#### STATE OF ILLINOIS

#### 1312 COOK 73 1

D-91-012-15

#### **DEPARTMENT OF TRANSPORTATION**

## **PROPOSED** HIGHWAY PLANS

**F.A.U. 1312: GOLF ROAD** OVERLOOK DRIVE TO HARMS ROAD

**SECTION: 584N(14)** 

INTERSECTION IMPROVEMENT, CHANNELIZATION, AND TRAFFIC SIGNAL MODERNIZATION PROJECT: CMAQ-1G4R(981) **COOK COUNTY** 

C-91-012-15

THE PROJECT IS LOCATED IN THE VILLAGE OF MORTON GROVE AND COOK COUNTY FOREST PRESERVE

#### TRAFFIC DATA:

0

0

0

**AVERAGE DAILY TRAFFIC** GOLFRD (2018): 36,700 HARMS RD (2018): 10,100

**POSTED SPEED:** 

**GOLF RD (WEST LEG): GOLF RD (EAST LEG):** 

HARMS RD (SOUTH LEG):

**45 MPH 35 MPH** 

HARMS RD (NORTH LEG):

**35 MPH 25 MPH** 

HIGHWAY FUNCTIONAL CLASSIFICATION

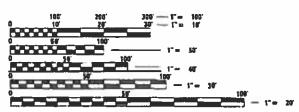
GOLF RD:

MINOR ARTERIAL

HARMS RD:

COLLECTOR

FOR INDEX OF SHEETS, SEE SHEET NO. 2



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432 PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

R 13 E HARMS ROAD END PROJECT: GOLF ROAD STA. 62+05.8 BEGIN PROJECT: STA: 370+00 GOLF ROAD END PROJECT: STA. 380+98.57 HARMS ROAD BEGIN PROJECT: STA. 56+61.5

**NILES TOWNSHIP** 

GROSS LENGTH = 1644.00 FT. = 0.311 MILE NET LENGTH = 1644,00 FT. = 0.311 MILE

**CONTRACT NO. 60Y74** 

STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: - -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS LIST OF STATE STANDARDS

69-73 DETAIL CROSS SECTIONS

SHEET NO.	DESCRIPTION	STANDARD NO. [	DESCRIPTION
1	COVERSHEET	000001-07	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
2	INDEX OF SHEETS & STANDARDS	280001-07	TEMPORARY EROSION CONTROL SYSTEMS
3	GENERAL NOTES	420001-09	PAVEMENT JOINTS
4-9	SUMMARY OF QUANTITIES	420106-06	36' (10.8m) JOINTED PCC PAVEMENT
		424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
10-12	EXISTING & PROPOSED TYPICAL SECTIONS	424006-04	DIAGONAL CURB RAMPS FOR SIDEWALKS
13-15	ALIGNMENT, TIES, AND BENCHMARKS	424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
16-17	ROADWAY PLAN AND PROFILE	424016-05	MID-BLOCK CURB RAMPS FOR SIDEWALKS
18	EARTHWORK BALANCE SCHEDULE	424021-05	DEPRESSED CORNER FOR SIDEWALKS
19-20	PEDESTRIAN RAMP DETAILS	442101-09	CLASS B PATCHES
21-29	SUGGESTED MAINTENANCE OF TRAFFIC PLANS	442201-03	CLASS C AND D PATCHES
30	EROSION CONTROL AND LANDSCAPING PLAN	601001-05	PIPE UNDERDRAINS
		602011-02	CATCH BASIN, TYPE C
31-32	DRAINAGE PLAN AND PROFILE	602301-04 604001-05	INLET, TYPE A
33	DRAINAGE PIPE AND STRUCTURE TABLE	606001-07	FRAME AND LIDS, TYPE 1  CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
34	VIDEO INSPECTION AND STORM SEWER CLEANING PLAN	606301-04	PC CONCRETE ISLANDS AND MEDIANS
35	PAVEMENT MARKING PLAN	606306-04	CORRUGATED PC CONCRETE MEDIANS
36-54	TRAFFIC SIGNAL PLANS	701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
55	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND FACE OF CURB & EDGE OF SHOULDER ≥ 15' (BD-1)	701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
56	DRIVEWAY DETAILS - DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (BD-2)	701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
57	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER (BD-7)	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
58	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)	701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
		701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
59	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
60	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
61	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	701901-08	TRAFFIC CONTROL DEVICES
62	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)	720001-01 720006-04	SIGN PANEL ERECTION DETAILS SIGN PANEL ERECTION DETAILS
63	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)	720008 04	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
64	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	720016-04	MAST ARM MOUNTED STREET NAME SIGNS
65	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	728001-01	TELESCOPING STEEL SIGN SUPPORT
66	SHORT TERM MARKING LETTERS AND SYMBOLS (TC-16)	729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
67	ARTERIAL ROAD INFORMATION SIGN (TC-22)	780001-05	TYPICAL PAVEMENT MARKINGS
		781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
68	CONSTRUCTION OF PAVEMENT & PAVEMENT APPURTENANCES (P-7)		

ſ	FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -			INDEX	OF SHE	ETS AND STAND	ARDS	F.A.U.	SECTION	COUNTY	TOTAL SHEET
	pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\P17080	9 <b>0FA0WA</b> ta\Design\P170809-sht-gennote.dgn	REVISED -	STATE OF ILLINOIS						584N(14)	СООК	73 2	
		PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			ILF NUAD					CONTRACT	T NO. 60Y74
	Default	PLOT DATE = 10/18/2019	DATE -	REVISED -		SCALE: 1"=50"	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT	

#### **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 HOUR NOTIFICATION IS REQUIRED).
- 2. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF MORTON GROVE, AND COOK COUNTY FOREST PRESERVE.
- 4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 5. USE #8 EPOXY-COATED TIE BARS, CONFORMING TO ART. 1006.10 OF THE STANDARD SPECIFICATIONS, FOR ALL TIE BARS. USE THE "LONGITUDINAL CONSTRUCTION JOINT (TIE BAR GROUTED IN PLACE)" DETAIL SHOWN ON HIGHWAY STANDARD 420001 FOR ALL LONGITUDINAL JOINTS AND FOR TYING PCC PAVEMENT WIDENING TO EXISING CONCRETE PAVEMENT AS SHOWN ON PLANS
- 6. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- 7. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 8. 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
- 9. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 10. LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT WILL BE DETERMINED IN THE FIELD BY THE ENGINEER
- 11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 12. FRAMES AND LIDS ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- 13. THE CONTRACTOR SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER AT CORY, JUCIUS@ILLINOIS, GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 14. THE RESIDENT ENGINEER SHALL CONTACT DON CHIARUGI. ARTERIAL TRAFFIC FIELD ENGINEER AT DON.CHIARUGI@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 15. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMETS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED THEIR LOCATION. THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.
- 16. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCES TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 17. FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.
- 18. AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS 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 ASI 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 SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

- 19. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.
- 20. 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 SEPERATE PAY ITEM HAS BEEN PROVIDED.
- 21. FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- 22. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 23. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
- 24. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- 25. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 11/2INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (45 KM/H) OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (45 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3
- 26. 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.
- 27. 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 DETERMINEED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS.
- 28. THE RESIDENT ENGINEER SHALL VERIFY ALL EXISTING PAVEMENT MARKINGS BEFORE MILLING.
- 29. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONTRUCTION.
- 30. PAVEMENT MARKING REMOVAL WATER BLASTING SHALL BE USED TO REMOVE CONFLICTING PAVEMENT MARKING ON PCC PAVEMENTS AND ON HMA SURFACES OUTSIDE RESURFACING LIMITS UNLESS OTHERWISE SPECIFIED.
- 31. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.

COOK 73 3 CONTRACT NO. 60Y74

32. CONSTRUCTION ON HARMS ROAD WILL FOLLOW COOK COUNTY STANDARDS P-7 WHERE APPROPRIATE.

FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -				GEN	IERAL NOTES		F.A.U. RTF	SECTION	COUNTY
	-	090RANNAta\Design\P170809-sht-gennote.dgn		STATE OF ILLINOIS		co		D AT HARMS R	POAD	1312	584N(14)	соок
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			LI NUAL					CONTRACT
Default	PLOT DATE = 10/18/2019	DATE -	REVISED -		SCALE: 1"=50"	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FE	D. AID PROJECT

	SUMMARY OF QUANTITIES		URBAN		STRUCTION TYPE CODE		SUMM	MARY OF QUANTITIES		URBAN			STRUCTION TYPE CODE
	121111111111111111111111111111111111111		TOTAL	ROADWAY TRAFFIC SIGNALS	EVP 0021					TOTAL	ROADWAY 0004	TRAFFIC SIGNALS	EVP 0021
CODE NO	ITEM	UNIT	QUANTITIES	0000	100% VILLAGE	CODE NO		ITEM	UNIT	QUANTITIES	20% STATE	0021 80% FED 15% STATE 5% VILLAGE	100% VILLAGE
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	24	24		28000510	INLET FILTERS	3	EACH	4	4		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	89	89		30300001	AGGREGATE SUI	GRADE IMPROVEMENT	CU YD	95	95		
20200100	EARTH EXCAVATION	CU YD	544	544		30300112	AGGREGATE SUI	BGRADE IMPROVEMENT 12"	SO YD	1610	1610		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE	CU YD	95	95		35501316	HOT-MIX ASPH	ALT BASE COURSE, 8"	SQ YD	717	717		
	MATERIAL					35600708	HOT-MIX ASPH	ALT BASE COURSE WIDENING,	SQ YD	193	193		
20400800	FURNISHED EXCAVATION	CU YD	483	483			8"						
20800150	TRENCH BACKFILL	CU YD	39	39		40600290	BITUMINOUS MA	ATERIALS (TACK COAT)	POUND	6801	6801		
21001000	GEOTECHNICAL FABRIC FOR GROUND	SO YD	285	285		40600400	MIXTURE FOR (	CRACKS, JOINTS, AND	TON	14	14		
	STABILIZATION						FLANGEWAYS						
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	1090	1090		40600982		ALT SURFACE REMOVAL - BUTT	SQ YD	120	120		
25000210	SEEDING, CLASS 2A	ACRE	0.7	0.7			JOINT						
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	42	42		40603200	POLYMERIZED I	HOT-MIX ASPHALT BINDER 75, N50	TON	416	416		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	42	42		40604060	HOT-MIX ASPH	ALT SURFACE COURSE, IL-9.5,	TON	5	5		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	42	42			MIX "D", N50						
25100630	EROSION CONTROL BLANKET	SQ YD	3402	3402		40605026		HOT-MIX ASPHALT SURFACE	TON	987	987		
							"F", N80						
28000305	TEMPORARY DITCH CHECKS	FOOT	60	60		42000511	PORTLAND CEME	ENT CONCRETE PAVEMENT 10	SQ YD	230	230		* SPECIALTY ITEM
28000400	PERIMETER EROSION BARRIER  USER NAME = ledezmorrm DESIC	FOOT	2169	2169			1/2" (JOINTE					IF.A II	NON-PARTICIPATING ITE
	illinois.gov:PWIDOTEDocuments@IDOT Offices@District 1@Projects@P17080 #@RAWM PLOT SCALE = 100.0000 ' / in. CHECH	<b>tN</b> a₿Design₿P1708	809-sht-S00.dgn	REVISED - REVISED - REVISED -	STATE OF DEPARTMENT OF 1		ION	SUMMAF GOLF ROAI SCALE: SHEET NO. 1 OF 6		IS ROAD	O STA.	F.A.U. RTE. 1312	SECTION   COUNTY   TOTAL SHEE NO.

	SUMMARY OF QUANTITIES		LIDDAN		CON	STRUCTION	N TYPE CO	DE		SL	JMMARY OF QUANTITIES		LIDDAN		CON	STRUCTIO	N TYPE CO	DΕ	
CODE NO	ITEM	UNIT	URBAN TOTAL OUANTITIES	0004 80% FED 20% STATE	TRAFFIC SIGNALS 0021 80% FED 15% STATE	EVP 0021 100% VILLAGE			CODE N		ITEM	UNIT	TOTAL OUANTITIE	20% STATE	SIGNALS 0021 80% FED 15% STATE	EVP 0021 100% VILLAGE			
42001300	PROTECTIVE COAT	SO YD	463	463	5% VILLAGE				6010810	PIPE UNDER	DRAINS 4" (SPECIAL)	FOOT	9	9	5% VILLAGE				
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SO FT	208	208					6010820	PIPE UNDER	DRAINS, TYPE 2, 4"	FOOT	638	638					
	INCH																		
									6020134		NS, TYPE A, 4'-DIAMETER, TYPE	EACH	1	1					
42400800	DETECTABLE WARNINGS	SO FT	50	50						24 FRAME A	ND GRATE								
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SQ YD	9164	9164					6020690	CATCH BASI	NS, TYPE C, TYPE 1 FRAME,	EACH	3	3					
	1/2"									OPEN LID									
44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	48	48					6023747	) INLETS, TY	PE A. TYPE 24 FRAME AND GRATE	EACH	2	2					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1263	1263					6025020	CATCH BASI	NS TO BE ADJUSTED	EACH	2	2					
44000600	SIDEWALK REMOVAL	SO FT	300	300					6025050	CATCH BASI	NS TO BE ADJUSTED WITH NEW	EACH	2	2					
										TYPE 1 FRA	ME, CLOSED LID								
44003100	MEDIAN REMOVAL	SO FT	5809	5809															
44200982	CLASS B PATCHES, TYPE II, II INCH	SQ YD	8	8					6025550	MANHOLES T	O BE ADJUSTED	EACH	4	4					
									6025790	) MANHOLES T	O BE RECONSTRUCTED	EACH	2	2					
44201299	DOWEL BARS 1 1/2"	EACH	24	24															
									6030030	FRAMES AND	LIDS TO BE ADJUSTED	EACH	8	8					
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SO YD	36	36					6050005	) REMOVING C	ATCH BASINS	EACH	2	2					
44213200	SAW CUTS	FOOT	54	54															
									6050006	REMOVING I	NLETS	EACH	2	2					
550A0330	STORM SEWERS, CLASS A, TYPE 2 10"	FOOT	6	6						060-7-1-									
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	126	126					6060380	TYPE B-6.1	N CONCRETE CURB AND GUTTER,	FOOT	843	843					
55100300	STORM SEWER REMOVAL 8"	FOOT	126	126													★ SPECI  NON-P		
FILE NAME =	USER NAME = ledezmorm  t.illinois.gov:PWIDOT&Documents&IDOT Offices&District l&Projects&P1708C  PLOT SCALE = 100.0000 ' / in.  PLOT DATE = 10/18/2019	DESIGNED - PROPROMINIA DE DESIGNA DE LA CHECKED - DATE -	/0809-sht-S00.dgn	REVISED REVISED REVISED REVISED	- - -				ATE OF ILLINOIS NT OF TRANSPORT	ATION	SUMMAR GOLF ROAL				F.A.U. RTE. 1312	SECT:	14)	соок	TOTAL SHEE NO. 73 5

	SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CO	DDE			CHAMADA	Y OF QUANTITIES		LIDDAN		CON	STRUCTION	TYPE COD	<u> </u>	
	SUMMANT OF QUANTITIES			ROADWAY 0004	TRAFFIC EVP SIGNALS 0021				SUMMART	I OF QUANTITIES		URBAN	ROADWAY 0004	TRAFFIC SIGNALS	EVP 0021			
CODE NO	ITEM		TOTAL UANTITIES	80% FED 20% STATE	0021 80% FED 100%			CODE NO		ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE	0021 80% FED 15% STATE 5% VILLAGE	100% VILLAGE			
60605000	COMBINATION CONCRETE CURB AND GUTTER,	FOOT	304	304				70300220	TEMPORARY PAVEME	NT MARKING - LINE 4"	FOOT	4590	4590					
	TYPE B-6.24																	
							 ——-{	70300240	TEMPORARY PAVEME	INT MARKING - LINE 6"	F00T	2500	2500					
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SO FT	2100	2100														
							· ·	70300260	TEMPORARY PAVEME	INT MARKING - LINE 12"	FOOT	1550	1550					
<del>*</del> 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	565	565														
Ne							· ·	70300280	TEMPORARY PAVEME	NT MARKING - LINE 24"	FOOT	195	195					
<del>*</del> 66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3				70700520	DAVENENT MARKING	TARE TYPE III 40	F007	2202	2202					
<del>*</del> 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION	LSUM	1	1				70300520	PAVEMENT MARKING	G TAPE, TYPE III 4"	FOOT	2282	2282					
100301001	PLAN	LJUM	•	1				70300900	PAVEMENT MARKING	G TAPE, TYPE IV -	SO FT	146	146					
									LETTERS AND SYMB		-5							
<del>*</del> 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	2	2														
							 	70300904	PAVEMENT MARKING	G TAPE, TYPE IV 4"	FOOT	5016	5016					
<del>*</del> 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION	LSUM	1	1				70300906	PAVEMENT MARKING	TAPE, TYPE IV 6"	FOOT	1448	1448					
	REPORT																	
							<u>.</u> .	70300924	PAVEMENT MARKING	TAPE, TYPE IV 24"	F00T	30	30					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6														
							*	72000100	SIGN PANEL - TYP	PE 1	SO FT	71	23	48				
67100100	MOBILIZATION	L SUM	1	1														
							*	72400500	RELOCATE SIGN PA	ANEL ASSEMBLY - TYPE A	EACH	2	2					
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	112	112				<b>70</b> (22 - 2 - 2				_	_					
70300100	SHORT TERM PAVEMENT MARKING	FOOT	9130	9130			*	72400600	RELOCATE SIGN PA	ANEL ASSEMBLY - TYPE B	EACH	2	2					
10300100	SHORT TERM FAVEMENT MARKING	FOOT	3130	9130				72800100	TELESCOPING STEE	L SIGN SUPPORT	FOOT	62	62					
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	6608	6608				.2300100	1222001100 3122	2 3100 3011 001		02	02					
							<u> </u>   <del> </del>	78000100	THERMOPLASTIC PA	VEMENT MARKING -	SO FT	400	400					
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND	SO FT	146	146					LETTERS AND SYMB	BOLS								
	SYMBOLS															* SPECIA	LTY ITEM	<u> </u>
																NON-PA	RTICIPAT	ING ITEM
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		-		REVISED		DELAU IINIEIN I	UF IKA	แขอกบที่IAI	SCAL				STA.	FED. ROA	D DIST. NO. 1  IL	INOIS FED. AID PR		O. 00114

	SUMMARY OF QUANTITIES		URBAN	_		ISTRUCTION T				SUM	MARY OF QUANTITIES		URBAN			ISTRUCTION TYPE CO	DE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	00% FED	TRAFFIC SIGNALS 0021 80% FED	0021 F	NTERLINE RUMBLE STRIP 0021		CODE NO		ITEM	UNIT	TOTAL OUANTITIES	00% FED	TRAFFIC SIGNALS 0021 80% FED	100%		
				20% STATE	15% STATE 5% VILLAGE	VILLAGE 9	0% FED % STATE							20% STATE	5% VILLAGE	VILLAGE		
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	3640	3640				*	81028240	UNDERGROUND	CONDUIT, GALVANIZED STEEL,	FOOT	420		420			
	4"									4" DIA.								
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	2240	2240				*	81400100	HANDHOLE		EACH	6		6			
	6"																	
								*	81400200	HEAVY-DUTY H	ANDHOLE	EACH	4		4			
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	1550	1550														
	12"							*	81400300	DOUBLE HANDH	OLE	EACH	2		2			
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE	FOOT	195	195				4	85000200	MAINTENANCE	OF EXISTING TRAFFIC SIGNAL	EACH	2		2			
18000830	24"	7001	135	135					85000200	INSTALLATION		EACH	2		2			
78009000	MODIFIED URETHANE PAVEMENT MARKING -	SO FT	73	73				*	86400100	TRANSCEIVER	- FIBER OPTIC	EACH	1		1			
	LETTERS AND SYMBOLS							<u> </u>										
								*	87301215	ELECTRIC CAE	LE IN CONDUIT, SIGNAL NO.	FOOT	1592		1592			
78009004	MODIFIED URETHANE PAVEMENT MARKING -	FOOT	956	956						14 2C								
	LINE 4"							<u> </u>	87301225	FLECTRIC CAR	LE IN CONDUIT, SIGNAL NO.	FOOT	1957		1957			
78009006	MODIFIED URETHANE PAVEMENT MARKING -	FOOT	266	266					01301223	14 3C	EL IN COMBOTT, STONAL NO.	1 001	1331		1331			
	LINE 6"																	
								*	87301245	ELECTRIC CAE	LE IN CONDUIT, SIGNAL NO.	FOOT	1286		1286			
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	84	84						14 5C								
									,									
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	76	76				*	87301255	ELECTRIC CAE	LE IN CONDUIT, SIGNAL NO.	FOOT	3334		3334			
80500010		EACH	1		1					•								
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL,	FOOT	1420		1420			*	87301305	ELECTRIC CAE	LE IN CONDUIT, LEAD-IN, NO.	FOOT	2563		2563			
	2" DIA.									14 1 PAIR								
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL,	FOOT	156		156			*	87301805	ELECTRIC CAE	LE IN CONDUIT, SERVICE, NO.	FOOT	77		77	₩ SPEC	IALTY ITEM	
	3" DIA.									6 2 C						△ NON-F	PARTICIPATI	NG ITEM
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	SUMMARY OF QUANTITIES		URBAN	CON ROADWAY TRAFFIC		TYPE CODE			SUMMARY OF QUANTITIES		URBAN	CON ROADWAY TRAFFIC	ISTRUCTIO EVP	N TYPE CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004   TRAFFIC SIGNALS 0021 80% FED   80% FED 20% STATE   15% STATE 5% VILLAGE	EVP 0021 100% VILLAGE			CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 SIGNALS	0021 100% VILLAGE	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT	FOOT	625	625			*	88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED,	EACH	8	8		
	GROUNDING CONDUCTOR, NO. 6 1C								FORMED PLASTIC					
											_	_		
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34  FT.	EACH	1	1			*	88500100	INDUCTIVE LOOP DETECTOR	EACH	8	8		
							*	88600100	DETECTOR LOOP, TYPE I	FOOT	923	923		
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42	EACH	1	1										
	FT.						*	88700200	LIGHT DETECTOR	EACH	2		2	
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48	EACH	1	1			*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1	
	FT.						*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50	EACH	1	1										
	FT.						<del>*</del>	89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	16	16		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16	16			*	89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL	EACH	8	8		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4					HEAD					
							*	89500400	RELOCATE EXISTING PEDESTRIAN	EACH	16	16		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH	FOOT	52	52					PUSH-BUTTON					
	DIAMETER						*	89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	4	4		
87900200	DRILL EXISTING HANDHOLE	EACH	2	2				33301130	THE STORM TO	2001	· .			
							*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5651	5651		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION,	EACH	1	1										
	BRACKET MOUNTED						*	89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	435	435		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION,	EACH	3	3										
	MAST-ARM MOUNTED						*	89502375	REMOVE EXISTING TRAFFIC SIGNAL	EACH	1	1		
									EQUIPMENT					* SPECIALTY ITEM  NON-PARTICIPATI
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ED 2 200011	PLOT SCALE = 100.0000 ' / in.  PLOT DATE = 10/18/2019	CHECKED - DATE -		REVISED - REVISED -		DEPARTMEN'			SCALE: SHEET NO. 5 OF	AD AT HARI		1312   D STA.   FED. ROA	584N0	14) COOK 73 CONTRACT NO. LLINOIS FED. AID PROJECT

	SUMMARY OF QUANTITIES		URBAN	ROADWAY	TRAFFIC	EVP	N TYPE COD STORM	<u>L</u>		SUMMARY OF QUANTITIES		URBAN	ROADWAY TRA	FIC EVP	ON TYPE CODE	-
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	20% STATE	SIGNALS 0021 80% FED	0021 100% VILLAGE	SEWER CLEANING 0004 100% STATE		CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0004 SIG	IALS 0021 21 FED 100% TATE VILLAGI	SEWER CLEANING 0004	
89502380	REMOVE EXISTING HANDHOLE	EACH	22		22				x7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	13196	13196			
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1		1			*	X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	1			
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	10		10			*	X8710024	FIBER OPTIC CABLE IN CONDUIT, NO.	FOOT	5651	5651			
X0323160	VIDEO INSPECTION OF STORM SEWER	FOOT	1745	1745						62.5/125, MM12F SM24F						
X0323100	TIPLO INST ECTION OF STORM SEREN	1001	1143	1143					Z0004562	COMBINATION CONCRETE CURB AND GUTTER	FOOT	80	80			
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE	FOOT	319			319				REMOVAL AND REPLACEMENT						
	SENSOR CABLE, NO. 20 3/C								Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
x0327979	PAVEMENT MARKING REMOVAL - GRINDING	SO FT	1352	1352												
									Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	10			10	
X0327980	PAVEMENT MARKING REMOVAL - WATER  BLASTING	SQ FT	38	38					Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	103	103			
X1400107	FULL-ACTUATED CONTROLLER AND TYPE SUPER	EACH	1		1			*	Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL	. EACH	1	1			
	P CABINET									2						
x4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1					Z0056604	STORM SEWER (WATER MAIN REQUIREMENTS) 8	FOOT	1 36	136			
VEE 27000	STORM SEWERS TO BE CLEANED 8"	5007	25.4				264			INCH						
X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	264				264	<del> </del>	Z0064800	SELECTIVE CLEARING	UNIT	2	2			
x5537700	STORM SEWERS TO BE CLEANED 10"	FOOT	175				175									
VC070710	FRANCE AND LINE TO DE ADJUSTED	FACU.						Q	Z0076600	TRAINEES	HOUR	500	500			
X6030310	(SPECIAL)	EACH	8	8				<u> </u>	<b>7</b> Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500			
X7010216	TRAFFIC CONTROL AND PROTECTION,	L SUM		,												
71010216	(SPECIAL)	L JUM	1	1											₩ SPECIAL	LTY ITEM
									Ø 0042						NON-PAF	RTICIPATI
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HOT-MIX ASPHALT MIXTUR	E REQUIREMENTS								
MIXTURE TYPE	AIR VOIDS (%) @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)							
GOLF ROAD & HARMS ROAD RESU	RFACING AND WIDENING								
POLYMERIZED HMA SURFACE COURSE, SMA, 9.5, N80, 1¾"	3.5% @ 80 GYR.	QC/QA							
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, ¾"	3.5% @ 50 GYR.	QC/QA							
HOT-MIX ASPHALT BASE COURSE WIDENING, (HMA BINDER IL-19.0) 8" (FOR WIDENING WIDTH < 6')	4% @ 70 GYR.	QC/QA							
HOT-MIX ASPHALT BASE COURSE, IL-19.0) 8" (FOR WIDENING WIDTH > 6')	4% @ 70 GYR.	QC/QA							
DRIVEWAYS									
HMA SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm)	4% @ 50GYR.	QC/QA							
HMA BASE COURSE, 8" (HMA BINDER IL-19.0mm)	4% @ 50GYR.	QC/QA							
PATCHING	ì								
CLASS D PATCHES (HMA BINDER IL-19 mm), 13"	4% @ 70 GYR.	QC/QA							
HMA CENTERLINE RUMBLE :	STRIP LONG PATCH								
HMA SURFACE COURSE, MIX "D", N70, 2" (IL-9.5mm)	4% @ 70 GYR.	QC/QA							
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY C	ONTROL FOR PERFORMA	NCE (QCP); PAY FOR							

- NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL SURFACE HOT-MIX ASPHALT MIXTURE QUANTITIES IS 112 LBS/SQYD/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 DISTRIC ONE SPECIAL PROVISIONS.
- NOTE 3: FOR USE OF RECYCLED MATERIALS, SEE DISTRICT ONE SPECIAL PROVISION.
- NOTE 4: QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

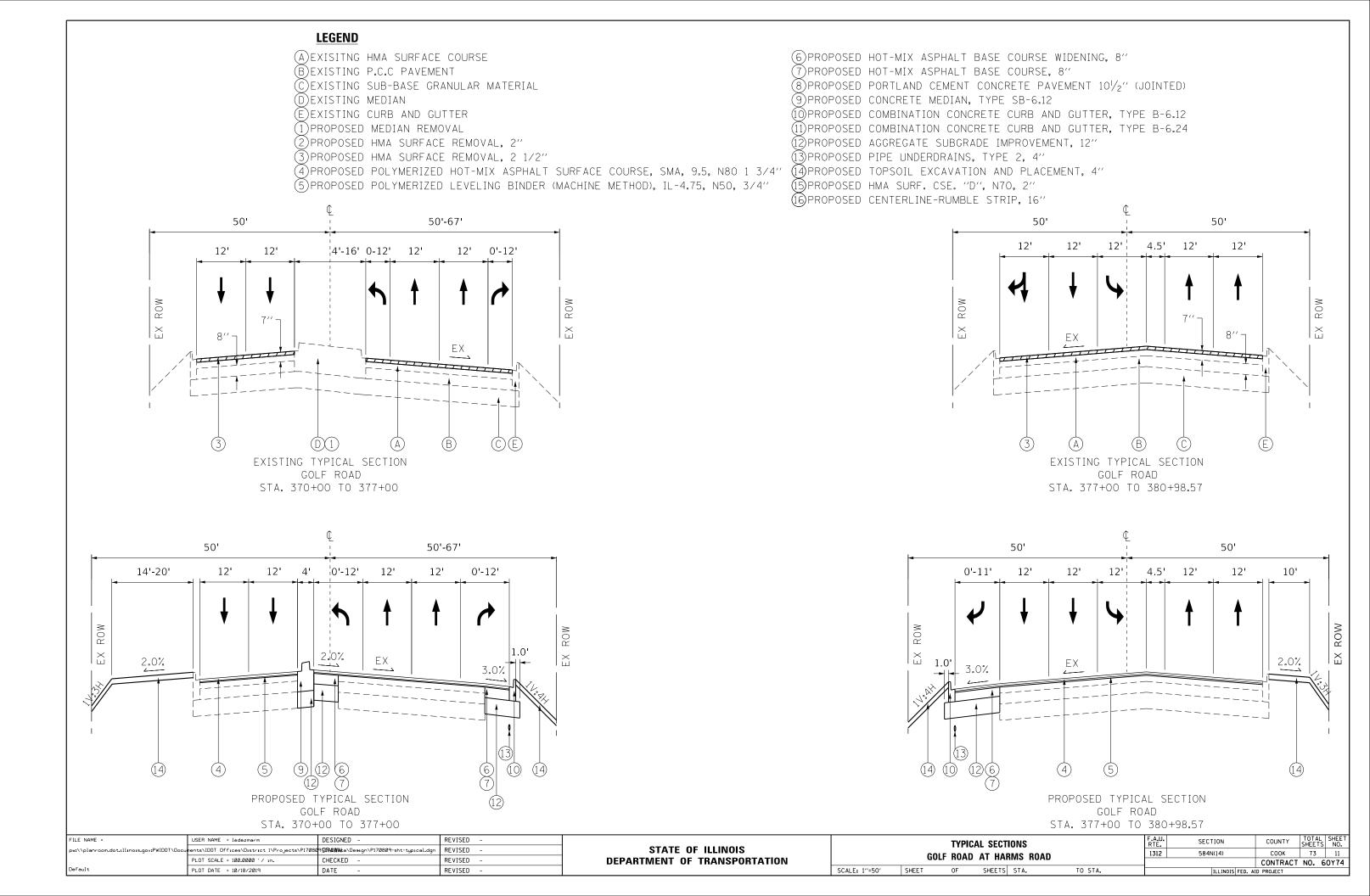
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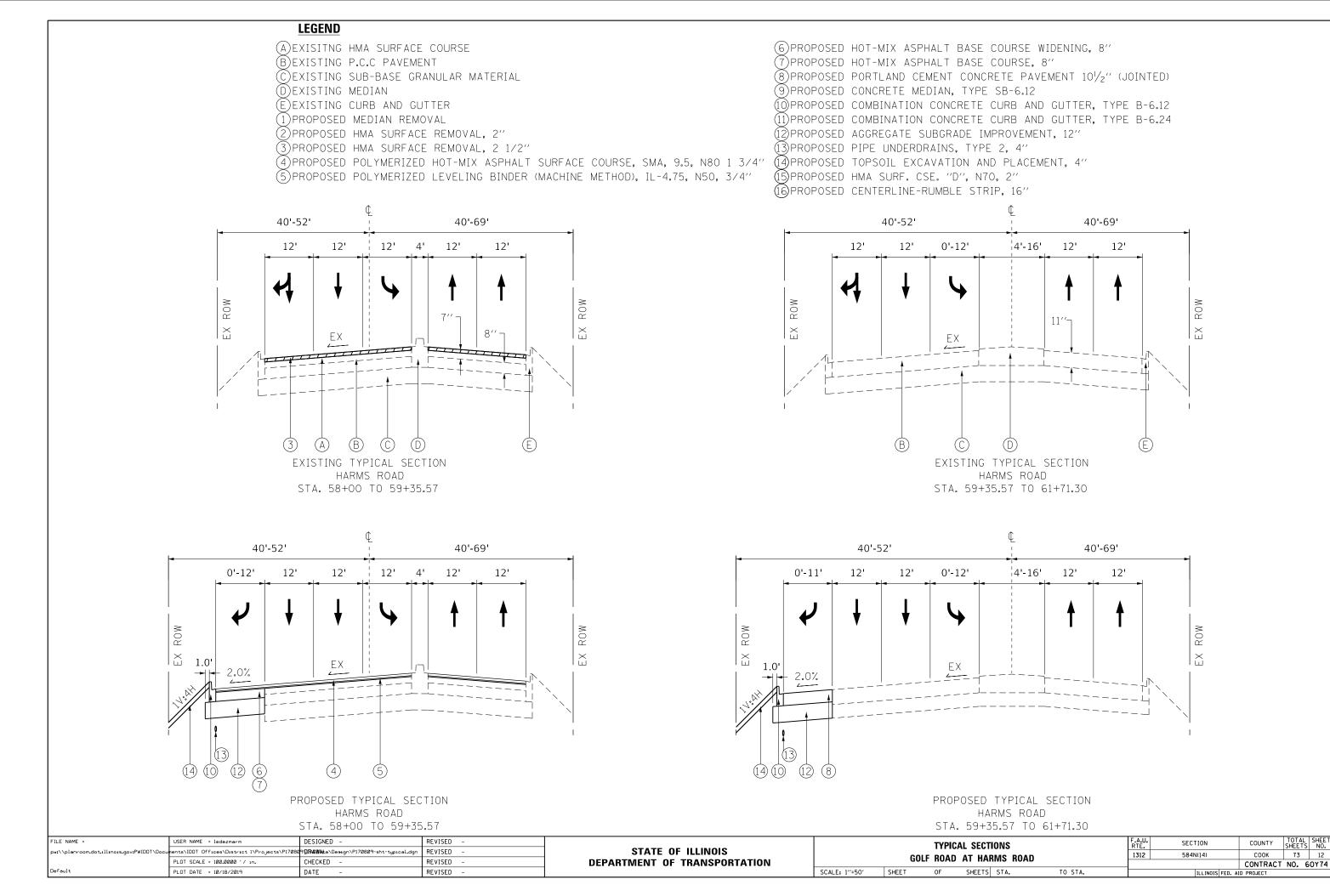
NOTE 5: THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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73 12

### **BENCHMARK** #A

ELEV. = 624.81

VILLAGE OF SKOKIE FINAL DISK IN CONCRETE WITH MEATAL ACCESS COVER FOR STATION ONLY 3088 ORIGIN OF DATUM B.M.A STA. 387+68.82 84.11 LT

## **BENCHMARK** #B

ELEV. = 625.70

SQUARE CUT @ NWX CONCRETE FOUNDATION FOR TRAFFIC CONTROL LITE BOX STA. 377+62 55.32 LT

## BENCHMARK #C

ELEV. = 627.86

CHISFLED "X" ON FLANGE BOLT STA. 55+82.45 52.70 RT

## **BENCHMARK #D**

ELEV. = 627.92CHISELED "X" ON FLANGE BOLT STA, 53+16,77 41,65 RT

## BENCHMARK #E

ELEV. = 627.09

CHISELED "X" ON FLANGE BOLT STA. 44+42.30 41.00 RT

### CONTROL POINT 1

CROSS NOTCH SET NO TIES PROVIDED STA. 376+70.40. 39.75 R N=1963246.9770 F=1138194.8850 ELEV.=625.62

## CONTROL POINT 2

CROSS NOTCH SET NO TIES PROVIDED STA. 53+99.56. 0.05 R N=1962888.9550 F=1138256.7500 ELEV.=625.95

## CONTROL POINT 3 CONTROL POINT 4

CROSS NOTCH SET NO TIES PROVIDED STA. 374+02.85. 1.33 L N=1963282,2500 E=1137926.5000 ELEV.=625.83

CROSS NOTCH SET NO TIES PROVIDED STA. 60+84.84. 4.11 R N=1963564,1360 F=1138155,9740 ELEV.=626.08

## **CONTROL POINT 6**

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 63+75.43, 36.43 L N=1963821.3150 E=1138014.9850 ELEV.=624.89

## **CONTROL POINT 7**

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 63+75.57, 35.76 R N=1963847.5200 E=1138082.2450 FI FV = 624.96

## **CONTROL POINT 8**

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 66+53.43, 30.69 L N=1964082.6250 E=1137919.9200 ELEV.=624.57

## **CONTROL POINT 9**

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 69+87.01, 23.96 L N=1964395.3450 E=1137804.1500 ELEV.=625.35

## CONTROL POINT 13 CONTROL POINT 19 CONTROL POINT 21 CONTROL POINT 22

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 371+02.38, 35.98 L N=1963310.3562 E=1137625.3537 FI FV<sub>4</sub>=623,66

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 72+69.92, 20.67 R N=1964675.3150 E=1137743.2350 FI FV = 624,44

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 363+19.45, 27.47 R N=1963229.9300 E=1136843.9800 FI FV<sub>a</sub>=624<sub>a</sub>23

# NO TIES PROVIDED

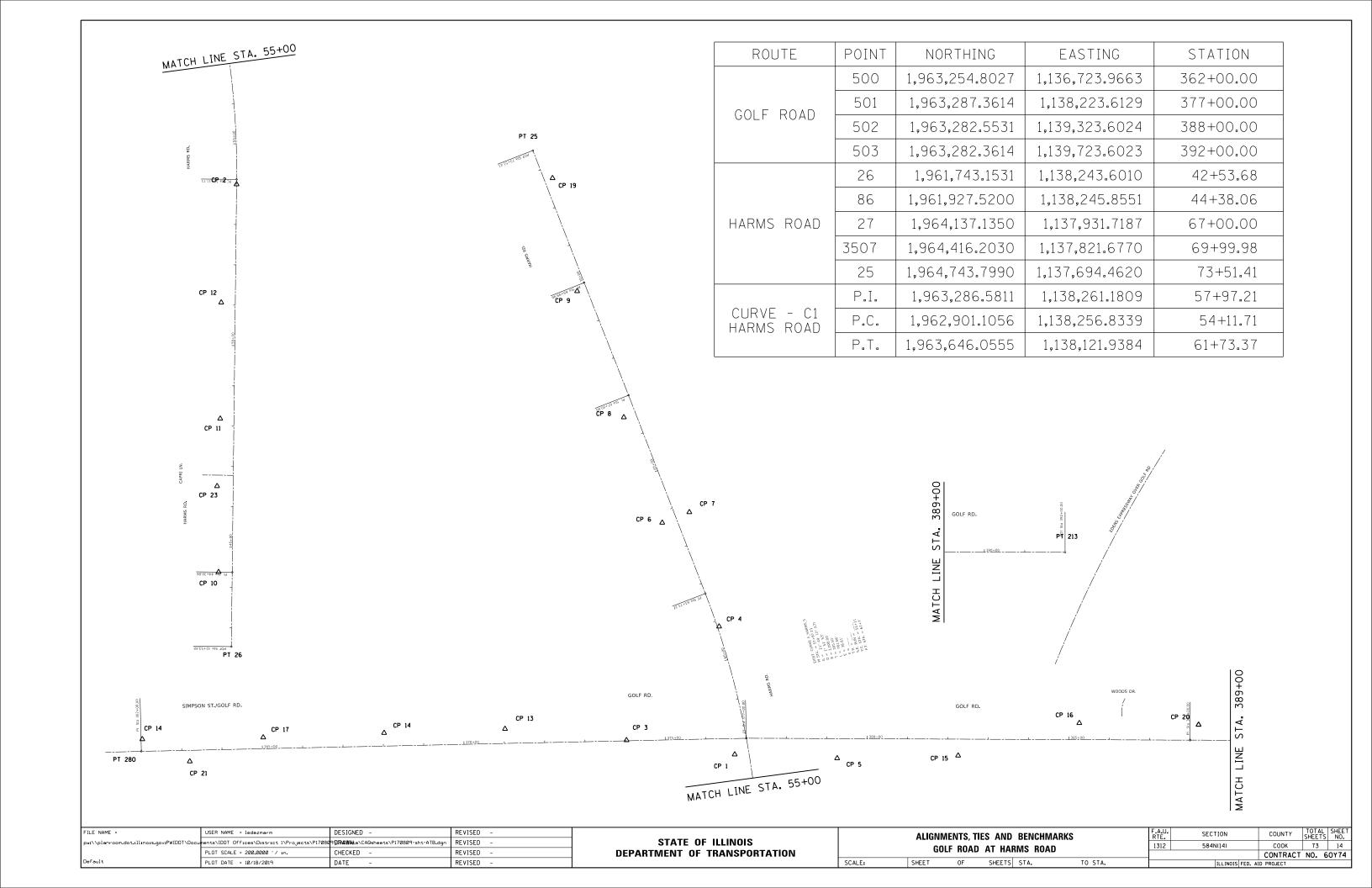
NO DESCRIPTION PROVIDED STA. 48+18.53, 34.00 L N=1962308.3450 E=1138216.1500 FI FV = 624.56

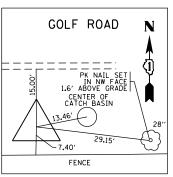
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

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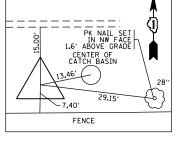
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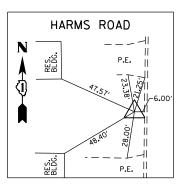
## **CONTROL POINT 23**

NO TIES PROVIDED NO DESCRIPTION PROVIDED STA. 46+50.98. 39.90 L N=1962140.8800 E=1138208.3600 ELEV.=625.26



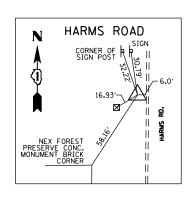
## **CONTROL POINT 5**

SET REBAR STA. 379+25.40, 48.85 R N=1963237.5203 E=1138448.7940 ELEV.=624.13



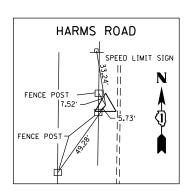
## **CONTROL POINT 10**

NO DESCRIPTION PROVIDED STA. 44+38.29, 33.81 L N=1961928.1270 E=1138212.0470 ELEV.=624.66



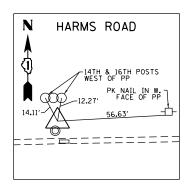
## **CONTROL POINT 11**

NO DECRIPTION PROVIDED STA. 48+18.51, 33.99 L N=1962308.3300 E=1138216.1500 ELEV.=624.57



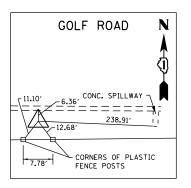
## **CONTROL POINT 12**

NO DESCRIPTION PROVIDED STA. 51+06.16, 34.71 L N=1962595.9700 E=1138218.6750 ELEV.=625.01



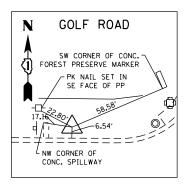
## **CONTROL POINT 14**

NO DESCRIPTION PROVIDED STA. 368+02.51, 32.57 L N=1963300.4383 E=1137325.6277 ELEV.=622.84



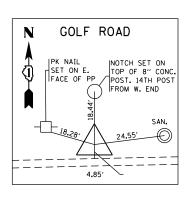
## **CONTROL POINT 15**

SET REBAR STA. 382+25.24, 40.87 R N=1963244.1950 E=1138748.6650 ELEV.=625.23



## **CONTROL POINT 16**

SET REBAR STA. 385+25.24, 41.29 L N=1963325.0408 E=1139049.0211 ELEV.=625.97



## **CONTROL POINT 17**

NO DESCRIPTION PROVIDED STA. 365+02.75, 27.91 L N=1963289,2800 E=1137026.0350 ELEV.=624.25

SCALE:



## **CONTROL POINT 20**

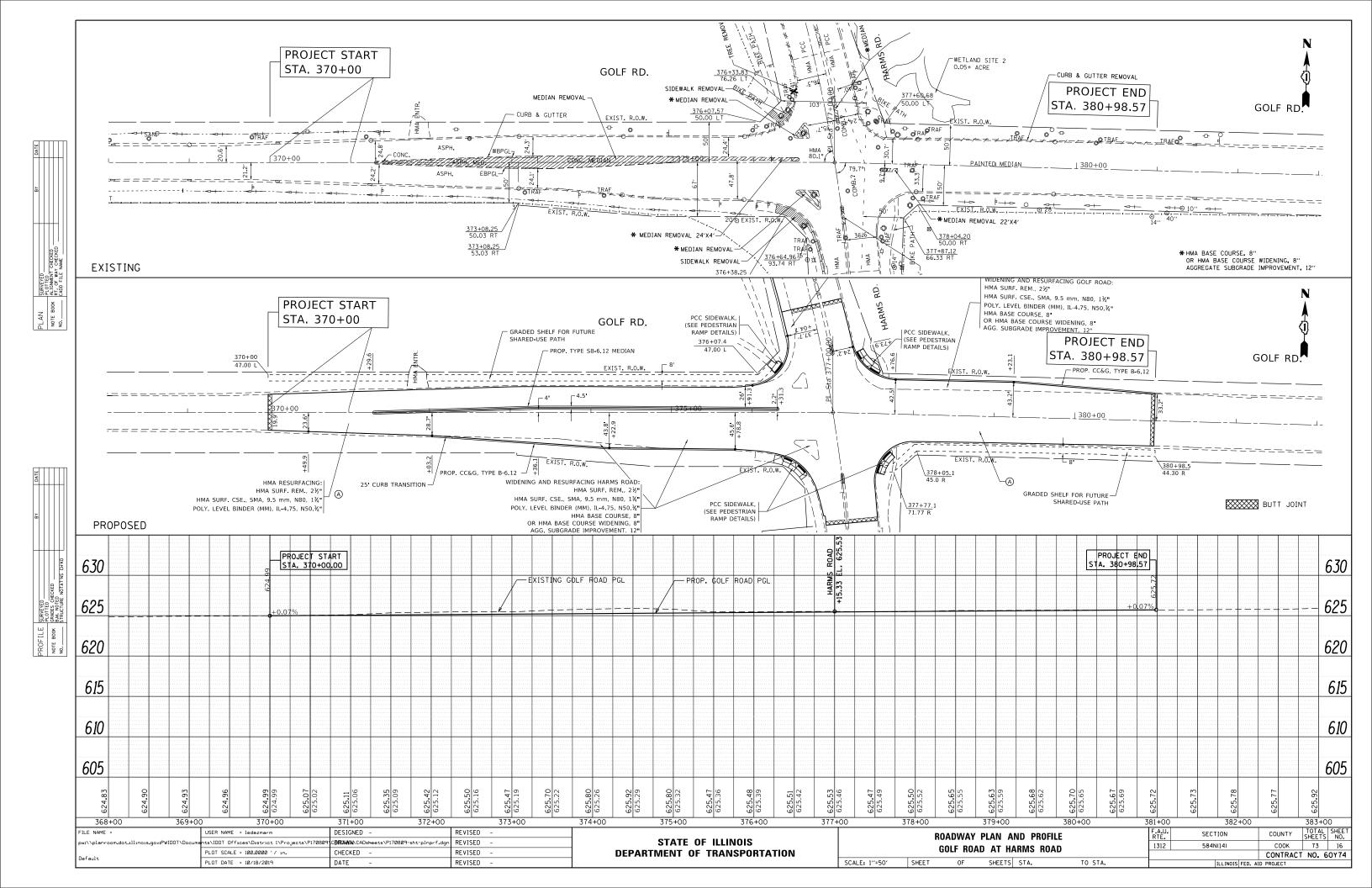
CROSS NOTCH SET ON CONCRETE SIDEWALK STA. 388+20.95, 38.17 L N=1963320.7108 E=1139344.5694 ELEV.=623.17

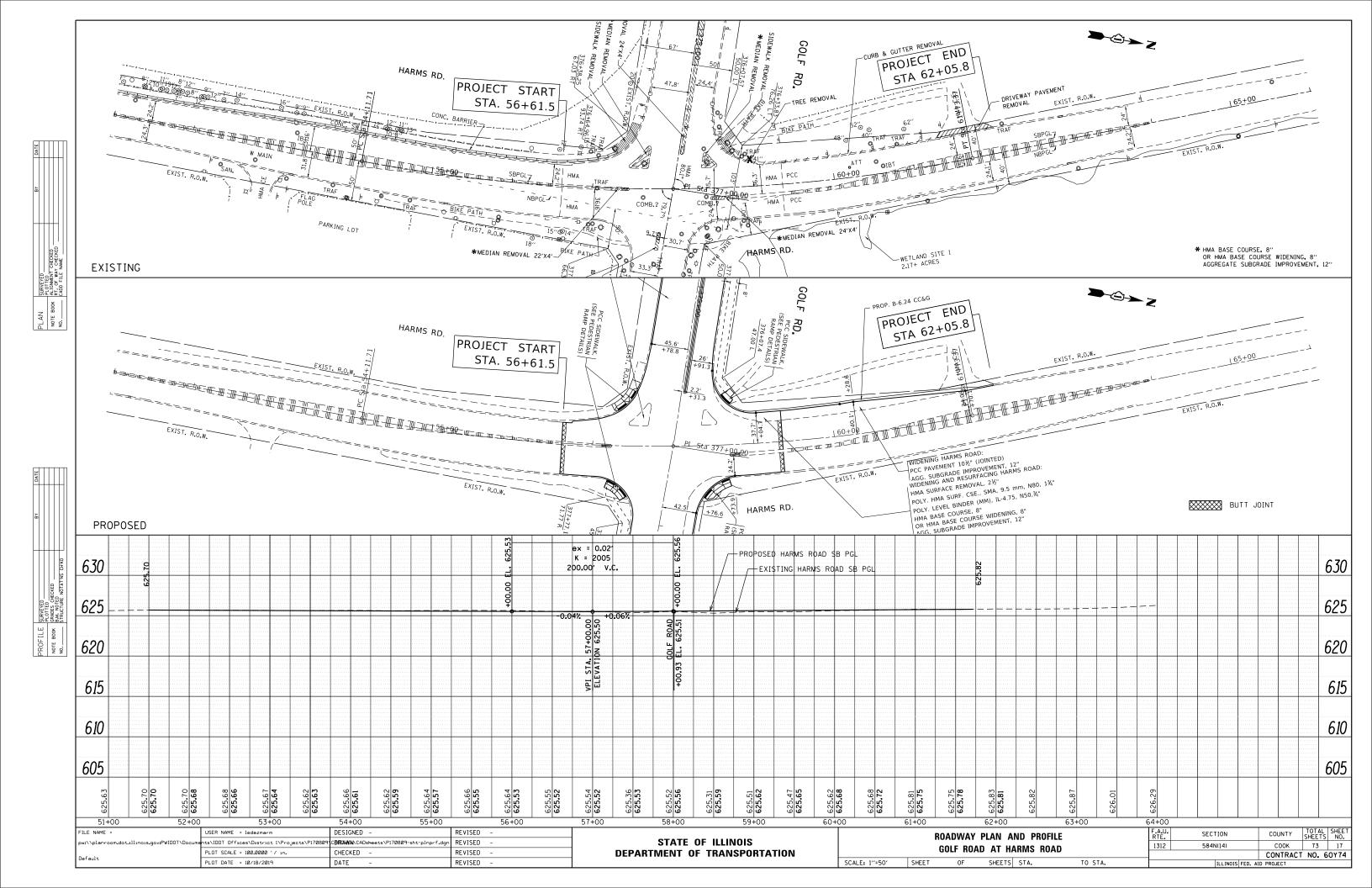
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ALIGNME	NTS, TI	ES AND BENCHMARKS	
GOLF	ROAD	AT HARMS ROAD	
SHEET	OF	SHEETS STA.	TO STA.

