## 06-12-2015 LETTING ITEM 198 INDEX OF SHEETS COVER SHEET: LOCATION MAP, INDEX OF SHEETS, INDEX OF DISTRICT 1 DETAILS GENERAL CONSTRUCTION NOTES, MWRDGC NOTES, INDEX OF HIGHWAY STANDARDS, SPECIAL PROJECT NOTES, TYPICAL ALLEY RETURN DETAIL, INLET - TYPE A DETAIL 2.) 3.) TYPICAL SECTIONS, HOT-MIX ASPHALT MIXTURE REQUIREMENTS PLAN AND PROFILE: FAU 2790 (AUSTIN BOULEVARD) - (REHABILITATION) 5.-10.) FAU 1477 (PERSHING ROAD) TO FAU 1473 (35TH STREET) 11.-12.) PLAN: FAU 2790 (AUSTIN BOULEVARD). - (PAVEMENT MARKING) FAU 1477 (PERSHING ROAD) TO FAU 1473 (35TH STREET) INDEX OF DISTRICT 1 DETAILS BD-01 DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 M) DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER > 15' (4.5 M) BD-08 DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING BD-22 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT BD-32 BUTT JOINT AND HMA TAPER DETAILS TRAFFIC CONTROL & PROTECTION FOR SIDE ROADS, INTERSECTIONS, DISTRICT ONE TYPICAL PAVEMENT MARKINGS TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS 20.) TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING 21.) TC-22 ARTERIAL ROAD INFORMATION SIGN 22.) TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS © 23.−28.) TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING SCHAUMBUR 29.) INDEX OF HIGHWAY STANDARDS SEE SHEET 2 DESIGN DESIGNATION TRAFFIC DATA AUSTIN BOULEVARD 16,500 (2014) MINOR ARTERIAL DESIGN SPEED POSTED SPEED 25 MPH (EXISTING) 25 MPH (EXISTING) 25 MPH (PROPOSED) 25 MPH (PROPOSED) 847)705 1"=100" 1"=50" 1"=40" 1"=30" 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. JOINT UTILITY LOCATION INFORMATION FOR Know what's below. **EXCAVATION** Call before you dig. CALL 811 PRO Frank Novotny & Associates, Inc.

825 Midway Drive ♦ Willowbrook, IL ♦ 60527 ♦ Telephone: (630) 887-8640 ♦ Fax: (630) 887-0132

ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928

FNA PROJECT NO. 14396 DRAWN/DESIGNED JFP/AMS CHECKED/APPROVED TPG/TPG

REVISIONS

CONTRACT NO. 61B55

AID

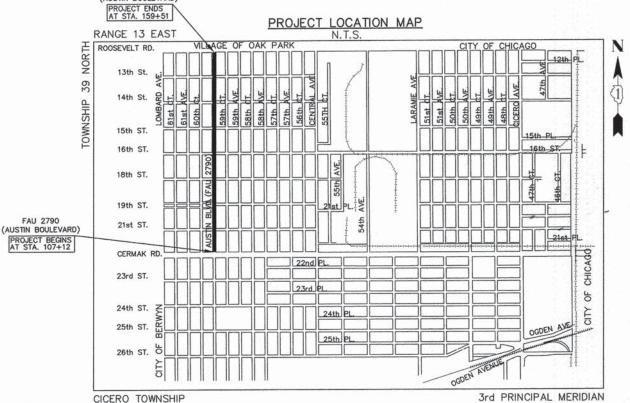
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY FAU 2790 (AUSTIN BOULEVARD)

FAU 2790 (AUSTIN BOOLEVARD)
FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD)
RESURFACING

SECTION 14-00225-00-RS PROJECT M-4003(481)

TOWN OF CICERO COOK COUNTY C-91-204-15

(AUSTIN BOULEVARD)



DENOTES LOCATION OF IMPROVEMENT

# LENGTH OF PROJECT

GROSS LENGTH OF PROJECT
NET LENGTH OF PROJECT

5,239 FEET (0.99 MILES)

5,239 FEET (0.99 MILES)

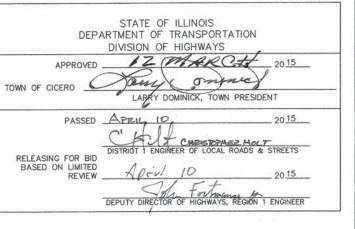
FAU RTE SECTION COUNTY TOTAL SHEET NO.

2790 14-00225-00-RS COOK 29 1

F.H.W.A. REG. ILLINOIS PROJECT M-4003(481)

CONTRACT NO. 61B55







PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

# GENERAL CONSTRUCTION NOTES

#### PAVING AND STORM SEWERS SPECIFICATIONS

THE JANUARY 1, 2012 EDITION 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 GOVER ALL WORK ASSOCIATED WITH THIS PROJECT. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN STRUCTION 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 IN ACCORDANCE WITH ARTICLES 105.07

#### 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 ATTICLES 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 SPECIAL ATTENTION IS DRAWN TO ANTICLE 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

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. SAW CUTTING FOR PATCHES WILL BE INCLUDED IN THE COST OF TO THE PATCHING ITEM. EXISTING DRIVEWAY PAVEMENT AND SIDEWALK TO REMAIN IN PLACE SHALL BE SAWCUT TO PROVIDE A NEAT VERTICAL FACE BETWEEN THE PROPOSED AND THE EXISTING, AND SUCH COST SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM TO BE REMOVED.

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 HALL 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 HIS WORK IN ACCORDANCE WITH THE DOCUMENTS AND SPECIFICATIONS.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

#### INDEX OF HIGHWAY STANDARDS

distant and the second	
000001-06 · 280001-07 ·	
424001-08	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-01	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-03	DEPRESSED CORNER FOR SIDEWALKS
424026-01	ENTRANCE/ALLEY PEDESTRAIN CROSSINGS
442201-03	CLASS C AND D PATCHES
604001-04	FRAMES & LIDS-TYPE 1
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES

TYPICAL LAYOUTS FOR DETECTION LOOPS

780001-06 TYPICAL PAVEMENT MARKINGS

DETECTOR LOOP INSTALLATIONS

886001-01

886006-01

REVISED - 02-23-15ESIGNED - AMS TOWN OF CICERO DRAWN -JEP-JFP REVISED FAU 2790 (AUSTIN BOULEVARD) HECKED -REVISED FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD) PLOT SCALE = DATE REVISED RESURFACING OT DATE =

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 leas two (2) working days prior to the commencement of any work (call 708/588-4055) U.S.G.S.

Elevation datum is N/A

- No floor drains
- 4. No footing drains/downspouts

Pine Material Spec

All sanitary sewer pipe materials and joints (and storm sewer pipe materials and joints in a combined sewer area) shall conform to:

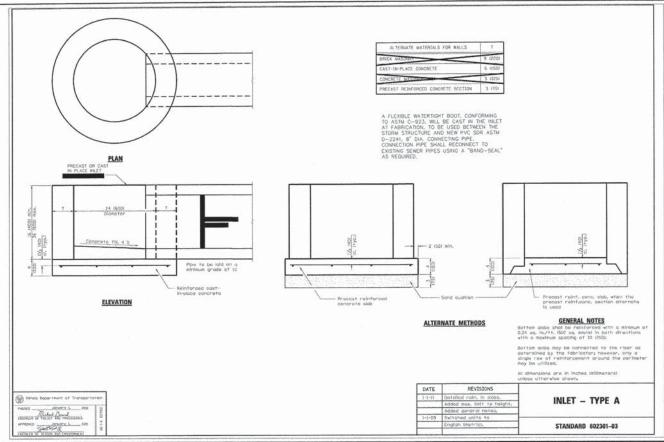
Pipe Material Spec.	Joint Spec.
Vitrified Clay Pipe VCP (C-700)	
VCP (No-Bel)(C-700)	C-425
Collar	C-425 D-1784
Concrete Pipe (C-14)	0.447
RCP (C-76)	C-443 C-443
ACP (C-428)	D-1869
ABS Sewer Pipe	
Solid Wall 6" dia. SDR 23.5	
ABS D-2751	D-2751
ABS Composite/Truss Pipe	
8" - 15" dia. ABS D-2680	
ABS U-2680	D-2680
PVC Gravity Sewer Pipe 6" - 15" dia. SDR 26	
D-2241 AWWA-C-900	D-3139
AWWA-C-900	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 app on a qualified basis in additi	

- 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 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.
- Non-shear "Band-Seal" 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 installation 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
  - 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 water man, 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 water manS 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 material or removed.
- 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 structures.

# SPECIAL PROJECT NOTES

- ALL SAWCUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS FOR WHICH THE WORK APPLIES.
- .) ALL EXISTING FRAMES AND LIDS THAT ARE TO BE REPLACED (AS DIRECTED BY THE ENGINEER), SHALL BE SALVAGED TO THE CONTRACTOR.
- 3.) MEET EXISTING CURB AND FLOW LINE ELEVATIONS AT REPLACEMENT LIMITS.
- 4.) NEW CURB AND GUTTER SHALL BE BACKFILLED WITH SUITABLE MATERIAL AT LOCATIONS DISTURBED DURING REMOVAL OPERATIONS AND REQUIRING SOD RESTORATION AND SHALL BE CONSIDERED INCLUDED IN THE COST OF "COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)".
- "TOPSOIL FURNISH AND PLACE, 4 INCH" SHALL BE INSTALLED IN DISTURBED AREAS OF CURB AND GUTTER REMOVAL OPERATIONS ONLY. ONE FOOT WIDTH MAXIMUM.
- 6.) ALL CATCH BASINS, MANHOLES, INLETS AND SIMILAR STRUCTURES NEWLY CONSTRUCTED, ADJUSTED OR RECONSTRUCTED SHALL BE CLEANED OF ANY SILT AND DEBRIS OF ANY KIND AND BE FREE OF SUCH MATERIALS AT THE TIME OF FINAL INSPECTION IN ACCORDANCE



#### NOTES:

1" PREFORMED EXPANSION MOLDING SHALL BE PLACED WITH TWO SMOOTH 1" DIA, DOWEL BARS WITH GREASED CAPS AT ALL POINTS OF CURVATURE MAD CORNERS

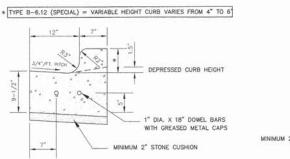
CONTRACTION JOINTS SHALL BE SAW CUT OR TOOLED TO A DEPTH OF 2' OUT OR TOOLED TO A DEPTH OF 2 OF 15' MINIMUM SPACING, SAW CUT CONTRACTION JOINTS SHALL BE DONE WITHIN 24 HR. ALL CONTRACTION JOINTS SHALL BE SEALED WITH AN IDOT APPROVED JOINT SEALANT.

AN IDOT APPROVED CURING COMPOUND SHALL BE USED ON ALL PROPOSED CONCRETE CURB AND GUTTER.

3/4" TIE ANCHOR BAR SHALL BE INSTALLED IN THE ENDS OF EXISTING CURB AND GUTTER TO TIE THE NEW CURB TO THE EXISTING. TO BE INCLUDED IN THE COST OF THE CRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)" PAY ITEM.

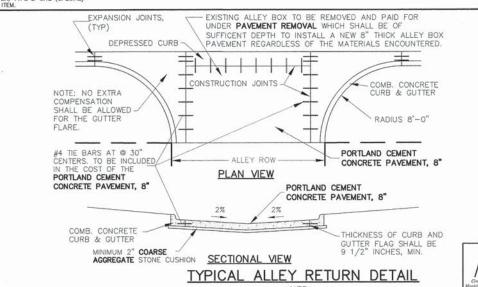
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION



TOP OF CURB WITH GREASED METAL CAPS - 1" PREMOULDED EXPANSION JOINT FILLER MINIMUM 2" STONE CUSHION -EXPANSION JOINT DETAIL

# COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)



INDEX OF HIGHWAY STANDARDS, SPECIAL PROJECT NOTES, TYPICAL ALLEY RETURN DETAIL, INLET - TYPE A DETAIL

825 Midway Drive • Willowbrook, II. • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-01. ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-000928 SECTION COUNTY 2790 14-00225-00-RS COOK 29 2 CONTRACT NO. 61B55

Frank Novotny & Associates, Inc.

