06-Aug-3-2025 LETTING ITEM 203

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	1
	ILLINOIS	CONTRACT NO. 62V88		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAP ROUTE 870 (IL 53)
S. OF BEMIS ROAD TO NICOLL WAY / HARDING AVE
SECTION: FAP 0870 23 SMART2
DESIGNED OVERLAY, ADA IMPROVEMENTS, NEW SHOULDER DUPAGE COUNTY

C-91-07 4-24

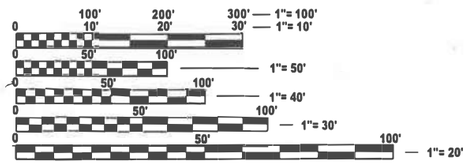
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS PROJECT IS LOCATED IN THE VILLAGE OF GLEN ELLYN.

TRAFFIC DATA:

IL 53:
S. OF BEMIS ROAD TO NICOLL WAY / HARDING AVE
ADT(2023) = 16,800 VPD
SPEED LIMIT = 40 MPH

FUNCTIONAL CLASS: OTHER PRINCIPAL ARTERIAL



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

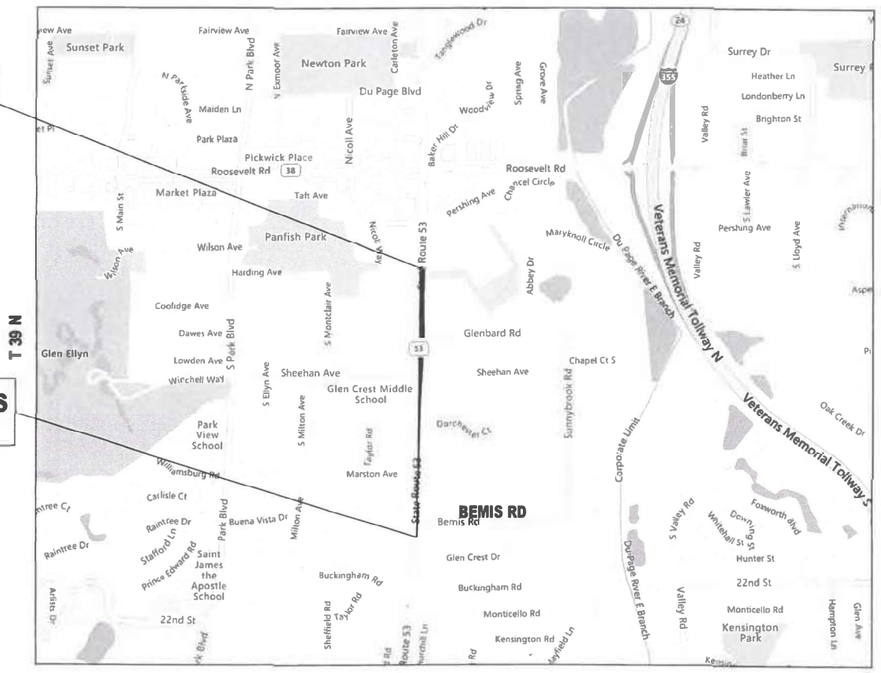
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432
PROJECT MANAGER: FAWAD AQUEEL

CONTRACT NO. 62V88

PROJECT ENDS STA. 55+74

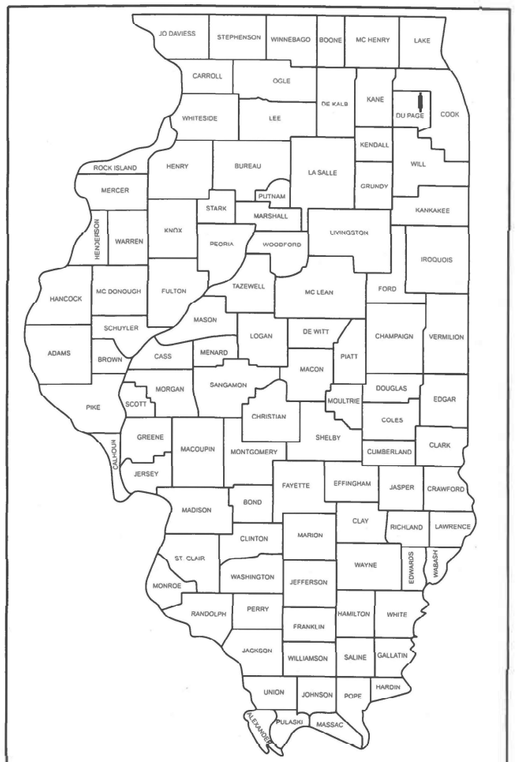
PROJECT BEGINS STA. 17+26



MILTON TOWNSHIP

GROSS & NET LENGTH = 3,848 FT. = 0.73 MILE

D-91-066-24



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 19th 20 25

REGIONAL ENGINEER

May 9 20 25

ENGINEER OF DESIGN AND ENVIRONMENT

May 9 20 25

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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INDEX OF SHEETS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424021-07	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDERS STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001-05	FRAME AND LIDS TYPE 1
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-13	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTOL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
814001-03	HANDHOLES
886001-01	DETECTOR LOOP INSTALLATIONS

ROADSIDE DEVELOPMENT NOTES

1. THE CONTRACTOR WILL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT 847.705.4171, AT LEAST 7 DAYS PRIOR TO DOING FORESTRY AND HERBICIDE WORK FOR LAYOUT.
2. TREES THREE (3) INCHES OR GREATER IN DIAMETER AT 4.5' OF THE GROUND SHALL BE CLEARED ONLY FROM NOVEMBER 1 TO MARCH 31 OF ANY GIVEN YEAR.
3. PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT DUE TO THE PROXIMITY OF THE EXISTING WETLANDS / BODIES OF WATER. A PHOSPHORUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).
4. THE CONTRACTOR SHALL TAKE CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OF TRUNKS. ANY DAMAGE DONE BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
5. ROADSIDE DEVELOPMENT LANDSCAPING PAY ITEMS SUCH AS TOPSOIL FURNISH AND PLACE, SEEDING CLASS 2A, NITROGEN AND POTASSIUM FERTILIZER NUTRIENT, AND EROSION CONTROL BLANKET SHALL BE USED TO RESTORE ALL THE AREAS WHERE THE TREE REMOVAL, ACRES (SPECIAL) HAS BEEN USED.
6. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL SECTIONS OF THE ILLINOIS CUSTOM SPRAY LAW, INCLUDING LICENSING. CONTRACTOR PERSONNEL APPLYING HERBICIDES SHALL HAVE A VALID PESTICIDE APPLICATOR LICENSE ISSUED BY THE ILLINOIS DEPARTMENT OF AGRICULTURE. THE LICENSED PESTICIDE APPLICATOR SHALL SUBMIT THEIR CURRENT LICENSE TO THE ENGINEER. THE LICENSED PESTICIDE APPLICATOR SHALL BE QUALIFIED AT A MINIMUM IN RIGHT-OF-WAY AND AQUATICS. THE LICENSED APPLICATOR SHALL WORK ON-SITE.
7. EXISTING VEGETATED AREAS (TREE, SHRUBS, VEGETATIVE BUFFERS, TURF AREAS, ETC.) WHERE DISTURBANCE IS NOT OCCURRING (INCLUDING AREAS OUTSIDE THE PROJECT LIMITS) SHALL NOT BE DISTURBED TO ENSURE THAT EXISTING VEGETATION IS PRESERVED HEALTHY TO MINIMIZE SOIL EROSION AND ELIMINATE SOIL COMPACTION. NO MATERIALS ARE TO BE STORED OR VEHICLES DRIVEN OR PARKED WITHIN THESE UNDISTURBED AREAS AT ANY TIME.

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES, (48 HOURS NOTIFICATION IS REQUIRED).
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, VILLAGE OF GLEN ELLYN.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. 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.
5. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) ACCORDING TO THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
6. THE RESIDENT ENGINEER SHALL CONTACT EMAD ALHUSSEINI AREA TRAFFIC FIELD ENGINEER, AT EMAD.ALHUSSEINI@ILLINOIS.GOV, A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
7. ANY DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO DISTRICT 1 TYPICAL PAVEMENT MARKING.
9. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE PROJECT LIMITS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
10. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
11. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

GENERAL NOTES (CONTINUED)

12. THE CONTRACTOR SHALL CONTACT THE DISTRICT TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM AND FOUNDATIONS AND VERIFYING THE MAST ARM LENGHTS.
14. RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED THROUGHOUT THE IMPROVEMENT ACCORDING TO THE DISTRICT STANDARDS AS NOTED IN THE DETAIL.
15. ALL PAVEMENT PATCHING, CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL, P.C.C. SIDEWALK 5", DRIVEWAY REMOVAL AND REPLACEMENT, BRICK PAVER REMOVAL AND REINSTALL, AND DRAINAGE ADJUSTMENT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
16. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
17. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 40 MPH OR LESS, AND 1 INCH. WHERE THE SPEED LIMIT IS OVER 40 MPH WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H).
18. OVERNIGHT LANE CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURES AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.

GEOTECHNICAL NOTES

1. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBS AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
2. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.
3. THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR1.

MAINTENANCE OF TRAFFIC NOTES

1. DROP OFFS ADJACENT TO THE TRAVEL LANE SHALL BE KEPT AT A MINIMUM. PROTECTION OF THE DROP-OFF SHALL BE ACCORDING TO THE IDOT BUREAU OF SAFETY PROGRAMS AND ENGINEERING, SAFETY ENGINEERING POLICY MEMORANDUM 4-21. DROP-OFFS GREATER THAN OR EQUAL TO 12" WILL NOT BE ALLOWED AT LOCATIONS WHERE THE DROP-OFF IS LOCATED WITHIN 8 FT OF THE EDGE OF THE TRAVEL LANE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DROP-OFF AREAS MEET THE OFFSET, HEIGHT, AND DURATION REQUIREMENTS TO USE BARRICADES AT THE END OF EACH WORK DAY. THIS MAY REQUIRE THE CONTRACTOR TO REPLACE OR PLACE SUFFICIENT MATERIAL IN THE EXCAVATION TO REDUCE THE DROP-OFF TO BE COMPLIANT WITH THE REQUIREMENTS FOR THE USE OF BARRICADES. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED TO COMPLY WITH THIS REQUIREMENT.

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PLOT DATE = 3/19/2025	DATE -	REVISED -	

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	2
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

REV-SEP

SUMMARY OF QUANTITIES

	Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	75	75					
	20200100	EARTH EXCAVATION	CU YD	1250	1250					
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	225	225					
	21101605	TOPSOIL FURNISH AND PLACE, 2"	SQ YD	4840	4840					
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	86	86					
	25000210	SEEDING, CLASS 2A	ACRE	1	1					
	25200110	SODDING, SALT TOLERANT	SQ YD	86	86					
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	90	90					
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	90	90					
	25000750	MOWING	ACRE	5	5					
	25100630	EROSION CONTROL BLANKET	SQ YD	4840	4840					
	28000400	PERIMETER EROSION BARRIER	FOOT	435	435					
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	75	75					
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	2235	2235					
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	10165	10165					
	40600370	LONGITUDINAL JOINT SEALANT	FOOT	4100	4100					
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	25	25					
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	175	175					
	40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	1425	1425					
	40605026	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80	TON	1475	1475					
	42001300	PROTECTIVE COAT	SQ YD	200	200					
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1295	1295					
	42400800	DETECTABLE WARNINGS	SQ FT	75	75					

SUMMARY OF QUANTITIES

	Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN
	44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	2350	2350					
	44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	12705	12705					
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	325	325					
	44000600	SIDEWALK REMOVAL	SQ FT	1265	1265					
	44201811	CLASS D PATCHES, TYPE I, 14 INCH	SQ YD	20	20					
	44201815	CLASS D PATCHES, TYPE II, 14 INCH	SQ YD	60	60					
	44201819	CLASS D PATCHES, TYPE III, 14 INCH	SQ YD	50	50					
	44201821	CLASS D PATCHES, TYPE IV, 14 INCH	SQ YD	30	30					
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	228	228					
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2235	2235					
	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1					
	60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1	1					
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	215	215					
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	110	110					
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200	200					
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4					
	63200310	GUARDRAIL REMOVAL	FOOT	200	200					
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1250	1250					
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2					
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1					
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1					
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	10					

* = SPECIALITY ITEMS
Δ = NON-PARTICIPATING WORK (100% STATE)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	3
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

REV-SEP

SUMMARY OF QUANTITIES

	Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN
	67100100	MOBILIZATION	L SUM	1	1					
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1					
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1					
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	16350	16350					
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	5450	5450					
	70300211	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - PAINT	SQ FT	580	580					
	70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	86300	86300					
	70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	5840	5840					
	70300261	TEMPORARY PAVEMENT MARKING - LINE 12"- PAINT	FOOT	4280	4280					
	70300281	TEMPORARY PAVEMENT MARKING - LINE 24"- PAINT	FOOT	780	780					
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	3270	3270					
*	72000100	SIGN PANEL - TYPE 1	SQ FT	17	17					
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4					
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	15	15					
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	145	145					
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	21575	21575					
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1460	1460					
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1070	1070					
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	195	195					

SUMMARY OF QUANTITIES

	Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	255	255					
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	10	10					
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	255	255					
*	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	66		66				
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1				
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	593		593				
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	563		563				
*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	71		71				
*	87900200	DRILL EXISTING HANDHOLE	EACH	3		3				
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6		6				
*	88600100	DETECTOR LOOP, TYPE I	FOOT	580		580				
*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	230		230				
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1				
*	89502376	REBUILD EXISTING HANDHOLE	EACH	3		3				
	K0029614	WEED CONTROL, AQUATIC	GALLON	1	1					
	K0029629	WEED CONTROL, BROADLEAF IN TURF	POUND	1	1					
	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1					
*	X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1		1				
*	X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2		2				
*	X1400450	REBUILD EXISTING HEAVY-DUTY HANDHOLE	EACH	1		1				
	X2010350	TREE REMOVAL, ACRES (SPECIAL)	ACRE	1	1					

* = SPECIALITY ITEMS
Δ = NON-PARTICIPATING WORK (100% STATE)

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	CHECKED -	REVISED -	
PLOT DATE = 3/19/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
SUMMARY OF QUANTITIES

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	4
		CONTRACT NO. 62V88		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

SUMMARY OF QUANTITIES

	Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN
	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	35	35					
	X2503110	MOWING (SPECIAL)	ACRE	2	2					
	X4060995	TEMPORARY RAMP (SPECIAL)	SQ YD	185	185					
Δ	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	300			300			
	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	5					
	X6330900	VERTICAL ADJUSTMENT OF GUARDRAIL	FOOT	100	100					
	X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	6					
*	X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1		1				
*	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6		6				
*	X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12		12				
Δ	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20			20			
	X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	104	104					
*	Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1		1				
*	Z0051400	REMOVING AND RESETTING POSTS	EACH	40	40					

SUMMARY OF QUANTITIES

Code No.	ITEM	UNIT	TOTAL QUANTITY	TYPE CODE URBAN ROADWAY 100% STATE 0005	URBAN TRAFFIC SIGNAL 100% STATE 0021	URBAN ROADWAY 100% STATE 0005	URBAN	URBAN	URBAN

* = SPECIALITY ITEMS
Δ = NON-PARTICIPATING WORK (100% STATE)

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
SUMMARY OF QUANTITIES

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	5
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

REV-SEP

MODEL: SOQ SHEET 3 [Sheet]
FILE NAME: c:\pw_work\dot\qarutmn\d1032534\D1056624-sht-SOQ.dgn

CURB RAMPS IMPROVEMENT SCHEDULE

				20200100	21101615	25200110	25200200	42001300	42400200	42400800	44000600	60255800	60603800	60605000	89502376
ID	MUNICIPALITY	LOCATION	CORNER	EARTH EXCAVATION	TOPSOIL FURNISH AND PLACE, 4"	SODDING, SALT TOLERANT	SUPPLEMENTAL WATERING	PROTECTIVE COAT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	DETECTABLE WARNINGS	SIDEWALK REMOVAL	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12	COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24	REBUILD EXISTING HANDHOLE
				CU YD	SQ YD	SQ YD	UNIT	SQ YD	SQ FT	SQ FT	SQ FT	EACH		FOOT	EACH
1	Glen Ellyn	IL Route 53 and Sheehan Avenue	NE	2.20	14.67	14.67	0.15	30.18	220.00	15.00	195.00	1.00	20.00		1.00
2	Glen Ellyn	IL Route 53 and Sheehan Avenue	NW	2.50	16.67	16.67	0.17	36.67	250.00	15.00	251.00			31.00	1.00
3	Glen Ellyn	IL Route 53 and Sheehan Avenue	SW	2.30	15.33	15.33	0.15	33.88	230.00	25.00	228.00			29.00	
4	Glen Ellyn	IL Route 53 and Sheehan Avenue	SE	2.35	15.67	15.67	0.16	37.59	235.00	20.00	202.00		40.00		1.00
		GRAND TOTAL =		10.0	62	62	0.6	138	935.0	75.0	880.0	1.0	60	60	3.0

MODEL: Schedule01 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarut\mnd10325341D106622-sht-schedule.dgn

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
SCHEDULE OF QUANTITIES - ADA IMPROVEMENTS

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	6
		CONTRACT NO. 62V88		
	ILLINOIS	FED. AID PROJECT		

HOT-MIX ASPHALT SCHEDULE

ROUTE	SEGMENT	HOT-MIX ASPHALT SURFACE REMOVAL (SQ.YD.)	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA (TON)	HOT-MIX ASPHALT BINDER COURSE (TON)
IL 53	SHOULDER ONLY	2351	230	-
IL 53	ROADWAY	12704	1245	1425
TOTAL		15055	1475	1425

ROADSIDE DEVELOPMENT SCHEDULE

Pay Item	Pay Item Description	Quantity/Unit
21101605	Topsoil Furnish and Place, 2"	4840 sq yds
25000210	Seeding, Class 2A	1 acre
25000400	Nitrogen Fertilizer Nutrient	90 pounds
25000600	Potassium Fertilizer Nutrient	90 pounds
25100630	Erosion Control Blanket	4840 sq yds

MODEL: Schedule02 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarut\mnd103253410106624-tht-schedule.dgn

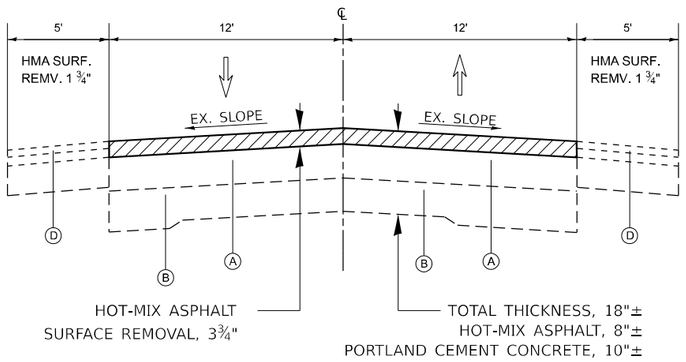
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666633 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
SCHEDULE OF QUANTITIES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	7
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

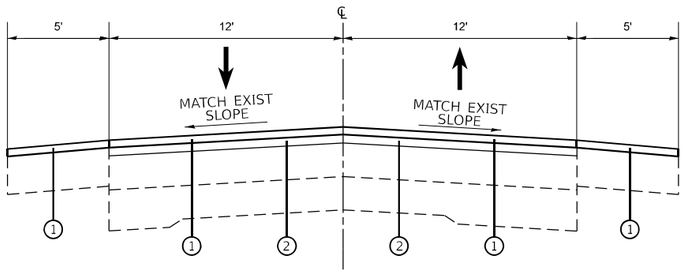
IL 53



EXISTING TYPICAL SECTION

STA. 17+26 TO STA. 27+66

IL 53



PROPOSED TYPICAL SECTION

STA. 17+26 TO STA. 27+66

EXISTING LEGEND

- (A) HOT-MIX ASPHALT PAVEMENT 8"±
- (B) PORTLAND CEMENT CONCRETE PAVEMENT 10"±
- (C) AGGREGATE SHOULDER
- (D) HOT-MIX ASPHALT SHOULDER
- (E) COMBINATION CURB AND GUTTER

PROPOSED LEGEND

1. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5, MIX "F", N80, 1 3/4"
2. HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"
3. HOT-MIX ASPHALT SHOULDERS, 8"
4. AGGREGATE SUBGRADE IMPROVEMENT 12"
5. AGGREGATE SHOULDERS, TYPE B (TON)
6. GRADING AND SHAPING SHOULDERS
7. PORTLAND CEMENT CONCRETE COMBINATION CURB AND GUTTER

HOT–MIX ASPHALT MIXTURE REQUIREMENTS		QUALITY MANAGEMENT PROGRAM (QMP)
MIXTURE TYPE	AIR VOIDS @ N des	
PAVEMENT RESURFACING		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5, MIX "F", N80, 1¾"	3.5% AT 80 GYR.	QCP
HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"	4.0% AT 70 GYR.	QCP
HOT–MIX ASPHALT SHOULDERS 8"		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5, MIX "F", N80, 1¾"	3.5% AT 80 GYR.	QC/QA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 6¼"	4.0% AT 70 GYR.	QC/QA
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19 mm)	4.0% AT 70 GYR.	QC/QA
TEMPORARY RAMP (SPECIAL)		
HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, (VARIABLE)	4.0% AT 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HHMA SURFACE MIXTURES QUANTITIES IS 112 LBS/SQ YD/IN.

