### STATE OF ILLINOIS

## **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

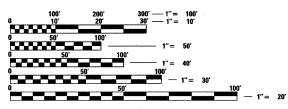
PROPOSED HIGHWAY PLANS

F.A.P. 330 (US 12 /45)
SECTION 465 X-RS-2
PROSPECT AVENUE TO WALNUT AVENUE
RESURFACING (3P)
PROJECT: £5P-0330(054)
COOK COUNTY
C-91-055-09

THIS IMPROVEMENT IS LOCATED WITHIN THE  $\mathcal{L}$  IT  $\mathcal{L}$  of des plaines

#### TRAFFIC DATA

2005 ADT - 21,300 POSTED SPEED LIMIT - 30 MPH



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

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

CONTRACT NO. 60F24

Ciorba Group, Inc.

DESIGN FIRM REGISTRATION NUMBER

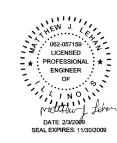
184-001016

CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE
CHICAGO, ILLINOIS 60656 :: (773) 775-4009

END PROJECT
STA. 66 + 30.00

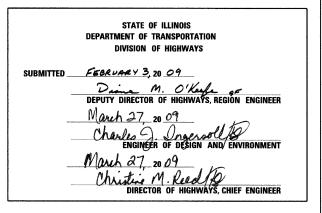
BEGIN PROJECT
STA. 1 + 75.00

1"=2000' GROSS AND NET LENGTH OF PROJECT = 6455 FT = 1.22 MI.



#### D-91-055-0





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

:TRICT 1 DESIGN PLAN PREPARATION ENGINEER: K. ENG (847)705—42

TOTAL TANADARA TANADA

#### INDEX OF SHEETS

HEET NO	DESCRIPTION	<u>STATE</u>	STANDARDS
1	COVER SHEET	000001 <b>-05</b>	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES SUMMARY OF QUANTITIES	442201- <i>03</i>	CLASS C AND D PATCHES
4 5-7	TYPICAL SECTIONS ROADWAY AND PAVEMENT MARKING PLAN	604001- <i>03</i> 606001- <i>04</i>	FRAME AND LIDS, TYPE 1  CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
8 9	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8) PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701301- <b>03</b>	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
10	CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701311- <i>03</i>	LANE CLOSURE, 2L, 2W, MOVING DAY OPERATIONS-DAY ONLY
11 12	BUTT JOINT AND HMA TAPER DETAILS (BD-32)  TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,  INTERSECTIONS, AND DRIVEWAYS (TC-10)	701602 <b>-04</b> 701606 <b>-06</b>	URBAN LANE CLOSURE, MULTILANE, 2W, WITH BIDIRECTIONAL LEFT TURN LANE URBAN LANE CLOSURE, MULTI LANE, 2W WITH MOUNTABLE MEDIAN
13	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)	701701- <i>06</i> 701801- <i>04</i>	URBAN LANE CLOSURE, MULTI LANE INTERSECTION  LANE CLOSURE MULTILANE 1W. 2W. CROSSWALK OR SIDEWALK CLOSURE
14 15	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	701901- <i>01</i>	TRAFFIC CONTROL DEVICES
16 17	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16) ARTERIAL ROAD INFORMATION SIGN (TC-22)	780001- <i>0</i> 2	TYPICAL PAVEMENT MARKINGS
18	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR	886001- <i>01</i>	DETECTOR LOOP INSTALLATIONS  TYPICAL LAYOUTS FOR DETECTION LOOPS
	ROADWAY RESURFACING (TS-07)	000000-01	TIFICAL LATOUTS FOR DETECTION EOUPS

#### GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT
  800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS
  FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIANS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 5. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
- 6. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 7. THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

BITUMINOUS MATERIALS (PRIME COAT)

0.004 TONS/SQ YD

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE

112 LBS/SQ YD/INCH

POLYMERIZED LEVELING BINDER

105 LBS/SQ YD/INCH

- (MACHINE METHOD)
- 8. THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.
- TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386.
- 10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1" (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
- 11. BUTT JOINTS WILL BE INSTALLED AT THE END OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 12. FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
- 13. MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS.
- 14. A QUANTITY FOR LEVELING BINDER (HAND METHOD) HAS BEEN PROVIDED FOR USE AROUND HAND HOLES, PRIVATE UTILITY STRUCTURE FRAMES AND ANY OTHER STRUCTURE FRAMES THAT ARE NOT ABLE TO BE LOWERED UNDER THE ITEM "FRAMES AND LIDS TO BE ADJUSED (SPECIAL)" AFTER GRINDING OF THE EXISITING PAVEMENT.

	Ciorba Gr	oup, Inc.
بت	5507 North Cumberlan Chicago, Illinois 60656 Tel. 773.775.4009	d Avenue, Suite 402

USER NAME = wlancaster	DESIGNED MWR	REVISED -
	DRAWN MWR	REVISED ~
PLOT SCALE = 1.0000 '/ IN.	CHECKED WBL	REVISED -
PLOT DATE = 2/4/2009	DATE 2/4/2009	REVISED -

sedPlan\3329\_45-Ø2-Gener

		SUMMARY OF QUANTITIES	URBAN 1001. FED. TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
	CODE NO.	DESCRIPTION	UNIT		ROADWAY IOOO-2A
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	18	18
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	30	30
	40600300	AGGREGATE (PRIME COAT)	TON	165	165
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	40	40
	40600535	LEVELING BINDER (HAND METHOD), N70	TON	30	30
	40600895	CONSTRUCTING TEST STRIP	EACH	2	2
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	575	575
	40600990	TEMPORARY RAMP	SQ YD	750	750
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	3,400	3,400
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	15	15
	42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	250	250
	44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	38,800	38,800
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	15	15
	44000600	SIDEWALK REMOVAL	SQ FT	250	250
	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	F00T	300	300
	44201803	CLASS D PATCHES, TYPE II, 13 INCH	SQ YD	600	600
	44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	420	420
	44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SQ YD	130	130
NP	55039700	STORM SEWERS TO BE CLEANED	F00T	1,300	1,300
	60252800	CATCH BASINSTO BE RECONSTRUCTED	EACH	5	5
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	5	5
	60262700	INLETS TO BE RECONSTRUCTED	EACH	5	5
	60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	85	85
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	- 6	6
	67100100	MOBILIZATION	L SUM	1	1