AID PROJECT M-4003(481)

GENERAL CONSTRUCTION NOTES, MWRDGC NOTES, SCALE: NONE SHEET NO. OF SHEETS STA. 0+63 TO STA. 8+50

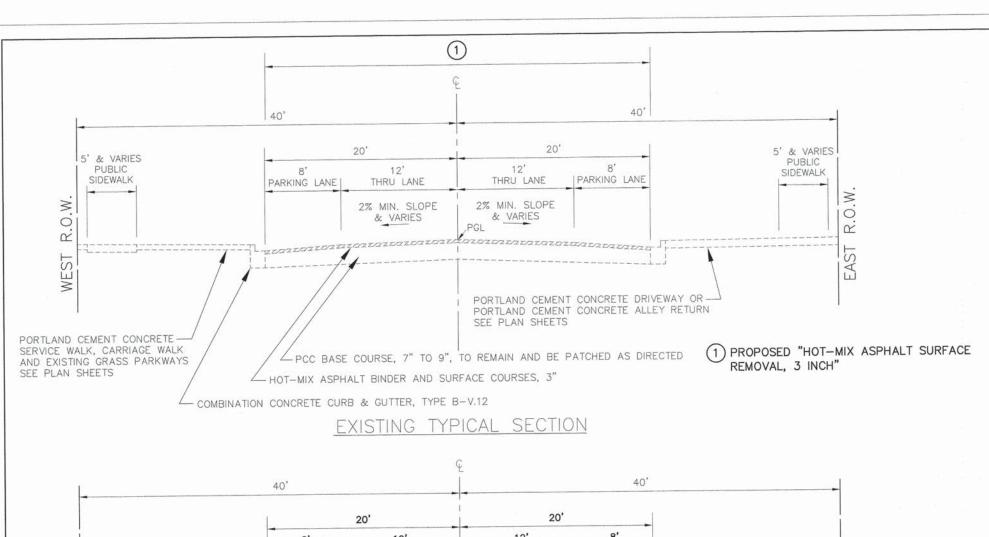
eciality	Special	Code			Total	Construction Code	Speciality	Special	Code			Total	Construction Cod
Item	Provision	No	ltem	Unit	Quantity		Item	Provision	No	Item	Unit	Quantity 10	Roadway 000
		20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	50	50			60250200	CATCH BASINS TO BE ADJUSTED	EACH	10	
		20800150	TRENCH BACKFILL	CU YD	47	47			60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	26	26
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	250	250			60255500	MANHOLES TO BE ADJUSTED	EACH	3	3
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	20	20			60260100	INLETS TO BE ADJUSTED	EACH	1	1
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	20	20			60265700	VALVE VAULTS TO BE ADJUSTED	EACH	2	2
		25200110	SODDING, SALT TOLERANT	SQ YD	1500	1500			60266100	VALVE VAULTS TO BE RECONSTRUCTED	EACH	1	1
		25200200	SUPPLEMENTAL WATERING	UNIT	30	30			60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2
		28000510	INLET FILTERS	EACH	70	70			60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	30	30
	SP	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	50	50			60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	20	20
		40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	40	40			60500060	REMOVING INLETS	EACH	1	1
	SP	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	23000	23000			67100100	MOBILIZATION	L SUM	1	1
		40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	40	40			70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701501	L SUM	1	1
		40600535	LEVELING BINDER (HAND METHOD), N70	TON	60	60			70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701701	L SUM	1	1
		40600825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	1400	1400			70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD, 701801	L SUM	1	1
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	250	250			70300100	SHORT TERM PAVEMENT MARKING	FOOT	2400	2400
	SP	40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	300	300			70301000	WORK ZONE PAVEMENT MARKING REMOVAL	FOOT	530	530
		40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2920	2920	*		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	150	150
		42000300	PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	120	120	*		78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	10000	10000
		42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 7 INCH	SQ YD	270	270	*		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1000	1000
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	11500	11500	*		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1100	1100
		42400800	DETECTABLE WARNINGS	SQ FT	650	650	*		78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	300	300
		44000100	PAVEMENT REMOVAL	SQ YD	120	120	*	SP	88600600	DETECTOR LOOP REPLACEMENT	FOOT	750	750
		44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	25300	25300		SP	X0322916	PROPOSED STORM SEWER CONNECTION TO EXISTING STORM SEWER	EACH	1	1
		44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	270	270		SP	X0795800	COARSE AGGREGATE	TON	100	100
		44000600	SIDEWALK REMOVAL	SQ FT	9500	9500		SP		COMBINATION CURB AND GUTTER REMOVAL (SPECIAL)	FOOT	3400	3400
	SP	44002212	HOT-MIX REMOVAL OVER PATCHES, 3"	SQ YD	1800	1800		SP		SIDEWALK REMOVAL (SPECIAL)	SQ FT	2000	2000
		44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	500	500		SP		FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	9	9
		44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	550	550		SP		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	3400	3400
		44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	750	750	*	SP		HANDHOLE TO BE ADJUSTED	EACH	5	5
		55100300	STORM SEWER REMOVAL 8"	FOOT	5	5	*	SP		HEAVY DUTY HANDHOLE TO BE ADJUSTED	EACH	2	2
	SP	56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	3	3		SP		TEMPORARY INFORMATION SIGNING	SQ FT	70	70
		60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1		SP		STORM SEWER (WATER MAIN REQUIREMENTS) 8 INCH	FOOT	5	5
								SP		DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED (SPECIAL)	EACH	2	2
									1		SQ YD	1200	1200
					L.			SP	XX007724	SOD STRIPPING, 2" DEPTH	1 30 10	1200	1200

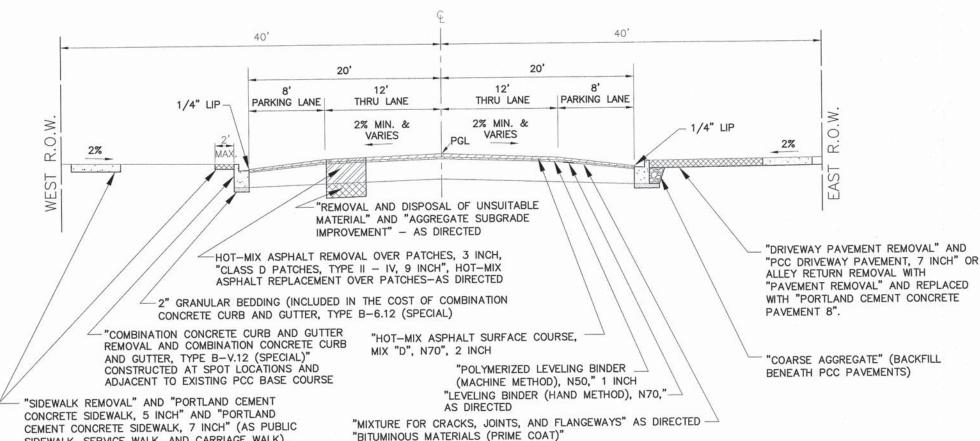
Frank Novotny & Associates, Inc.

825 Midway Drive + Willowbrook, IL - 80527 + Telephone (650) 887-840 + Fax (630) 887-8152

ILLINOIS PROFESSIONAL DESIGN FIZM NO. 184-00898

FILE NAME TOWN OF CICERO	USER NAME =	DESIGNED - AMS	REVISED - 02-23-15			F.A.U. RTE. SECTION	COUNTY TOTAL SHEET NO.
FAU 2790 (AUSTIN BOULEVARD)		DRAWN - JEP-JFP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	2790 14-00225-00-RS	COOK 29 3
FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD)	PLOT SCALE =	CHECKED - TPG	REVISED -				CONTRACT NO. 61B55
14396 RESURFACING	PLOT DATE =	DATE - 12-02-14	REVISED —		SCALE: NONE SHEET NO. OF SHEETS STA. 0+63 TO STA. 8+50	FED. ROAD DIST. NO.   ILLINOIS FED.	AID PROJECT M-4003(481)





#### NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS								
MIXTURE TYPE	AIR VOIDS							
PAVEMENT RESURFACING								
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, (IL-9.5mm)	4% @ 70 GYR							
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50,	3.5% @ 50 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) (IN 3 LIFTS)	4% @ 70 GYR							
HOT-MIX ASPHALT OVER PATCHES, (HMA BINDER, IL-19.0mm), 3"	4% @ 70 GYR							
	= = Mpc.tr ME							

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 HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS FOR USE OF RECYCLED MATERIALS SEE 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.

Frank Novotny & Associates, Inc.

SS Midwy Drive - Willywheed, IL + 60527 \* Telephon: (50) 887-810 \* Fax. (50) 887-010
ILINON PROPESSIONAL DESIGN FEM NO. 184-00028

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FILE NAME TOWN OF CICERO

FAU 2790 (AUSTIN BOULEVARD)
FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD)

FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD)

RESURFACING

REVISED - 02-23-15

STATE OF ILLINOIS

DESIGNED - AMS

REVISED - 02-23-15

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLOT SCALE # DATE - 12-02-14 REVISED -

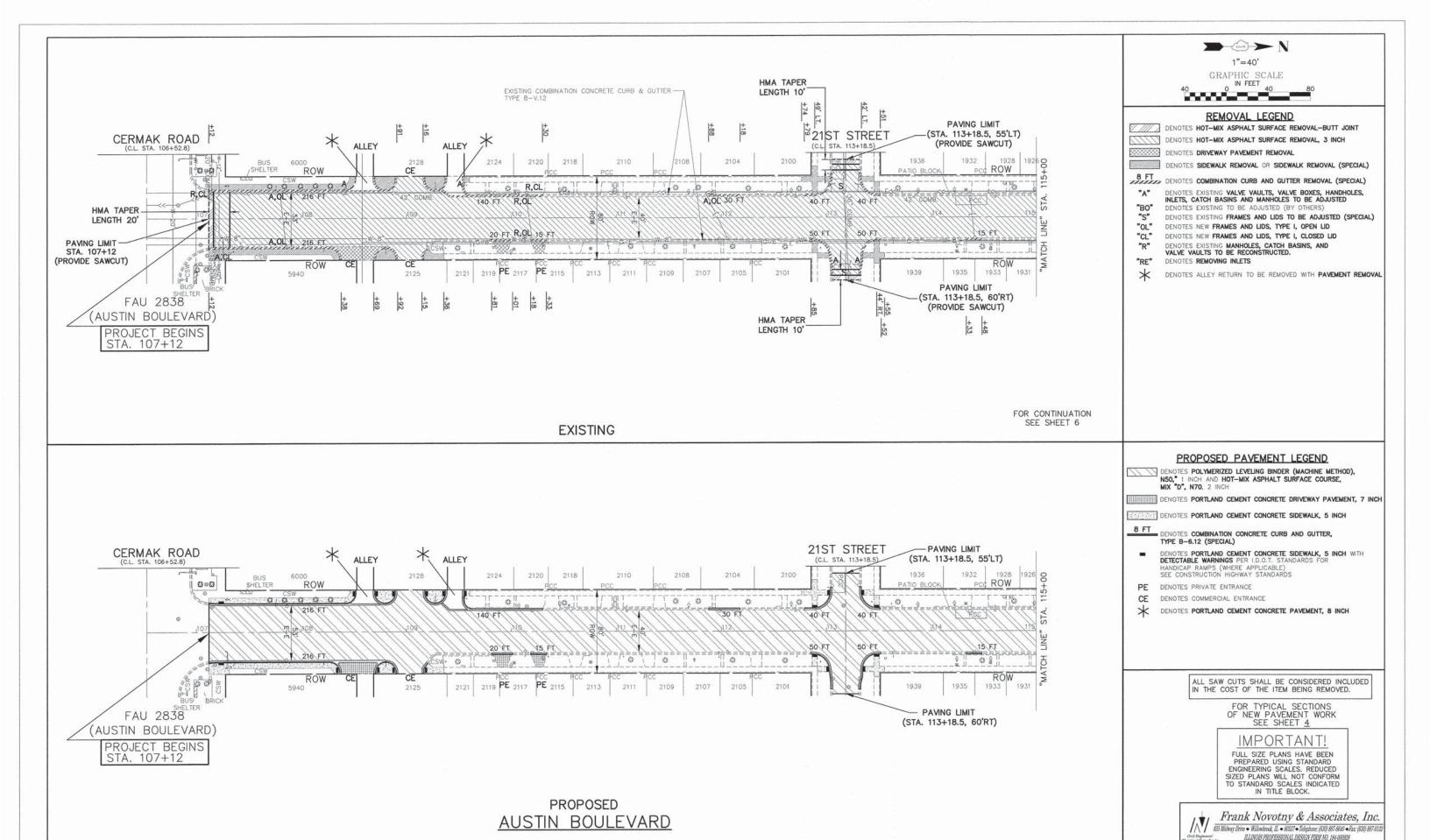
PROPOSED TYPICAL SECTION

SIDEWALK, SERVICE WALK, AND CARRIAGE WALK), "SOD STRIPPING, 2" DEPTH", "FURNISH & PLACE TOPSOIL, 4 INCH" AND "SODDING, SALT TOLERANT"

TO MATCH EXISTING GRADE.