NOTE 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 RECLAIMED MATERIALS SPECIFICATIONS.

NOTE 3: THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.

NOTE 4: LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE HMA BINDER COURSE, IL-9.5, N70.

MODEL: Typ. Section Sheet 2 [Sheet]
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USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
TYPICAL SECTIONS

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

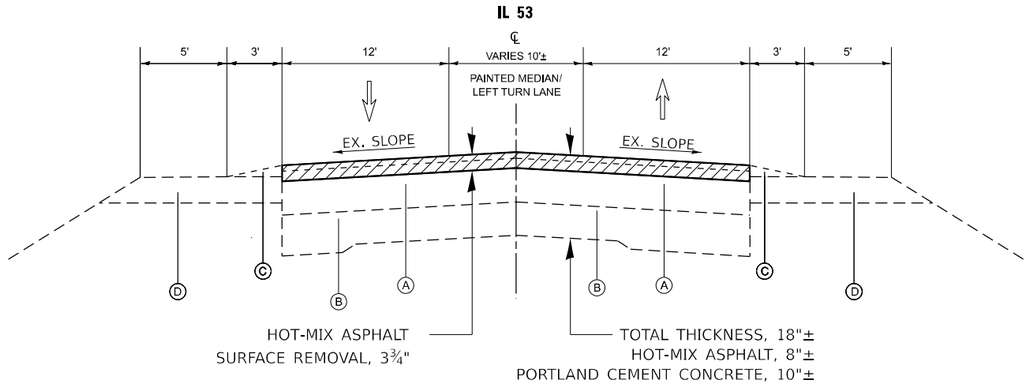
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	8
		CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

EXISTING LEGEND

- (A) HOT-MIX ASPHALT PAVEMENT 8"±
- (B) PORTLAND CEMENT CONCRETE PAVEMENT 10"±
- (C) AGGREGATE SHOULDER
- (D) HOT-MIX ASPHALT SHOULDER
- (E) COMBINATION CURB AND GUTTER

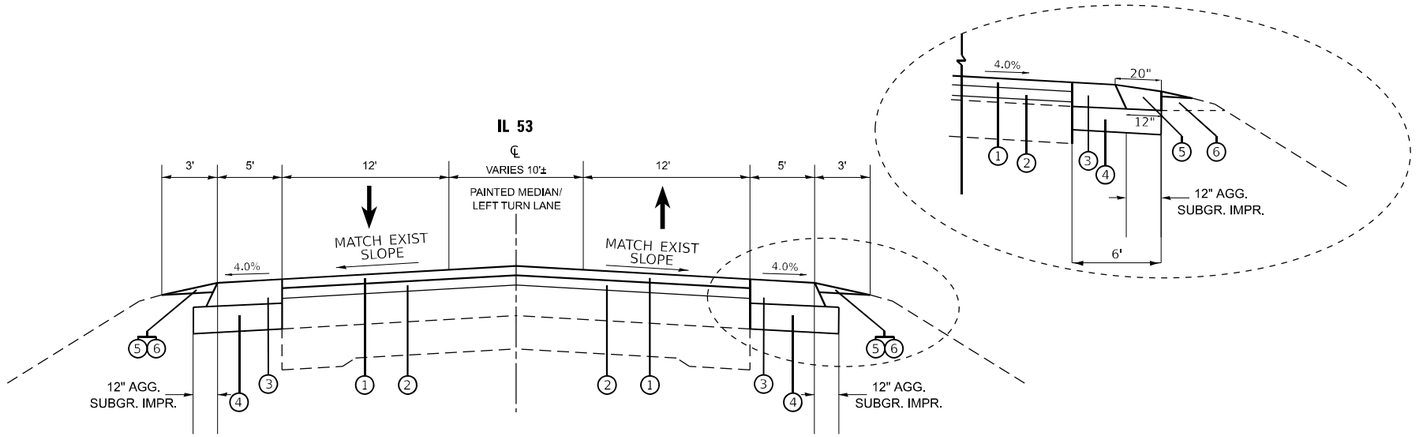
PROPOSED LEGEND

1. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5, MIX "F", N80, 1 ¾"
2. HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"
3. HOT-MIX ASPHALT SHOULDERS, 8"
4. AGGREGATE SUBGRADE IMPROVEMENT 12"
5. AGGREGATE SHOULDERS, TYPE B (TON)
6. GRADING AND SHAPING SHOULDERS
7. PORTLAND CEMENT CONCRETE COMBINATION CURB AND GUTTER



EXISTING TYPICAL SECTION

STA. 27+66 TO STA. 51+50



PROPOSED TYPICAL SECTION

STA. 27+66 TO STA. 51+50

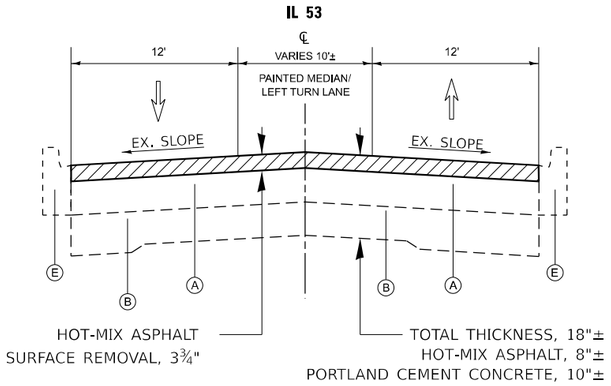
MODEL: Typ. Section Sheet 1 [Sheet]
FILE NAME: c:\pw_work\pwdot\qarutmn\d1032534\D106624-sht-typical.dgn

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/19/2025	DATE -	REVISED -	

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
TYPICAL SECTIONS

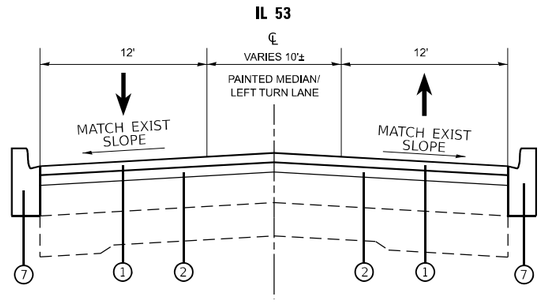
SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	9
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION

STA. 51+50 TO STA. 55+74



PROPOSED TYPICAL SECTION

STA. 51+50 TO STA. 55+74

EXISTING LEGEND

- (A) HOT-MIX ASPHALT PAVEMENT 8"±
- (B) PORTLAND CEMENT CONCRETE PAVEMENT 10"±
- (C) AGGREGATE SHOULDER
- (D) HOT-MIX ASPHALT SHOULDER
- (E) COMBINATION CURB AND GUTTER

PROPOSED LEGEND

1. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA 9.5, MIX "F", N80, 1 ¾"
2. HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70, 2"
3. HOT-MIX ASPHALT SHOULDERS, 8"
4. AGGREGATE SUBGRADE IMPROVEMENT 12"
5. AGGREGATE SHOULDERS, TYPE B (TON)
6. GRADING AND SHAPING SHOULDERS
7. PORTLAND CEMENT CONCRETE COMBINATION CURB AND GUTTER

MODEL: Typical Sheet 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarutmnd\d1032534\D106623-sht-typical.dgn

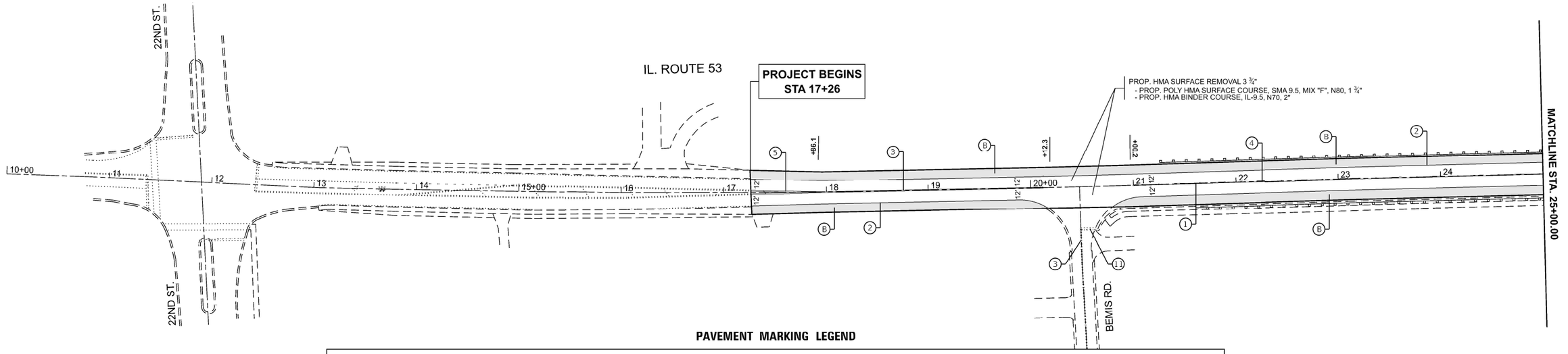
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/15/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
TYPICAL SECTIONS

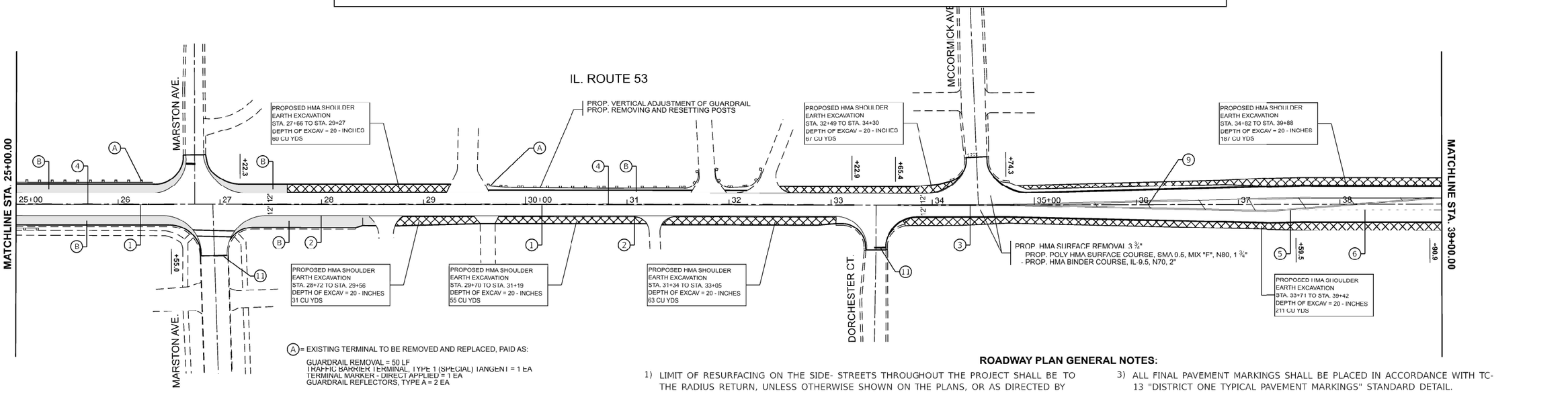
SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	10
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING LEGEND

1. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID CENTERLINE YELLOW (TYP.)
2. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)
3. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)
4. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' YELLOW (TYP.)
5. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW MEDIAN, 2 @ 11" C-C (TYP.)
6. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)
7. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)
8. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE CROSSWALK LINE, 2 @ 6' C-C (TYP.)
9. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C (MINIMUM 5) YELLOW (TYP.)
10. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" SOLID LONGITUDINAL BARS @ 90°, WHITE (TYP.)
11. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
12. PROP. THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)



(A) = EXISTING TERMINAL TO BE REMOVED AND REPLACED, PAID AS:
GUARDRAIL REMOVAL = 50 LF
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT = 1 EA
TERMINAL MARKER - DIRECT APPLIED = 1 EA
GUARDRAIL REFLECTORS, TYPE A = 2 EA

(B) = EXISTING HMA SHOULDER TO BE RESURFACED
PROP. POLY HMA SURFACE COURSE, SMA 9.5, MIX "F", N80, 1¾"

ROADWAY PLAN GENERAL NOTES:

1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
2) ALL FINAL PAVEMENT MARKINGS ON HMA SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.

MODEL: ExCL - Plan 1 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarutmn\d1032534\D106824-sht-plan.dgn

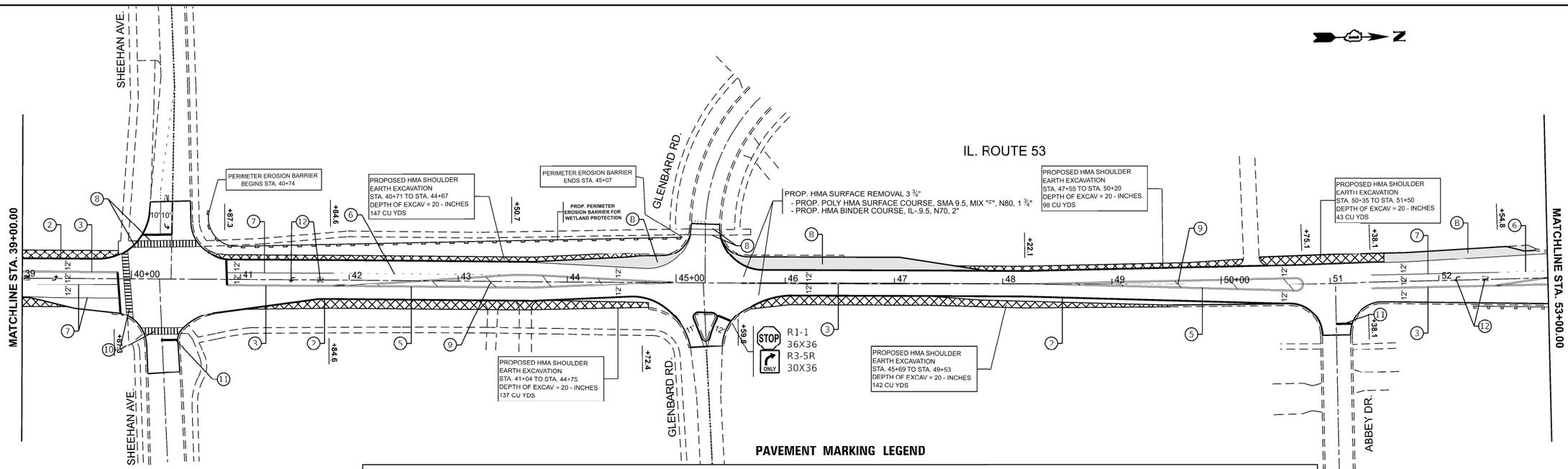
USER NAME = NeUal.Qarul	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/19/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
ROADWAY AND PAVEMENT MARKING PLAN

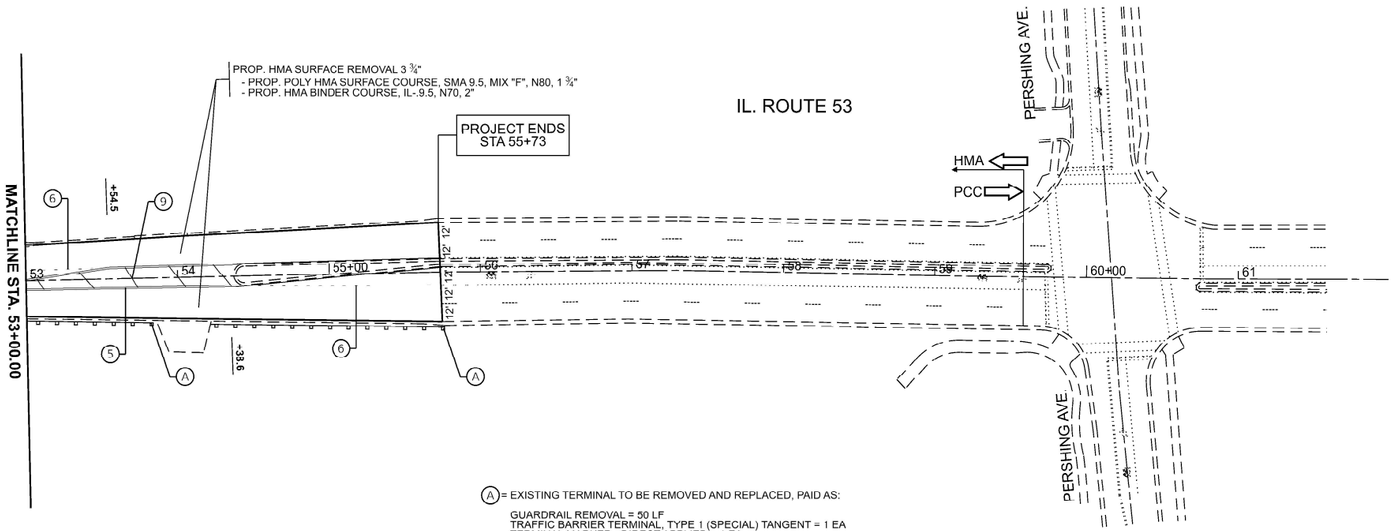
SCALE: 1"=50' | SHEET 1 OF 9 SHEETS | STA. 10+00.00 | TO STA. 39+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	11
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



PAVEMENT MARKING LEGEND

1. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID CENTERLINE YELLOW (TYP.)
2. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SOLID EDGE LINE WHITE (TYP.)
3. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW CENTERLINE, 2 @ 11" C-C (TYP.)
4. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" SKIP DASH, 10' DASH-30' YELLOW (TYP.)
5. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 4" DOUBLE SOLID YELLOW MEDIAN, 2 @ 11" C-C (TYP.)
6. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SKIP DASH, WHITE TURN LANE @ 6' SKIP & 2' DASH (TYP.)
7. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE TURN LANE (TYP.)
8. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 6" SOLID, WHITE CROSSWALK LINE, 2 @ 6' C-C (TYP.)
9. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" DIAGONAL 45° @ 75' C-C (MINIMUM 5) YELLOW (TYP.)
10. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 12" SOLID LONGITUDINAL BARS @ 90°, WHITE (TYP.)
11. PROP. THERMOPLASTIC PAVEMENT MARKING LINE, 24" SOLID STOP LINES, WHITE (TYP.)
12. PROP. THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS WHITE (TYP.)



Ⓐ = EXISTING TERMINAL TO BE REMOVED AND REPLACED, PAID AS:

GUARDRAIL REMOVAL = 50 LF
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT = 1 EA
TERMINAL MARKER - DIRECT APPLIED – 1 EA
GUARDRAIL REFLECTORS, TYPE A = 2 EA

Ⓑ = EXISTING HMA SHOULDER TO BE RESURFACED
PROP. POLY HMA SURFACE COURSE, SMA 9.5, MIX "F", N80, 1¾"

ROADWAY PLAN GENERAL NOTES:

1) LIMIT OF RESURFACING ON THE SIDE- STREETS THROUGHOUT THE PROJECT SHALL BE TO THE RADIUS RETURN, UNLESS OTHERWISE SHOWN ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER / TECHNICIAN.
2) ALL FINAL PAVEMENT MARKINGS ON HMA SHALL BE THERMOPLASTIC PAVEMENT MARKINGS (OF THE EXTRUDED TYPE).
3) ALL FINAL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" STANDARD DETAIL.
4) ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH TC-11 "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" STANDARD DETAIL.

MODEL: ExCL - Plan 3 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarutnnd\d1032534\D1066824-sht-plan.dgn

USER NAME = Neulal.Qarul	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/19/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 53: S. OF BEMIS RD TO NICOLL WAY / HARDING AVE
ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET 2 OF 9 SHEETS | STA. 39+00.00 | TO STA. 67+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	12
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	ECC	CC
MASTER CONTROLLER	EMC	MC
MASTER MASTER CONTROLLER	EMMC	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	RR	RR
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	P P
SAMPLING (SYSTEM) DETECTOR	S S	S S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS IS	IS IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y G ◄Y ◄G (P)	R Y G ◄Y ◄G P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	R Y G ◄Y ◄G P RB	R Y G ◄Y ◄G P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	13
	TS-05	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

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.

