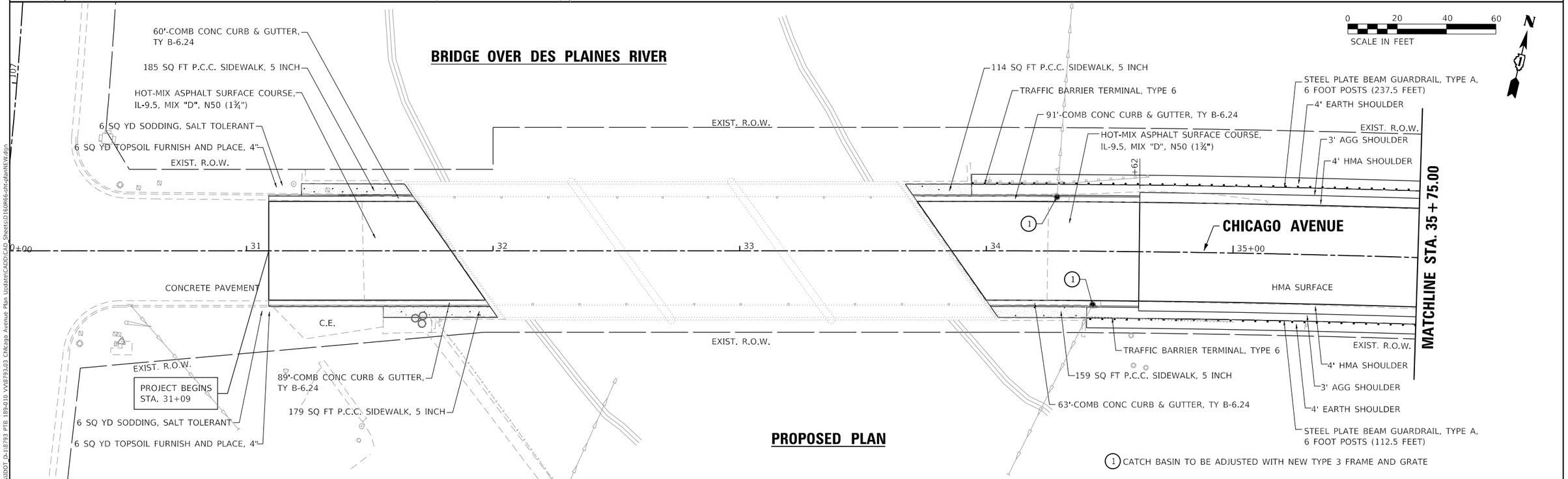
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
CHICAGO AVENUE

SCALE: 1" = 5' | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	11
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		





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	CHECKED - SDS	REVISED	
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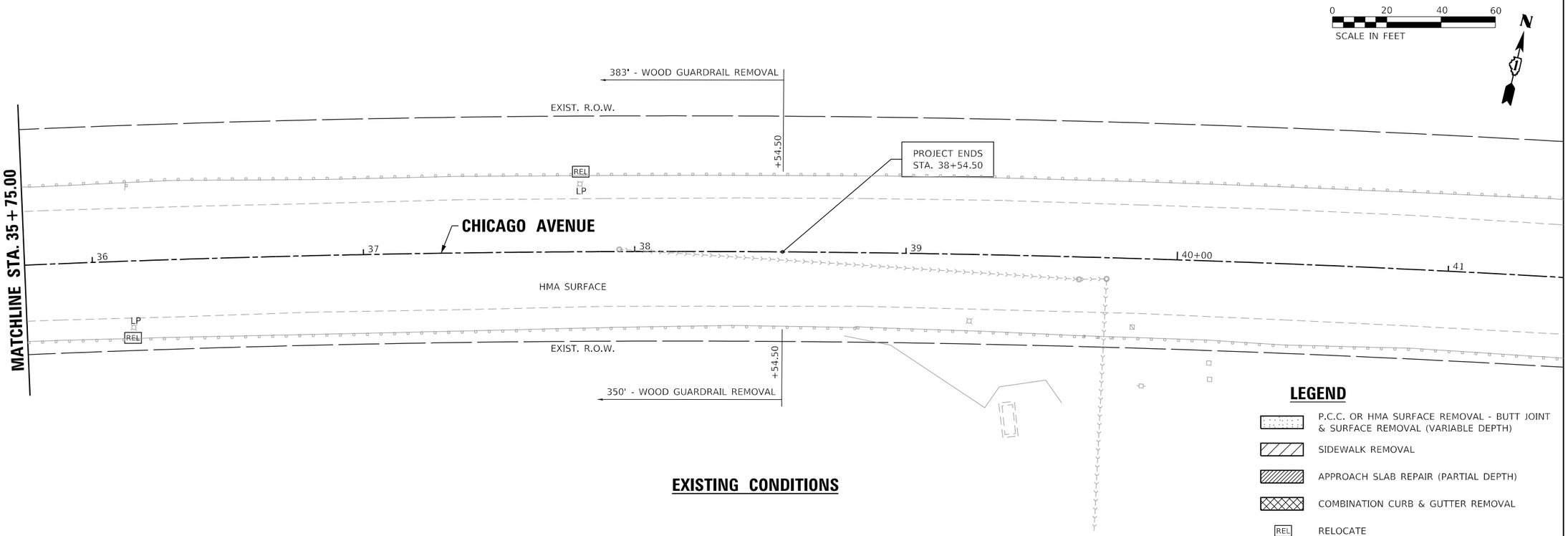
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

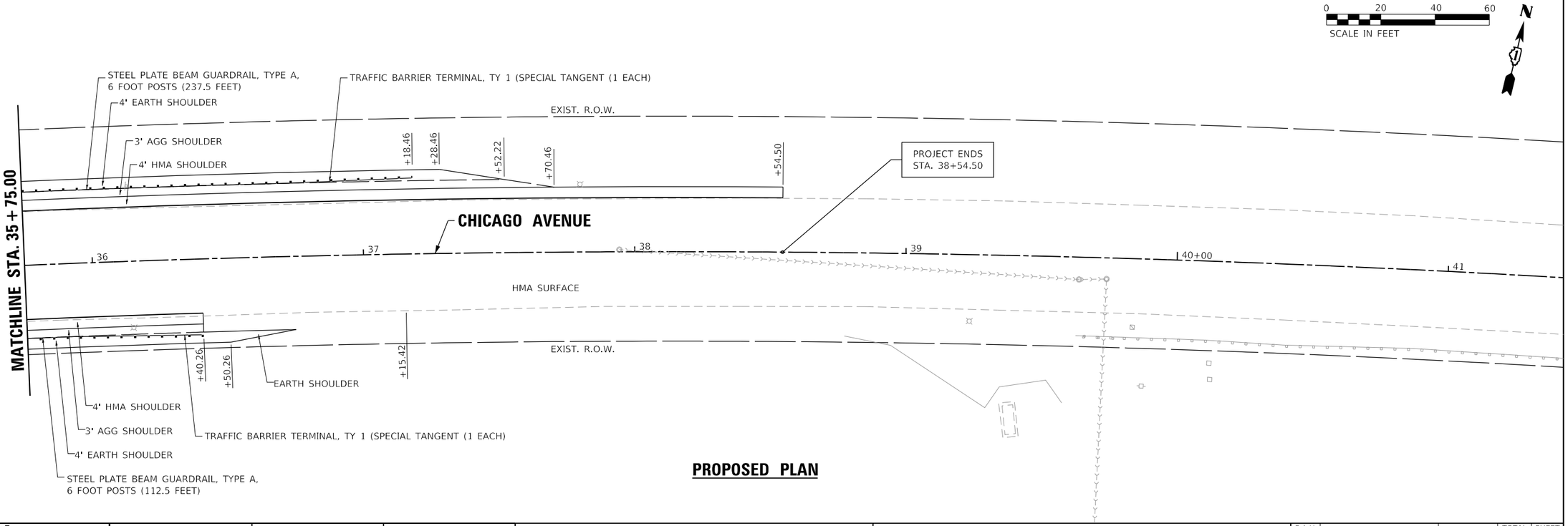
EXISTING CONDITIONS AND PROPOSED PLAN
CHICAGO AVENUE

SCALE: 1" = 20' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	12
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	



EXISTING CONDITIONS



PROPOSED PLAN

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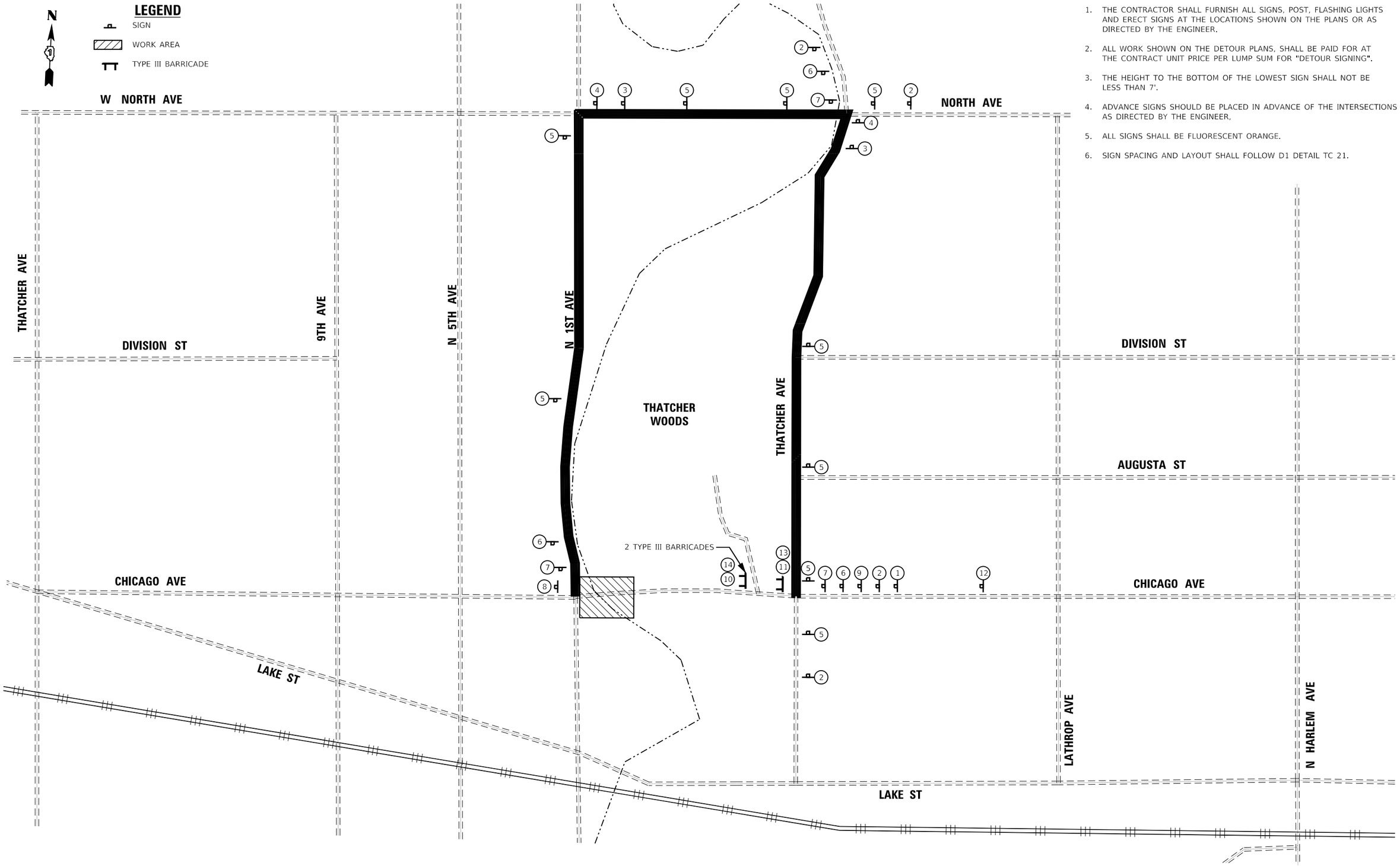
USER NAME = gjameson	DESIGNED - RKA	REVISED	
	CHECKED - SDS	REVISED	
PLOT SCALE = 40.0000 ' / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND PROPOSED PLAN
CHICAGO AVENUE

SCALE: 1" = 20' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	13
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



GENERAL NOTES:

1. THE CONTRACTOR SHALL FURNISH ALL SIGNS, POST, FLASHING LIGHTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. ALL WORK SHOWN ON THE DETOUR PLANS, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LUMP SUM FOR "DETOUR SIGNING".
3. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 7'.
4. ADVANCE SIGNS SHOULD BE PLACED IN ADVANCE OF THE INTERSECTIONS AS DIRECTED BY THE ENGINEER,
5. ALL SIGNS SHALL BE FLUORESCENT ORANGE.
6. SIGN SPACING AND LAYOUT SHALL FOLLOW D1 DETAIL TC 21.

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PLOT SCALE = 1000.0000 ' / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC – DETOUR PLAN
CHICAGO AVENUE

SCALE: NTS | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	13A
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

1

W20-3-4848

2

W20-2-4848

3

M3-1-2412
D3-1-3612*
M4-9-3024

4

M3-1-2412
D3-1-3612*
M4-9-3024

5

M3-1-2412
D3-1-3612*
M4-9-3024

6

M3-1-2412
D3-1-3612*
M4-9-3024

7

M3-1-2412
D3-1-3612*
M4-9-3024

8

M4-8A-2418
M3-1-2412
D3-1-3612*

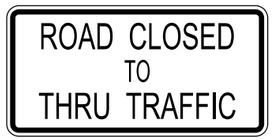
9

W20-3-4848

10

R11-2-4830

11



R11-4-6030

12

ORANGE BACKGROUND
WITH BLACK
6" LETTERING

13

M4-10R

14

R5-1

NOTES:

* ORANGE REFLECTIVE BACKGROUND WITH MINIMUM 6" BLACK LETTERING

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	CHECKED - SDS	REVISED	
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PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC – DETOUR PLAN
CHICAGO AVENUE

SCALE: NTS | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	13B
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC

CONSTRUCTION STAGING

PRE-STAGE I
CONSTRUCT HMA AND AGGREGATE SHOULDER ON RIGHT. INSTALL GUARDRAIL ON RIGHT.

STAGE I
SCARIFY BRIDGE ON WESTBOUND HALF OF BRIDGE, PLACE LATEX CONCRETE OVERLAY AND REPAIR BRIDGE JOINTS. CONSTRUCT HMA AND AGGREGATE SHOULDER, COMBINATION CONCRETE CURB AND GUTTER, AND CONCRETE SIDEWALK ON LEFT. INSTALL GUARDRAIL ON LEFT. ADJUST DRAINAGE STRUCTURE ON LEFT.

STAGE II
SCARIFY BRIDGE ON EASTBOUND HALF OF BRIDGE, PLACE LATEX CONCRETE OVERLAY AND REPAIR BRIDGE JOINTS. REMOVE PORTION OF PAVED SHOULDER RIGHT. CONSTRUCT COMBINATION CONCRETE CURB AND GUTTER, AND CONCRETE SIDEWALK ON RIGHT. ADJUST DRAINAGE STRUCTURE ON RIGHT.

OVERLAY APPROACH SLABS AND EXISTING PAVEMENT AT THE END OF STAGE II.

MAINTENANCE OF TRAFFIC

PRE-STAGE I
CLOSE OUTSIDE EASTBOUND LANE UTILIZING HIGHWAY STANDARD 701606. MAINTAIN TWO-LANE TRAFFIC ON WESTBOUND PAVEMENT ACROSS BRIDGE.

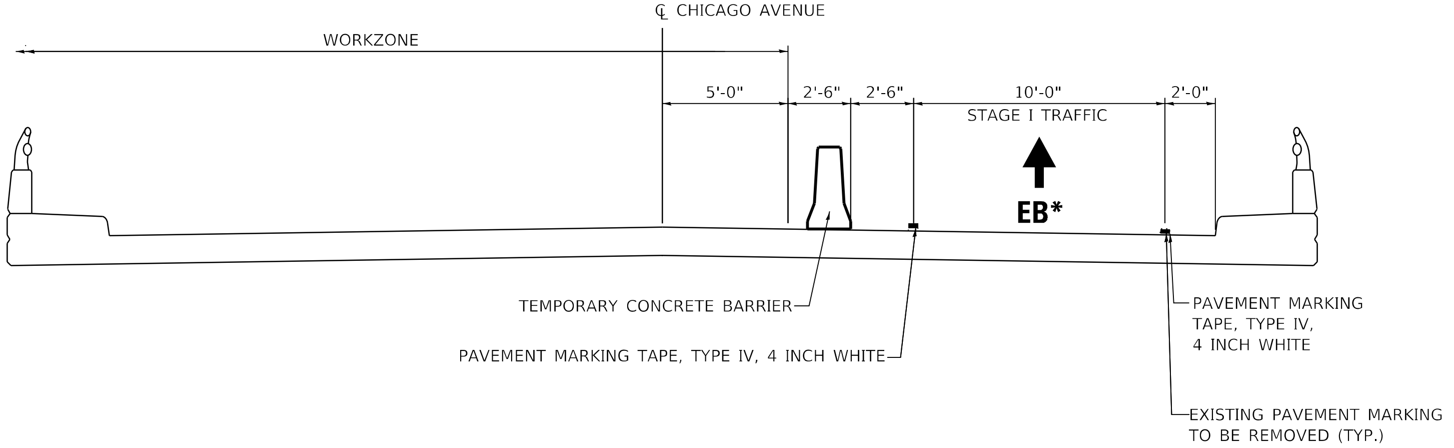
STAGE I
ERECT DETOUR SIGNING AS SHOWN ON DETOUR PLAN. CLOSE TWO WESTBOUND LANES AND DETOUR TRAFFIC AS SHOWN ON THE DETOUR PLAN.
MAINTAIN ONE-LANE ONE-WAY EASTBOUND TRAFFIC ON PAVEMENT ACROSS BRIDGE.
REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS.

STAGE II
CLOSE TWO EASTBOUND LANES AS SHOWN ON THE SUGGESTED TRAFFIC CONTROL AND PROTECTION PLAN UTILIZING HIGHWAY STANDARD 701611.
MAINTAIN TWO-LANE TWO-WAY TRAFFIC ON WESTBOUND PAVEMENT ACROSS BRIDGE.
REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS.

USE LANE CLOSURES TO OVERLAY APPROACH SLABS AND PAVEMENT AT THE END OF STAGE II UTILIZING HIGHWAY STANDARD 701606.

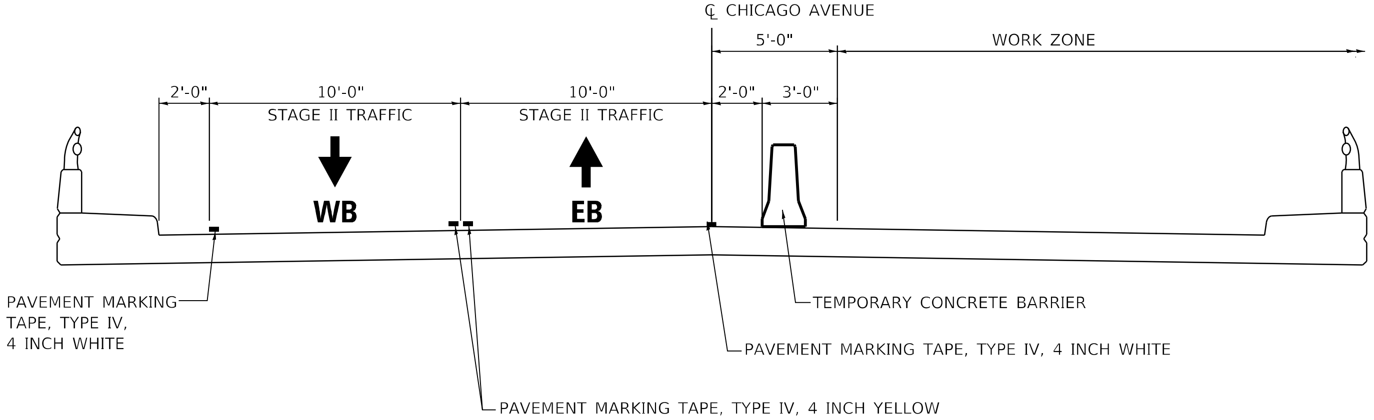
TRAFFIC CONTROL GENERAL NOTES

1. THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
2. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
3. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV.
4. REMOVAL OF TEMPORARY PAVEMENT MARKINGS SHALL BE PAID FOR AS SHORT TERM PAVEMENT MARKING REMOVAL.
5. EXISTING, CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL - WATER BLASTING.
6. THE EXISTING PAVEMENT MARKINGS THAT HAVE BEEN REMOVED SHALL BE REPLACED. SEE PAVEMENT MARKING PLAN FOR TYPE.
7. USE SUGGESTED TRAFFIC CONTROL AND PROTECTION PLAN IN CONJUNCTION WITH STANDARD 701606 AND APPLICABLE PORTIONS OF DISTRICT ONE STANDARD TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS. ADDITIONAL SIGNAGE MAY BE REQUIRED BY THE RESIDENT ENGINEER. ALL WORK AND SIGNAGE IN THE PLANS SHALL BE INCLUDED IN THE PAY ITEM FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL) UNLESS OTHERWISE PROVIDED IN THE PLANS.
8. A MONO-DIRECTIONAL FLASHING AMBER BEACON SHALL BE MOUNTED ON THE FIRST TWO WARNING SIGNS ON EACH APPROACH DURING HOURS OF DARKNESS.
9. TEMPORARY CONCRETE BARRIER SHALL BE PLACED AS SHOWN ON THE SUGGESTED TRAFFIC CONTROL AND PROTECTION PLAN AND IN CONJUNCTION WITH STANDARD 704001.