TYPICAL SECTIONS
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

SCALE: 1"=5' SHEET NO. OF SHEETS STA. 0+63 TO STA. 8+50



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

REVISED -02-23-15

REVISED

REVISED

REVISED

DRAWN

CHECKED -

TOWN OF CICERO

FAU 2790 (AUSTIN BOULEVARD)

RESURFACING

PLOT SCALE =

LOT DATE =

FAU 1453 (CERMAK ROAD) TO FAP 347 (ROOSEVELT ROAD)

PLAN: FAU 2790 (AUSTIN BOULEVARD) -

(RESURFACING)

FAU 1453 (CERMAK ROAD) TO STA, 115+00

SCALE: 1"=40' SHEET NO. OF SHEETS STA. 27+03 TO STA. 159+27

SECTION

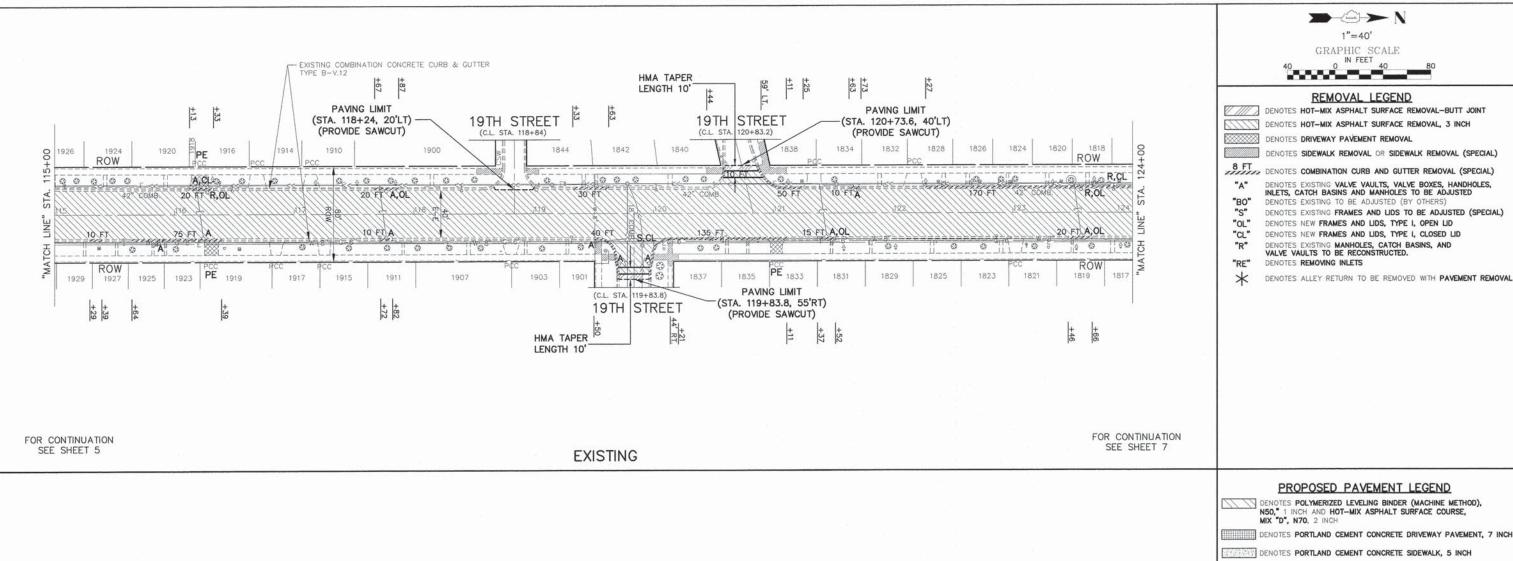
2790 14-00225-00-RS

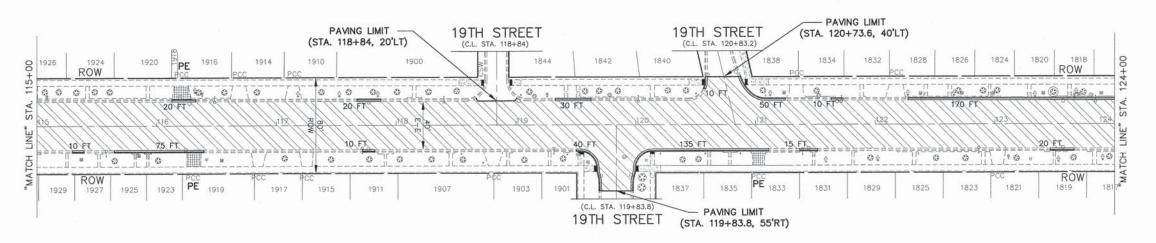
COUNTY

COOK 29 5

CONTRACT NO. 61B55

AID PROJECT M-4003(481)





# PROPOSED AUSTIN BOULEVARD

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN: FAU 2790 (AUSTIN BOULEVARD) -STA. 115+00 TO STA. 124+00 (RESURFACING)

					Civil Engine Municipal Cons	ens/					30) 887-0132
EVARD) -				F.A.U. RTE.	SECTION			COUNTY	TOTAL	SHEET NO.	
					2790	14-0022	-00225-00-RS COOK 2  CONTRACT NO	29	6		
									CONTRA	ACT NO. 61	B55
SHEETS	STA.	115+00	TO STA.	124+00	FED. ROA	D DIST. NO.	ILUNOIS	FED. AID	PROJECT	M-4003(4	181)

	DENOTES PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH
372334	DENOTES PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
8 FT	DENOTES COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)
•	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
	TO A CONTRACT OF THE PROPERTY OF THE CONTRACT OF THE PROPERTY

PE DENOTES PRIVATE ENTRANCE

CE DENOTES COMMERCIAL ENTRANCE

DENOTES PORTLAND CEMENT CONCRETE PAVEMENT, 8 INCH

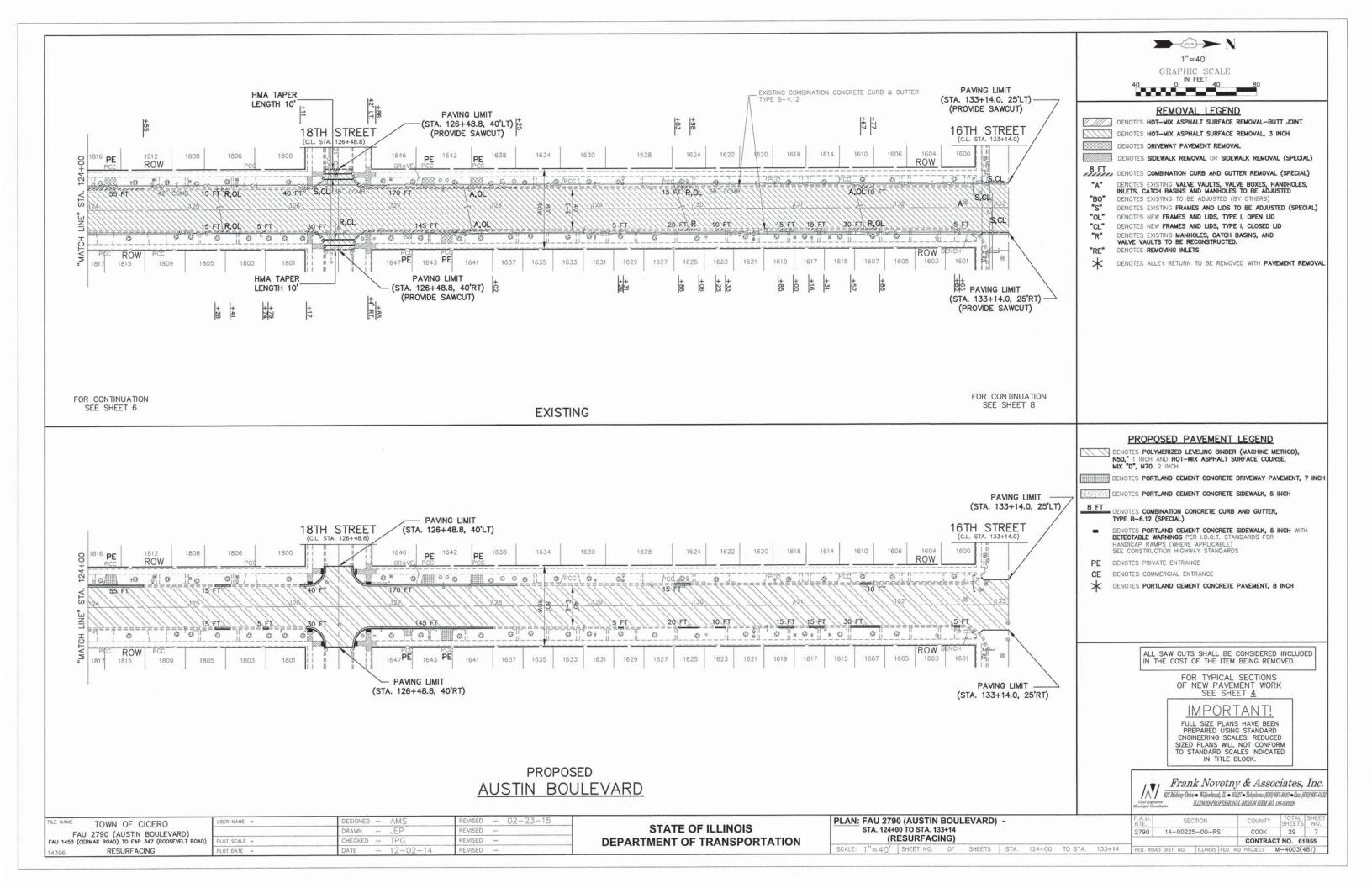
ALL SAW CUTS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

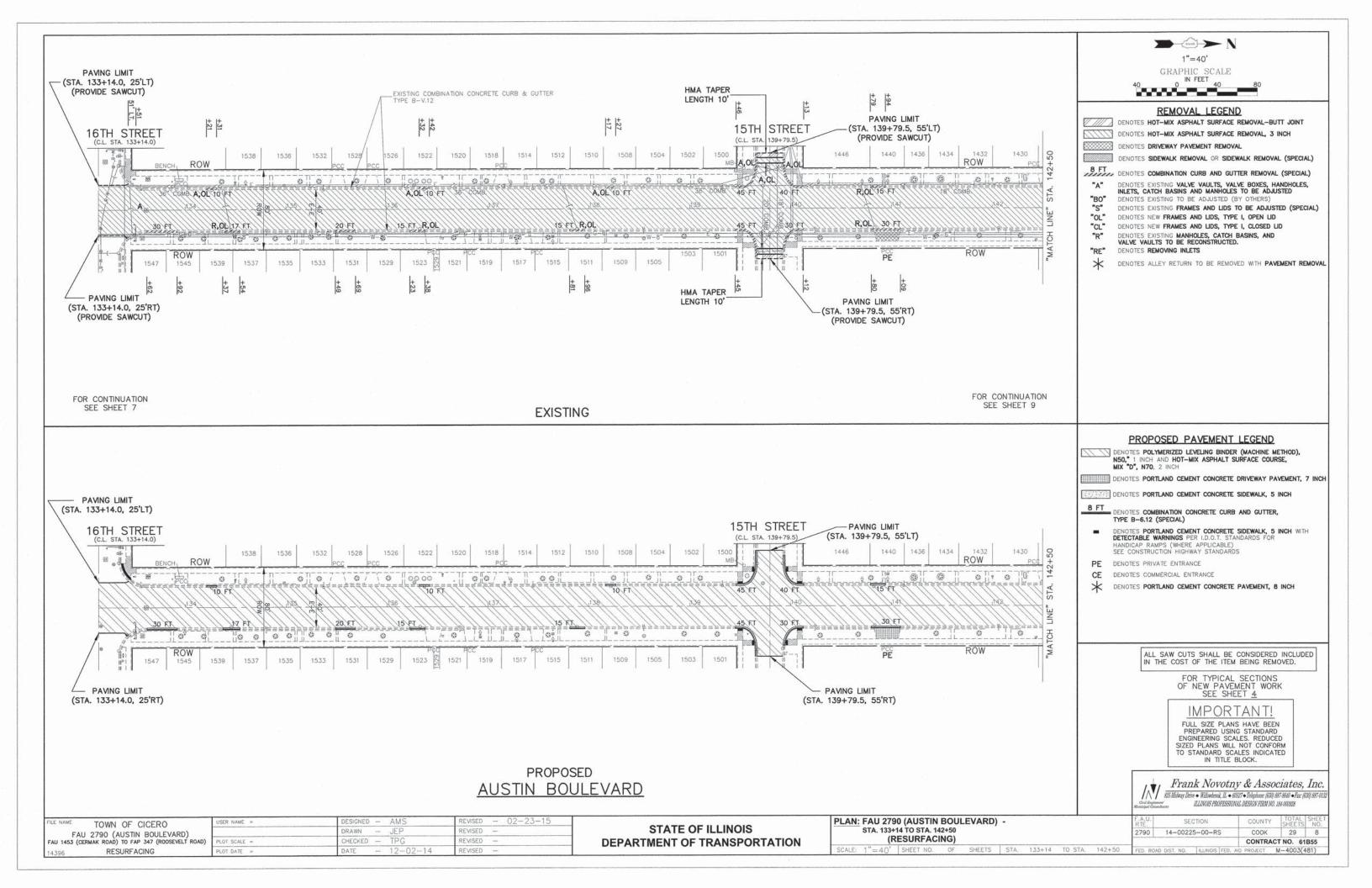
FOR TYPICAL SECTIONS
OF NEW PAVEMENT WORK
SEE SHEET 4

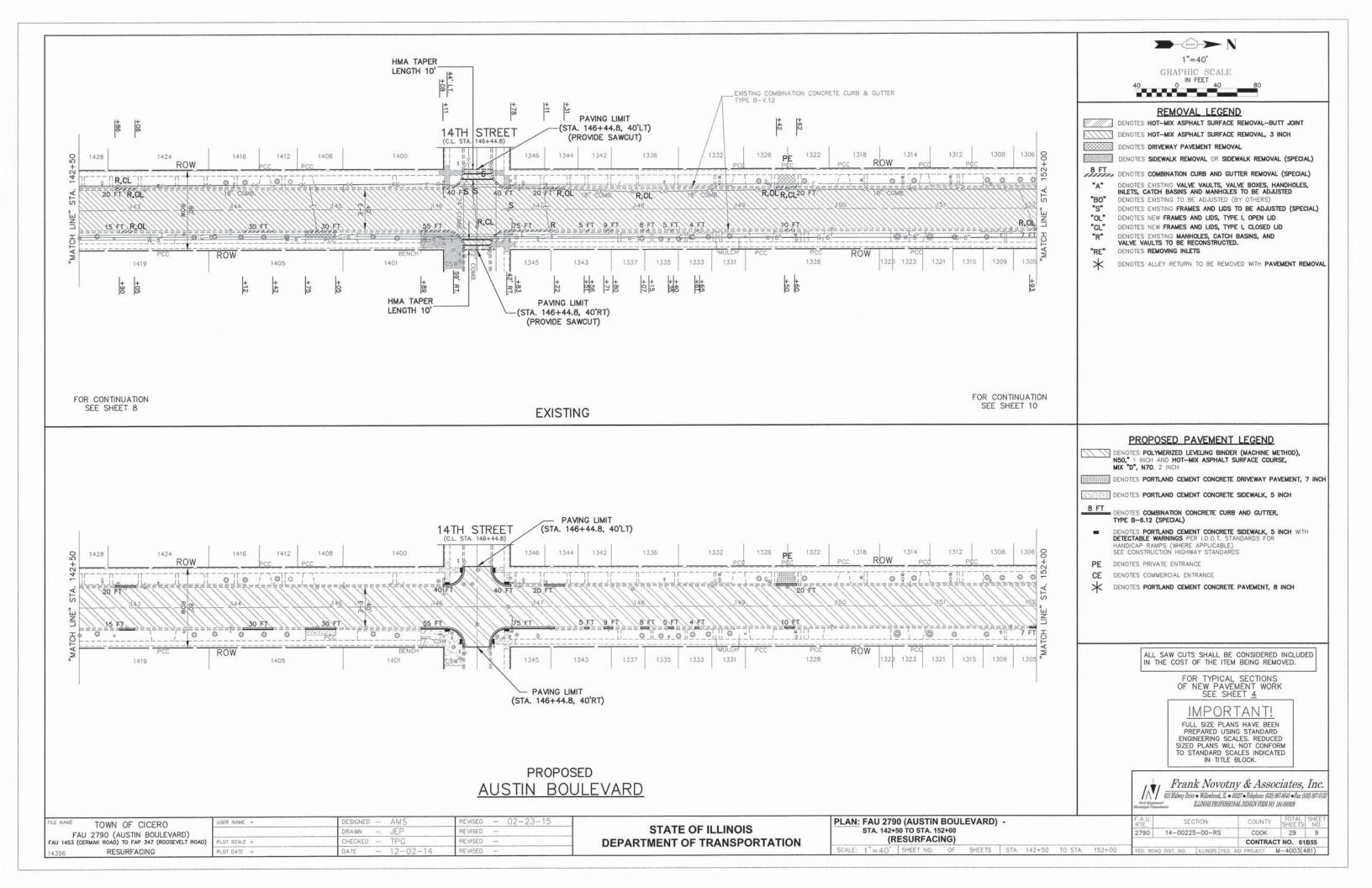
IMPORTANT!