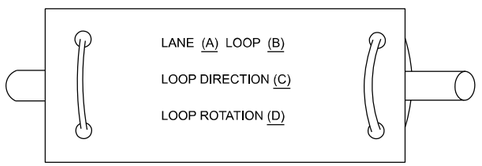
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

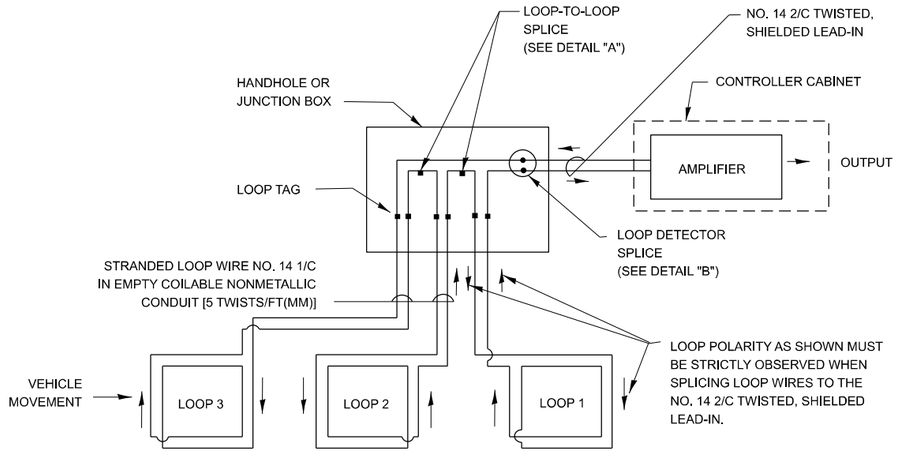


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

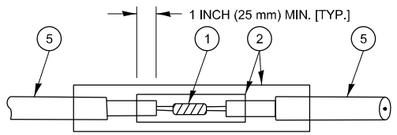
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

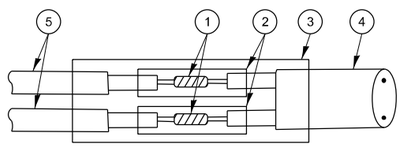


DETECTOR LOOP WIRING SCHEMATIC

- 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.

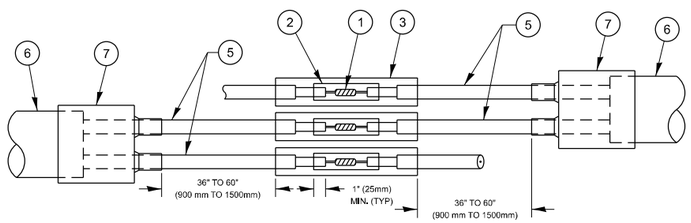


DETAIL "A"
LOOP-TO-LOOP SPLICE



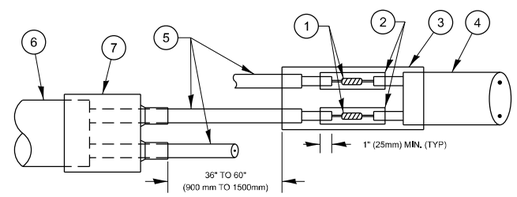
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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. PRE-FORMED LOOP
6. XL POLYOLEFIN 2 CONDUCTOR
7. BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

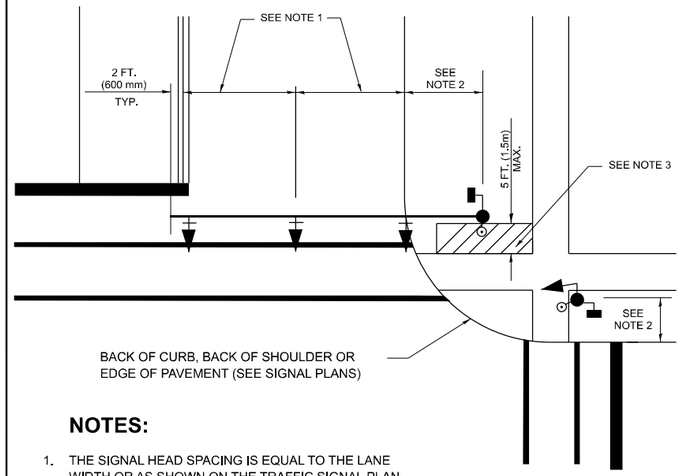
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 2 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	14
	TS-05	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

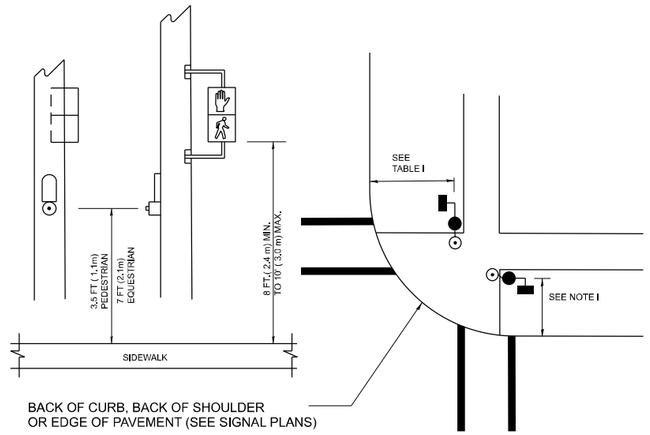
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

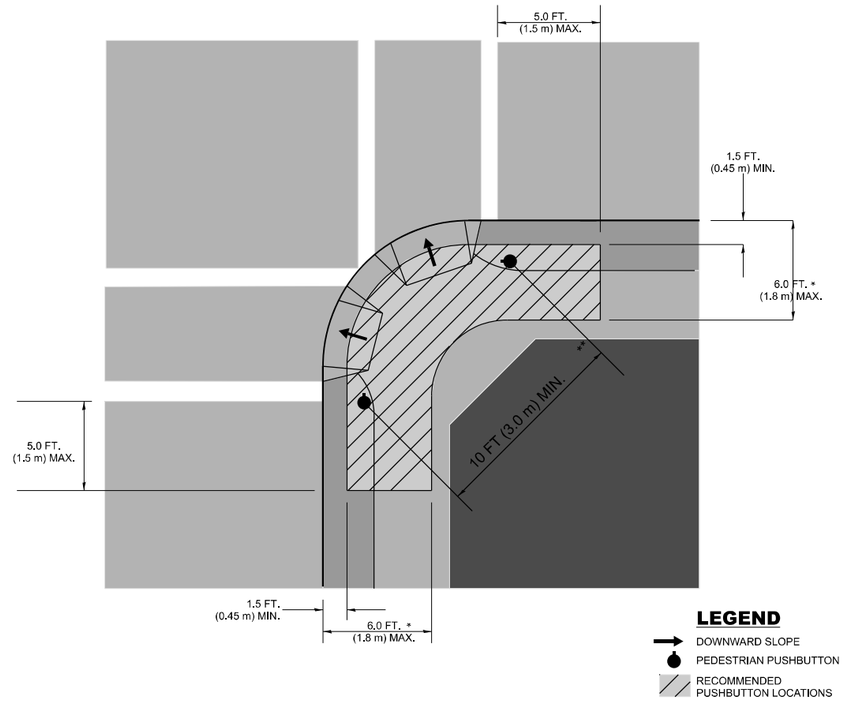
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 3 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	15
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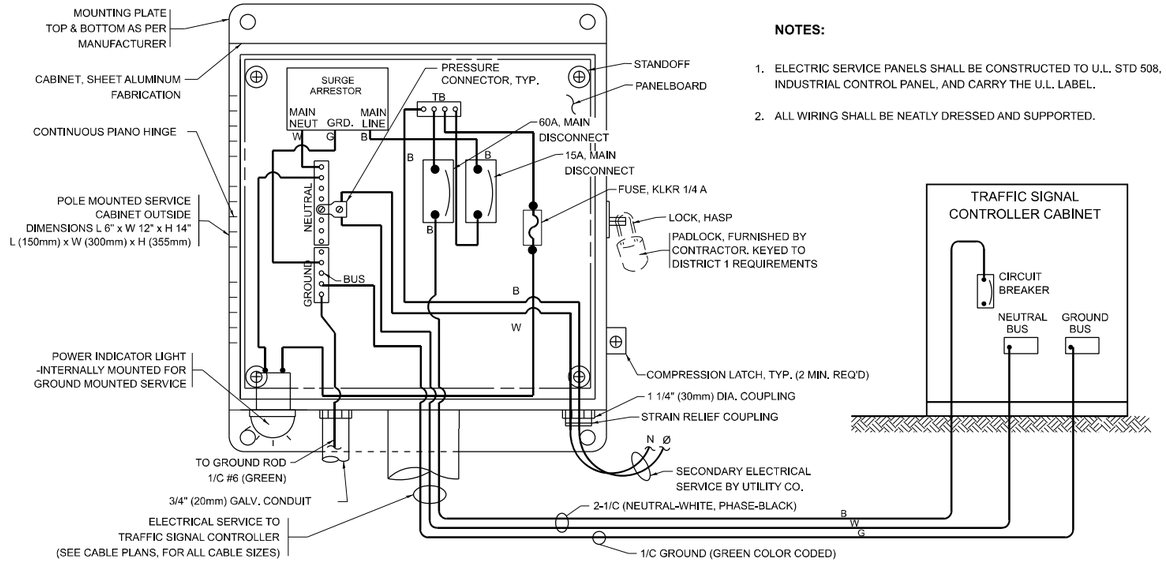
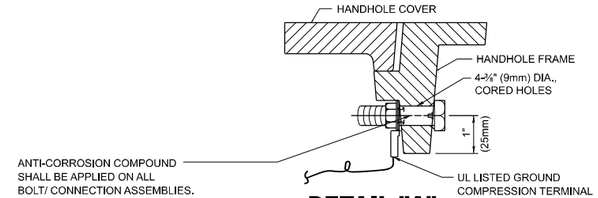


NOTES:

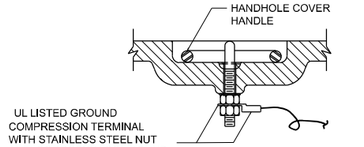
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ELECTRICAL SERVICE - PANEL DIAGRAM
(TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



DETAIL "A"

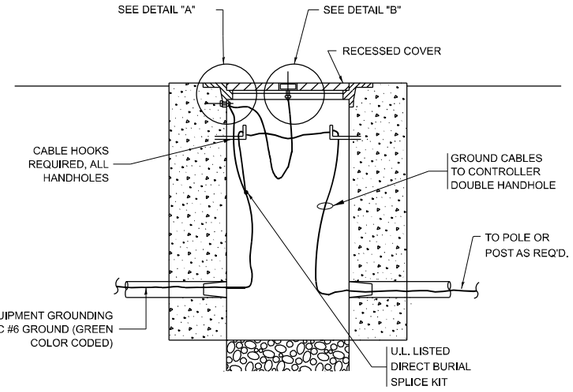


DETAIL "B"

NOTES:

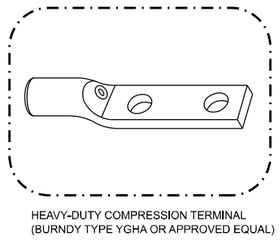
GROUNDING SYSTEM

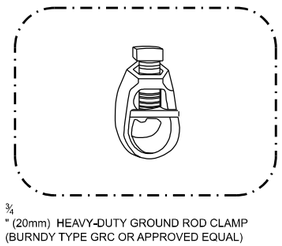
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



HANDHOLE COVER & FRAME - GROUNDING DETAIL

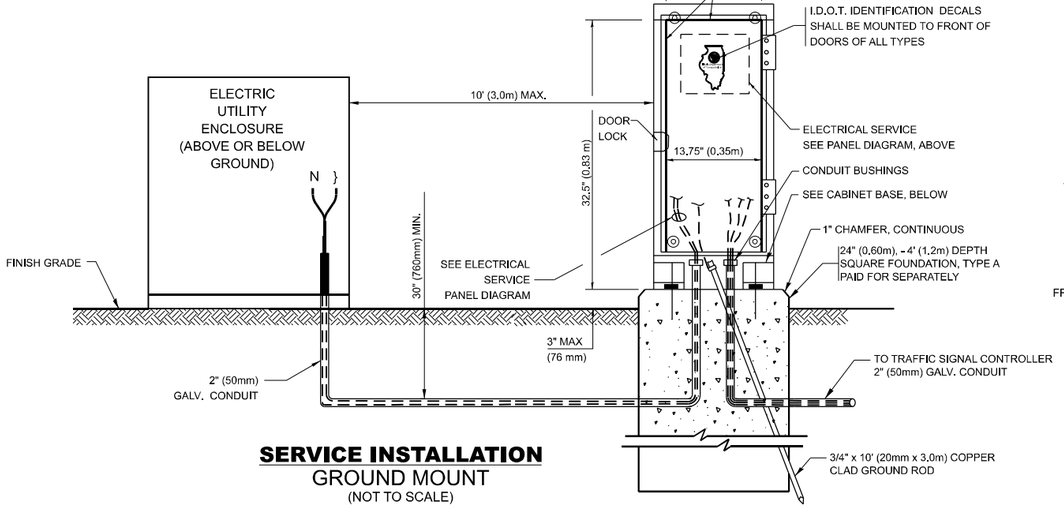
(NOT TO SCALE)



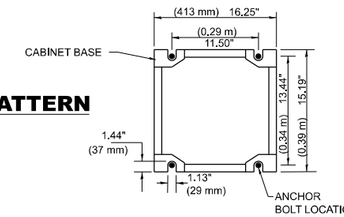


NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

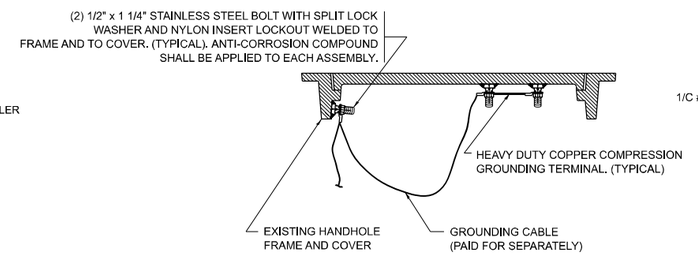


SERVICE INSTALLATION
GROUND MOUNT
(NOT TO SCALE)



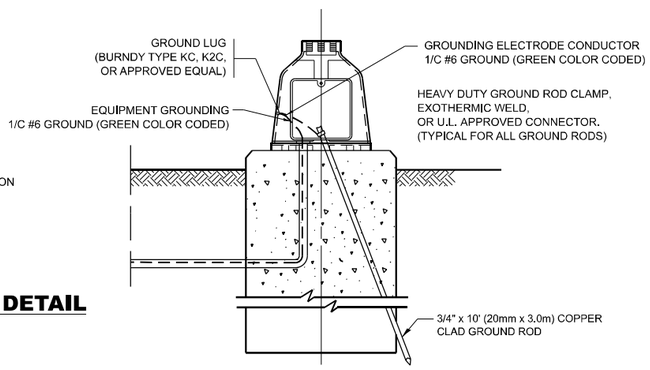
CABINET - BASE BOLT PATTERN

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)

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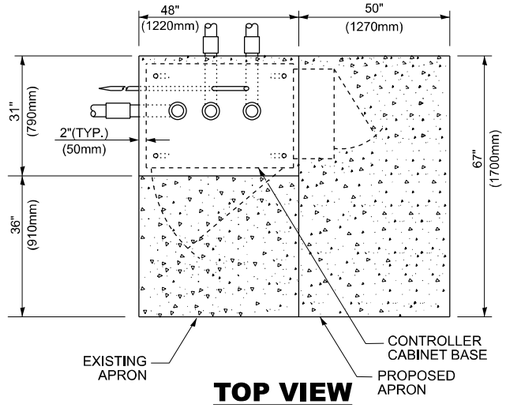
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/18/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

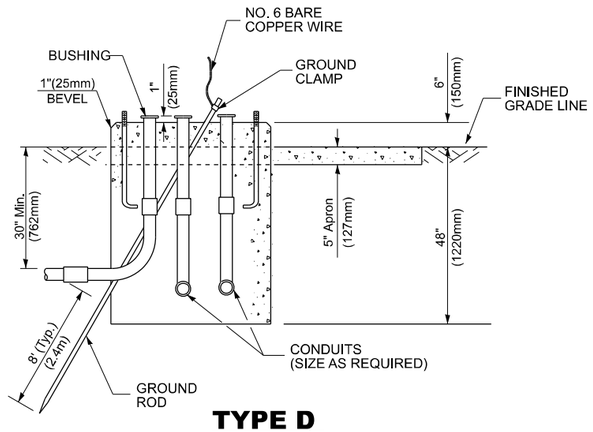
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 4 OF 7 SHEETS | STA. | TO STA.

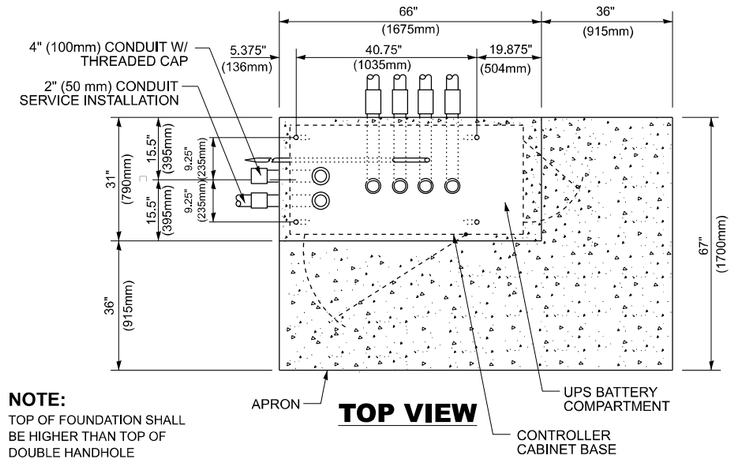
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	16
	TS-05	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



TOP VIEW

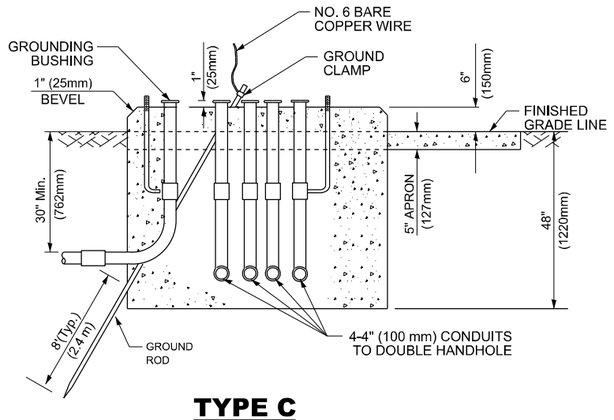


TYPE D
FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET

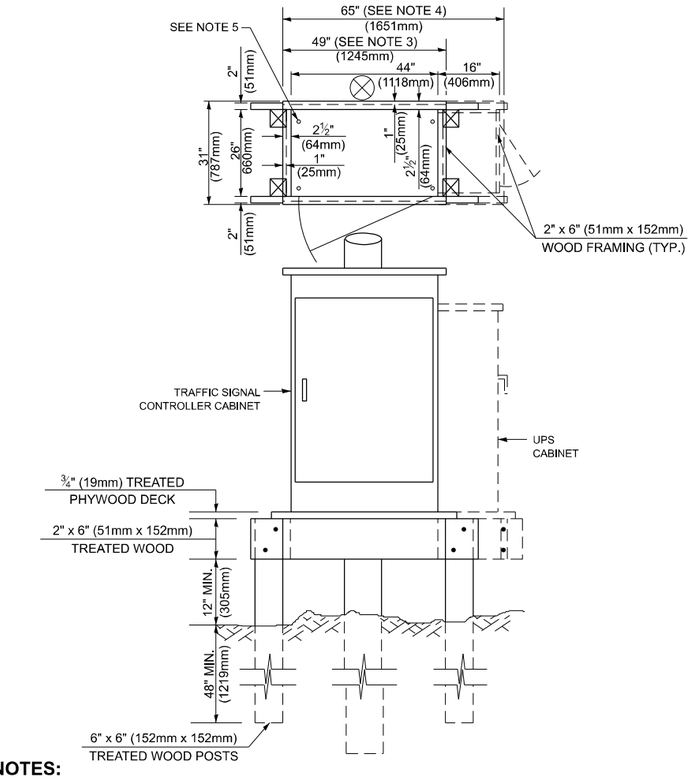


NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



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



NOTES:

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

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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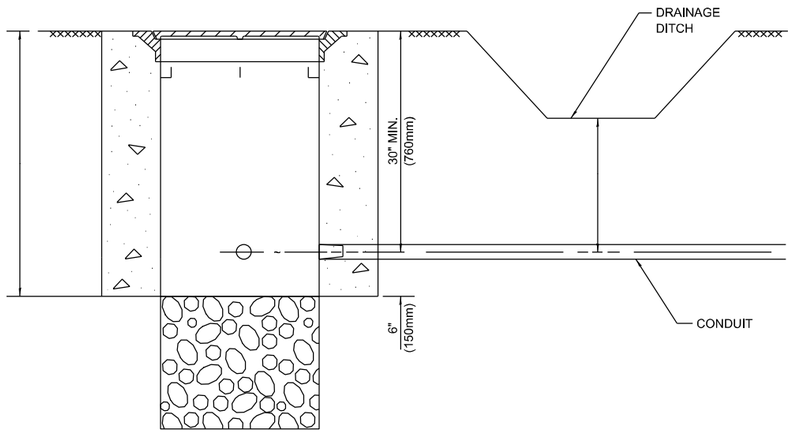
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 5 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	17
	TS-05	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

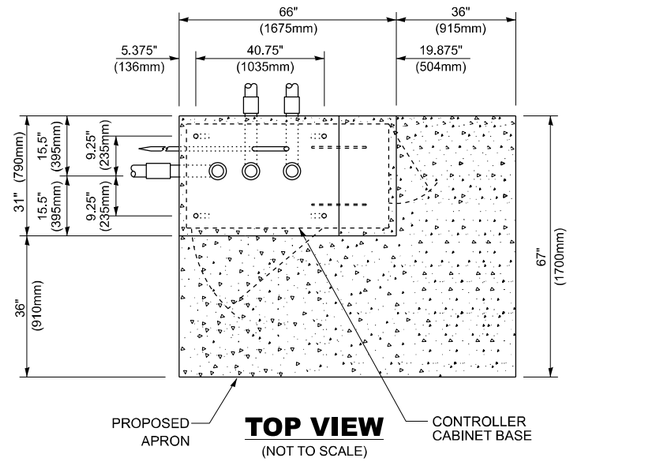


NOTES:

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

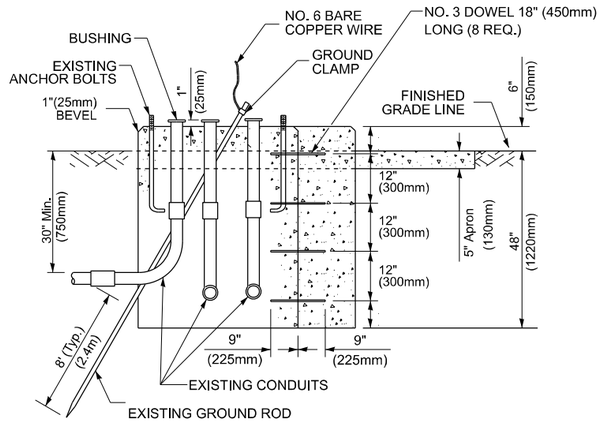
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



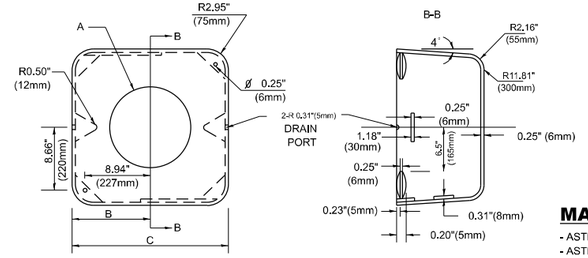
TOP VIEW

(NOT TO SCALE)



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

(NOT TO SCALE)



MATERIAL

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

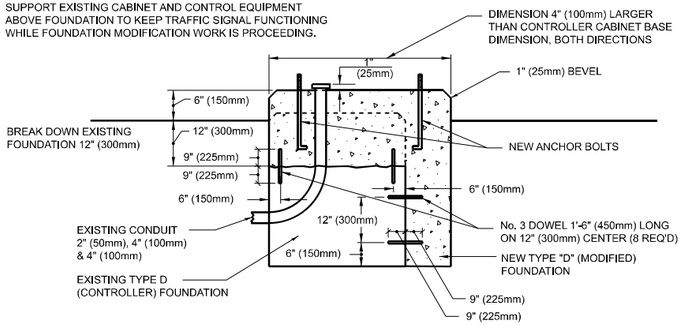
SHROUD

NOTES:

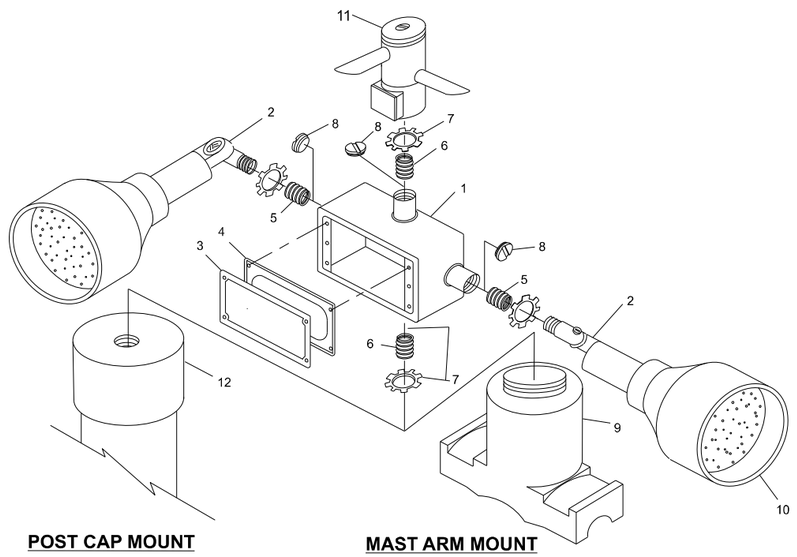
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



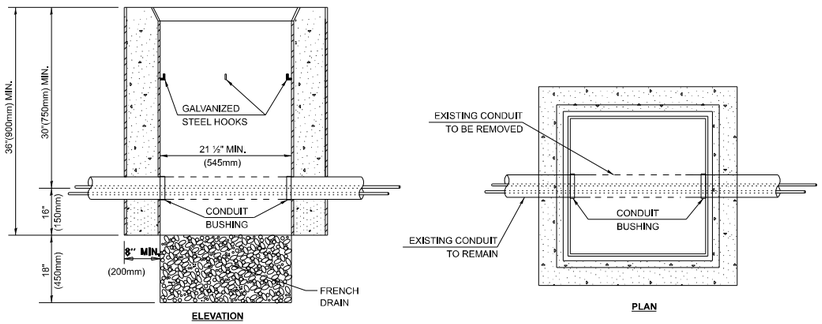
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾" (19 mm) CLOSE NIPPLE
7	¾" (19 mm) LOCKNUT
8	¾" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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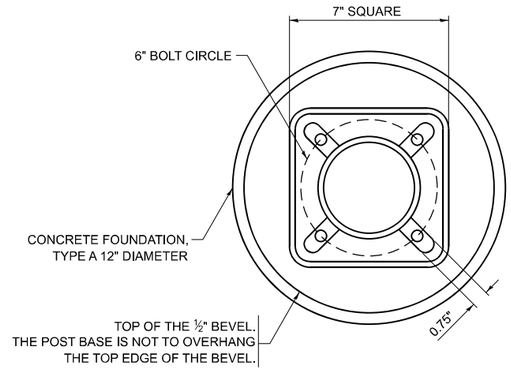
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 6 OF 7 SHEETS | STA. | TO STA.

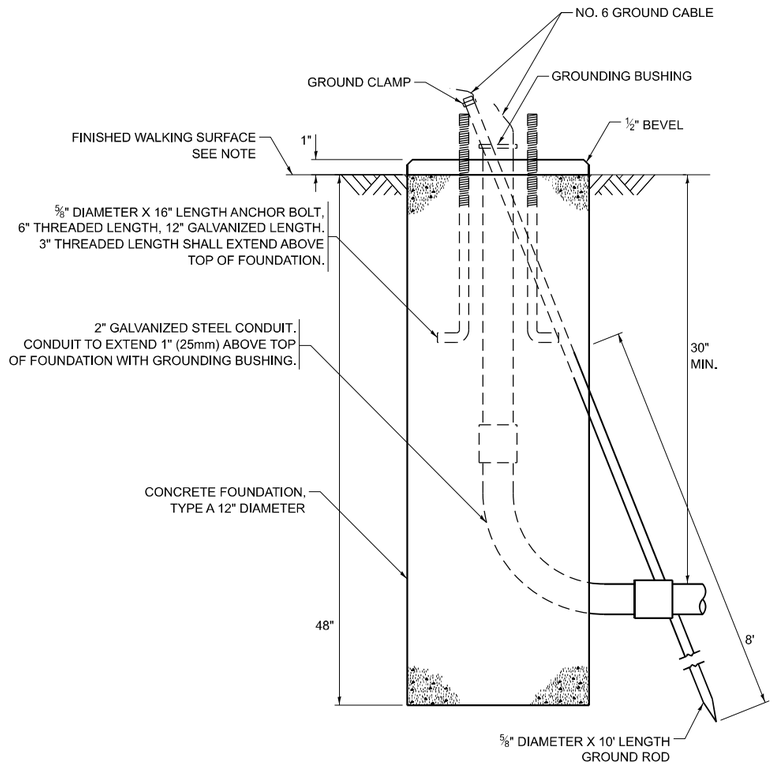
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	18
	TS-05	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		



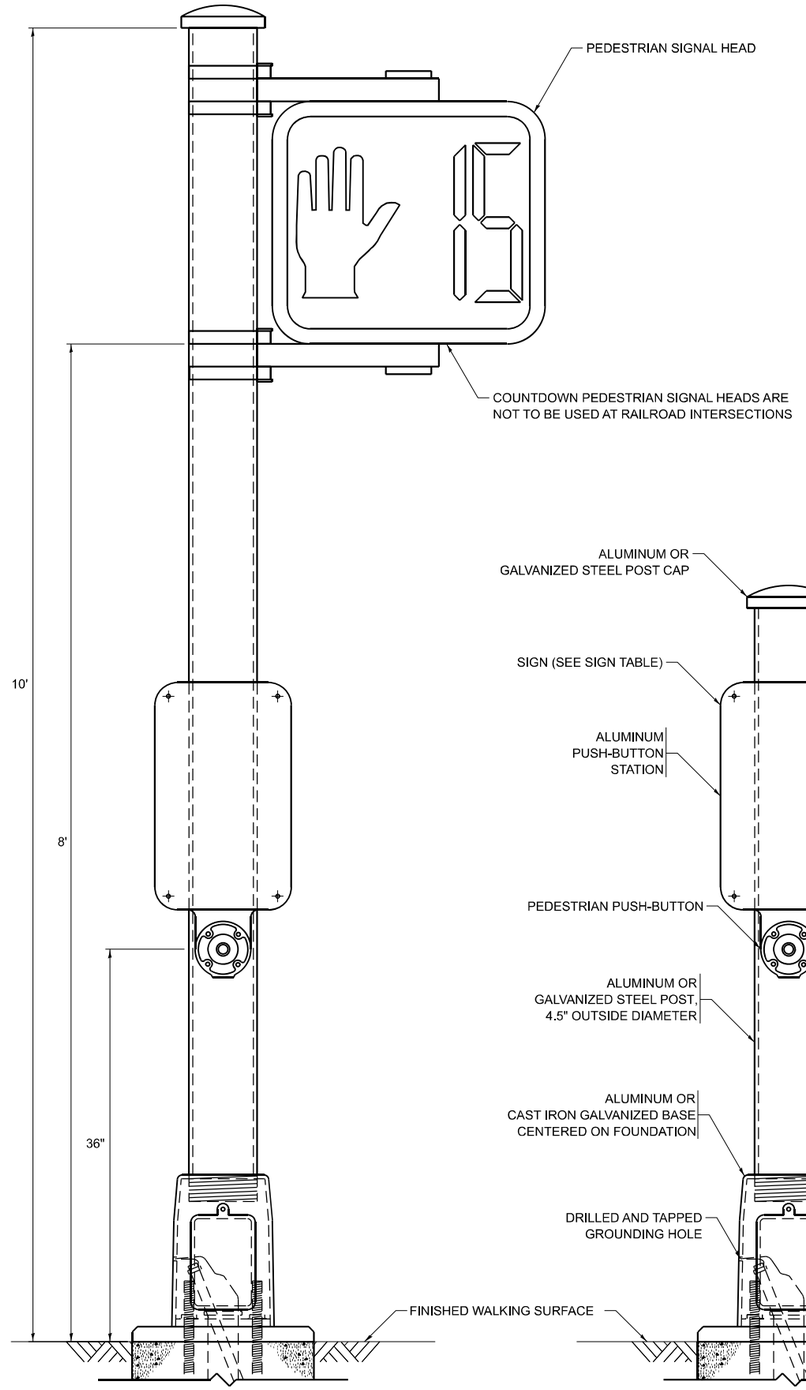
BOLT PATTERN

NOTE:

1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.

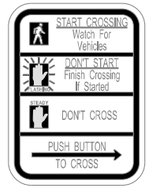


CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER



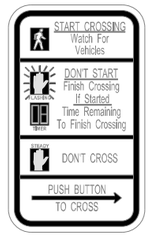
PEDESTRIAN SIGNAL POST, 10 FT.

PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b

R10-3d



R10-3e

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: TS-05g [Sheet]
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 7 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	19
	TS-05	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

2. THE CONTRACTOR SHALL CONFIRM THE FINAL LOCATION OF THE PEDESTRIAN EQUIPMENT WITH THE ADA PLANS AND THE TRAFFIC SIGNAL ENGINEER BEFORE INSTALLATION.

3. APS SHALL BE PLACED PARALLEL TO THE CORRESPONDING CROSSWALK.

4. ALL PUSH BUTTONS SHALL BE APS

5. NO PROPOSED PEDESTRIAN POST SHALL EXCEED 10 FT FROM FACE OF CURB

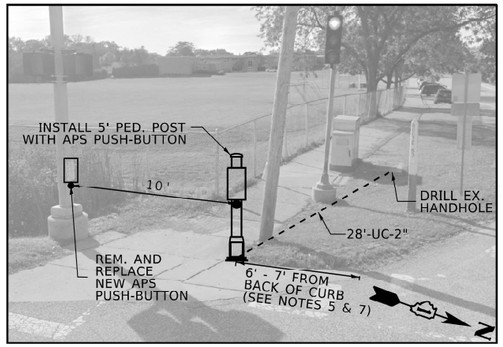
6. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED

7. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE NEXT TO TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT

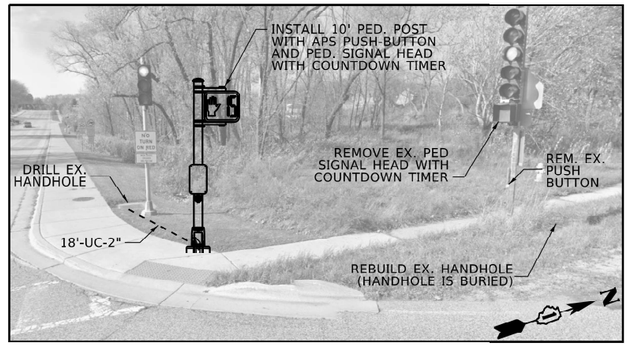
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	CONTROLLER (ASC/2)
3	EACH	PEDESTRIAN PUSH-BUTTON
4	EACH	PEDESTRIAN SIGNAL HEAD



SOUTHWEST CORNER



NORTHWEST CORNER

SOUTHEAST CORNER

NORTHEAST CORNER

TS 21505
ECON 104

MODEL: APS Sheet 1 [Sheet]
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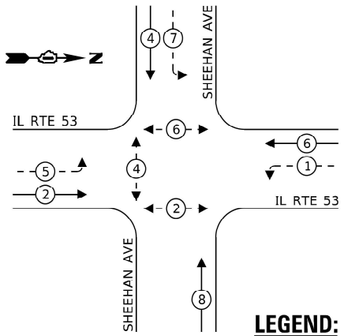
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN
IL RTE 53 AND SHEEHAN AVE

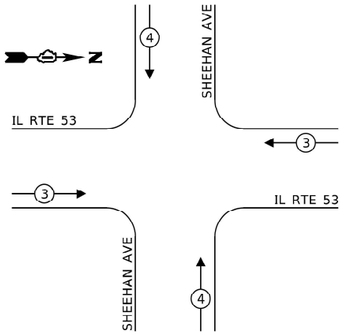
SCALE: | SHEET A001 OF 2 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	20
		CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

SCHEDULE OF QUANTITIES

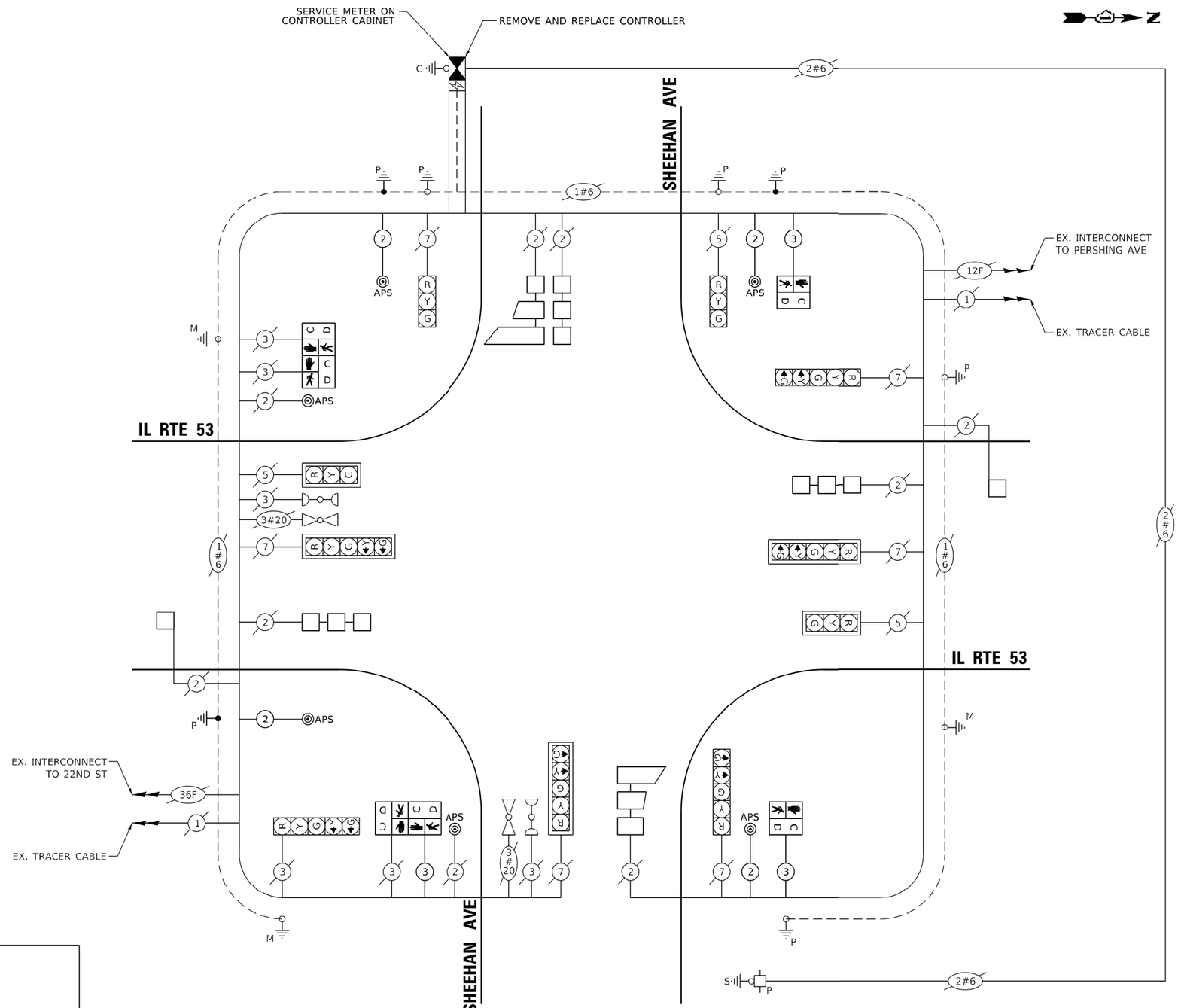
ITEM DESCRIPTION	UNITS	TOTAL QTY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	66
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	593
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	563
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	71
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	580
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	230
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL POST, 10 FT	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT	EACH	2
REBUILD EXISTING HEAVY-DUTY HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNAL	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	4	11	44
4-SECTION	-	14	-
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			387
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			992