*WESTBOUND TRAFFIC DETOURED IN STAGE I

MAINTENANCE OF TRAFFIC – STAGE I



MAINTENANCE OF TRAFFIC – STAGE II

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PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION NOTES AND DETAILS
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 1 OF 2 SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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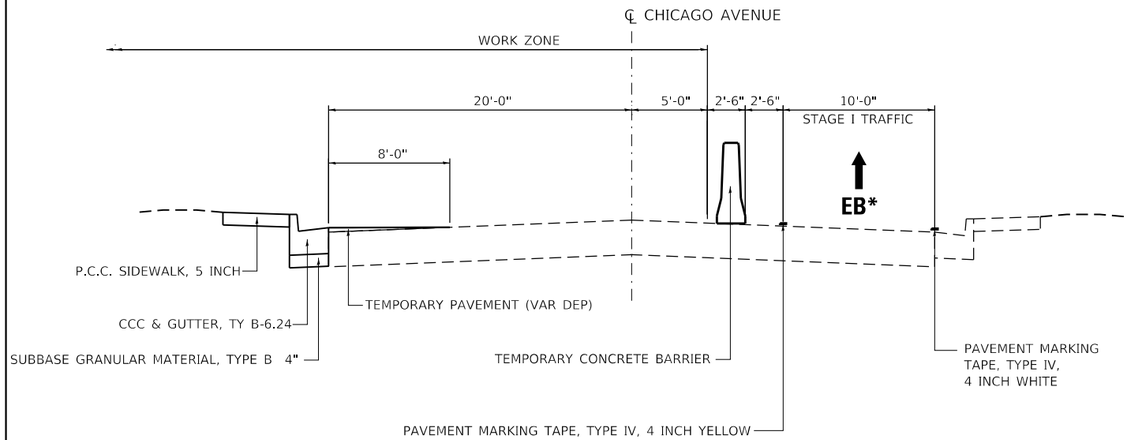
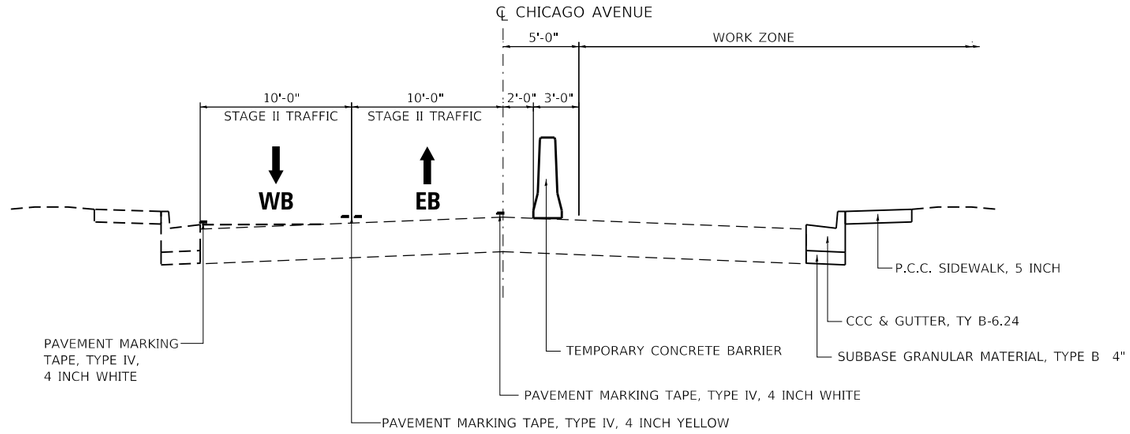
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



MAINTENANCE OF TRAFFIC – STAGE I

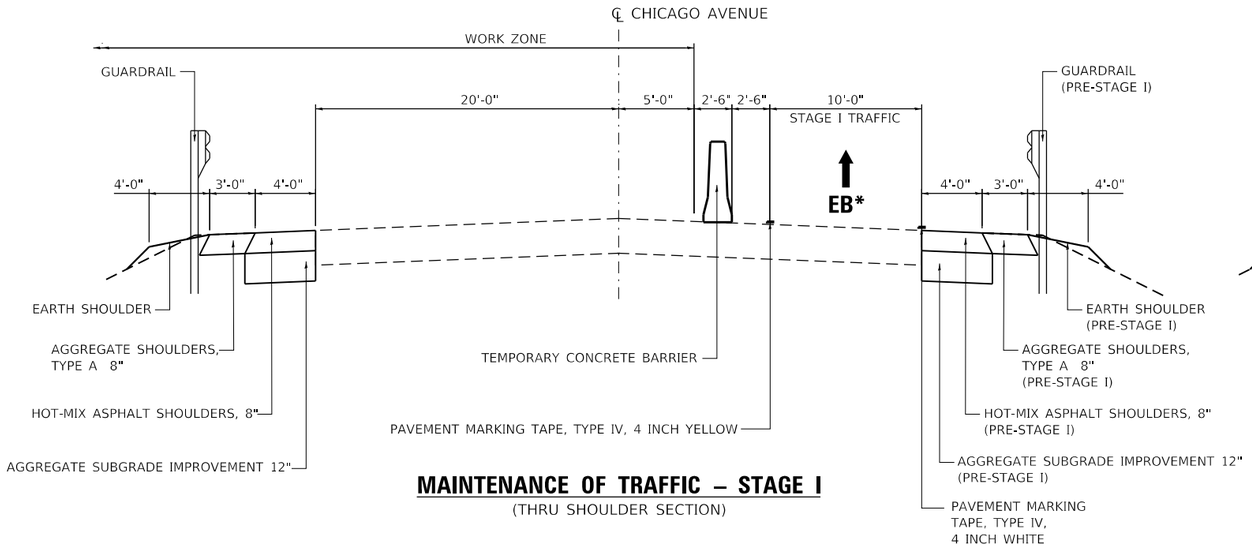
(THRU CURBED SECTION)



MAINTENANCE OF TRAFFIC – STAGE II

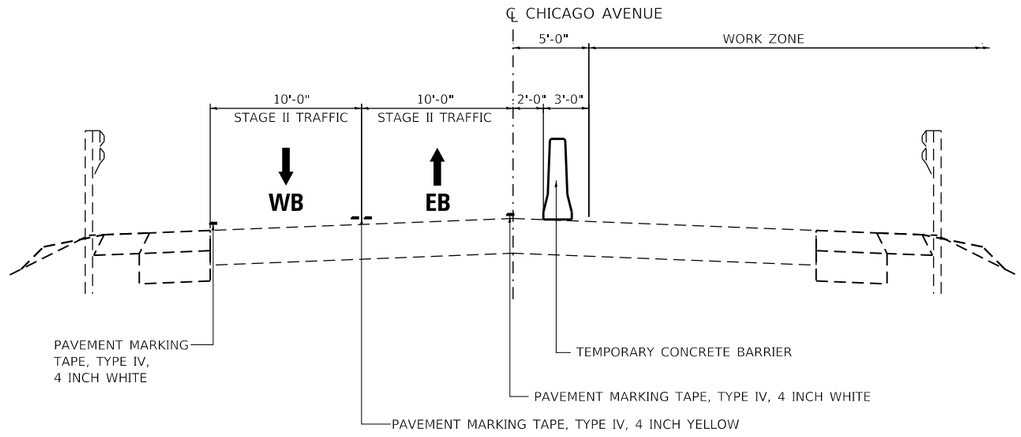
(THRU CURBED SECTION)

✱ WESTBOUND TRAFFIC DETOURED IN STAGE I



MAINTENANCE OF TRAFFIC – STAGE I

(THRU SHOULDER SECTION)



MAINTENANCE OF TRAFFIC – STAGE II

(THRU SHOULDER SECTION)

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PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION NOTES AND DETAILS
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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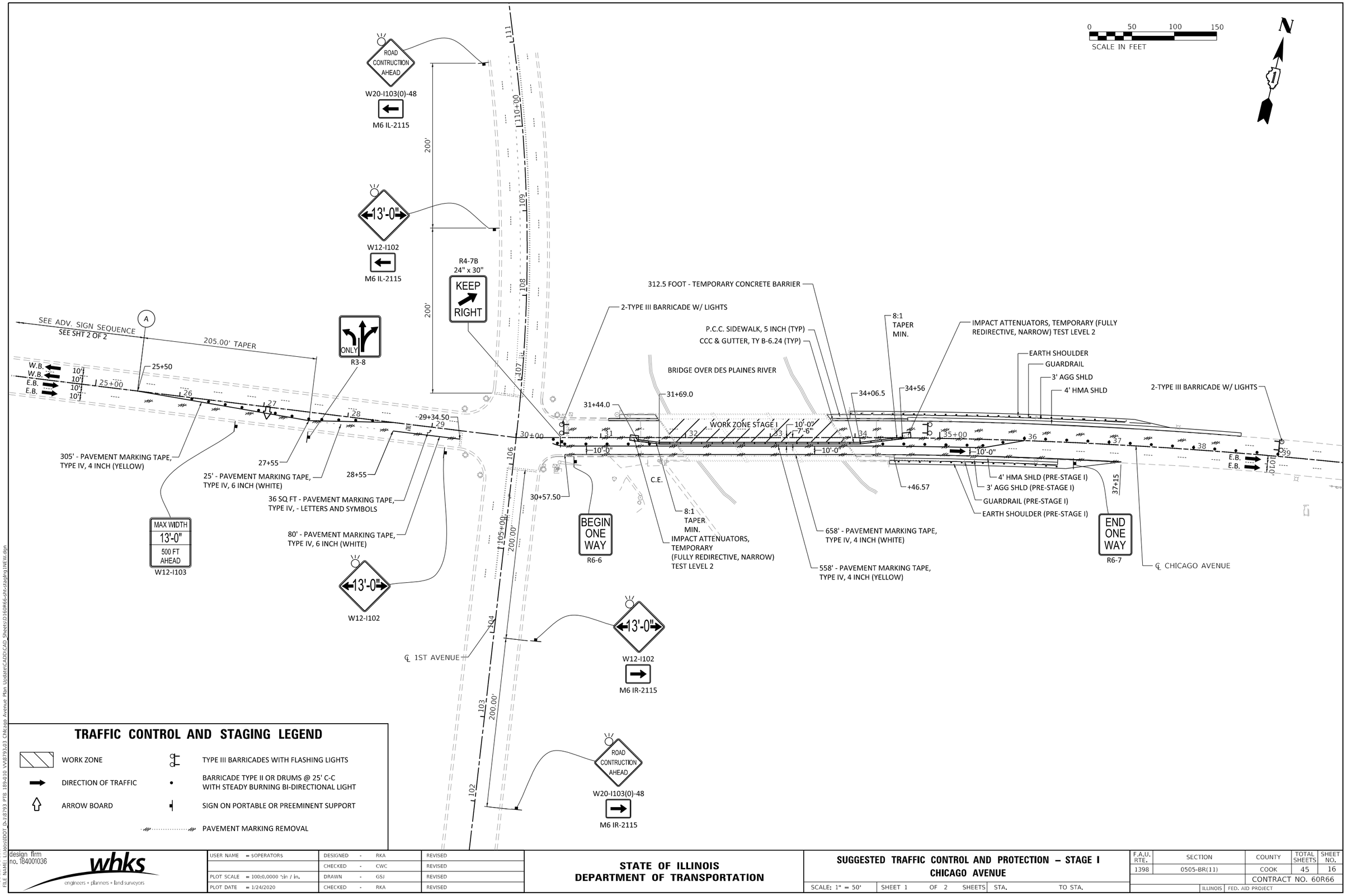

TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- DIRECTION OF TRAFFIC
- ARROW BOARD
- TYPE III BARRICADES WITH FLASHING LIGHTS
- BARRICADE TYPE II OR DRUMS @ 25' C-C WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- SIGN ON PORTABLE OR PREEMINENT SUPPORT
- PAVEMENT MARKING REMOVAL

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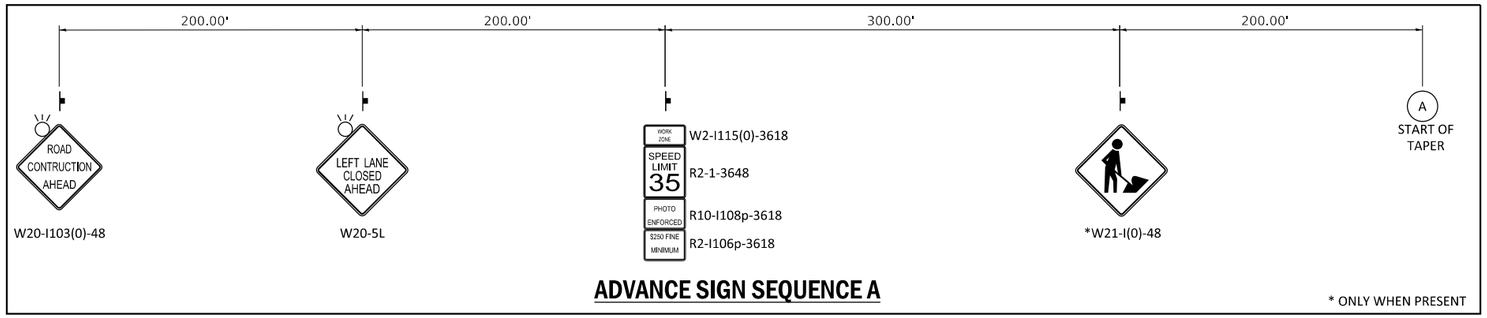
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION – STAGE I
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	16
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



ADVANCE SIGN SEQUENCE A

* ONLY WHEN PRESENT

TRAFFIC CONTROL AND STAGING LEGEND

WORK ZONE	TYPE III BARRICADES WITH FLASHING LIGHTS
DIRECTION OF TRAFFIC	BARRICADE TYPE II OR DRUMS @ 25' C-C WITH STEADY BURNING BI-DIRECTIONAL LIGHT
ARROW BOARD	SIGN ON PORTABLE OR PREEMINENT SUPPORT
	PAVEMENT MARKING REMOVAL

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design firm no. 184001036

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PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION – STAGE I
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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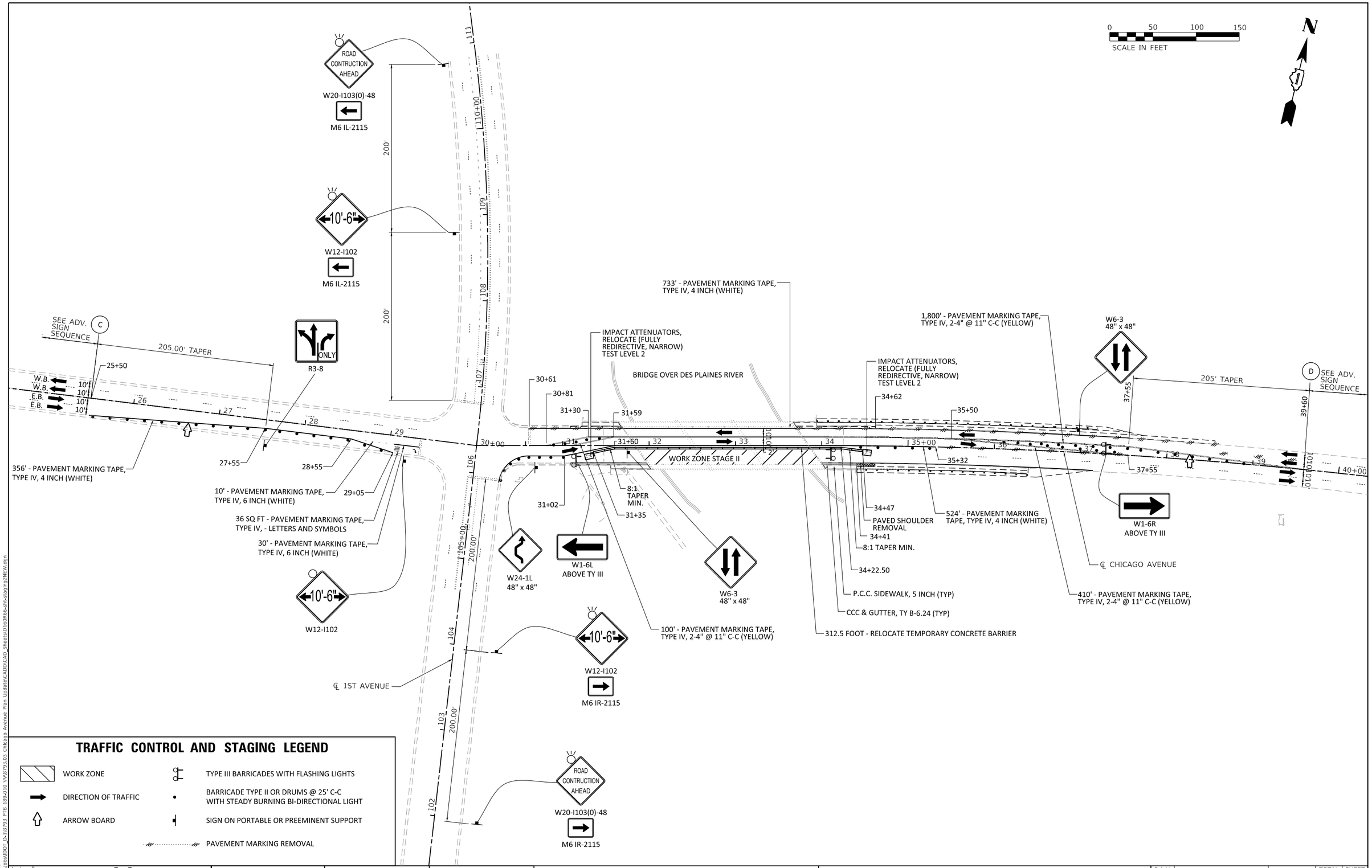
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND STAGING LEGEND

WORK ZONE	TYPE III BARRICADES WITH FLASHING LIGHTS
DIRECTION OF TRAFFIC	BARRICADE TYPE II OR DRUMS @ 25' C-C WITH STEADY BURNING BI-DIRECTIONAL LIGHT
ARROW BOARD	SIGN ON PORTABLE OR PREEMINENT SUPPORT
	PAVEMENT MARKING REMOVAL

MODEL: Default
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design firm no. 184001036
whks
engineers + planners + land surveyors

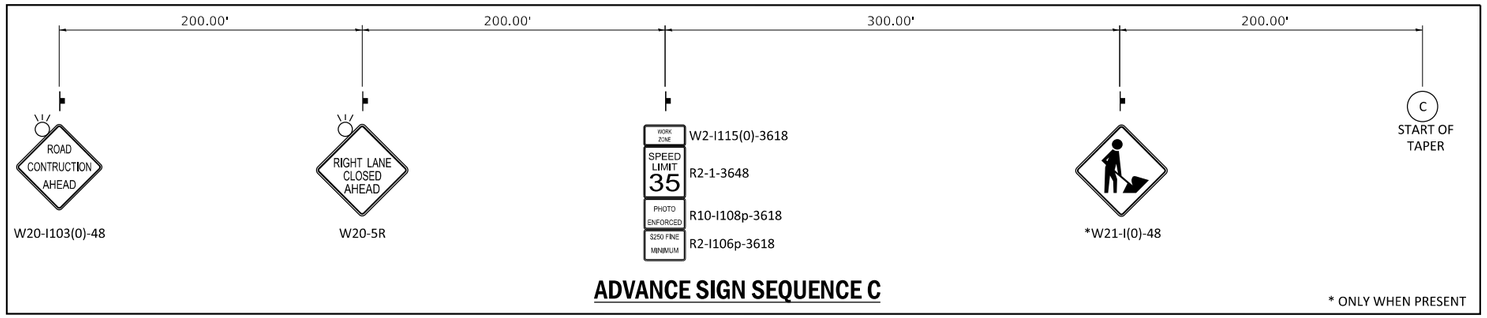
USER NAME = gjameson	DESIGNED - RKA	REVISED	
	CHECKED - CWC	REVISED	
PLOT SCALE = 100:0.0000 ':in / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 1/24/2020	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION – STAGE II
CHICAGO AVENUE

