08-02-13 LETTING ITEM 033

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2783	09-00054-00-RS	COOK	16	1
F.H.W.A. REG.	ILLINOIS	PROJECT	M-9003(647)	

CONTRACT NO. 63481

INDEX OF SHEETS

1.) COVER SHEET, INDEX OF SHEETS, INDEX OF DISTRICT 1 DETAILS, INDEX OF HIGHWAY STANDARDS, LOCATION MAP,
2.) GENERAL NOTES, SPECIAL PROJECT NOTES, MWRDGC NOTES
3.) SUMMARY OF QUANTITIES
4.) TYPICAL SECTIONS, HOT-MIX ASPHALT MIXTURE REQUIREMENTS
5.) SPECIAL PROJECT DETAILS
6.) PLAN: RIDGELAND AVENUE (RESURFACING) - 43RD STREET TO PERSHING ROAD (FAU 1477)
7.) PLAN: RIDGELAND AVENUE (PAVEMENT MARKINGS) - 43RD STREET TO PERSHING ROAD (FAU 1477)

INDEX OF DISTRICT 1 DETAILS

8.) BD-08 DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING
9.) BD-22 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
10.) BD-32 BUTT JOINT AND HMA TAPER DETAILS
11.) TC-10 TRAFFIC CONTROL & PROTECTION FOR SIDE ROADS, INTERSECTIONS, & DRIVEWAYS
12.) TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
13.) TC-14 TRAFFIC CONTROL & PROTECTION AT TURN BAYS
14.) TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
15.) TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
16.) TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

INDEX OF HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVATIONS, AND PATTERNS
424001-07	PERPENDICULAR CURB RAMPS
424026-01	ENTRANCE/ALLEY PEDESTRAIN CROSSINGS
442201-03	CLASS C AND D PATCHES
604001-03	FRAMES & LIDS-TYPE 1
606001-05	CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2 L, 2 W UNDIVIDED
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
780001-03	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTOR LOOPS

TRAFFIC DATA

ADT:
RIDGELAND AVENUE 5,600 (2012)

DESIGN DESIGNATION

COLLECTOR

POSTED SPEED
20 MPH (EXISTING)
20 MPH (PROPOSED)

DESIGN SPEED
20 MPH (EXISTING)
20 MPH (PROPOSED)

0 100' 200' 300' 1"=100'
0 10' 20' 30' 1"=10'
0 50' 100' 1"=50'
0 50' 100' 1"=40'
0 50' 100' 1"=30'
0 50' 100' 1"=20'

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
811
Know what's below.
Call before you dig.

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847)705-4406 SCHAUMBURG, IL.

Frank Novotny & Associates, Inc.
Civil Engineers/ Municipal Consultants
825 Midway Drive ◆ Willowbrook, IL ◆ 60527 ◆ Telephone: (630) 887-8640 ◆ Fax: (630) 887-0132
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928

FNA PROJECT NO. 09227 | DRAWN/DESIGNED JFP/AMS | CHECKED/APPROVED TPG/TPG

REVISIONS

NO.	BY	DATE	DESCRIPTION
1	TPG	2-12-13	PER I.D.O.T. REVIEW
2	TPG	2-25-13	PER I.D.O.T. REVIEW
3	TPG	5-06-13	PER I.D.O.T. REVIEW
4	TPG	5-16-13	PER I.D.O.T. REVIEW

CONTRACT NO. 63481

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

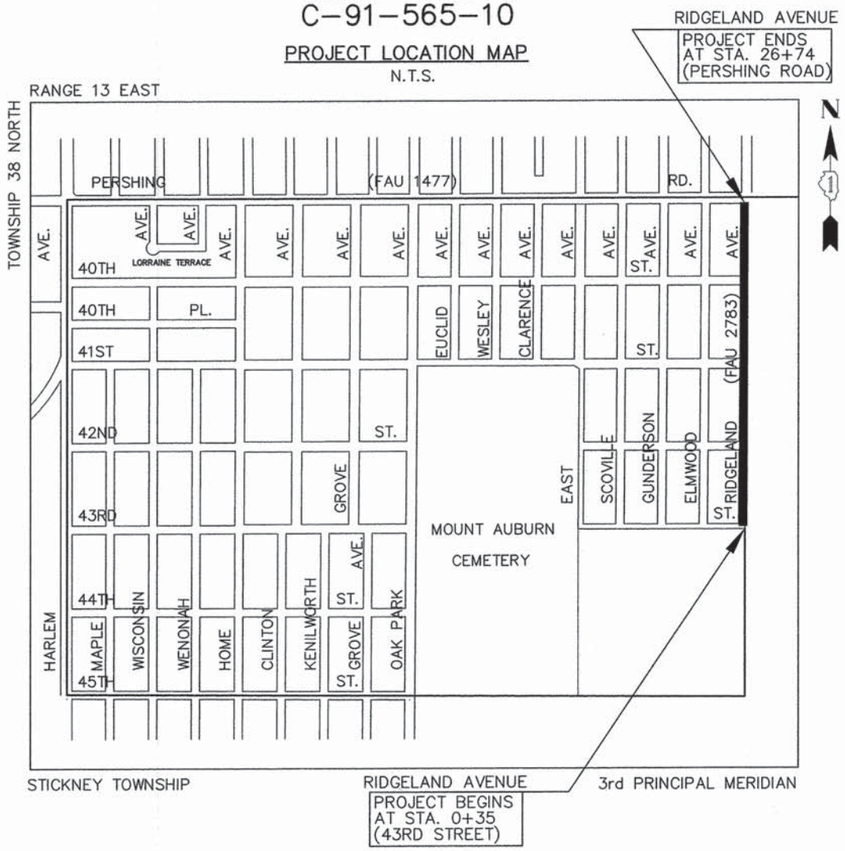
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU RTE. 2783 (RIDGELAND AVENUE)
FROM 43RD STREET TO FAU 1477 (PERSHING ROAD)

RESURFACING

PROJECT M-9003(647)
SECTION 09-00054-00-RS
VILLAGE OF STICKNEY
COOK COUNTY
C-91-565-10

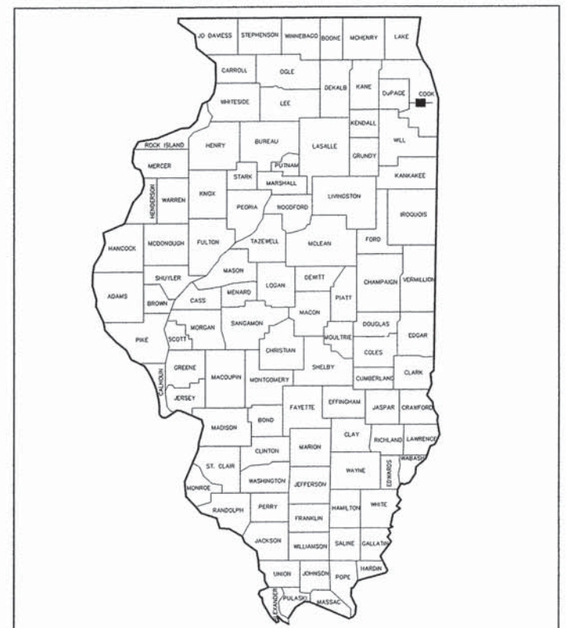
PROJECT LOCATION MAP
N.T.S.



DENOTES LOCATION OF IMPROVEMENT

LENGTH OF PROJECT

GROSS LENGTH OF PROJECT 2639 FEET (0.4998 MILES)
NET LENGTH OF PROJECT 2639 FEET (0.4998 MILES)



LOCATION OF SECTION INDICATED THUS: -■-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED MAY 16, 2013
VILLAGE OF STICKNEY
DEBORAH MORELLI, VILLAGE PRESIDENT

PASSED May 23 2013
C.J. HOLT
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW May 23 2013
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

TIMOTHY P. GEARY, P.E.
IL/P.E. NO. 062-043796
EXPIRES 11-30-2013
5-16-13
DATE

062-043796 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
SEAL

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL CONSTRUCTION NOTES
PAVING AND STORM SEWERS

SPECIFICATIONS
THE JANUARY 1, 2012 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, WATER VALVES, MANHOLES, CATCH BASINS, INLETS, BUFFALO BOXES, AND OTHER STRUCTURES ARE NOT DAMAGED OR REMOVED. ANY 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.

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 SUCH FACILITIES IN THE FIELD.

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".

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 CONTRACT, 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".

SUPERINTENDENCE
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 SAWED 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 ITEMS IN THE CONTRACT UNLESS OTHERWISE INDICATED. SAWCUTTING FOR PATCHES WILL BE INCLUDED IN THE COST OF THE PATCHING ITEM.

PROJECT SAFETY
WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 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 SLOPED A MINIMUM 1:3 (V:H).

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 RESPECTIVE AGENTS AND EMPLOYEES.

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.

MWRDGC GENERAL NOTES

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
LOCAL SEWER SYSTEMS SECTION

TYPICAL GENERAL NOTES

1. 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).
2. Elevation datum is USGS. Conversion equation is N/A.
3. No floor drains
4. No footing drains/downspouts
5. 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)	C-425
VCP (No-Bel)(C-700)	
Joint	C-425
Collar	D-1784
Concrete Pipe (C-14)	C-443
RCP (C-76)	C-443
ACP (C-428)	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-3212 or
D-3034	D-2855
PVC Gravity Sewer Pipe	
Pressure Pipe	
6" - 15" dia. SDR 26	D-3212 or
D-3034	D-2855
18" - 27" dia. F/dy=46	
F-679	D-3212 or D-2855
CISP A-74	C-564
DIP A-21.51	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.)