ENERGY COSTS TO:
VILLAGE OF GLEN ELLYN
535 DUANE ST
GLEN ELLYN, IL 60137

ENERGY SUPPLY: CONTACT: ANTONIO RIOS
PHONE: 630-696-6855
COMPANY: COMED
ACCOUNT NUMBER: 32544-65000
METER NUMBER: ---



CABLE PLAN

TS 21505
ECON 104

MODEL: APS Sheet 2 [Sheet]
FILE NAME: c:\pw_work\pwidot\garut\d0325341D\10622-sht-TS.dgn

USER NAME = Nedal.Qarut
PLOT DATE = 3/1/2025

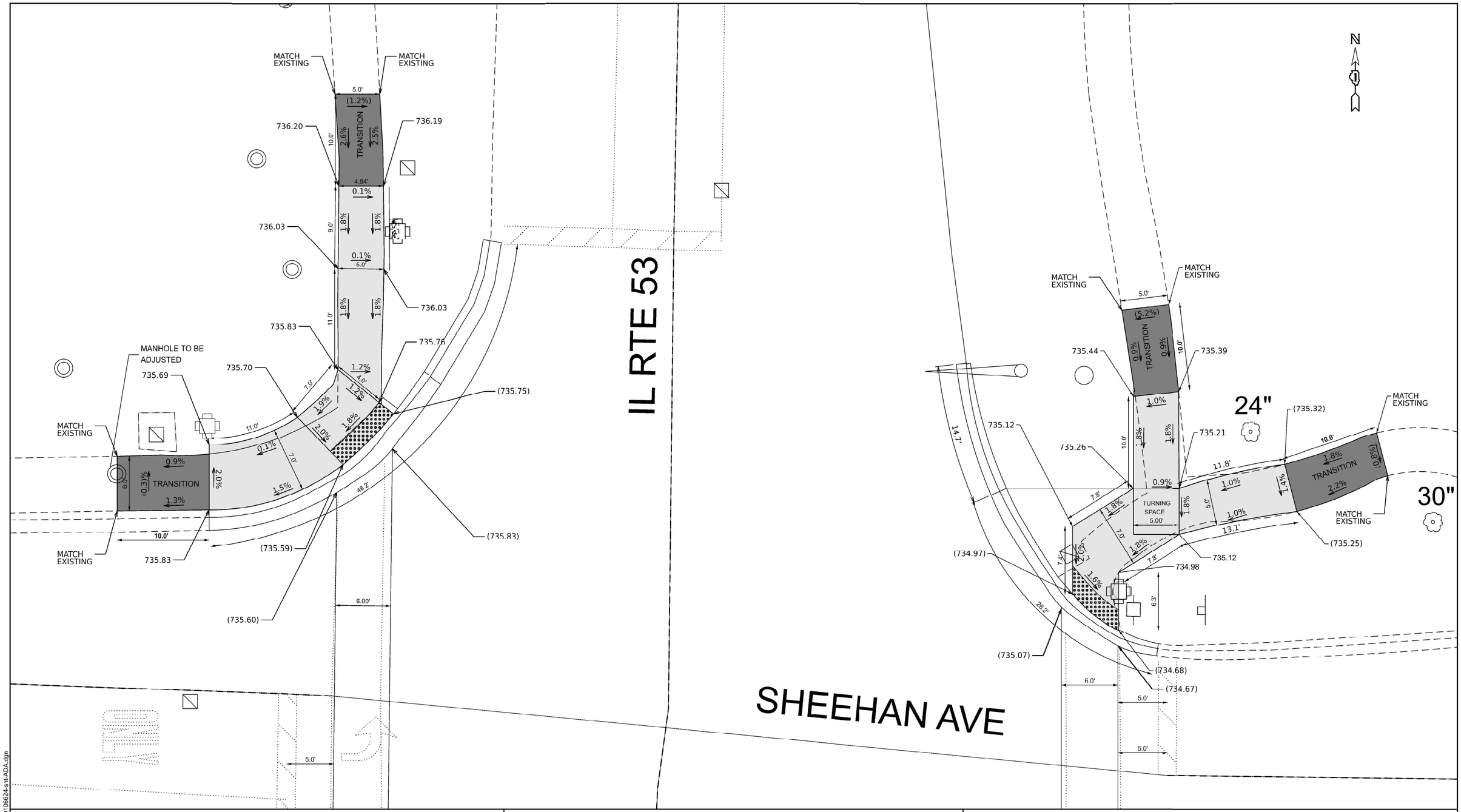
DESIGNED -		REVISED -
DRAWN -		REVISED -
CHECKED -		REVISED -
DATE -		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
IL RTE 53 AND SHEEHAN AVE

SCALE: | SHEET A002 OF 2 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	21
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



DESIGNER NOTES

BENCHMARK REFERENCE ELEVATION: 734.98

BENCHMARK: CUT SQUARE IN NW CORNER OF TCB PAD

LOCATION: NW CORNER OF IL 53 AND SHEEHAN AVENUE

LEGEND

- XX.XX' — EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) — EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

CONSTRUCTION NOTES

1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISITING SIDEWALK.

2) MATCH EXISTING SIDEWALK WIDTH.

USER NAME = Nedal.Qarul	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 2/27/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB RAMPS IMPROVEMENT PLAN
NE & NW QUADRANTS OF IL 53 AT SHEEHAN AVENUE

SCALE: | SHEET A001 OF 2 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	22
		CONTRACT NO. 62V88		
	ILLINOIS | FED. AID PROJECT			

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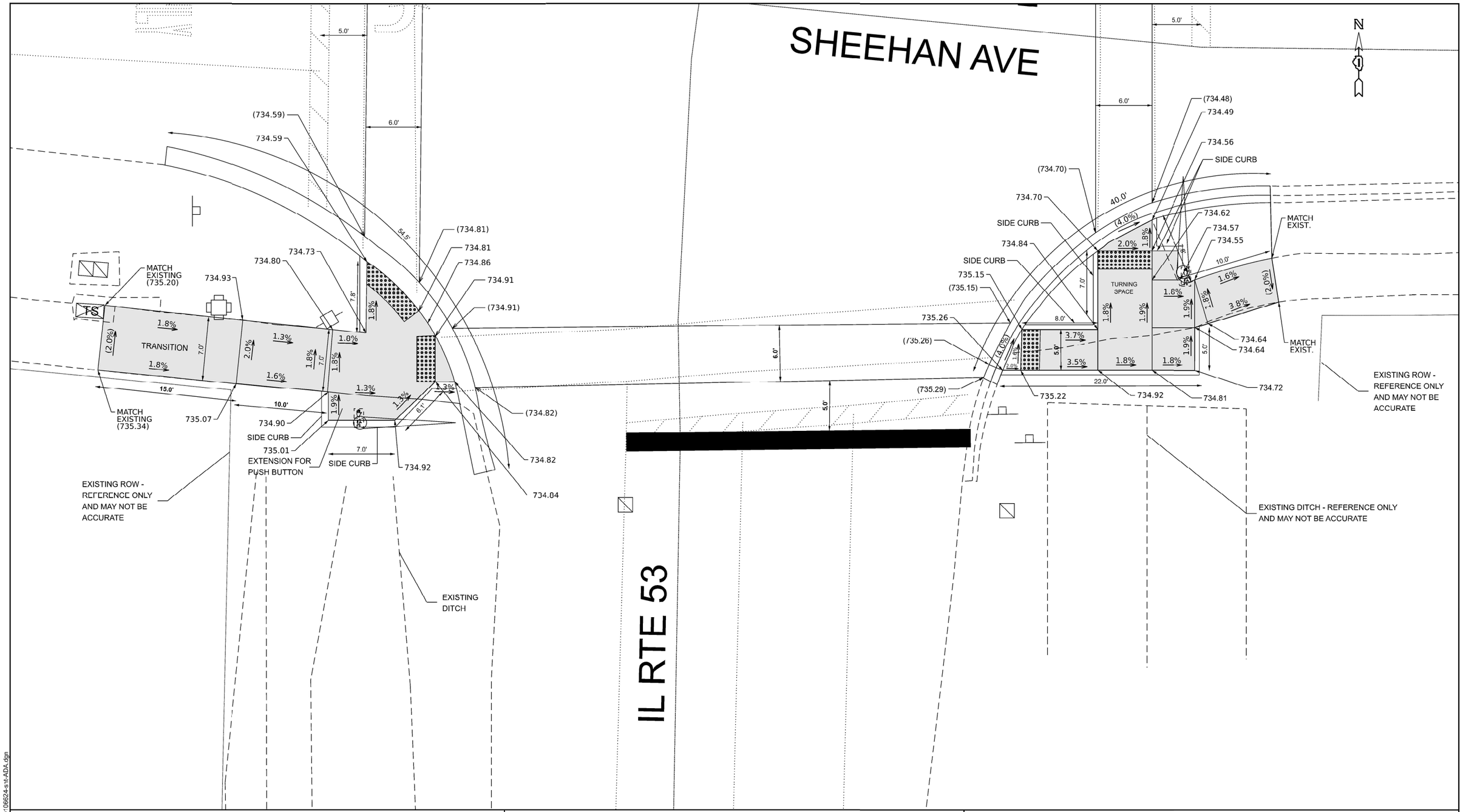

DESIGNER NOTES

BENCHMARK REFERENCE ELEVATION: 734.98

BENCHMARK: CUT SQUARE IN NW CORNER OF TCB PAD

LOCATION: NW CORNER OF IL 53 AND SHEEHAN AVENUE

LEGEND

- XX.XX' — EXISTING LENGTH
- PROPOSED SIDE CURB
- ( ) — EXISTING ELEVATION/SLOPE
- PROPOSED SIDEWALK
- DETECTABLE WARNINGS
- SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

CONSTRUCTION NOTES

1) ALL CROSS SLOPES ARE PREFERRED 1.6% (1:64), MAXIMUM 2% (1:50) EXCEPT WHEN TRANSITIONING TO EXISITING SIDEWALK.

2) MATCH EXISTING SIDEWALK WIDTH.

USER NAME = NedaI.Qarul	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/18/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB RAMPS IMPROVEMENT PLAN
SE & SW QUADRANTS OF IL 53 AT SHEEHAN AVENUE

SCALE: | SHEET A002 OF 2 SHEETS | STA. 0+00.00 | TO STA. 0+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	23
		CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

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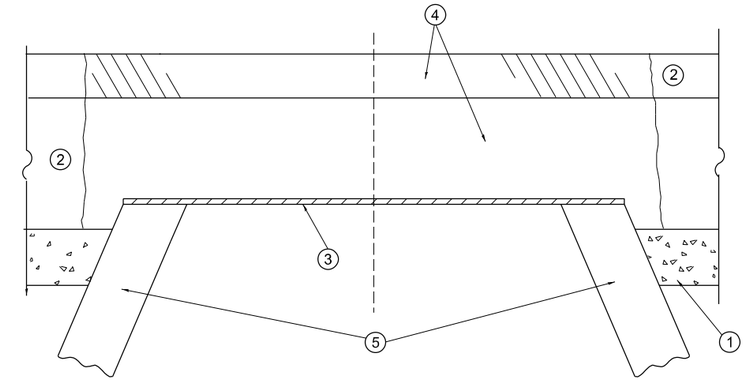

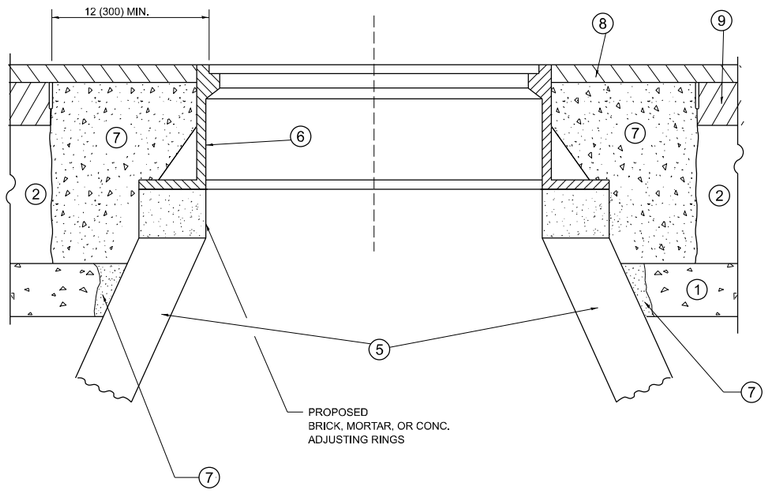

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

NOTES

1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
2. IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.

C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.

B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

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

LOCATION OF STRUCTURES

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

BASIS OF PAYMENT

1. REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

MODEL: BD-08 [Sheet]
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USER NAME = Nedal.Qarut	DESIGNED - R. SHAH	REVISED - R. BORO 03-09-11	
	DRAWN -	REVISED - R. BORO 12-06-11	
	CHECKED -	REVISED - K. SMITH 11-18-22	
PLOT DATE = 3/18/2025	DATE - 10-25-94	REVISED - K. SMITH 09-15-23	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

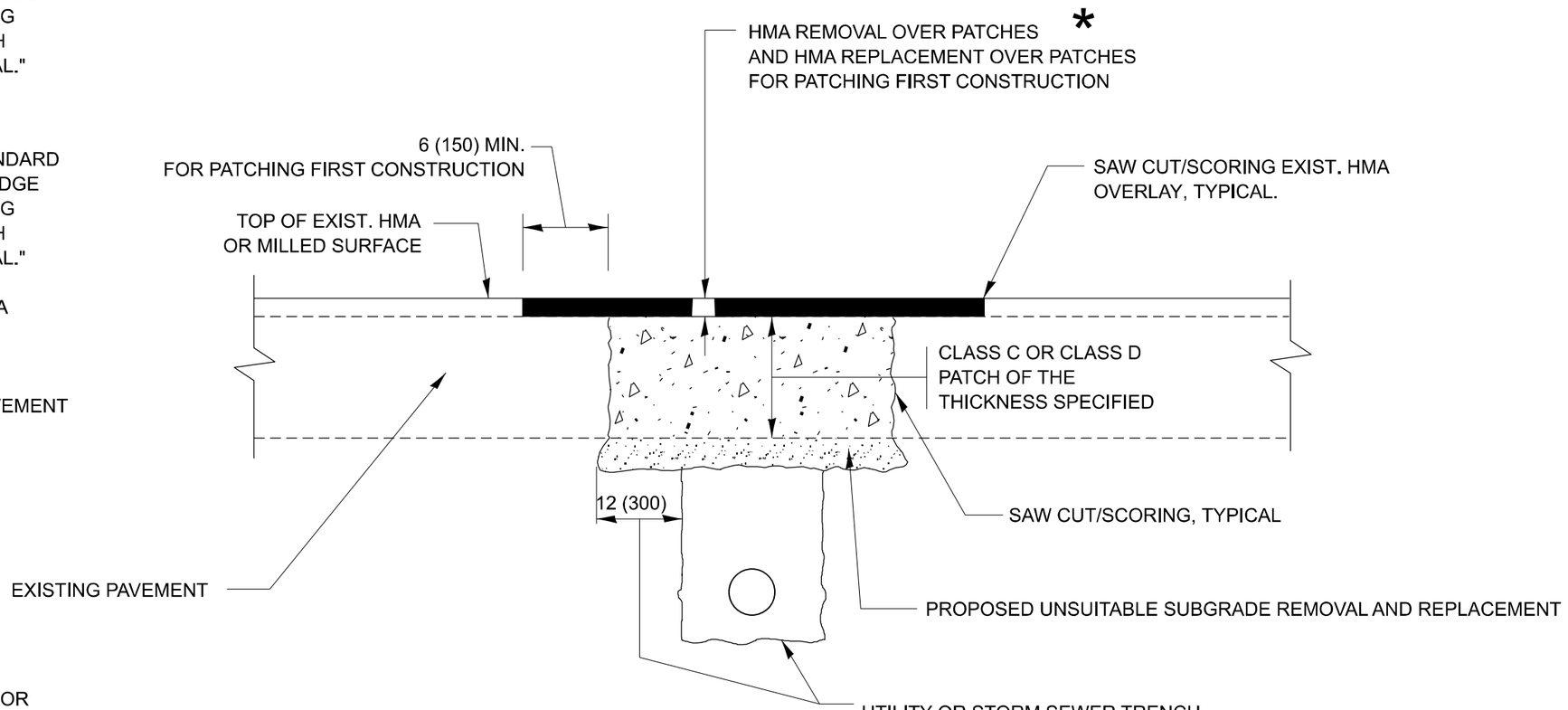
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	24
	BD600-03 (BD-08)	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

METHOD OF MEASUREMENT

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

BASIS OF PAYMENT

1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 ½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

MODEL: BD-22 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarut\nnd10325341D10662&-slnt-DistStds.dgn

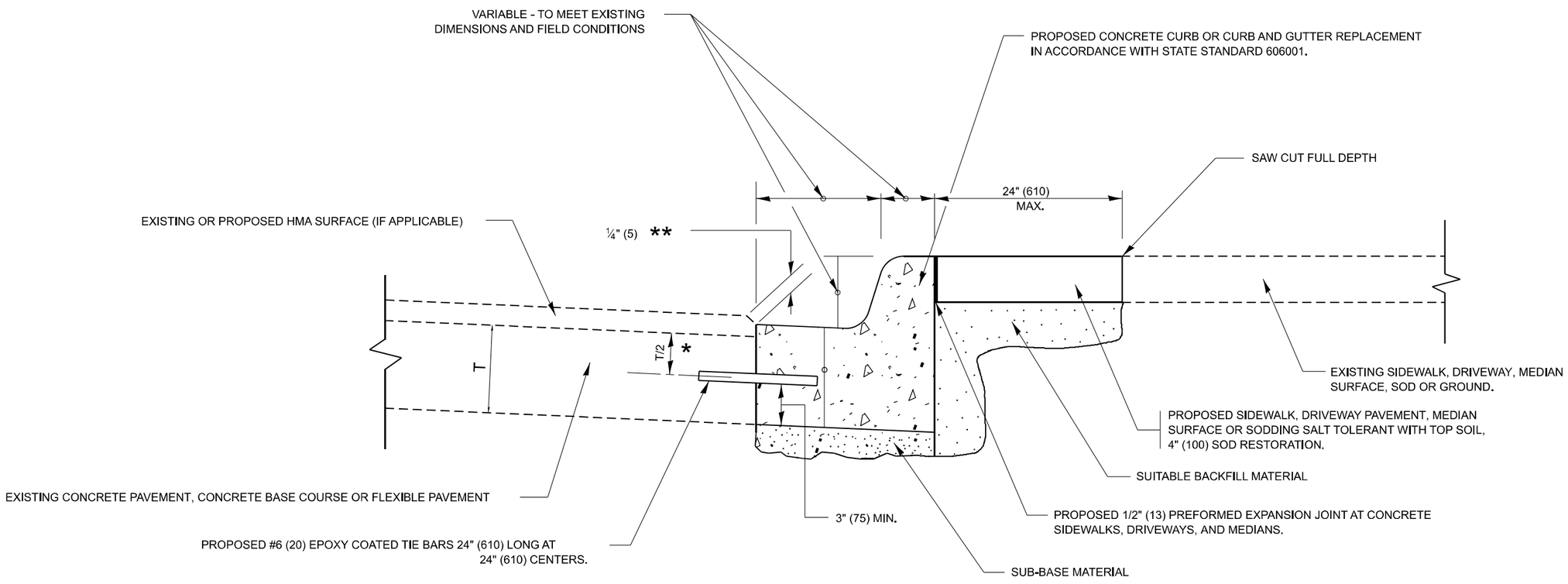
USER NAME = Nedal.Qarut	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07	
	DRAWN -	REVISED - R. BORO 09-04-07	
	CHECKED -	REVISED - K. ENG 10-27-08	
PLOT DATE = 3/18/2025	DATE - 10-25-94	REVISED - K. SMITH 11-18-22	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	25
	BD400-04 (BD-22)	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

MODEL: BD-24 [Sheet]
FILE NAME: c:\dw_work\pwidot\garunnld1032534\D1066224-sht-DistStds.dgn