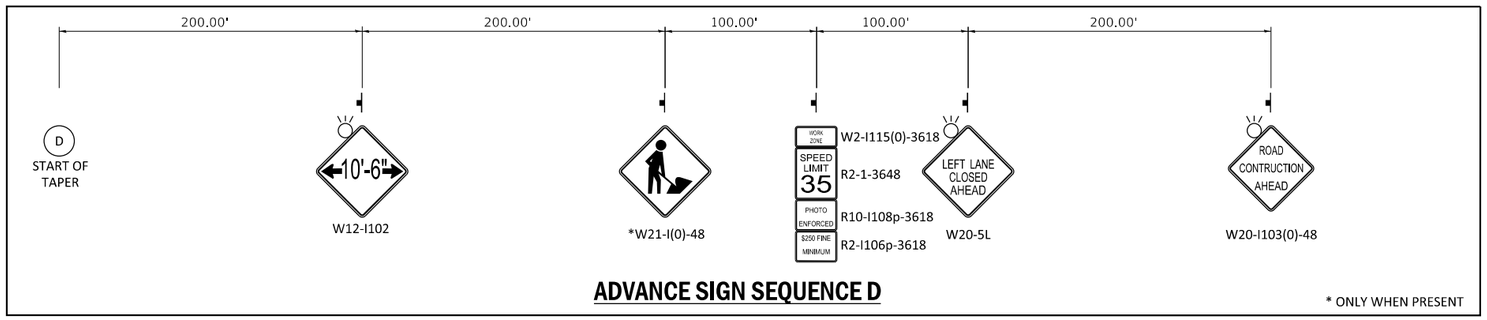
SCALE: 1" = 50' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	18
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



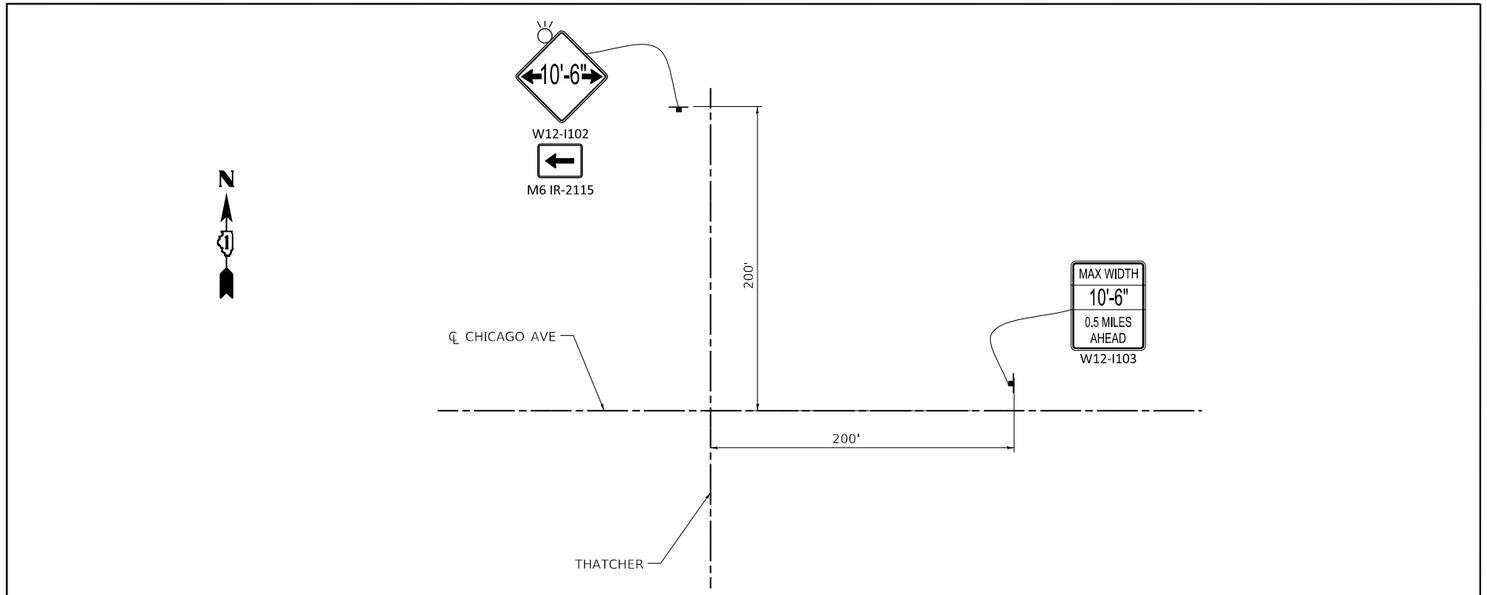
ADVANCE SIGN SEQUENCE C

* ONLY WHEN PRESENT



ADVANCE SIGN SEQUENCE D

* ONLY WHEN PRESENT



THATCHER AND CHICAGO AVE

TRAFFIC CONTROL AND STAGING LEGEND

WORK ZONE	TYPE III BARRICADES WITH FLASHING LIGHTS
DIRECTION OF TRAFFIC	BARRICADE TYPE II OR DRUMS @ 25' C-C WITH STEADY BURNING BI-DIRECTIONAL LIGHT
ARROW BOARD	SIGN ON PORTABLE OR PREEMINENT SUPPORT
	PAVEMENT MARKING REMOVAL

design firm no. 184001036
whks
engineers + planners + land surveyors

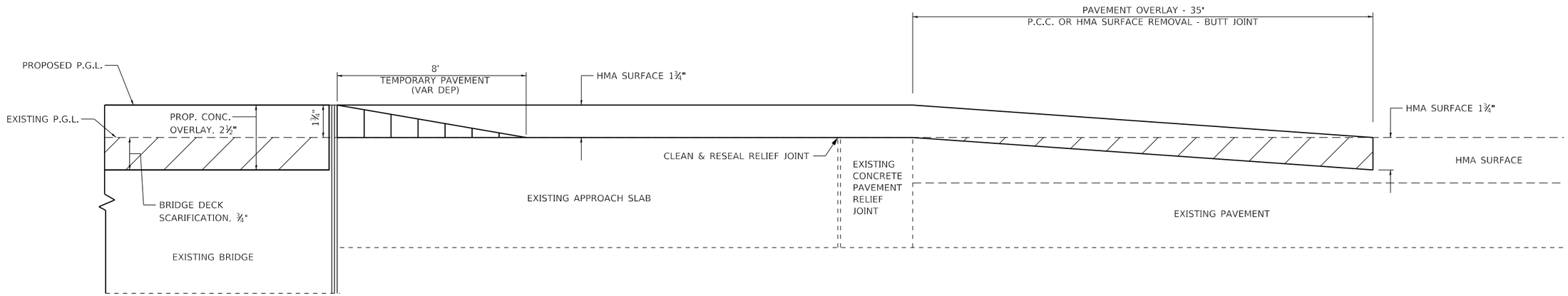
USER NAME = gjameson	DESIGNED - RKA		REVISED
	CHECKED - CWC		REVISED
PLOT SCALE = 100:0.0000 'sin / in.	DRAWN - GSJ		REVISED
PLOT DATE = 1/24/2020	CHECKED - RKA		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND PROTECTION – STAGE II
CHICAGO AVENUE

SCALE: 1" = 50' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	19
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



PAVEMENT OVERLAY DETAIL

STA. 31+16 TO STA. 31+83
STA. 33+86 TO STA. 34+53

MODEL: Default
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design firm
no. 184001036
whks
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - RKA	REVISED	
	CHECKED - CWC	REVISED	
PLOT SCALE = 100:0.0000 ':in / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT OVERLAY DETAIL
CHICAGO AVENUE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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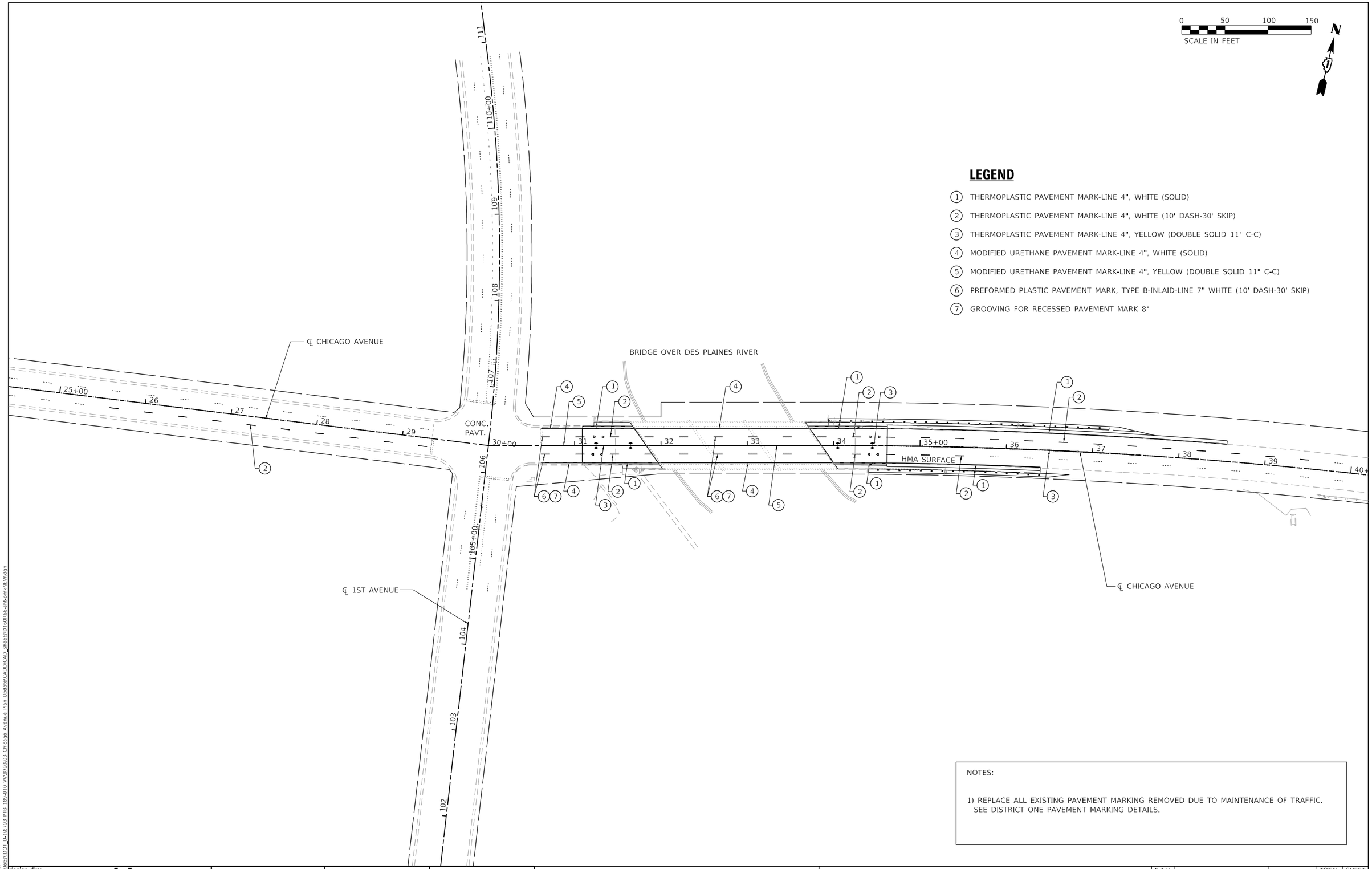
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1) REPLACE ALL EXISTING PAVEMENT MARKING REMOVED DUE TO MAINTENANCE OF TRAFFIC. SEE DISTRICT ONE PAVEMENT MARKING DETAILS.

MODEL: Default
FILE NAME: c:\dot\IDOT D-1\18793 PTB 189-010 VV18793.03 Chicago Avenue Plan Update\CADD\CAD Sheets\D160R66-sht-pmrkNEW.dgn

design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - RKA	REVISED	
	CHECKED - CWC	REVISED	
PLOT SCALE = 100:0.0000 'in / in.	DRAWN - GSJ	REVISED	
PLOT DATE = 12/13/2019	CHECKED - RKA	REVISED	

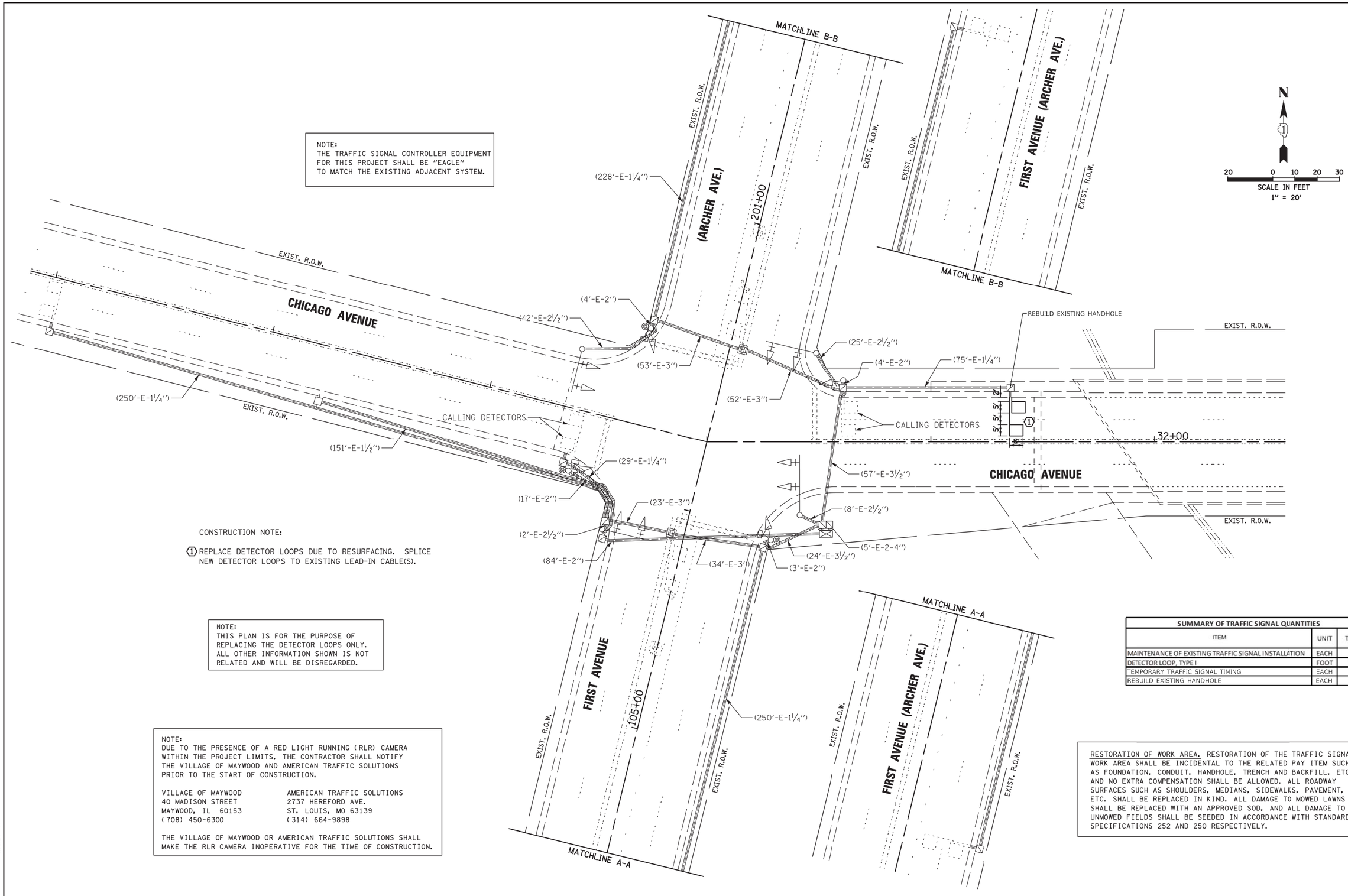
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
CHICAGO AVENUE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	21
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



CONSTRUCTION NOTE:

① REPLACE DETECTOR LOOPS DUE TO RESURFACING. SPLICE NEW DETECTOR LOOPS TO EXISTING LEAD-IN CABLE(S).

NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

NOTE:
DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF MAYWOOD AND AMERICAN TRAFFIC SOLUTIONS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF MAYWOOD	AMERICAN TRAFFIC SOLUTIONS
40 MADISON STREET	2737 HEREFORD AVE.
MAYWOOD, IL 60153	ST. LOUIS, MO 63139
(708) 450-6300	(314) 664-9898

THE VILLAGE OF MAYWOOD OR AMERICAN TRAFFIC SOLUTIONS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION.

SUMMARY OF TRAFFIC SIGNAL QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DETECTOR LOOP, TYPE I	FOOT	58
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

6/8/2012 1:30:24 PM

FILE NAME = 07 - MOD Chicago Ave.dgn
PLOT DATE = 6/8/2012
PLOT SCALE = 40.000000 ' / in.

DESIGNED	- TCM	REVISED	-
DRAWN	- TCM	REVISED	-
CHECKED	- YK	REVISED	-
DATE	- JUNE 8, 2012	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE – DETECTOR LOOP REPLACEMENT
CHICAGO AVENUE AND FIRST AVENUE (ARCHER AVE.)

SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	22
		CONTRACT NO. 60R66		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

P:\11306.010 - CRA Chicago Ave over Des Plaines River\Working Files\Drawing Files\Sht\Traffic Signals\07 - MOD Chicago Ave.dgn IDOT - District 01 40.000000 ' / in. P:_CAD Standards\Microstation\Workspace\System\Plotdrv\HDR - PDF.plt P:_CAD Standards\Microstation\Workspace\System\Tables\pen\HDR Fullerton Parkway.tbl

LAST SAVED DATE: S:\ASTS\REVDATES

Existing Structure: *SN 016-0863 originally built in 1930 under Section 150-0505-15D and rehabilitated in 1989 under Section (0505 & 0606.1) WRS-84 & 0505BR-84. Structure consists of three span PPC I-Beams and 7½" reinforced concrete deck supported by reinforced concrete abutments and piers on spread footings. 56'-0" out to out deck. 203'-0" back to back abutments. 34°55' skew. All work to be completed using stage construction.*

Salvage: *None*

SCOPE OF WORK

1. *Scarify and overlay bridge deck utilizing latex concrete overlay system.*
2. *Reconstruct expansion joint at each abutment utilizing new preformed joint strip seals.*
3. *Complete deck slab repairs.*
4. *Clean and flush existing floor drains.*
5. *Install stream gauge at Pier 1.*

INDEX OF SHEETS

DESIGN SPECIFICATIONS (New Const.)

2002 AASHTO Standard Specification for Highway Bridges

LOADING HS20-44 (Superstructure)

No allowance for additional future wearing surface

LOADING H15-44 (Substructure)

DESIGN STRESSES

FIELD UNITS (New Construction)

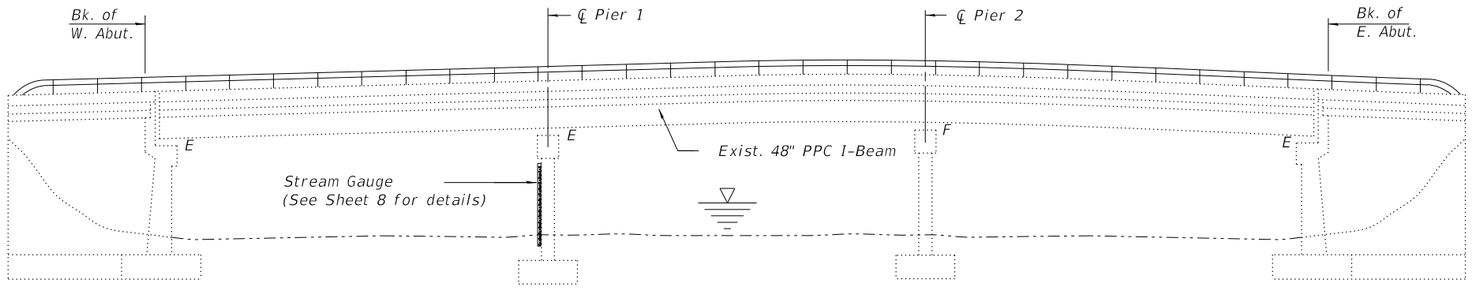
f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)

FIELD UNITS (Exist. 1989 Construction)

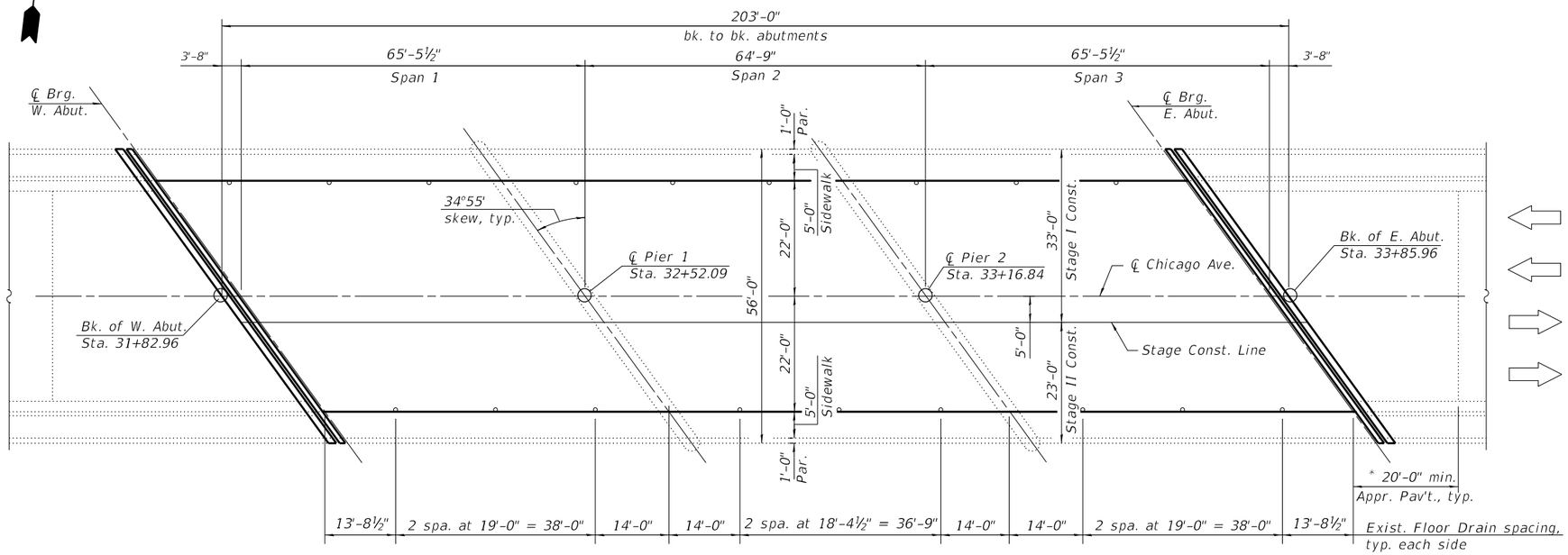
f'c =	3,500 psi	(Superstructure Replacement & Substructure Rehabilitation)
f'c =	5,000 psi	(PPC I-Beams)
f'ci =	4,000 psi	(PPC I-Beams)
fy =	60,000 psi	(Reinforcement)
fs =	270,000 psi	(½" Ø Stress-Relieved Strands)
fy =	36,000 psi	(Structural Steel, M183)