6. 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 when using PVC.
7. Non-shear flexible-type couplings shall be used in the connection of sewer pipes of dissimilar materials.
8. 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:
   1. Circular saw-cut of sewer main by proper tools ("Shewer-Tap" machine or similar) and proper installation of hub-wye saddle or hub-tee saddle.
   2. Remove an entire section of pipe (breaking only the top of one bell) and replace with a wye or tee branch section.
   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.
9. Wherever a sanitary/combined sewer crosses under a water main, the minimum vertical distance from the top of the sewer to the bottom of the water main shall be 18 inches. Furthermore, a minimum horizontal distance of 10 feet between sanitary/combined sewers and water mains 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 water main located at the opposite side on a bench of undisturbed earth, keeping a minimum 18" vertical separation. If either the vertical or horizontal distances described above cannot be maintained or the sewer crosses above the water main, the sewer shall be constructed to water main standards.
10. All existing septic systems shall be abandoned. Abandoned tanks shall be filled with granular materials or removed.
11. All sanitary manholes (and 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. Additionally, all pipe to structure connections shall include a watertight resilient rubber boot conforming to ASTM C-923.
12. Except for foundation/footing drains provided to protect buildings, drain tiles/field tiles/underdrains/perforated pipes are not allowed to be connected to or tributary to combined sewers, sanitary sewers, or storm sewers tributary to combined sewers in combined sewer areas. Construction of new facilities of this type is prohibited; and all existing drain tiles and perforated pipes encountered within the project area shall be plugged or removed, and shall not be connected to combined sewers, sanitary sewers, or storm sewers tributary to combined sewers.

SPECIAL PROJECT NOTES

1) ALL SAWCUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS FOR WHICH THE WORK APPLIES.
2) ALL EXISTING FRAMES AND LIDS THAT ARE TO BE REPLACED (AS DIRECTED BY THE ENGINEER), SHALL BE SALVAGED TO THE CONTRACTOR.
3) ALL COMED HANDHOLES AND MWRDGC MANHOLES TO BE ADJUSTED (BY OTHERS).
4) MEET EXISTING CURB AND FLOW LINE ELEVATIONS AT REPLACEMENT LIMITS.
5) ALL CURBLINE INLETS 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.
6) ALL PROPOSED STORM SEWER LATERAL RECONNECTION PIPE SHALL BE PVC (SDR 26), ASTM D-2241, 8" DIA. AND SHALL BE INSTALLED WITH "INLETS, TYPE A, TYPE 1 FRAME, OPEN LID". NEW "STORM SEWER (WATER MAIN REQUIREMENTS) 8 INCH" PIPE SHALL BE CONNECTED TO EXISTING STORM SEWER PIPE USING A NON-SHEAR "BAND SEAL" CONNECTION.
7) DRAINAGE STRUCTURE FABRICATION WILL NOT COMMENCE PRIOR TO FIELD VERIFICATION OF PIPE CONNECTIONS BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

Frank Novotny & Associates, Inc.
Civil Engineers' Municipal Consultants
825 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-002928

FILE NAME: VILLAGE OF STICKNEY / RIDGELAND AVENUE / 43RD STREET TO PERSHING ROAD / #09227	USER NAME =	DESIGNED - AMS	REVISED - AMS 5-16-13
		DRAWN - JFP	REVISED -
	PLOT SCALE =	CHECKED - TPG	REVISED -
	PLOT DATE =	DATE - 1/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, SPECIAL PROJECT NOTES, MWRDGC NOTES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	2
		CONTRACT NO. 63481		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-9003(647)	

Specialty Item	Special Provision	Code No	Description	Unit	Construction Code Type 0005
		20800150	TRENCH BACKFILL	CU YD	5
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	40
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3
		25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	3
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3
		25200100	SODDING	SQ YD	450
		25200200	SUPPLEMENTAL WATERING	UNIT	10
		40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1950
		40600300	AGGREGATE (PRIME COAT)	TON	15
		40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	10
		40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	725
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	60
		40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1500
		42000300	PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	130
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2000
		42400800	DETECTABLE WARNINGS	SQ FT	170
		44000100	PAVEMENT REMOVAL	SQ YD	130
		44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	12800
		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1000
		44000600	SIDEWALK REMOVAL	SQ FT	2000
		44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	100
		44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	200
		44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	300
		55100300	STORM SEWER REMOVAL 8"	FOOT	10
		60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	2
		60250200	CATCH BASINS TO BE ADJUSTED	EACH	4
		60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1

Specialty Item	Special Provision	Code No	Description	Unit	Construction Code Type 0005
		60255500	MANHOLES TO BE ADJUSTED	EACH	4
		60260100	INLETS TO BE ADJUSTED	EACH	4
		60266100	VALVE VAULTS TO BE RECONSTRUCTED	EACH	1
		60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	5
		60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	5
		60500060	REMOVING INLETS	EACH	2
		60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1000
		67100100	MOBILIZATION	L SUM	1
		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701501	L SUM	1
		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701701	L SUM	1
		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701801	L SUM	1
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	200
*		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110
*		78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2010
*		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	585
*		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	140
*		78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	185
*		78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	50
*		78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	25
*		78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	25
*	SP	88600600	DETECTOR LOOP REPLACEMENT	FOOT	80
	SP	X0322916	PROPOSED STORM SEWER CONNECTION TO EXISTING STORM SEWER	EACH	2
	SP	X0795800	COARSE AGGREGATE	TON	100
		X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	7
	SP	Z0004510	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	SQ YD	220
	SP	Z0004544	HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL	SQ YD	220
	SP	Z0056604	STORM SEWER (WATER MAIN REQUIREMENTS) 8 INCH	FOOT	10

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885 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000628

FILE NAME: VILLAGE OF STICKNEY
RIDGELAND AVENUE
43RD STREET TO PERSHING ROAD
#09227

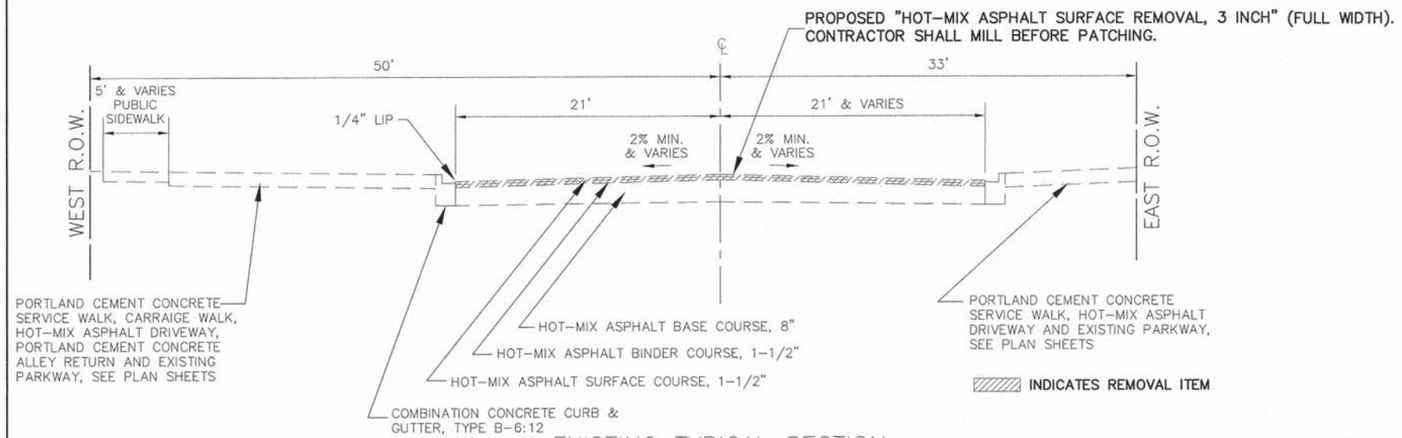
USER NAME = | PLOT SCALE = | PLOT DATE =
DESIGNED – AMS | DRAWN – JFP | CHECKED – TPG | DATE – 1/13
REVISED – AMS 5-06-13 | REVISED – AMS 5-16-13 | REVISED – | REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