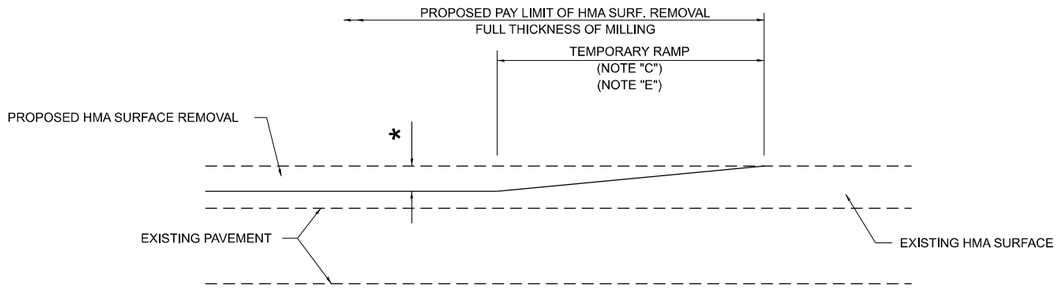
USER NAME = Nedal.Qarut	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97	
	DRAWN -	REVISED - M. GOMEZ 01-22-01	
	CHECKED -	REVISED - R. BORO 12-15-09	
PLOT DATE = 3/18/2025	DATE - 03-11-94	REVISED - K. SMITH 07-11-19	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

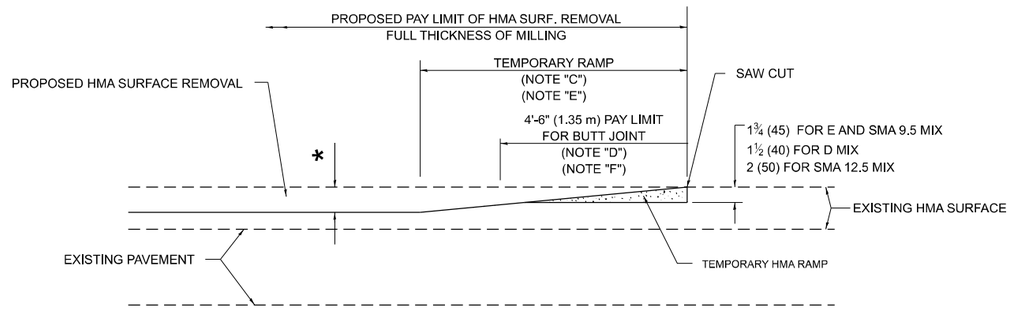
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	26
	BD600-06 (BD-24)	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

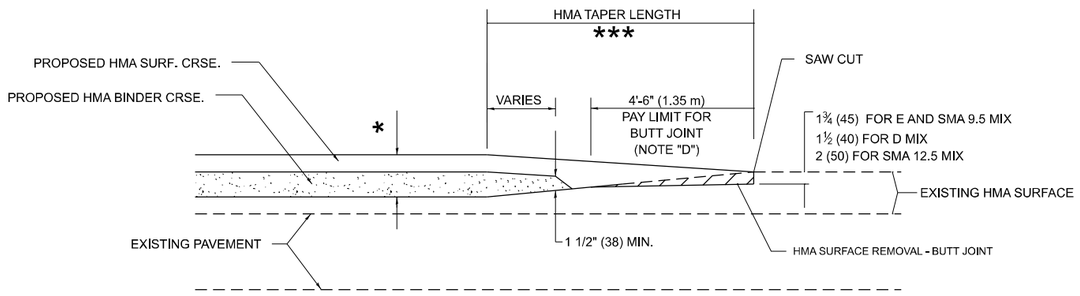


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

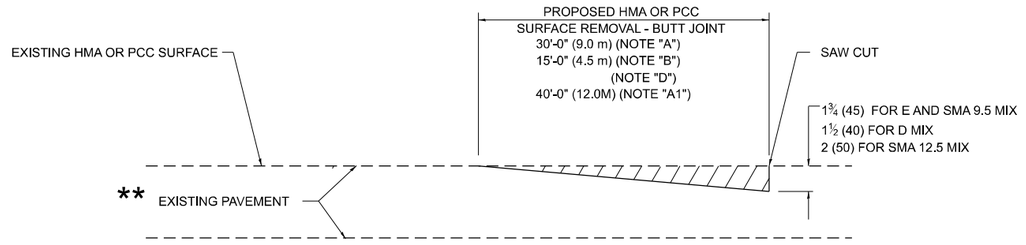
OPTION 2

TYPICAL TEMPORARY RAMP

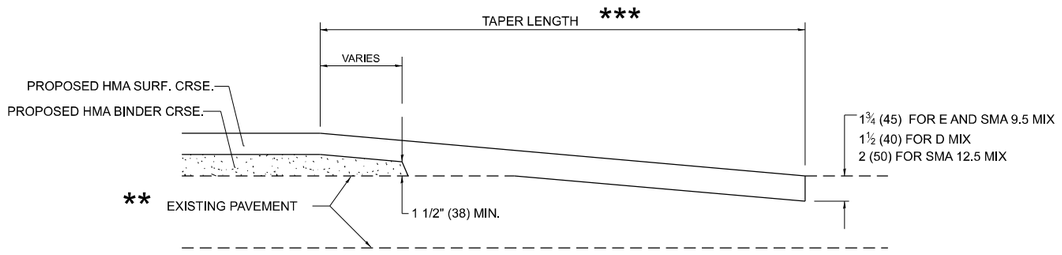


BUTT JOINT AND HMA TAPER

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.

GENERAL NOTES

A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.

A1. INTERSTATES

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' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

BASIS OF PAYMENT

1. 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".

2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

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

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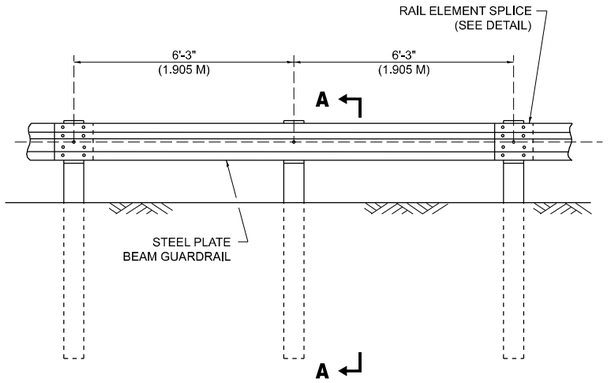
	DRAWN -	REVISED - M. GOMEZ 04-06-01			
	CHECKED -	REVISED - R. BORO 01-01-07			
PLOT DATE = 3/18/2025	DATE - 06-13-90	REVISED - K. SMITH 11-18-22		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	

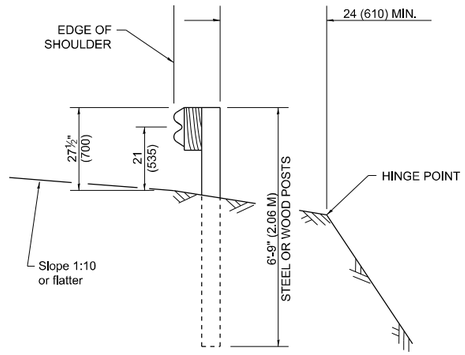
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	27
	BD400-05 BD-32	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



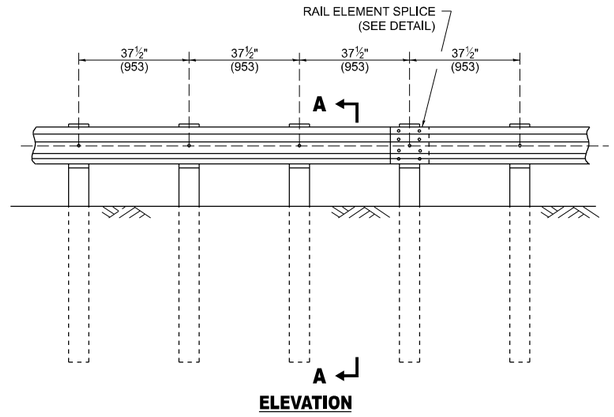
ELEVATION

TYPE A

6'-3" (1.905 M) TYPICAL POST SPACING



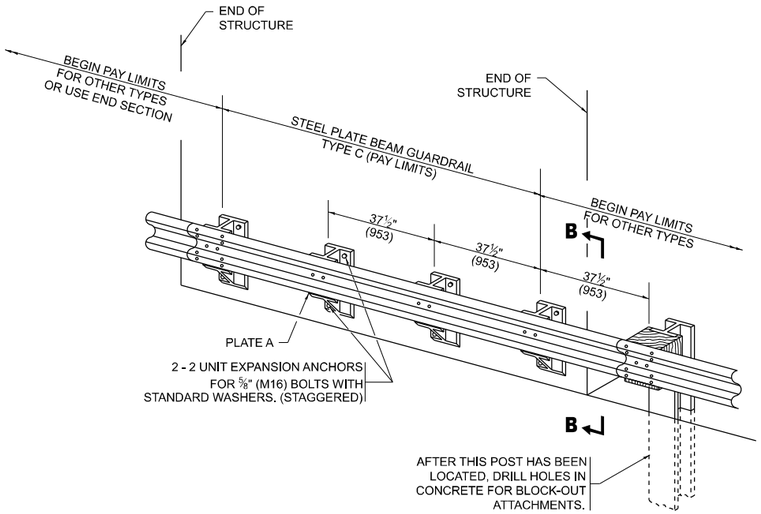
SECTION A-A



ELEVATION

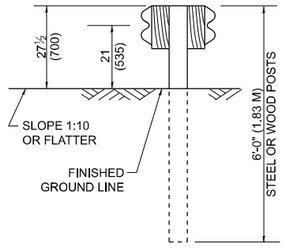
TYPE A

37 1/2 (953) CLOSED POST SPACING

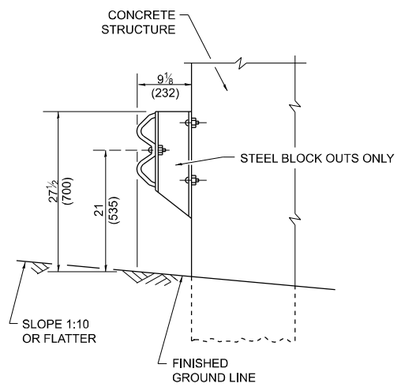


TYPE C

37½" (953) BLOCK-OUT SPACING



SECTION C-C



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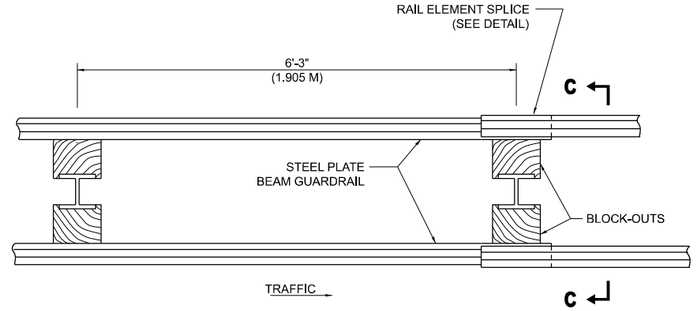


PLAN

TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL
6'-3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

MODEL: BM-21a [Sheet]
FILE NAME: c:\dw_work\pwidot\qarut\mnd10325341D106624-sht-DistStds.dgn

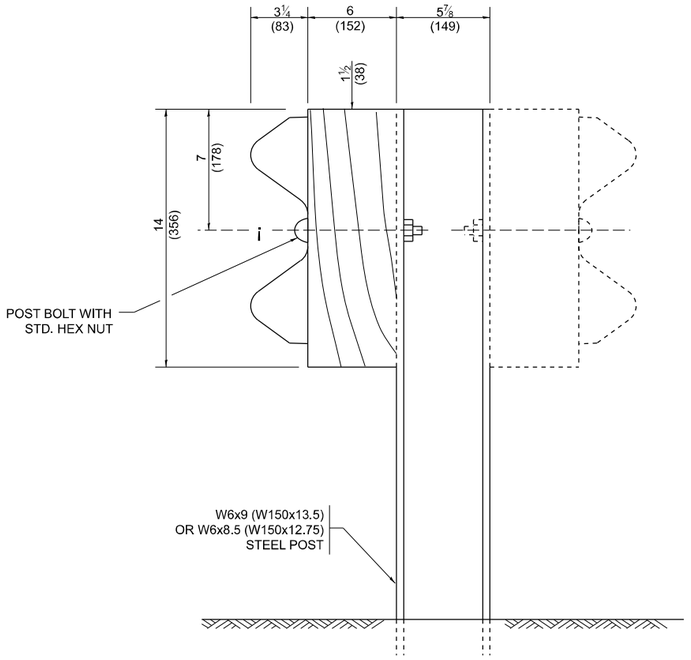
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

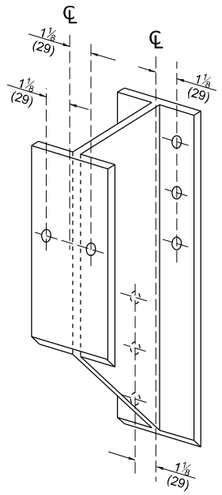
REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET 1 OF 4 SHEETS | STA. | TO STA.

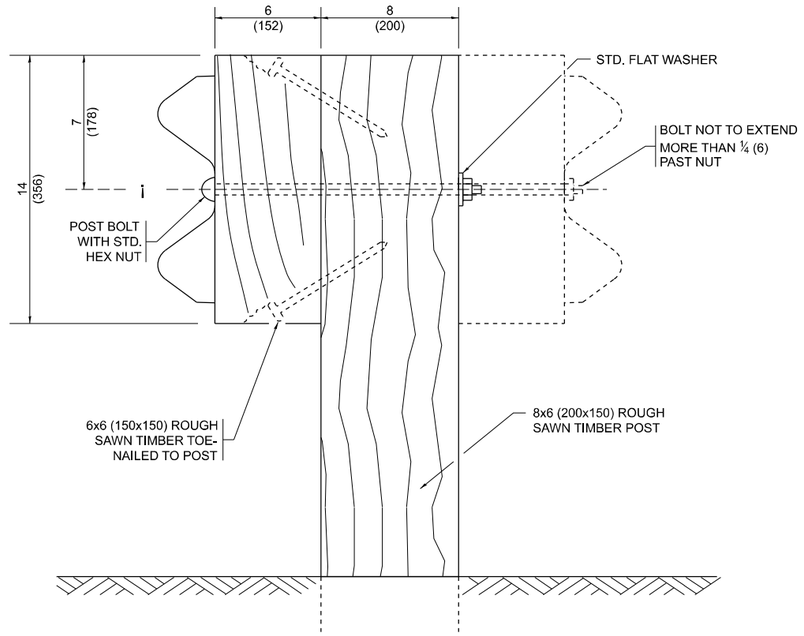
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	28
	BM-21	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



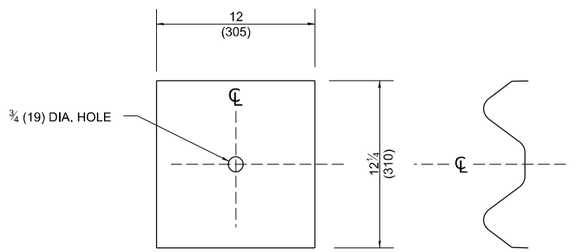
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL



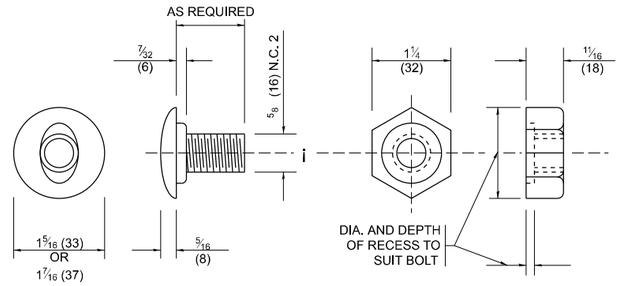
WOOD POST CONSTRUCTION



NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



POST OR SPLICE BOLT & NUT

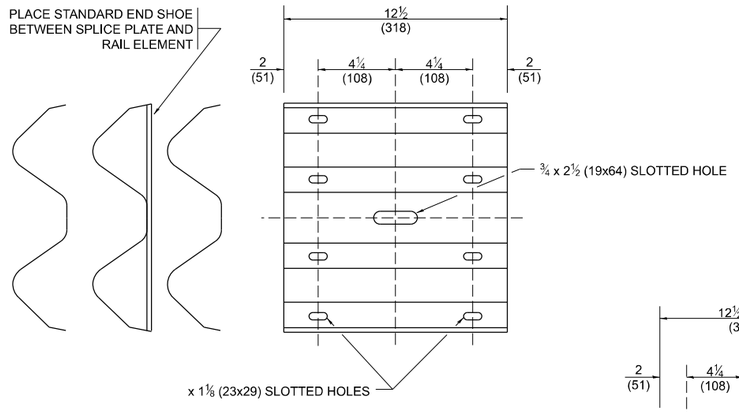
MODEL: BM-21b [Sheet]
FILE NAME: c:\pw_work\pwidot\garutmnd\d1032534\D106623-sht-DistStds.dgn

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

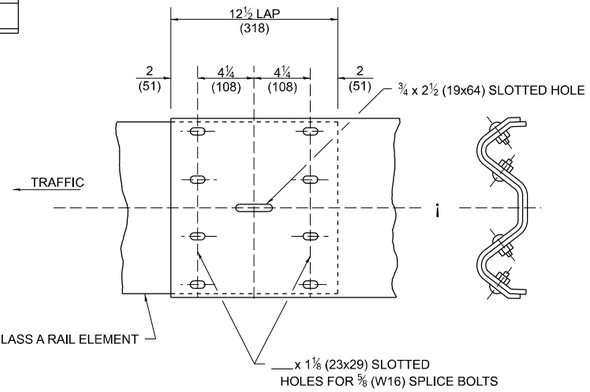
REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET 2 OF 4 SHEETS | STA. | TO STA.

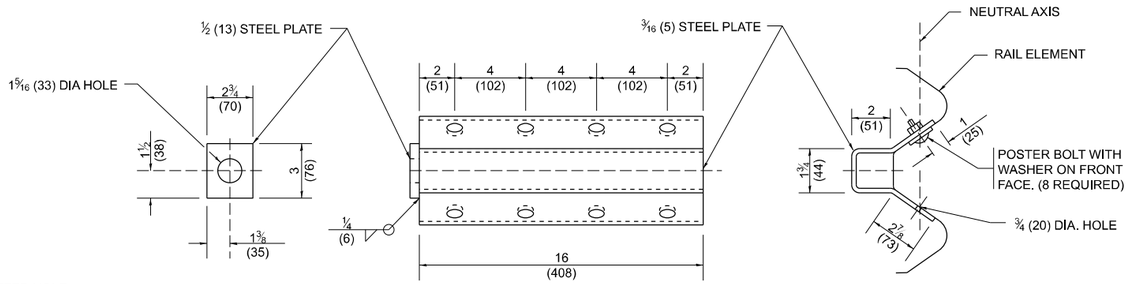
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	29
	BM-21	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



SPLICE PLATE



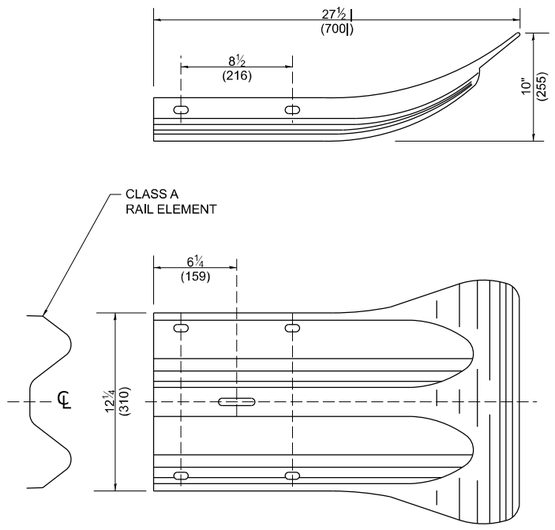
RAIL ELEMENT SPLICE



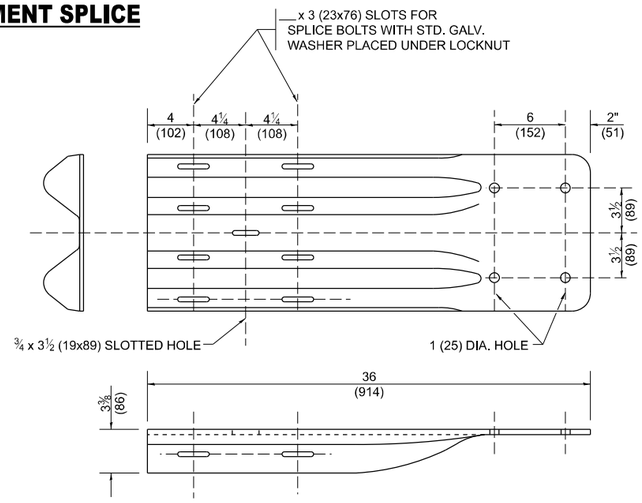
NOTE:

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

ANCHORE PLATE T DETAILS



END SECTION



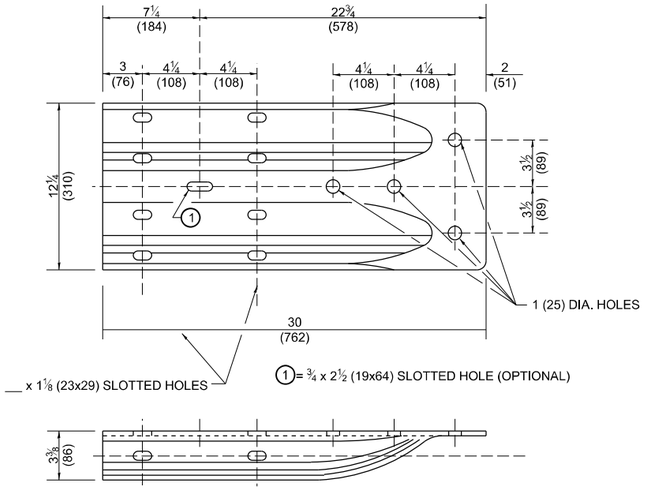
END SHOE

NOTE:

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.