		SUMMARY OF QUANTITIES	URBAN 1004. FED.	CONSTRUCTION TYPE CODE	
	CODE NO.	DESCRIPTION	UNIT		ROADWAY IOOO-2A
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
	70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2,590	2,590
	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,350	1,350
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	50,700	50,700
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	7,800	7,800
	70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1,530	1,530
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	2,100	2,100
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1,320	1,320
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	9,400	9,400
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	450	450
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	16,900	16,900
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,600	2,600
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	510	510
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	700	700
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	440	440
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	700	700
:	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	665	665
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	1,600	1,600
·····	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2,100	2,100
NP	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	85	85
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1

\* DENOTES SPECIALTY ITEM

NP= Non-participating

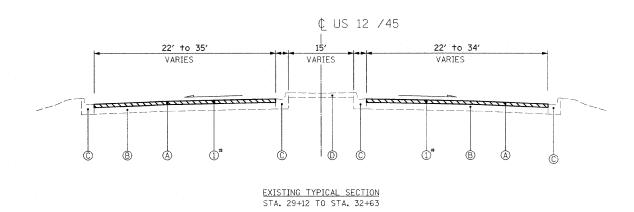
Ciorba Group, Inc.	F
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656 Tel. 773.775.4009 Fax 773.775.4014	F

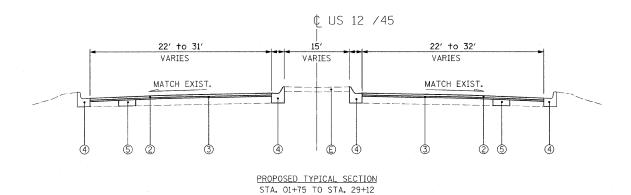
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

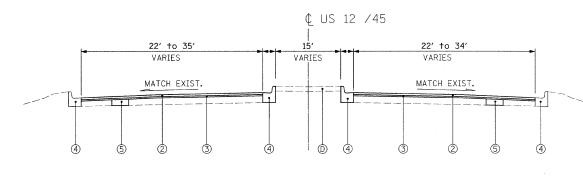
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PROSPECT AVENUE TO WALNUT AVENUE					F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
					330	465 X-RS-2	СООК	18	3	
SUMMARY OF QUANTITIES								CONTRACT	NO. 6	0F24
	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT	THE RESIDENCE OF THE PARTY OF T	





STA. 32+63 TO STA. 66+30



#### PROPOSED TYPICAL SECTION STA. 29+12 TO STA. 32+63

### EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 5" AND VARIES
- B PORTLAND CEMENT CONCRETE BASE COURSE, 10"
- © COMBINATION CONCRETE CURB AND GUTTER
- naised concrete median
- MOUNTABLE HMA MEDIAN

### PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ② HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (AS DIRECTED BY ENGINEER)
- (5) CLASS D PATCHES, 13" (DETERMINED BY ENGINEER IN FIELD)
- # THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

#### HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART

OPERATIONS	MIXTURE TYPE	AC TYPE	PERCENT
OFERATIONS	MIXIORE TIFE	AC TITE	AIR VOIDS
	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9,5MM)	PG 64-22	4% <b>@</b> 70 GYR
ROADWAY RESURFACING	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 GYR
	LEVELING BINDER (HAND METHOD), N70 (IL-9.5MM)	PG 64-22 *	4% @ 70 GYR
PAVEMENT PATCHING	CLASS D PATCHES, 13" (HMA BINDER IL-19 MM)	PG 64-22 *	4% @ 70 GYR

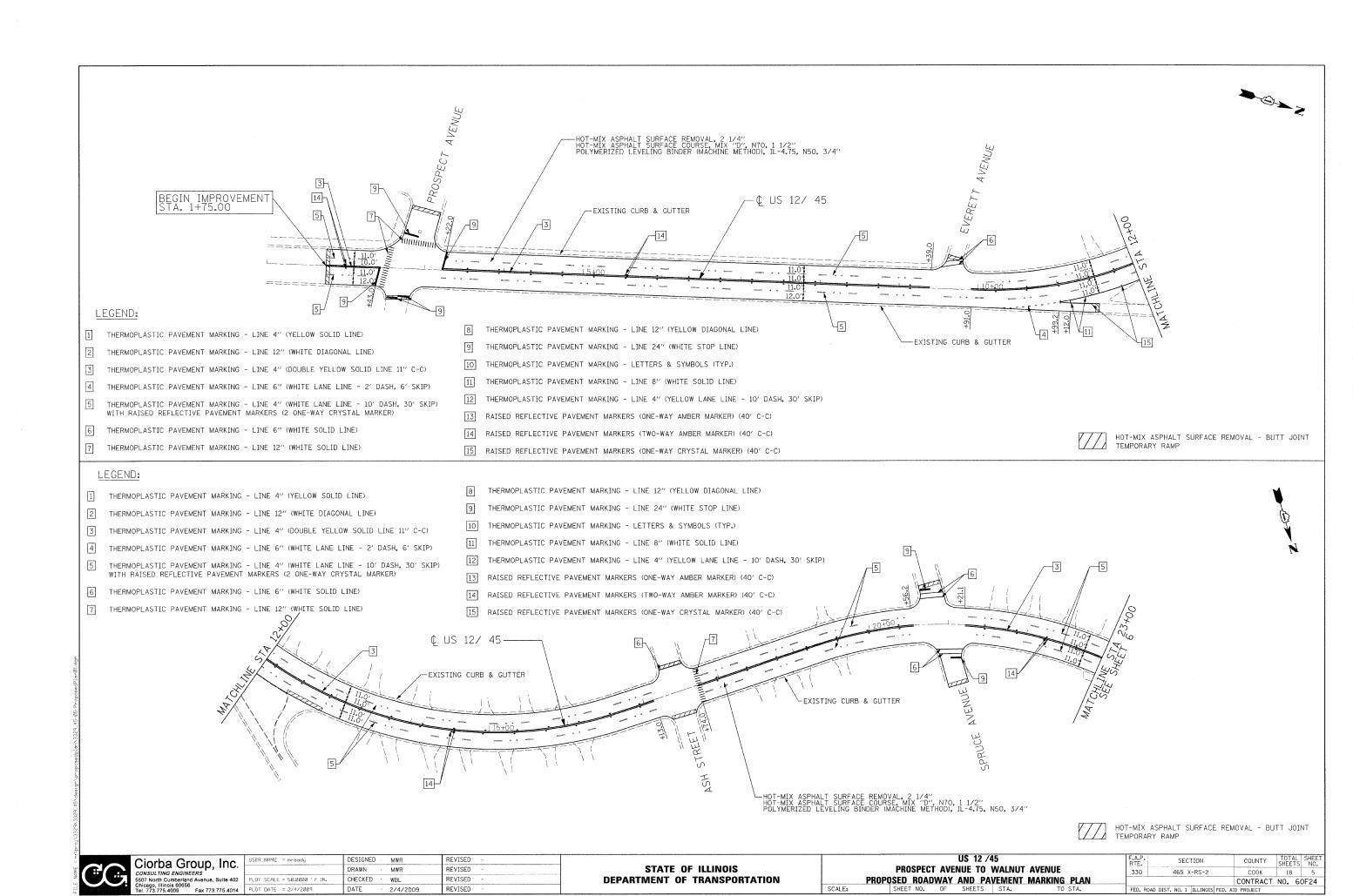
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