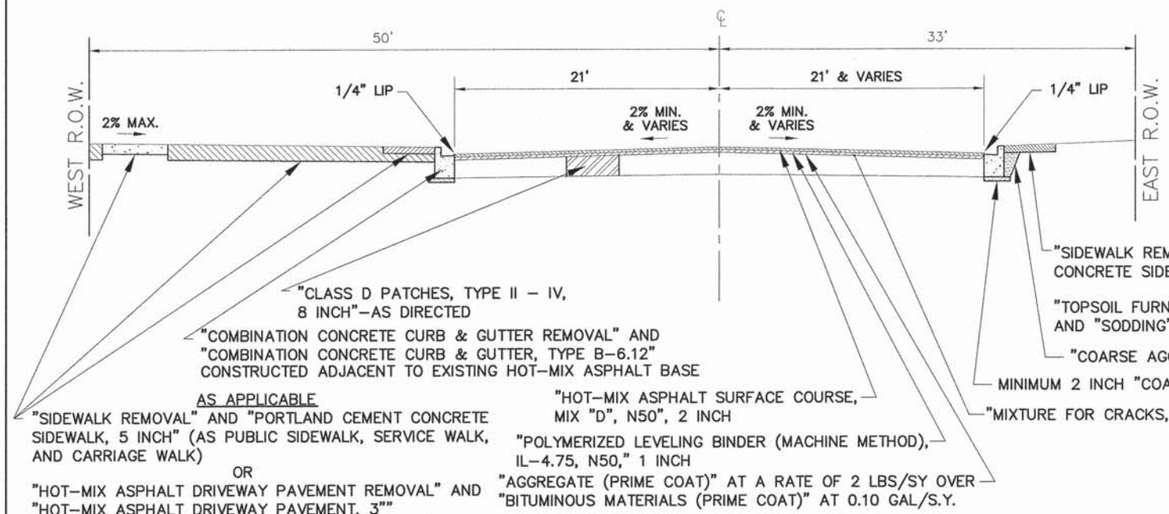
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	3
		CONTRACT NO. 63481		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-9003(647)	



EXISTING TYPICAL SECTION

RIDGELAND AVENUE – 43RD STREET TO PERSHING ROAD – STA. 0+35 TO STA. 26+74



PROPOSED TYPICAL SECTION

RIDGELAND AVENUE – 43RD STREET TO PERSHING ROAD – STA. 0+35 TO STA. 26+74

NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	PERCENT AIR VOIDS
ROADWAY	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL-9.5mm), 2"	4% @ 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"	3.5% @ 50 GYR
DRIVEWAYS	
HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (TO BE PLACED IN TWO EQUAL LIFTS)	4% @ 50 GYR
PATCHING	
CLASS D PATCHES, TYPE II-IV, 8", (HMA BINDER IL-19.0mm) (IN 2 LIFTS)	4% @ 70 GYR

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 PG 76-22" AND
FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22"
UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS"

"FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS"

IMPORTANT!

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

TYPICAL SECTIONS

SCALE: 1"=6'

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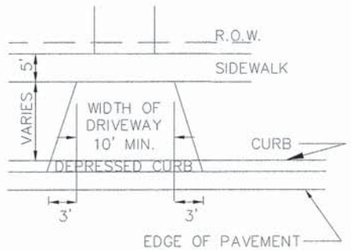
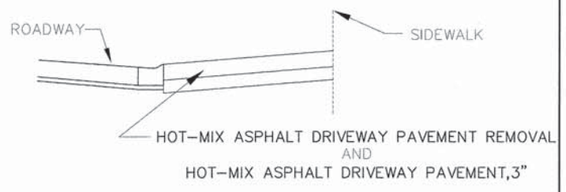
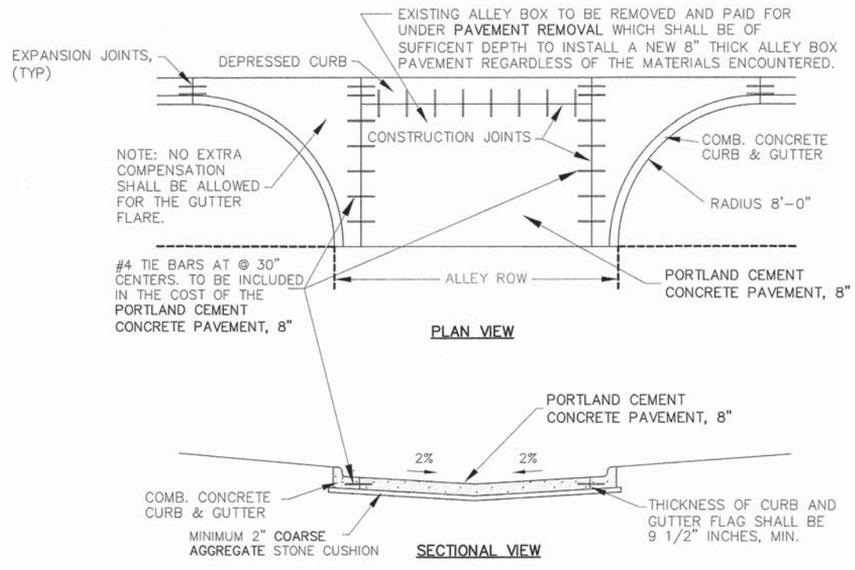
Civil Engineers/Municipal Consultants
835 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000628

FILE NAME: VILLAGE OF STICKNEY RIDGELAND AVENUE 43RD STREET TO PERSHING ROAD #09227	USER NAME =	DESIGNED – AMS	REVISED – AMS 5-06-13	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS HOT-MIX ASPHALT MIXTURE REQUIREMENTS	F.A. RTE. 2783	SECTION 09-00054-00-RS	COUNTY COOK	TOTAL SHEETS 16	SHEET NO. 4
		DRAWN – JFP	REVISED – AMS 5-16-13							
	PLOT SCALE =	CHECKED – TPG	REVISED –						CONTRACT NO. 63481	
	PLOT DATE =	DATE – 1/13	REVISED –		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-9003(647)	





TYPICAL HOT-MIX ASPHALT DRIVEWAY DETAIL

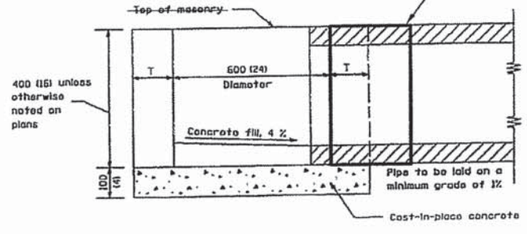


TYPICAL ALLEY RETURN DETAIL

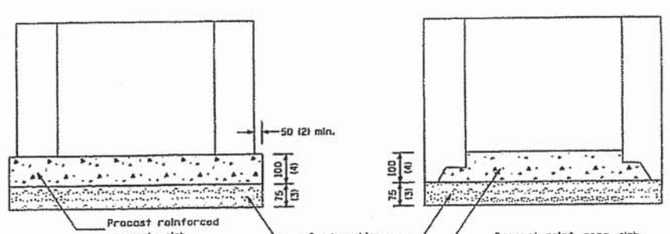
TOP OF PRECAST STRUCTURE

ALTERNATE MATERIALS FOR WALLS	T
~~BRICK MASONRY~~	~~200 (8)~~
~~CAST-IN-PLACE CONCRETE~~	~~150 (6)~~
~~CONCRETE MASONRY UNIT~~	~~125 (5)~~
PRECAST REINFORCED CONCRETE SECTION	75 (3)

A flexible watertight boot will be cast in the inlet at fabrication to be used between the storm structure and new PVC (SDR 26) ASTM D-2241, 8" Dia. connecting pipe. Connection pipe shall reconnect to existing sewer pipes using a non-shear flexible-type couplings as required by th MWRDGC.



SECTION A-A



ALTERNATE METHODS

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

INLET, TYPE A

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ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928

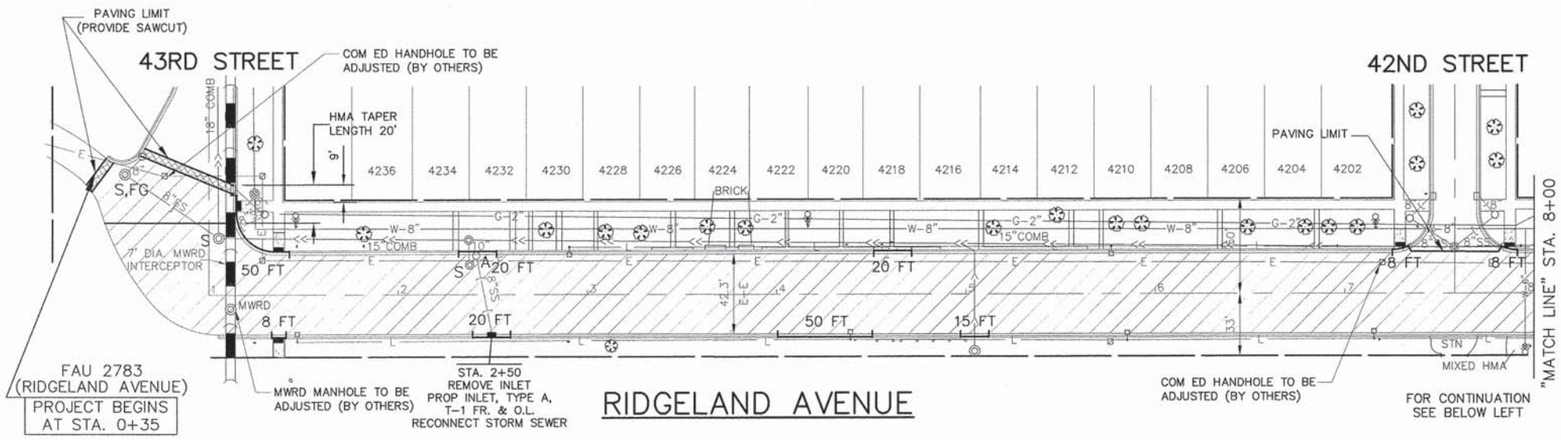
FILE NAME: VILLAGE OF STICKNEY RIDGELAND AVENUE 43RD STREET TO PERSHING ROAD #09227	USER NAME =	DESIGNED - AMS	REVISED - AMS 5-16-13
		DRAWN - JFP	REVISED -
	PLOT SCALE =	CHECKED - TPG	REVISED -
	PLOT DATE =	DATE - 1/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