	ILLINOIS FED.	ΑI			
			CONTRACT	NO. 6	OY74
1312	584N(14)		COOK	73	15
F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.





LOCATION		EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	FILL	EARTHWORK BALANCE WASTE (+)	TOPSOIL EXCAVATION STRIP DEPTH = VAR 12"	TOPSOIL EXCAVATION ADJUSTED FOR a(5)	TOPSOIL FILL DEPTH = VAR 4"	TOPSOIL BALANCE  WASTE (+) SHORTAGE (-)
					SHORTAGÉ (-)				SHORTAGE (-)
GOL	.F RD								
	1								
FROM STATION	TO STATION	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD
(	1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
					1	1			_
370+00	371+00	0	0	102	-102	65	65	22	43
371+00	372+00	14	12	79	-68	63	63	21	42
372+00	373+00	51	43	81	-38	90	90	28	62
373+00	374+00	83	70	87	-17	103	103	29	74
374+00	375+00	65	55	73	-18	85	85	25	60
375+00	376+00	33	28	83	-55	96	96	33	63
376+00	377+00	14	12	44	-32	54	54	19	35
377+00	378+00	35	0	17	-17	59	0	12	-12
378+00	379+00	57	0	50	-50	114	28	24	3
379+00	380+00	35	0	66	-66	108	56	23	33
380+00	381+00	13	0	57	-57	77	53	20	33
381+00	382+00	0	0	24	-24	25	25	8	16
SUB-TOTAL		399	220	764	-544	937	716	263	453

EAR	EARTH EXCAVATION SUMMARY  EARTHWORK BALANCE (CY) WASTE (+) SHORTAGE (-)  EAA. 452				
Golf	-544	453			
Harms	61	135			
TOTAL	-483	588			

LOCATION		EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	FILL	EARTHWORK BALANCE  WASTE (+) SHORTAGE ( - )	TOPSOIL EXCAVATION STRIP DEPTH = VAR 12"	TOPSOIL EXCAVATION ADJUSTED FOR a(5)	TOPSOIL FILL DEPTH = VAR 4"	TOPSOIL BALANCE  WASTE (+) SHORTAGE (-)
HARM	IS RD				0.1011,102( )				S.16.117.102 ( )
FROM STATION	TO STATION								
		CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD	CUBIC YARD
(1	1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
53+00	54+00	0	0	0	0	0	0	0	0
54+00	55+00	0	0	0	0	0	0	0	0
55+00	56+00	0	0	0	0	0	0	0	0
56+00	57+00	0	0	0	0	0	0	0	0
57+00	58+00	0	0	0	0	0	0	0	0
58+00	59+00	30	26	6	20	24	24	2	21
59+00	60+00	52	44	22	22	58	58	7	51
60+00	61+00	43	36	23	14	53	53	7	47
61+00	61+66	17	15	8	7	17	17	3	14
61+66	62+00	2	1	2	0	2	2	1	2
62+00	63+00	0	0	0	0	0	0	0	0
SUB-T	OTAL	144	123	61	61	154	154	19	135

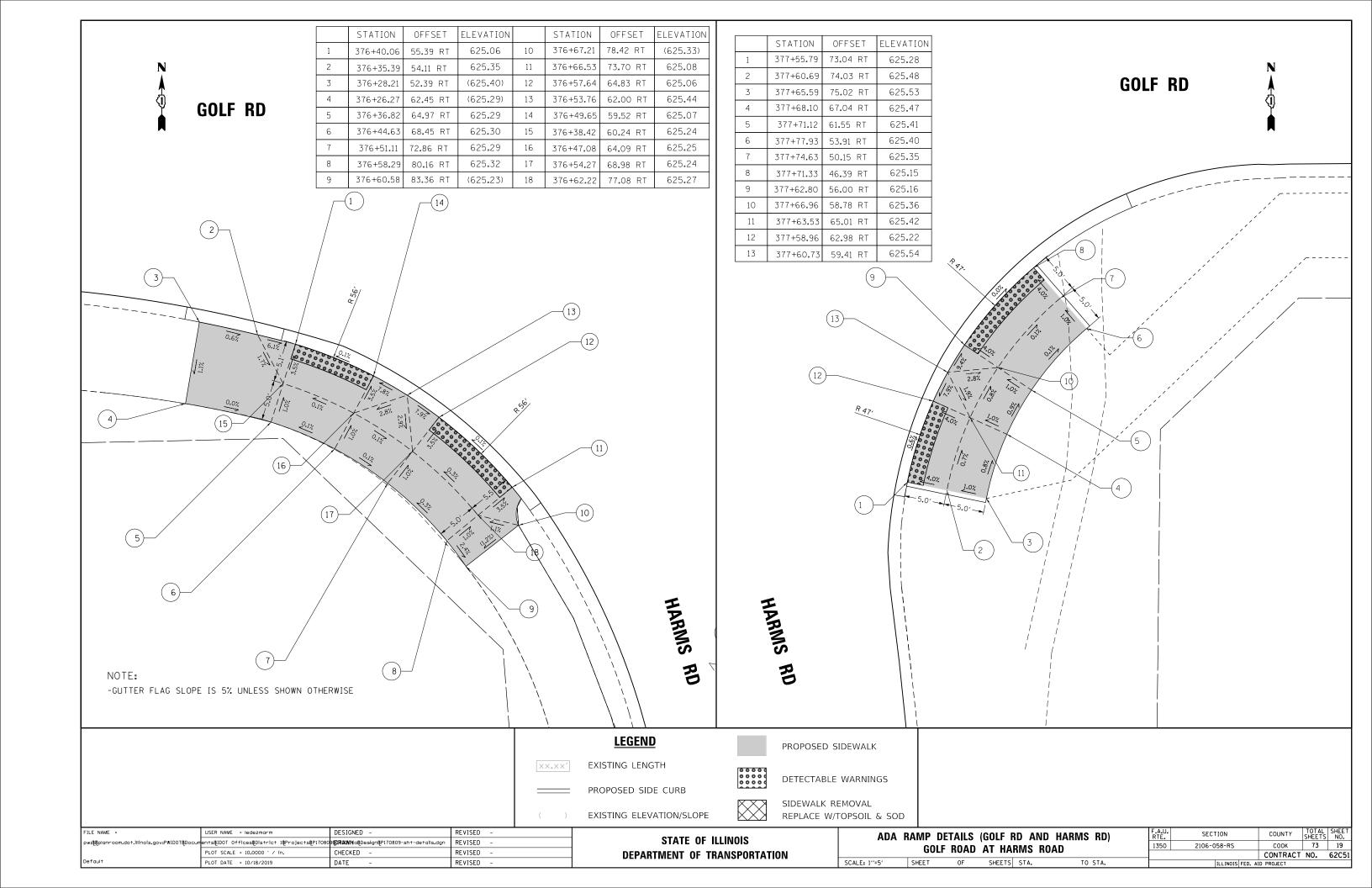
#### EARTHWORK NOTES:

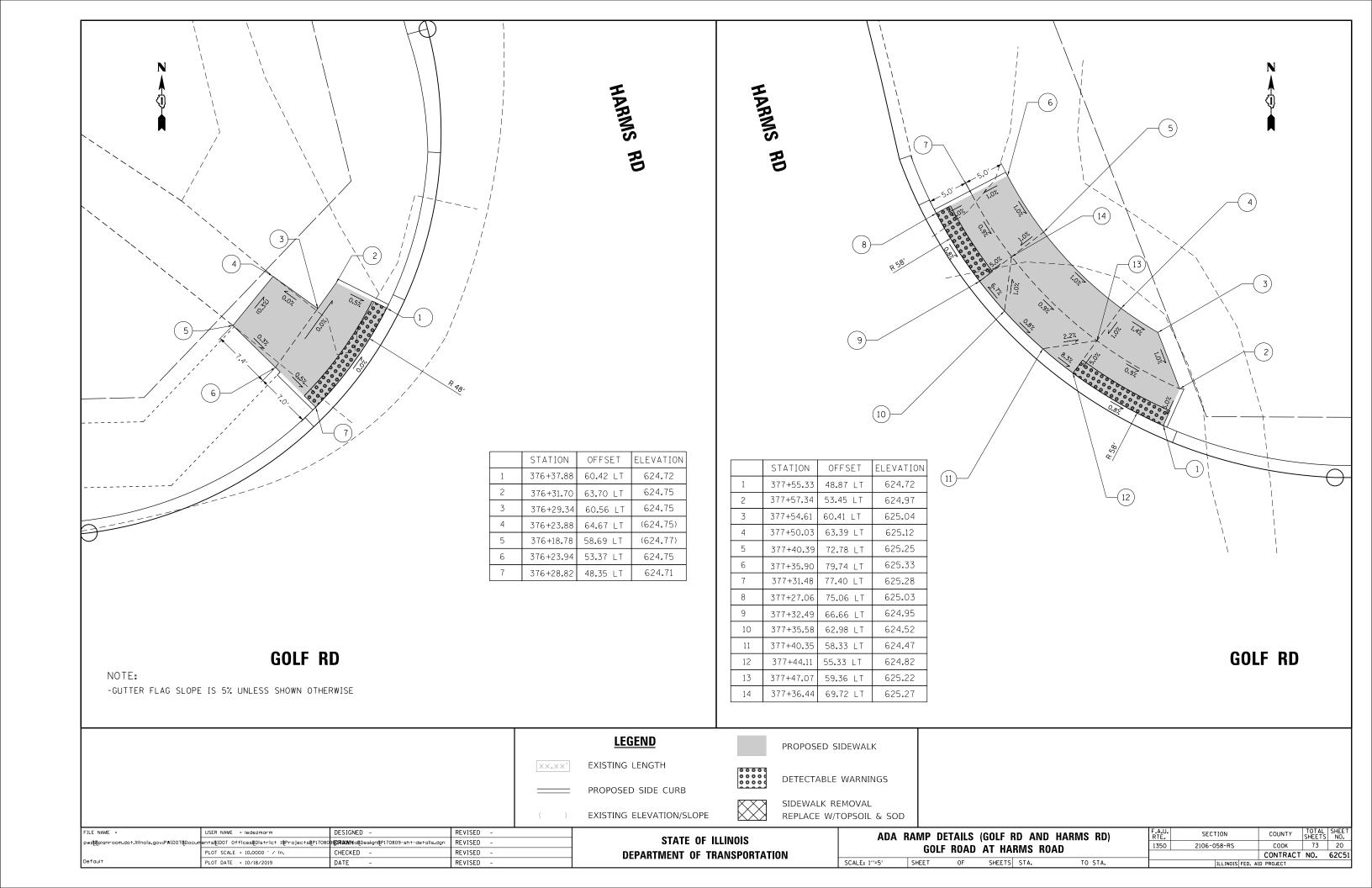
- STATION RANGE
- 2. VOLUME TO BE CUT
- 3. VOLUME TO BE USED AS FILL AFTER EITHER ADJUSTING 15% FOR SHRINKAGE AND LOSSES, OR OMISSION DUE TO HAVING AN A(5) CONTAMINATED SITE PER THE PSI REPORT
- 4. VOLUME TO BE FILLED
- 5. COLUMN (4) MINUS COLUMN (3)
- 6. TOPSOIL STRIPPING VOLUME
- 7. TOPSOIL FILL VOLUME
- 8. COLUMN (7) MINUS COLUMN (6)

USER NAME = ledezmarm	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/31/2019	DATE -	REVISED -

	EARTHWORK BALANCE							A.U. SECTION			TOTAL SHEETS	SHEET NO.
	COL	F ROAD	AT HAR	MS RO	An	1312	584N	584N(14)		соок	73	18
	GOL	I HUAL	י או וואוו	110						CONTRAC	T NO. 6	0Y74
SCALE: NTS	SHEET	OF	SHEETS (	STA.	TO STA.			ILLINOIS [	FED. AI	D PROJECT		Ì

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#### COMMON TO ALL STAGES

WORK CAN BE COMPLETED USING LANE CLOSURES DURING ALLOWABLE HOURS ONLY AS SPECIFIED IN THE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC"

#### STAGE I

ESTABLISH TRAFFIC CONTROL AS SHOWN.

REMOVE MEDIANS NEAR INTERSECTION AND REPLACE WITH CLASS D PATCHES.
DIMENSIONS OF MEDIANS TO BE REMOVEDAND REPLACED WITH CLASS D PATCHES ARE
SHOWN IN ROADWAY PLANS.

#### STAGE II

ESTABLISH TRAFFIC CONTROL AS SHOWN.

REMOVE NW AND SW ISLANDS AND REPLACE WITH CLASS D PATCHES.

#### STAGE III

ESTABLISH TRAFFIC CONTROL AS SHOWN.

REMOVE CONFLICTING PAVEMENT MARKING USING WATER BLASTING METHOD.

REMOVE CONFLICTING CURB AND GUTTER AND DRAINAGE STRUCTURES. CONSTRUCT WIDENING ON W AND E LEGS OF GOLF, AND ON N LEG OF HARMS ROAD INCLUDING ALL COLLATERAL WORK AS SHOWN ON PLANS.

BEGIN GRADING WORK RELATED TO BIKE PATH SHELVES.

INSTALL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN.

#### STAGE IV

ESTABLISH TRAFFIC CONTROL AS SHOWN.

REMOVE MEDIAN ON WEST LEG OF GOLF. CONSTRUCT WIDENING AND ALL OTHER COLLATERAL WORK AS SHOWN ON PLANS.

BEGIN TRAFFIC SIGNAL WORK.

COMPLETE ALL GRADING AND LANSCAPING WORK AS SHOWN ON PLANS.

#### STAGE V

MILL EXISTING HMA PAVEMENT AND INSTALL POLYMERIZED LEVELING BINDER AND SURFACE COURSE.

INSTALL PAVEMENT MARKINGS AND RAISED REFLECTIVE MARKERS AS SHOWN ON PLANS.

THIS WORK SHALL BE DONE USING APPROPRIATE TRAFFIC CONTROL AND PROTECTION.

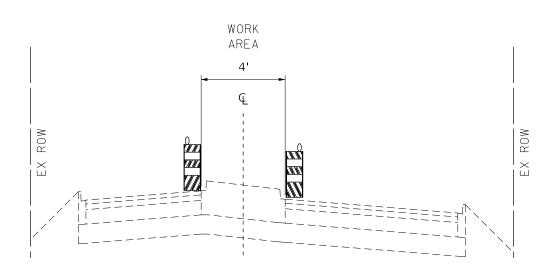
#### NOTE:

ESTABLISHING TRAFFIC CONTROL AS SHOWN ON SUGGESTED STAGING CONSTRUCTION STAGING SHALL BE PAID FOR AS TRAFFIC CONTROL & PROTECTION (SPECIAL).

LANE CLOSURES SHALL BE PERMITTED ONLY AS SPECIFIED IN THE SPECIAL PROVISINS "KEEPING ARTERIAL ROAD WAYS OPEN TO TRAFFIC".

EXISTING SPEED LIMIT SIGNS ON GOLF ROAD WITHIN THE PROJECT LIMITS ARE TO BE COVERED.

FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -		SUGGESTED CONSTRUCTION STAGING NOTES	F.A.U.	SECTION	COUNTY TOTAL SHEE
pw://planroom.dot.illinois.gov:PWIDOT/Docu	ments\IDOT Offices\District 1\Projects\P17080	9 <b>DRANNA</b> ta\Design\P170809-staging.dgn	REVISED -	STATE OF ILLINOIS	GOLF ROAD AT HARMS ROAD	1312	584N(14)	COOK 73 21
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	GULF RUAD AT HAKWS KUAD			CONTRACT NO. 60Y7
Default	PLOT DATE = 10/18/2019	DATE -	REVISED -		SCALE: 1"=50"   SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT



GOLF ROAD STA. 376+33 TO 376+59 STA. 377+54 TO 377+80 HARMS ROAD STA. 57+22 TO 57+47 STA. 58+43 TO 58+70

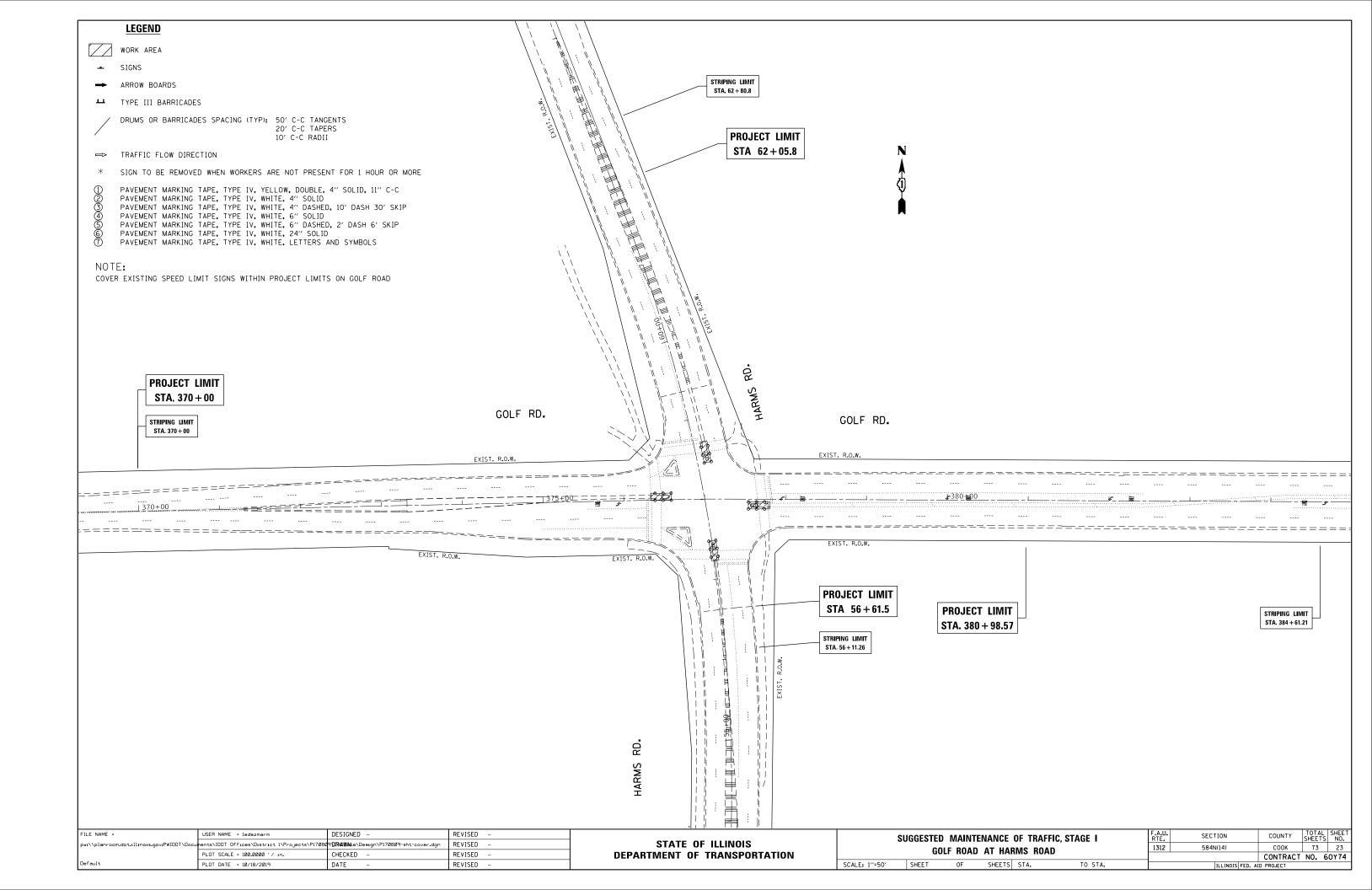
FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -
pw:\\planroom.dot.illinois.gov:PWIDOT\Docu	nents\IDOT Offices\District 1\Projects\P17080	9 <b>)JRANWak</b> a\Design\P170809-staging.dgn	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/18/2019	DATE -	REVISED -

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS	SECTIONS	s, sugg	ESTED C	SNTRUCTION	STAGING, STAGE I	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	
	COL	F ROA	N AT HA	RMS ROAD		1312	584N(14)	соок	73	22
		i iiuAi	ואוו וא ט	וויוט ווטאט				CONTRACT	NO.	50Y74
SCALE: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

#### **LEGEND**

- 1) PAVEMENT MARKING TAPE, TYPE IV, YELLOW, DOUBLE, 4" SOLID, 11" C-C (2) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 4" SOLID
- (3) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 4" DASHED, 10' DASH 30' SKIP
- (4) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 6" SOLID
- (5) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 6" DASHED, 2' DASH 6' SKIP

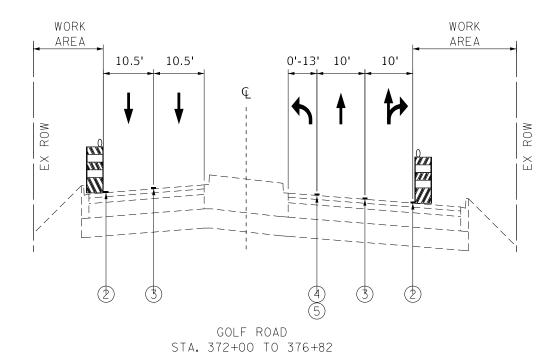


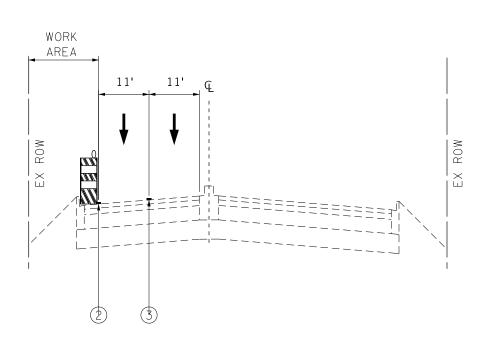
#### **LEGEND**

WORK

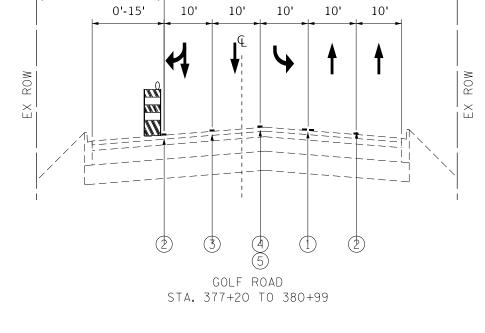
AREA

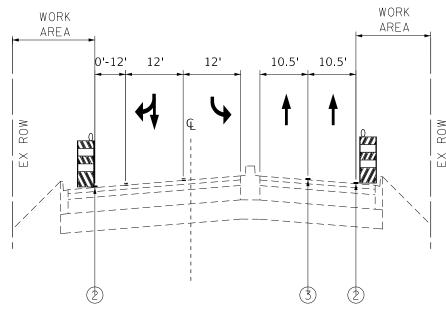
- 1) PAVEMENT MARKING TAPE, TYPE IV, YELLOW, DOUBLE, 4" SOLID, 11" C-C
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HARMS ROAD STA. 56+61 TO 57+71