FIELD UNITS (Exist. 1930 Construction)

fc = 1,400 psi (Substructure)
fs = 18,000 psi (Reinforcement)

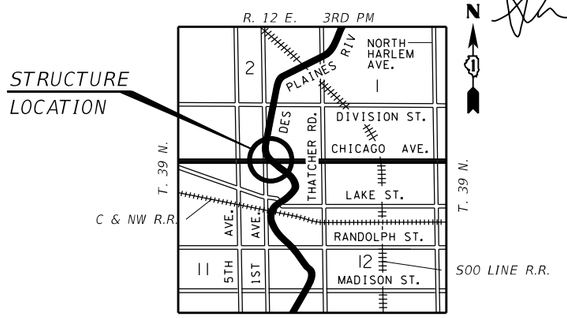


ELEVATION



PLAN

* *For proposed Approach Pavement work, See Roadway Plans*



LOCATION SKETCH

STATE OF ILLINOIS
SLADE B. CHELBIAN
081-006565
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER

1/24/2020

Expires: 11/30/2020

GENERAL PLAN & ELEVATION
CHICAGO AVENUE OVER DES PLAINES RIVER
"PUBLIC WATERS"
SECTION: 0505-BR(11)
COOK COUNTY
STATION 32+84.46
STRUCTURE NO. 016-0863

FILE NAME: L:\Jobs\IDOT_D-18793 PTB 189-010 VV18793.03 Chicago Avenue Plan Update\C4D\DGN\CAD_Sheets\SN_0160863.dgn

design firm no. 184001036 — whks engineers + planners + land surveyors

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PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 016-0863

SHEET NO. 1 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	23
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

LAST SAVED DATE: $LASTSAVEDDATE$

TOTAL BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	12.9
Concrete Superstructure	Cu Yd	14.1
Bridge Deck Grooving	Sq Yd	915
Protective Coat	Sq Yd	1,316
Reinforcement Bars, Epoxy Coated	Pound	2,090
Bar Splicers	Each	12
Preformed Joint Strip Seal	Foot	134
Bridge Deck Latex Concrete Overlay, 2½ Inches	Sq Yd	962
Bridge Deck Scarification ¾"	Sq Yd	962
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1.0
Stream Gauge	Each	1

GENERAL NOTES:

1. These plans have been prepared from notes received from I.D.O.T. Field Maintance Engineers.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
4. Reinforcement bars designated (E) shall be epoxy coated.

FILE NAME: L:\Jobs\IDOT_D 1\8793 PTB 189-010 VY\8793.03 Chicago Avenue Plan Update\CADD\CAD_Sheets\SN_0160863.dgn

design firm no. 184001036

whks engineers + planners + land surveyors

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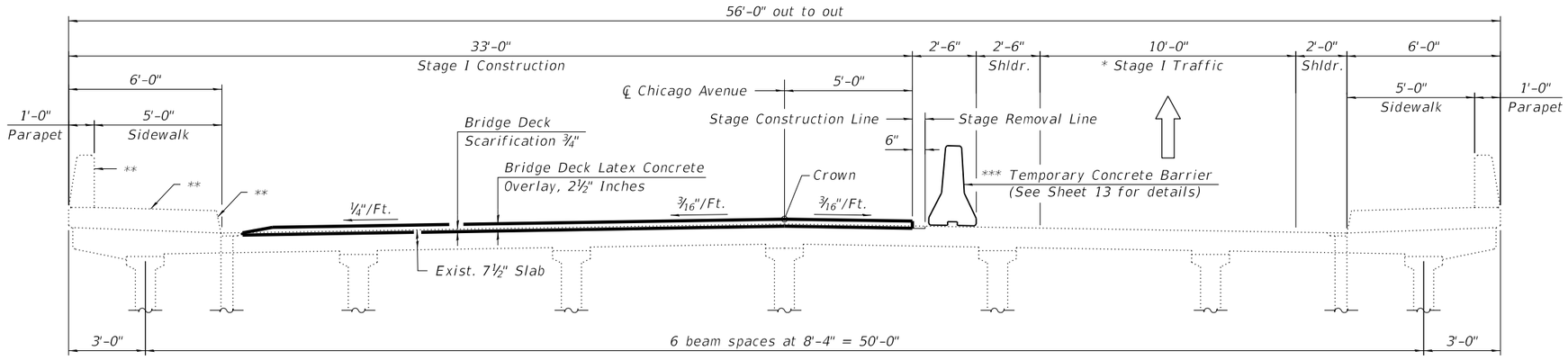
PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 016-0863
SHEET NO. 2 OF 13 SHEETS

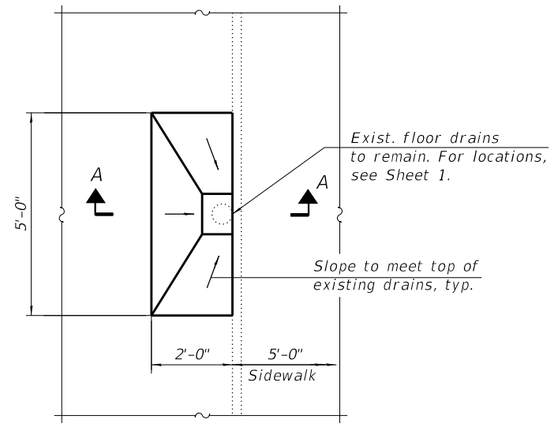
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	24
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



STAGE I CONSTRUCTION

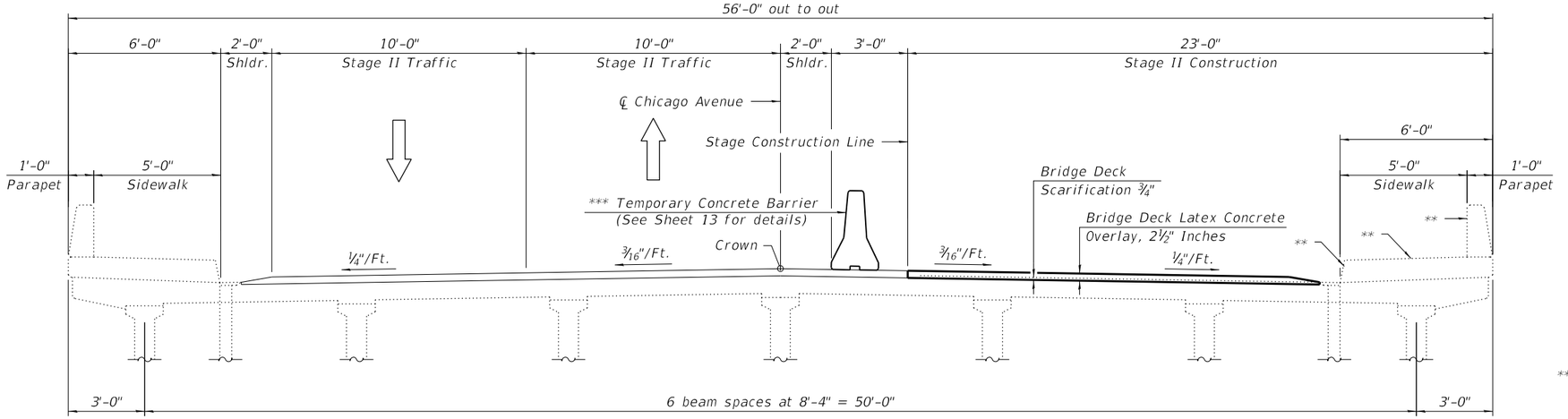
(Looking East)

* The two westbound lanes will be closed and traffic detoured as shown on the Detour Plans. See Roadway Plans.



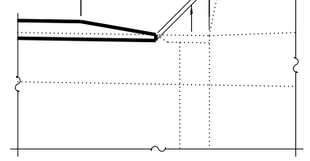
VIEW AT 6" Ø FLOOR DRAIN

(Stage II shown, Stage I similar.)



STAGE II CONSTRUCTION

(Looking East)



SECTION A-A

**** 1" min. overlay thickness at edge, typ. all around.

** Protective coat shall be applied to the top and inside vertical faces of the existing sidewalk and only the inside vertical face of the existing parapet. Application shall be in accordance with Article 503.19 of the Standard Specifications.

*** For quantity of Temporary Concrete Barrier, see Roadway Plans.

Floor Drain Notes:

1. *The floor drains shall be covered with plastic and taped shut immediately prior to the application of the protective coat. No protective coat must be allowed to stick to the floor drains. Immediately after the protective coat has dried, the plastic and tapes shall be removed from the floor drains. Cost included with Protective Coat.*
2. *All floor drains shall be cleaned and flushed with water at the end of the contract. Cost included with Concrete Superstructure.*

BILL OF MATERIAL

Item	Unit	Total
Bridge Deck Scarification ¾"	Sq Yd	962
Bridge Deck Latex Concrete Overlay, 2½"	Sq Yd	962
Bridge Deck Grooving	Sq Yd	906
Protective Coat	Sq Yd	1,286

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = dheberling	DESIGNED - SBC	REVISED
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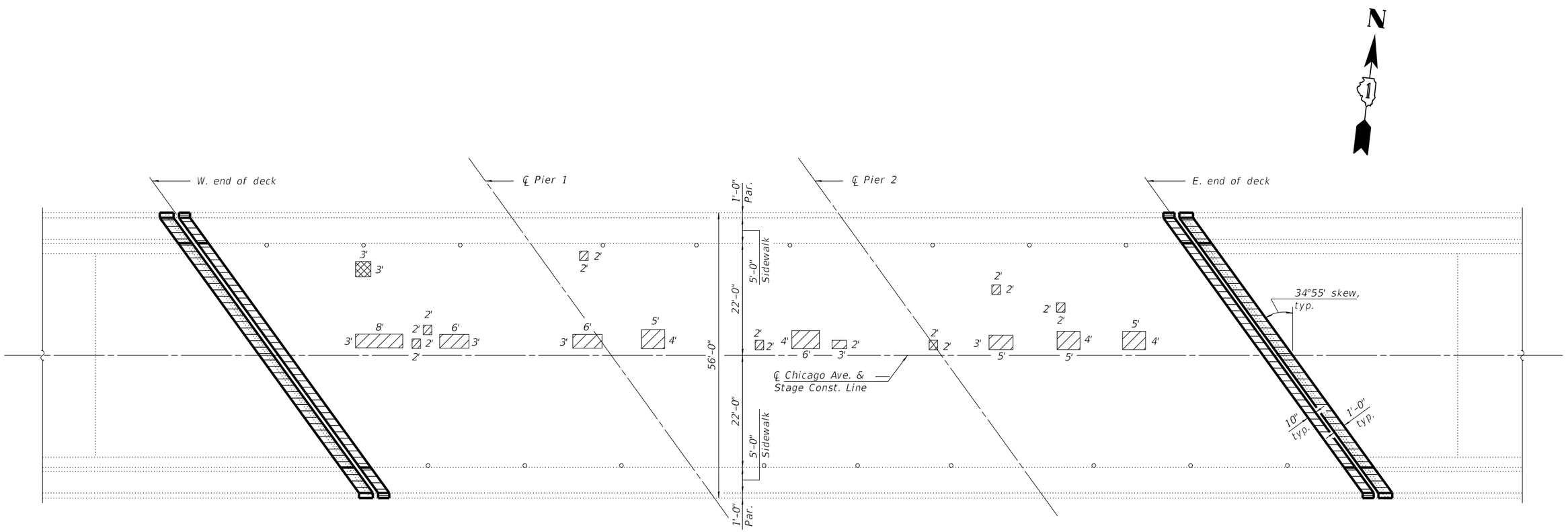
PLOT SCALE = 100:0 '-" / in.	DRAWN - DLH	REVISED
PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REPAIR DETAILS I
STRUCTURE NO. 016-0863

SHEET NO. 3 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	25
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	



DECK PATCHING PLAN

LEGEND:

- Deck Slab Repair (Partial) (21.5 Sq Yds, estimated. See Note 1)
- Deck Slab Repair (Full Depth, Type II)
- Expansion Joint Reconstruction Limits

Notes:

1. Deck Slab Repair (Partial) locations and quantities shown herein are for information only and will not be measured for payment but shall be included in the cost of Bridge Deck Latex Concrete Overlay. See special provision for Bridge Deck Latex Concrete Overlay.
2. Quantities and limits of Deck Slab Repairs shown herein are estimated from the delamination survey completed by the District on July 10, 2019. Actual limits shall be determined in the field and noted in the As-Built Plans. See special provision for Deck Slab Repair.
3. For Expansion Joint Reconstruction Details, see Sheets 5 thru 7.
4. For Stage Construction Scheme, see Sheet 3.

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type II)	Sq Yd	1.0

design firm no. 184001036 — whks engineers + planners + land surveyors

USER NAME = dheberling	DESIGNED - SBC	REVISED	
FILE NAME = SN_0160863.dgn	CHECKED - BRD	REVISED	
PLOT SCALE = 100:0 '/' in.	DRAWN - DLH	REVISED	
PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REAPIR DETAILS II
STRUCTURE NO. 016-0863

SHEET NO. 4 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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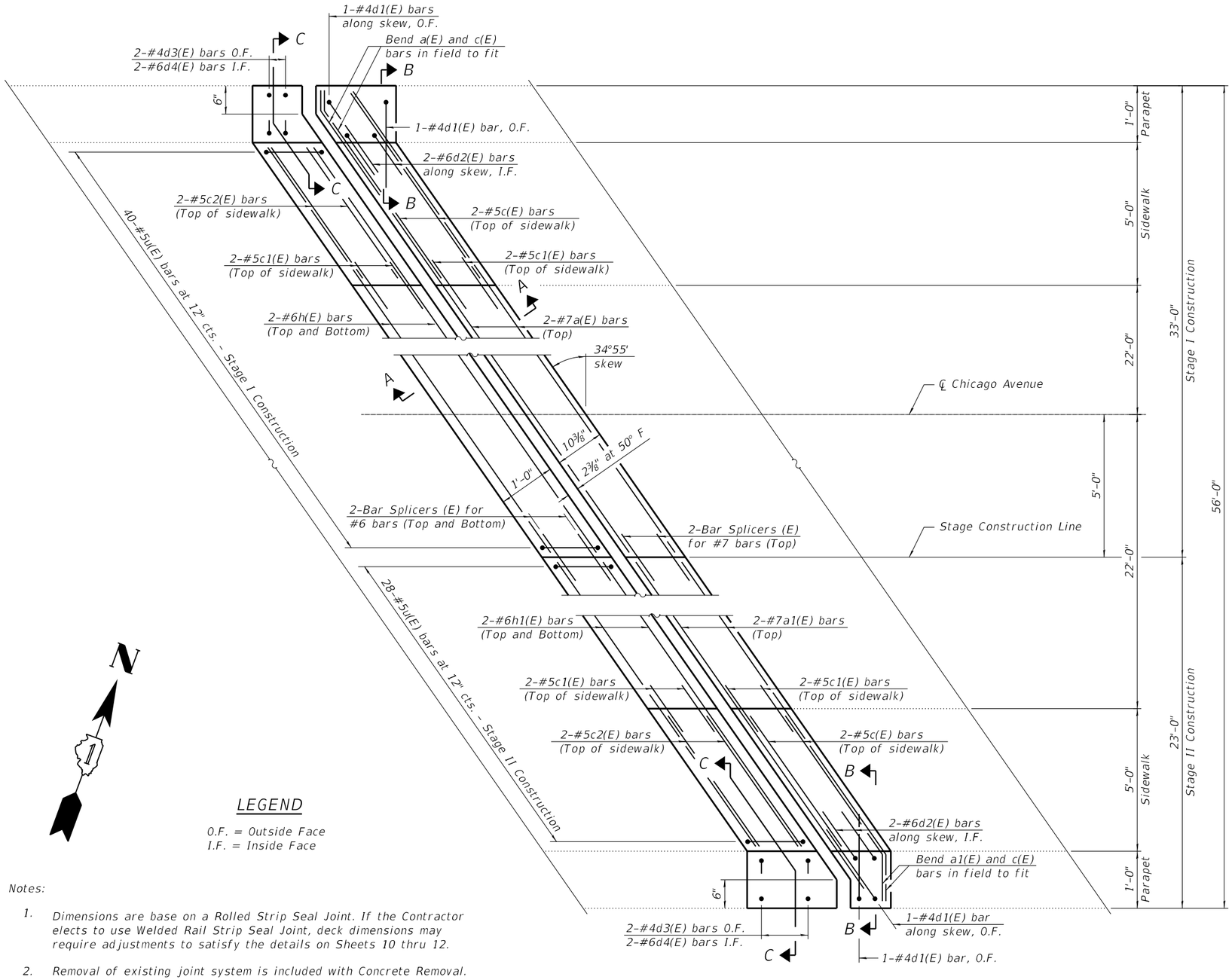
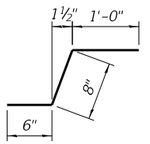
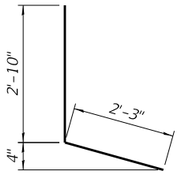
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		





BAR c1(E)



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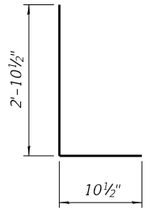
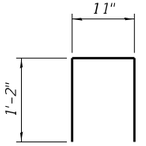
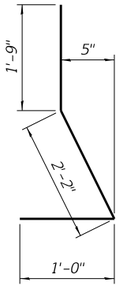


BAR d2(E)



BAR u(E)



BAR d4(E)

BILL OF MATERIAL FOR TWO ABUTMENTS

Bar	No.	Size	Length	Shape
a(E)	4	#7	39'-10"	———
a1(E)	4	#7	27'-7"	———
c(E)	8	#5	6'-11"	———
c1(E)	16	#5	2'-2"	⌐¬
c2(E)	8	#5	5'-8"	———
d1(E)	8	#4	5'-1"	L
d2(E)	8	#6	3'-9"	L
d3(E)	8	#4	3'-11"	———
d4(E)	8	#6	4'-11"	⌊
h(E)	8	#6	38'-7"	———
h1(E)	8	#6	26'-5"	———
u(E)	136	#5	3'-3"	⊓
Concrete Removal			Cu Yd	12.9
Concrete Superstructure			Cu Yd	14.1
Bridge Deck Grooving			Sq Yd	9
Protective Coat			Sq Yd	30
Reinforcement Bars, Epoxy Coated			Pound	2,090
Bar Splicers			Each	12

LEGEND

0.F. = Outside Face
I.F. = Inside Face

Notes:

1. Dimensions are base on a Rolled Strip Seal Joint. If the Contractor elects to use Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheets 10 thru 12.
2. Removal of existing joint system is included with Concrete Removal.
3. See Sheets 10 thru 12 for Preformed Joint Strip Seal Details.
4. See Sheet 6 for Section A-A.
5. See Sheet 7 for Sections B-B, C-C, and Diaphragm At Abutment.
6. See Sheet 9 for Bar Splicer Assembly Details.
7. See Sheet 3 for Stage Construction Scheme.

PARTIAL PLAN

(Showing Joint Reconstruction at West Abutment. East Abutment similar.)