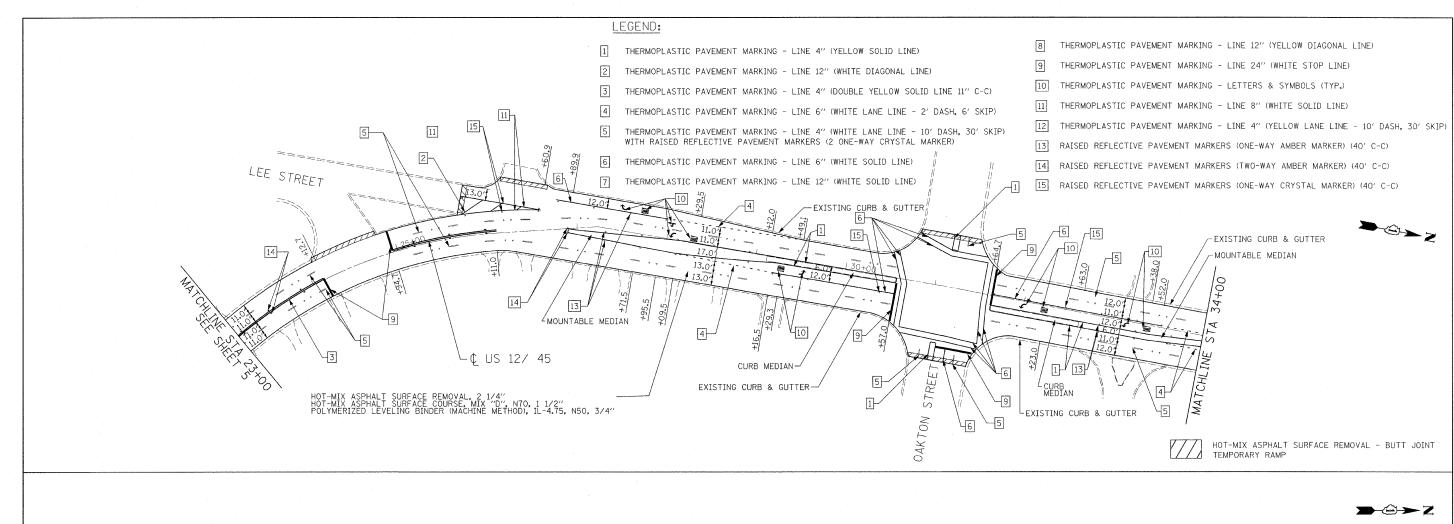
 $\star$  WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

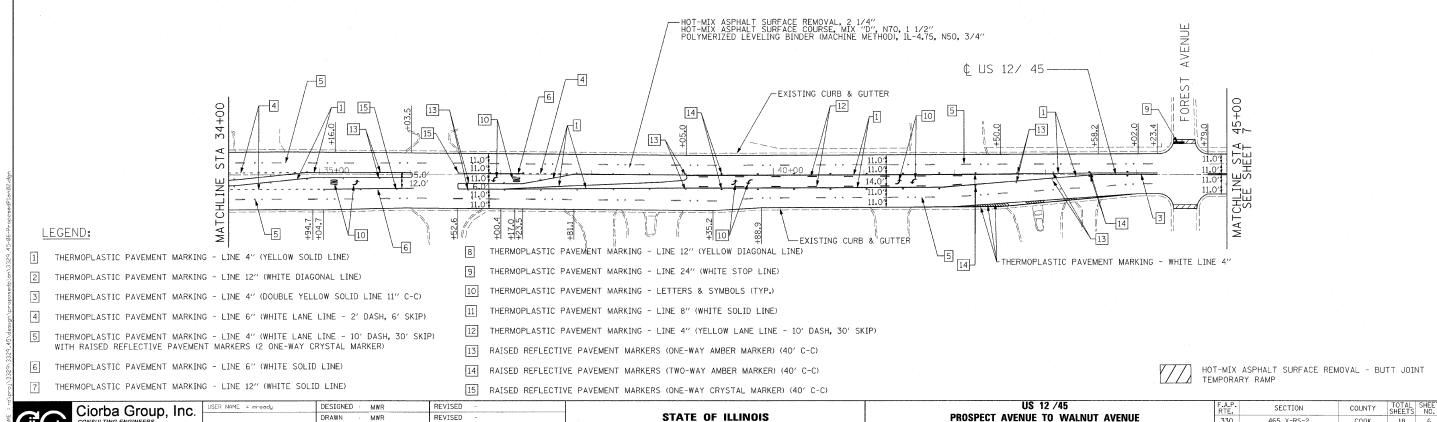


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uite 402	PLOT SCALE = 5.0000 '/ IN.	CHECKED	WBL	REVISED -	
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	********	US 12 /45 PROSPECT AVENUE TO WALNUT			A 1 / M A 1 / M	F.A.P. SECTION		COUNTY	TOTAL	S NO
	PROSPECT				AVENUE	330	465 X-RS-2	COOK	18	4
			CAL SECT	IONS				CONTRACT	NO.	60F24
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		