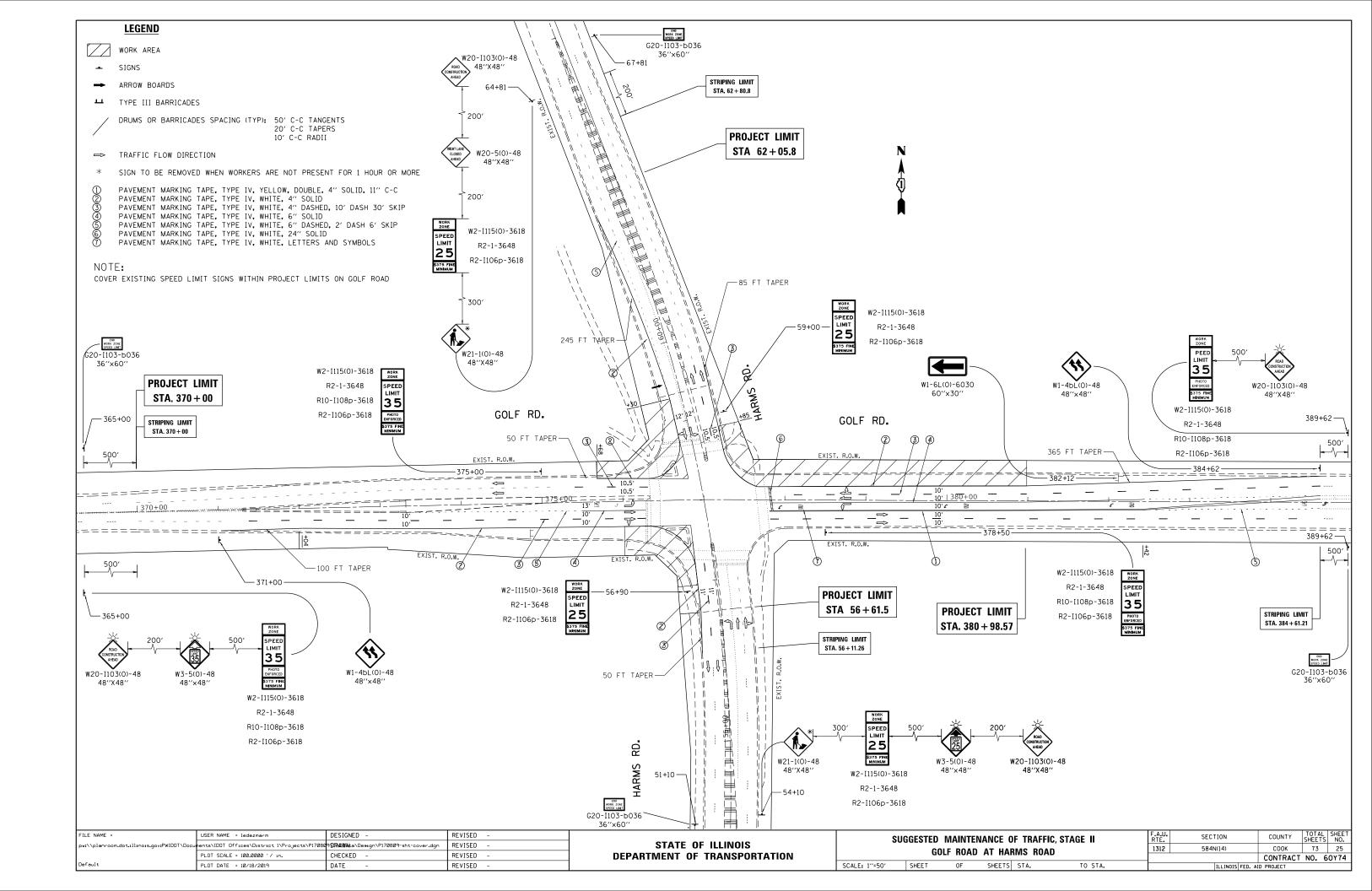


HARMS ROAD STA. 58+31 TO 61+71

FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -	Ī
pw://planroom.dot.illinois.gov:PWIDOT/Docu	nents\IDOT Offices\District 1\Projects\P17080	9 <b>0RANWA</b> ta\Design\P170809-staging.dgn	REVISED -	
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -	
Default	PLOT DATE = 10/18/2019	DATE -	REVISED -	

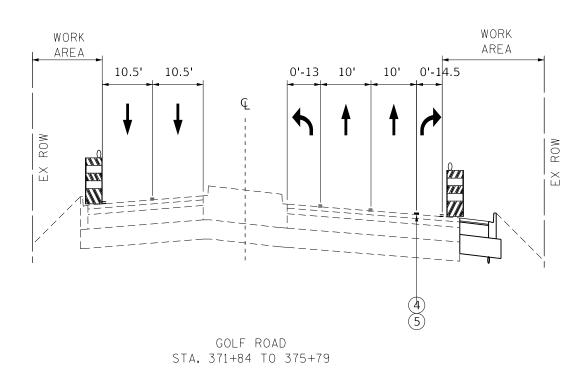
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

TYPICAL CROSS	SECTION	IS, SUGGE	STED CO	SNTRUCTION	STAGING, STAGE	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	c	NIE BOAD	АТ НА	RMS ROAD		1312	584N(14)	COOK	73	24
		JEI HOAD	AI IIAI	וויוט ווטאט				CONTRACT	NO. 6	0Y74
SCALF: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		TILLINOIS FED. AL	D PROJECT		



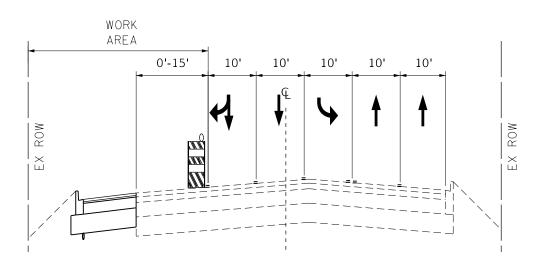
#### <u>LEGEN</u>D

- 1) PAVEMENT MARKING TAPE, TYPE IV, YELLOW, DOUBLE, 4" SOLID, 11" C-C
- 2) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 4" SOLID
- 3) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 4" DASHED, 10' DASH 30' SKIP
- (4) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 6" SOLID
- (5) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 6" DASHED, 2' DASH 6' SKIP

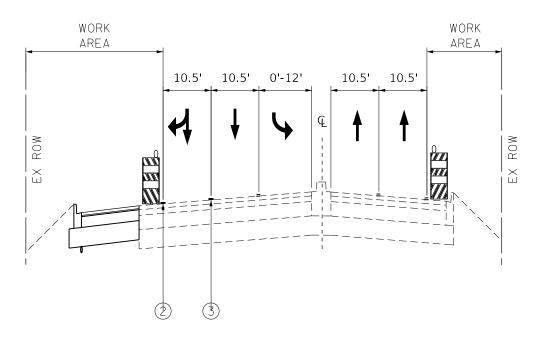


#### NOTES:

-ITEM PAVEMENT MARKING REMOVAL - WATER BLASTING SHALL BE USED TO REMOVE ALL CONFLICTING PAVEMENT MARKINGS DURING STAGE III

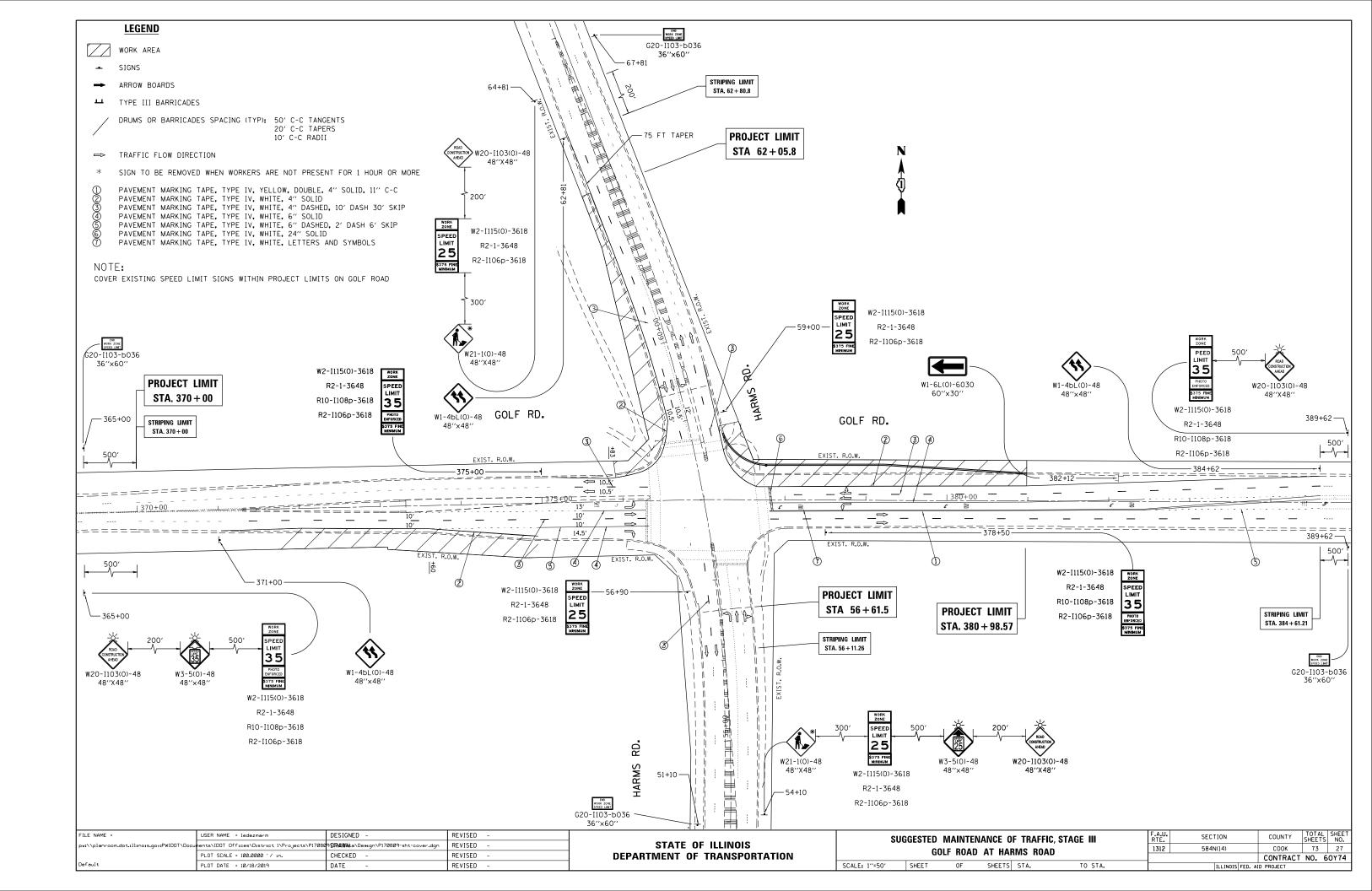


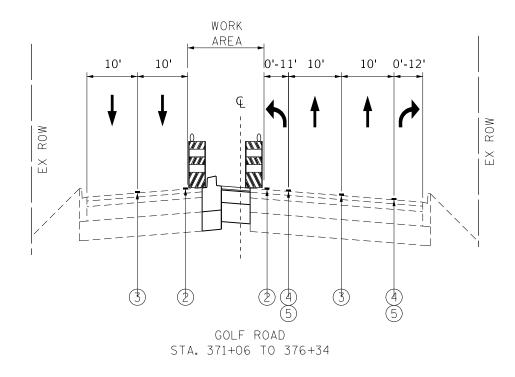
GOLF ROAD STA. 377+20 TO 380+99



HARMS ROAD STA. 58+31 TO 61+71

FILE NAME =	USER NAME = ledezmarm	DESIGNED -	REVISED -		TYPICAL CROSS S	SECTIONS	SUGGES	STED COS	NTRUCTION	STAGING, STAGE III	F.A.U. RTF	SECTION	COUNTY	TOTAL	L SHE	ĒΠ
pw://planroom.dot.illinois.gov:PWIDOT/Docu	ments\IDOT Offices\District 1\Projects\P1708	090FANNAta\Design\P170809-staging.dgn	REVISED -	STATE OF ILLINOIS	THIOME GROOD O	· ·				oradiita, orade iii	1312	584N(14)	соок	73	21	<u>;</u> —
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		GULF	- KUAD	AI HAKI	MS ROAD				CONTRAC	T NO.	60Y7	4
Default	PLOT DATE = 10/18/2019	DATE -	REVISED -		SCALE: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT			$\dashv$





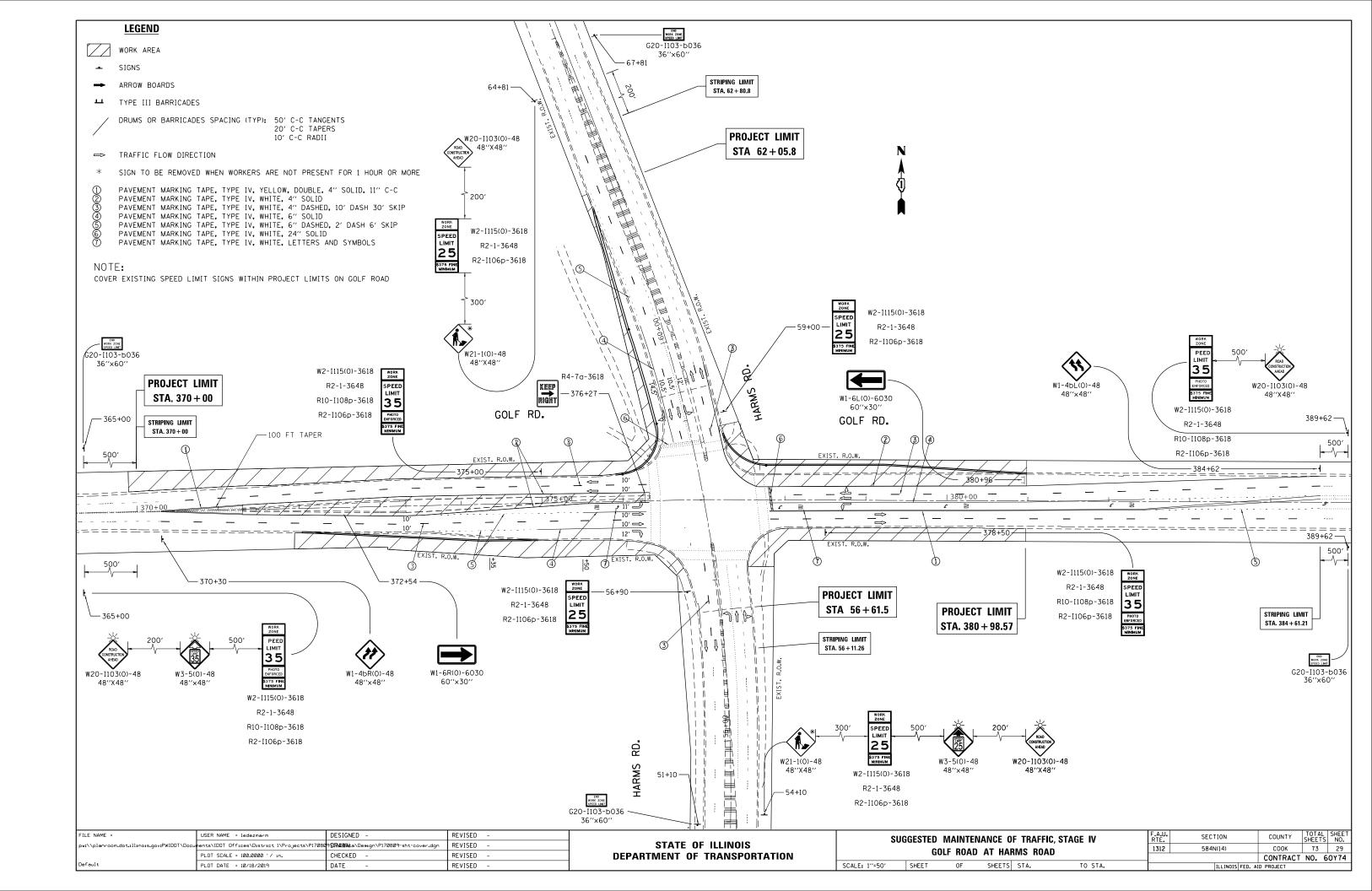
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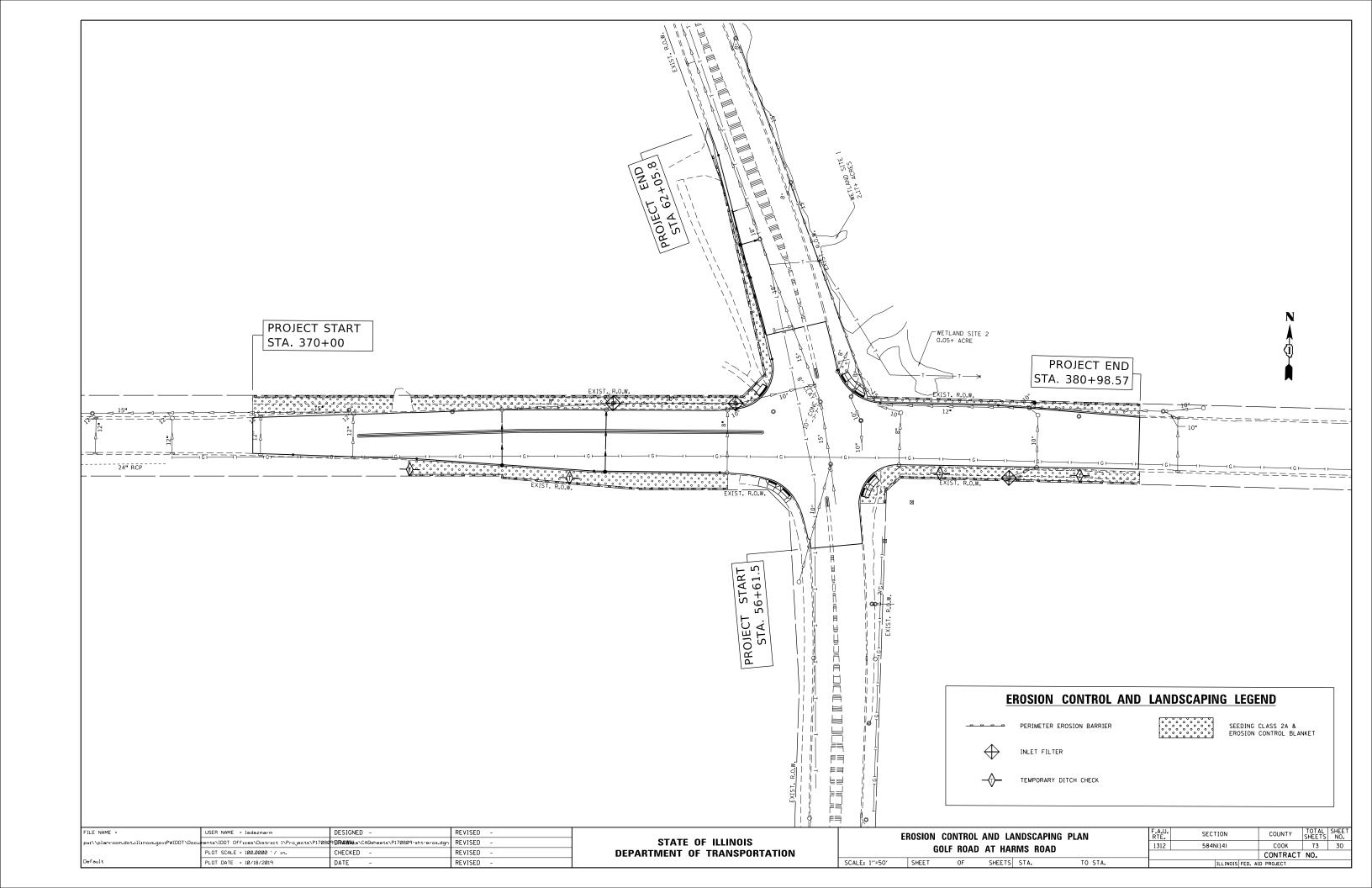
#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

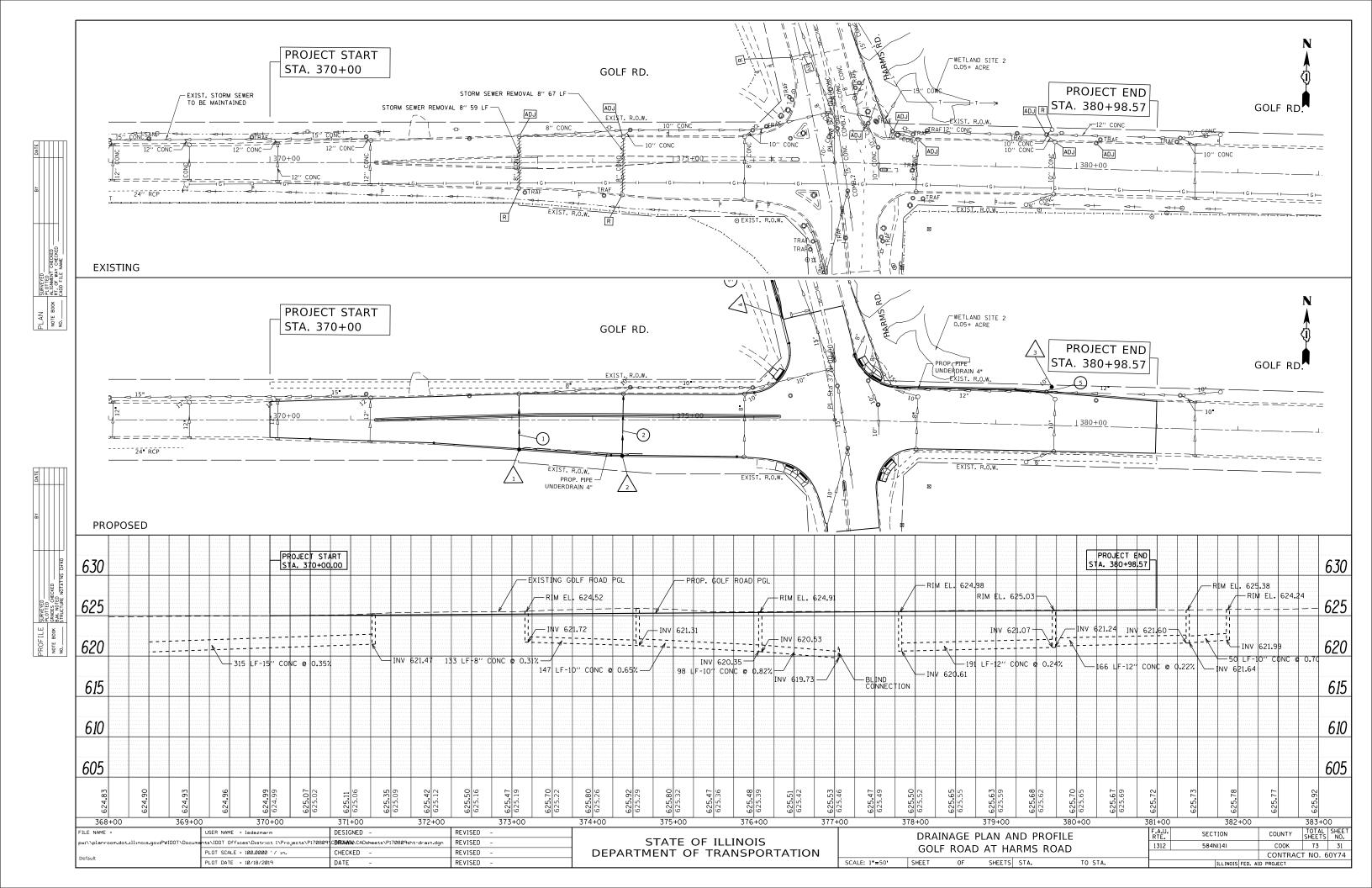
TYPICAL CROSS	SECTIONS	S, SUGGE	STED CO	SNTRUCTION	STAGING, STAGE IV	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				RMS ROAD		1312	584N(14)	соок	73	28
	- 40	LI IIUAL	, 41 1141	וואוט ווטאט				CONTRACT	NO. 6	50Y74
SCALE: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

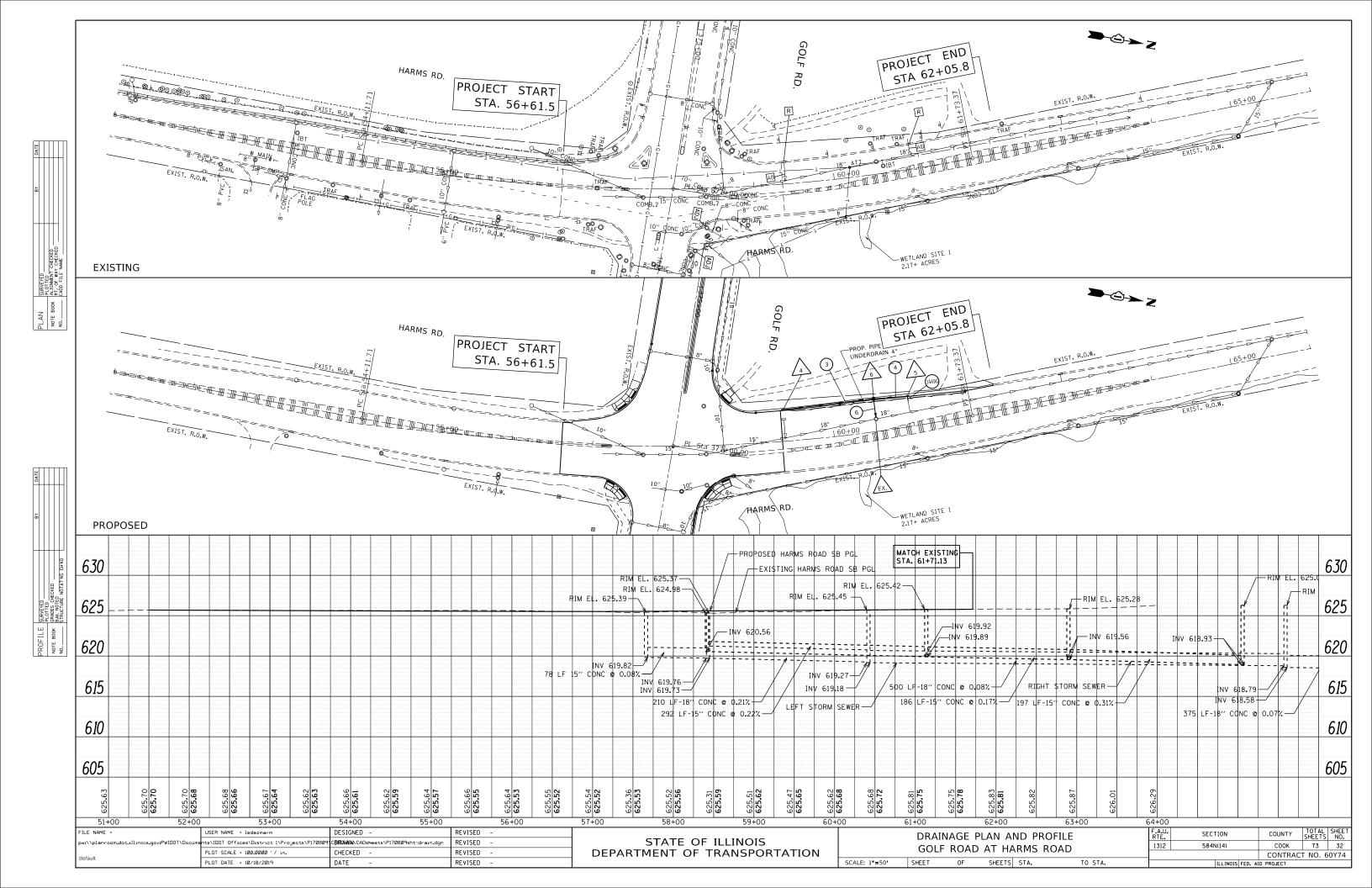
#### LEGEND

- 1) PAVEMENT MARKING TAPE, TYPE IV, YELLOW, DOUBLE, 4" SOLID, 11" C-C
- (2) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 4" SOLID
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- (5) PAVEMENT MARKING TAPE, TYPE IV, WHITE, 6" DASHED, 2' DASH 6' SKIP