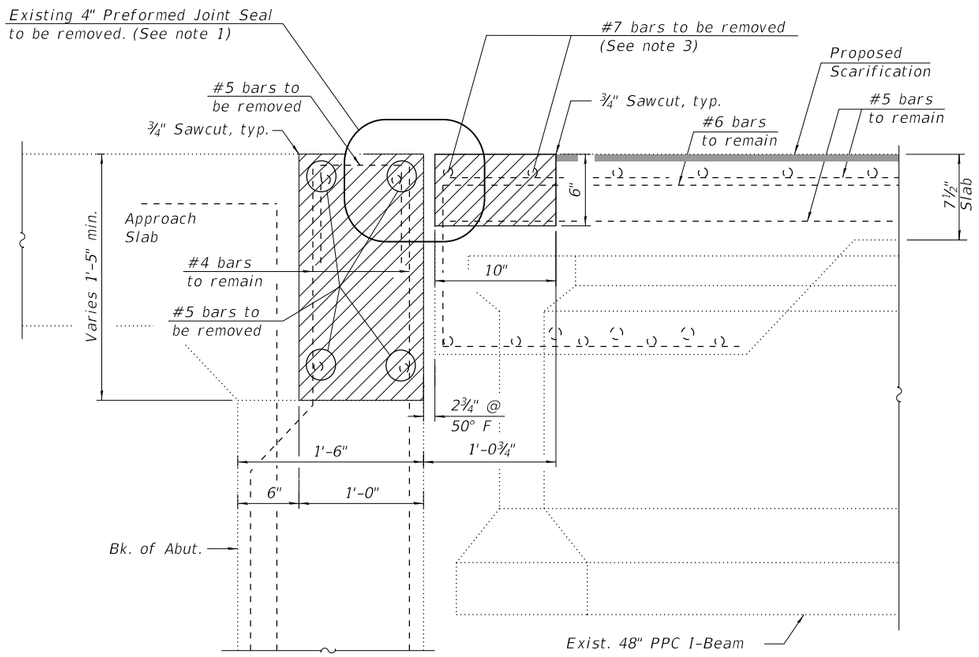
design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = dheberling	DESIGNED - SBC	REVISED	
FILE NAME = SN_0160863.dgn	CHECKED - BRD	REVISED	
PLOT SCALE = 0.2 '\" / in.	DRAWN - DLH	REVISED	
PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED	

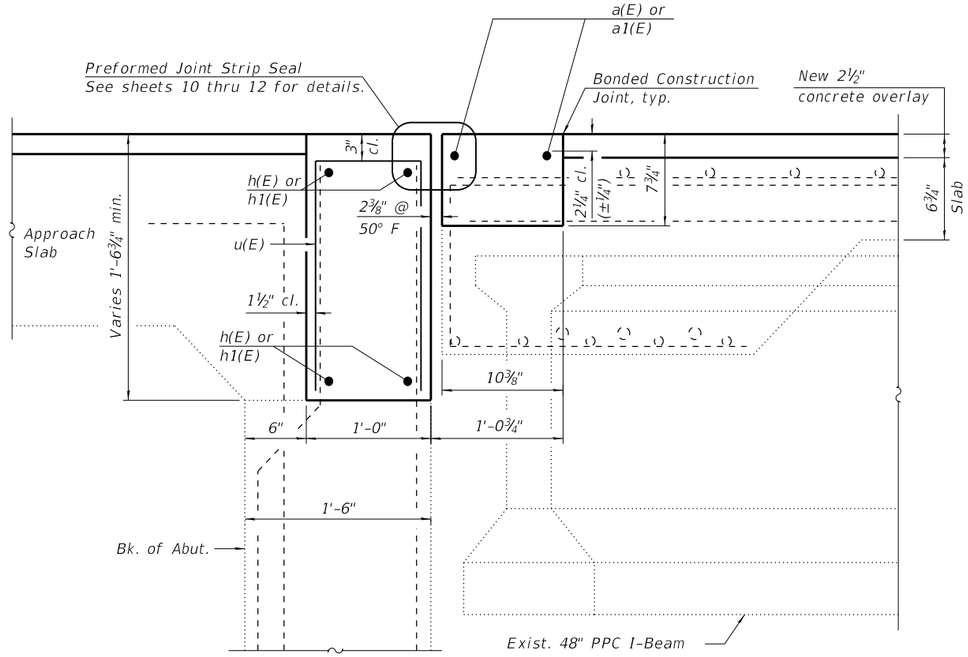
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT RECONSTRUCTION DETAILS I
STRUCTURE NO. 016-0863
SHEET NO. 5 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	27
		CONTRACT NO. 60R66		
ILLINOIS	FED. AID PROJECT			



SECTION A-A
(Showing Removal)



SECTION A-A
(Showing Reconstruction)

LEGEND

Concrete Removal Limits (See note 2.)

Proposed Scarification

Notes:

1. Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.
2. The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beams.
3. Existing transverse reinforcing bars perpendicular to ℄ Chicago Avenue that extend into the removal area are not shown for clarity. These reinforcing bars shall remain.
4. All existing reinforcement to remain shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
5. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
6. For Bar Splicer Assembly Details, see Sheet 9.

design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = dheberling	DESIGNED - SBC	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	FILE NAME = SN_0160863.dgn	CHECKED - BRD	REVISED	JOINT RECONSTRUCTION DETAILS II
	PLOT SCALE = 0.2 '-" / in.	DRAWN - DLH	REVISED	STRUCTURE NO. 016-0863
	PLOT DATE = 1/24/2020	CHECKED - SBC	REVISED	SHEET NO. 6 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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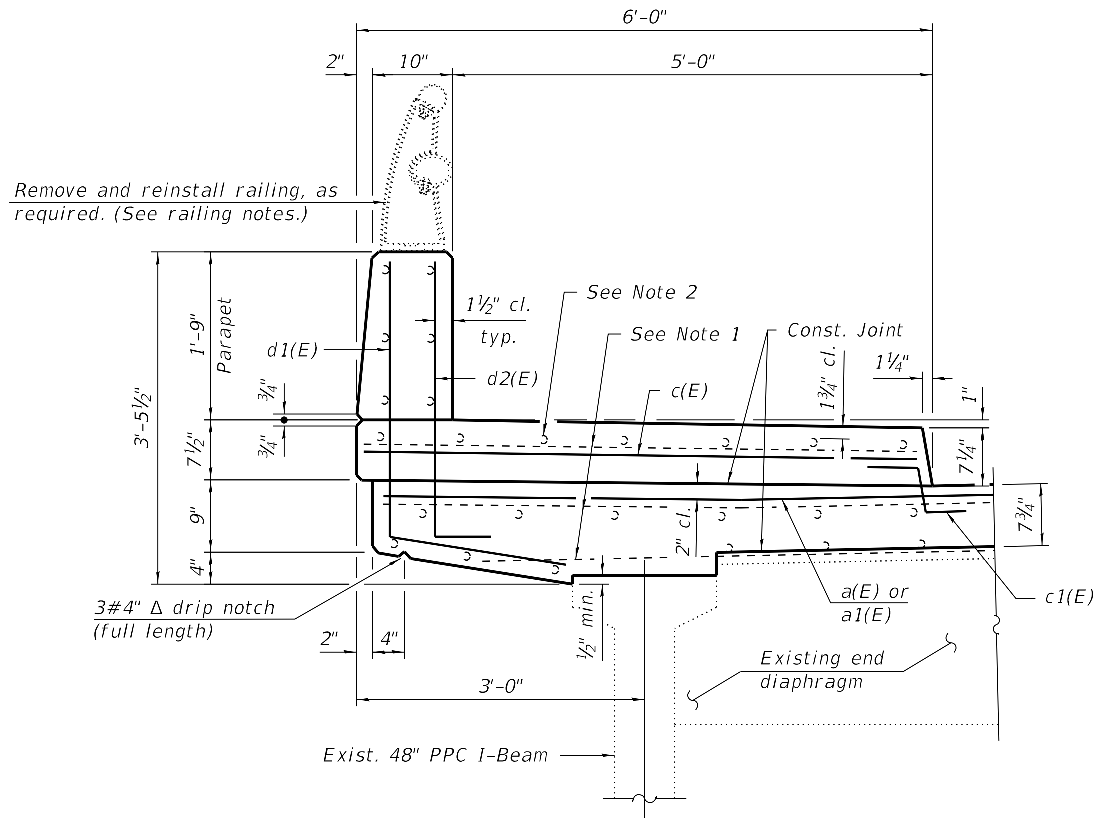
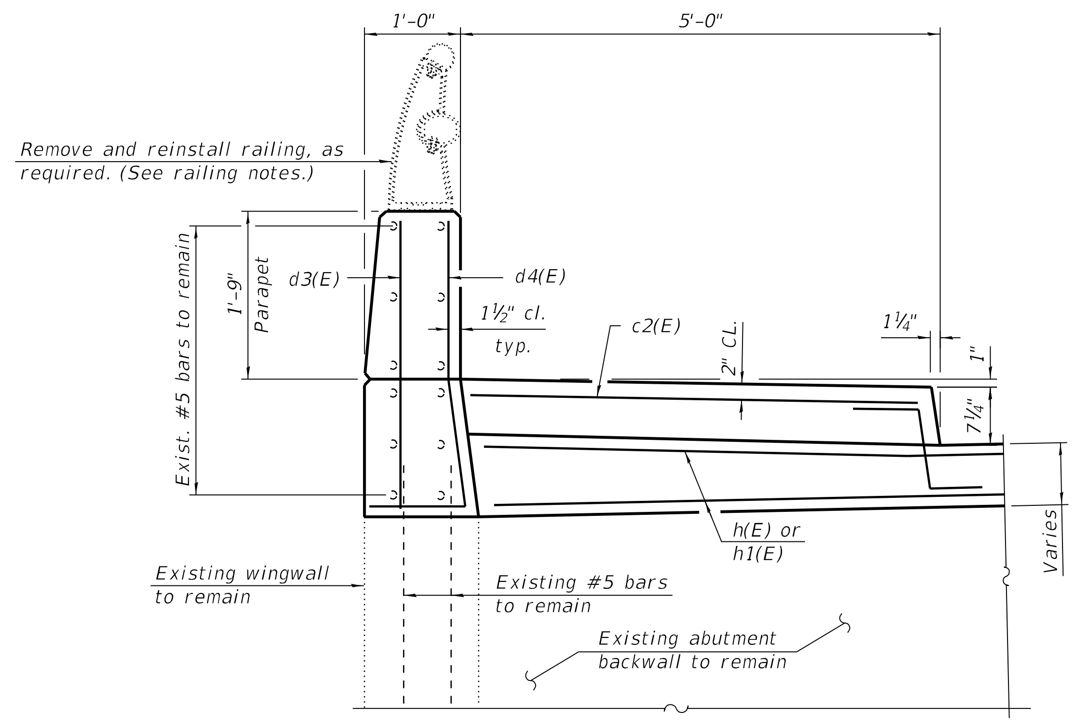
		CONTRACT NO. 60R66		
	ILLINOIS	FED. AID PROJECT		



SECTION B-B

(Showing Reconstruction)



SECTION C-C

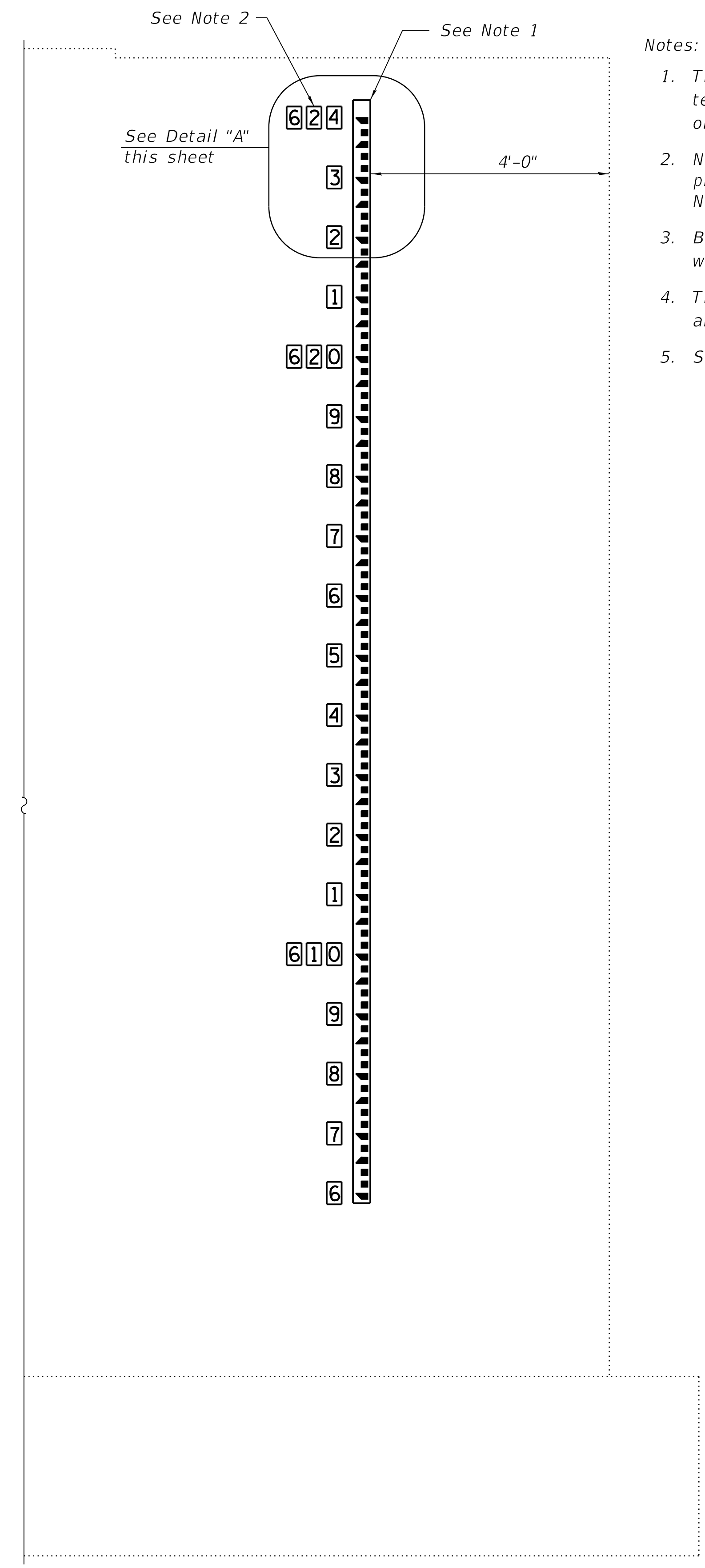
(Showing Reconstruction)

Notes:

1. Existing transverse reinforcing bars that extend into the removal area shall remain. These reinforcing bars are perpendicular to ℄ Chicago Avenue, not parallel to the skew.
2. Existing longitudinal reinforcing bars shall remain.
3. All existing reinforcement to remain shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Railing Notes:

1. If required to accommodate expansion joint reconstruction, the railing shall be carefully removed and stockpiled on site at a location designated by the Engineer. Any damaged materials designated for reuse shall be repaired or replaced by the Contractor in a manner satisfactory to the Engineer.
2. Limits of parapet removal shall be adjusted by the Engineer as to not compromise the existing rail post anchorage. A distance of 1'-0" or greater from the removal line to the ℄ of the existing rail post shall be maintained.
3. Reinstallation of existing railing shall be in accordance with the applicable requirements of Section 505 of the Standard Specifications.
4. All work associated with the railing will not be measured or paid for separately but shall be considered as included in the cost of Concrete Superstructure.

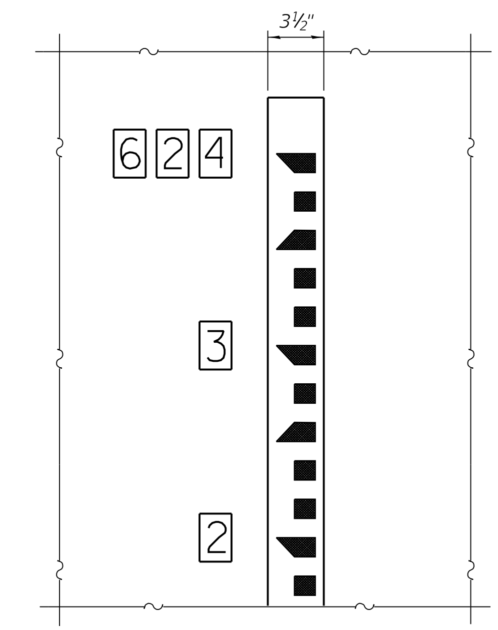


ELEVATION - PIER 1

(Looking East)

Notes:

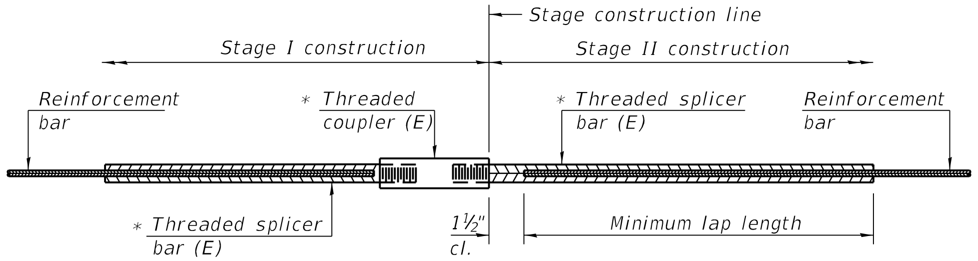
1. *The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered and 3½" wide. Gauge plates shall be "Watermark" style "E" or approved equivalent.*
2. *Number plate shall be a black numeral on a 2"x3" white porcelain enameled iron plate. Number plates shall be "Watermark" style "E" or approved equivalent. Number plates with length in feet and elevations shall be installed as shown.*
3. *Both the gauge plates and number plates shall be fastened directly to the pier with a ¼" Ø x 1½" long masonry screw with a hex washer head.*
4. *The Contractor must determine exact elevation of the gauge plates, in the field, and install gauge plates within a tolerance of ¼".*
5. *See Special Provision for Stream Gauge.*



DETAIL "A"

BILL OF MATERIAL

Item	Unit	Total
Stream Gauge	Each	1

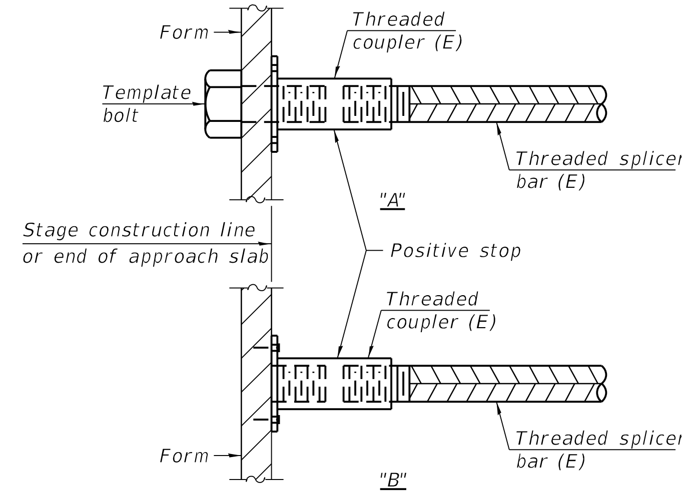


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

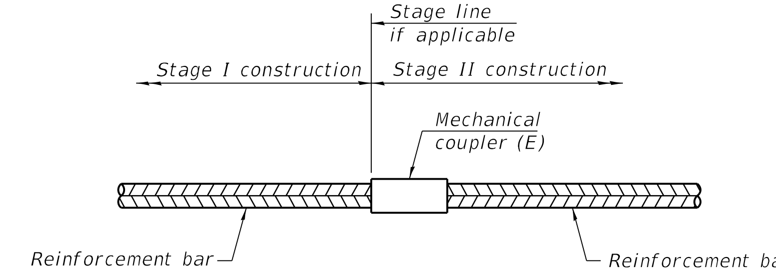
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Joint Reconstruction at West Abutment	#6	4	4'-10"
	#7	2	6'-3"
Joint Reconstruction at East Abutment	#6	4	4'-10"
	#7	2	6'-3"



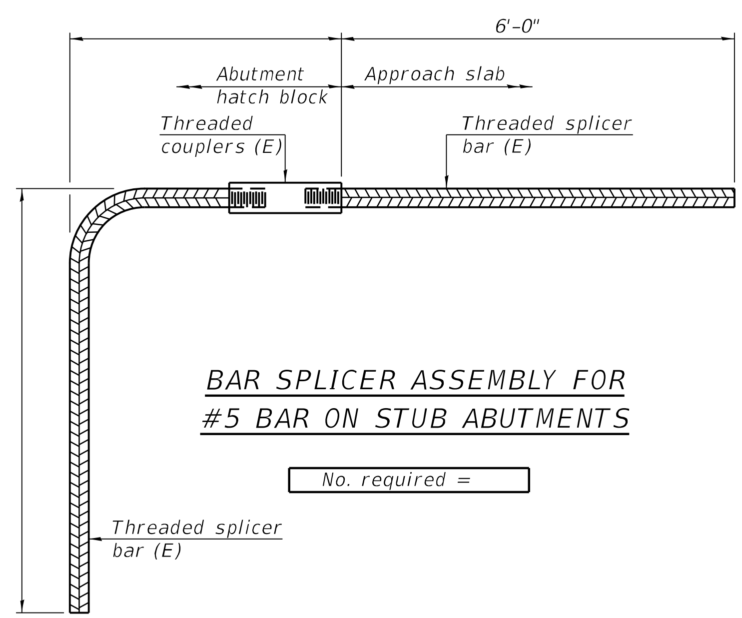
INSTALLATION AND SETTING METHODS

"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.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



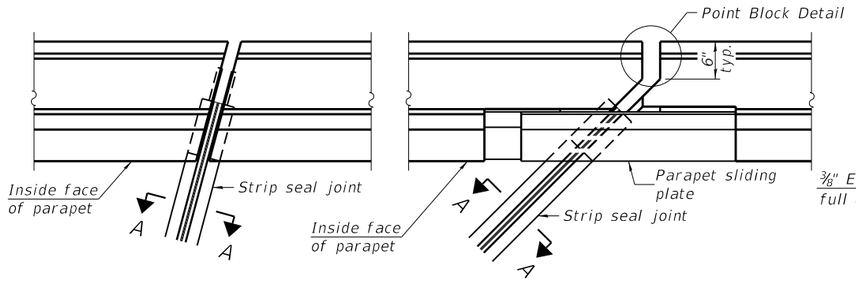
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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.