**DEPARTMENT OF TRANSPORTATION** 

PROPOSED ROADWAY AND PAVEMENT MARKING PLAN

SCALE:

CONTRACT NO. 60F24

507 North Cumberland Avenue, Suite 402 hicago, Illinois 60656 el. 773.775.4009 Fax 773.775.4014

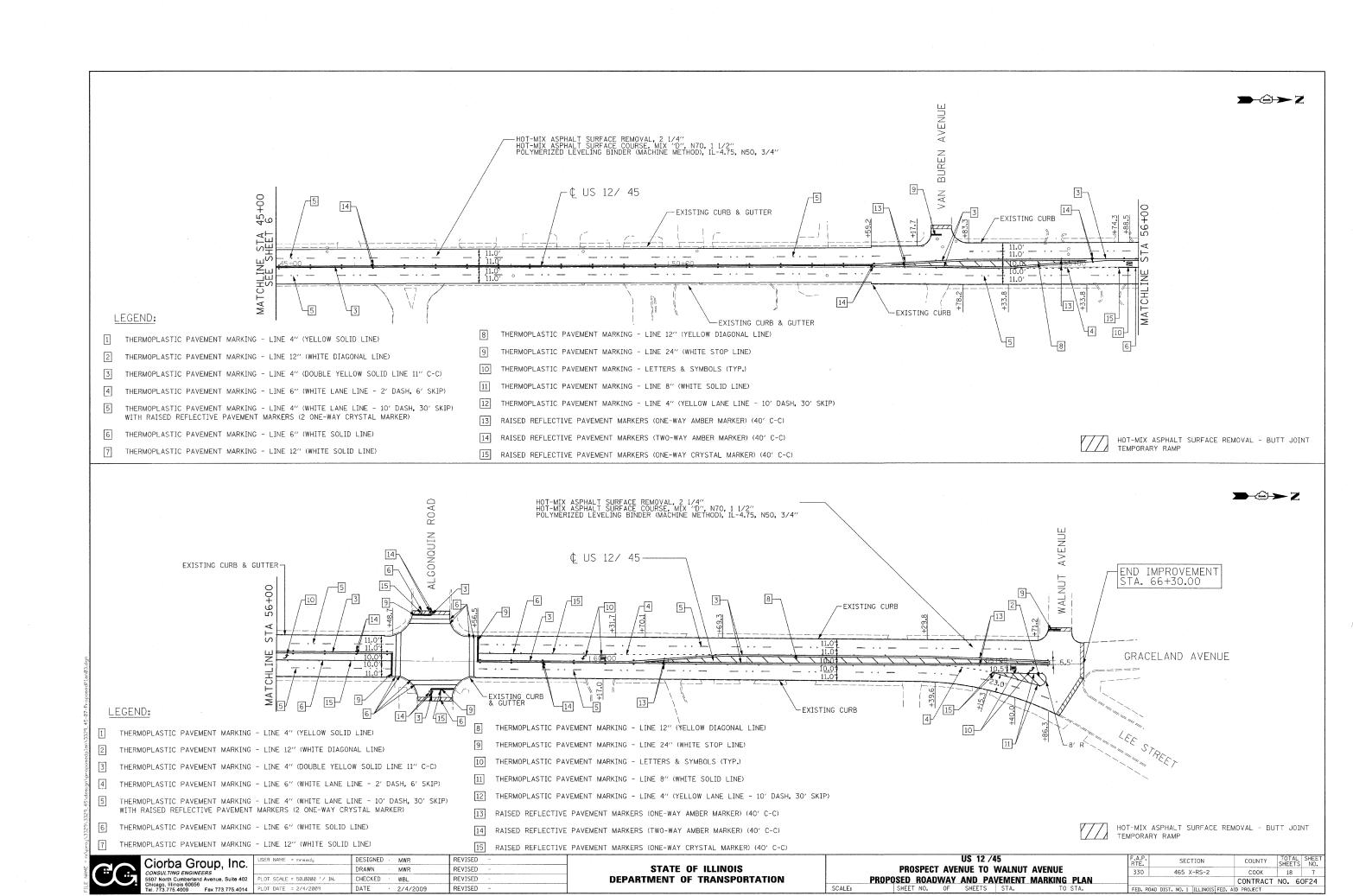
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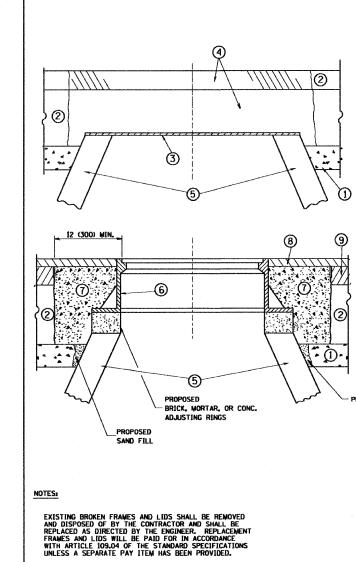
2/4/2009

DATE

REVISED

REVISED





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

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

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

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

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

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

#### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HIMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

#### LEGEND

- (1) SUB-BASE GRANULAR
  MATERIAL

  (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE

  4 PROPOSED CRUSHED STONE AND
  HMA SURFACE MIX
- 5 EXISTING STRUCTURE
- 8 PROPOSED HMA SURFACE COURSE
- 9 PROPOSED HMA BINDER COURSE