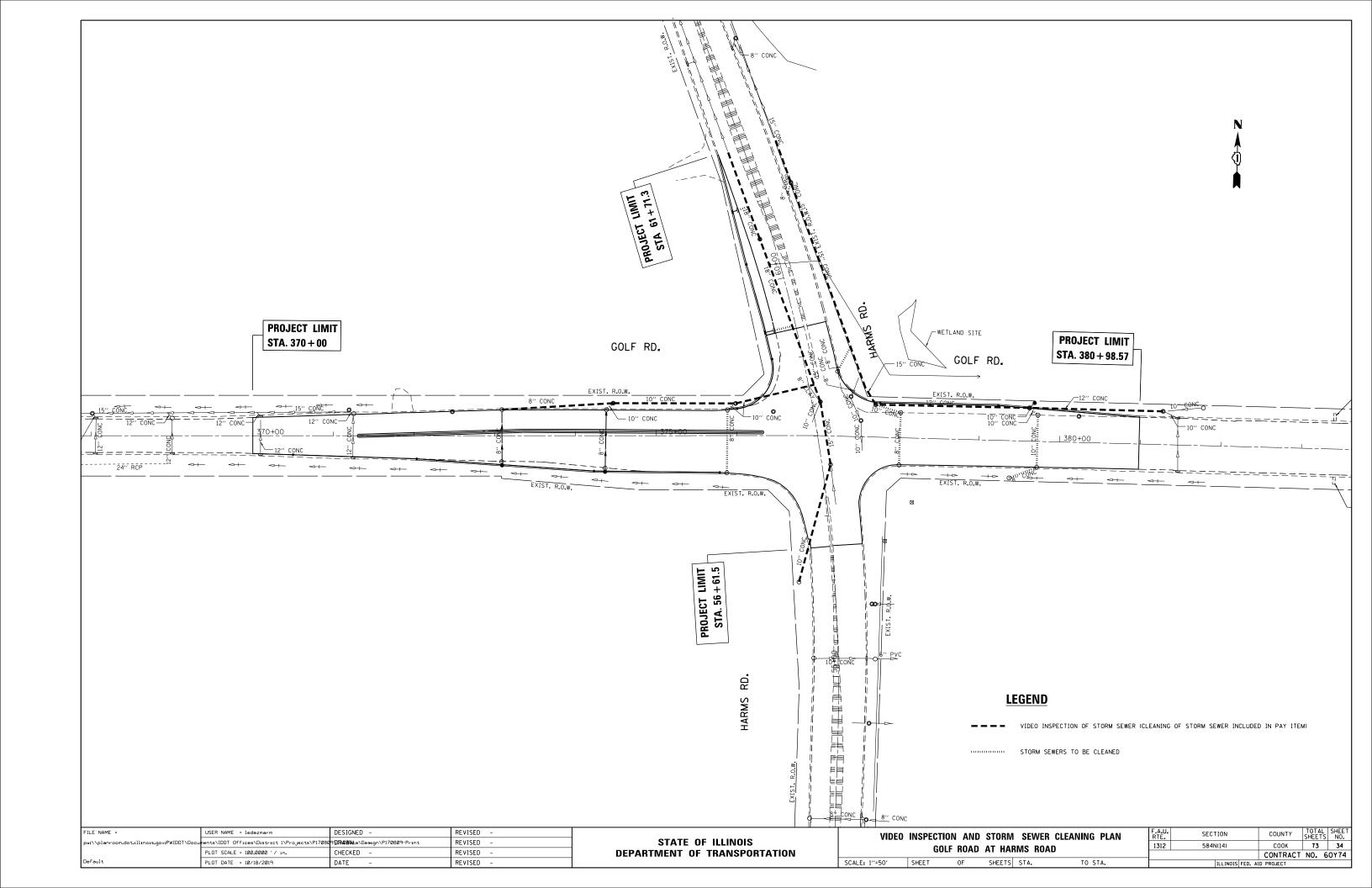
NO.	PIPE LC	CATION	STAT	IONI STA	TION	DESCRIPTION /	DIA	LENGTH	SLOPE	TRENCH BACKFILL	WATER MAIN
FROM STR. TO STR.		STATION - STATION		ATION	COMMENTS	(IN)	(FT)	(%)	(CY)	QUALITY	
1	1	EX MH	373+09.00	-	373+09.00	SS. CLASS A, TYPE 2	8	64	0.28%	1.3	YES
2	2	EX MH	374+37.00	-	374+38.00	SS. CLASS A, TYPE 2	8	72	0.28%	2.8	YES
3	4	6	59+37.00	-	60+52.75	SS. CLASS A, TYPE 2	12	108	1.00%	20.2	NO
4	5	6	60+52.75	-	60+97.00	SS. CLASS A, TYPE 2	12	40	1.01%	9.6	NO
5	3	EX MH	379+62.00	-	379+68.00	SS. CLASS A, TYPE 2	10	6	1.17%	0.0	NO
6	6	EX	60+52.75	-	60+54.37	SS. CLASS A, TYPE 2	12	21	1.02%	5.2	NO

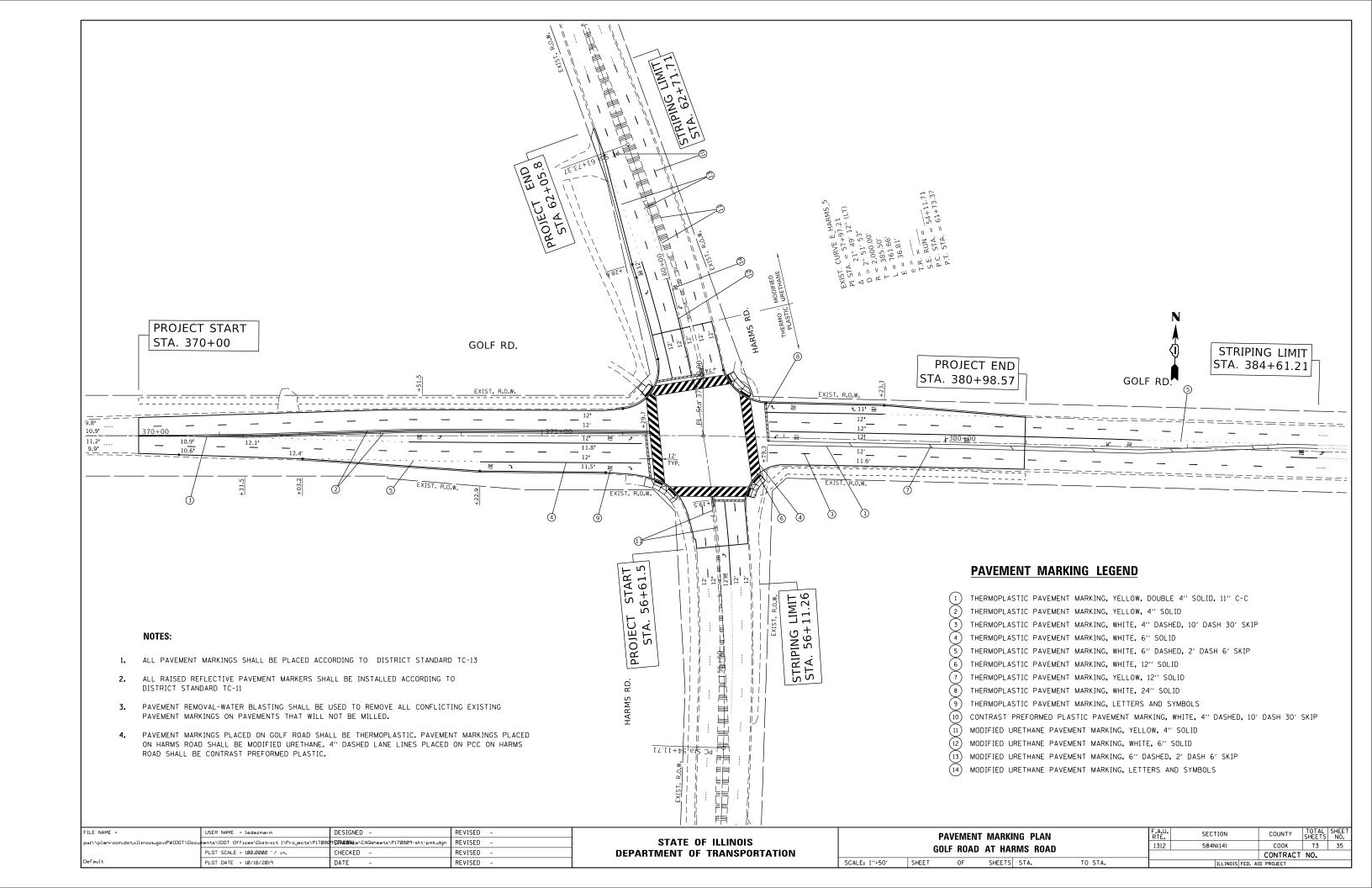
	DRAINAGE STRUCTURES TABLE														
NO.	STATION	OFFSET	STRU	CTURE	TYPE	DIA (ET)	F&G TYPE	RIM ELEV	INVERT (FT)	INVERT (FT)	INVERT (FT)	INVERT (FT)			
INO.	(F1)		MH	СВ	INLET	DIA (ITI)	I AG I I F L	(FT)	INVERT (FT)	INVERT (FT)	INVERT (FT)	INVERT (FT)			
1	373+09.00	36.8 RT		С		2	1 OL	624.52	622.03 N						
2	374+37.00	44.77 RT		С		2	1 OL	624.38	621.74 N						
3	379+68.00	47.47 LT		С		2	1 OL	622.98	621.36 S						
4	59+37.00	38.97 LT			Α	2	24 OL	624.59	620.51 E						
5	60+97.00	37.81 LT			Α	2	24 OL	624.82	619.83 E						
6	60+52.75	40.71 LT		Α		4	24 OL	624.55	619.41 E	619.43 S	619.42 N				
EX	60+54.37	15.45 LT	Α			EX	EX CL	624.44	619.2 W						

MODEL: Default

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DRAINAGE STRUCTURES AND PIPES SCHEDULE
GOLF ROAD AT HARMS ROAD

SCALE: NTS SHEET OF SHEETS STA. TO STA.





# TS SHT. NO. 01

FILE NAME =

J:\Microst\352114 GOLF ROAD\Dgn\Eng\Dra

USER NAME = RICH

PLOT DATE = 12/28/2017

wings\Final Drafting\D160Y74-SHT-TS01.dgn PLOT SCALE = 20.0000 '/ in.

## TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	<u>PROPOSED</u>
CONTROLLER CABINET	$\boxtimes$	$\blacksquare$	HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R R	R R Y
COMMUNICATION CABINET	ECC	СС	-ROUND HEAVY DUTY HANDHOLE					Y
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND		⊞ ⊕		F P	<b>€</b> G <b>€</b> G
MASTER MASTER CONTROLLER	ЕммС	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		R R R
UNINTERRUPTABLE POWER SUPPLY	<b>∲</b>	<b>7</b>	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
SERVICE INSTALLATION -(P) POLE MOUNTED	-D- <sup>P</sup>	- <b>■-</b> P	RAILROAD CANTILEVER MAST ARM	X <del>OX X</del> X	X <del>eX X</del>			<del>                                    </del>
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	$\Xi \Theta \Xi$	¥◆X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G} \boxtimes^{GM}$	$\mathbf{Z}^{G}$ $\mathbf{Z}^{GM}$	RAILROAD CROSSING GATE	<del>∑⊙</del> ∑─	X•X-	PEDESTRIAN SIGNAL HEAD	<b>(P</b> )	•
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	苍	*	AT RAILROAD INTERSECTIONS	<b>©</b> <b>S</b>	Ā
STEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET		<b>≥</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	© C <b>(A</b> ) D	<b>₽</b> c <b>★</b> D
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	<b>↔</b>	• <del>×</del>	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	<ul> <li>● BM</li> </ul>	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		
WOOD POLE	⊗	8	INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED	$\sim$	C
GUY WIRE		<b>⊕</b> ≻	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	<del>- 1*6</del>	——————————————————————————————————————
SIGNAL HEAD	<b>→</b>	<b>→</b>	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER		
SIGNAL HEAD WITH BACKPLATE	+⊳	+►	ABANDON ITEM CONTROLLER CABINET AND		А		— <u>©</u> —	<u> </u>
SIGNAL HEAD OPTICALLY PROGRAMMED		- <b>P</b> + <b>P</b>	FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	/ -	
FLASHER INSTALLATION -(FS) SOLAR POWERED	of of FS	•►F •►FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		<u></u>
-1F37 SOLAN FOWENED	orb orb FS	FF FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<u>6*18</u>	<del></del>
PEDESTRIAN SIGNAL HEAD	-0	4	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62,5/125, MM12F SM12F -NO. 62,5/125, MM12F SM24F		
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	$[\underline{s}]$ $(\underline{\hat{s}})$	s s			
VIDEO DETECTION CAMERA	[V]	<b>V</b> ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	$[\underline{i}\underline{s}]$ $(\underline{i}\underline{s})$	IS (IS)			
RADAR/VIDEO DETECTION ZONE			QUEUE AND SAMPLING (SYSTEM) DETECTOR	[os] (os)	os (os)	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	<u> </u>	<u></u> CMPS
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ	WIRELESS DETECTOR SENSOR	<b>®</b>	<b>®</b>	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	$\bowtie$	<b>~</b>	WIRELESS ACCESS POINT					
CONFIMATION BEACON	o-()	•-1						
WIRELESS INTERCONNECT	<b>⊶</b> + <del>   </del>	<del>•-+   </del>						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
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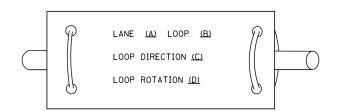
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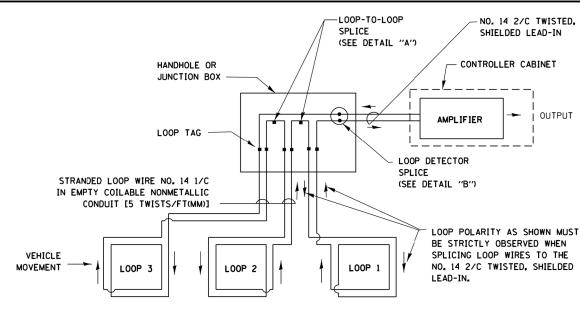
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CONTRACT NO. 60Y74				
1312	584N(14)	СООК	73	36
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

- 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

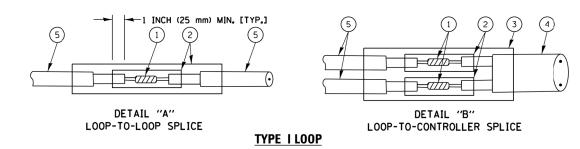


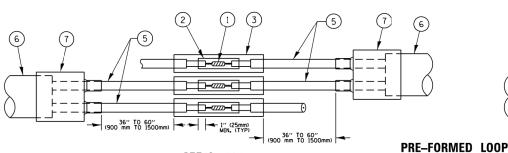
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



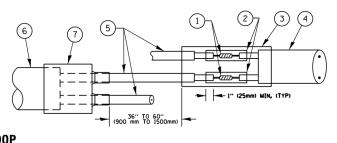
#### **DETECTOR LOOP WIRING SCHEMATIC**

- 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

#### LOOP DETECTOR SPLICE

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

SCALE: NONE

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

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

REAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

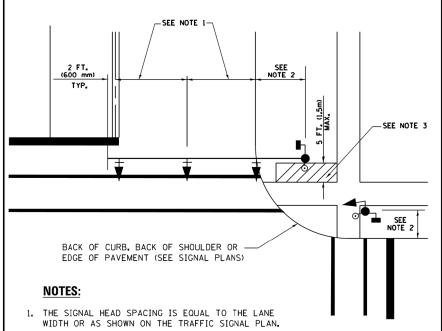
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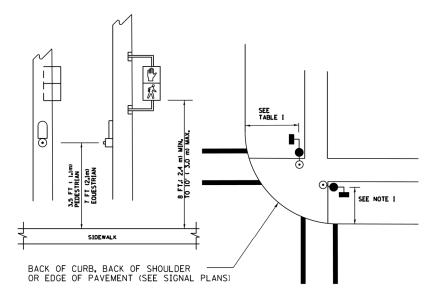
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# TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



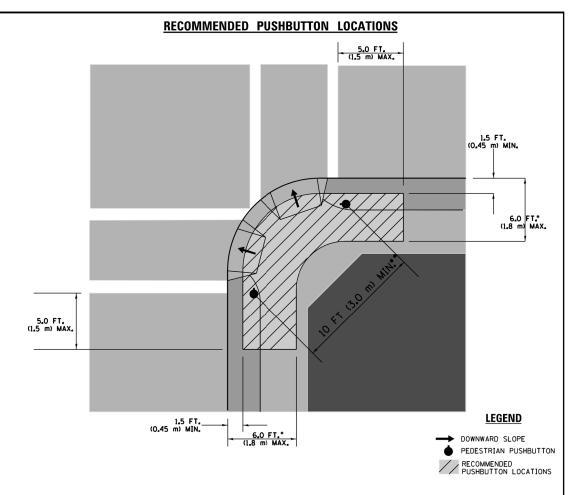
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE 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."



- 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

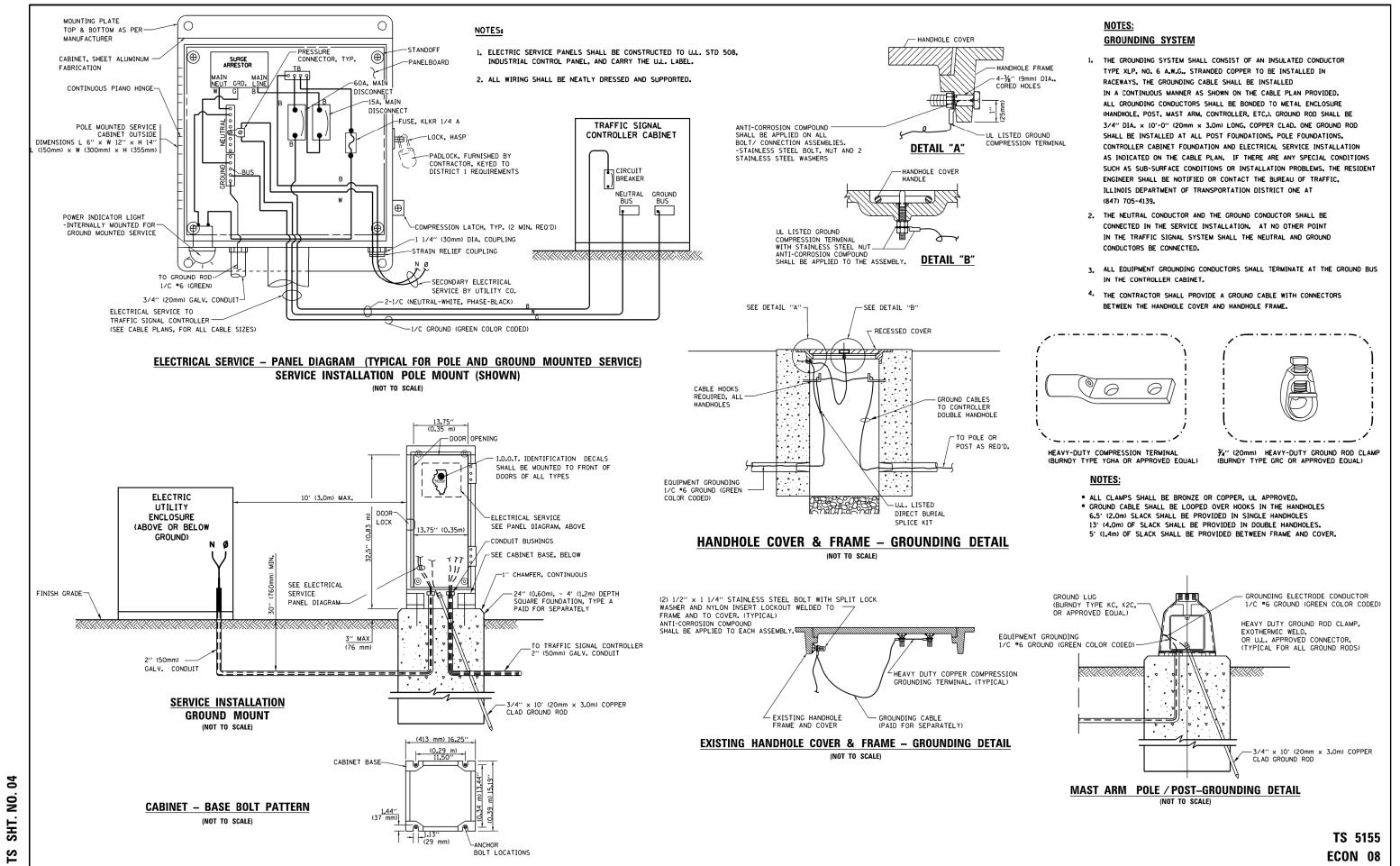
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TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	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.