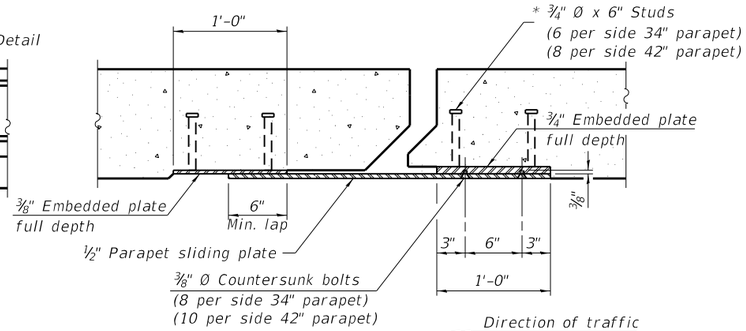
BSD-1 2-17-2017



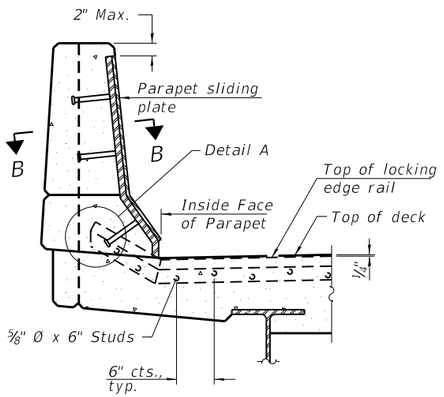
FOR SKEWS ≤ 30°

FOR SKEWS > 30°

PLAN AT PARAPET

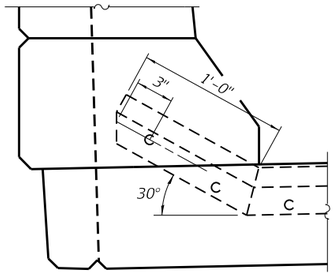


SECTION B-B

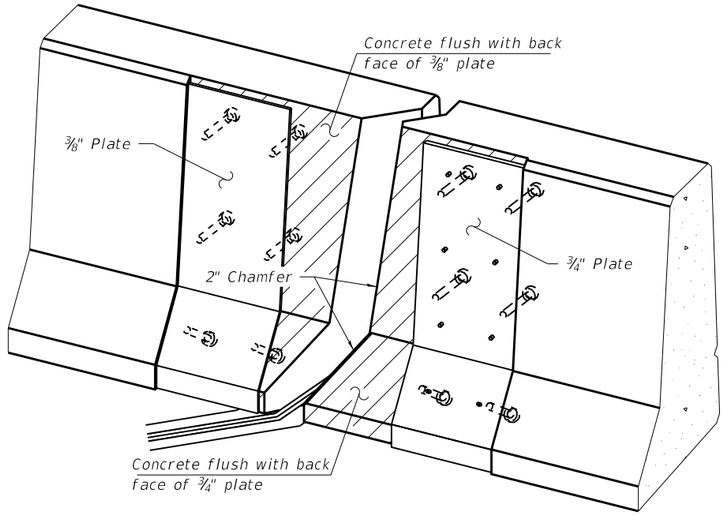


ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

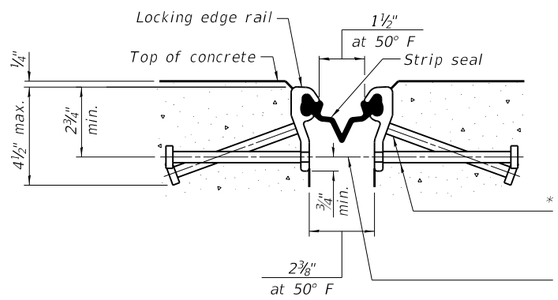


DETAIL A



TRIMETRIC VIEW

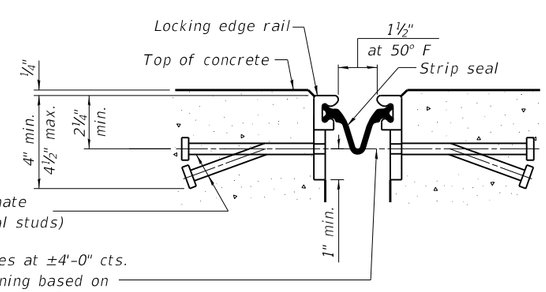
(Showing embedded plates only)



* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

⅜" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

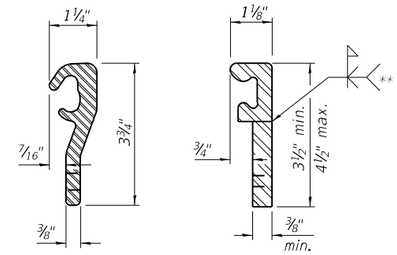
SHOWING ROLLED RAIL JOINT



SHOWING WELDED RAIL JOINT

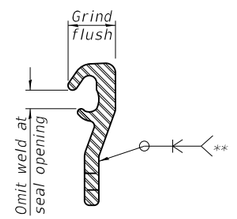
SECTION A-A

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



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



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	134

Notes:

1. The strip seal shall be made continuous and shall have a minimum thickness of ¼". 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.
2. 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.
3. The Manufacturer's recommended installation methods shall be followed.
4. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
5. The maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
6. The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.
7. Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.
8. 34" F-shape barrier shown, 42" F-shape similar as noted.
9. 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.

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design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = dheberling	DESIGNED - SBC	REVISED
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	PLOT SCALE = 0.2 '-" / in.	DRAWN - DLH	REVISED
	PLOT DATE = 12/13/2019	CHECKED - SBC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL – SIDEWALK
STRUCTURE NO. 016-0863

SHEET NO. 10 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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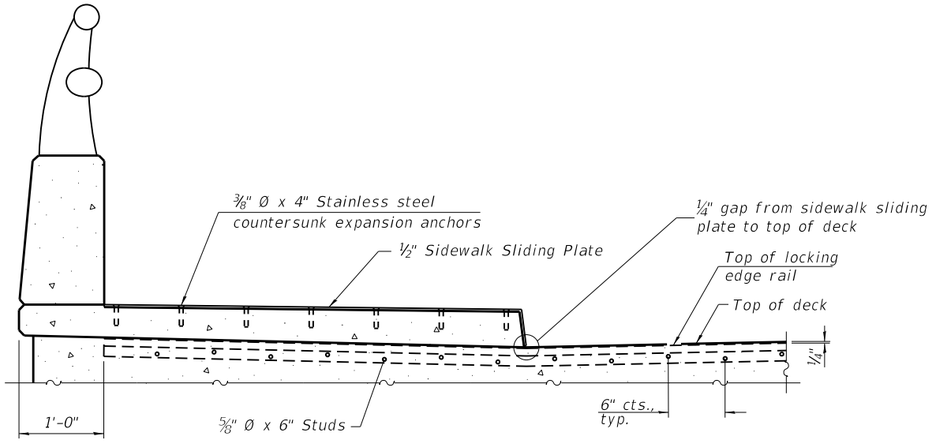
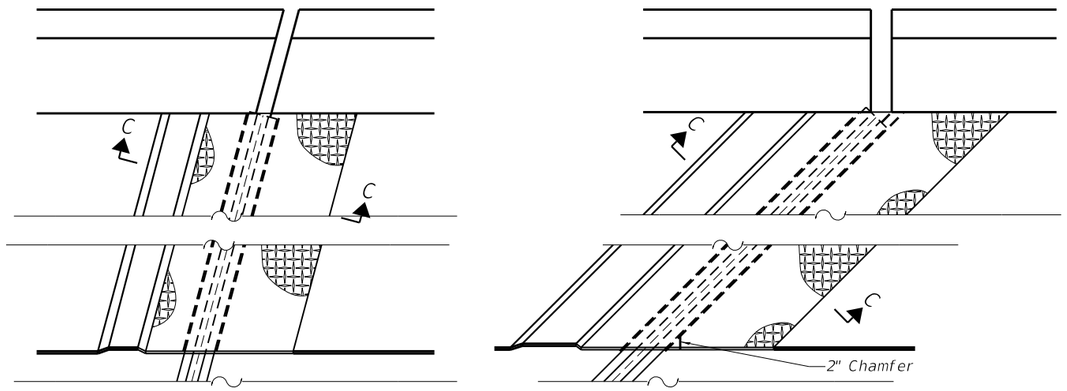
		CONTRACT NO. 60R66		
		ILLINOIS FED. AID PROJECT		



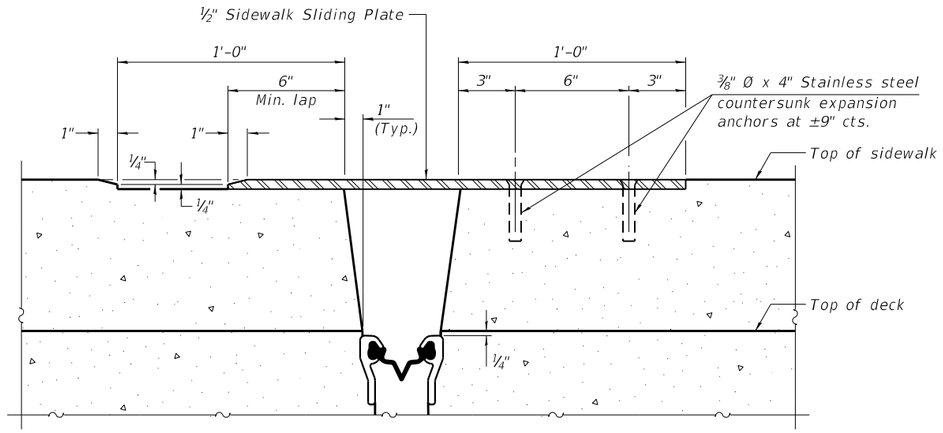
ELEVATION AT RAISED SIDEWALK



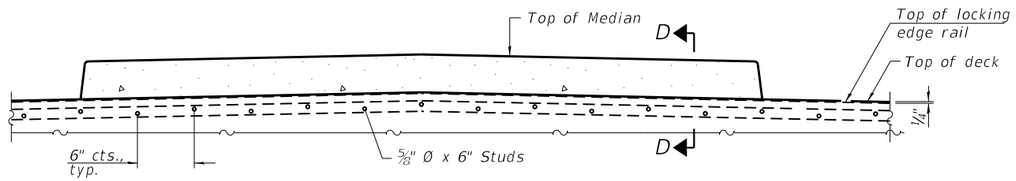
(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT RAISED SIDEWALK

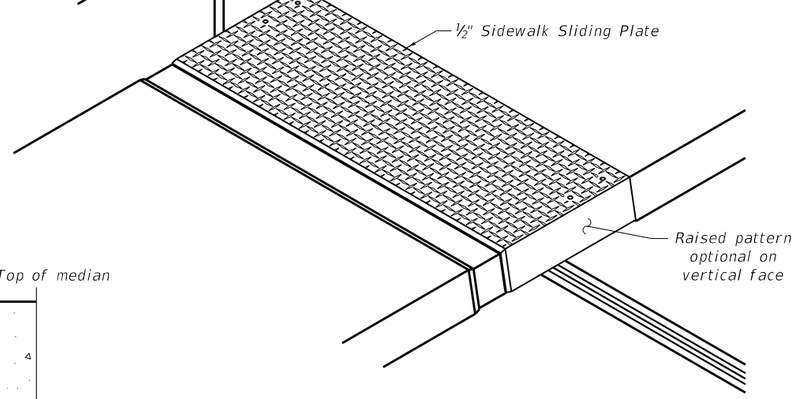


SECTION C-C

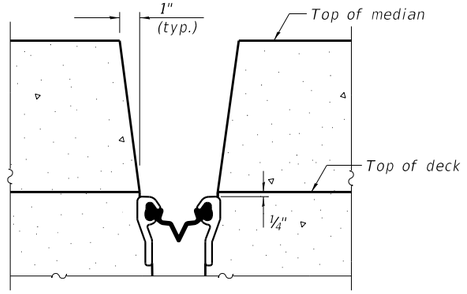


ELEVATION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



TRIMETRIC VIEW



SECTION D-D
(at Rt. ∠'s)

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design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = dheberling	DESIGNED - SBC	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PREFORMED JOINT STRIP SEAL – SIDEWALK STRUCTURE NO. 016–0863
	FILE NAME = SN_0160863.dgn	CHECKED - BRD	REVISED		SHEET NO. 11 OF 13 SHEETS
	PLOT SCALE = 0.2 '=" / in.	DRAWN - DLH	REVISED		
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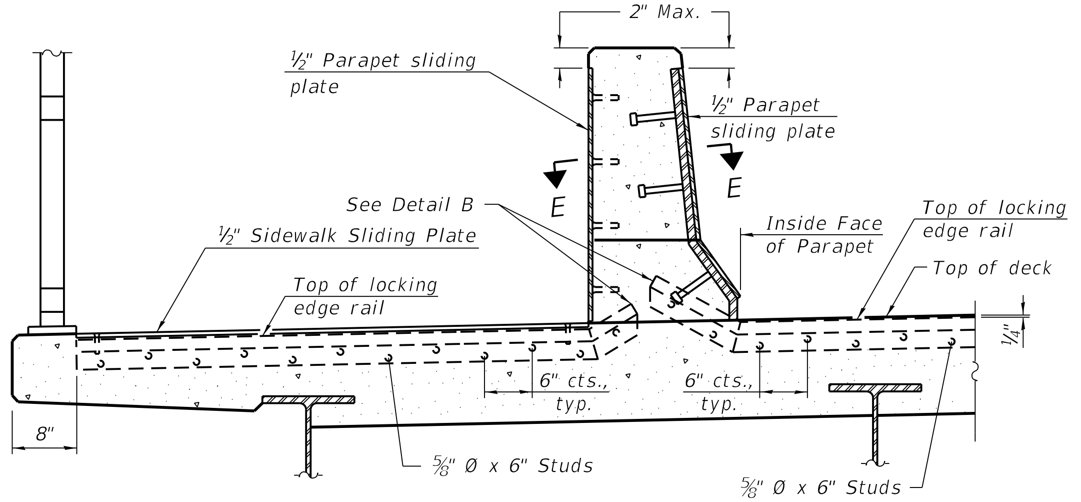
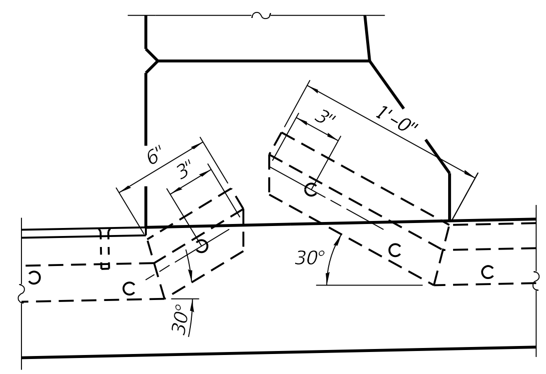
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	33
		CONTRACT NO. 60R66		
		ILLINOIS	FED. AID PROJECT	

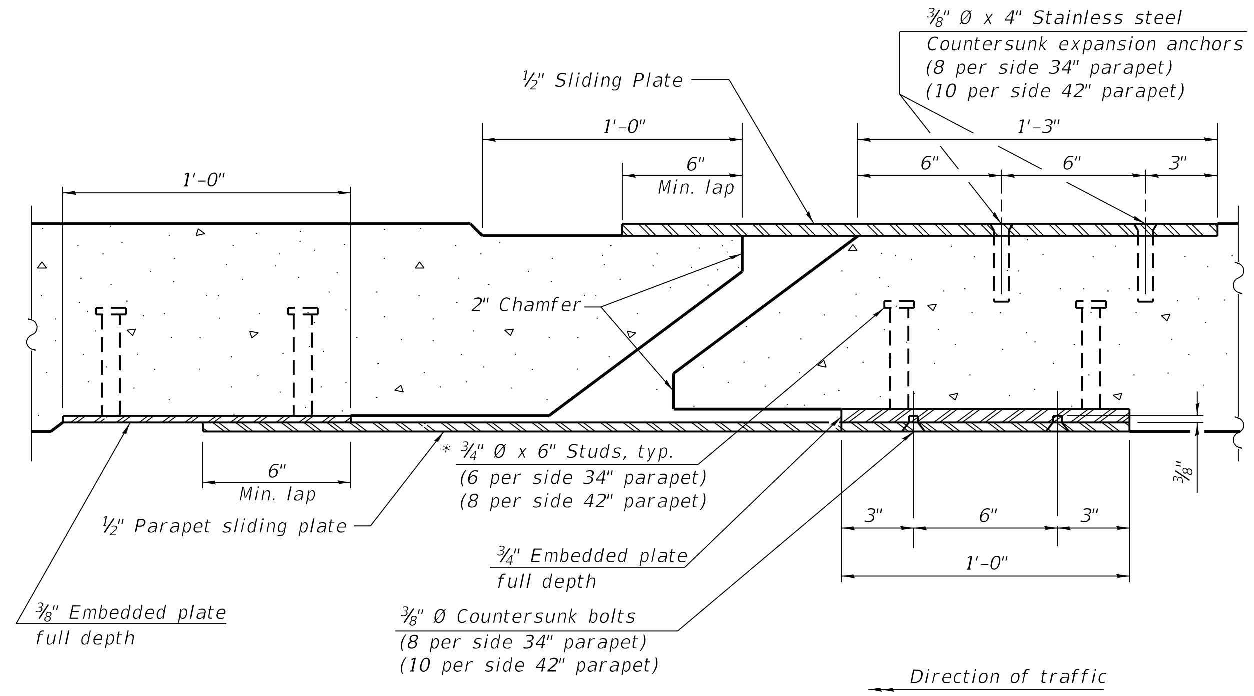


ELEVATION AT DECK LEVEL SIDEWALK

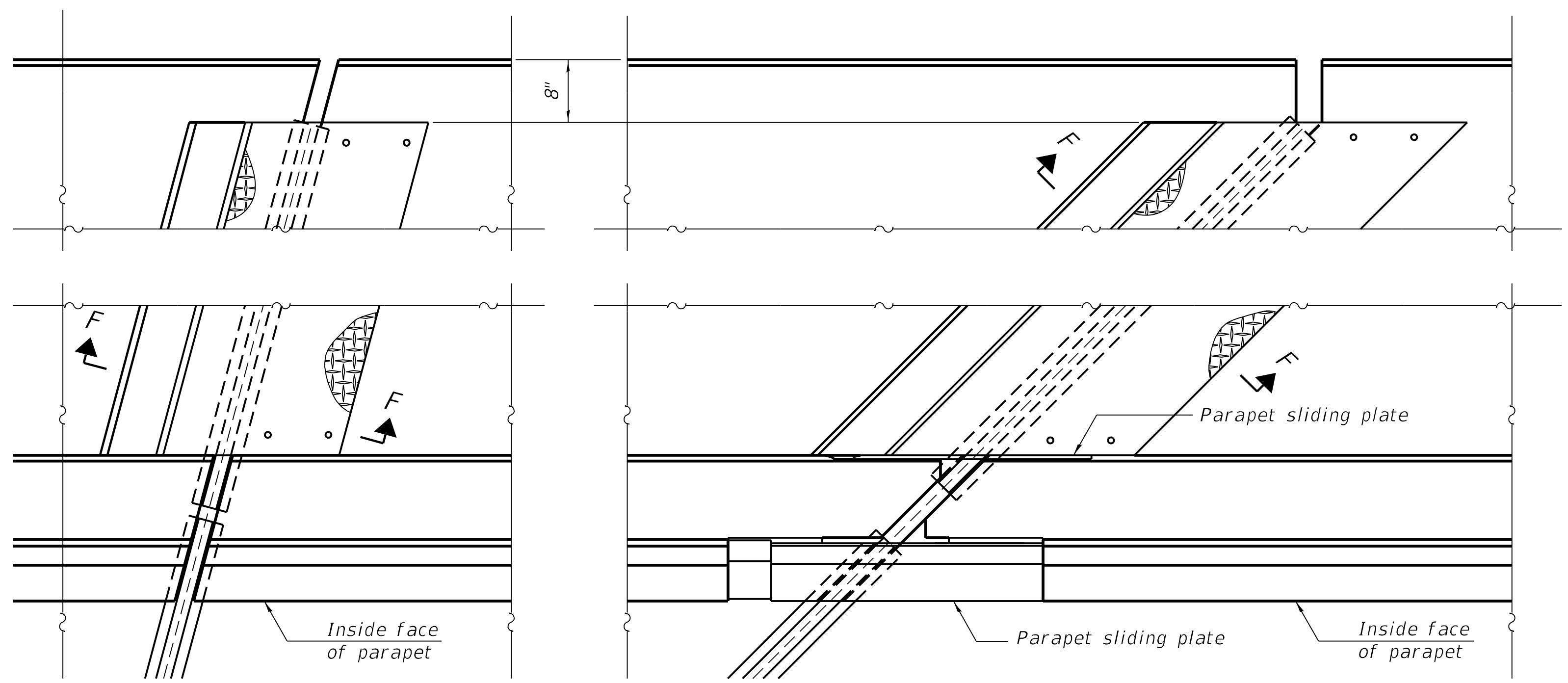
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL B