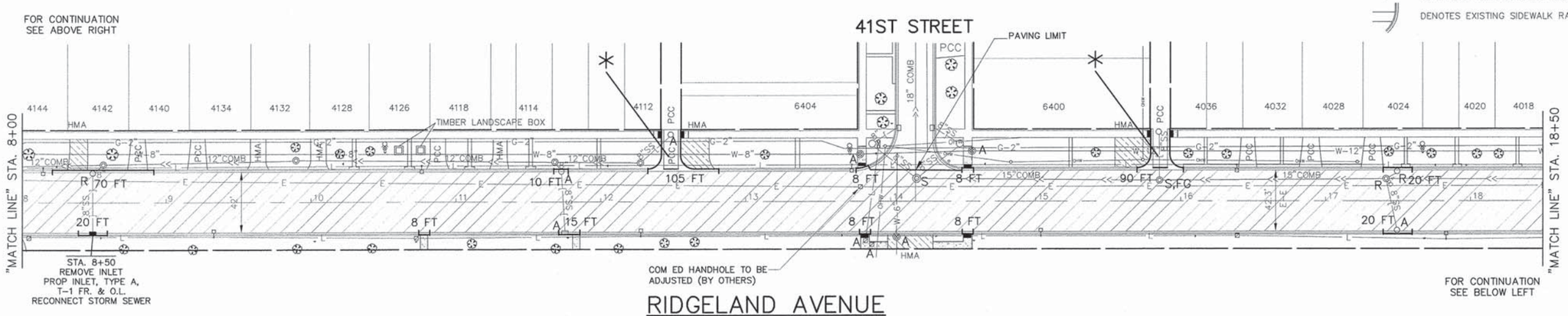
SPECIAL PROJECT DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

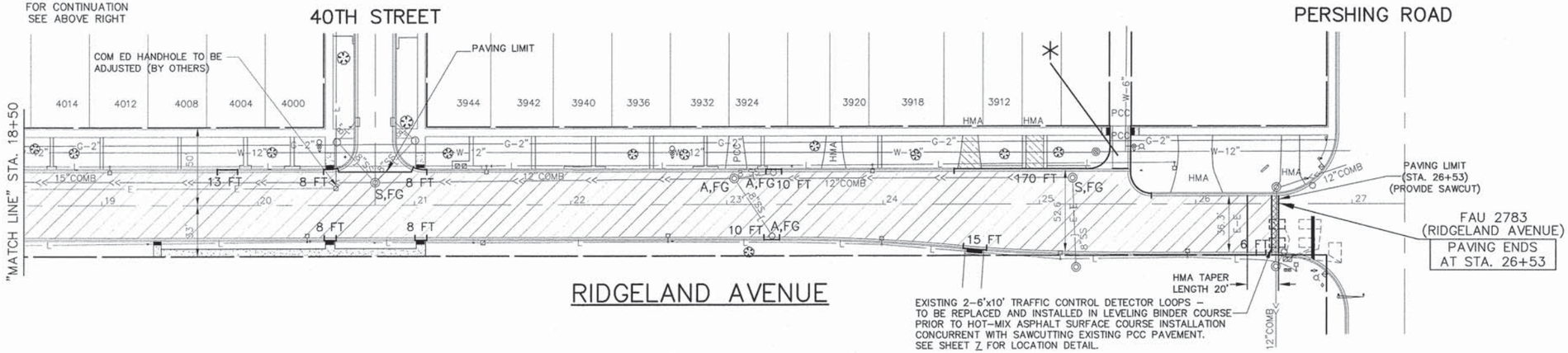
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	5
		CONTRACT NO. 63481		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-9003(647)	



RIDGELAND AVENUE



RIDGELAND AVENUE



RIDGELAND AVENUE

1"=40'

GRAPHIC SCALE
IN FEET
40 0 40 80

LEGEND

- DENOTES **HOT-MIX ASPHALT SURFACE REMOVAL, 3"**, **"POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50,"** 1 INCH AND **"HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50"**, 2 INCH
- DENOTES **HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT**, (4.5' WIDTH)
- DENOTES **HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL** AND **HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"**
- DENOTES **SIDEWALK REMOVAL** AND **PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH**
- DENOTES **PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH** WITH **DETECTABLE WARNINGS** PER I.D.O.T. STANDARDS FOR HANDICAP RAMPS (WHERE APPLICABLE) SEE CONSTRUCTION HIGHWAY STANDARDS
- "A" DENOTES EXISTING **INLETS, CATCH BASINS AND MANHOLES TO BE ADJUSTED**
- "S" DENOTES EXISTING **FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)** (SEE SHEET 8 FOR DETAIL)
- "R" DENOTES EXISTING **CATCH BASINS AND VALVE VAULTS TO BE RECONSTRUCTED**
- "FG" DENOTES **FRAMES AND LIDS, TYPE 1, OPEN** AND **CLOSED LIDS**
- 8 FT DENOTES **COMBINATION CURB AND GUTTER REMOVAL** AND **COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12**
- DENOTES ALLEY RETURN TO BE REMOVED WITH **PAVEMENT REMOVAL** AND REPLACED WITH **PORTLAND CEMENT CONCRETE PAVEMENT, 8 INCH.**
- DENOTES EXISTING SIDEWALK RAMP TO REMAIN

FOR TYPICAL SECTION OF
NEW PAVEMENT WORK
SEE SHEET 3

IMPORTANT!

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

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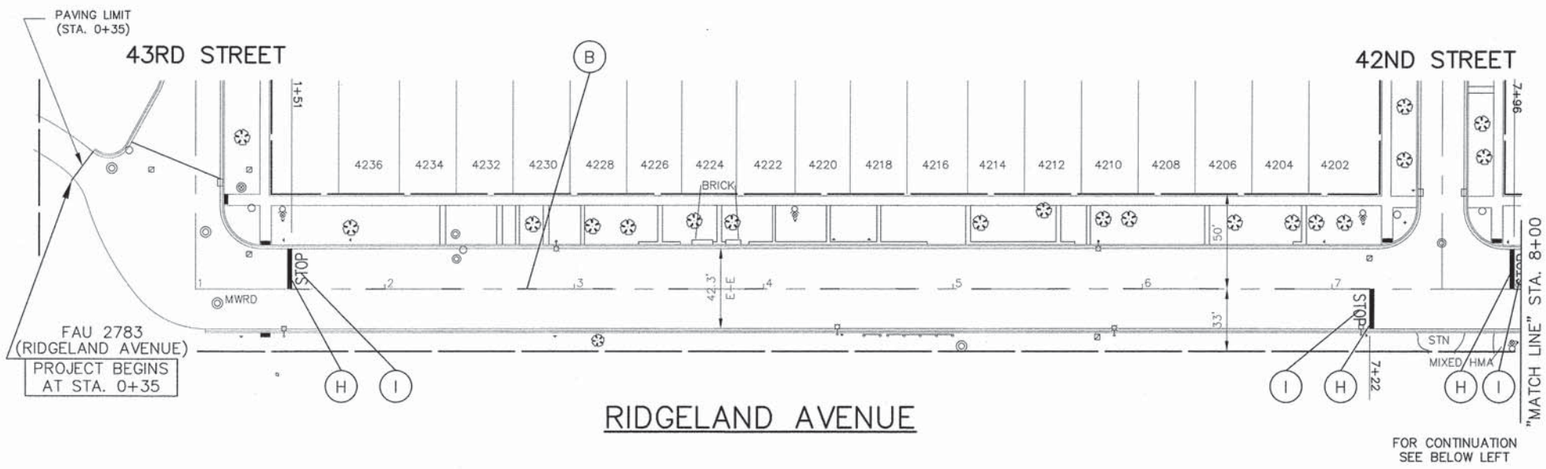
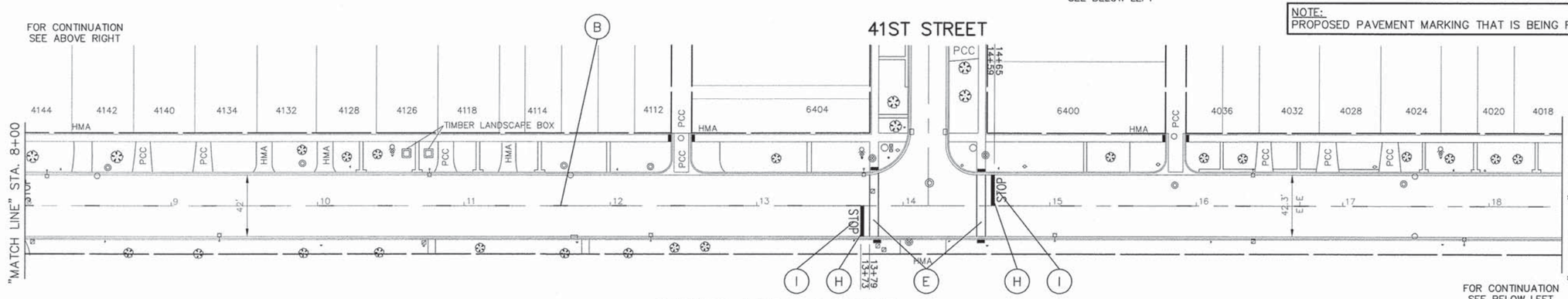
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000828

