PLAN: AUSTIN BOULEVARD (RESURFACING) - OGDEN AVENUE TO 29TH STREET PLAN: AUSTIN BOULEVARD (PAVEMENT MARKING) - OGDEN AVENUE TO 29TH STREET 7.)

INDEX OF SHEETS

BD-08 DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING

BD-32 BUTT JOINT AND HMA TAPER DETAILS 9.)

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

TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS

TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS

TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING 13.)

TC-18 SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS 14.)

BD-22 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT 15.)

TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING 16.)

STATE STANDARDS

000001-05 STANDARD SYMBOLS, ABBREVATIONS, AND PATTERNS

424001-05 CURB RAMPS FOR SIDEWALK 442201-03 CLASS C AND D PATCHES

602601-02 PRECAST REINFORCED CONCRETE FLAT SLAB TOP

602701-02 MANHOLE STEPS

604001-03 FRAMES & LIDS-TYPE 1

701301-03 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

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

701501-05 URBAN LANE CLOSURE, 2 L, 2 W UNDIVIDED 701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE

701901-01 TRAFFIC CONTROL DEVICES

780001-02 TYPICAL PAVEMENT MARKINGS

814001-02 HANDHOLES

814006-02 DOUBLE HANDHOLES

TRAFFIC DATA ADT: AUSTIN BOULEVARD 15,000 (2010)

(841).

SOLOMON

MARILIN

ENGINEER:

FIELD

DESIGN DESIGNATION: 15,000 (2010) MINOR ARTERIAL 1.25(COMP-20)

1"=100' 1"=10"

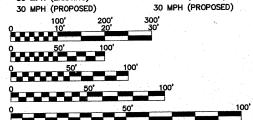
1"=40'

1"=30"

1"=20"

POSTED SPEED 30 MPH (EXISTING)

DESIGN SPEED 30 MPH (EXISTING)



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

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR **EXCAVATION**

CALL 811

Know what's below. Call before you dig.

Frank Novotny & Associates, Inc. 825 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132

II. LINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928

			R	E	٧	1	S	1	0	N	<u>S</u>	 	
NO.	BY	DATE							RIPTIO			 	
1	AMS	3/9/10					PEI	R IDC	T REV	1EW		 	
2	THK	3/12/10					PE	R IDC	T REV	1EW		 	
3		3/23/10					PE	R IDC	T REV	1EW		 	
						0 -	7 4 6	~ A					

CONTRACT NO. 63464

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

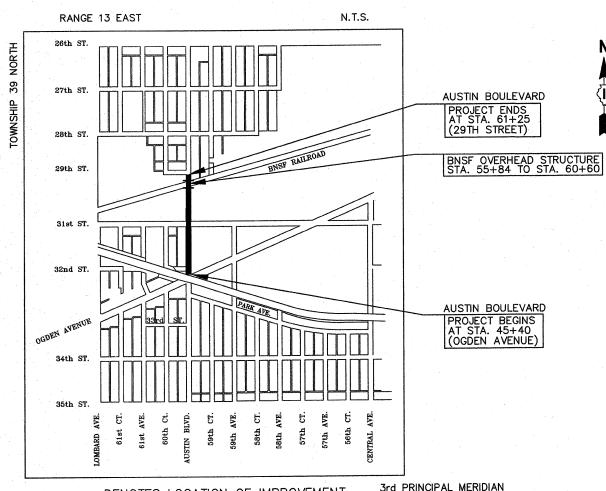
FAU 2790 (AUSTIN BOULEVARD)

OGDEN AVE. (FAP 311) TO 29TH STREET RESURFACING

PROJECT ARA-9003(645)

SECTION 10-00212-00-RS TOWN OF CICERO COOK COUNTY C - 91 - 551 - 10

PROJECT LOCATION MAP



DENOTES LOCATION OF IMPROVEMENT IN CICERO TOWNSHIP

LENGTH OF PROJECT

GROSS LENGTH OF PROJECT

NET LENGTH OF PROJECT

1585 FEET (0.3002 MILES) 1585 FEET (0.3002 MILES) 3.15-10

APPROVED

PASSED

TOWN OF CICERO

RELEASING FOR BID

BASED ON LIMITED



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

SECTION

2790 10-00212-00-RS

F.H.W.A. REG.

FAU RTE

COUNTY

COOK

ILLINOIS PROJECT ARA-9003(645)

CONTRACT NO. 63464

16

FNA JOB # 09332

GENERAL CONSTRUCTION NOTES PAVING AND STORM SEWERS

SPECIFICATIONS

THE LATEST EDITIONS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" SHALL GOVERN ALL WORK ASSOCIATED WITH THIS PROJECT. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" MAY GOVERN OTHER WORK ON THIS PROJECT AS INDICATED BY REFERENCE.

CARE IN EXCAVATION

CARE SHALL BE EXERCISED BY THE CONTRACTOR IN CARRYING OUT EARTH AND/OR TRENCHING OPERATIONS SO THAT LOCAL UTILITY SERVICES, WAITER VALVES, MANHOLES, CATCH BASINS, INLETS, BUFFALO BOXES, AND OTHER STRUCTURES ARE NOT DAMAGED OR REMOVED. ALL DAMAGE DONE BY THE CONTRACTOR, WHETHER THE STRUCTURE OR SERVICE IS VISIBLE AT THE GROUND SURFACE OR NOT, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED IN ACCORDANCE WITH ARTICLES 105.07 AND 107.20.

NOTIFICATION OF PUBLIC UTILITIES

PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OFFICIALS OF THE PUBLIC WORKS DEPARTMENT OF THE LOCAL MUNICIPALITY, J.U.L.I.E. AT 1-800-892-0123 OR 811, AND OTHER PUBLIC AND PRIVATE UTILITIES SO THAT ARRANGEMENTS CAN BE MADE TO LOCATE THEIR VARIOUS FACILITIES WITHIN THE LIMITS OF CONSTRUCTION UNDER THIS CONTRACT, AS WELL AS TO PROVIDE ADEQUATE PROTECTION AND INSPECTION THERETO. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL

TRAFFIC CONTROL DEVICES

BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 107.14 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". ADEQUATE LIGHTING SHALL BE MAINTAINED FROM DUSK TO DAWN AT ALL LOCATIONS WHERE CONSTRUCTION OPERATIONS WARRANT, OR AS DESIGNATED BY THE ENGINEER.

PROTECTION OF SIGNS AND PROPERTY

ALL TRAFFIC SIGNS, STREET SIGNS, ETC., THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AND PLACED AT NEW LOCATIONS AS DESIGNATED BY THE ENGINEER, THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE COMBINATION CURB AND GUTTER REMOVAL, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. IN ADDITION, ALL MAIL BOXES THAT INTERFERE WITH CONSTRUCTION SHALL BE SIMILARLY RELOCATED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLES 107.20 AND 107.21 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

SPECIAL ATTENTION IS DRAWN TO ARTICLE 105.06 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" WHICH REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVING CONTROL OF ALL THE WORK AS THE AGENT OF THE GENERAL CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

SAWING EXISTING IMPROVEMENTS

ALL PERMANENT TYPE PAVEMENTS OR OTHER PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED, SHALL BE SAMED AS DIRECTED PRIOR TO REMOVAL. ALL ITEMS SO REMOVED SHALL BE REPLACED WITH SIMILAR CONSTRUCTION MATERIALS TO THEIR ORIGINAL CONDITION OR BETTER. PAYMENT FOR SAWING SHALL BE INCLUDED IN THE COST FOR THE REMOVAL OF EACH ITEM, AND REPLACEMENT WILL BE PAID FOR UNDER THE RESPECTIVE THEN IN THE CONTRACT UNLESS OTHERWISE INDICATED. SAWCUTTING FOR PATCHES WILL BE INCLUDED IN THE COST OF THE PATCHING ITEM.