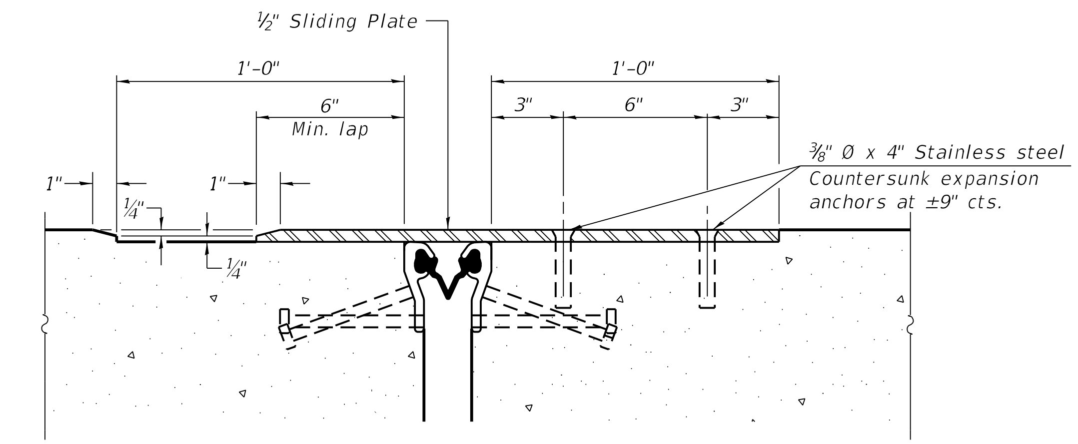
SECTION E-E



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

EJ-SS-S 8-11-17

(Sheet 3 of 3)

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PLOT DATE = 12/13/2019	CHECKED - SBC	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL – SIDEWALK
STRUCTURE NO. 016–0863

SHEET NO. 12 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	34
		CONTRACT NO. 60R66		
		ILLINOIS FED. AID PROJECT		

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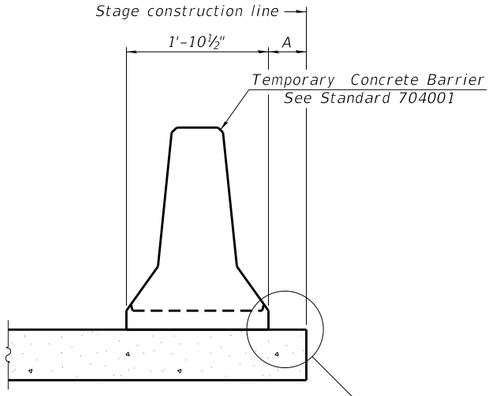
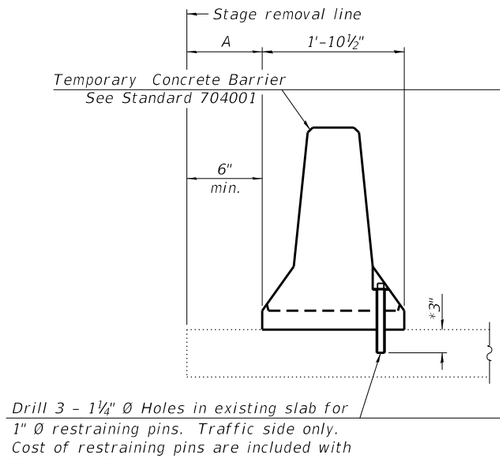


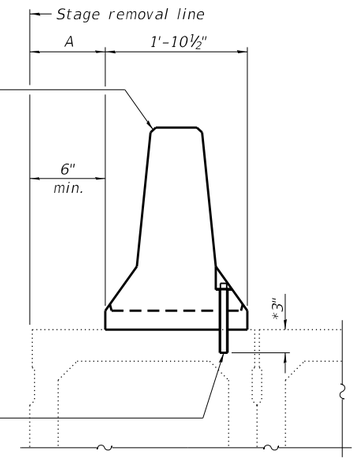
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3 - 1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

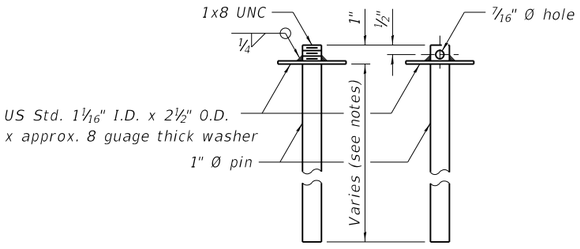
EXISTING SLAB



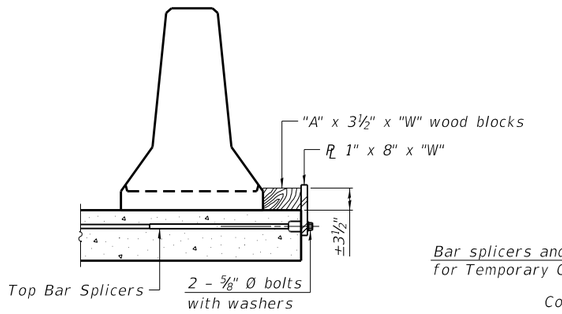
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

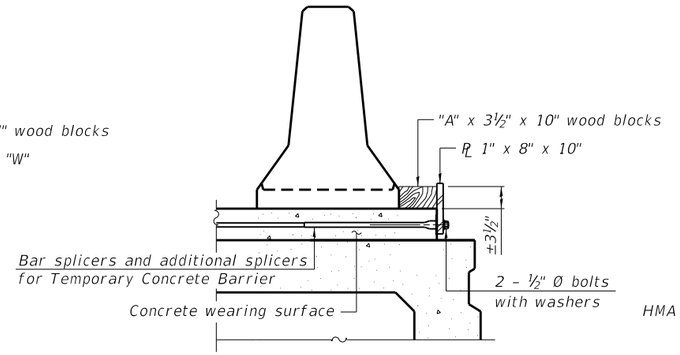
SECTIONS THRU SLAB OR DECK BEAM



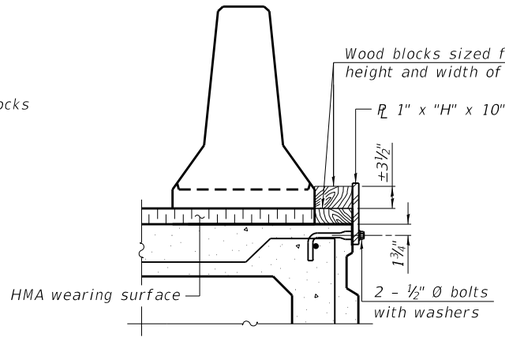
RESTRAINING PIN



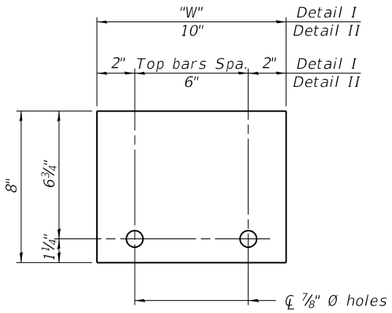
DETAIL I



DETAIL II

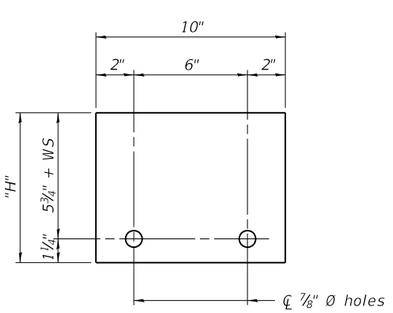


DETAIL III



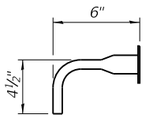
STEEL RETAINER ℄ 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER ℄ 1" x "H" x 10"

(Detail III)



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

1. Cost of retainer assembly is included with Temporary Concrete Barrier.
2. A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.
3. The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
4. When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

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

R-27

2-17-2017

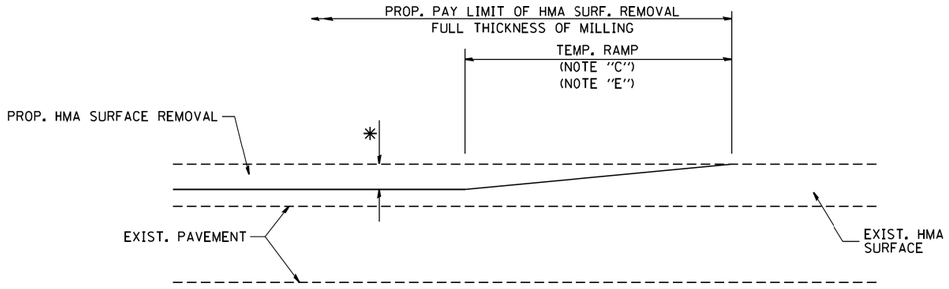
design firm no. 184001036 whks engineers + planners + land surveyors

USER NAME = dheberling	DESIGNED - SBC	REVISED	
FILE NAME = SN_0160863.dgn	CHECKED - BRD	REVISED	
PLOT SCALE = 0.2 '\"/ in.	DRAWN - DLH	REVISED	
PLOT DATE = 12/13/2019	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0863
SHEET NO. 13 OF 13 SHEETS

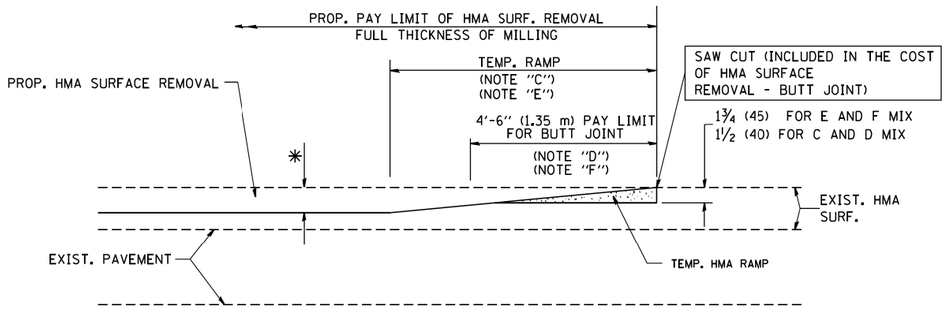
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	35
		CONTRACT NO. 60R66		
	ILLINOIS FED. AID PROJECT			



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

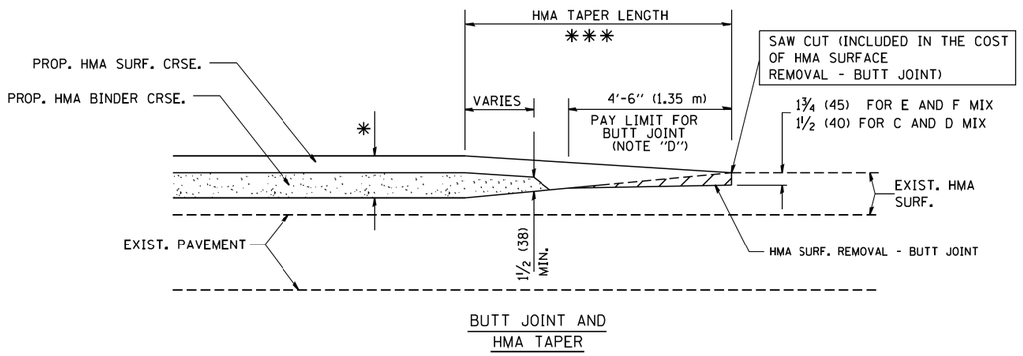


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

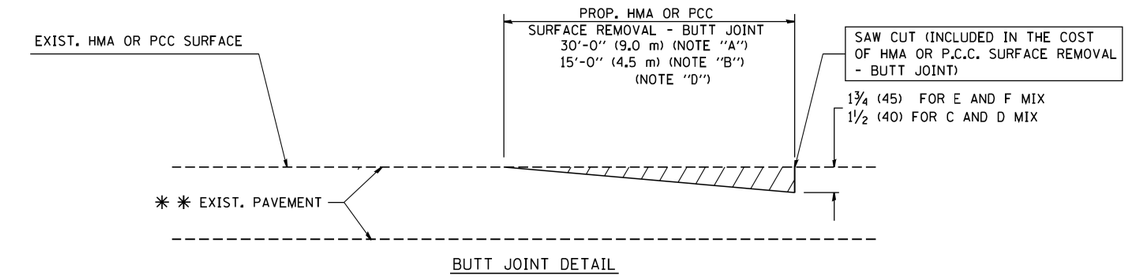
OPTION 2

TYPICAL TEMPORARY RAMP

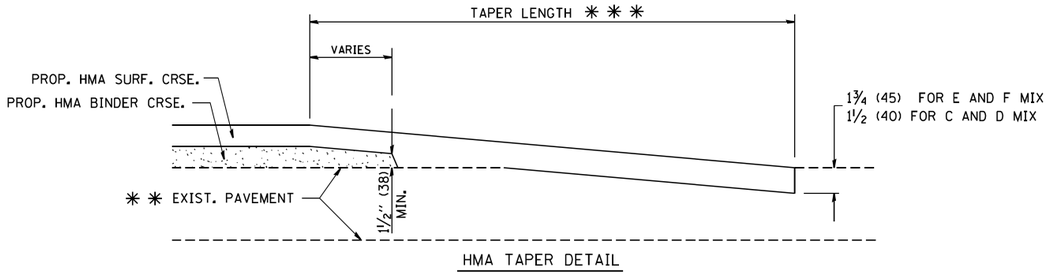


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

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

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

BASIS OF PAYMENT:

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

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

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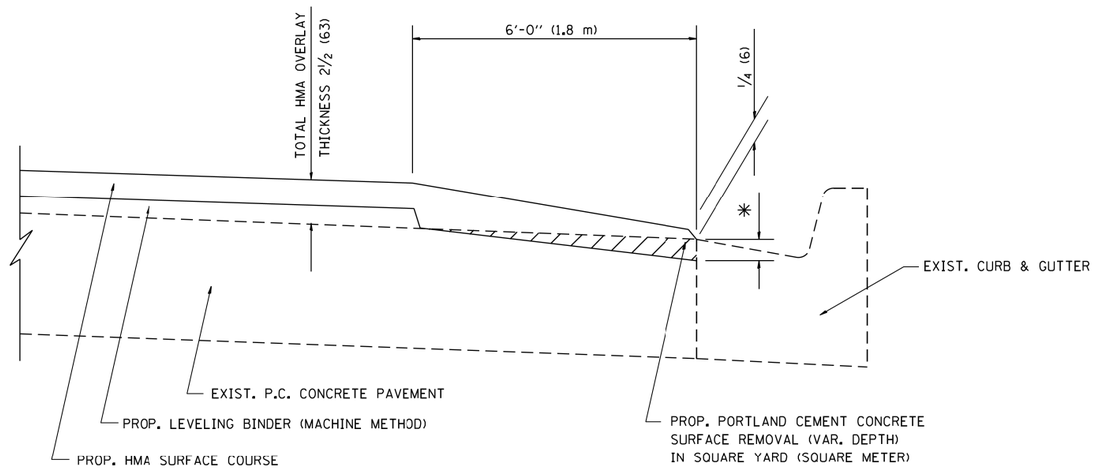
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	36
	BD400-05 BD32	CONTRACT NO. 60R66		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



HMA TAPER AT EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1½ (38)	1 (25)	1¼ (33)
E	1¾ (44)	¾ (19)	1½ (38)

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

FILE NAME = pwt\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist Standards\CADData\Cad sheets\bd33.dgn	USER NAME = leyse	DESIGNED - R. SHAH	REVISED - A. ABBAS 05-05-9
		DRAWN -	REVISED - E. GOMEZ 12-21-00
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Default	PLOT DATE = 7/7/2016	DATE - 09-10-94	REVISED - JP CHANG 07-08-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA TAPER AT EDGE OF P.C.C. PAVEMENT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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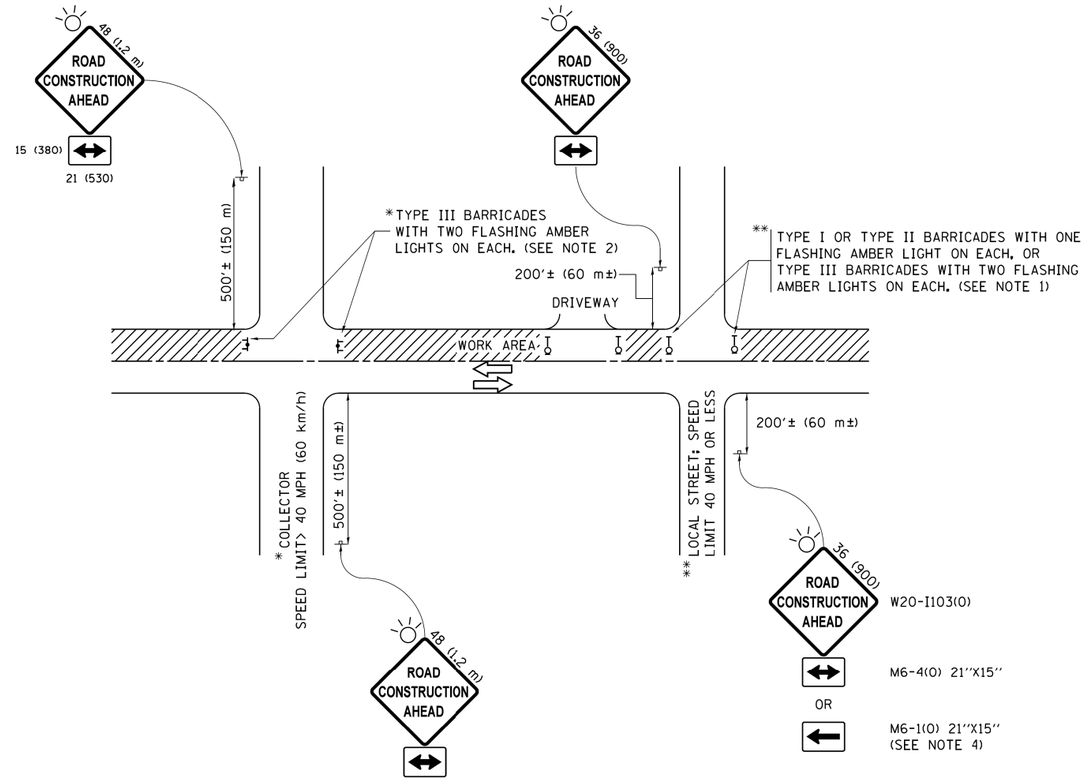
	BD400-06 (BD33)	**CONTRACT NO.** 60R66		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE ''ROAD CONSTRUCTION AHEAD'' SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE ''ROAD CONSTRUCTION AHEAD'' SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\$\DRAWN\CADData\CADsheets\tc10.dgn	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
		DRAWN	REVISED -T. RAMMACHER 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 OF TRANSPORTATION

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

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	38
	TC-10	CONTRACT NO. 60R66		
	ILLINOIS FED. AID PROJECT			

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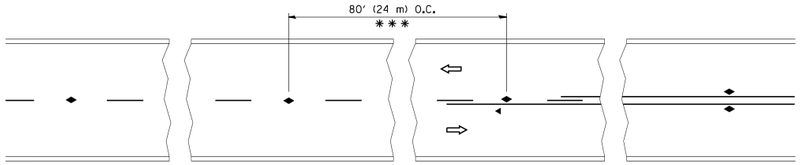
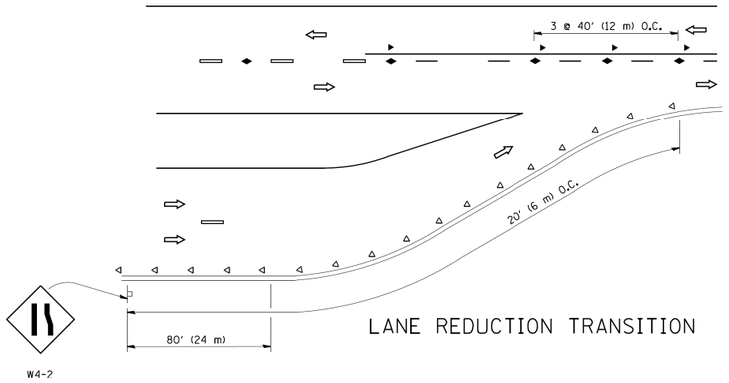
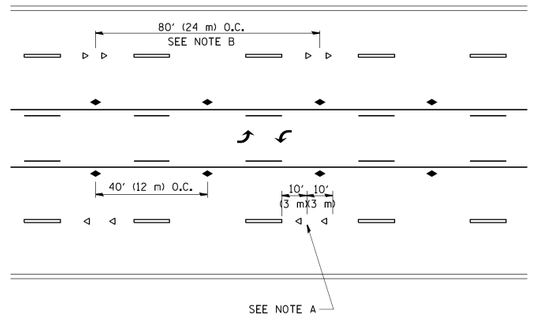