#### LOCATION OF STRUCTURES:

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

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

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

## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

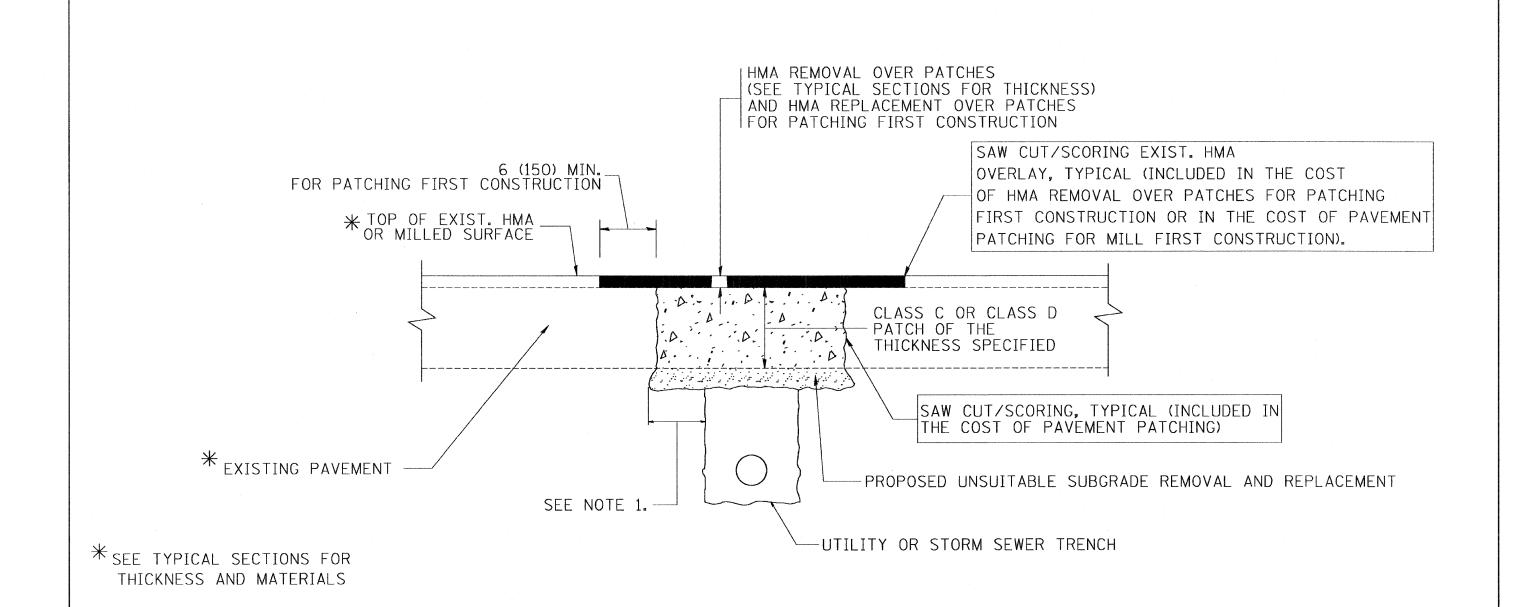
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95
W:\diststd\22x34\bdØ8.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
· ·	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-0
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07

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.



#### NOTES:

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

### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

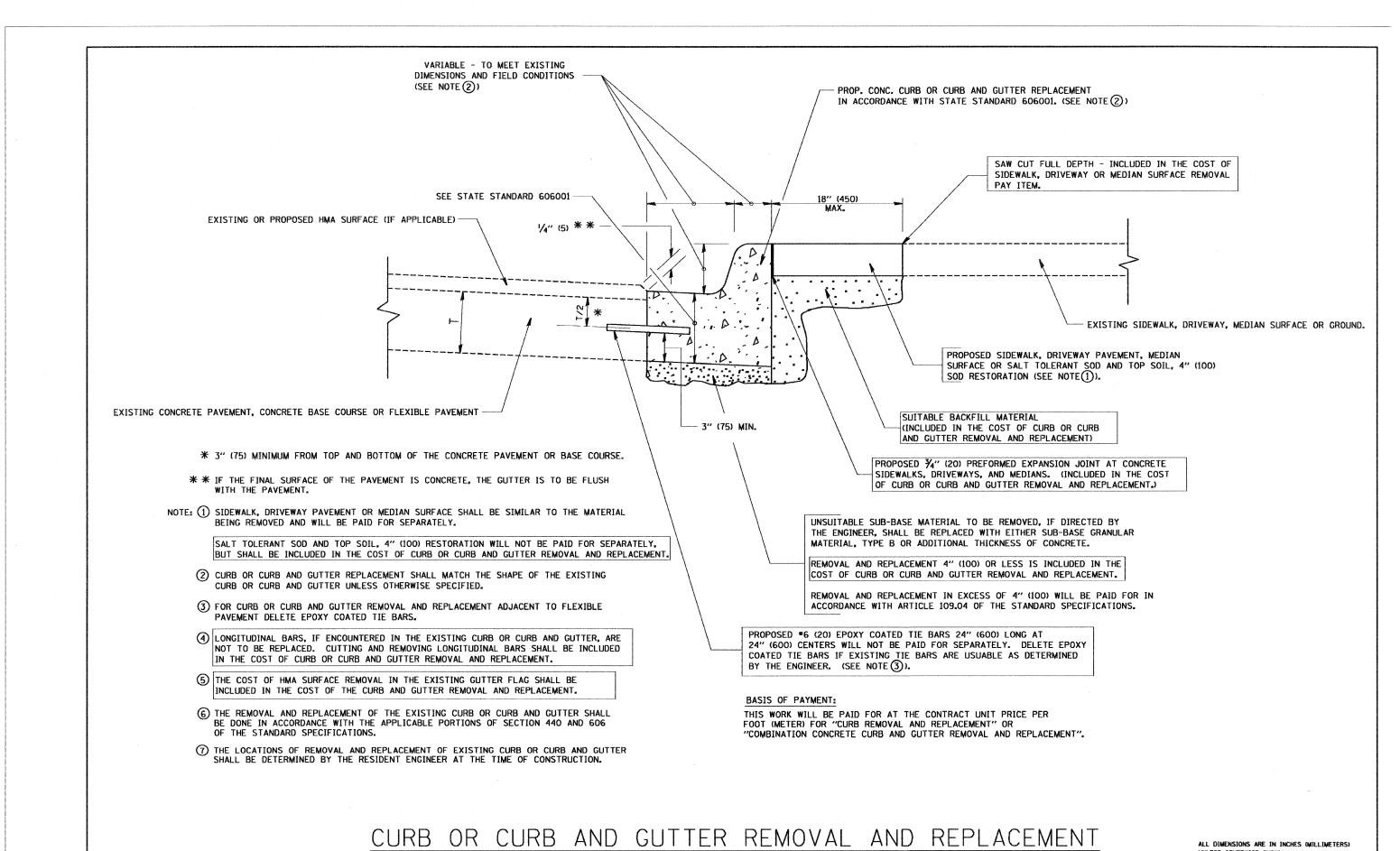
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A, ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P.	SECTION	COUNTY	TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn	·	DRAWN	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		330	465 X-RS-2	СООК	18 9
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	В	D400-04 (BD-22	) CONTRACT	T NO. 60F24
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINO	IS FED. AID PROJECT	