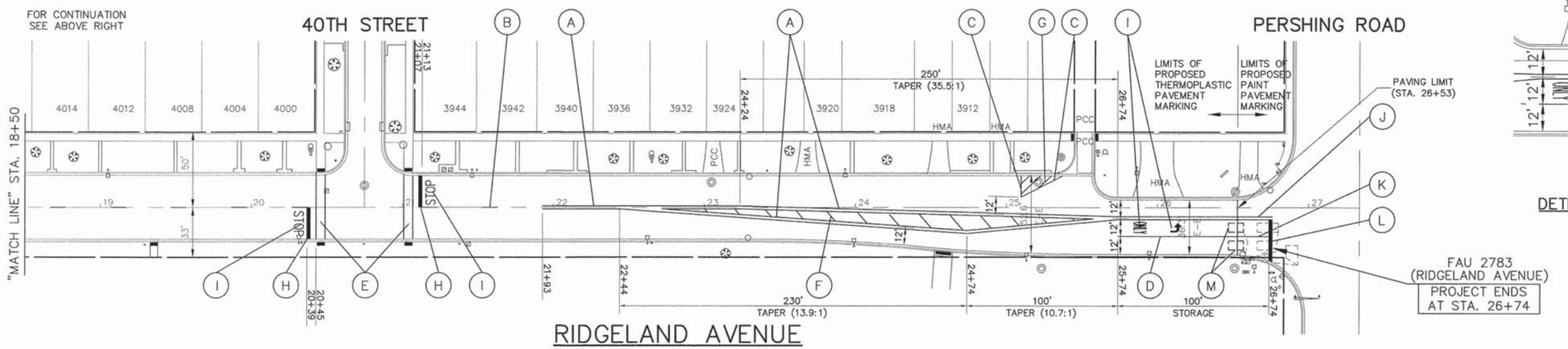
FILE NAME: VILLAGE OF STICKNEY / RIDGELAND AVENUE / 43RD STREET TO PERSHING ROAD / #09227	USER NAME =	DESIGNED - AMS	REVISED - AMS 2-12-13	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**PLAN:** RIDGELAND AVENUE- 43RD STREET TO PERSHING ROAD	F.A. RTE. 2783	SECTION 09-00054-00-RS
		DRAWN - JFP	REVISED - AMS 2-25-13				COUNTY COOK
	PLOT SCALE =	CHECKED - TPG	REVISED - AMS 5-06-13				TOTAL SHEETS 16
	PLOT DATE =	DATE - 1/13	REVISED -				SHEET NO. 6
					SCALE:	SHEET NO. OF SHEETS	STA. TO STA.
						FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT M-9003(647)

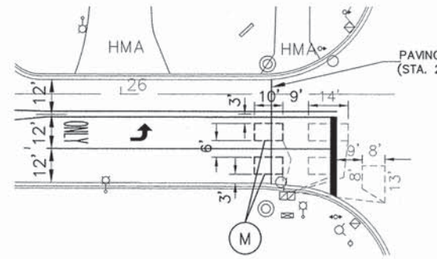
CONTRACT NO. 63481

(RESURFACING)









DETECTOR LOOP REPLACEMENT
AT PERSHING ROAD

1"=40'

GRAPHIC SCALE
IN FEET
40 0 40 80

THERMOPLASTIC STRIPING CODE

- (A) CENTERLINE – DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING – 4", 11"O/C
- (B) LANE LINE – SKIP–DASH YELLOW THERMOPLASTIC PAVEMENT MARKING – LINE 4" – 10' DASH, 30' SKIP
- (C) CHANNELIZATION LINE – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING – LINE 4"
- (D) TURN LANE – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING – LINE 6"
- (E) PEDESTRIAN CROSSWALK – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING – LINE 6"
- (F) CHANNELIZATION DIAGONALS – SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING – LINE 12", 45°
- (G) CHANNELIZATION DIAGONALS – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING – LINE 12", 45°
- (H) STOP BAR – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING – LINE 24"
- (I) LETTERS AND SYMBOLS – SOLID WHITE THERMOPLASTIC PAVEMENT MARKING

PAINTED STRIPING CODE

- (J) CENTERLINE – DOUBLE SOLID YELLOW PAINTED PAVEMENT MARKING – 4", 11"O/C
- (K) TURN LANE – SOLID WHITE PAINTED PAVEMENT MARKING – LINE 6"
- (L) STOP BAR – SOLID WHITE PAINTED PAVEMENT MARKING – LINE 24"

DETECTOR LOOPS

- (M) PROPOSED DETECTOR LOOP REPLACEMENT

NOTE:
PROPOSED PAVEMENT MARKING THAT IS BEING REPLACED IS IN THE SAME LOCATION.

NOTE:
ALL "ARROWS" AND "ONLYS" SHALL BE 8' IN HEIGHT.

NOTE:
ALL "STOPS" SHALL BE 6' IN HEIGHT.

NOTE:
PROPOSED CENTERLINE – DOUBLE SOLID YELLOW THERMOPLASTIC PAVEMENT MARKING – 4", 11"O/C (NOTE: (A)) AND CENTERLINE – DOUBLE SOLID YELLOW PAINTED PAVEMENT MARKING – 4", 11"O/C (NOTE: (J)) IS MEASURED PER LINE. TOTAL QUANTITY AND PAYMENT LENGTH IS FOR EACH LINEAR FOOT OF SINGLE 4" STRIPE INSTALLED.

NOTE:
SHORT–TERM PAVEMENT MARKING IS PROPOSED ON THE MILLED PAVEMENT, NEW LEVELING BINDER AND ON THE NEW SURFACE. SEE ARTICLE 703.04 OF THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

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

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ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184.000928

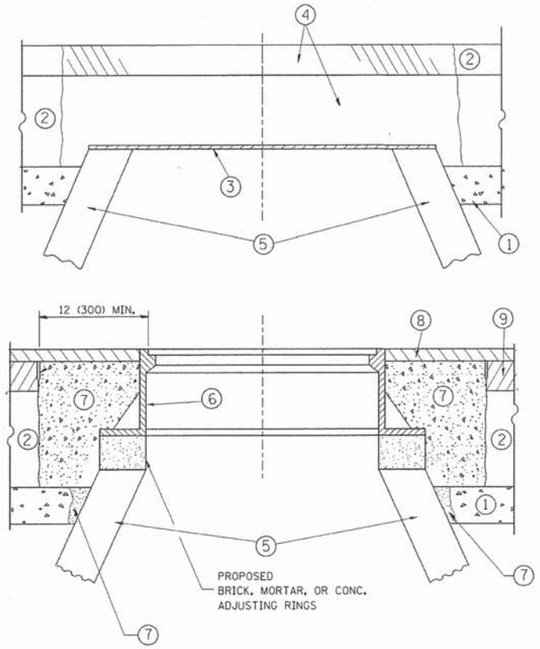
FILE NAME	USER NAME =	DESIGNED – AMS	REVISED –
VILLAGE OF STICKNEY RIDGELAND AVENUE 43RD STREET TO PERSHING ROAD #09227		DRAWN – JFP	REVISED –
	PLOT SCALE =	CHECKED – TPG	REVISED –
	PLOT DATE =	DATE – 1/13	REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN:
RIDGELAND AVENUE- 43RD STREET TO PERSHING ROAD
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

(PAVEMENT MARKING)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09–00054–00–RS	COOK	16	7
		CONTRACT NO. 63481		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M–9003(647)	



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.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

LEGEND

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

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.

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

FILE NAME = c:\pw_work\pwidot\bauerdl\d0108315\bd08.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1968.5000 ' / in	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