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

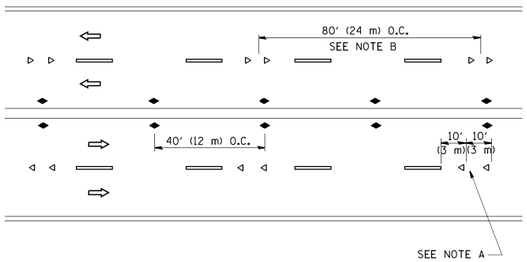
TWO-LANE/TWO-WAY



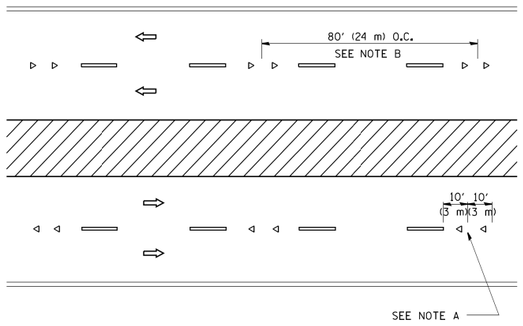
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

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

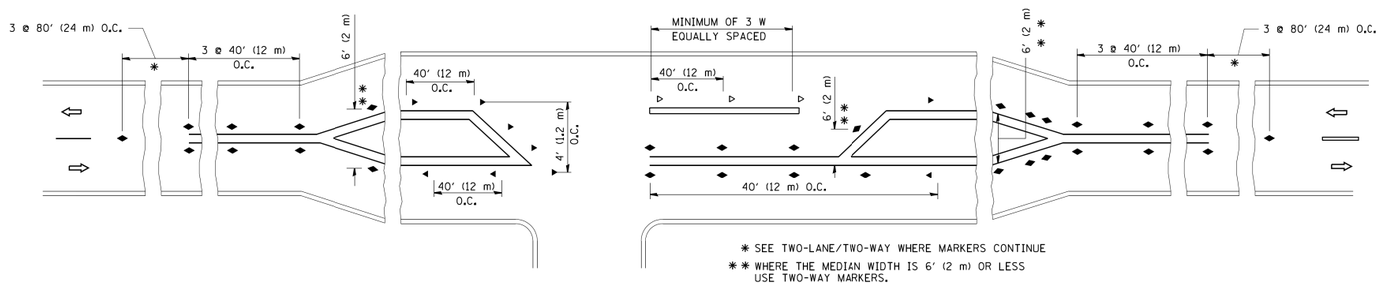
LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

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



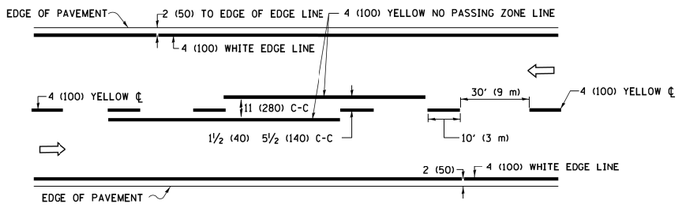
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

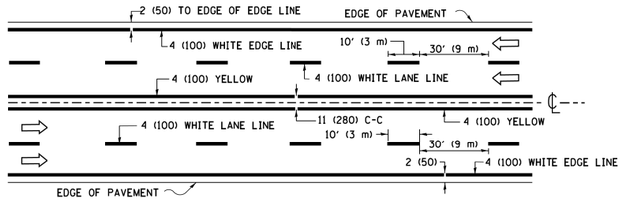
LEFT TURN

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

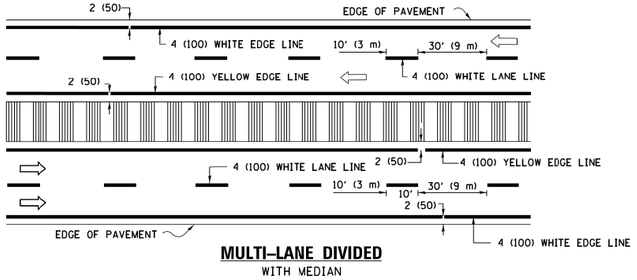
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc11.dgn	USER NAME = leysa	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - T. RAMMACHER 03-12-99					1398	0505-BR(11)	COOK	45	39
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00						TC-11		CONTRACT NO. 60R66	
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



2–LANE ROADWAY

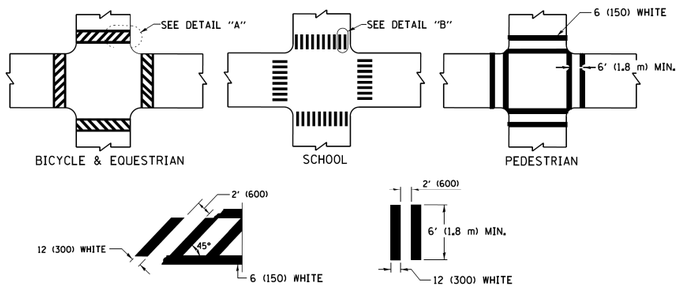


MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

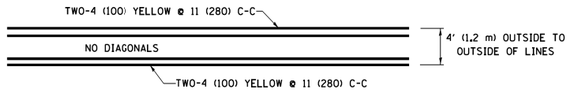
TYPICAL LANE AND EDGE LINE MARKING



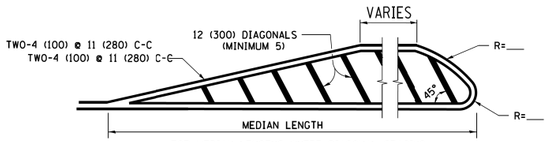
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

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



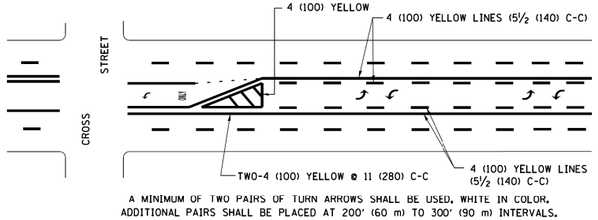
4' (1.2 m) WIDE MEDIANS ONLY



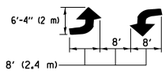
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

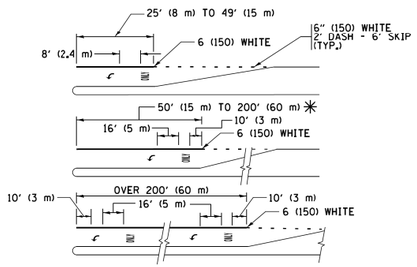


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

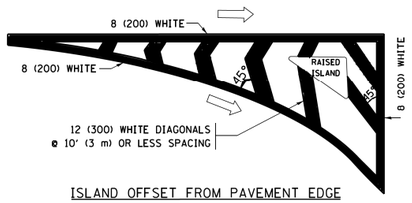


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

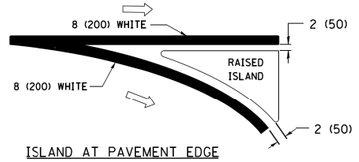
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

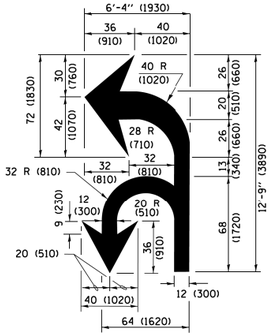


ISLAND OFFSET FROM PAVEMENT EDGE

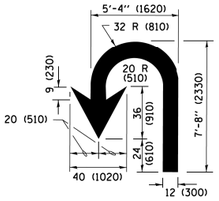


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

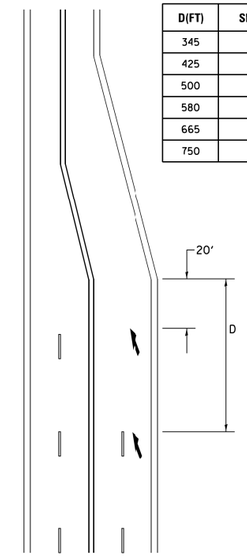


COMBINATION LEFT AND U–TURN



U–TURN

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



LANE REDUCTION TRANSITION

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 ⊄ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⊄ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 ⊄ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⊄ 6 (150) 12 (300) ⊄ 45° 12 (300) ⊄ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⊄ 4 (100) WITH 12 (300) DIAGONALS ⊄ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⊄ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3,6 SQ. FT. (0,33 m^2) EACH "X"=54,0 SQ. FT. (5,0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) ⊄ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME = W:\diststd\22x34\tc13.dgn	USER NAME = leysa	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
		DRAWN -	REVISED - C. JUCIUS 07-01-13
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
Default	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

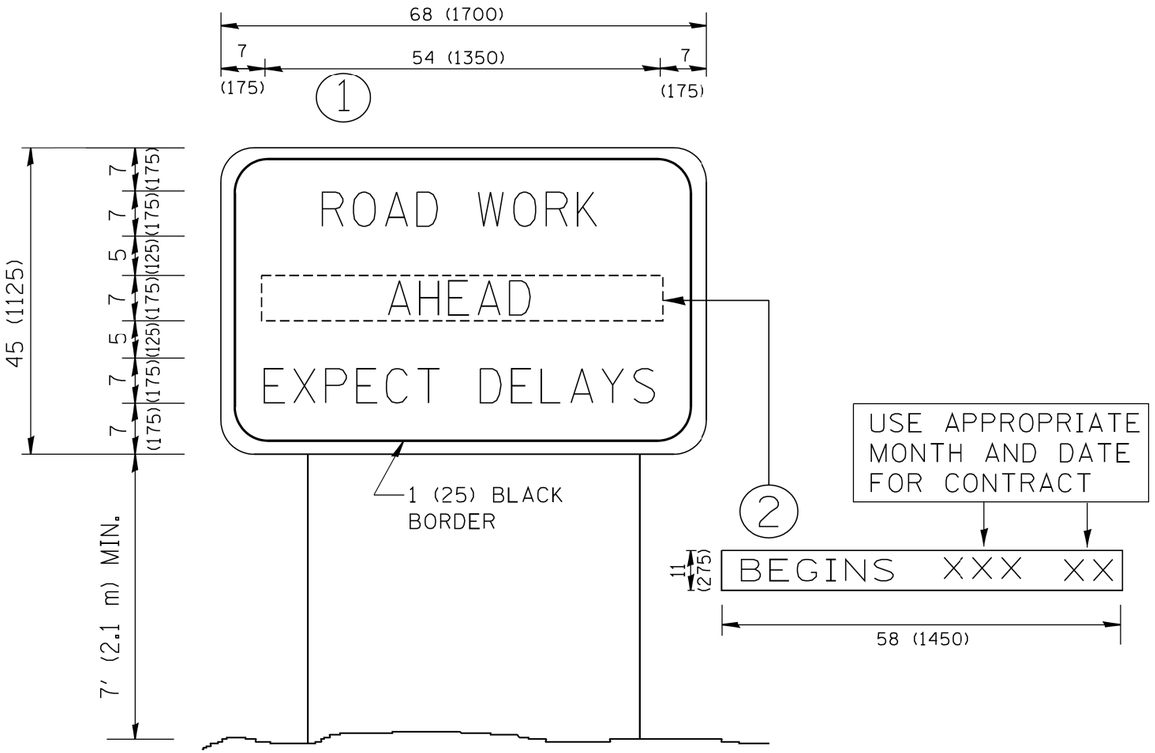
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	40
	TC-13	CONTRACT NO. 60R66		
		ILLINOIS FED. AID PROJECT		

tc13.dan 6/23/2017 9:41:31 AM User=leysa



NOTES:

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

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

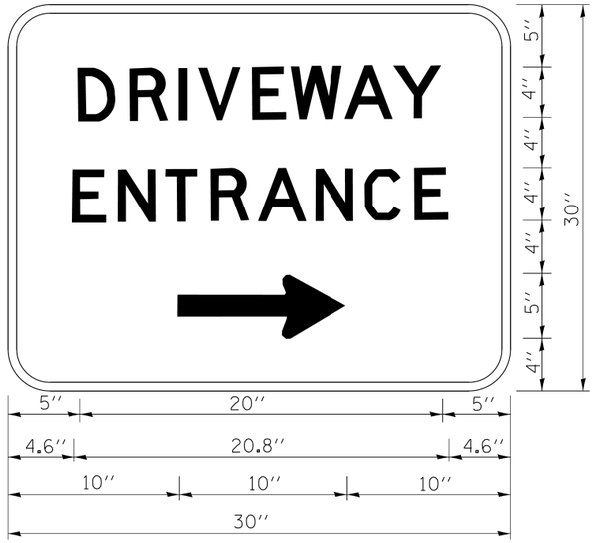
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	41
	TC-22	CONTRACT NO. 60R66		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



3.0'' RADIUS, 0.5'' BORDER, WHITE ON GREEN; REFLECTORIZED
''DRIVEWAY'' D; ''ENTRANCE'' D; STANDARD ARROW CUSTOM 12.0'' × 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 = c:\pw_work\pwidot\gaglianobt\d0108315\tc26.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
		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

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	42
	TC-26	CONTRACT NO. 60R66		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX	J	J
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET	RXR	RXR
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P	P
SAMPLING (SYSTEM) DETECTOR	S	S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS	IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS	QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	CD	CD
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	1#6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

FILE NAME = ts05.dgn	USER NAME = leysa	DESIGNED - IP	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**DISTRICT ONE** **STANDARD TRAFFIC SIGNAL DESIGN DETAILS**	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -			1398	0505-BR(11)	COOK	45	43
Default	PLOT SCALE = 50.0000 ' / in.	CHECKED - LP	REVISED -				**TS-05**	CONTRACT NO. 60R66		
	PLOT DATE = 9/29/2016	DATE - 9/29/2016	REVISED -		SCALE: NONE SHEET 1 OF 7 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

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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.

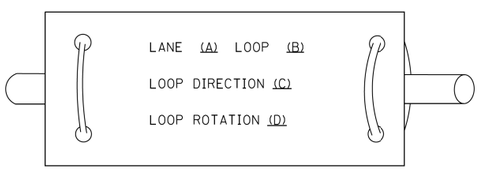
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

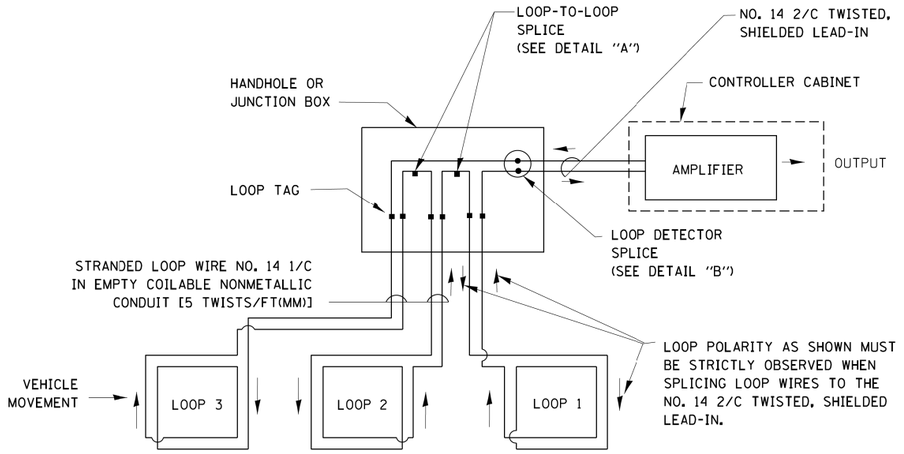


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

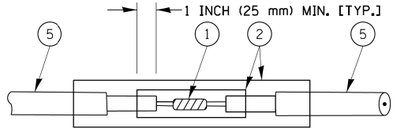
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

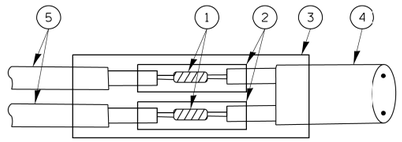


DETECTOR LOOP WIRING SCHEMATIC

- 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.

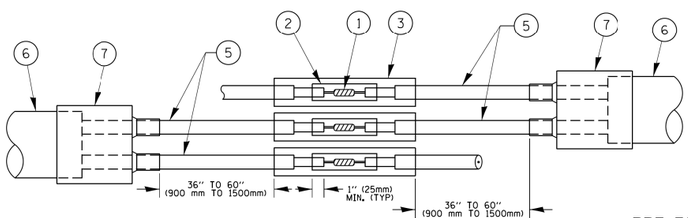


DETAIL "A"
LOOP-TO-LOOP SPLICE



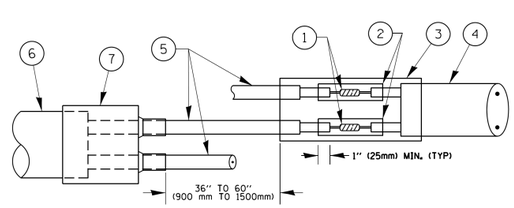
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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.

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

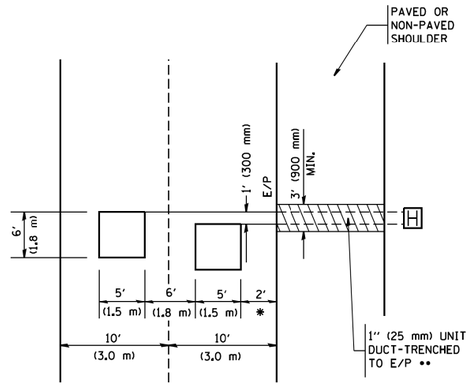
(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\ts05.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BCK	REVISED -			1398	0505-BR(11)	COOK	45	44
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -				TS-05	CONTRACT NO. 60R66		
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

ts05.dgn 1/13/2014 12:36:31 PM User=footemj

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

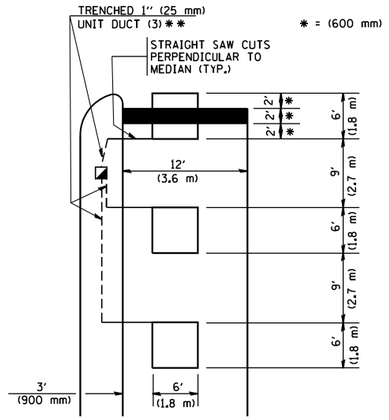


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

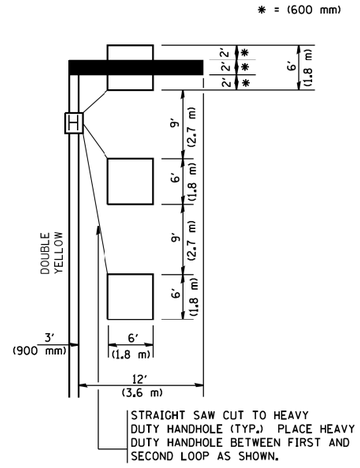
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

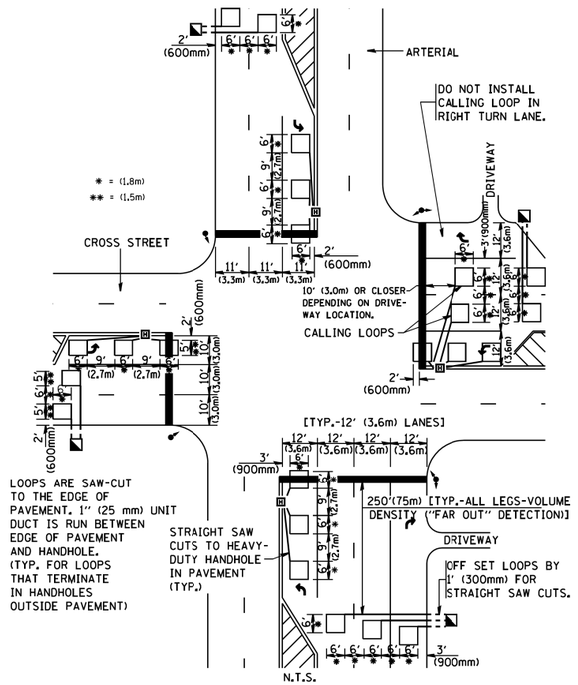
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)



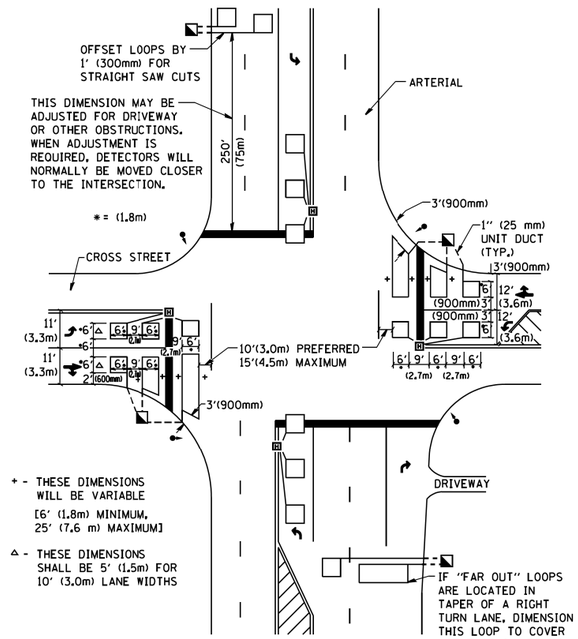
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



DETAIL 1
N.T.S.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1398	0505-BR(11)	COOK	45	45
	TS-07	CONTRACT NO. 60R66		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		