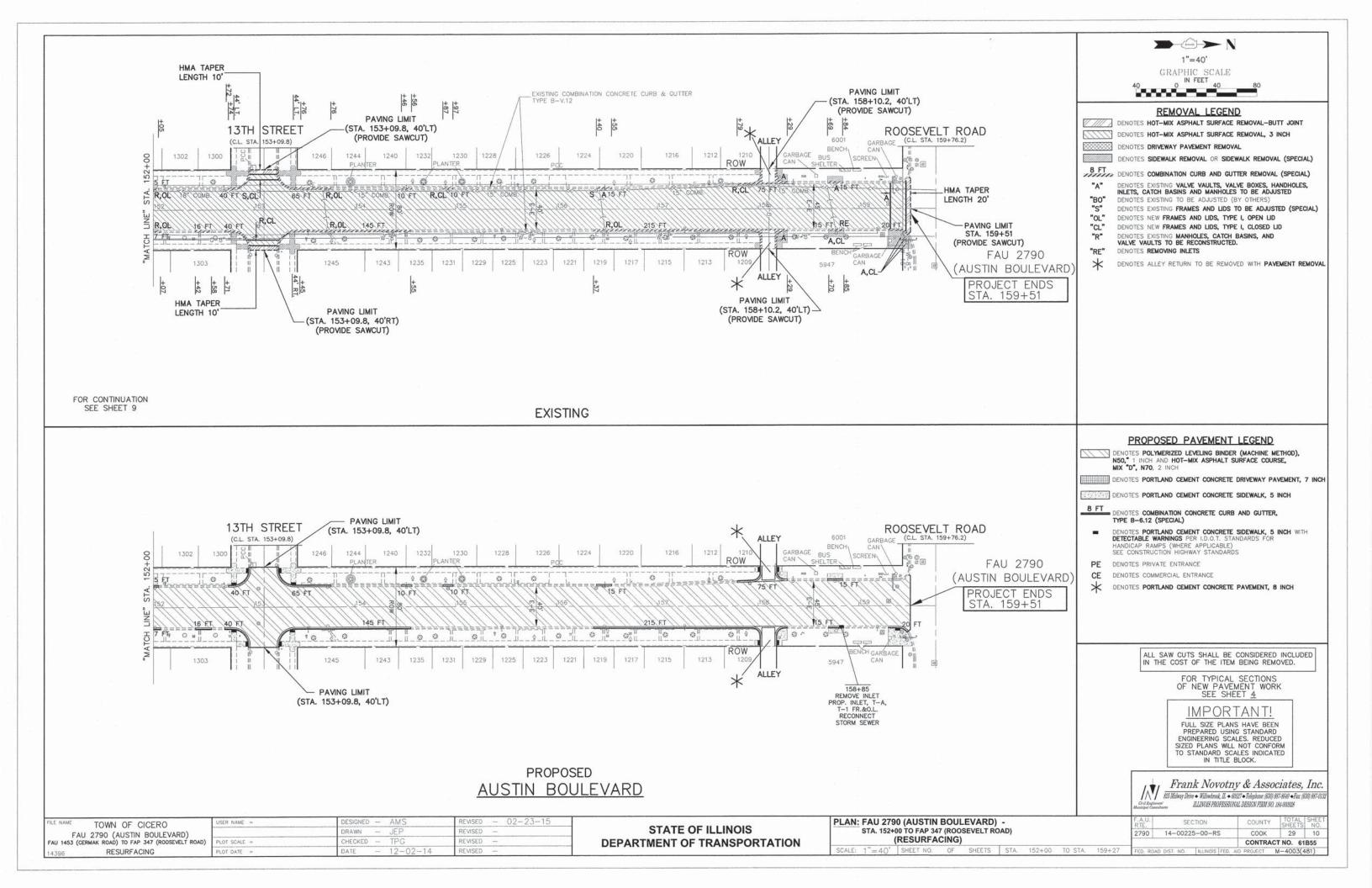
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES INDICATED IN TITLE BLOCK.

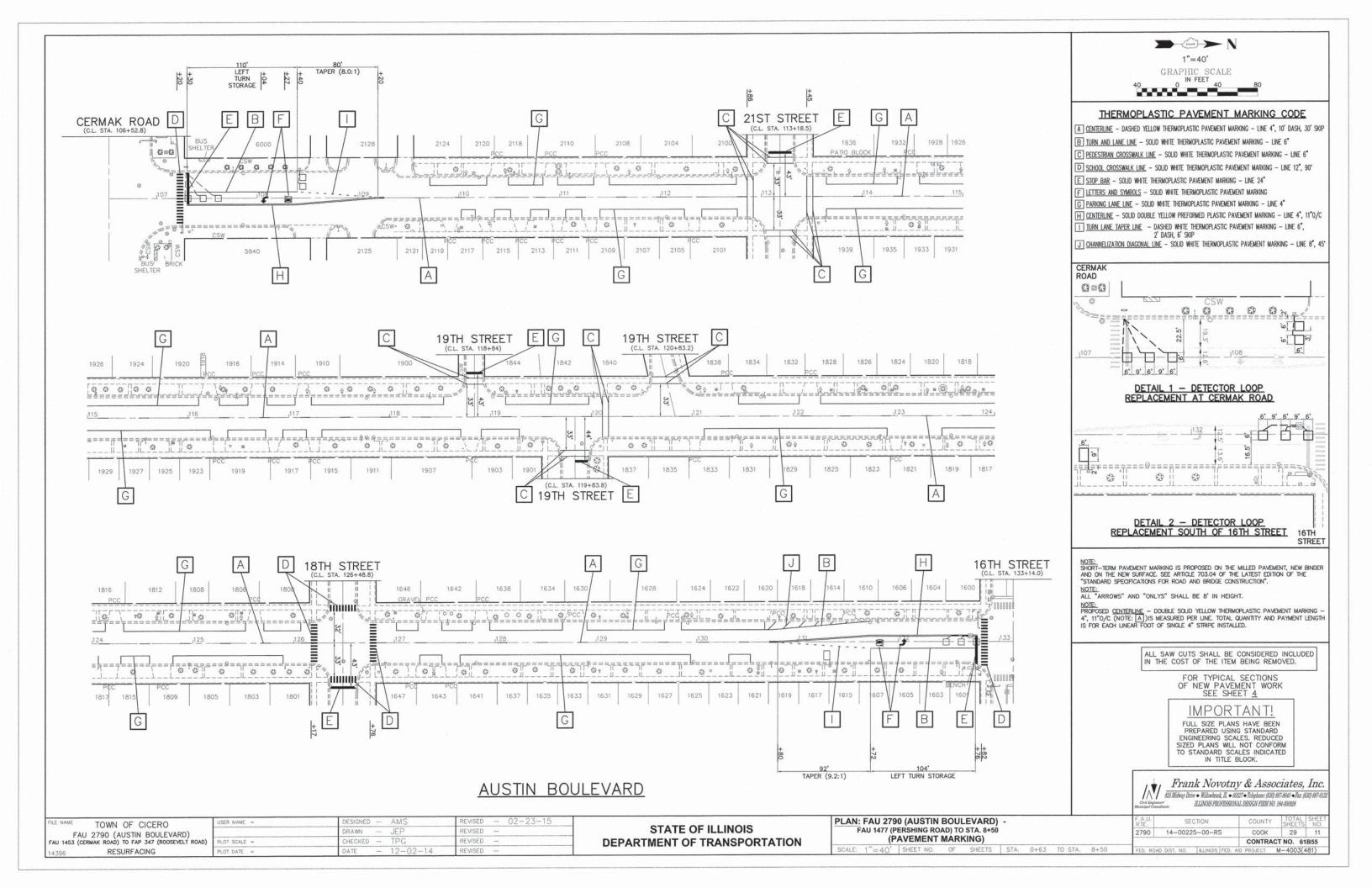
Frank Novotny & Associates, Inc.