PROJECT SAFETY

BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

WHEN MILLED PAYEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR SHALL COMPLY WITH AND OBSERVE THE RULES AND REGULATIONS OF O.S.H.A. AND APPROPRIATE AUTHORITIES REGARDING SAFETY PROVISIONS. THE CONTRACTOR, ENGINEER, AND OWNER SHALL EACH BE RESPONSIBLE FOR THEIR OWN RESPE

THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS, OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE DOCUMENTS AND SPECIFICATIONS.

SPECIAL PROJECT NOTES

- 1) DRIVEWAY REPAIR BETWEEN THE CURB AND THE PROPERTY LINE SHALL BE COMPLETED PER THE TOWN ORDINANCE. THE INSTALLATION IS DETAILED IN THESE PLANS AND IN THE SPECIAL PROVISIONS.
- 2) ALL SAWCUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS FOR WHICH THE WORK APPLIES.
- 3) ALL EXISTING FRAMES AND LIDS THAT ARE TO BE REPLACED
- (AS DIRECTED BY THE ENGINEER), SHALL BE SALVAGED TO THE CONTRACTOR.
- 4) ALL METERS, VALVES, AND BUFFALO BOXES WITHIN SIDEWALK AND DRIVEWAY REMOVAL LIMITS SHALL BE
- 5) ALL AT&T MANHOLES TO BE ADJUSTED (BY OTHERS).
- 6) MEET EXISTING CURB AND FLOW LINE ELEVATIONS AT SIDE STREET APPROACHES.
- 7) ALL CURBLINE INLETS AND CATCH BASINS ON THIS PROJECT FLOW TO A COMBINED SEWER ALL WORK SHALL CONFORM TO ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (M.W.R.D.) STANDARDS. THE FINAL OUT FLOWING PIPE FROM ANY INLET OR CATCH BASIN STRUCTURE THAT WILL FLOW TO THE COMBINED SEWER SHALL BE TRAPPED AS DETAILED ON SHEET 5. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CATCH BASIN REPLACEMENT.
- 8) ABANDONED STORM SEWER PIPE SHALL BE PLUGGED WITH CONCRETE MORTAR. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE REPLACEMENT STRUCTURE.
- 9) PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL, VARIABLE DEPTH, SHALL BE MEASURED IN PLACE AT THE TIME OF CONSTRUCTION. DURING CONSTRUCTION OF THE HOT-MIX SURFACE REMOVAL, 3 INCH, PAY ITEM, A SMALL AMOUNT OF PCC BASE COURSE IS EXPECTED TO BE ENCOUNTERED. 1,200 SY HAS BEEN STIMATED FOR THIS WORK FOR BIDDING. EXACT AREA WILL BE DETERMINED AT THE TIME OF

MWRDGC NOTES

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO LOCAL SEWER SYSTEMS SECTION

TYPICAL GENERAL NOTES

- The MWRD Local Sewer Systems Section Field Office must be notified at least two (2) working days prior to the commencement of any work (call 708/588-4055).
- U.S.G.S. Elevation datum is Conversion equation is _____N/A
- 3. All floor drains shall discharge to the sanitary sewer system. (NOT APPLICABLE)
- 4. All downspouts and footing drains shall discharge to the storm sewer system. (NOT APPLICABLE)
- All sanitary sewer pipe materials and joints (and storm sewer pipe materials and joints in a combined sewer area) shall conform to:

Pipe Material Spec.	Joint Spec.
Vitrified Clay Pipe VCP (C-700) VCP (No-Bel)(C-700)	C-425
Joint Collar	C425 D1784
<u>Concrete Pipe (C-14)</u> RCP (C-76) ACP (C-428)	C-443 C-443 D-1869
ABS Sewer Pipe Solid Wall 6" dia. SDR 23.5 ABS D-2751	D-2751
ABS Composite/Truss Pipe 8" — 15" dia. ABS D—2680	D-2680
PVC Gravity Sewer Pipe 6" - 15" dia. SDR 26 D-2241 AWWA-C-900	D-3139 D-3139
18" - 27" dia. F/dy=46 F-679	D-3212 or D-2855
CISP A-74 DIP A-21.51	C-564 A-21.11

(Note: The District has approved less common pipe materials on a qualified basis in addition to those above. Please contact the District if considering using pipe not listed above.)

- All sanitary sewer construction (and storm sewer construction in combined sewer areas), requires stone bedding with stone 1/4" to 1" in size, with minimum bedding thickness equal to 1/4 the outside diameter of the sewer pipe, but not less than four (4) inches nor more than eight (8) inches. Materials shall be CA-11 or CA-13 and shall be extended at least 12" above the top of the pipe
- "Band-Seal" or similar flexible-type couplings shall be used in the connection of sewer pipe of dissimilar materials.
- When connecting to an existing sewer main by means other than an existing wye, tee, or an existing manhole, one of the following methods shall be used:
- Circular saw-cut of sewer main by proper tools ("Shewer-Tap" machine or similar) and proper instaliation of hub-wye saddle or hub-tee saddle. Remove an entire section of pipe (breaking only the
- top of one bell) and replace with a wye or tee branch
- 3. With pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting, using "Band-Seal" or similar couplings to hold it firmly in place.
- Wherever a sanitary/combined sewer crosses under a watermain, the minimum vertical distance from the top of the sewer to the bottom of the water man shall be 18 inches. Furthermore, a minimum horizontal distance of 10 feet between sanitary/combined sewers and watermains shall be maintained unless: the sewer is laid in a separate trench, keeping a minimum 18" vertical separation; or the sewer is laid in the same trench with a watermain located at the opposite side on a bench of undisturbed earth, keeping of minimum 18" vertical separation. If either the vertical or horizontal distances described above cannot be maintained or the <u>sewer crosses above the</u> <u>watermain</u>, the sewer shall be constructed to watermain standards.
- 10. All existing septic systems shall be abandoned. Abandoned tanks shall be
- All sanitary manholes, and also storm manholes in combined sewer areas, shall have a minimum inside diameter of 48 inches, and shall be cast—in—place or pre—cast reinforced concrete. Resilient connectors, conforming to ASTM C—923, shall be used between manhole and pipe(s) for all sanitary and combined sewer

SUMMARY OF QUANTITIES

				 	Construct
					Code I000
pecialty	Special	ltem No.	Description	Unit	Quantit
Item	Provision	No	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	200
			AGGREGATE FOR TEMPORARY ACCESS	TON	200
			BITUMINOUS MATERIALS (PRIME COAT)	TON	5
			AGGREGATE (PRIME COAT)	TON	20
			MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5
			LEVELING BINDER (HAND METHOD), N70	TON	15
			LEVELING BINDER (MACHINE METHOD), N70	TON	550
			HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD TON	125 210
	SP		HOT-MIX ASPHALT REPLACEMENT OVER PATCHES HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1,000
		40603340	HOT-MIX ASPHALT SORFACE COOKSE, WILK D , N/O	1	1,000
		40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	10
			PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	650
			PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	17,000
		44000100	PAVEMENT REMOVAL	SQ YD	200
		44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	8,000
				_	
			DRIVEWAY PAVEMENT REMOVAL	SQ YD	650
			COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,800
			SIDEWALK REMOVAL	SQ FT SQ YD	17,000 900
			HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SQ YD	200
	ļ	44201753	CLASS D PATCHES, TYPE II, 9 INCH	1 30 10	200
	ļ	44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	400
	<u> </u>		CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	300
	SP	44300300	AREA REFLECTIVE CRACK CONTROL TREATMENT, SYSTEM A	SQ YD	6,400
	SP	56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	12
	SP	60202805	CATCH BASINS, TYPE A, SPECIAL, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	11
				FACIL	1
	SP		INLETS, TYPE A, SPECIAL, TYPE 1 FRAME, OPEN LID	EACH EACH	3
			CATCH BASINS TO BE ADJUSTED CATCH BASINS TO BE RECONSTRUCTED	EACH	4
-,			MANHOLES TO BE ADJUSTED	EACH	5
			MANHOLES TO BE RECONSTRUCTED	EACH	2
		00237300	INPARIOLES TO BE RECORDING CTED		
		60260100	INLETS TO BE ADJUSTED	EACH	2
	· · · · · · · · · · · · · · · · · · ·		VALVE VAULTS TO BE ADJUSTED	EACH	1
			VALVE VAULTS TO BE RECONSTRUCTED	EACH	1
	SP	60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20
		60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	10
				 	L
			FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10
	<u></u>		MOBILIZATION	L SUM	1
			TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
			TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
	<u> </u>	/0102640	ITAPPIC CONTROL AND PROTECTION, STANDARD 701001	LOUVI	t
	<u> </u>	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	800
	 		WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	800
*			THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	200
*			THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,400
·-, ·-					
*			THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,400
*		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	100
*	L		THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	200
	SP		HANDHOLE TO BE ADJUSTED	EACH	4
	SP	81400215	HEAVY-DUTY HANDHOLE TO BE ADJUSTED	EACH	1
- J	<u></u>	0000000	DETECTOR LOOP BERLACEMENT	FOOT	400
*	SP SP		DETECTOR LOOP REPLACEMENT PORTI AND CEMENT CONCRETE SUPEACE REMOVAL	SQ YD	1,200
	SP	XU321020	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (COLD MILLING) VARIABLE DEPTH	1 30 10	1,200
	SP	Y0326144	TACTILE/DETECTABLE WARNING SURFACE	SQ FT	170
*	SP		PAINT PAVEMENT MARKING CURB	FOOT	300
	SP		RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
	SP A		TRAINEES	HOUR	500
	 	l			
	SP		DOMESTIC WATER SERVICE BOX TO BE ADJUSTED (SPECIAL)	EACH	4
	SP.	XX006465	DOMESTIC WATER METER VAULT TO BE ADJUSTED (SPECIAL)	EACH	4
,	SP	XX104800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V.12	FOOT	1,800