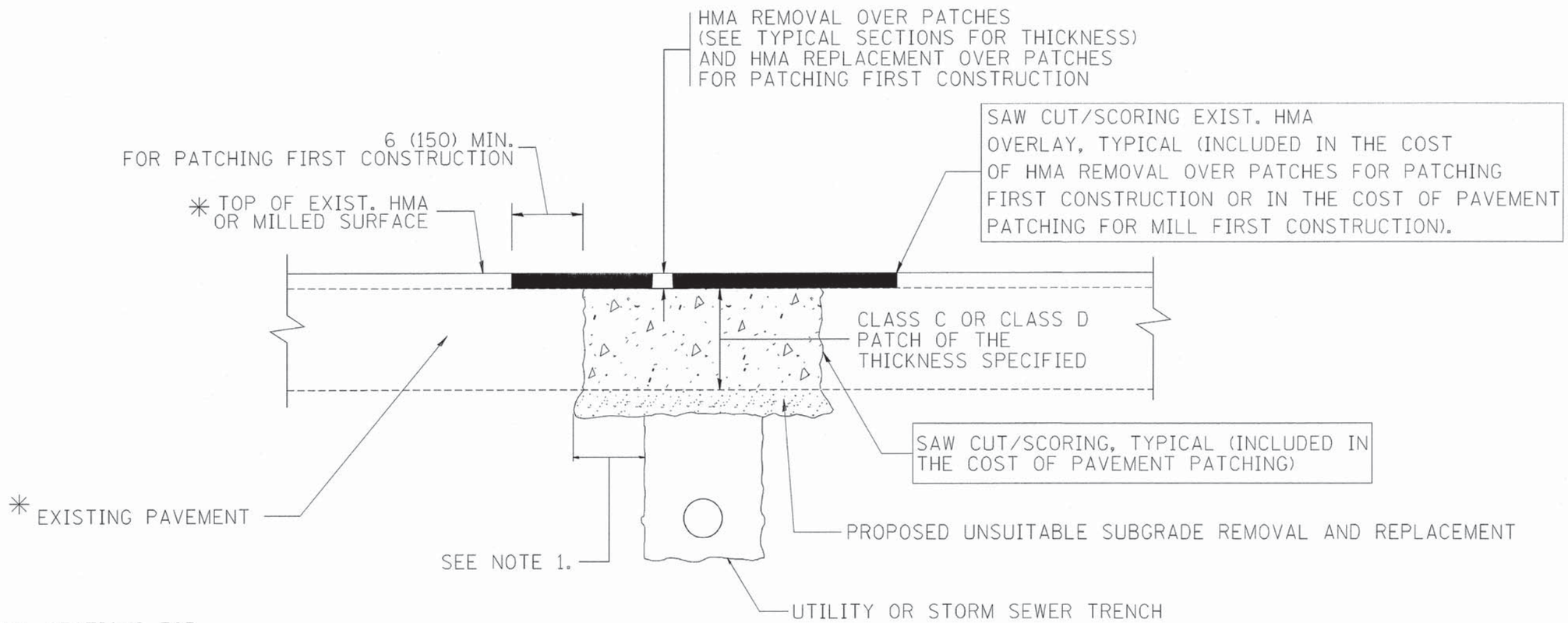
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	8
	BD600-03 (BD-8)	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	

bd08.dgn 12/6/2011 10:33:33 AM User: bauerdl



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

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 4½ 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.

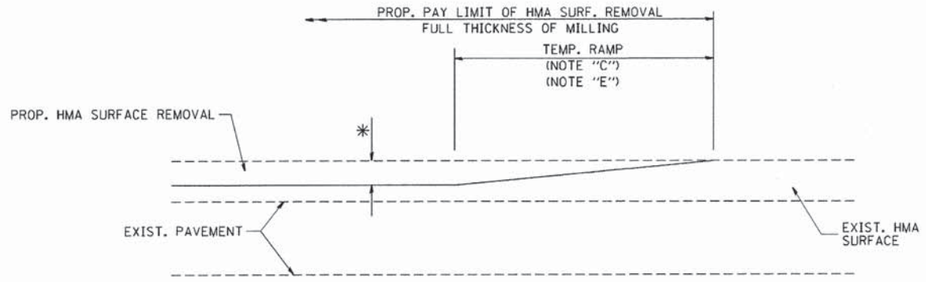
FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

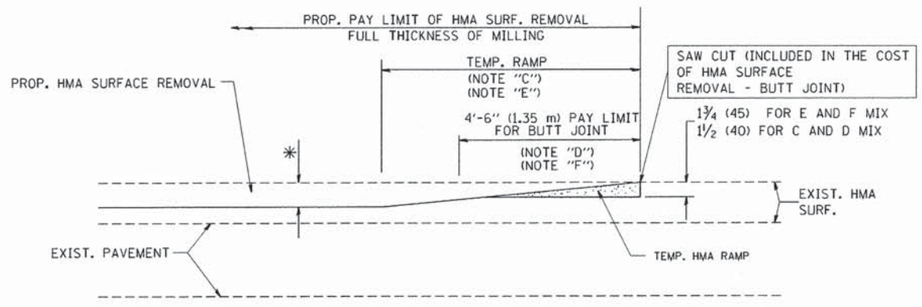
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	9
	BD400-04 (BD-22)	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

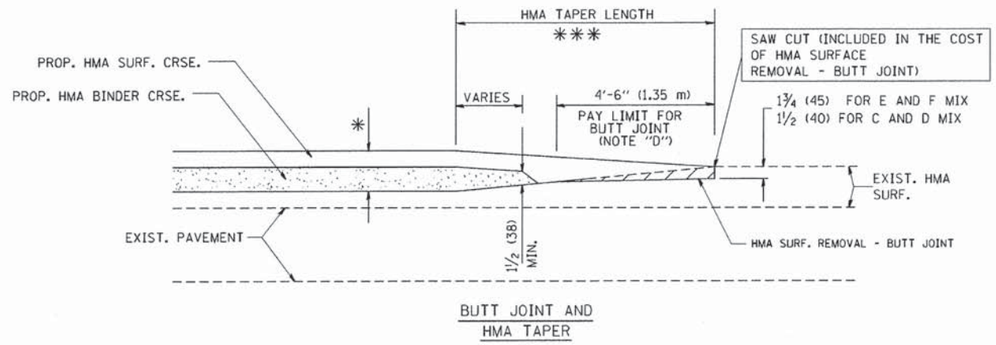


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

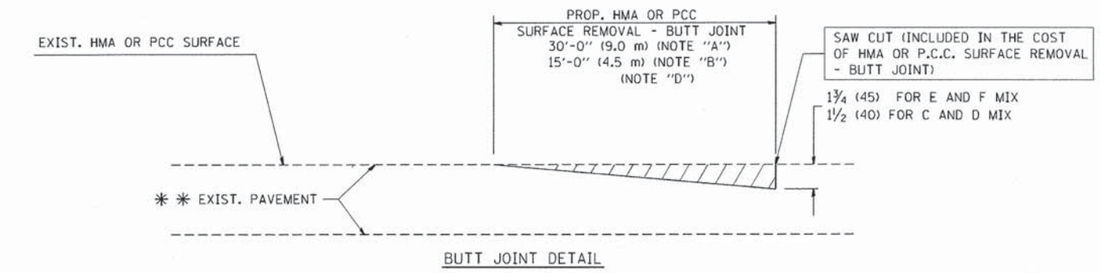
OPTION 2

TYPICAL TEMPORARY RAMP

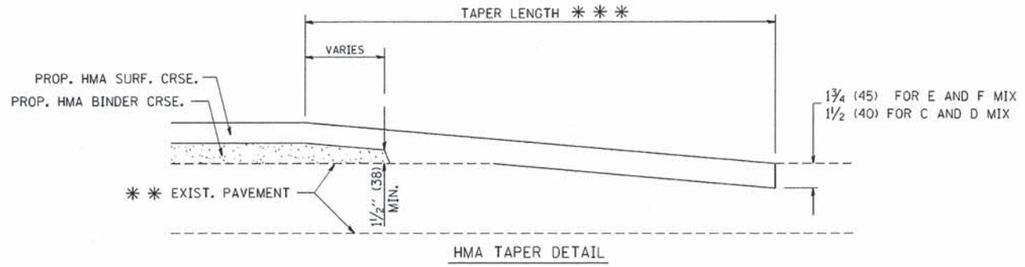


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

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

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

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

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

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

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

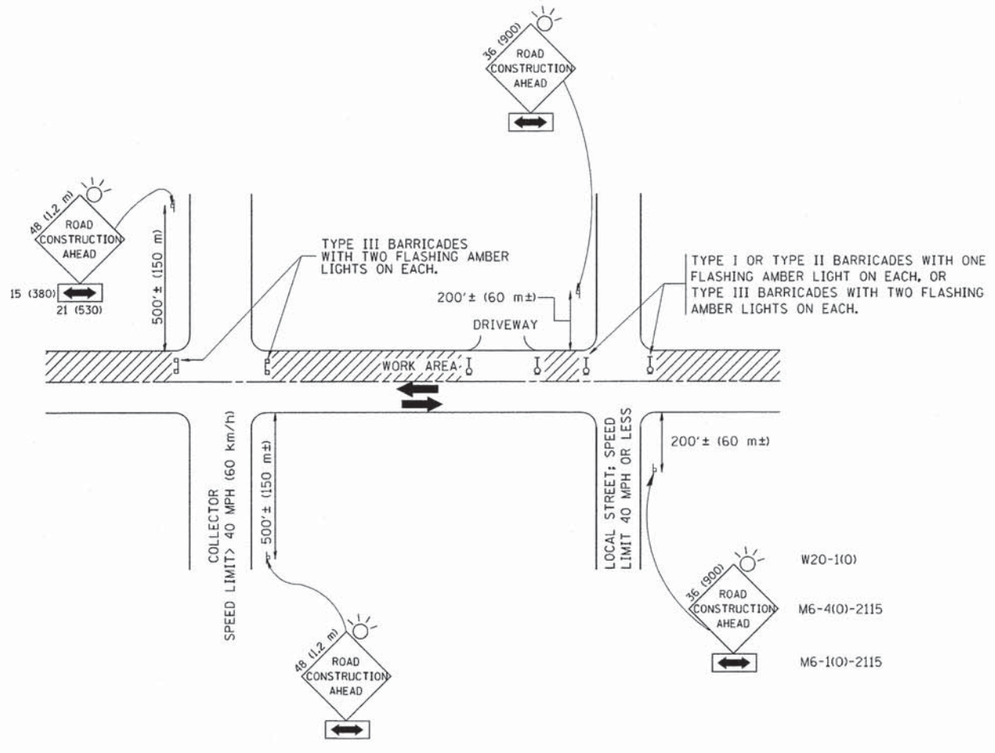
BASIS OF PAYMENT:

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

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

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gegiuenobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS
		DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01		
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	10
	BD400-05 BD32	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	



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

NOTES:

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:

   a) 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 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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) unless otherwise shown.