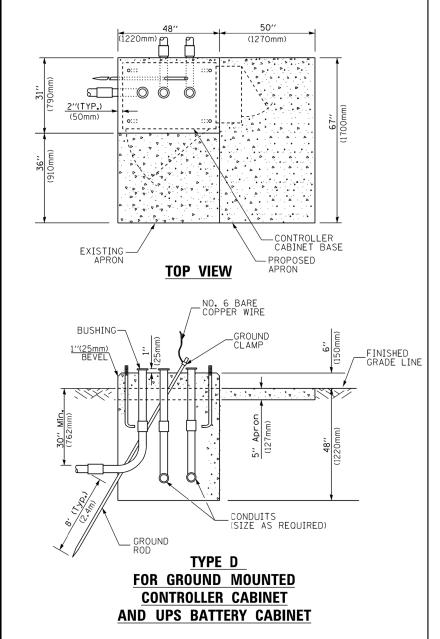
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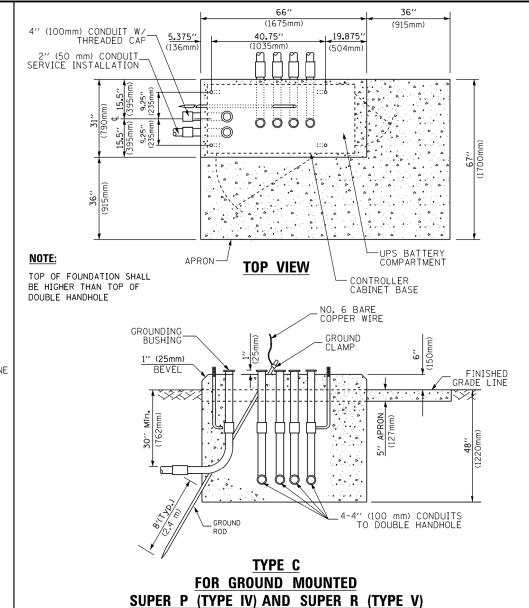
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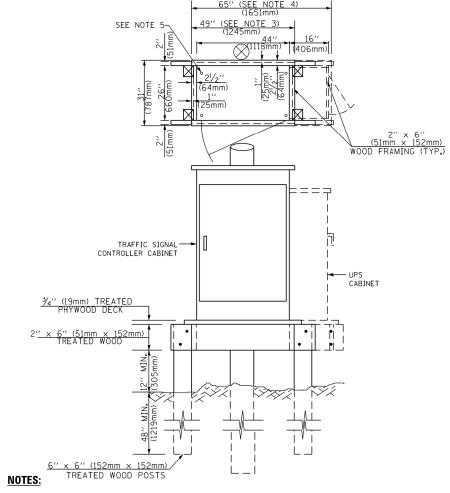
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**CONTROLLER CABINETS** 



- 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 LENGT	V	ERTI	CAL	CABLE	LENGTI
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FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0'' (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0'' (1.2m)
TYPE D - CONTROLLER	4'-0'' (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SOUARE	4'-0" (1.2m)

#### **DEPTH OF FOUNDATION**

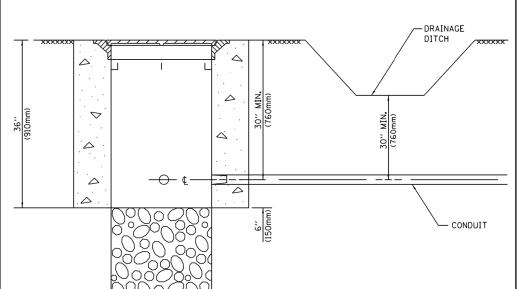
Mast Arm Length	<ol> <li>Foundation Depth</li> </ol>	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)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

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

#### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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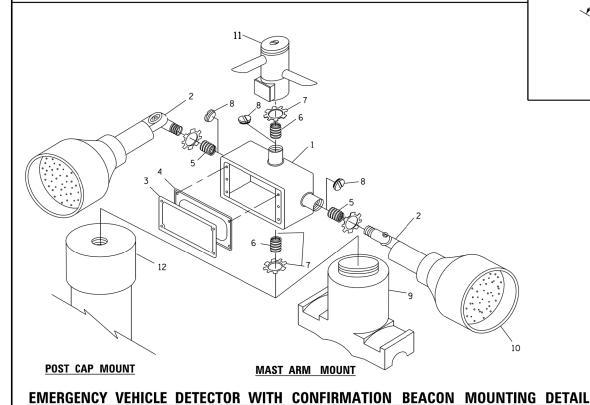
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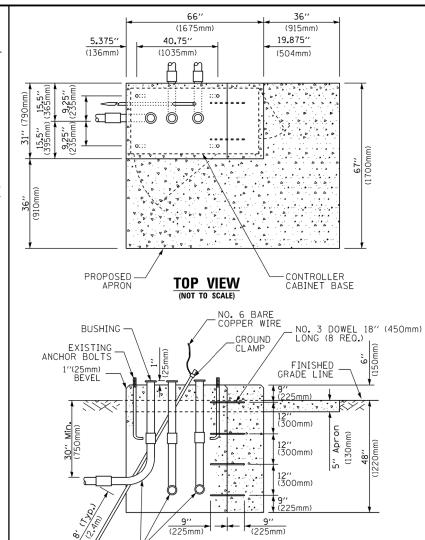


#### <u>NOTES:</u>

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 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





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

-EXISTING CONDUITS

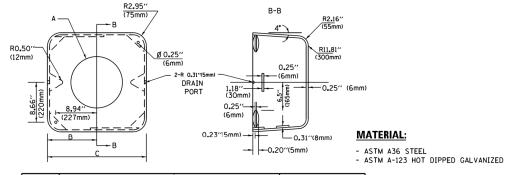
EXISTING GROUND ROD

(NOT TO SCALE)

# ITEM NO. IDENTIFICATION 1 OUTLET BOX- GALV. 21 CUJIN. (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:

- 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.

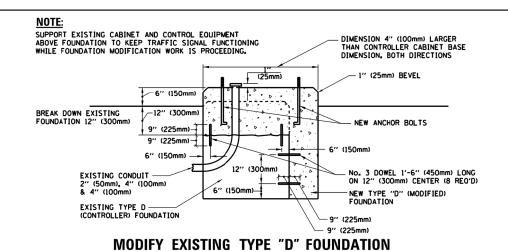


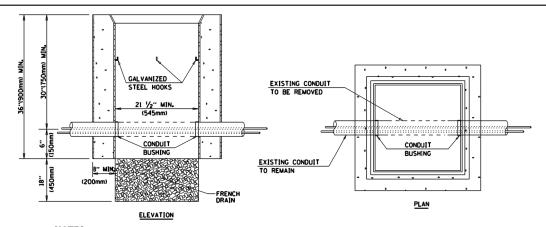
A	В	С	HEIGHT	WEIGHT
VARIES	9 <b>.</b> 5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

#### SHROUD

#### NOTES:

- 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.





#### NOTES:

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 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

TS 5155 ECON 08

FILE NAME =	USER NAME = RICH	DESIGNED -	REVISED -					DI	STRICT O	NF		F.A.U. RTF	SECTION	COUNTY	TOTAL	SHEET NO.
J:\Microst\352114 COLF ROAD\Dgn\Eng\Dra	wings\Final Drafting\D160Y74-SHT-TS06.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS		CT.	ANDARD 1				TAU C	1312	584N(14)	соок	73	41
	PLOT SCALE = 20.0000 ' / 10.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		31 <i>F</i>	ANDARD 1	IKAFFIL	SIGNAL L	DESIGN D	JETAILS			CONTRAC	CT NO. 60	0Y74
Default	PLOT DATE = 12/29/2017	DATE -	REVISED -		SCALE: NONE	NE S	SHEET 6	OF 7	SHEETS ST	TA.	TO STA.		ILLINOIS FED	AID PROJECT		-

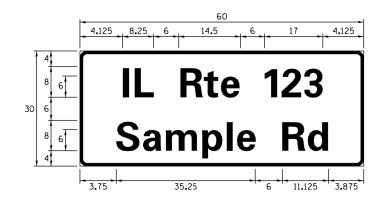
TS 5155 ECON 08

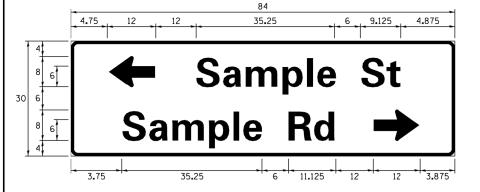
COUNTY TOTAL SHEETS NO.

COOK 73 42 USER NAME = RICH DESIGNED -REVISED SECTION COUNTY DISTRICT ONE STATE OF ILLINOIS J:\Microst\352114 GOLF ROAD\Dgn\Eng\Drawings\Final Drafting\D160Y74-SHT-TS07.dgn DRAWN REVISED 1312 584N(14) STANDARD TRAFFIC SIGNAL DESIGN DETAILS PLOT SCALE = 20.0000 '/ in. CHECKED -REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60Y74 SHEET 7 OF 7 SHEETS STA. SCALE: NONE PLOT DATE = 2/5/2018 DATE REVISED ILLINOIS FED. AID PROJECT

#### SIGN PANEL - TYPE 1 OR TYPE 2

# 3.75 35.25 60 11.125 3.875 Sample Rd





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

# COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH	(INCH)	
NAME	ADDREVATION	SERIES "C"	SERIES "D"	
AVENUE	Ave	15.000	18.250	
BOULEVARD	Blvd	17.125	20.000	
CIRCLE	Cir	11.125	13.000	
COURT	C†	8.250	9.625	
DRIVE	Dr	8.625	10.125	
HIGHWAY	Hwy	18.375	22.000	
ILLINOIS	ΙL	7. 000	8. 250	
LANE	Ln	9.125	10.750	
PARKWAY	Pkwy	23. 375	27.375	
PLACE	PI	7. 125	7. 750	
ROAD	Rd	9.625	11.125	
ROUTE	R†e	12.625	14.500	
STREET	S†	8.000	9.125	
TERRACE	Ter	12.625	14.625	
TRAIL	Tr	7. 750	9.125	
UNITED STATES	US	10.375	12.250	

#### **GENERAL NOTES**

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-O". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC SIGN MIDLOTHIAN, VA SIGN

- WESTERN REMAC, INC.

WOODRIDGE, IL

SIGN CHANNEL SIGN SCREWS BRACKETS PART #HPN053 (MED. CHANNEL)

1/4" x 14 x 1" H.W.H. #3

SELF TAPPING WITH NEOPRENE WASHER

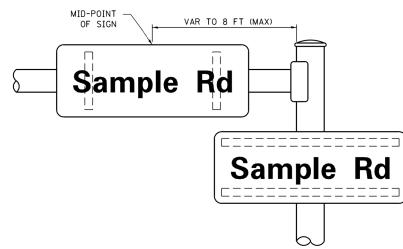
PART #HPN034 (UNIVERSAL)

CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

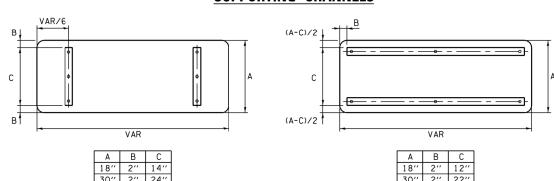
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

#### **MOUNTING LOCATION**

ARM OR POLE MOUNTED



#### **SUPPORTING CHANNELS**



#### STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

	FHWA SEF	RIES "C"		FHWA SERIES "D"								
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)					
Α	0.240	5.122	0.240	Α	0.240	6. 804	0.240					
В	0.880	4.482	0.480	В	0.960	5.446	0.400					
С	0.720	4.482	0.720	С	0.800	5.446	0.800					
D	0.880	4.482	0.720	D	0.960	5.446	0.800					
E	0.880	4.082	0.480	E	0.960	4.962	0.400					
F	0.880	4.082	0.240	F	0.960	4.962	0.240					
G	0.720	4.482	0.720	G	0.800	5.446	0.800					
Н	0.880	4.482	0.880	Н	0.960	5.446	0.960					
I	0.880	1.120	0.880	I	0.960	1.280	0.960					
J	0.240	4.082	0.880	J	0.240	5.122	0.960					
K	0.880	4.482	0.480	K	0.960	5.604	0.400					
L	0.880	4.082	0.240	L	0.960	4.962	0.240					
M	0.880	5. 284	0.880	M	0.960	6. 244	0.960					
N	0.880	4.482	0.880	N	0.960	5.446	0.960					
0	0.720	4. 722	0.720	0	0.800	5.684	0.800					
P	0.880	4.482	0.720	P	0.960	5.446	0.240					
0	0.720	4.722	0.720	0	0.800	5.684	0.800					
R	0.880	4.482	0.480	R	0.960	5.446	0.400					
S	0.480	4.482	0.480	S	0.400	5.446	0.400					
T	0.240	4.082	0.240	T	0.240	4.962	0.240					
U	0.880	4.482	0.880	U	0.960	5.446	0.960					
V	0.240	4.962	0.240	V	0.240	6.084	0.240					
W	0.240	6.084	0.240	W	0.240	7. 124	0.240					
X	0.240	4. 722	0.240	X	0.400	5.446	0.400					
Y	0.240	5. 122	0.240	Y	0.240	6.884	0.240					
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400					
0	0.320	3.842	0.640	0	0.400	4.562	0.720					
Ь	0.720	4.082	0.480	b	0.800	4.802	0.480					
С	0.480	4.002	0.240	С	0.480	4.722	0.240					
d	0.480	4.082	0.720	d	0.480	4.802	0.800					
e	0.480	4.082	0.320	e f	0.480	4. 722	0.320					
f	0.320	2.480	0.160		0.320	2.882	0.160					
g	0.480	4.082	0.720	g	0.480	4. 802 4. 722	0.800					
h i	0.720 0.720	4.082 1.120	0.640 0.720	h	0.800 0.800	1. 280	0.720					
<u>'</u>	0.720		0.720	i	0.000	2.642	0.800					
J k	0.720	2. 320 4. 322	0.160	k	0.800	5. 122	0.800					
Ī	0.720	1.120	0.720	ì	0.800	1. 280	0. 800					
m	0.720	6. 724	0. 120	m	0.800	7. 926	0.720					
n	0.720	4. 082	0.640	n	0.800	4. 722	0.720					
0	0. 120	4.082	0.480	0	0.480	4.882	0. 120					
P	0.720	4. 082	0.480	P	0.480	4.802	0.480					
q	0.480	4. 082	0.720	q	0.480	4.802	0.800					
r	0.720	2.642	0.160	r	0.800	3.042	0.160					
s	0.320	3. 362	0.240	s	0.320	3. 762	0.240					
+	0.080	2.882	0.080	†	0.080	3. 202	0.080					
u	0.640	4.082	0.720	u	0.720	4. 722	0.800					
v	0.160	4. 722	0.160	v	0.160	5. 684	0.160					
w	0.160	7. 524	0.160	w	0.160	9.046	0.160					
×	0.000	5. 202	0.000	×	0.000	6. 244	0.000					
У	0.160	4.962	0.160	У	0.160	6.004	0.160					
z	0.240	3. 362	0.240	z	0.240	4.002	0.240					
1	0.720	1.680	0.880	1	0.800	2.000	0.960					
2	0.480	4.482	0.480	2	0.800	5.446	0.800					
3	0.480	4.482	0.480	3	1.440	5.446	0.800					
4	0.240	4.962	0.720	4	0.160	6.004	0.960					
5	0.480	4.482	0.480	5	0.800	5.446	0.800					
6	0.720	4.482	0.720	6	0.800	5.446	0.800					
7	0.240	4.482	0.720	7	0.560	5.446	0.560					
8	0.480	4.482	0.480	8	0.800	5.446	0.800					
9	0.480	4.482	0.480	9	0.800	5.446	0.800					
0	0.720	4.722	0.720	0	0.800	5.684	0.800					
		2.802	0.240		0.240	2.802	0.240					

TS 5155 ECON 08

FILE NAME =	USER NAME = RICH	DESIGNED -	LP/IP	REVISED - LP 07/01/2015					DISTE	RICT ONE	:			F.A.U.	SECTION	COUNTY	TOTAL	SHEET
J:\Microst\352114 GOLF ROAD\Dgn\Eng\Dra	wings\Final Drafting\D160Y74-SHT-TS08.dgn	DRAWN -	LP	REVISED -	STATE OF ILLINOIS		BEACT	A D B #				<b>-</b> 0	F'	1312	584N(14)	СООК	73	43
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	IP	REVISED -	DEPARTMENT OF TRANSPORTATION		MASI	AKIVI	MOUNTE	D STREI	I NAWI	E 8				CONTRAC	T NO. 60	OY74
Default	PLOT DATE = 2/5/2018	DATE -	10/01/2014	REVISED -		SCALE: NONE	SHEET	OF	SHE	ETS STA.		TO STA.			ILL INOIS FED. A	ID PROJECT		

PLOT DATE = 5/29/2018

DATE

1-5-18

REVISED

OF

SHEETS STA.

**DEPARTMENT OF TRANSPORTATION** 

PLOT SCALE = 20.0000 '/ in.

CHECKED - BPT

REVISED -

REVISED -

## PROPOSED CONTROLLER SEQUENCE **LEGEND: ★**PROTECTED PHASE 47 ← - (\*)- - PROTECTED/PERMITTED PHASE √- (\*)- ► PEDESTRIAN PHASE \_TEMPORARY WIRELESS INTERCONNECT TO GLENVIEW GOLF CLUB **∢**-6)- **▶** ◆ OL OVERLAP ---(5) - --<del>-</del> 4 **∢**-②- ▶ GOLF ROAD (3) 3 38 **₩** C **> ≪** R Y G ♣Y ♣G \_ TEMPORARY WIRELESS INTERCONNECT TO WOODS DRIVE G ◆Y ◆G PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE (5)—<u>«</u> > 0 **4**—3)— GOLF ROAD **↑ ↑ ○ ▼** G ≺ ¬ (5) **GOLF ROAD** \$\dagger\$ \$\

## TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

	NO. OF	LED	%	TOTAL
TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	593.8

ENERGY COSTS TO:

VILLAGE OF MORTON GROVE 6101 CAPULINA AVENUE

MORTON GROVE, ILLINOIS 60053

ENERGY SUPPLY: CONTACT: TERRI BLOCK PHONE: (847) 816-5239

USER NAME = brandon

PLOT DATE = 4/20/2018

PLOT SCALE = 20.0000 '/ in.

Ji/Microst/352114 COLF ROAD/Dgn/Eng/Drawings/Final Drafting/D160Y74-SHT-TS11-TEMP C#B**DRAWN**gn -

COMPANY: COMED ACCOUNT NUMBER: ---

DESIGNED - ARE

DATE - 1-5-18

CHECKED -

RDS

# PREPARED BY: CEMCON, Led. Consulting Engineers. Land Surveyors & Planners 2280 White Oat Circle. Suite 100 Aurora. Illinois 60504-9675 Phi 630.862.2100 Fax: 630.862.2199 E-Wall: cod@cemcon.com Website: www.cemcon.com

REVISED

REVISED

REVISED

REVISED -

(NOT TO SCALE)

**CABLE PLAN** 

COUNTY TOTAL SHEETS NO.

COOK 73 46 SECTION 584N(14) CONTRACT NO. 60Y74 ILLINOIS FED. AID PROJECT

TS 5155

ECON 08

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

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(7) (7)

HARMS

ROAD

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE **GOLF ROAD AT HARMS ROAD** SCALE: 1"=20" SHEET OF SHEETS STA.

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 COUNTY
 TOTAL SHEETS NO.

 COOK
 73
 47

 CONTRACT
 NO.
 60Y74
 SECTION TEMPORARY INTERCONNECT SCHEMATIC GOLF ROAD AT HARMS ROAD STATE OF ILLINOIS ings\Final Drafting\D160Y74-SHT-TS12-TEMP SCH**DRAWN.**dgn - RDS J:\Microst\352114 COLF ROAD\Dgn\Eng\Dr REVISED 584N(14) PLOT SCALE = 50.0000 '/ in. CHECKED -REVISED **DEPARTMENT OF TRANSPORTATION** SCALE: 1"=20" OF SHEETS STA. TO STA. PLOT DATE = 6/5/2018 DATE 1-5-18 REVISED -

**DEPARTMENT OF TRANSPORTATION** 

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 5/24/2018

CHECKED - BPT

REVISED -

REVISED

**GOLF ROAD AT HARMS ROAD** 

OF SHEETS STA.

SCALE: 1"=20' SHEET

CONTRACT NO. 60Y74

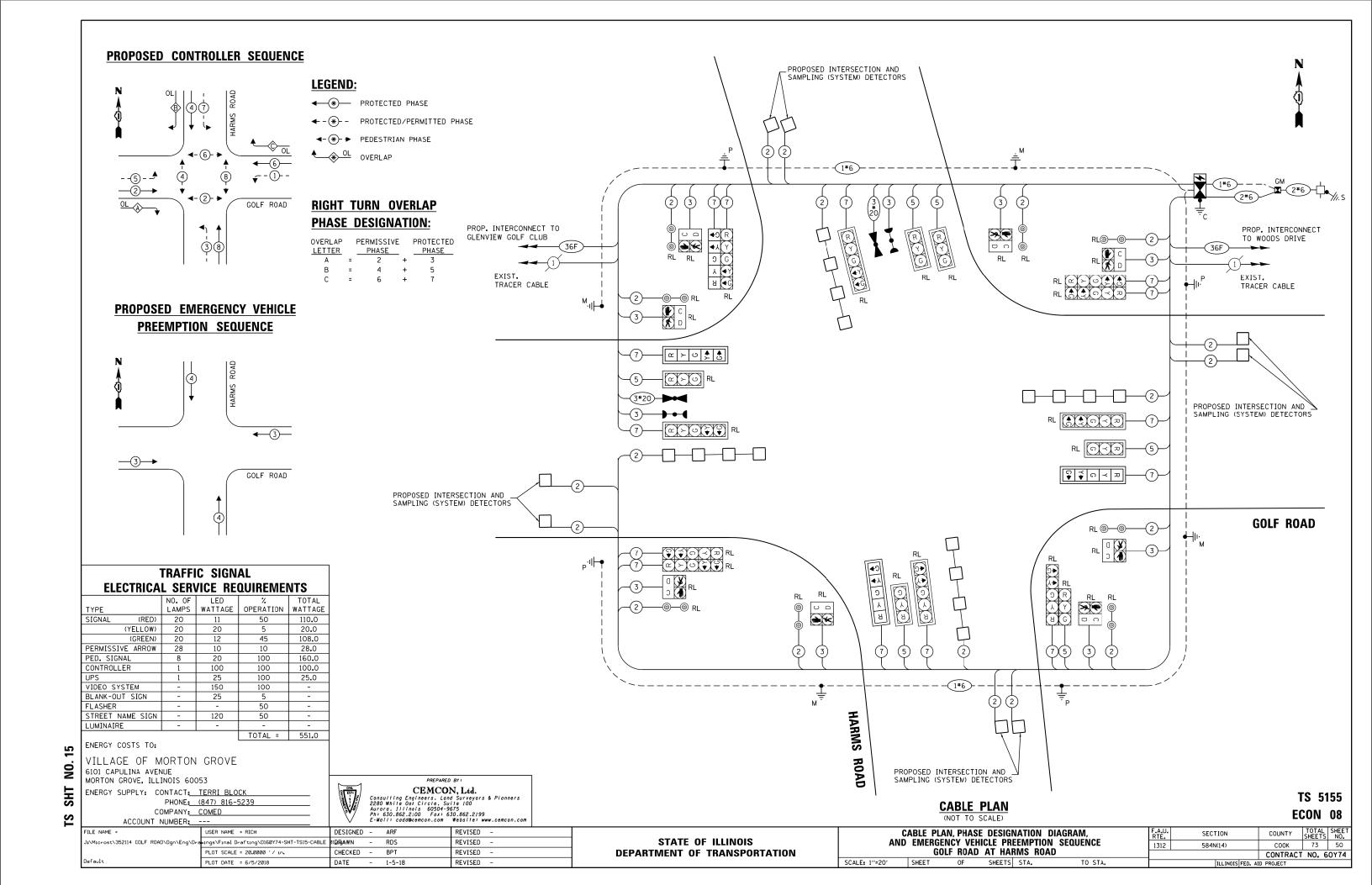
PLOT DATE = 5/24/2018

1-5-18

REVISED

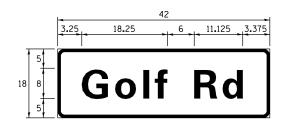
OF SHEETS STA.

SCALE: 1"=20" SHEET

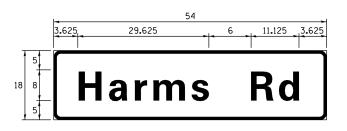


### SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	10.5	1	ZZ	



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	13.5	1	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

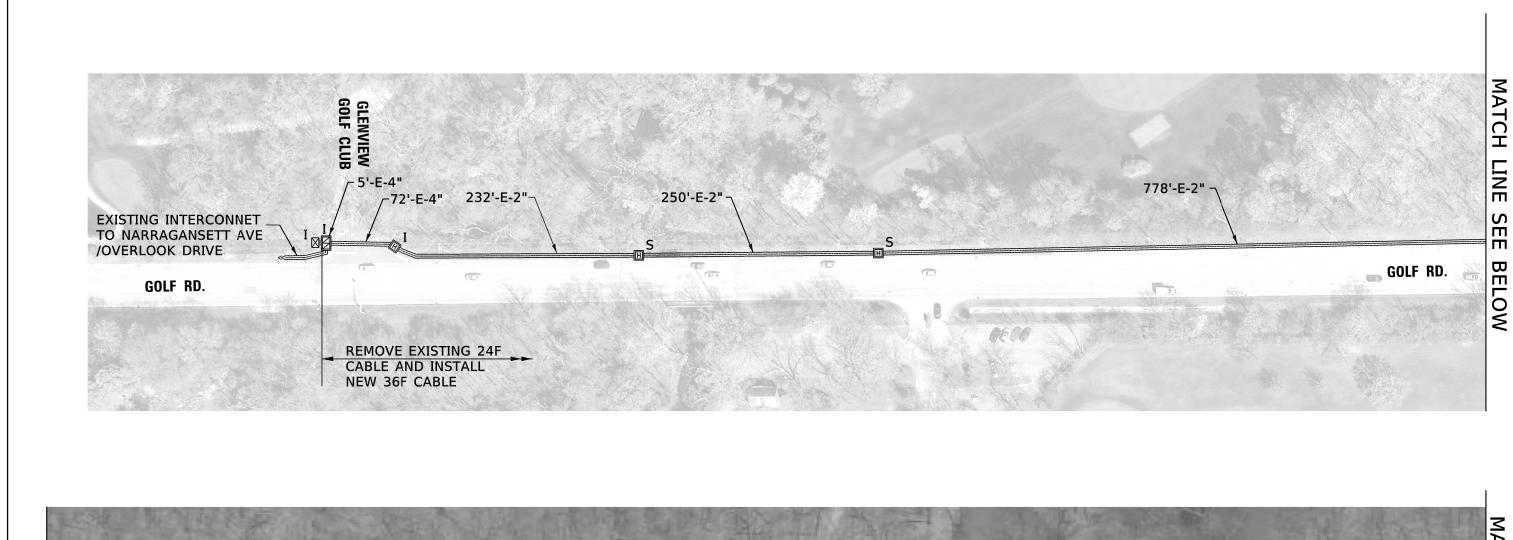
#### SCHEDULE OF QUANTITIES

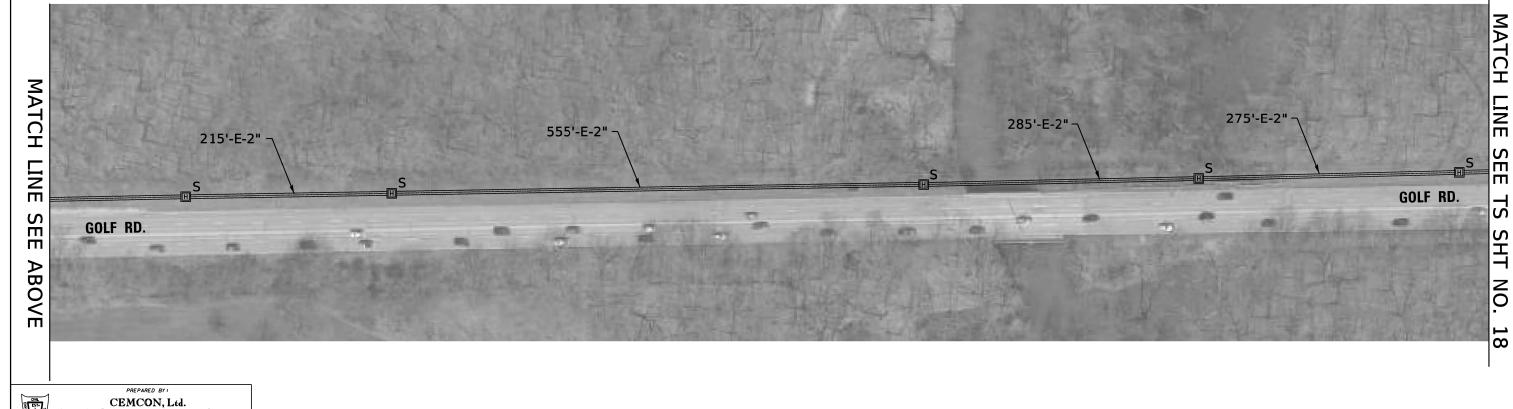
	ITEM DESCRIPTION	UNITS	TOTAL OTY.
	SIGN PANEL - TYPE 1	SQ. FT	48.0
	SERVICE INSTALLATION - GROUND MOUNTED METERED SERVICE	EACH	1
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA,	FOOT	1315
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	156
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	420
	HANDHOLE	EACH	6
	HEAVY-DUTY HANDHOLE	EACH	4
	DOUBLE HANDHOLE	EACH	2
	TRANSCEIVER - FIBER OPTIC	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1592
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1957
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1286
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3334
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2563
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	77
	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	625
	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE. 50 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	16
	CONCRETE FOUNDATION, TYPE C	FOOT	4
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
	SIGNAL HEAD. LED. 1-FACE. 5-SECTION. BRACKET MOUNTED	EACH	1
	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
	INDUCTIVE LOOP DETECTOR	EACH	8
	DETECTOR LOOP. TYPE I	FOOT	923
ŧ	LIGHT DETECTOR	EACH	2
· •	LIGHT DETECTOR AMPLIFIER	EACH	1
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	RELOCATE EXISTING SIGNAL HEAD	EACH	16
	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	8
	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	16
	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	4
	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
	REMOVE EXISTING HANDHOLE	EACH	22
	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
	REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
ŧ	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	319
	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET	EACH	1
	* 100% COST TO THE VILLAGE OF MODION CROVE		