D 4080

Frank Novotny & Associates, Inc. / | 825 Midway Drive + Willowbrook, IL + 60527 + Telephone: (630) 887-8640 + Fax: (630) 887-0132 ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-00092

REVISED - AMS 3/09/10 DESIGNED - AMS FILE NAME = USER NAME = REVISED -AMS 3/23/10DRAWN - BAH CHECKED - TPG REVISED PLOT SCALE : DATE - 1/28/10 REVISED -PLOT DATE =

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES. MWRDGC NOTES. SPECIAL PROJECT NOTES, AND SUMMARY OF QUANTITIES SHEET NO. OF SHEETS STA.

	F.A RTE.	SEC	TION	Τ	COUNTY		TOTAL SHEETS	SHE	
	2790	10-0021	Т	COOK		16	2		
					(CONTRA	СТ	NO. 6346	4
1	FED R	OM TRIC CAC	ILLINOIS	FFD	AID	PROJECT	ARA	-9003(64)	5)

BENCHMARKS

DESCRIPTION	ELEVATION
NNE BOLT ON F.H. AT 2822 S AUSTIN BOULEVARD	609.08
SW BOLT ON F.H. AT NW CORNER OF PARK AVENUE AND AUSTIN BOULEVARD	607.33

USER NAME =

PLOT SCALE = 1"-6

FILE NAME =

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

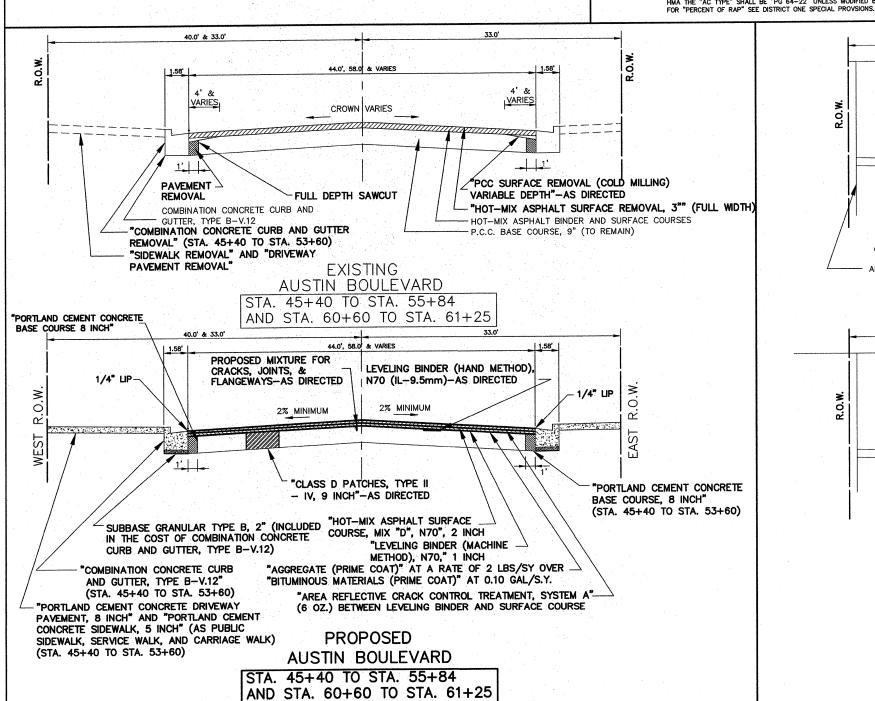
MIXTURE TYPE	PERCENT AIR VOIDS
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (IL-9.5mm)	4% @ 70 GYR
LEVELING BINDER (MACHINE METHOD), N70, 1" (IL-9.5mm)	4% @ 70 GYR
LEVELING BINDER (HAND METHOD), N70 (IL—9.5mm)	4% @ 70 GYR
PATCHING	
CLASS D PATCHES, TYPE II - IV, 9", (HMA BINDER IL-19.0mm)	4% @ 70 GYR
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19.0mm)	

IMPORTANT!

FULL SIZE PLANS HAVE BEEN
PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED
SIZED PLANS WILL NOT CONFORM
TO STANDARD SCALES INDICATED
IN TITLE BLOCK.

THE UNIT WEIGHT TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG70-22" AND NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROMISIONS.