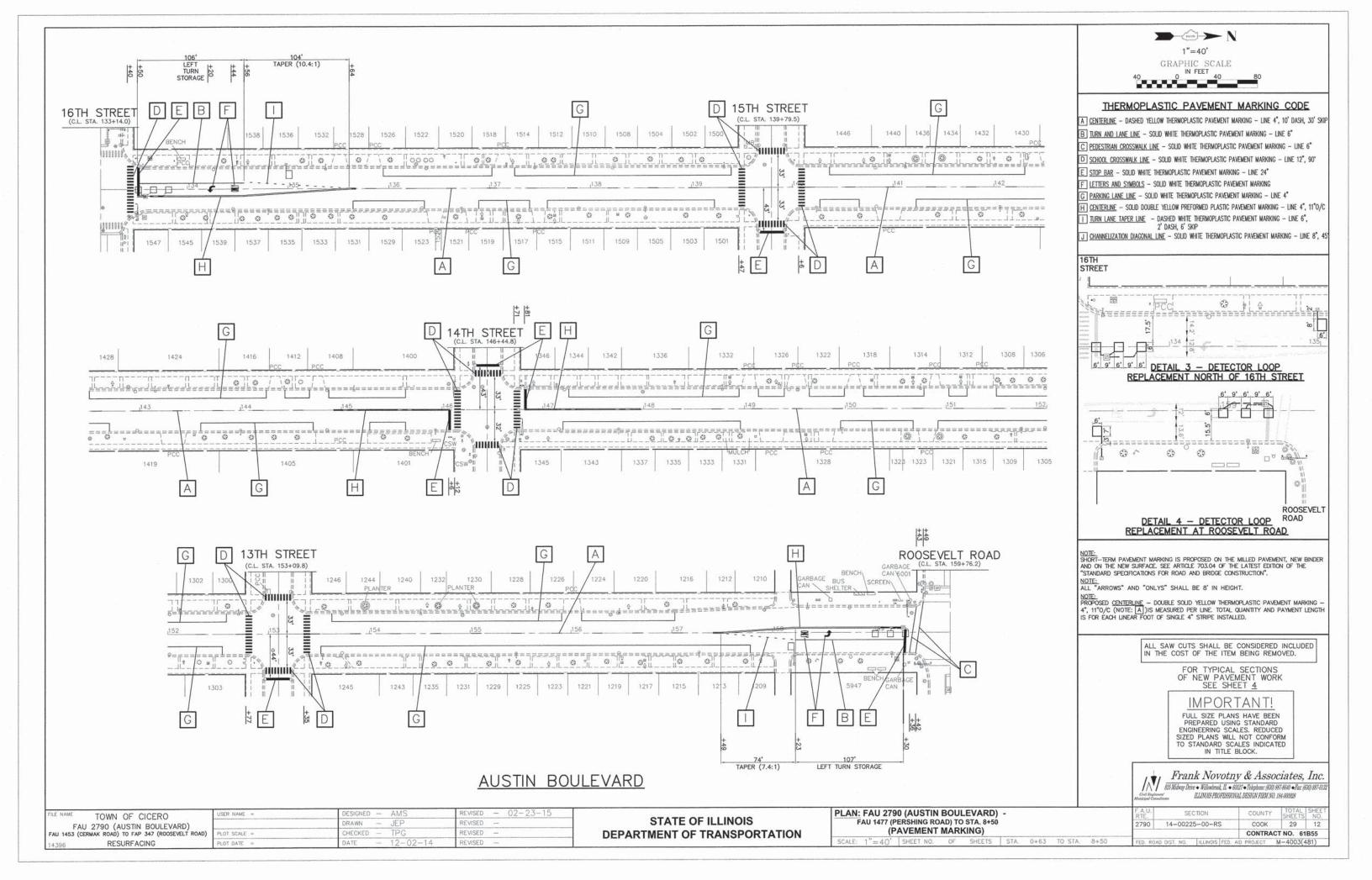


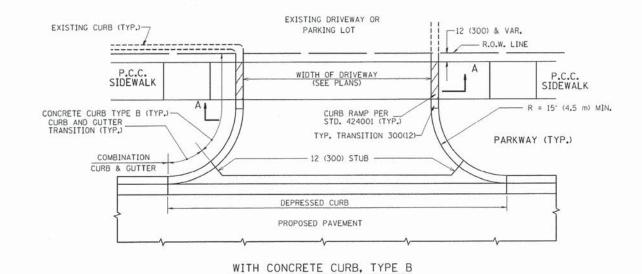


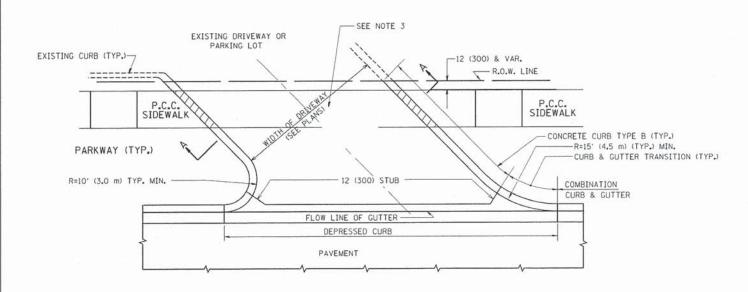


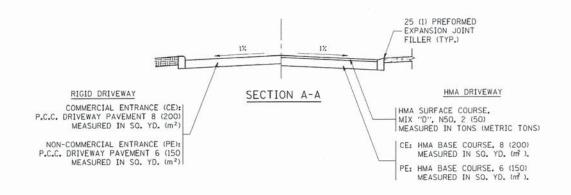




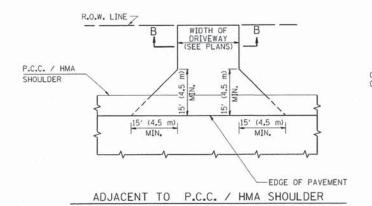


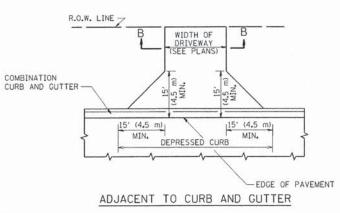


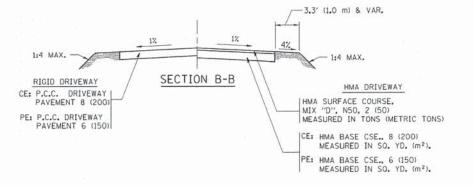




WITH CONCRETE CURB, TYPE B







# RURAL FIELD ENTRANCE (FE)

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

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SO. YD.  $(m^2)$ .

# GENERAL NOTES:

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

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

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

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

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

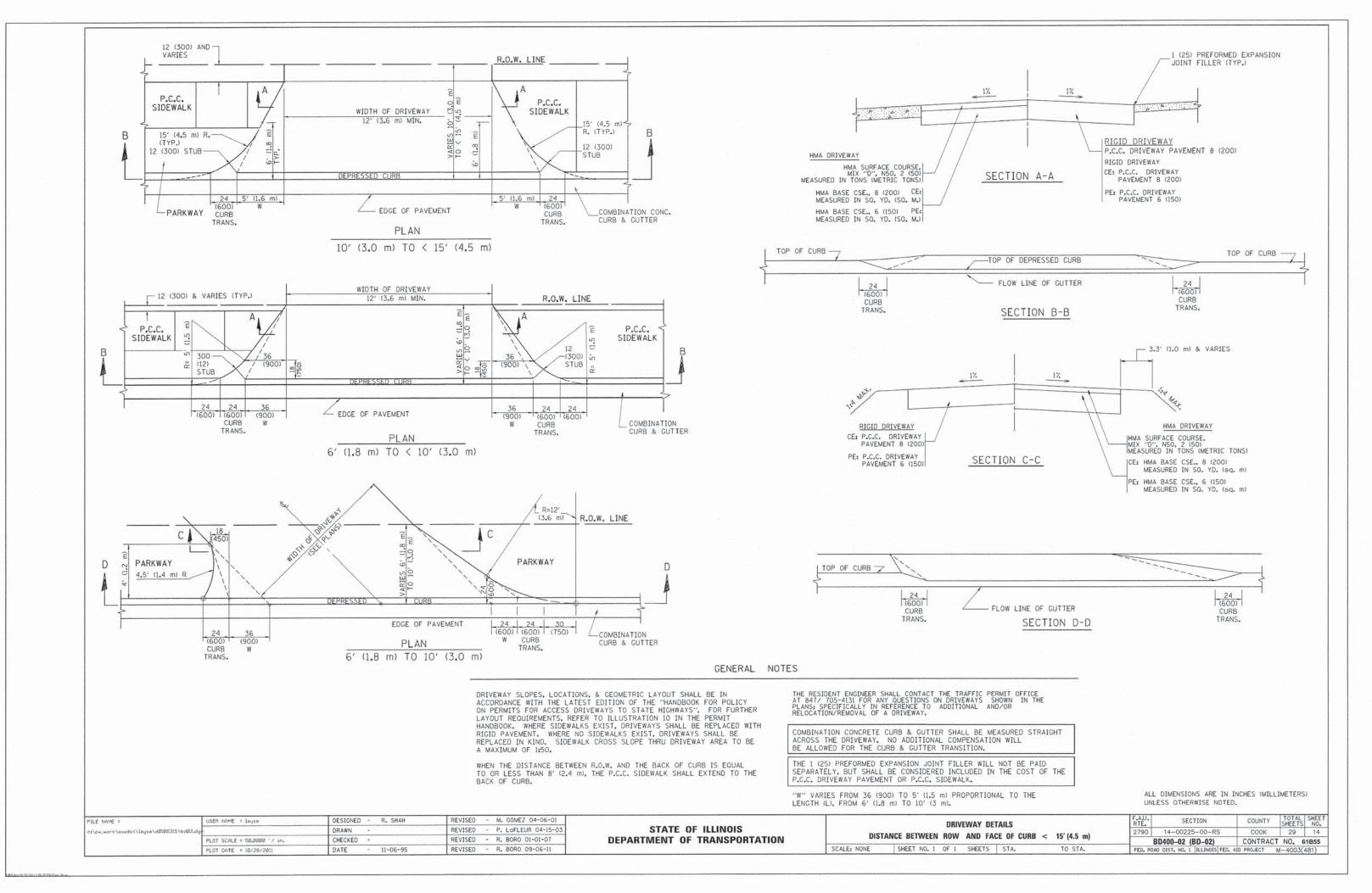
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

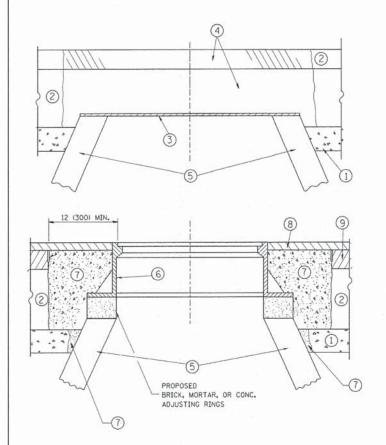
SCALE:

FILE NAME =	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - P. LoFLUER 04-15-03
ci\pw_work\pwidot\leysa\d0108315\bd01.dgr		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.00000 ' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DR	IVEWAY DETAILS -	DISTANCE	BETWEEN R.	0.W.	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
AND FACE OF CURB & EDGE OF SHOULDER > = 15' (4.5 m)				15' // E m\	2790 14-00225-00-RS		COOK	29	13
AND	ACE OF COMB &	DOE OF SH	IUULDEN >-	15 (4.5 111)	В	D0156-07 (BD-01)	CONTRACT	NO. 6	1B55
NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. 1   ILLINOIS FED. A	AID PROJECT M	-4003(4	81)





#### NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

  D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40)
- 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 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
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- (8) PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COUR
- 5 EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

#### LOCATION OF STRUCTURES:

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

## BASIS OF PAYMENT:

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

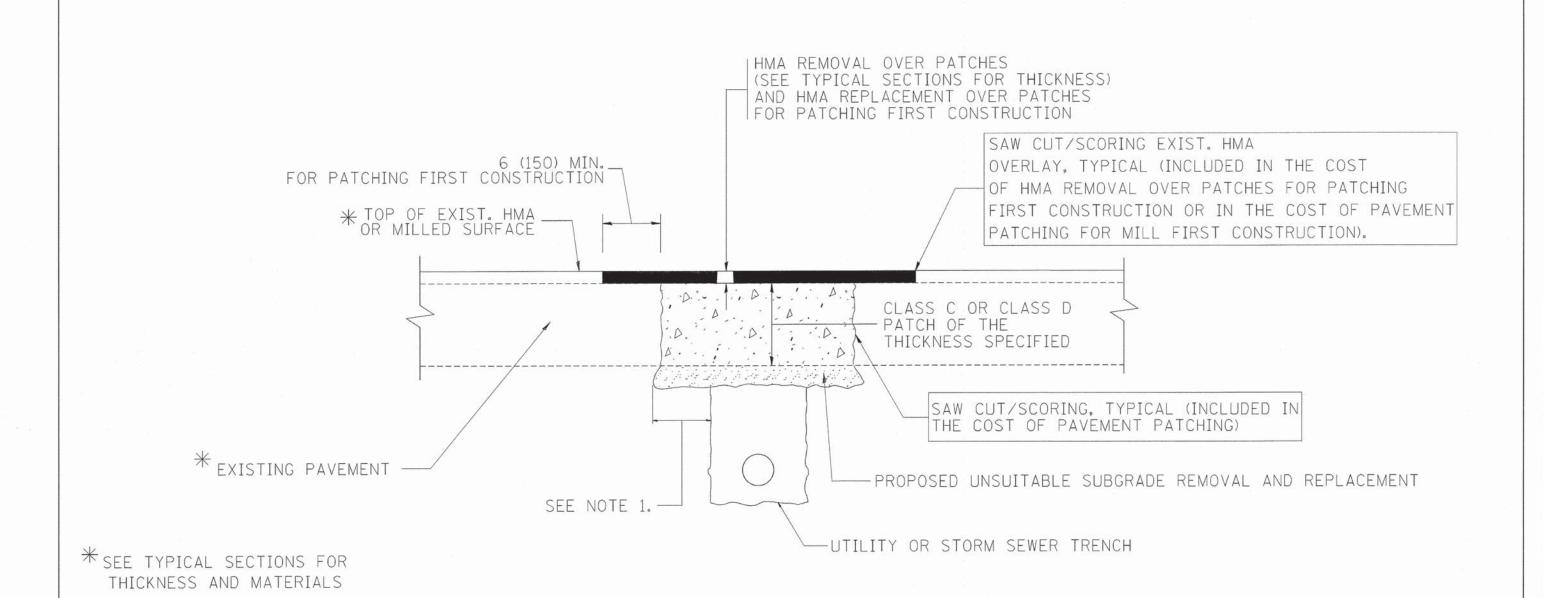
THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04		No.	DETAILS FOR	F.AU. RTE.	SECTION	COUNTY	TOTAL SHEE SHEETS NO.
c:\pw_work\pwidot\bauerd1\d0108315\bd0	\bauerd \d0108315\bd08.dgn		REVISED - R. BORO 01-01-07	STATE OF ILLINOIS			2790	14-00225-00-RS	COOK	29 15
The same of the sa	PLOT SCALE = 1968,5000 '/ m	CHECKED -	REVISED - R. BORO 03-09-11	DEPARTMENT OF TRANSPORTATION		FRAMES AND LIDS ADJUSTMENT WITH MILLING		BD600-03 (BD-8)	CONTRAC	T NO. 61B55
1	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO		AID PROJECT M	1-4003(481)



## 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)

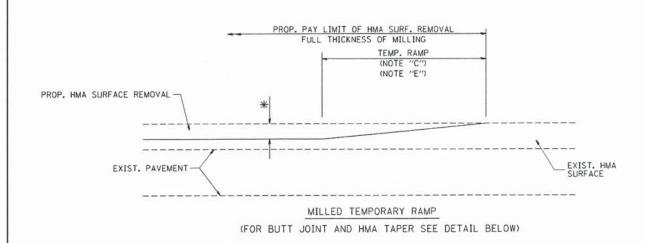
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

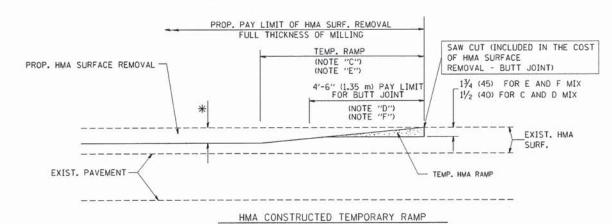
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = boundl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		SECTION	COUNTY	SHEETS NO.
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				0 14-00225-00-RS	соок	29 16
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT			BD400-04 (BD-22)	CONTRACT	T NO. 61B55
	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		AID PROJECT M	1-4003(481)



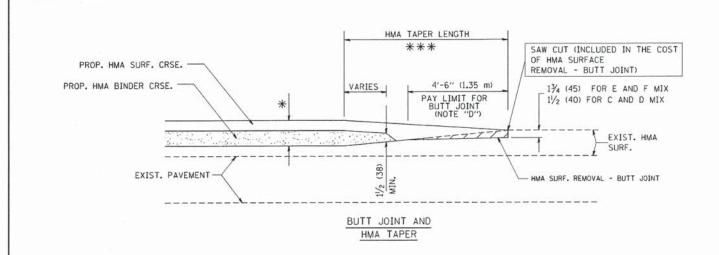
# OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