\* 100% COST TO THE VILLAGE OF MORTON GROVE

TS 5155 ECON 08

FILE NAME =	USER NAME = RICH	DESIGNED - ARF	REVISED -						REET NAME		F.A.U.	SECTION	COUNTY	TOTAL SHEET
J:\Microst\352114 GOLF ROAD\Dgn\Eng\Dr	awings\Final Drafting\D160Y74-SHT-TS16-STREET	NDARMANNUM – RDS	REVISED -	STATE OF ILLINOIS					QUANTITIES		1312	584N(14)	соок	73 51
	PLOT SCALE = 20.0000 ' / in.	CHECKED - BPT	REVISED -	DEPARTMENT OF TRANSPORTATION		GO	OLF ROAL	) AT HA	RMS ROAD				CONTRAC	T NO. 60Y74
Default	PLOT DATE = 5/24/2018	DATE - 1-5-18	REVISED -		SCALE:	SHEET	OF	SHEET:	STA.	TO STA.		ILLINOIS FED. A	AID PROJECT	





TS SHT. NO. 17

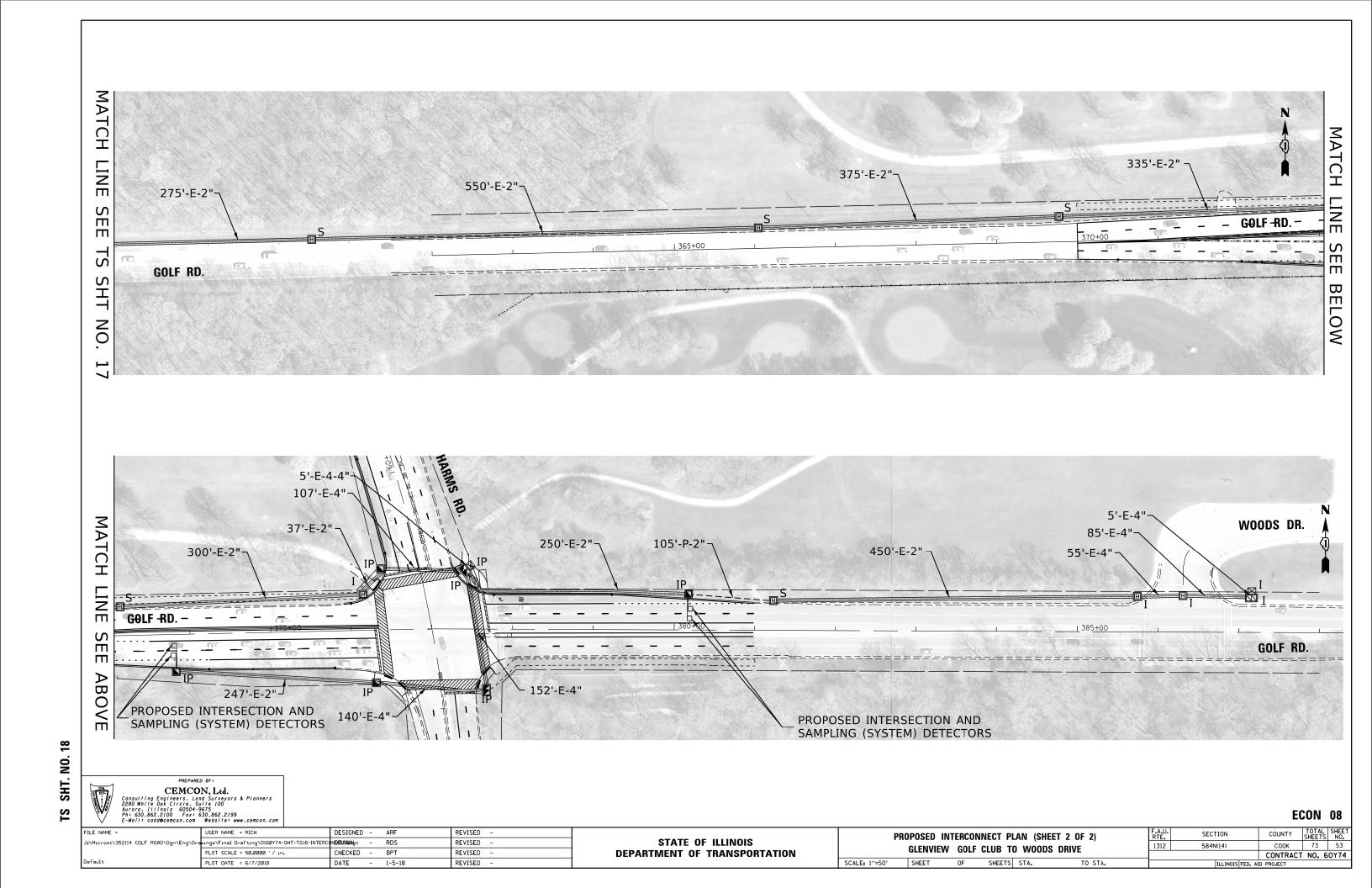
PREPARED BY:

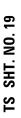
CEMCON, Ltd.

Consulting Engineers. Land Surveyors & Planners
2280 While Oak Circle. Suite 100
Aurora. Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Websile: www.cemcon.com

ECON 08

FILE NAME =	USER NAME = RICH	DESIGNED - ARF	REVISED -		PR	OPOSED II	NTERCON	NECT P	LAN (SHEE	T 1 OF 2)	F.A.U. RTF	SECTION	COUNTY	TOTAL SHEETS	SHEET
J:\Microst\352114 COLF ROAD\Dgn\Eng\Dr	wings\Final Drafting\D160Y74-SHT-TS17-INTERC	INDERAWANG∩ – RDS	REVISED -	STATE OF ILLINOIS					O WOODS	,	1312	584N(14)	СООК	73	52
	PLOT SCALE = 50.0000 ' / 10.	CHECKED - BPT	REVISED -	DEPARTMENT OF TRANSPORTATION		GLENVIEW	V GULF	CLUB I	O MOODS	DRIVE	'		CONTRACT	T NO. F	OY74
Default	PLOT DATE = 6/5/2018	DATE - 1-5-18	REVISED -		SCALE: 1"=50"	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		



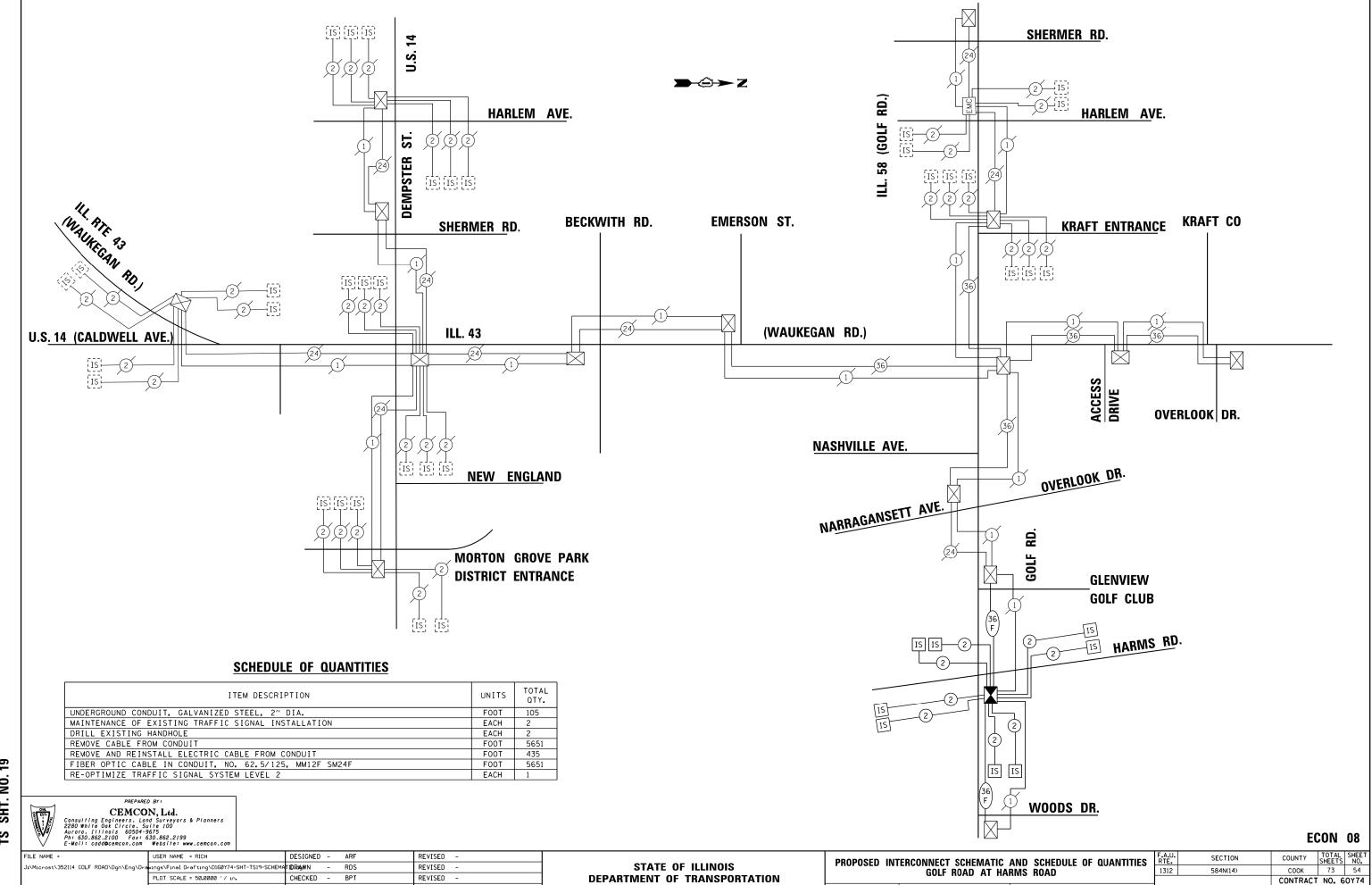


PLOT DATE = 6/5/2018

DATE

- 1-5-18

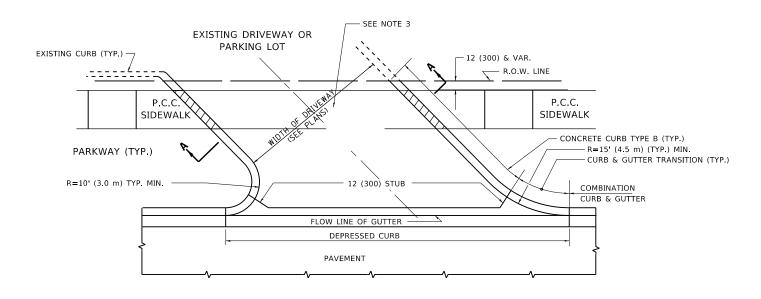
REVISED

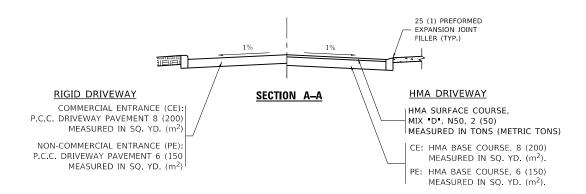


OF SHEETS STA.

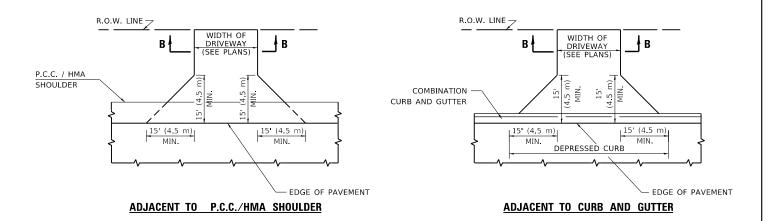
SCALE: 1"=20' SHEET

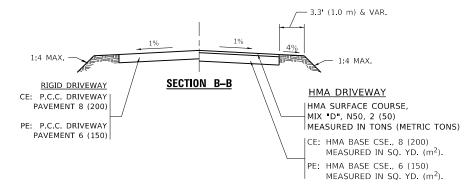
#### WITH CONCRETE CURB, TYPE B





WITH CONCRETE CURB, TYPE B





DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

**GENERAL NOTES:** 

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

SCALE: NONE

#### RURAL FIELD ENTRANCE (FE)

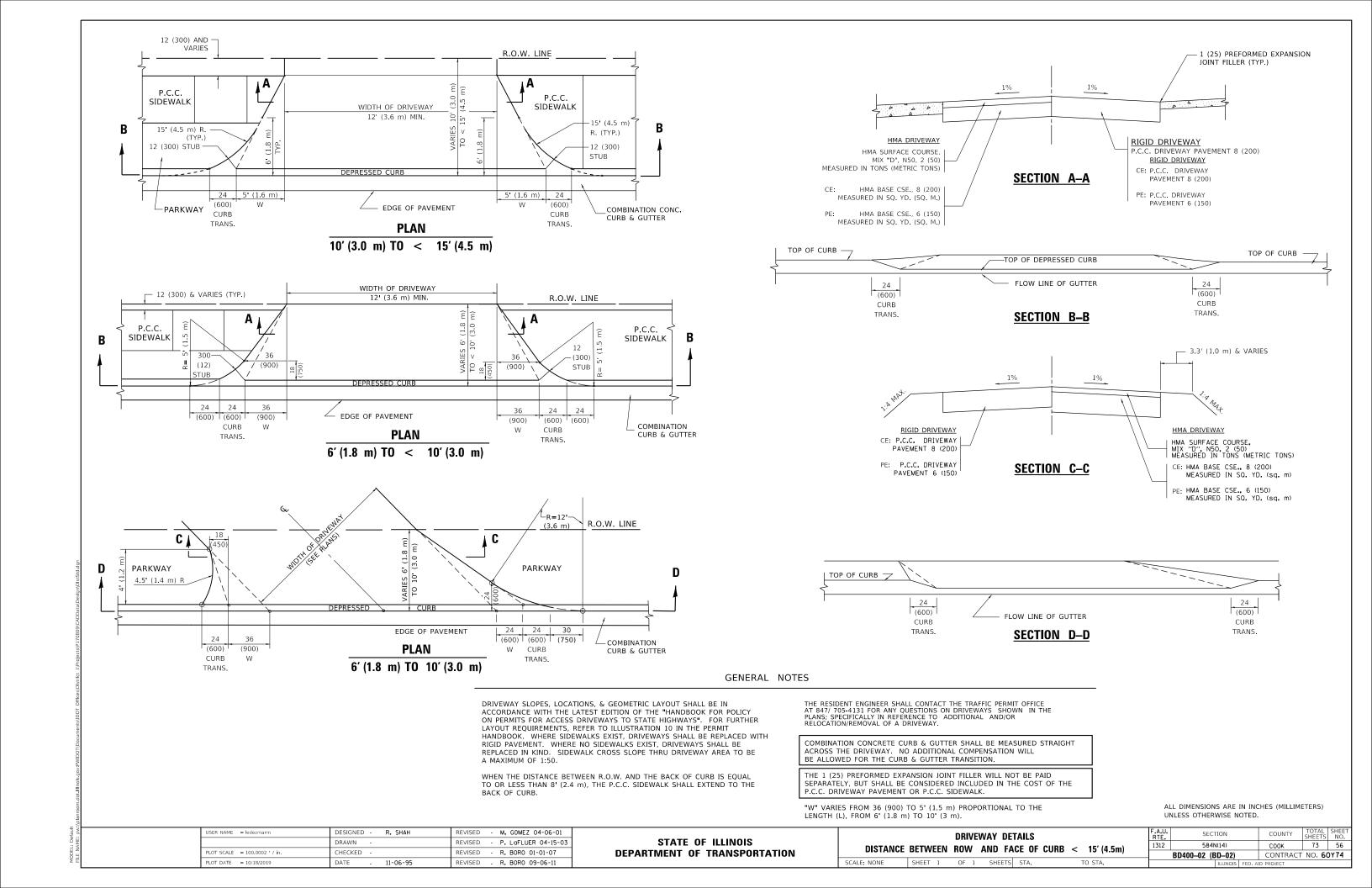
HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

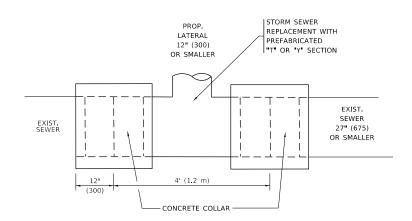
AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>).

USER NAME = ledezmarm	DESIGNED -	R. SHAH	REVISED	-	P. LaFLUER 04-15-03
	DRAWN -		REVISED	-	R. BORO 01-01-07
PLOT SCALE = 100.0002 ' / in.	CHECKED -		REVISED	-	R. BORO 06-11-08
PLOT DATE = 10/18/2019	DATE -	11-04-95	REVISED	-	R. BORO 09-06-11

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

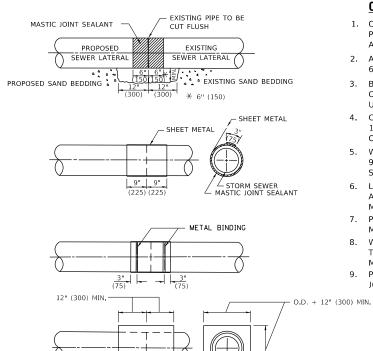
DRIV	/EWAY	DET/	AILS	- DISTAI	NCE BETWEE	N R.O.W.	F.A RT	A.U. TE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
AND F	ACE O	F CIIE	R S	. FNGF O	E CHOILINER	> 15'(4.5m)	13	12	584N	(14)		COOK	73	55
ו שווא	AUL U	- 601	י טו	x LDGL C	JIIOOLDLII	<u> </u>		В	D400-01 (BD-	-01)		CONTRACT	NO. 60	)Y74
ONE	SHEET	1	OF	1 SHEETS	STA.	TO STA.				ILLINOIS	FED. AI	D PROJECT		





#### **DETAIL** "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



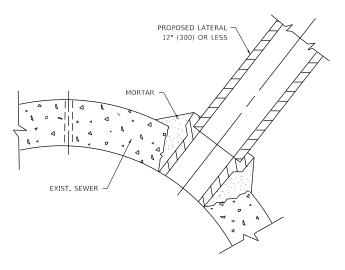
<u>DETAIL "B"</u> CLASS SI CONCRETE COLLAR

#### **CONSTRUCTION SEQUENCE**

- 1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- 5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- 7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE

SCALE: NONE

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



#### DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

#### NOTES:

#### MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

#### **CONSTRUCTION METHODS**

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

  A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

#### **GENERAL**

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER,

#### **BASIS OF PAYMENT**

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

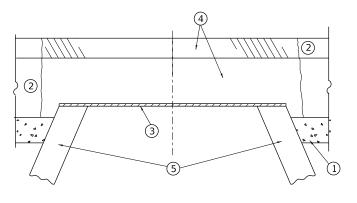
TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

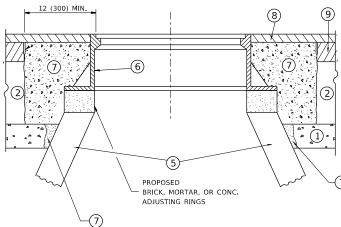
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

USER NAME = ledezmarm	DESIGNED - M. DE YONG	REVISED - M. DE YONG 5-8-92
	DRAWN -	REVISED - R. SHAH 09-09-94
PLOT SCALE = 100.0002 / in.	CHECKED -	REVISED - R. SHAH 10-25-94
PLOT DATE = 10/18/2019	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DE	DETAIL OF STORM SEWER						F.A.U. RTE. SECTION COUNTY S			
CUNINI	CONNECTION TO EXISTING SEWER					1312	584N(14)	СООК	73	57
CONNECTION TO EXISTING SEVEN						BD500-01 (BD-7) CONTRACT NO. 60Y74				)Y74
HEET 1	OF	1	SHEETS	STA.	TO STA.		TILLINOIS FED AL	D PROJECT		





#### NOTES

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

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

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

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

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

#### **CONSTRUCTION PROCEDURES**

#### STAGE 1 (BEFORE PAVEMENT MILLING)

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

#### STAGE 2 (AFTER PAVEMENT MILLING)

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

#### **LEGEND**

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

  (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE
- LOCATION OF STRUCTURES

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

#### BASIS OF PAYMENT

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

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

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

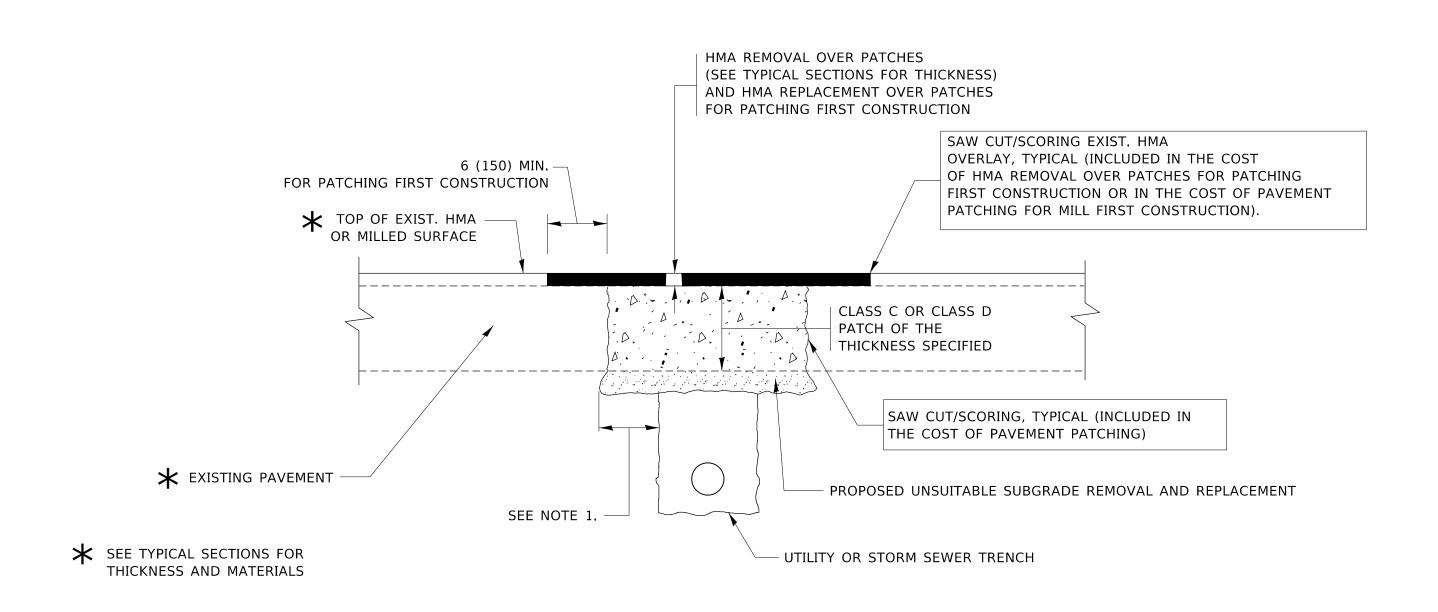
# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMES AND LIDS ADJUSTMENT WITH MILLING

SHEET 1 OF 1 SHEETS STA. TO STA.