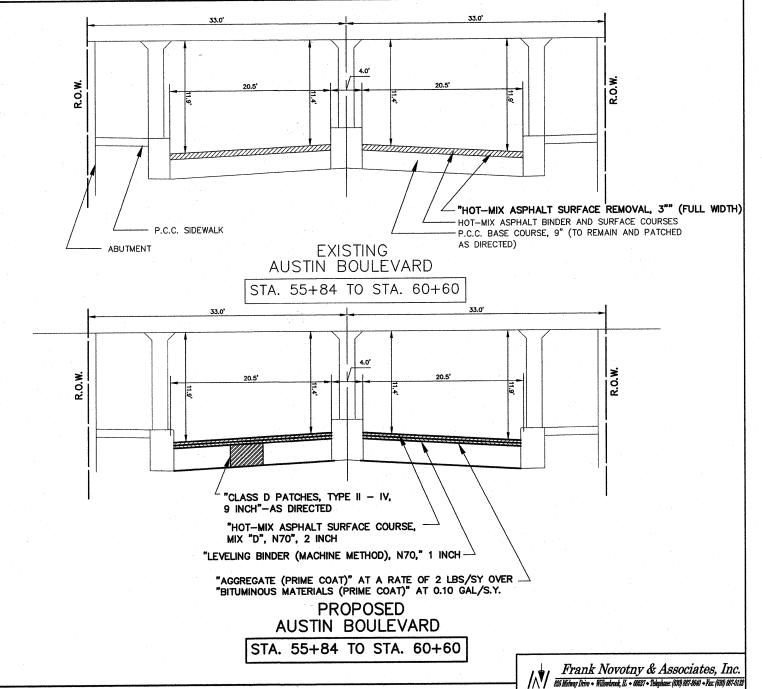


DRAWN - BAH

CHECKED - TPG

- 1/28/10

DATE



TYPICAL CROSS SECTIONS

REVISED - AMS 3/09/10 REVISED - AMS 3/23/10

REVISED

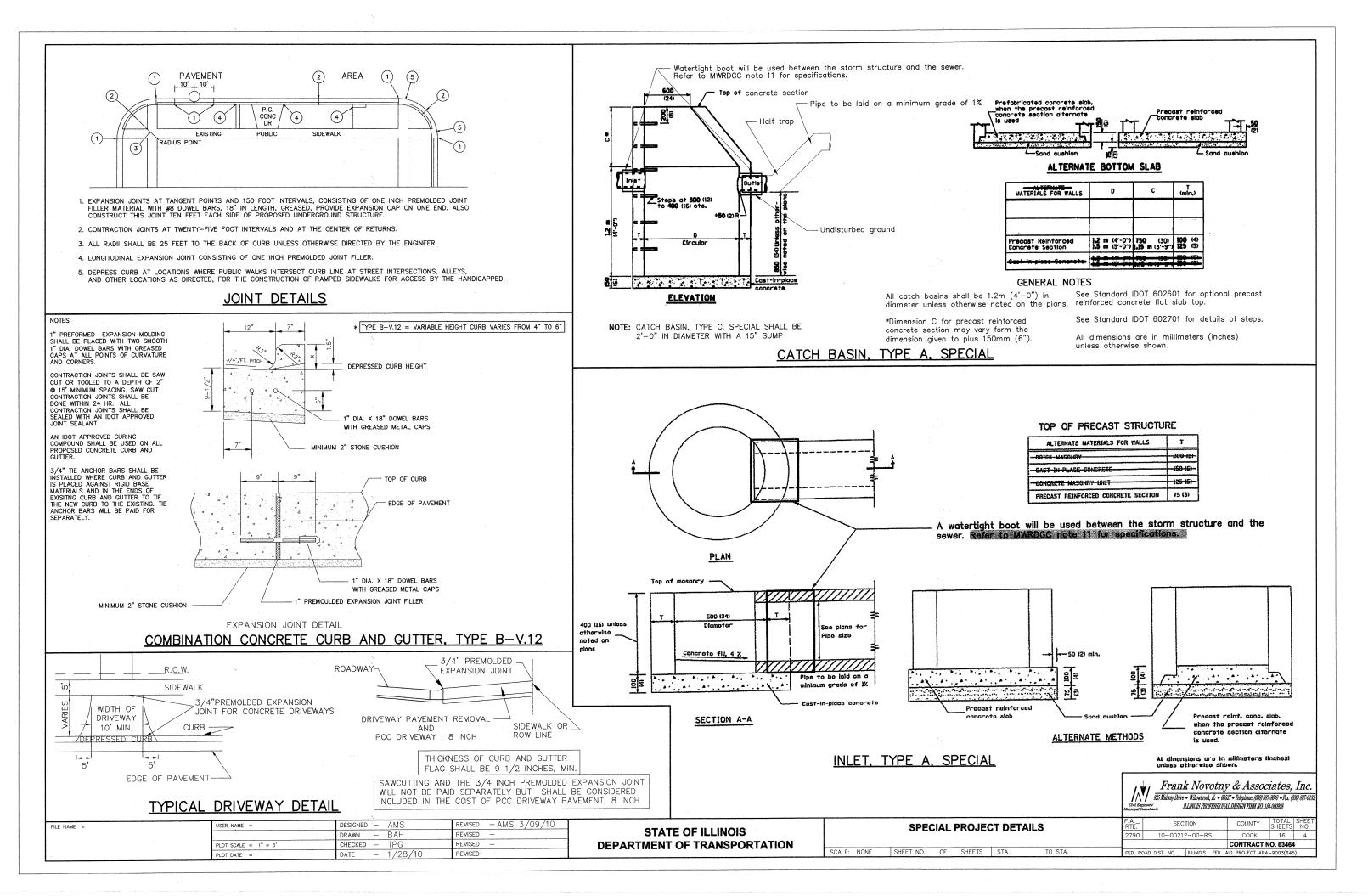
REVISED -

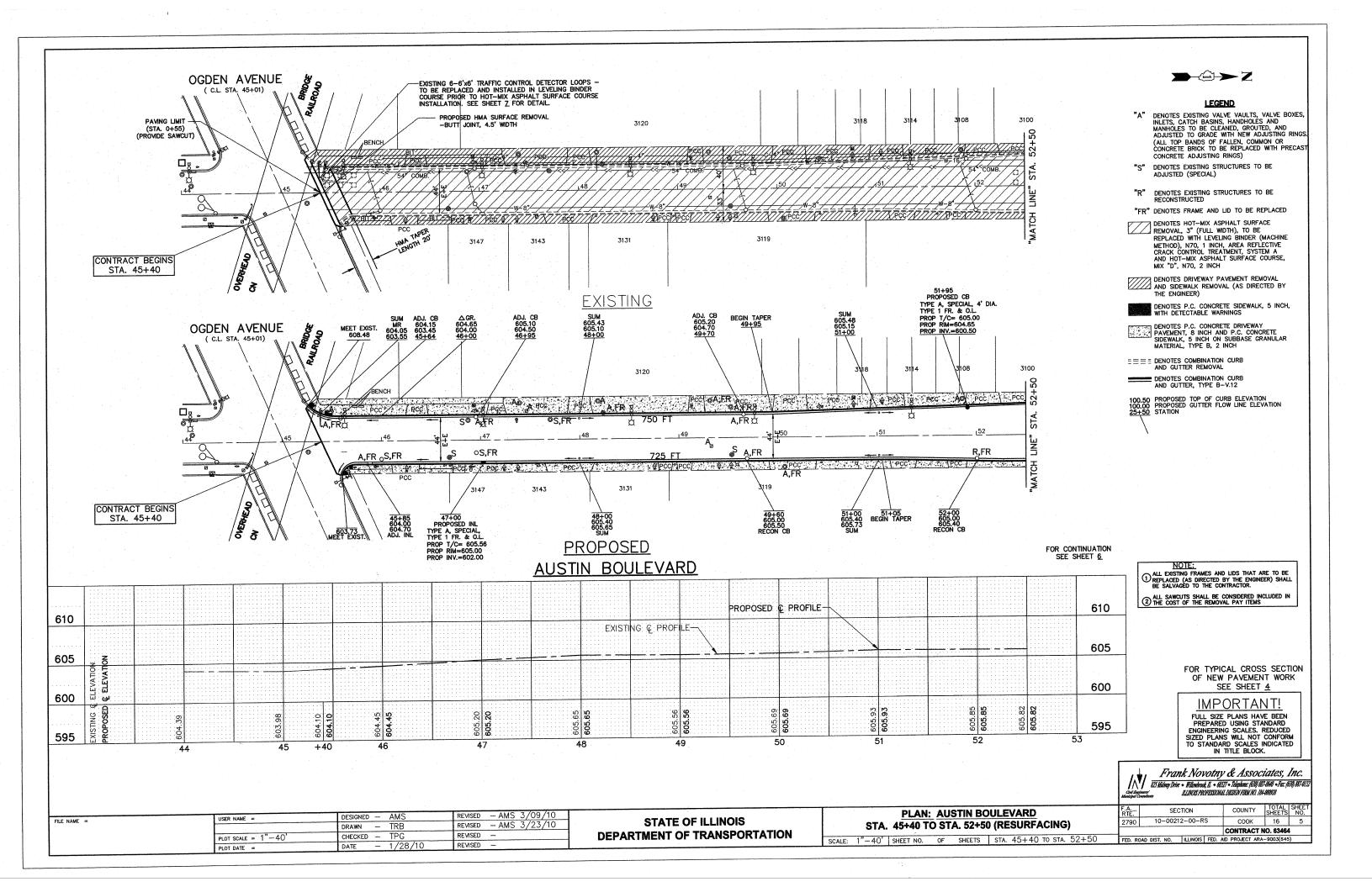
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