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION

465 X-RS-2

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

BD600-06 (BD-24)

REMOVAL AND REPLACEMENT

TO STA.

SHEET NO. 1 OF 1 SHEETS STA.

SCALE: NONE

COOK 18

CONTRACT NO. 60F24

DESIGNED - A. HOUSEH

DRAWN

DATE

CHECKED

REVISED - R. SHAH 10-03-96

REVISED - A. ARRAS 03-21-97

REVISED - M. GOMEZ 01-22-01

R. BORO 01-01-07

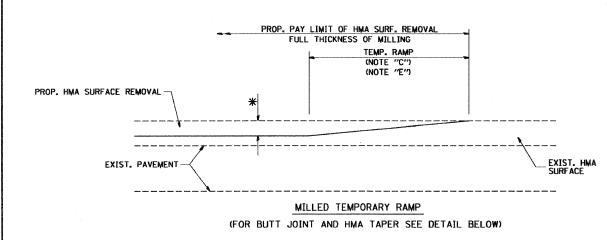
REVISED

USER NAME = geglienobt

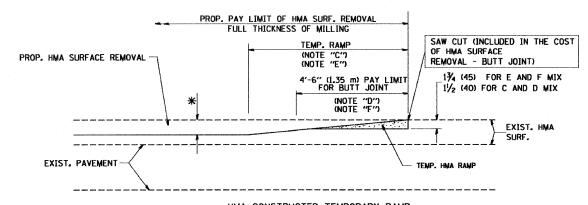
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#### OPTION 1

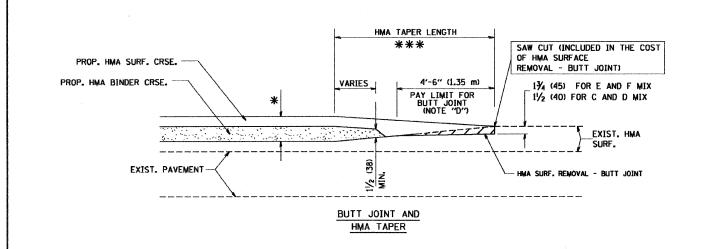


HMA CONSTRUCTED TEMPORARY RAMP

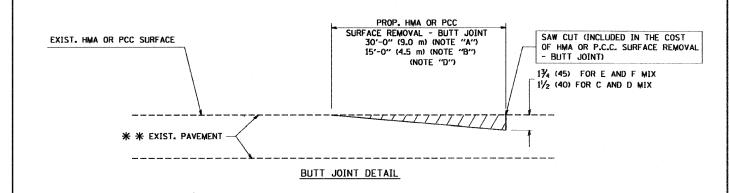
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

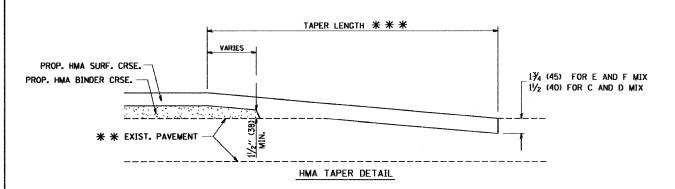
#### OPTION 2

#### TYPICAL TEMPORARY RAMP



## TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





## TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

#### NOTES

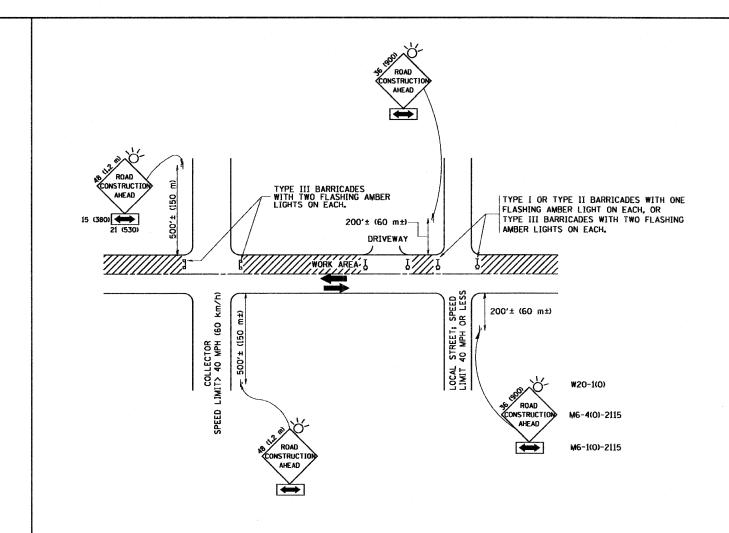
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D<sub>2</sub> THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-O" (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.

#### 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 =	USER NAME = geglienobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94		BUTT JOINT AND	F.A.P. SECTION	COUNTY TOTAL SHE
W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	HMA TAPER DETAILS	330 465 X-RS-2	COOK 18 11
	PLOT SCALE = 50.0000 '/ IN.	CHECKED ~	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION	IMA IAPEN VEIALS	BD400-05 BD32	CONTRACT NO. 60F2
	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.	FED. ROAD DIST. NO. 1 ILLINOI	FED. AID PROJECT



#### 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 ENGINEERS
- Q) 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 1, 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  $\times$  48 (1.2 m  $\times$  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.
- 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).