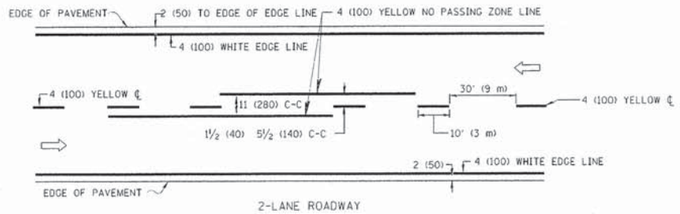
FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

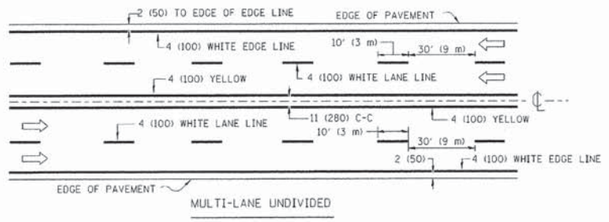
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

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

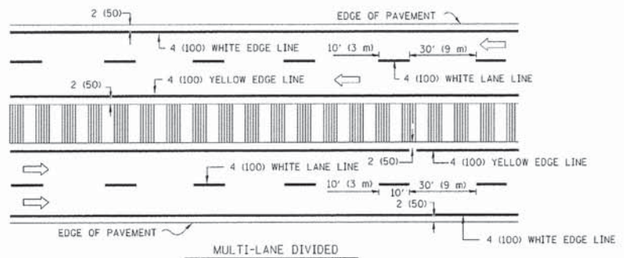
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	11
	TC-10	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	



2-LANE ROADWAY



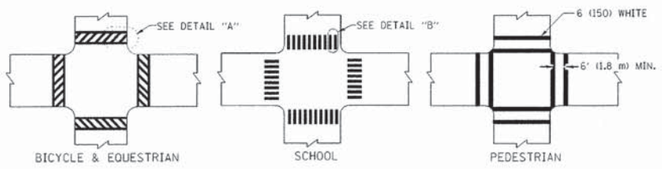
MULTI-LANE UNDIVIDED

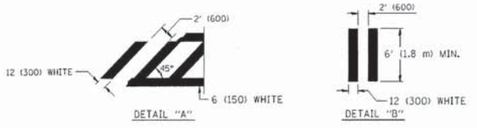


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

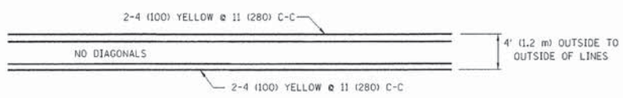
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

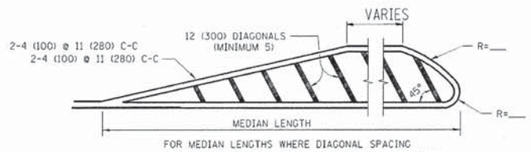




TYPICAL CROSSWALK MARKING



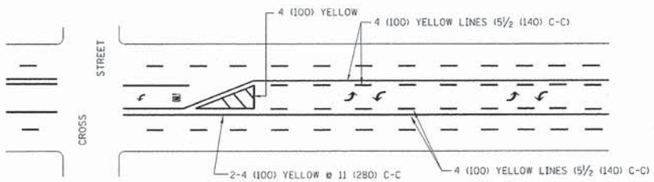
4' (1.2 m) WIDE MEDIANS ONLY



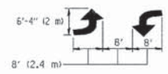
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

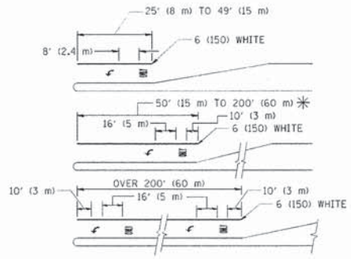


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

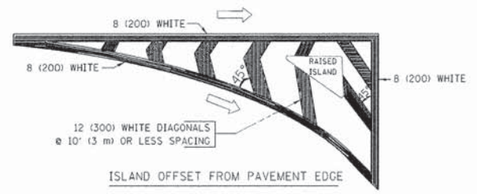


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

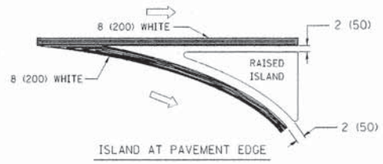
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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 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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	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))

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.

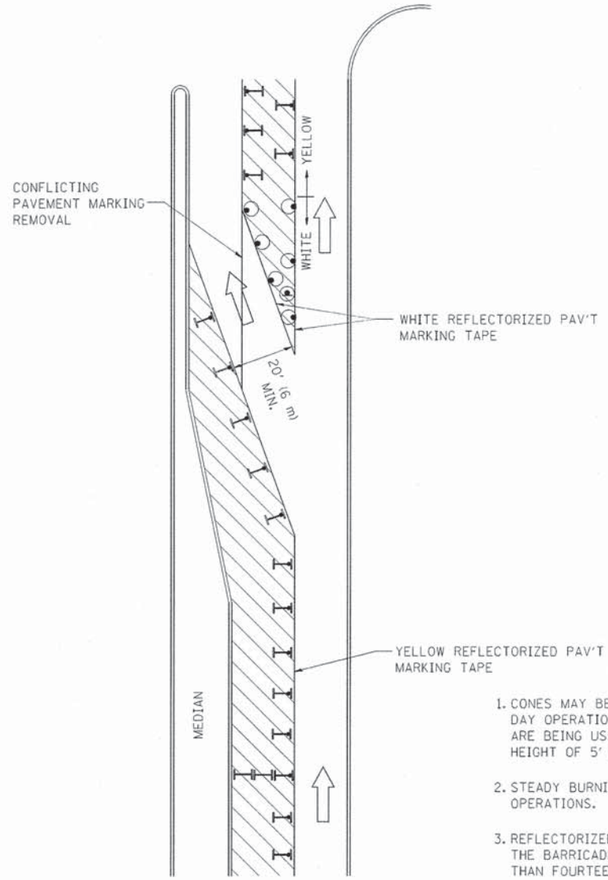
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

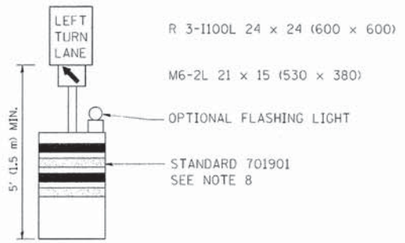
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	12
	TC-13	CONTRACT NO. **63481**		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	





GENERAL NOTES

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. 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" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

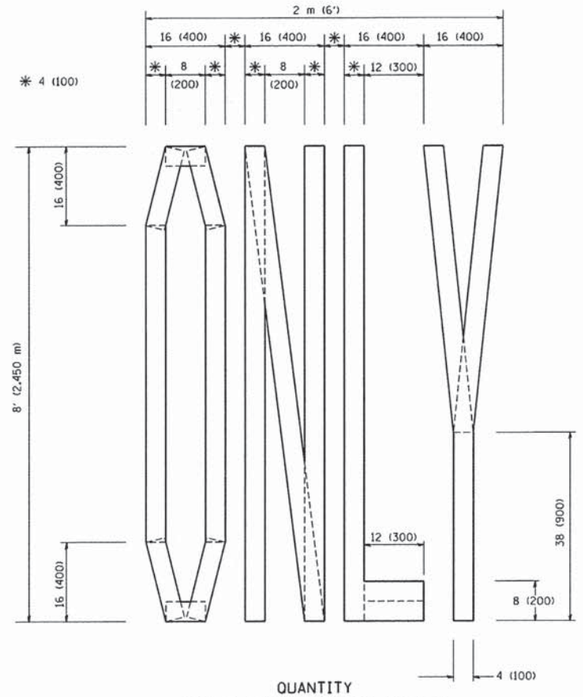
FILE NAME = c:\pw_work\PWIDOT\DRIVAKOSGN\d0180315\ts14.dgn	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
		REVISED - A. HOUSEH 11-07-95	REVISED -
	PLOT SCALE = 49.9999 ' / IN.	REVISED - A. HOUSEH 10-12-96	REVISED -
	PLOT DATE = 9/14/2009	REVISED -T. RAMMACHER 01-06-00	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