ALTERNATE END SHOE

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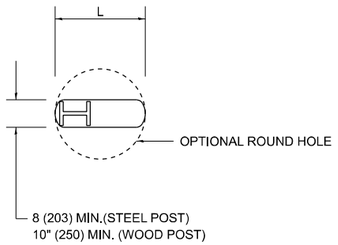
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

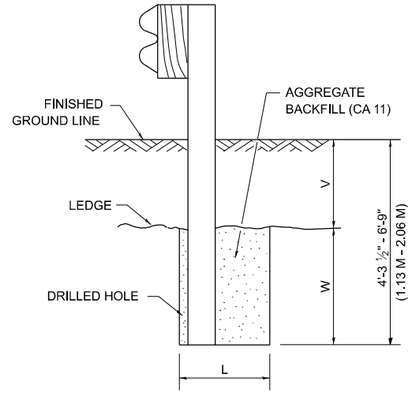
REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	30
	BM-21	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



PLAN

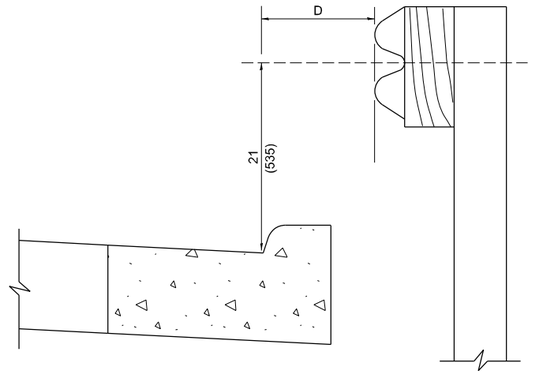


NOTE:

LEDGE LINE IS TOP OF ROCK
LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



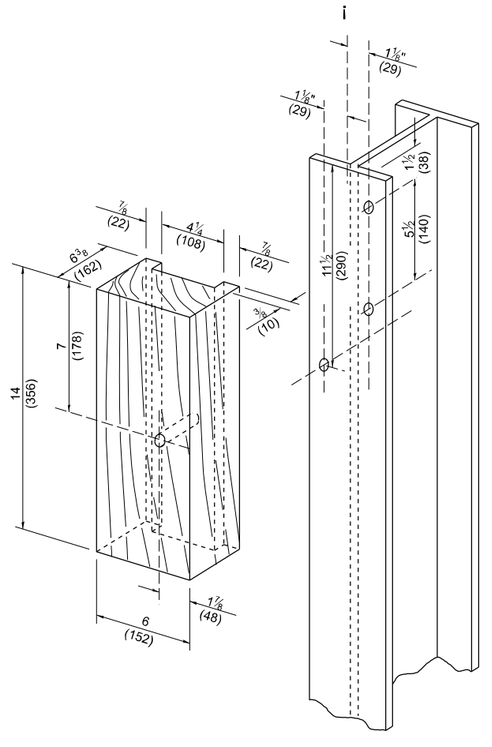
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

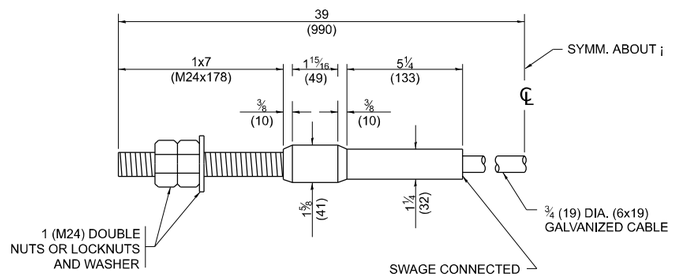
GUARDRAIL PLACED BEHIND CURB

(D = O DESIRABLE TO 12 (300) MAXIMUM)

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



WOOD BLOCK - OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

MODEL: BM-21d [Sheet]
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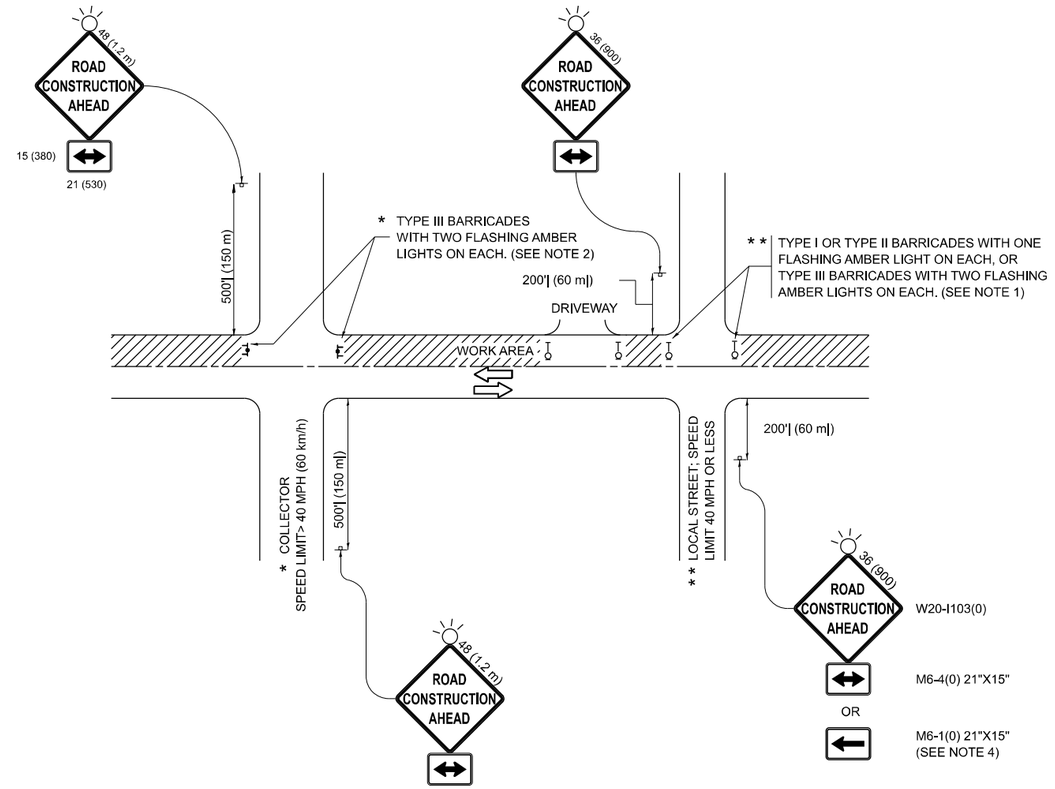
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SCALE: NONE | SHEET 4 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	31
	BM-21	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



NOTES:

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

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

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	DRAWN -	REVISED - A. SCHUETZE 07-01-13
	CHECKED -	REVISED - A. SCHUETZE 09-15-06
PLOT DATE = 3/18/2025	DATE - 06-89	REVISED - D. SENDERAK 05-03-24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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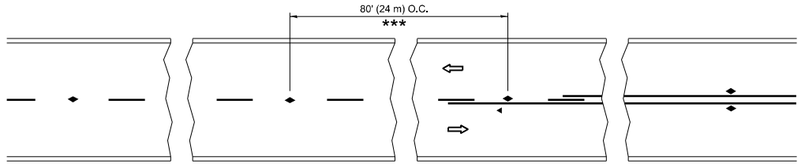
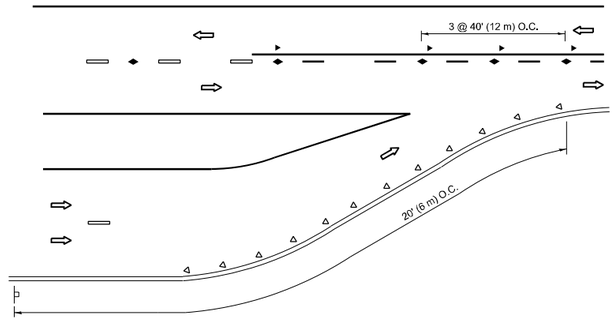
	TC-10	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



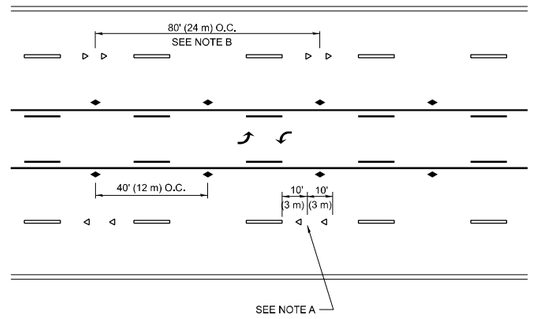
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

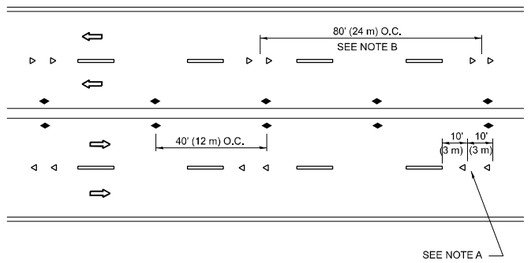
SEE FIGURE 3B-14 MUTCD



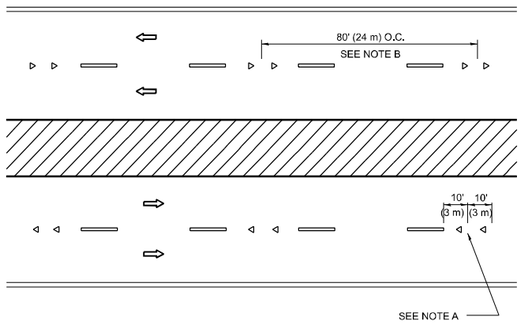
LANE REDUCTION TRANSITION



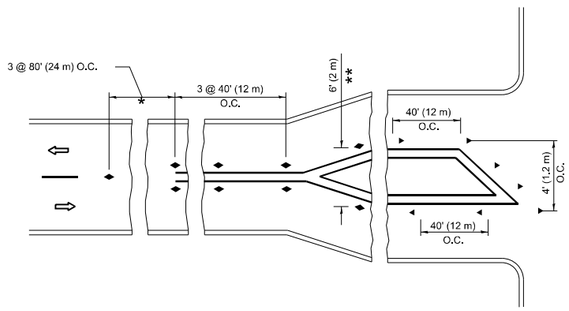
TWO-WAY LEFT TURN

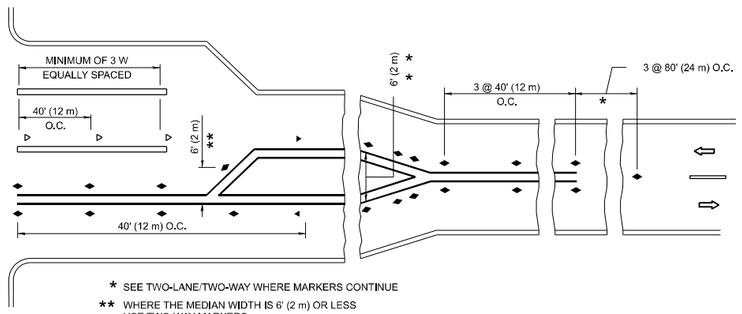


MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED





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

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

TURN LANES

GENERAL NOTES

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

SYMBOLS

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

LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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

DESIGN NOTES

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

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

MODEL: TC-11 [Sheet]
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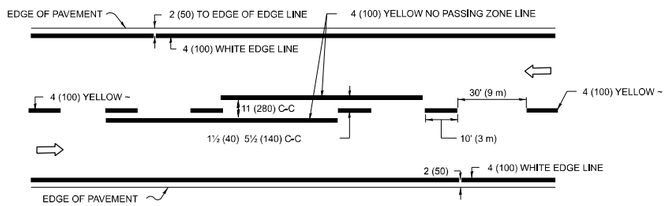
	DRAWN -	REVISED - T. RAMMACHER 01-06-00	
	CHECKED -	REVISED - C. JUCIUS 09-09-09	
PLOT DATE = 3/18/2025	DATE -	REVISED - C. JUCIUS 07-01-13	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

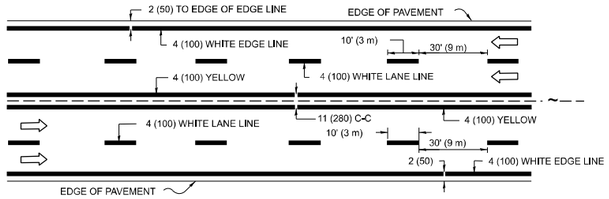
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

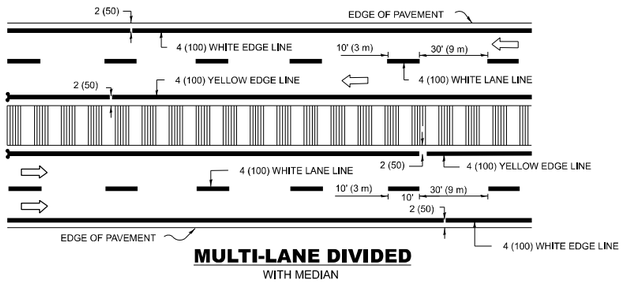
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	33
	TC-11	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



2-LANE ROADWAY

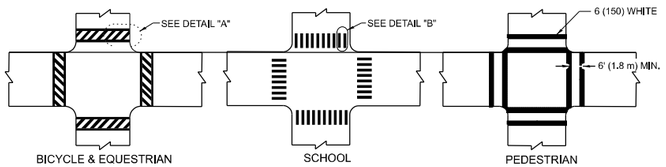


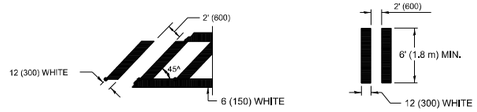
MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

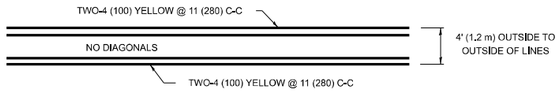




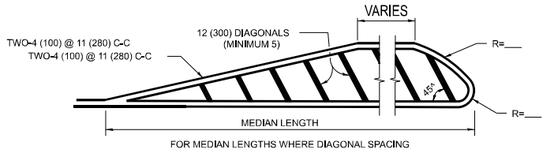
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

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



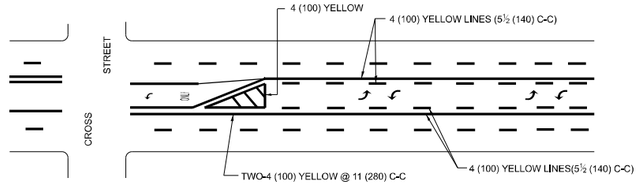
4' (1.2 m) WIDE MEDIANS ONLY



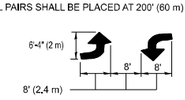
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

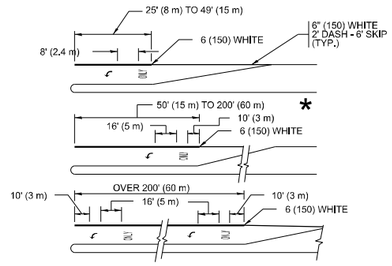


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

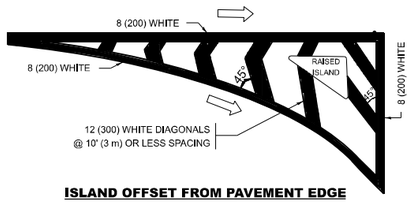


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
AREA = 15,6 SQ. FT. (1,5 m²) ONLY AREA = 20,8 SQ. FT. (1,9 m²)

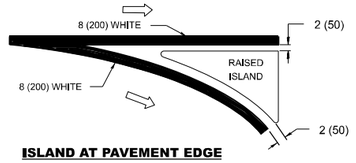
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

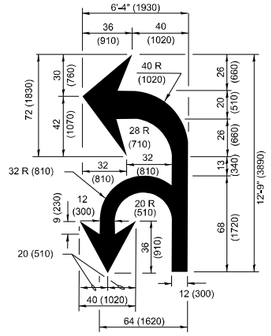


ISLAND OFFSET FROM PAVEMENT EDGE

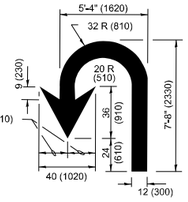


ISLAND AT PAVEMENT EDGE

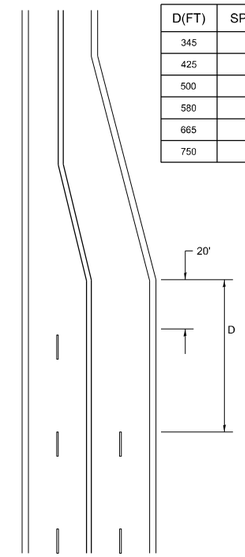
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN



LANE REDUCTION TRANSITION

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

* 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 m²) EACH "X"=54,0 SQ. FT. (5,0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30,4 SF

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

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

MODEL: TC-13 [Sheet]
FILE NAME: c:\pw_work\pwdot\qarum\d1032534\D106624-sht-DistStds.dgn

USER NAME = Nedal.Qarut	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	
	DRAWN -	REVISED - C. JUCIUS 07-01-13	
	CHECKED -	REVISED - C. JUCIUS 12-21-15	
PLOT DATE = 3/18/2025	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.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	34
	TC-13	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

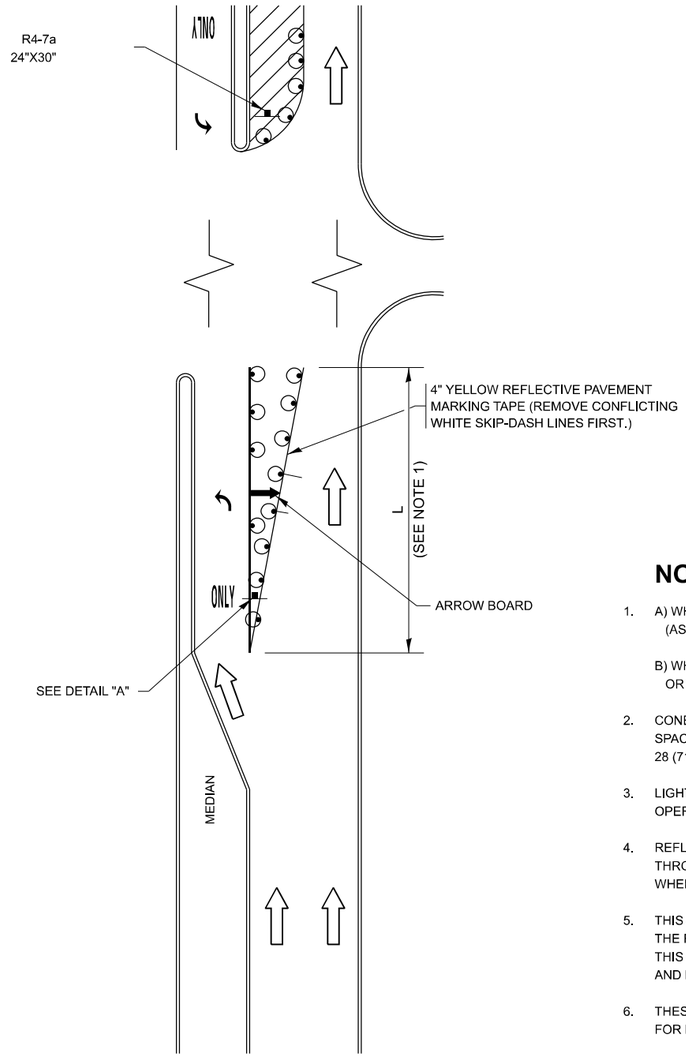


FIGURE 1

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.