## OPTION 2

#### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

REVISED

DESIGNED - M. DE YONG

- 06-13-90

DRAWN

DATE

CHECKED

USER NAME = gaglianobt

PLOT SCALE = 50.0000 '/ IN

PLOT DATE = 1/4/2008

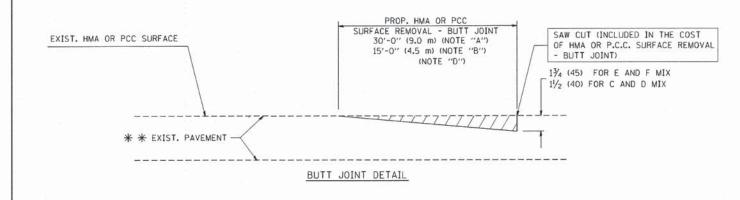
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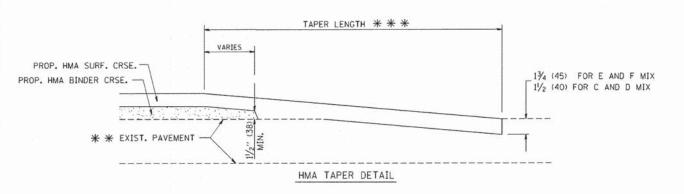
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REVISED - R. SHAH 10-25-94 - A. ABBAS 03-21-97 REVISED - M. GOMEZ 04-06-01 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

COUNTY TOTAL SHEET NO. SECTION **BUTT JOINT AND** COOK 29 17 14-00225-00-RS HMA TAPER DETAILS BD400-05 BD32 CONTRACT NO. 61B55 SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

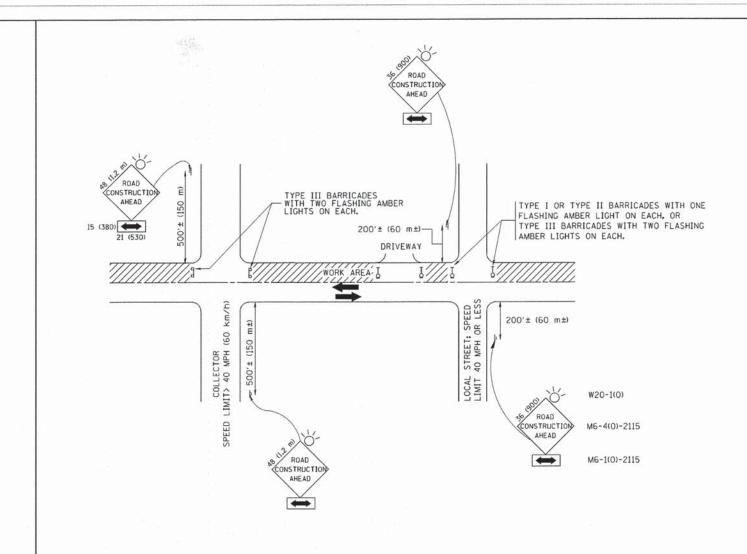
#### NOTES

- 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 SOUARE YARD (SOUARE 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.



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN  $36\times36\ (900\times900)$  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:
- O) 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 (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:

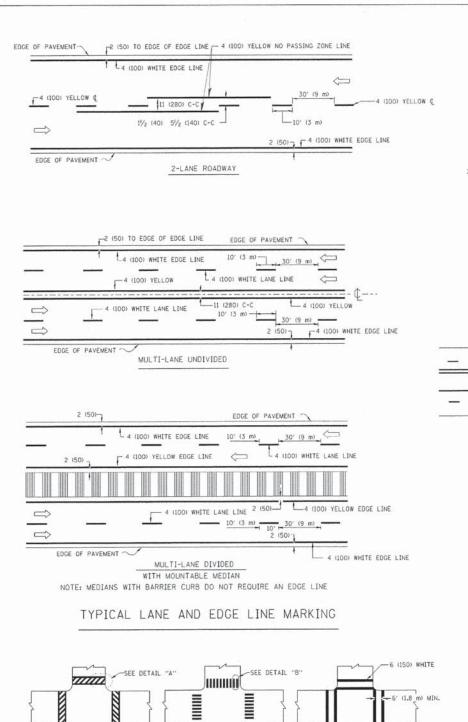
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER 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.

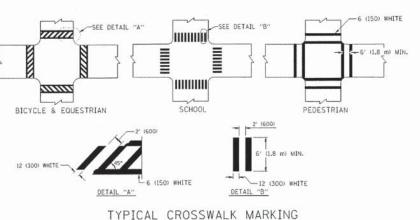
All dimensions are in millimeters (inches) unless otherwise shown.

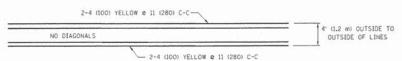
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W:\distatd\22x34\tcl0.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATI	E 01	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

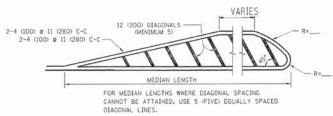
TRAFFIC CONTROL AND PROTECTION FOR				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
				2790	14-00225-00-RS	COOK	29	18
	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS				TC-10	CONTRACT	NO. 61	B55
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD	D DIST. NO. 1 ILLINOIS FED. A	10 PROJECT N	1-4003(4	81)





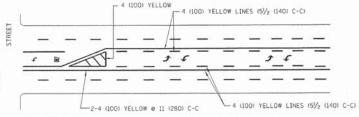


#### 4' (1.2 m) WIDE MEDIANS ONLY



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

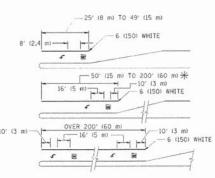


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

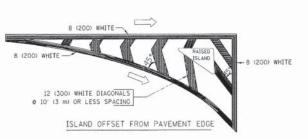
#### TYPICAL PAINTED MEDIAN MARKING

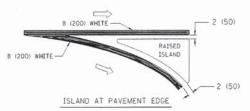


\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING





# 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 0 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 DMIT 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 MEXTENSIONS 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; 51/2 (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 & 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' (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. OTHERNISE, 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 m²) EACH "%"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) © 45°	SOL10	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.

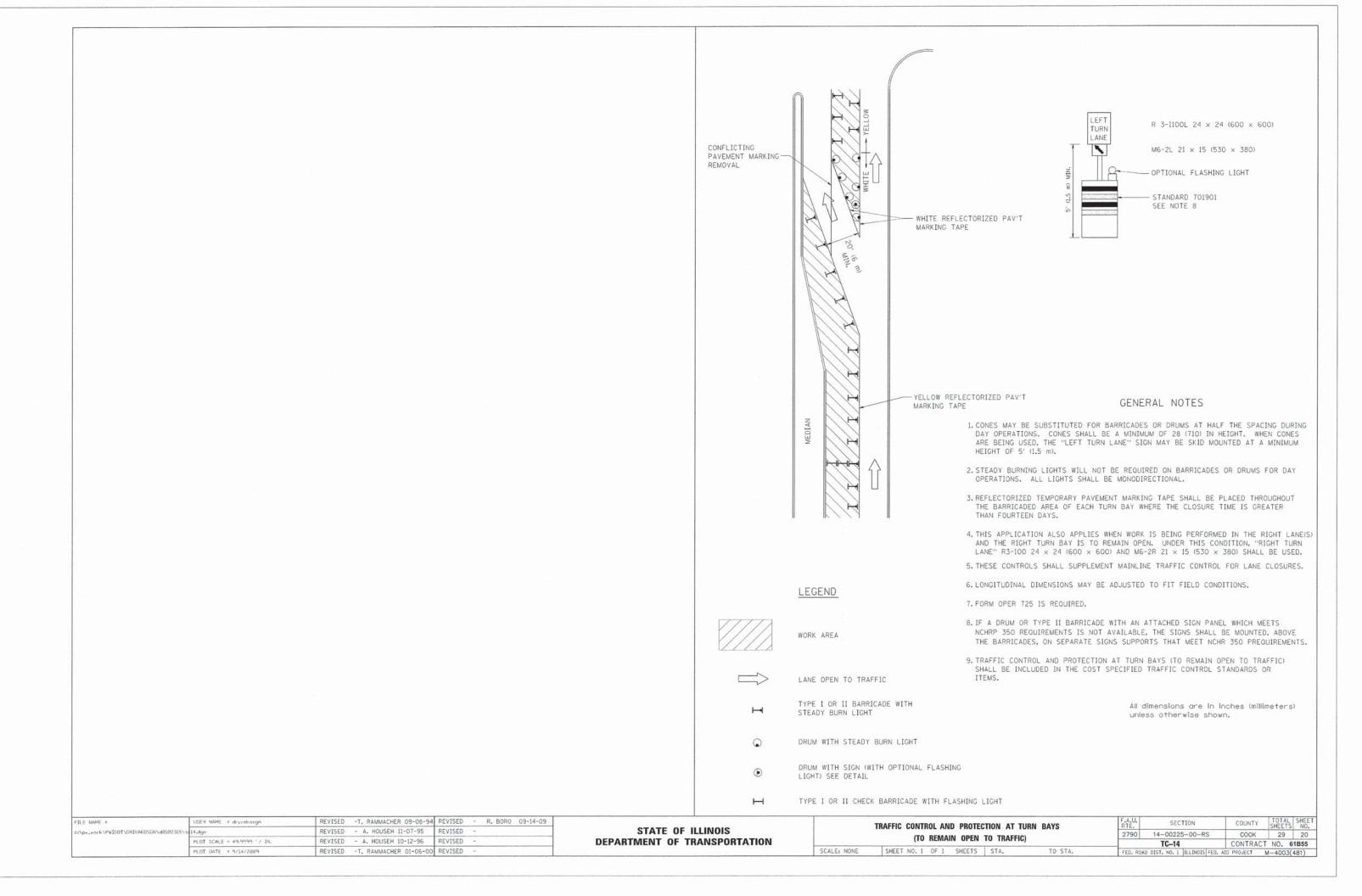
	LARGE SIZE	SMALL SIZE
THROUGH ARROW	1.07 (11.5)	0.60 (6.5)
LEFT OR RIGHT ARROW	1.47 (15.6)	0.60 (6.5)
COMBINATION LEFT (RIGHT) AND THROUGH ARROW	2.42 (26.0)	1.37 (14.7)
RAILROAD "R" 1.8m (6ft.)	0.33 (3.6)	_
RAILROAD "X" 6.1m (20ft.)	5.02(54.0)	
HANDICAPPED SYMBOL	0.43 (4.6)	

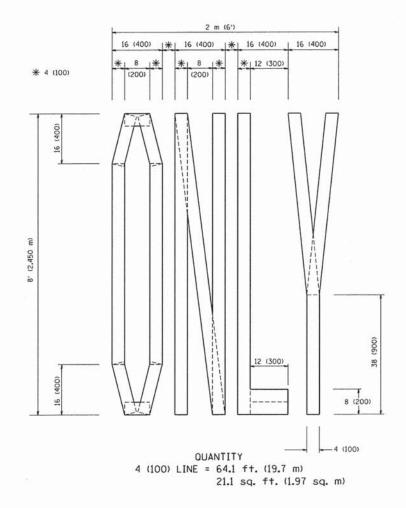
All dimensions are in inches (millimeters) unless otherwise shown.

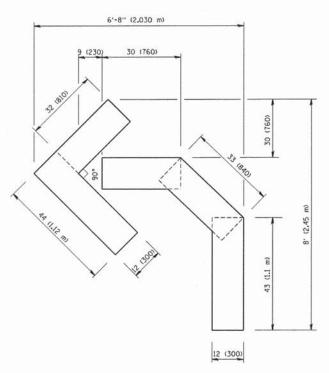
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	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATI	E 01	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

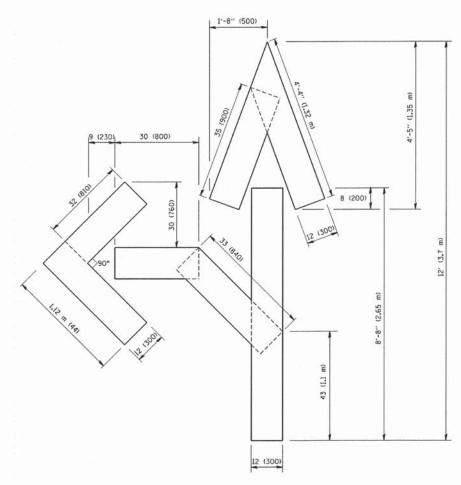
	DISTRICT ONE				SECTION	COUNTY	TOTAL	SHEET NO.
					14-00225-00-RS	COOK	29	19
	TYPICAL PAVEMENT MARKINGS				TC-13	CONTRACT	NO. 61	B55
SCALE: NONE	SHEET NO. 1 OF 1 SHEE	TS STA.	TO STA.	FED, ROA	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT M	-4003(4	81)







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



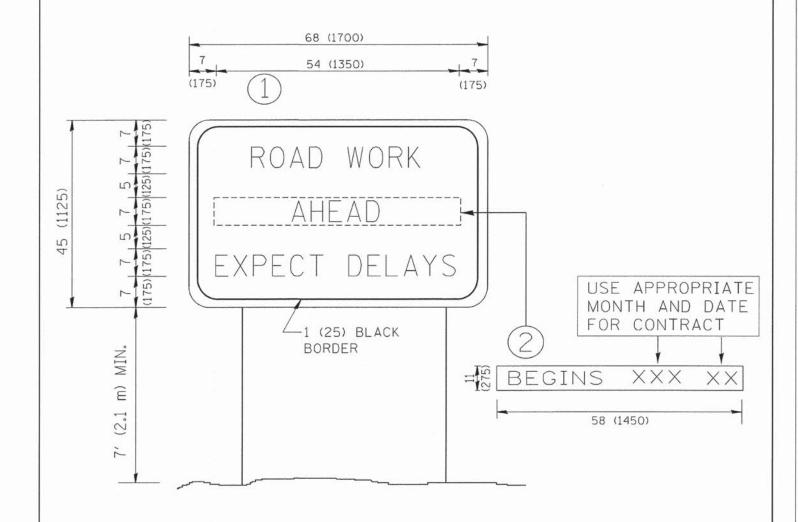
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
Wr\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 FOR TRAFFIC STAGING				F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
				2790	14-00225-00-RS	COOK	29	21	
					TC-16	CONTRACT	NO. 61	B55	
CALE: NONE	SHEET NO. 1 OF 1 S	SHEETS	STA.	TO STA.	FED. ROAL	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT	M-4003(4	81)