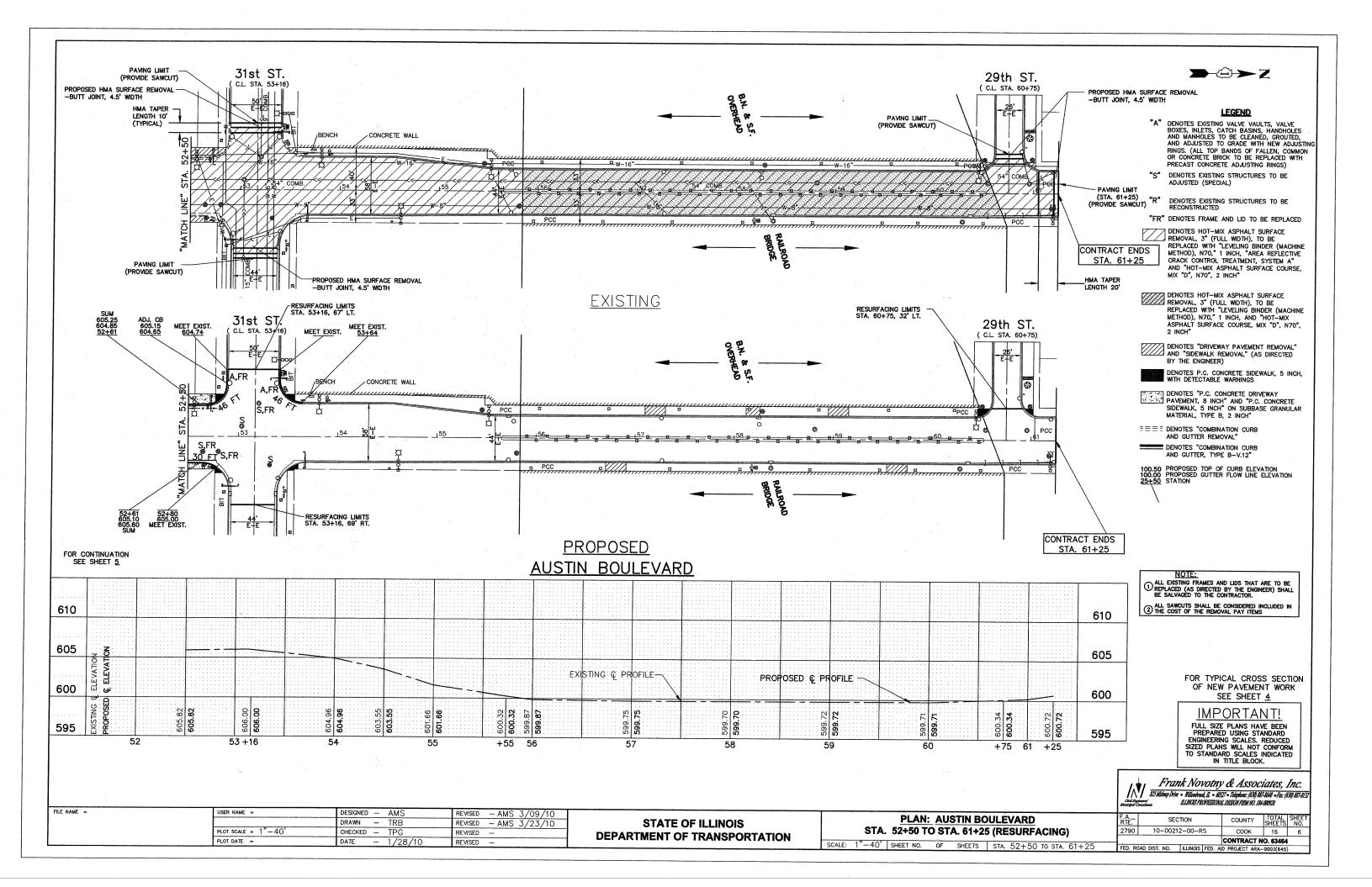
TYP ICAL CROSS SECTIONS, BENCHMARKS, AND HOT-MIX ASPHALT MIXTURE REQUIREMENTS

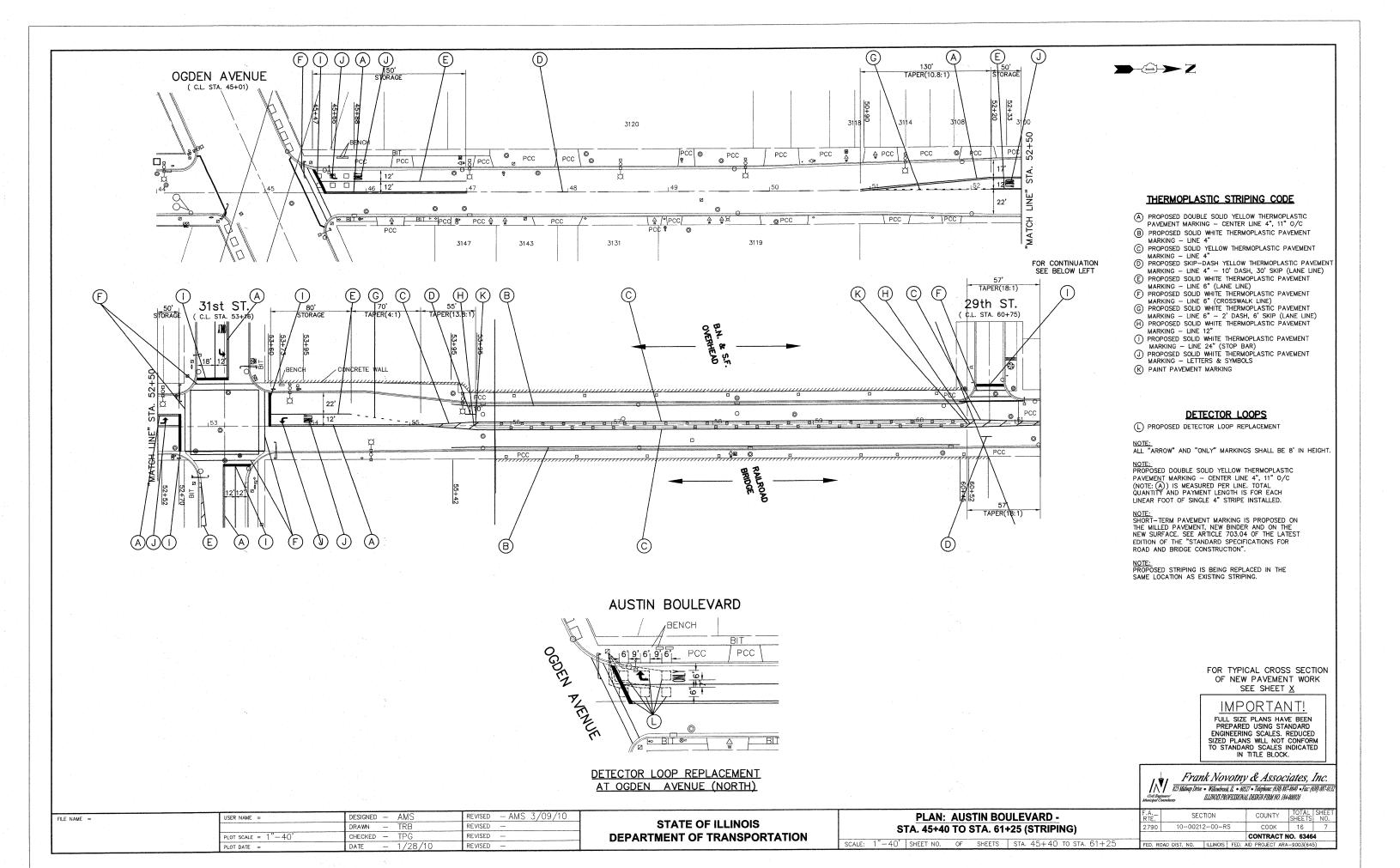
SCALE: 1"-6' SHEET NO. OF SHEETS STA. TO STA.

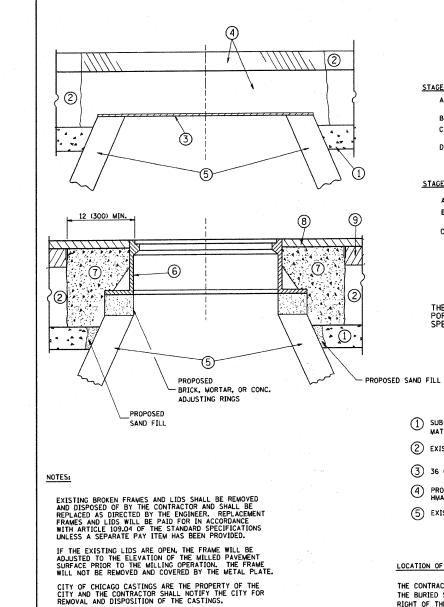
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928











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 11/2 (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 SI CONCRETE, OR HMA SURRACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURRACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 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.