#### **NOTES:**

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

## **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  $4\frac{1}{2}$  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.

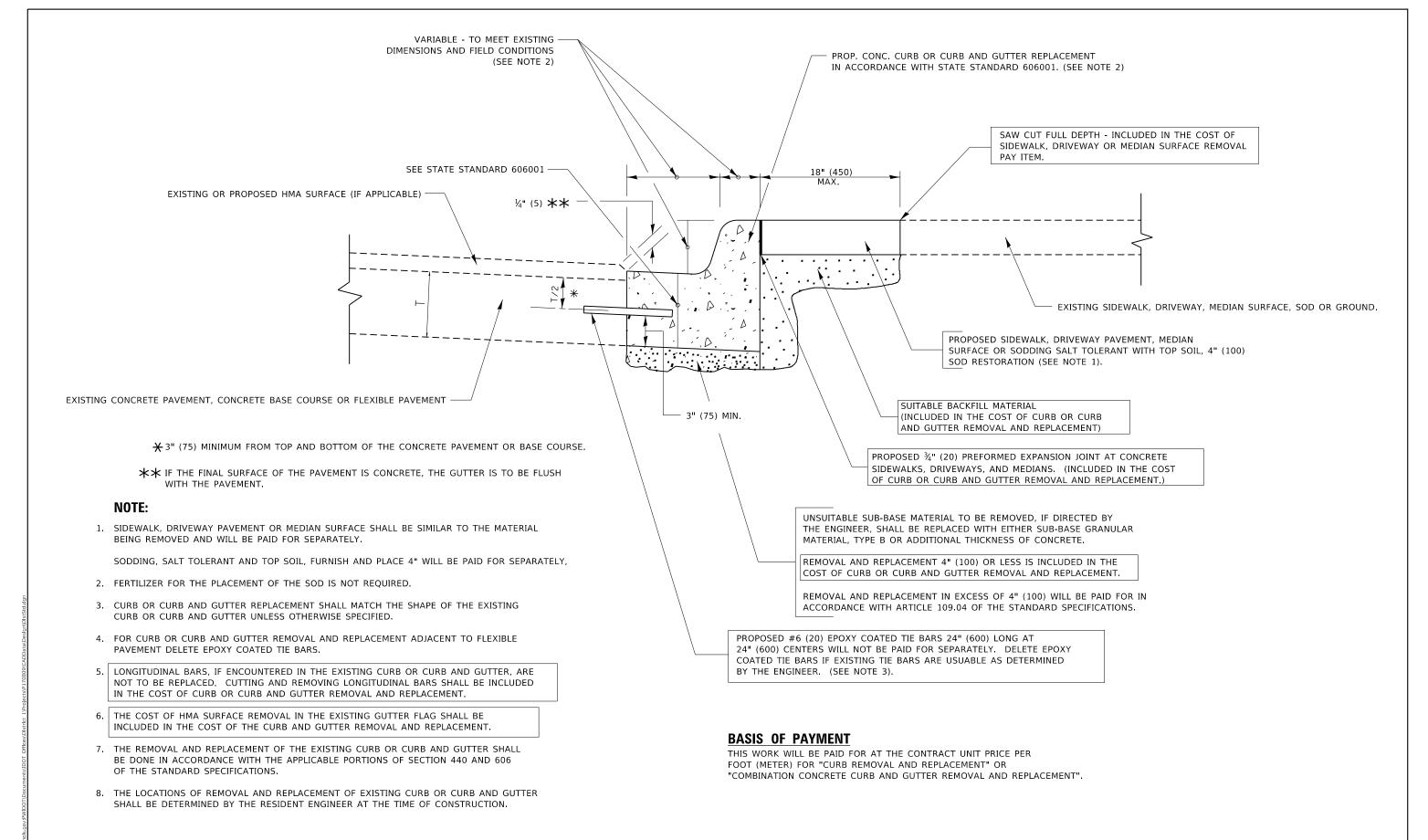
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

OSER NAME = ledezitlatti	DESIGNED - R. SHARI	KENIZED -	A. ADDAS 04-27-90
	DRAWN -	REVISED -	R. BORO 01-01-07
PLOT SCALE = 100.0002 ' / in.	CHECKED -	REVISED -	R. BORO 09-04-07
PLOT DATE = 10/18/2019	DATE - 10-25-94	REVISED -	K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

	PAVEMENT PATCHING FOR							RTE. SECTION			TOTAL SHEETS	SHEET NO.
	HMA SURFACED PAVEMENT						1312	584N(14)	COOK	73	59	
HIMA SUNFACED PAVEINIENT						BD400-04 (BD-22) CONTRACT NO. 60					)Y74	
	SHEET	1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS	FED. A	ID PROJECT		



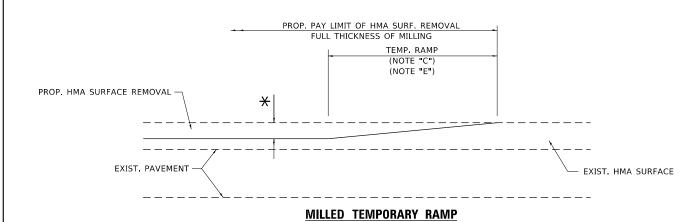
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

USER NAME = ledezmarm	DRAWN -	REVISED -	A. ABBAS 03-21-97	STATE OF ILLINOIS
PLOT SCALE = 100.0002 / in.	CHECKED -	REVISED -	M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION
PLOT DATE = 10/18/2019	DATE - 03-11-94	REVISED -	R. BORO 12-15-09	

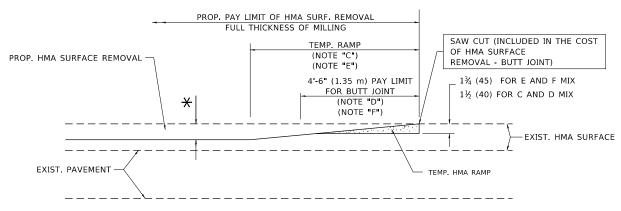
CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

SCALE: NONE SHEET 1 OF 1 SHEETS STA.



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

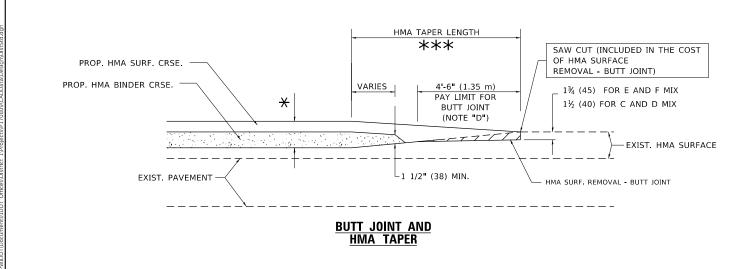


#### HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 2

# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

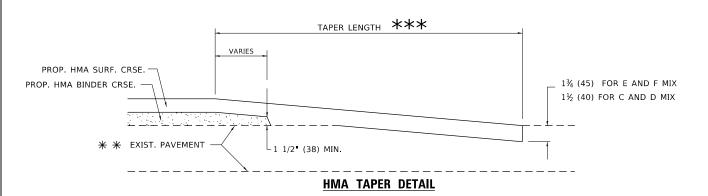
JSER NAME = ledezmarm DESIGNED - M. DE YONG DRAWN REVISED -A. ABBAS 03-21-97 HECKED REVISED M. GOMEZ 04-06-01 LOT DATE = 10/18/2019 R.BORO 01-01-07 DATE REVISED -

**DEPARTMENT OF TRANSPORTATION** 

**BUTT JOINT AND** HMA TAPER DETAILS SHEET 1 OF 1 SHEETS STA. TO STA.

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST 30'-0" (9.0 m) (NOTE "A") OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 1¾ (45) FOR E AND F MIX 1½ (40) FOR C AND D MIX

**BUTT JOINT DETAIL** 



# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

#### NOTES

A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

EXIST. HMA OR PCC SURFACE -

\* \* EXIST. PAVEMENT

- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP, RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT. \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- $\star\star\star$  20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### **BASIS OF PAYMENT**

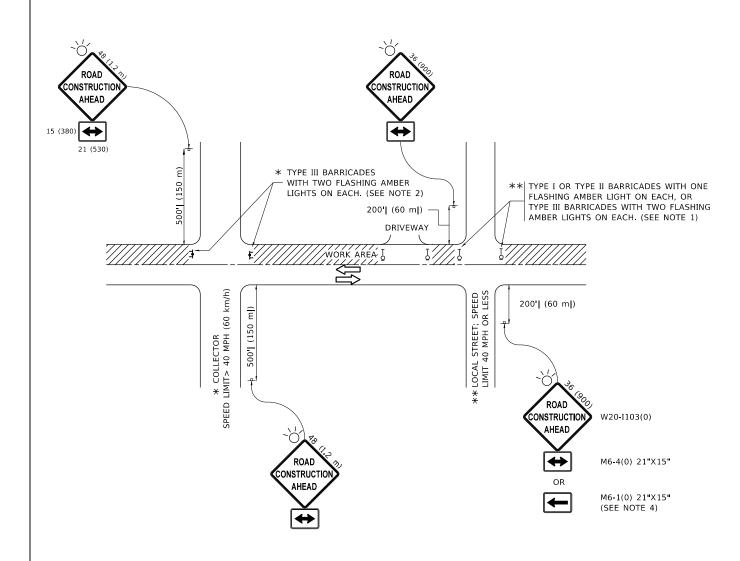
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT".

SCALE: NONE

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

STATE OF ILLINOIS

COUNTY 73 61 584N(14) COOK BD400-05 BD32 CONTRACT NO. 60Y74



#### 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.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  b) 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)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
  4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
  BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

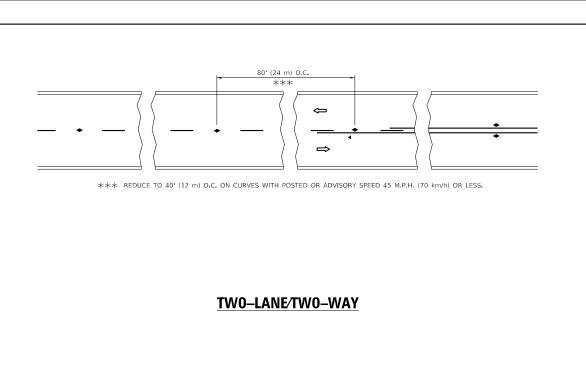
All dimensions are in inches (millimeters) unless otherwise shown.

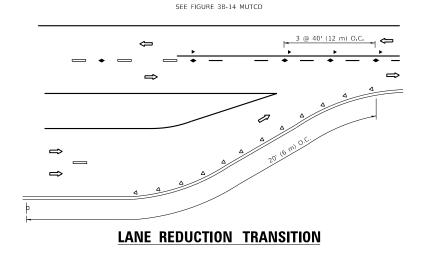
USER NAME = ledezmarm	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 100.0002 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 10/18/2019	DATE - 06-89	REVISED _ A. SCHUETZE 09-15-16

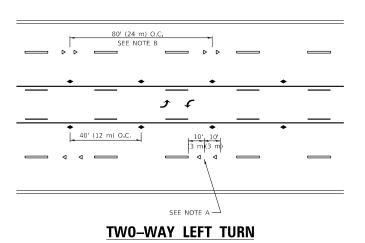
STATE	OF ILLINOIS	
DEPARTMENT O	F TRANSPORTA	ΓΙΟΝ

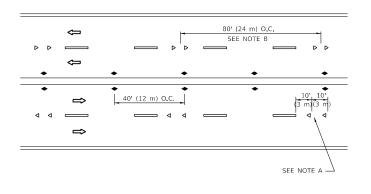
SI	TRAFFIC CONTROL AND PROTECTION FOR IDE ROADS, INTERSECTIONS, AND DRIVEWAYS    SHEET 1 OF 1 SHEETS STA. TO STA.						
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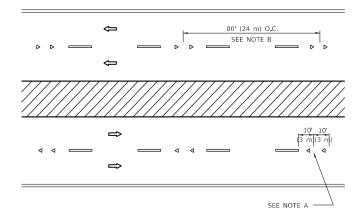
.A.U. RTE.	SEC <sup>-</sup>	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHE
312	5841	v(14)		соок	73	62
	TC-10		CONTRACT	NO. 60	)Y74	
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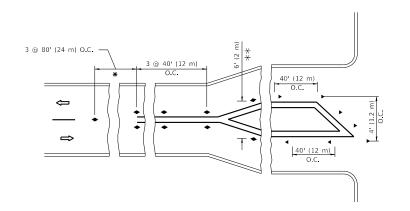


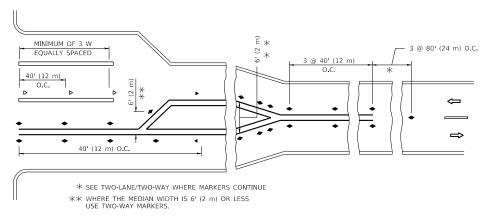




#### MULTI-LANE/UNDIVIDED







#### **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

#### 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.

- 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
- INVOLVED.

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

JSER NAME = ledezmarm DESIGNED -REVISED - T. RAMMACHER 03-12-99 REVISED -T. RAMMACHER 01-06-00 DRAWN HECKED REVISED -C. JUCIUS 09-09-09 C. JUCIUS 07-01-13 PLOT DATE = 10/18/2019 DATE REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET 1 OF 1 SHEETS STA.

SECTION 73 63 584N(14) 1312 COOK TC-11 CONTRACT NO. 60Y74

**SYMBOLS** 

ONE-WAY AMBER MARKER

TWO-WAY AMBER MARKER

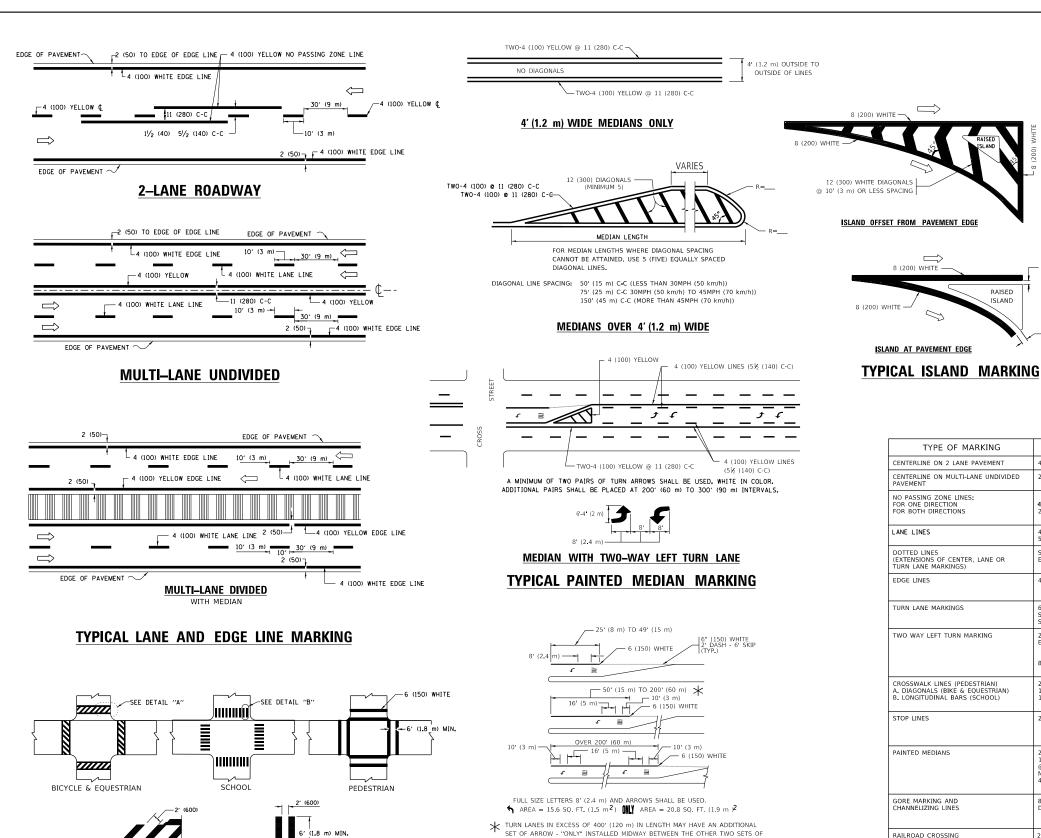
ONE-WAY CRYSTAL MARKER (W/O)

— YELLOW STRIPE

■ WHITE STRIPE

**DESIGN NOTES** 

- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE



TYPICAL LEFT (OR RIGHT) TURN LANE

ARROW - "ONLY".

#### TYPICAL TURN LANE MARKING

JSER NAME = ledezmarm DESIGNED -EVERS REVISED - C. JUCIUS 09-09-09 DRAWN REVISED -C. JUCIUS 07-01-13 HECKED C. JUCIUS 04-12-16 PLOT DATE = 10/18/2019 DATE

─12 (300) WHITE

DETAIL "B"

-6 (150) WHITE

TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY DISTRICT ONE 73 64 1312 584N(14) COOK TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 60Y74 OF 2 SHEETS STA. SHEET 1

D(FT) SPEED LIMIT 665 50 55 COMBINATION LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) LANE REDUCTION TRANSITION

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	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 5' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ, FT. (0.33 m ZEACH "X"=54.0 SQ, FT. (5.0 m Z
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

**U\_TURN** 

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

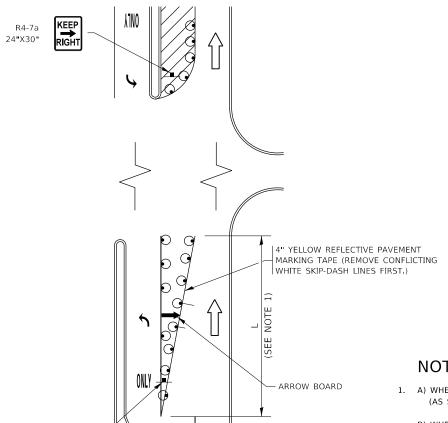
SCALE: NONE

8 (200) WHITE -

RAISED

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

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



# FIGURE 1

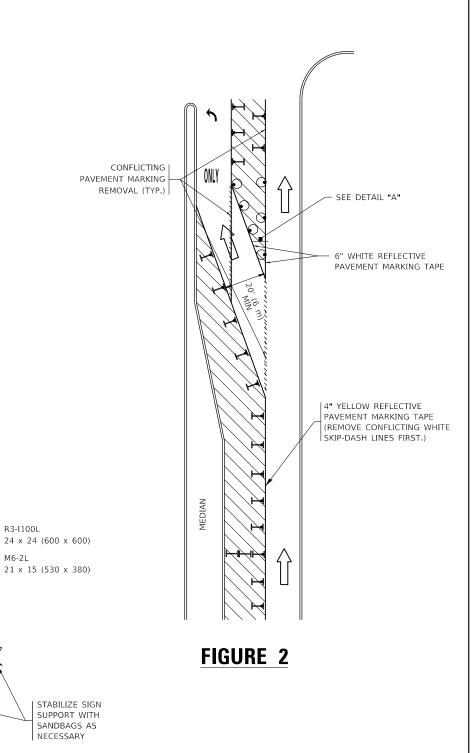
# **LEGEND** WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY

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

# **TURN BAY ENTRANCE** WITHIN A LANE CLOSURE



## **DETAIL A**

TURN

All dimensions are in inches (millimeters) unless otherwise shown

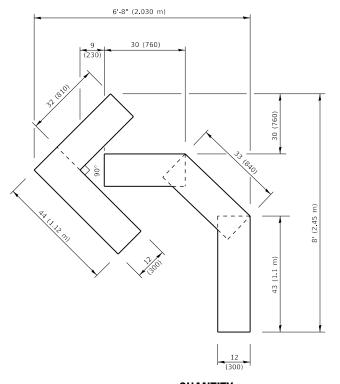
USER NAME = ledezmarm	DESIGNED	-1.	RAMMACHER	09-08-94	KEVISED	-	R. BURU (	J9-14-U9
	DRAWN	-	A. HOUSEH	11-07-95	REVISED	- A.	SCHUETZE	07-01-13
PLOT SCALE = 100.0002 ' / in.	CHECKED	-	A. HOUSEH	10-12-96	REVISED	- A.	SCHUETZE	09-15-16
PLOT DATE = 10/18/2019	DATE	- T.	RAMMACHER	01-06-00	REVISED	-		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TRAFI	IC CON	ITR	OL AN	ID	PROTEC	CTION A	T TURN BAYS	F
	(T	0 I	REMAI	N	OPEN 1	TO TRAF	FIC)	F
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.	╁

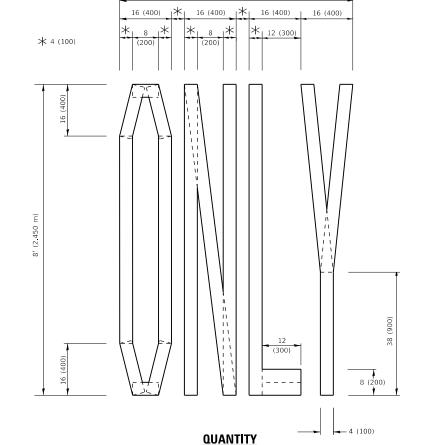
SECTION 73 65 584N(14) 1312 COOK TC-14 CONTRACT NO. 60Y74

SEE DETAIL "A"

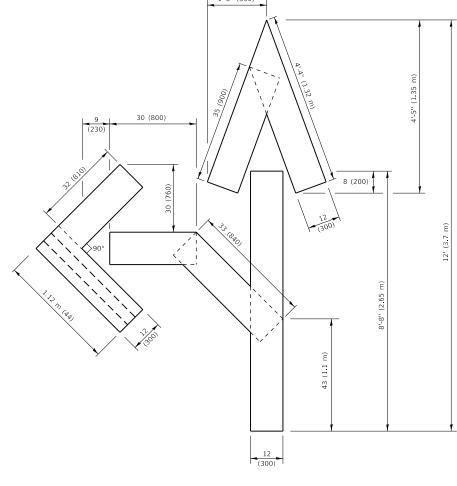


#### QUANTITY

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



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

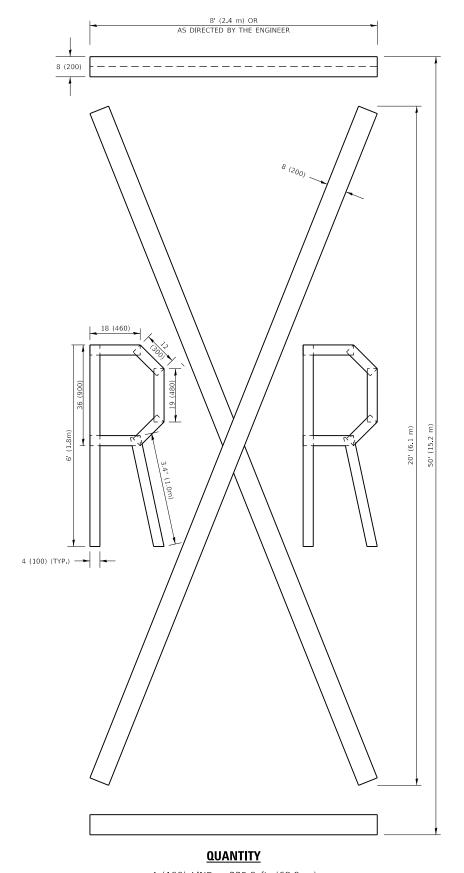


#### QUANTITY

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

#### NOTE:

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

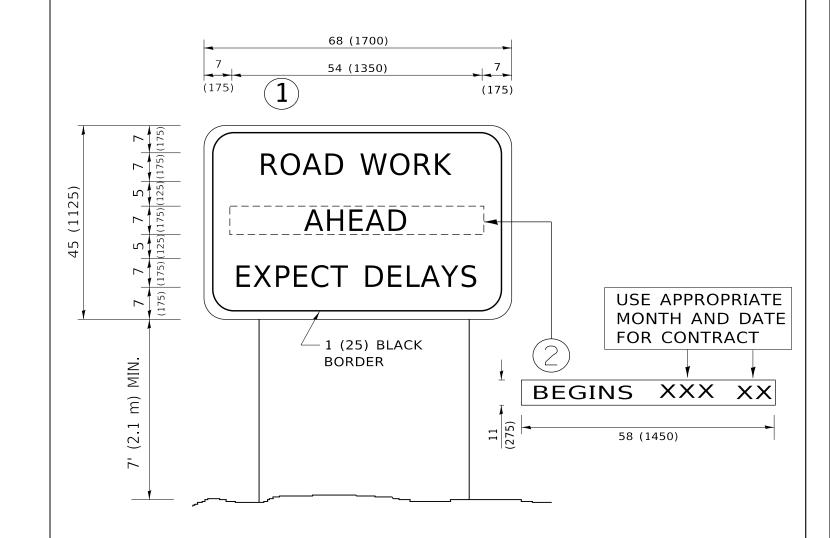


4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



## 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.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = ledezmarm	DESIGNED -	REVISED	-	R. MIRS 09-15-97
	DRAWN -	REVISED	-	R. MIRS 12-11-97
PLOT SCALE = 100.0002 / in.	CHECKED -	REVISED	- T.	RAMMACHER 02-02-9
PLOT DATE = 10/18/2019	DATE -	REVISED	-	C. JUCIUS 01-31-07

ARTERIAL ROAD							F.A.U. RTE.			
INFORMATION SIGN						1312	584N(1-			
IN ONNATION SIGN							TC-22			
FT	1	OF	1	SHEETS	STA	TO STA		n i		