# NOTES:

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

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

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

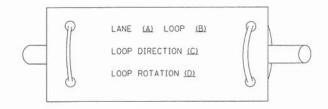
STATE	O	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

ARTERIAL ROAD						F.A RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
						2790	14-00225-00-RS	COOK	29	22
INFORMATION SIGN					TC-22	CONTRAC	T NO. 6	1B55		
ALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT	M-4003(4	81)

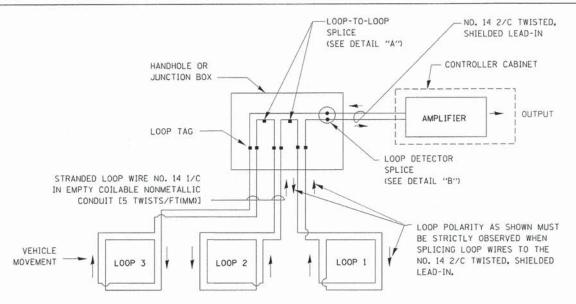
#### LOOP DETECTOR NOTES

- 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

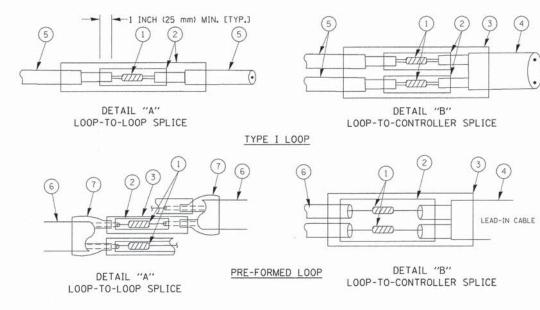


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### 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.



#### 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

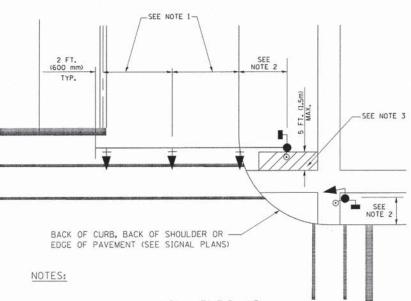
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STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

DISTRICT ONE				F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
STANDA	RD TRAFFIC SIGN		ICH DETAILS	2790	14-00225-00-RS	COOK	29	23
STANDA						CONTRACT	NO. 6	1B55
SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. ROAL	D DIST. NO. ILLINOIS FED. A	AID PROJECT N	1-4003(4	481)

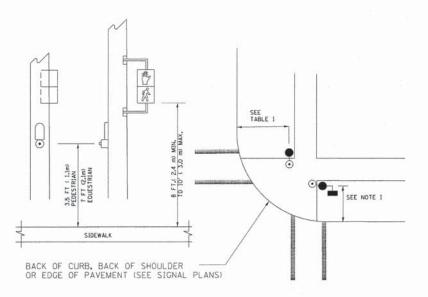
#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



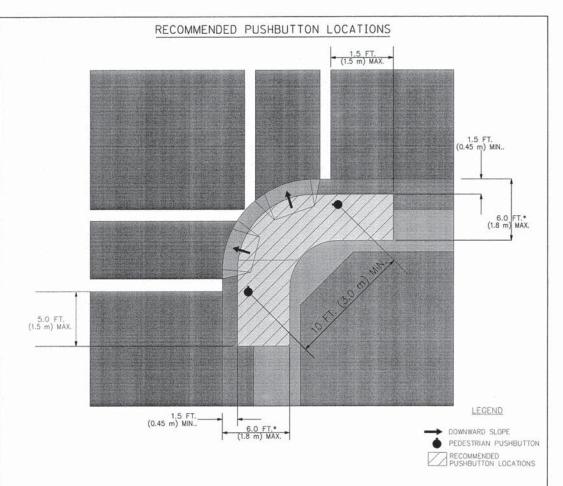
- 1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST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

# PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



#### NOTES:

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



- . WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- .. WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

# NOTES:

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

#### TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1,2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

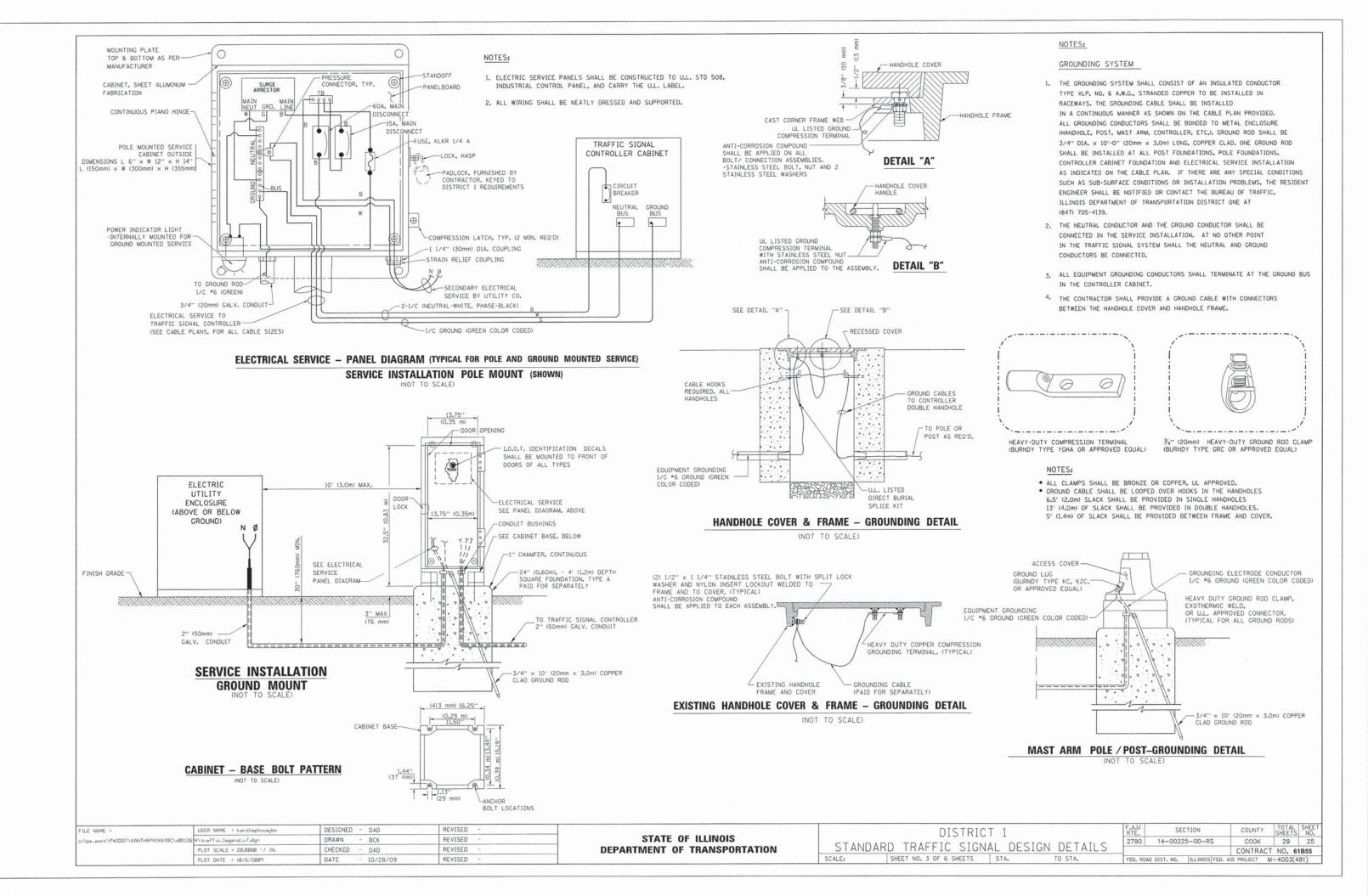
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
-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

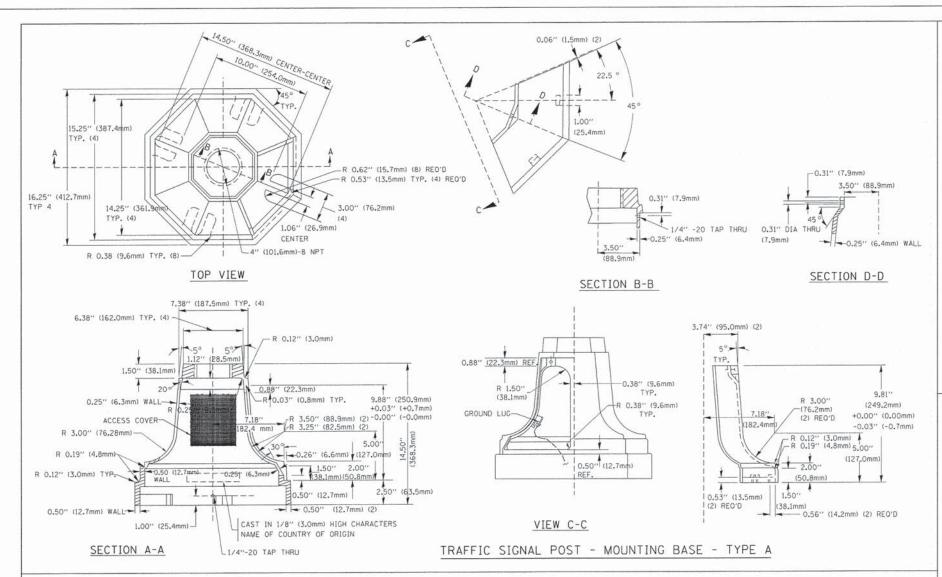
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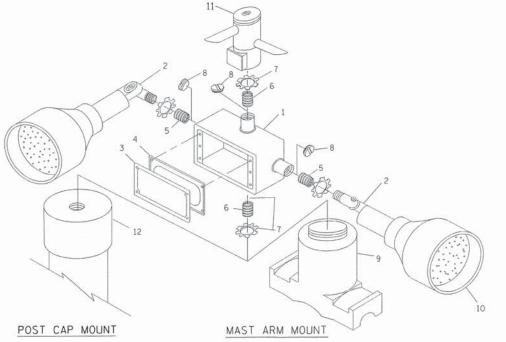
#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DIS	TRICT	1		RTE.	SECTION	COUNTY	SHEETS	NO.
CTANDADE	TDAFFIC	CICNIAL	DECTON	DETAILC	2790	14-00225-00-RS	COOK	29	24
	TRAFFIC	0.20.11.12	DESIGN	DETAILS	_		CONTRACT	NO. 61	1B55
SCALE:	SHEET NO. 2 OF 6	SHEETS	STA.	TO STA.	FED, ROAL	DIST. NO. ILLINOIS FED.	AID PROJECT M	-4003(4	81)

TOTAL SHEET NO.







EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

USER NAME = kanthaphixaybo

PLOT SCALE = 20.0000 1/ IN.

\traffic\_legend\_v7.don

FILE NAME

DESIGNED - DAG

CHECKED - DAD

DRAWN - BCK

REVISED

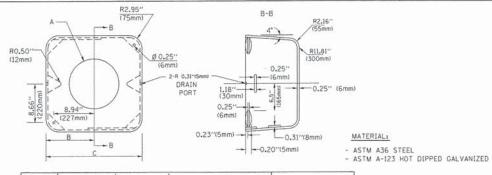
REVISED REVISED

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

#### NOTES:

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

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

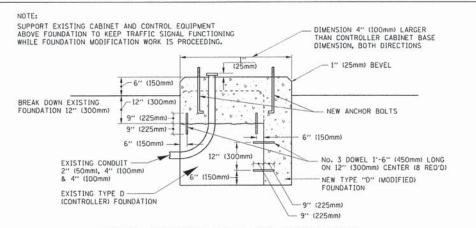


Α	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

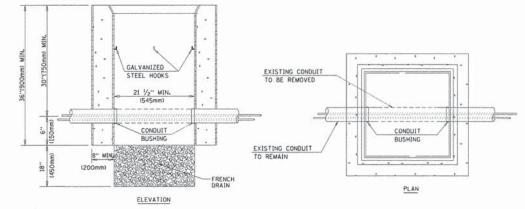
#### SHROUD

#### NOTES:

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



# MODIFY EXISTING TYPE "D" FOUNDATION

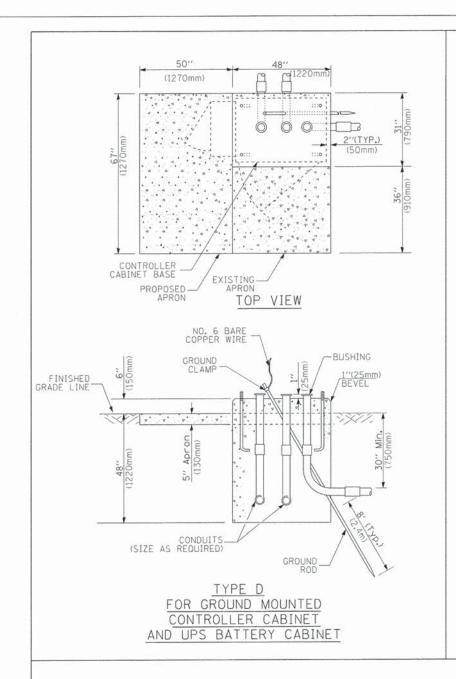


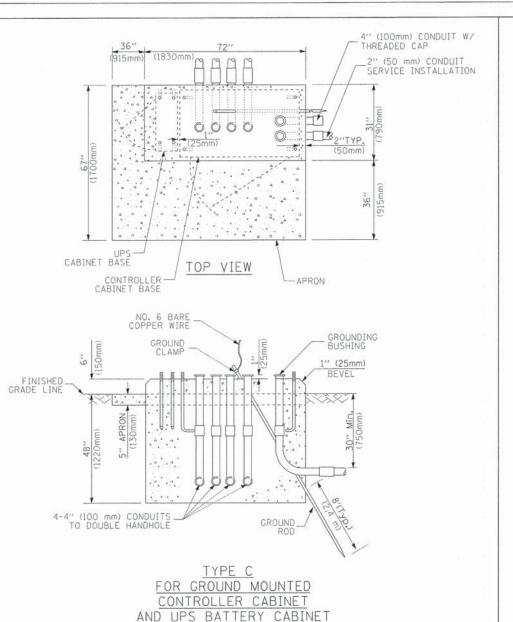
## NOTES:

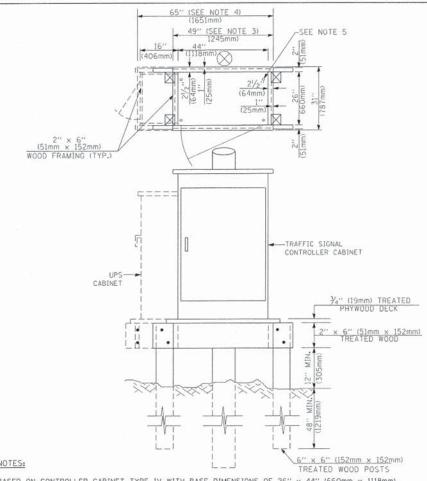
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

## HANDHOLE TO INTERCEPT EXISTING CONDUIT

	DISTRICT	1		F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEE'
CTANDAD	RD TRAFFIC SIGNA		DETAILS	2790	14-00225-00-RS	COOK	29	26
STANDAR	D TRAFFIC SIGNA	AL DESIGN	DETAILS			CONTRAC	NO. 6	1B55
SCALE:	SHEET NO. 4 OF 6 SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO.   ILLINOIS FED.	AID PROJECT N	1-4003(4	81)







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

# TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

# VERTICAL CABLE LENGTH

THE MODIFIED STOTAL FIEADS		
DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
ARM POLE OR SIGNAL POLE)	13.0	4.0
	6.0	2.0
LE MOUNT TO SERVICE DROP	13.5	4.1
LE MOUNT TO GROUND	13.5	4.1
OUND MOUNT	6.0	2.0
. MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

#### DEPTH OF FOUNDATION

TYPE A - Signal Post TYPE C - CONTROLLER W/ UPS TYPE D - CONTROLLER SERVICE INSTALLATION,

GROUND MOUNT. TYPE A - SOUARE

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4,0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

#### NOTES:

4'-0" (1.2m)

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

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = kanthaphixaybo	DESIGNED	- DAG	REVISED -	
c:\pw.work\PWIDOT\KANTHAPHIXAYBC\dØ112	4\traffic_legend_v7.dgn	DRAWN	- ВСК	REVISED -	
	PLOT SCALE = 20.0800 ' / IN.	CHECKED	DAD	REVISED -	
	PLOT DATE = 10/6/2009	DATE	10/28/09	REVISED -	

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

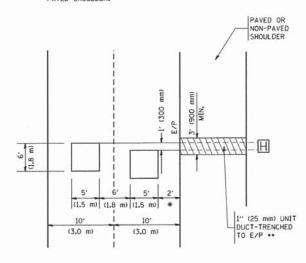
	DISTRICT	F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.		
STANDAR	RD TRAFFIC SIGN	2790 14-00225-00-RS		COOK	29	27		
STANDAN	INAFFIC SIGN	AL DESIGN	DETAILS			CONTRACT	NO. 6	1B55
SCALE:	SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.	FED. ROAL	D DIST. NO.   ILLINOIS FED. A	ID PROJECT M	-4003(4	181)

# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL E	XISTING	PROPOSED
CONTROLLER CABINET	⊠ <sup>R</sup>			EMERGENCY VEHICLE LIGHT DETECTOR	R≪	<b>6</b> <<	<b>H</b>	NO. 14 1/C, UNLESS NOTED OTHERWISE	-	1)—	
RAILROAD CONTROL CABINET		R R	B	CONFIRMATION BEACON	R <sub>O-J</sub>	<b>0−</b> 0	н	COAVIAL CARLS	12	_<	_©_
COMMUNICATIONS CABINET	CCR	ECC	CC	HANDHOLE	R			COAXIAL CABLE			0
MASTER CONTROLLER		[EMC]	MC	HEAVY DUTY HANDHOLE	R	H	H	VENDOR CABLE FOR CAMERA	2 <del>-</del>		(v)
MASTER MASTER CONTROLLER	[LPS]R	EMMC]	UPS UPS	DOUBLE HANDHOLE	R			COPPER INTERCONNECT CABLE.		d	
UNINTERRUPTIBLE POWER SUPPLY SERVICE INSTALLATION,		1000 AND		JUNCTION BOX	R		0	NO. 18 3 PAIR TWISTED, SHIELDED	11-	7.5	-6-
(P) POLE OR (G) GROUND MOUNT	-□ <sup>R</sup>	-□ <sup>₽</sup>	- <b>=</b> -	GALVANIZED STEEL CONDUIT				FIBER OPTIC CABLE NO. 62.5/125, MM12F	S*	-(12F)-	
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P <sub>T</sub>	PŢ	IN TRENCH (T) OR PUSHED (P) TEMPORARY SPAN WIRE, TETHER WIRE,	R			FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F	e.	-(24F)-	—(24F)—
STEEL MAST ARM ASSEMBLY AND POLE	"O	0		AND CABLE			0.7	FIBER OPTIC CABLE NO. 62,5/125.		$\prec$	
ALUMINUM MAST ARM ASSEMBLY AND POLE	0	0		COMMON TRENCH  COILABLE NONMETALLIC CONDUIT (EMPTY)			CT	(NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)	\(\rightarrow\)	-0-	-0-
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	<sup>R</sup> O-⊐	0-X	• <del>×</del> · ·	SYSTEM ITEM		S	S	GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM,		Cillino	<sup>c</sup> ı⊩•
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	PIZI	Pizh	PTZ	INTERSECTION ITEM		1	IP	OR (S) SERVICE	205		
SIGNAL POST	RO	0	•	REMOVE ITEM RELOCATE ITEM	R RL			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	$\stackrel{R}{\otimes}$	$\otimes$	•	ABANDON ITEM	A	<u> 1988 (18</u> 4		STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
SUY WIRE	>R	>	>-	12" (300mm) TRAFFIC SIGNAL SECTION		R	R	ALUMINUM MAST ARM POLE AND	RMF		
SIGNAL HEAD	R A	$\rightarrow$	-	12" (300mm) RED WITH 8" (200mm)		R		FOUNDATION TO BE REMOVED	a		
GIGNAL HEAD CONSTRUCTION STAGES NUMBERS INDICATE THE CONSTRUCTION STAGE)			_2	YELLOW AND GREEN TRAFFIC SIGNAL FACE			R	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF O-3⊄		
SIGNAL HEAD WITH BACKPLATE	+C <sup>R</sup>	+[>	+-			$\bigcirc$	Y	22 000 00 00 00 00 00 00 00 00 00 00 00			
SIGNAL HEAD OPTICALLY PROGRAMMED	-R "P"	>''P''	→"P"	SIGNAL FACE		6	G ◆Y	SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
LASHER INSTALLATION S DENOTES SOLAR POWER)	O-Ð″F″	O- <b>⊳</b> "F"	• <b>&gt;</b> "F"				<b>◆</b> G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR			IS
PEDESTRIAN SIGNAL HEAD	P.	-0	4	A tradeport to the content of the perfection of the content of the		R	R	SAMPLING (SYSTEM) DETECTOR		[5]	S
PEDESTRIAN PUSHBUTTON DETECTOR	R (10)	6	•	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD			G	EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	₹	[P]	
CCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	⊚APS	APS			· P.	<b>4</b> G	EXISTING PREFORMED INTERSECTION LOOP DETECTOR		PP;	
LLUMINATED SIGN 'NO LEFT TURN''		(8)	9	12" (300mm) PEDESTRIAN SIGNAL HEAD		fow)		PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR  PREFORMED INTERSECTION AND SAMPLING	\$		
LLUMINATED SIGN	R			WALK/DON'T WALK SYMBOL		(w)		(SYSTEM) DETECTOR		PIS	PIS
NO RIGHT TURN"	(8)	(3)		12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				PREFORMED SAMPLING (SYSTEM) DETECTOR		[PS]	PS
ETECTOR LOOP. TYPE I		[_]					•				
REFORMED DETECTOR LOOP		ÎPÎ	Р	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID		*	Ŕ	RAILROAD	SYMBOLS	3	
MICROWAVE VEHICLE SENSOR	R M)	M	<u> </u>	PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		(P) C	<b>₽</b> C	continuent of files the Charge miles from the strictles.	EXI	STING	PROPOSED
VIDEO DETECTION CAMERA	R		$\bigcirc$	RADIO INTERCONNECT	-      R	11110		RAILROAD CONTROL CABINET	R	i	
VIDEO DETECTION ZONE								RAILROAD CANTILEVER MAST ARM	XOX	<del>- X</del> X	IOI X X
	R			RADIO REPEATER	RERR	ERR	RR	FLASHING SIGNAL		- <u>-</u>	XOX
PAN, TILT, ZOOM CAMERA	PIZD	PTZD	<b>™</b>	DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE,		-5-	-5-	CROSSING GATE		×>	<b>x</b> ⊕ <b>x</b> −
VIRELESS DETECTOR SENSOR	R R	W	W	ALL DETECTOR LOOP CABLE TO BE SHIELDED  GROUND CABLE IN CONDUIT		(1)		CROSSBUCK		₹	*
WIRELESS ACCESS POINT				NO. 6 SOLID COPPER (GREEN)					le di l	The same of the sa	
LE NAME = USER NAME = kanthaphixa;  \( \rightarrow \text{PWIDOT\KANTHAPHIXAYBC\d01126} \)  \( \rightarrow \text{Vtraffic.legand.v7.dgn} \)  \( \rightarrow \text{PLOT SCALE} = 28.0000 \cdot / \)  \( \rightarrow \text{PLOT DATE} = 18/6/2009 \)	IN. CI	DAG/BCK	REVISED - REVISED - REVISED - REVISED -	STATE DEPARTMENT	OF ILLINOIS		SCALE: NO	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS  NE SHEET NO. 6 OF 6 SHEETS STA. TO STA.	2790 14-00	SECTION D225~00-RS	COUNTY TOTAL SHEETS  COOK 29  CONTRACT NO. 61  ALD PROJECT M-4003(48

# LOOPS NEXT TO SHOULDERS

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



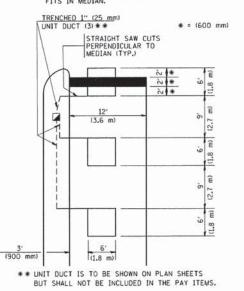
\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

\* = (600 mm)

# LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

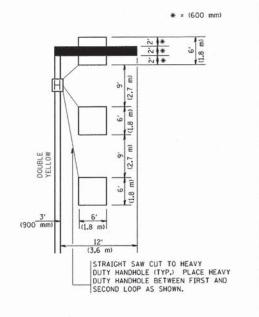
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE



NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

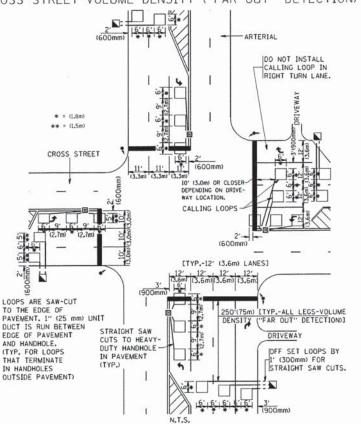


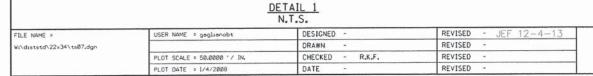
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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)





OFFSET LOOPS BY (300mm) FOR STRAIGHT SAW CUTS - ARTERIA THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS.
WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSES TO THE INTERSECTION. UNIT DUCT -CROSS STREET (3.3m) -6 4 6: 9'6: -10"(3 Om) PREFERRED-[6, 3, 6, 3, 6, 15'(4.5m) MAXIMUM + - THESE DIMENSIONS DRIVEWAY WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM] △ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR IF "FAR OUT" LOOPS 10' (3.0m) LANE WIDTHS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN DETAIL 2 LANE TAPER.

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

#### NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFLDED.
- \* 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 <u>ALL</u> 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.

DISTRICT 1 - DETECTOR LOOP INSTALLATION					TECTOR L	OOP INSTAL	LATION	F.A RTE.	SECTION	COUNTY TOTAL		SHEET NO.
				2790	COOK 25		29					
DETAILS FOR ROADWAY RESURFACING						AT RESURFA	CING		TS-07	CONTRACT	NO. 6	B55
	SHEET	NO. 1	OF	1	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT A	1-4003(4	81)