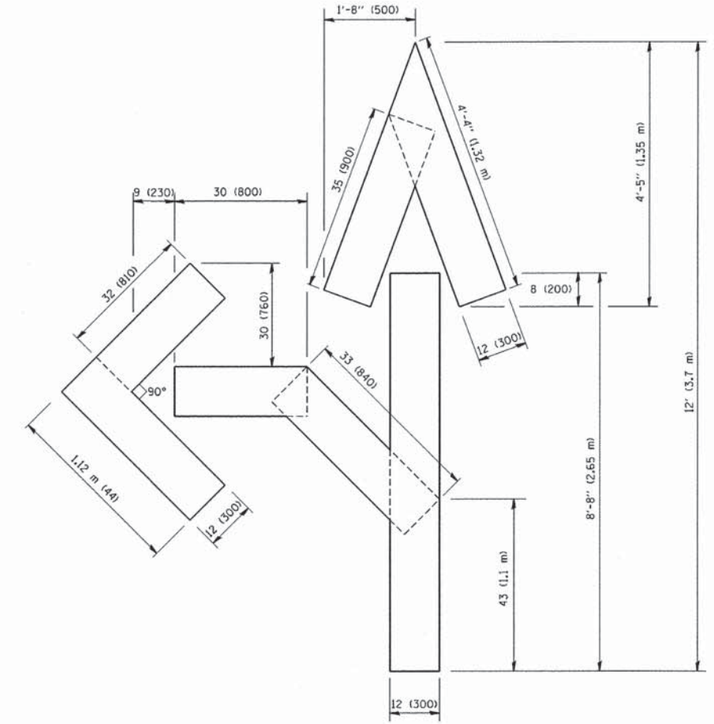
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC)

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

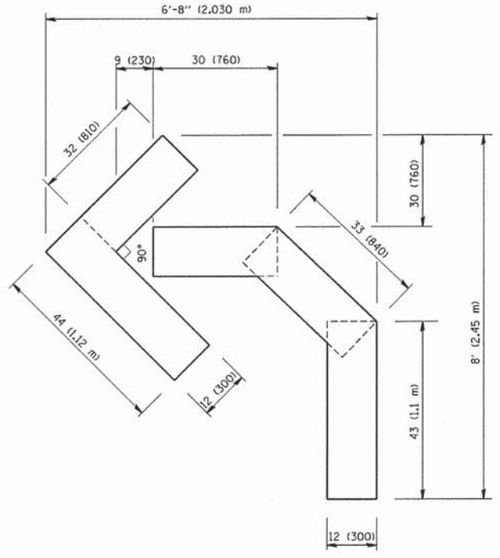
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	13
	TC-14	CONTRACT NO. **63481**		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



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



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

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		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 FOR TRAFFIC STAGING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	14
	TC-16	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

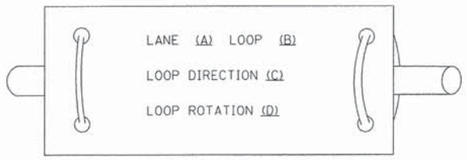
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

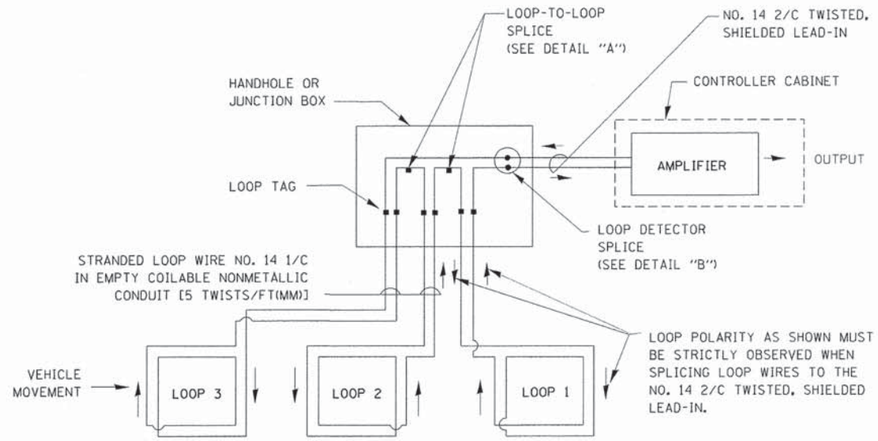


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

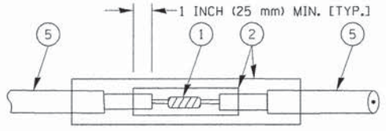
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

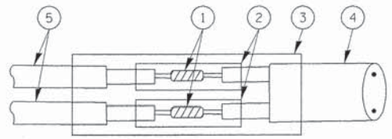


DETECTOR LOOP WIRING SCHEMATIC

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

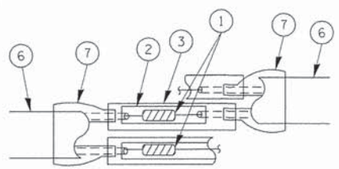


DETAIL "A"
LOOP-TO-LOOP SPLICE



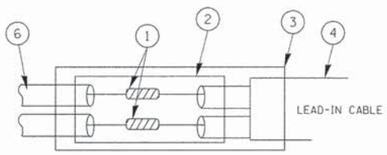
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

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

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	PLOT DATE = 10/6/2009	DATE - 10/28/09	REVISED -

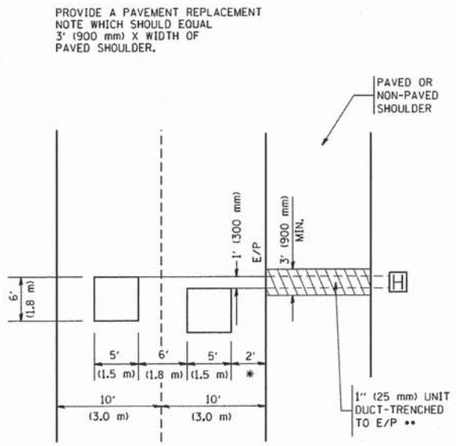
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	15
	TS-05	CONTRACT NO. 63481		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M-9003(647)	

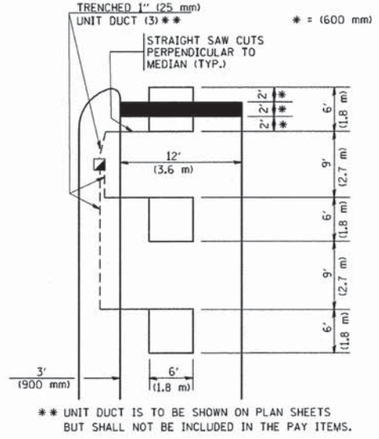
LOOPS NEXT TO SHOULDERS



* = (600 mm)

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

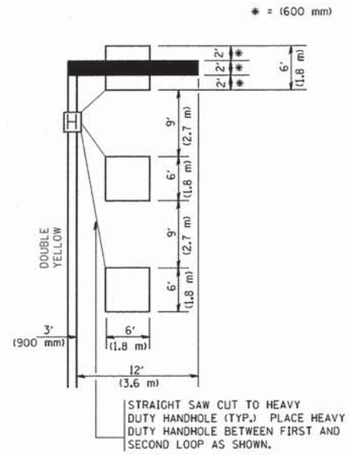
LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)



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

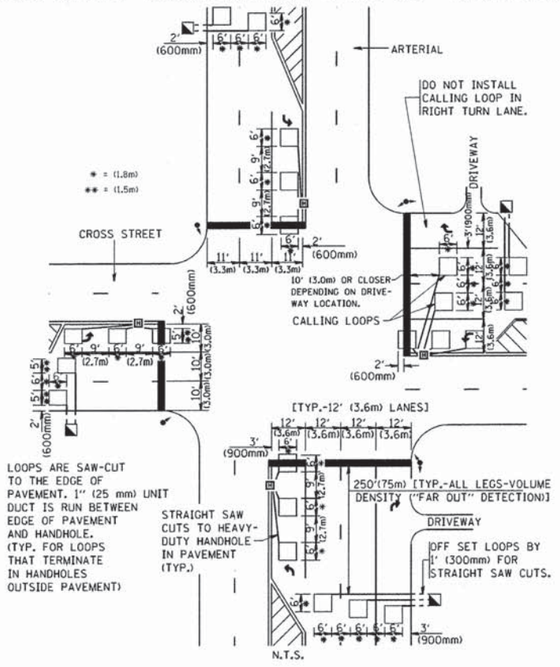
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



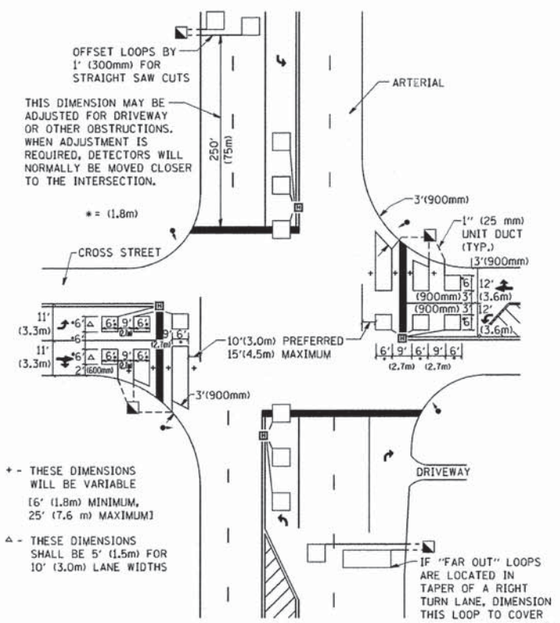
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

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	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2783	09-00054-00-RS	COOK	16	16
	TS-07	CONTRACT NO. 63481		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	M-9003(647)	