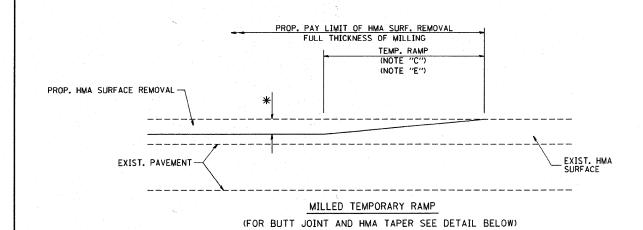
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

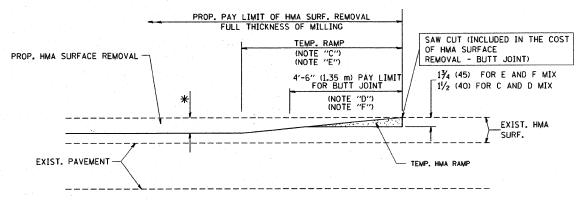
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95		DETAILS FOR	F.A. SECTION COUNTY TOTAL SHEET NO.
W:\diststd\22x34\bd08.dgn	diststd\22x34\bd08.dgn DRAWN		REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	FRAMES AND LIDS ADJUSTMENT WITH MILLING	2790 10-00212-00-RS COOK 16 8
	PLOT SCALE = 50.0000 '/ IN.	CHECKED ~	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION		BD600-03 (BD-8) CONTRACT NO. 63464
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-9003(645)



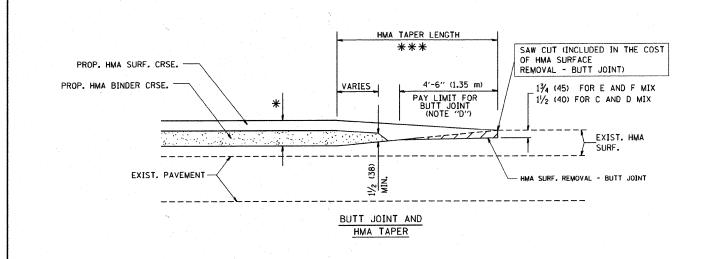
OPTION 1



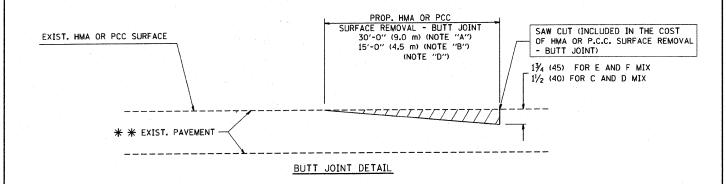
HMA CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

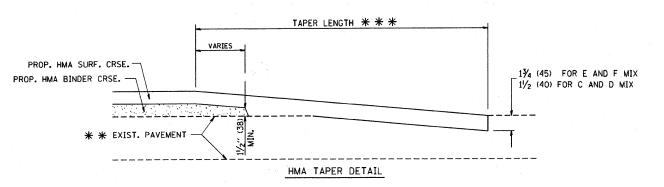
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

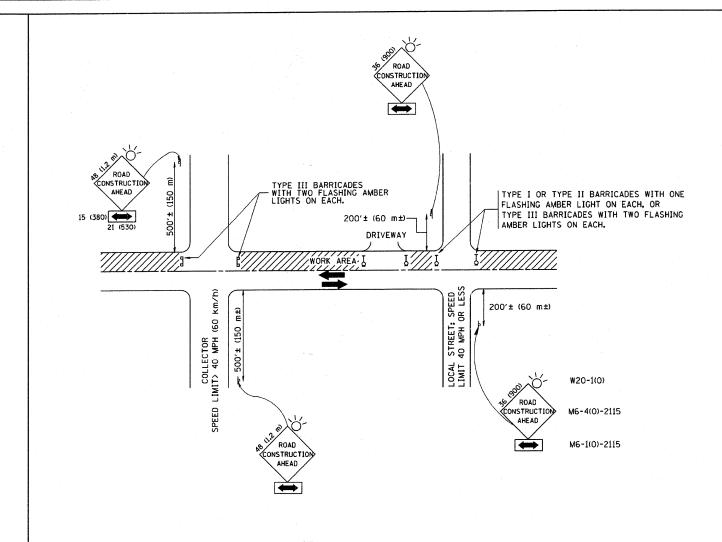
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0"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

BASIS OF PAYMENT:

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

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

USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 SECTION COUNTY FILE NAME = **BUTT JOINT AND** STATE OF ILLINOIS REVISED - A. ABBAS 03-21-97 10-00212-00-RS COOK 16 9 vi:\diststd\22x34\bd32.dgn DRAWN 2790 HMA TAPER DETAILS **DEPARTMENT OF TRANSPORTATION** CHECKED REVISED - M. GOMEZ 04-06-01 BD400-05 BD32 CONTRACT NO. 63464 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. PLOT DATE = 1/4/2008 DATE - 06-13-90 REVISED - R. BORO 01-01-07 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT ARA-9003(645)



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

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG 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 × 48 (1.2 m × 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD).
 THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD
 CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS. OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches)

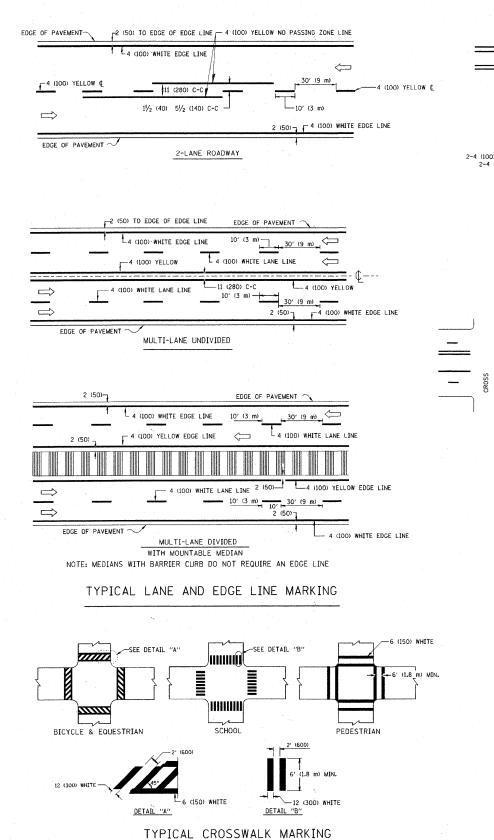
COUNTY TOTAL SHEET NO.

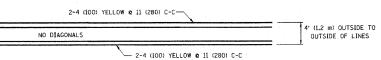
COOK 16 10

DESIGNED - LHA REVISED - J. OBERLE 10-18-95 FILE NAME = USER NAME = gaglianobt DRAWN REVISED - A. HOUSEH 03-06-96 \diststd\22x34\tc10.dgn CHECKED -REVISED - A. HOUSEH 10-15-96 PLOT SCALE = 50.000 '/ IN. REVISED -T. RAMMACHER 01-06-0 PLOT DATE = 1/4/2008 DATE - 06-89

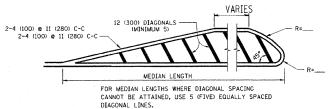
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

Canadracon		TRAFFIC CONTRO	L AND P	ROTECTI	ON FOR	F.A RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
ar and						2790	10-00212-00-RS	COOK	16	10
-							NO.	63464		
į	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-9003				



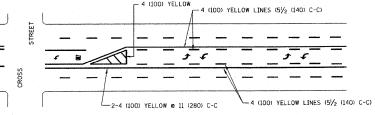


4' (1.2 m) WIDE MEDIANS ONLY

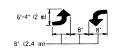


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

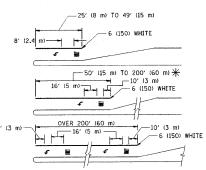


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

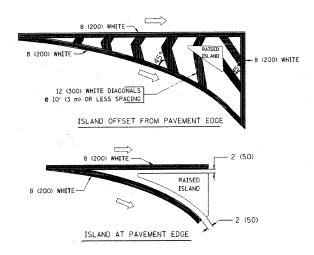


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. $\ \ \uparrow \$ AREA = 15.6 SQ. FT. (1.5 m²)) AREA = 20.8 SQ. FT. (1.9 m²)

 \divideontimes Turn lanes in excess of 400' (120 m) in length may have an additional set of arrow - "only" installed midway between the other two sets of ARROW - "ONLY".