   B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.

2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.

3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.

4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.

5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

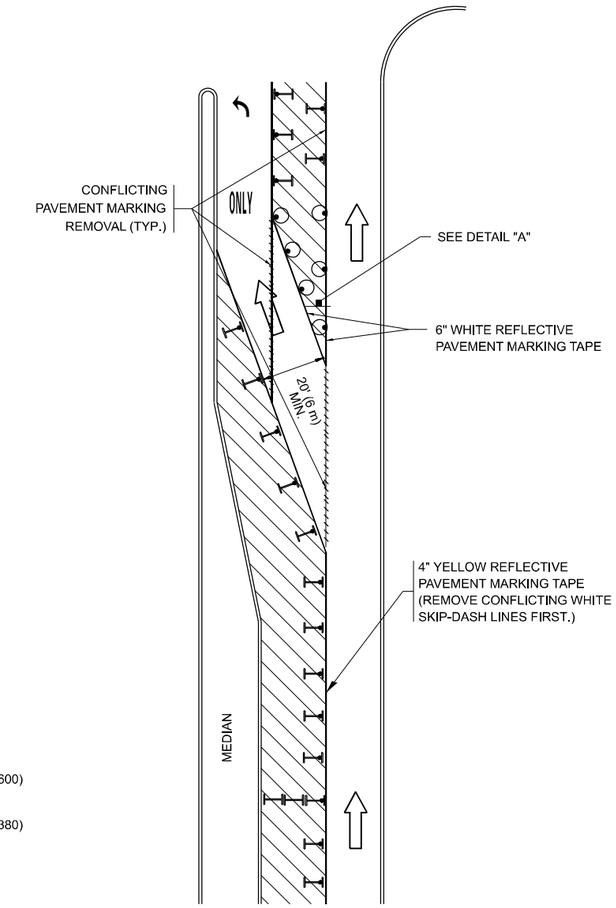
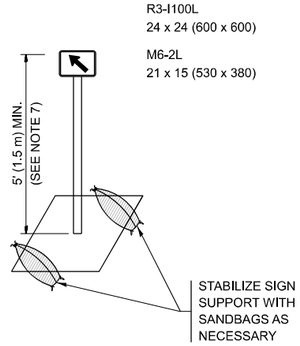


FIGURE 2



DETAIL A

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

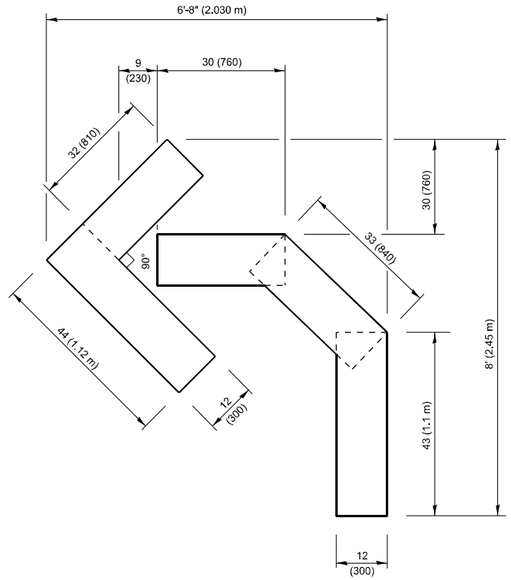
MODEL: TC-14 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarut\nnd10325341D106623-sht-DistStds.dgn

USER NAME = Nedal.Qarut	DESIGNED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN - A. HOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	
	CHECKED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	
PLOT DATE = 3/18/2025	DATE - T. RAMMACHER 01-06-00	REVISED -	

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

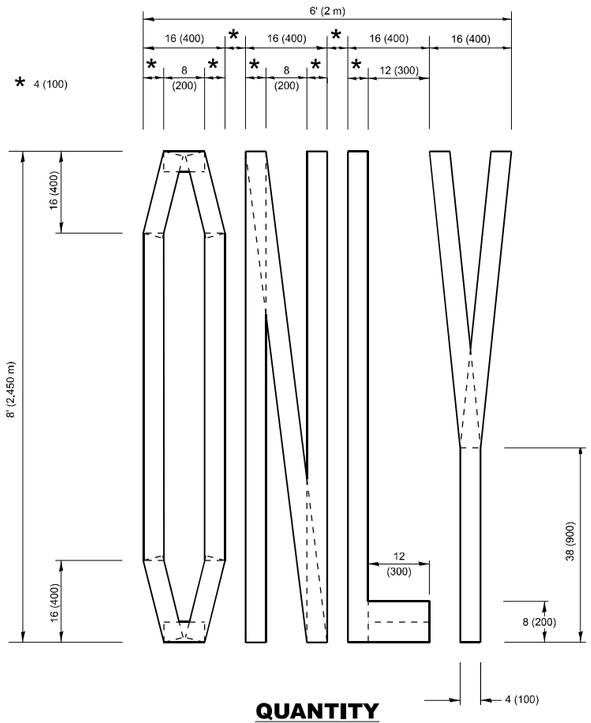
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	35
	TC-14	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		



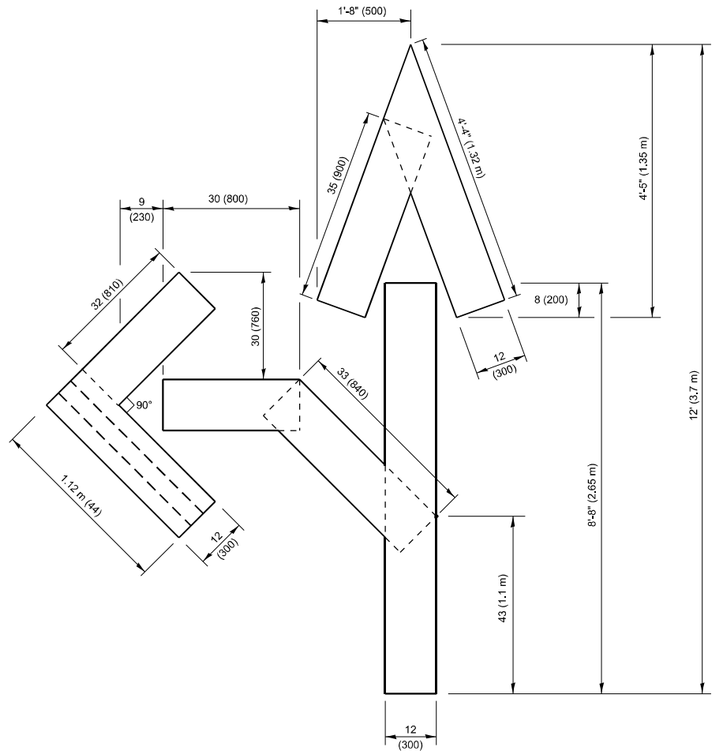
QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.41 sq. m)



QUANTITY

4 (100) LINE = 64.1 ft. (19.5 m)
21.4 sq. ft. (1.99 sq. m)

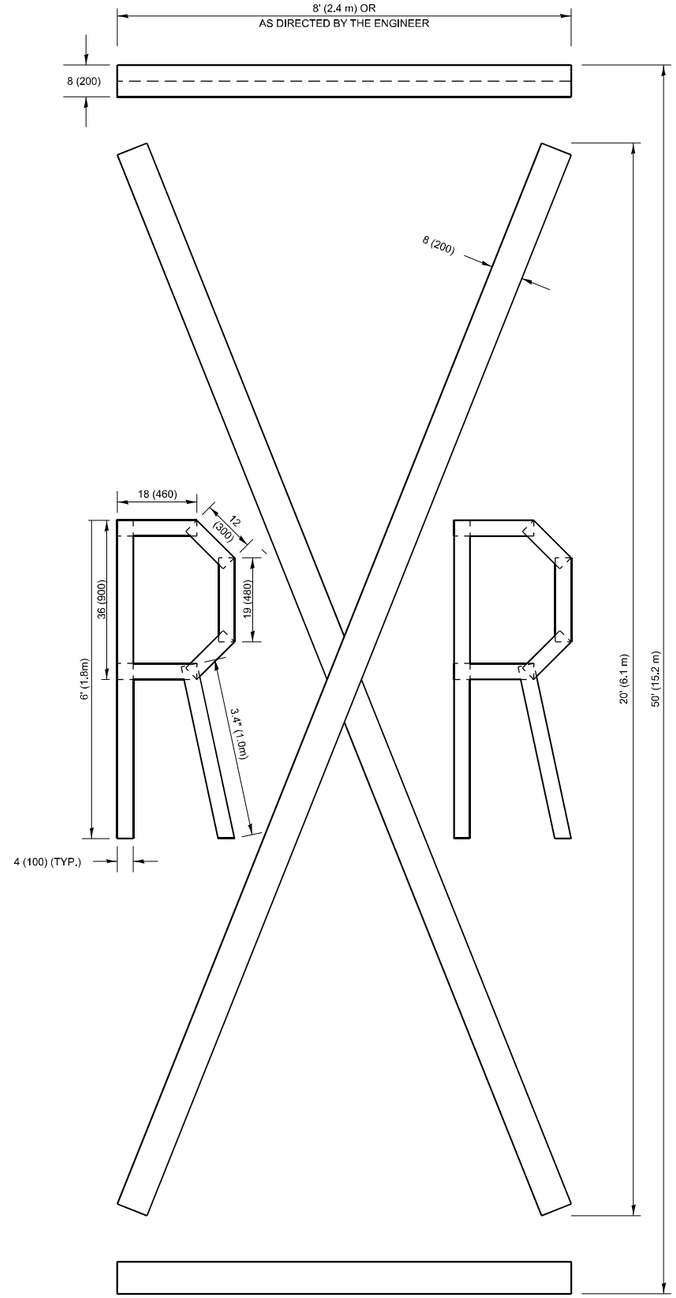


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m)
27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY

4 (100) LINE = 225.9 ft. (68.9 m)
75.3 sq. ft. (6.99 sq. m)

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

MODEL: TC-16 [Sheet]
FILE NAME: c:\pw_work\pwidotqarut\mvd10323341\D106624-sht-DistStds.dgn

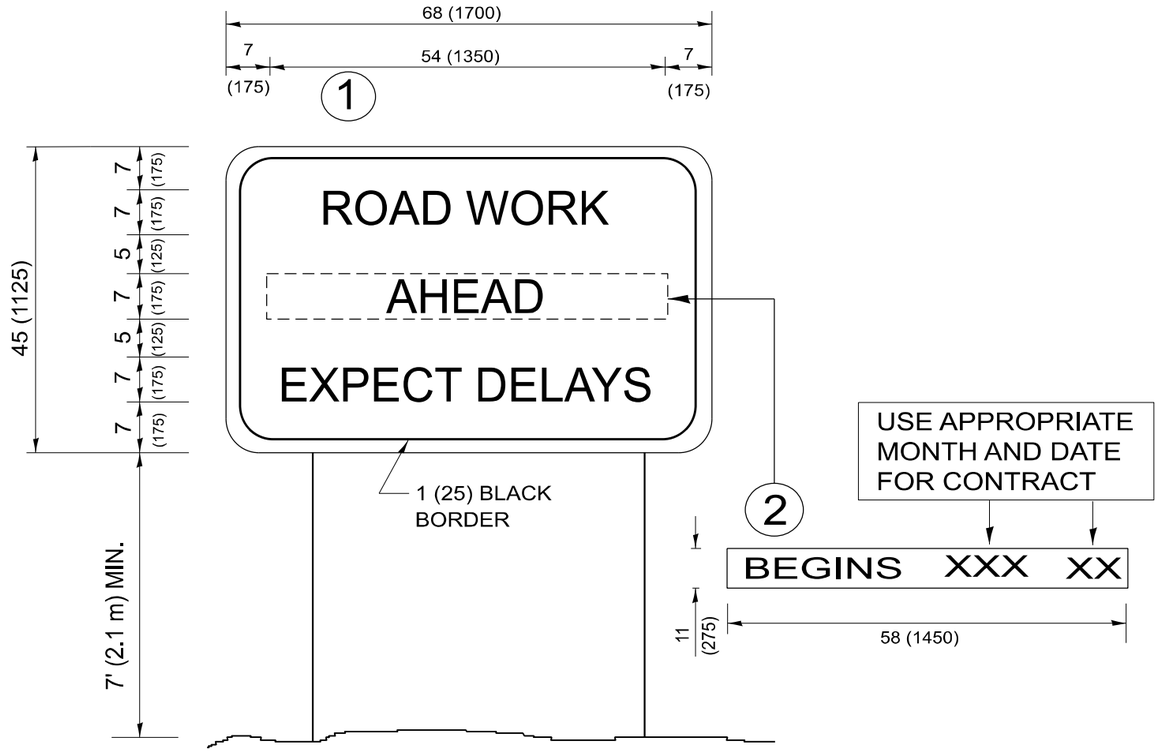
USER NAME = Nedal.Qarut	DESIGNED -	REVISED - T. RAMMACHER 03-02-98	
	DRAWN -	REVISED - E. GOMEZ 08-28-00	
	CHECKED -	REVISED - E. GOMEZ 08-28-00	
PLOT DATE = 3/18/2025	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	36
	TC-16	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		



NOTES:

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

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

MODEL: TC-22 [Sheet]
FILE NAME: c:\dw_work\pwidot\qarumnd\d1032534\D1106624-sht-DistStds.dgn

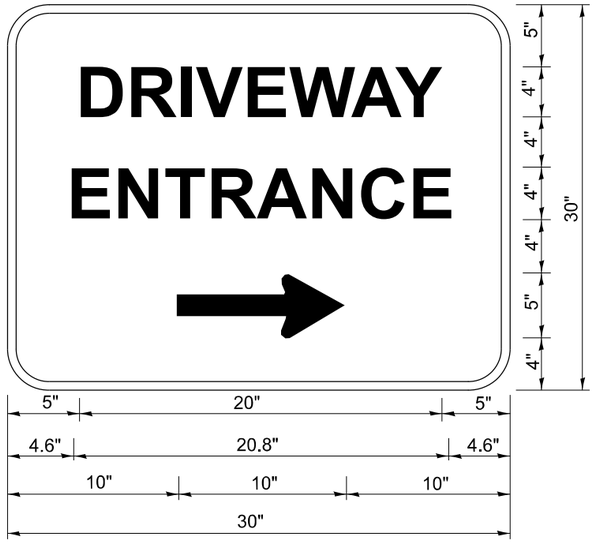
USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	R. MIRS 09-15-97
	DRAWN -	REVISED -	R. MIRS 12-11-97
	CHECKED -	REVISED -	T. RAMMACHER 02-02-99
PLOT DATE = 3/18/2025	DATE -	REVISED -	C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	37
	TC-22	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

MODEL: TC-26 [Sheet]
FILE NAME: c:\pw_work\pwidot\qarutmnd\d1032534\D1066 24-sht-DistStds.dgn

USER NAME = Nedal.Qarut	DESIGNED -	REVISED - C. JUCIUS 02-15-07	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

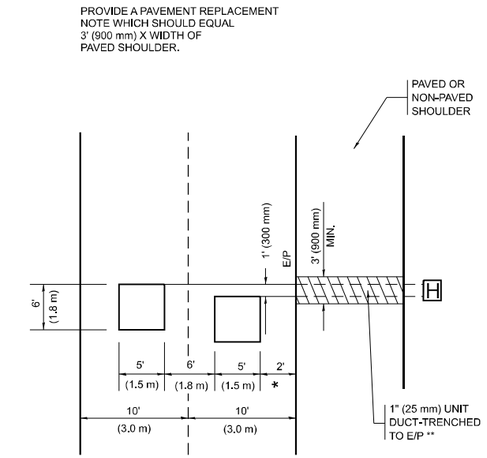
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	38
	TC-26	CONTRACT NO. 62V88		
	ILLINOIS FED. AID PROJECT			

LOOPS NEXT TO SHOULDERS



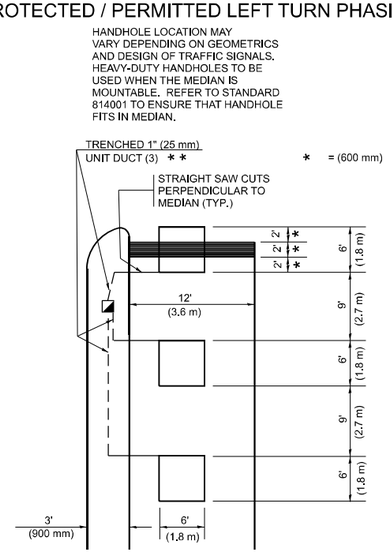
* = (600 mm)

* * 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)



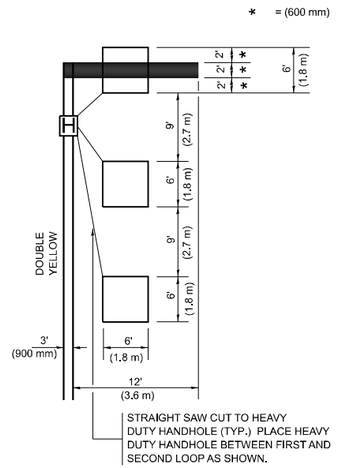
* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

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.

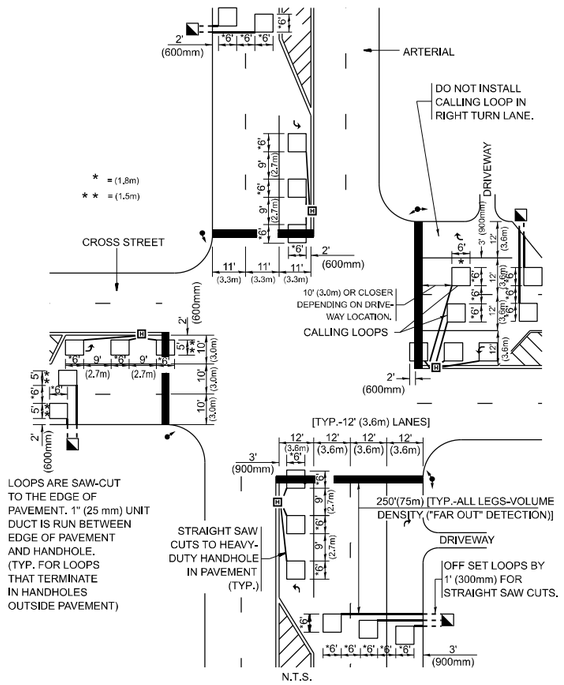
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

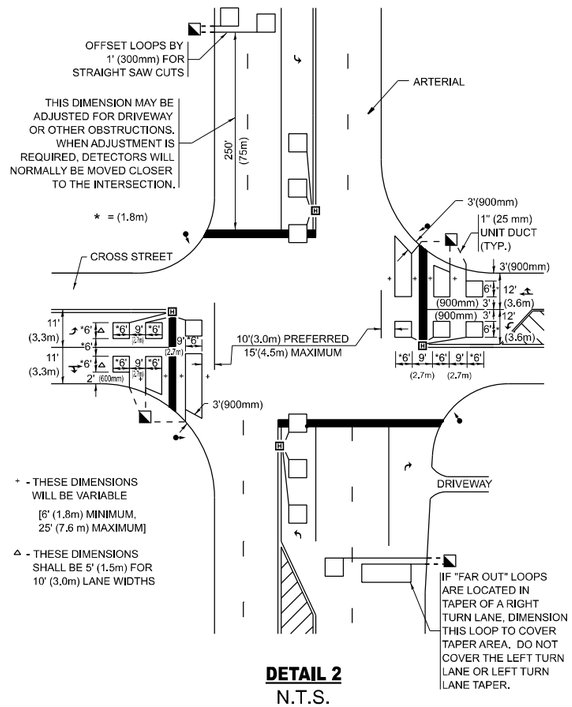
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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

USER NAME = Nedal.Qarut	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED - R.K.F.	REVISED -	
PLOT DATE = 3/18/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	FAP 0870 23 SMART2	DUPAGE	39	39
	TS-07	CONTRACT NO. 62V88		
		ILLINOIS FED. AID PROJECT		

MODEL: TS-07 [Sheet]
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