TYPICAL LEFT (OR RICHT) TURN LANE

ΤY



TYPICAL ISLAND MARKING

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 e 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 MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EDUESTRIAN) 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' (500) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, 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 0F: "R"-3.6 SO. FT. (0.33 m ²) EACH "X"-54.0 SO. FT. (5.0 m ²)
SHOULDER DIAGONALS	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 (0VER 45MPH (70 km/h))

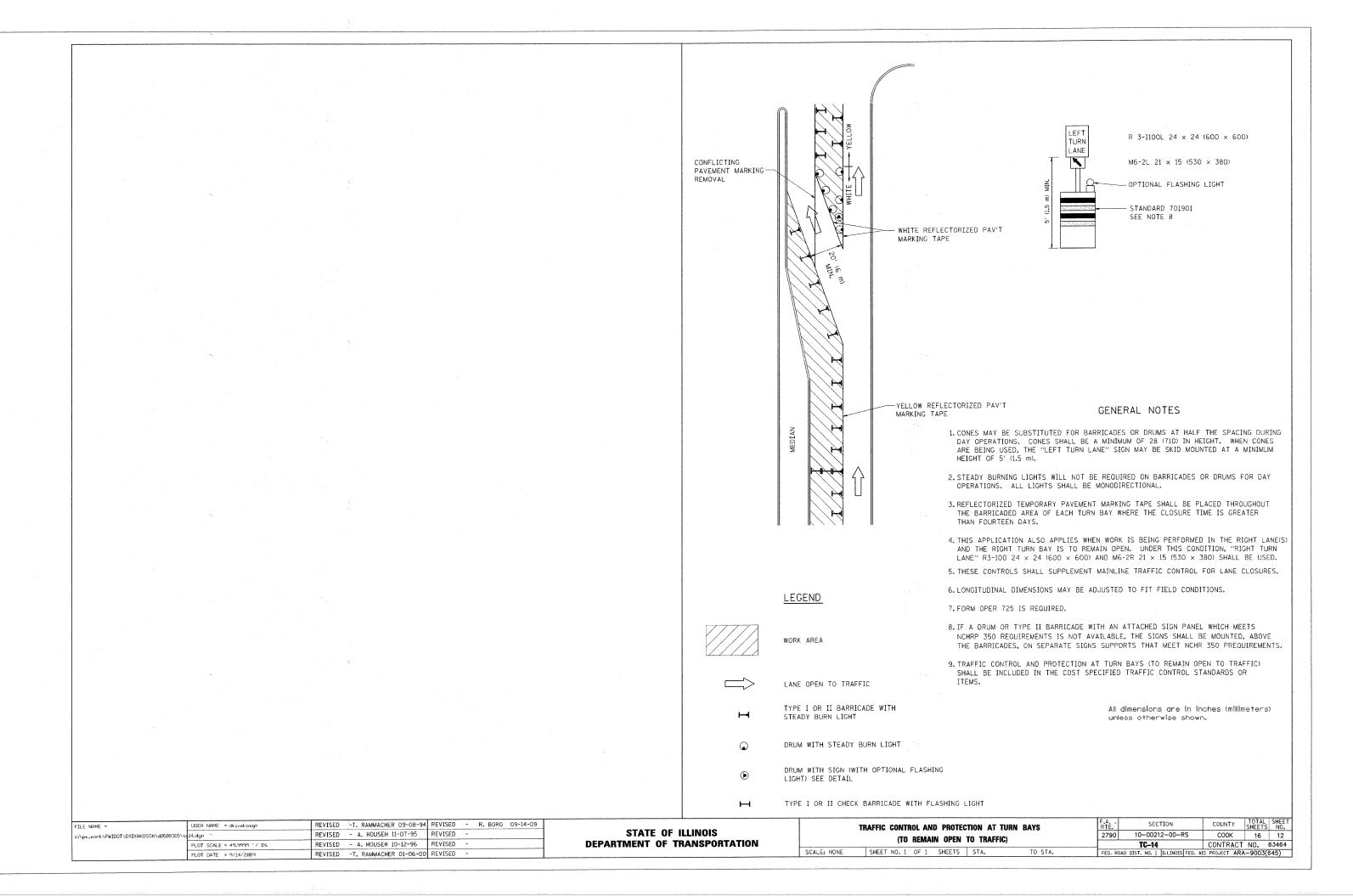
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

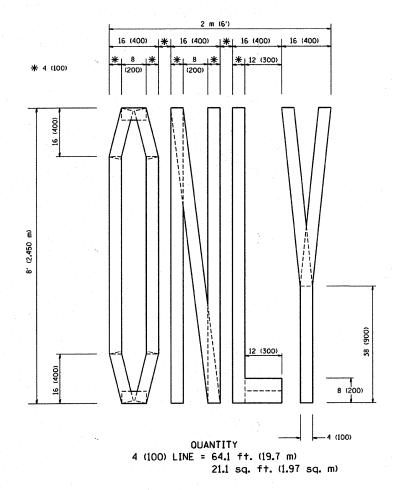
	LARGE SIZE	SMALL SIZE
THROUGH ARROW	1.07 (11.5)	0.60 (6.5)
LEFT OR RIGHT ARROW	1.47 (15.6)	0.60 (6.5)
COMBINATION LEFT (RIGHT) AND THROUGH ARROW	2.42 (26.0)	1.37 (14.7)
RAILROAD "R" 1.8m (6ft.)	0.33 (3.6)	_
RAILROAD "X" 6.1m (20ft.)	5.02(54.0)	-
HANDICAPPED SYMBOL	0.43 (4.6)	

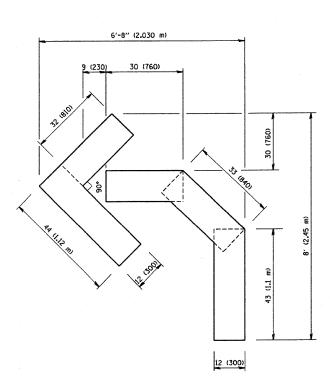
All dimensions are in inches (millimeters) unless otherwise shown.

				URN LANE
/PI	CAL	TURN	LANE	MARKI

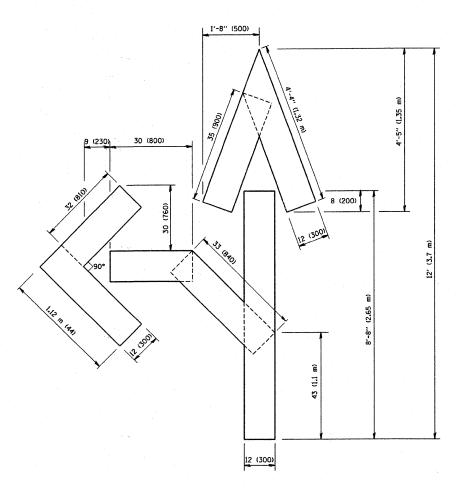
								·	,
FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE TYPICAL PAVEMENT MARKINGS		SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\drivakosgn\d0108315\tc	l3.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09	STATE OF ILLINOIS			10-00212-00-RS	соок	16 11
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			TC-13	CONTRACT	NO. 63464
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT ARA	A-9003(645)







OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

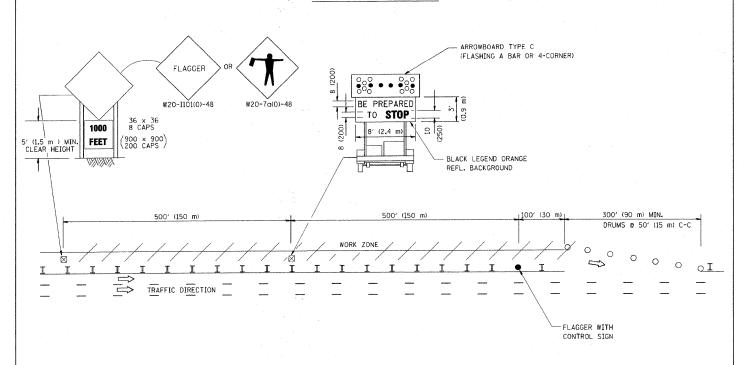
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00

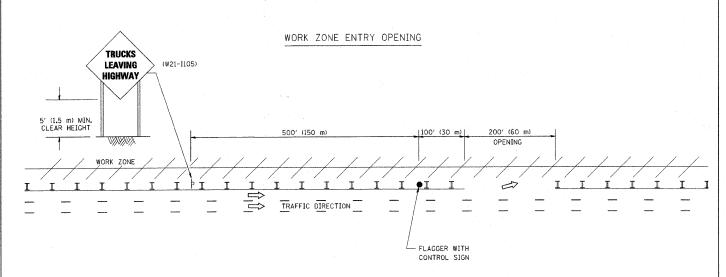
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
FOR TRAFFIC STAGING				2790	10-00212-00-RS	COOK	16	13		
					TC-16	CONTRACT	NO.	3464		
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. AT	D PROJECT ARA	-9003(645)

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



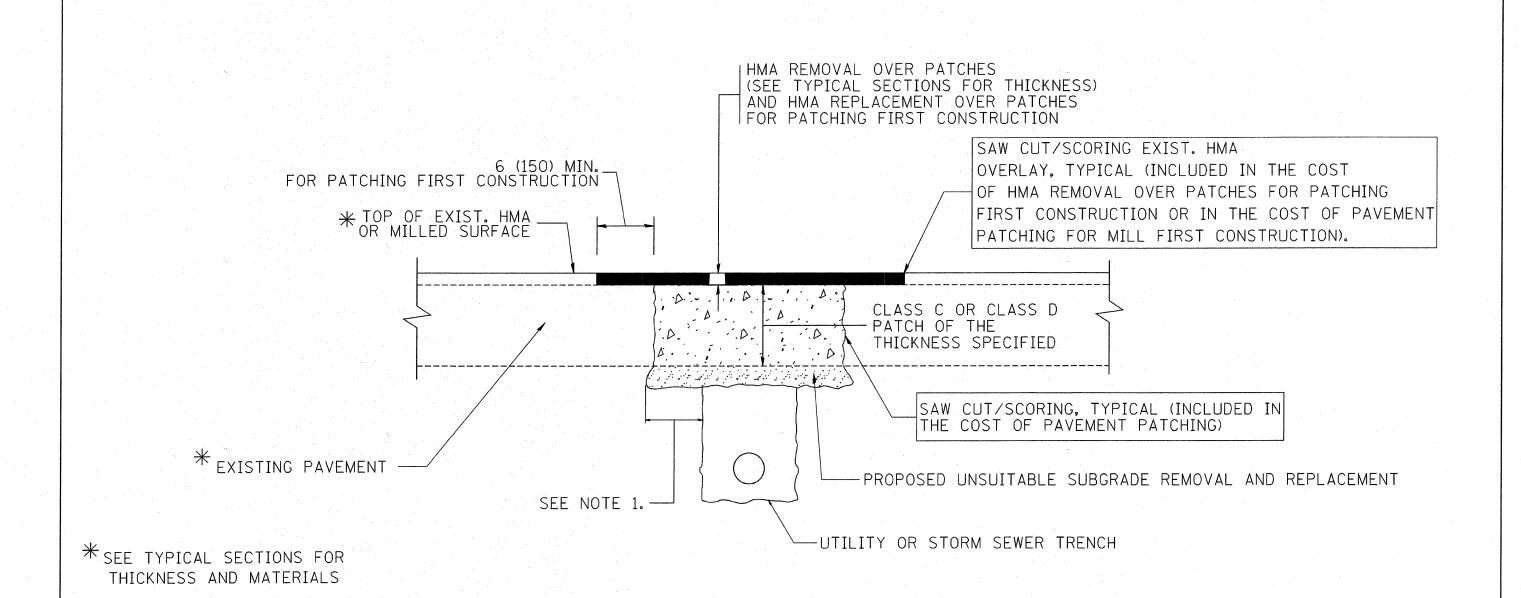


NOTES:

- 1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = leyso	DESIGNED -	REVISED - J.A.F. 04-03		SIGNING FOR FLAGGING OPERATIONS	F.A RTE.	SECTION	COUNTY TOTAL	TS NO.
W:\diststd\22x34\tc18.dgn		DRAWN -	REVISED - J.A.F. 02-06	STATE OF ILLINOIS	AT WORK ZONE OPENINGS	2790	10-00212-00-RS	COOK 16	14
	PLOT SCALE = 50.000 '/ IN.	CHECKED	REVISED - S.P.B. 01-07	DEPARTMENT OF TRANSPORTATION			TC-18	CONTRACT NO.	63464
	PLOT DATE = 1/26/2010	DATE -	REVISED - S.P.B. 12-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. AL	D PROJECT ARA-900	3(645)



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 41/2 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.

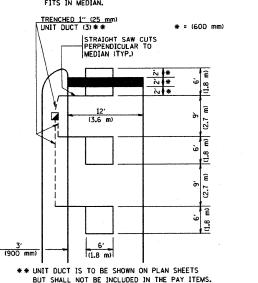
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		F.A. SECTION	COUNTY TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				2790 10-00212-00-RS	COOK 16 15
	PLOT SCALE = 50.000 ' / IN.	CHECKED ~	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT NO. 63464
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 10' (1.5 m) (1.8 m) (1.5 m) * 10' (3.0 m) (3.0 m) 10' W* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

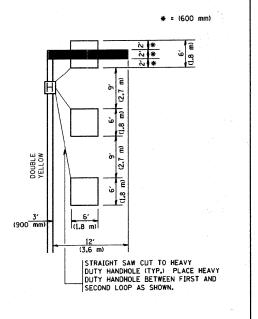
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
BI4001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



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

LE<u>FT TURN LANES WITHOUT MEDIANS</u> VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

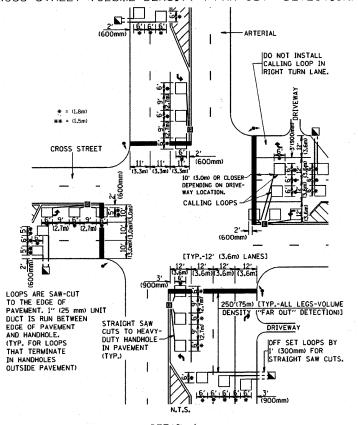
(PROTECTED / PERMITTED LEFT TURN PHASING)

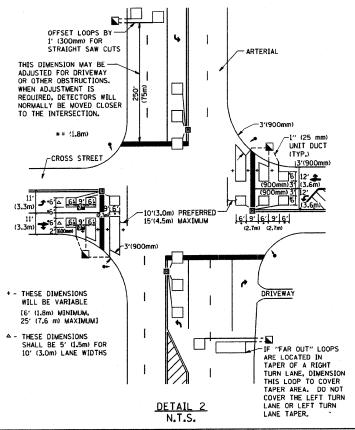


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

ILE NAME =	USER NAME = gaglianobt	DESIGNÉD -	REVISED -
Vi\distatd\22×34\ts07.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	DLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION				RTE. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
,	DETAILS FOR ROADWAY RESURFACING					COOK	16	16
						CONTRACT	NO. 6	3464
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. 1 ILLINOIS FED. A	D PROJECT AR	A-9003	(645)