SCALE: NONE

#### 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 LINLESS 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.

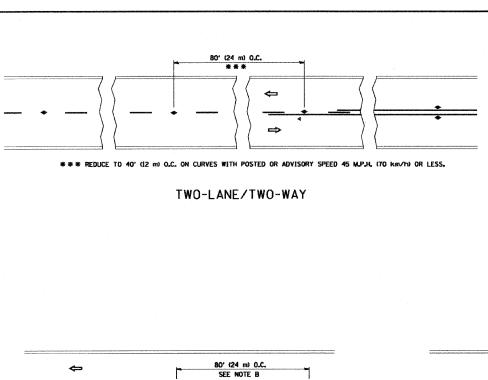
FILE NAME =	USER NAME = gaglianabt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tclØ.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TR	AFFIC	CONTROL	AND	PROTEC	TION FO	à
SIDE	ROADS	S, INTERSE	CTION	IS, AND	DRIVEW/	4YS

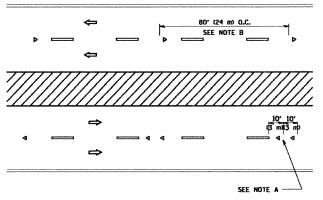
TO STA.

SHEET NO. 1 OF 1 SHEETS STA.



SEE NOTE A-

MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

#### GENERAL NOTES

3 0 40' (12 m) O.C. \_\_ <=

LANE REDUCTION TRANSITION

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

#### LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

### SYMBOLS

----- YELLOW STRIPE

80' (24 m) O.C. SEE NOTE B

40° (12 m) O.C.

15

SEE NOTE A-

TWO-WAY LEFT TURN

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

#### DESIGN NOTES

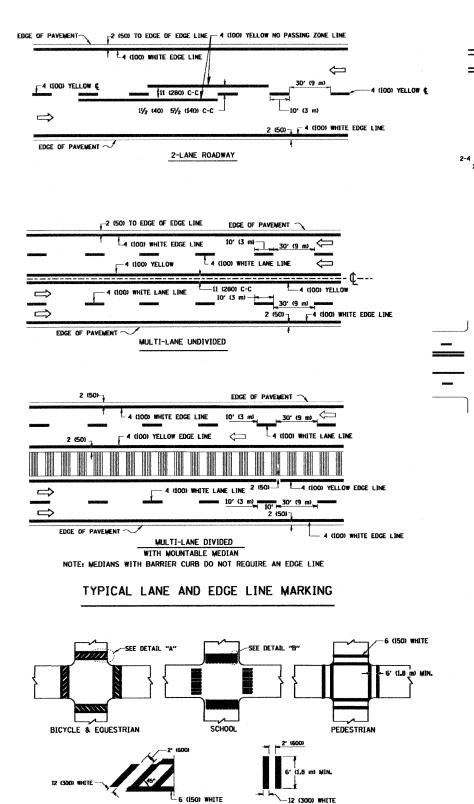
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD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

## 

LEFT TURN

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

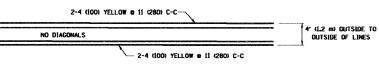
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W:\diststd\22x34\tc11.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS	natorn .		330	465 X-RS-2	COOK 18
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			TC-11	CONTRACT NO. 601
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAL	D DIST. NO. 1 ILLINOIS FED. A	D PROJECT



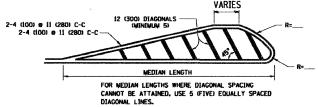
DETAIL "B"

TYPICAL CROSSWALK MARKING

DETAIL "A"

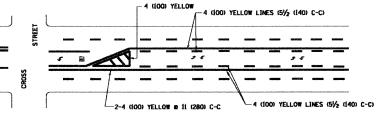


#### 4' (1.2 m) WIDE MEDIANS ONLY

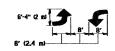


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

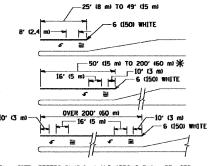


A WINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

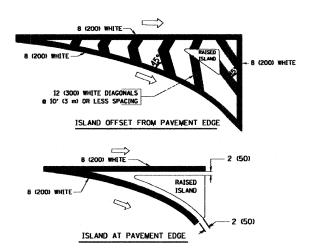


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m²)  $\P$  AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING

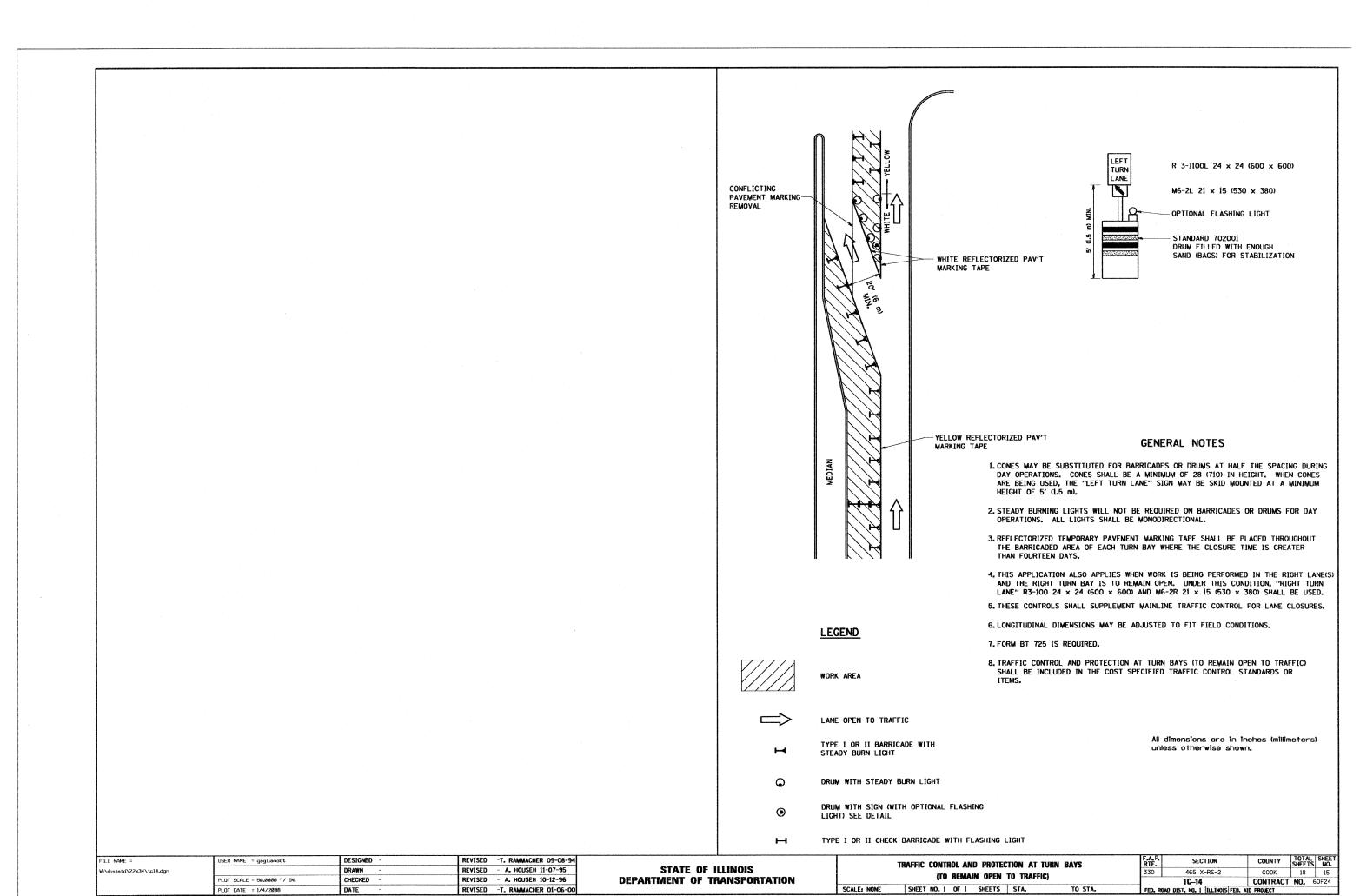


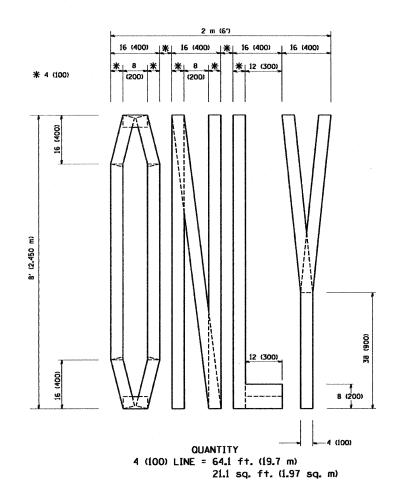
#### TYPICAL ISLAND MARKING

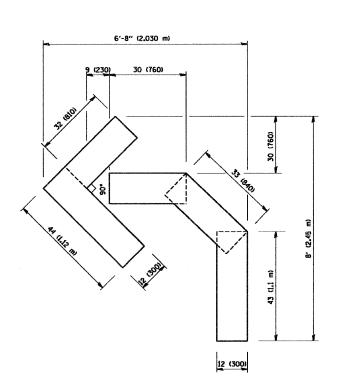
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 8 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 8 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 1280) C-C OWIT 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' (2.4mi)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 0 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 CANSSMALL, IF PRESENT. UTHERWISE, 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 1280) 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 SD. FT. (0.33 m²) EACH "X"=54.0 SD. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) e 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.

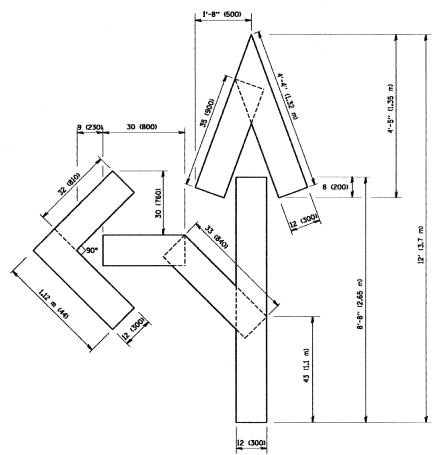
FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A.P. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\tol3idgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS		330 465 X-RS-2	COOK 18 14
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS	TC-13	CONTRACT NO. 60F24
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DISY. NO. 1 ILLINOIS FED.	







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



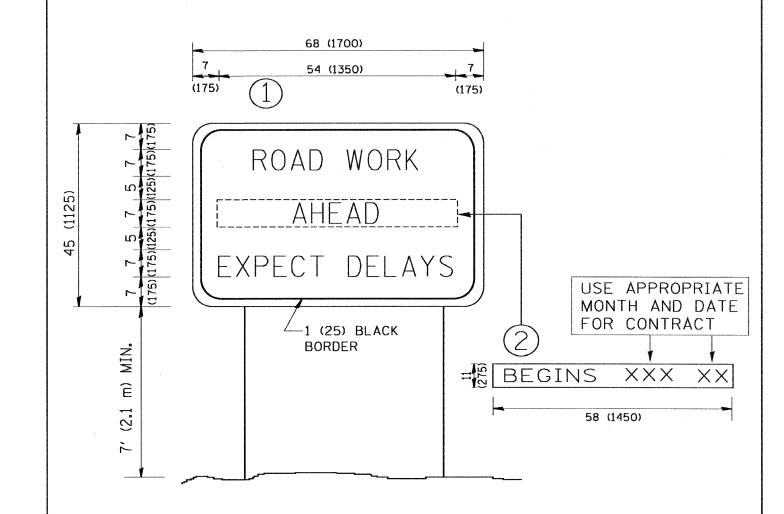
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

1		PAVEMENT MARKING LETTE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		FOR TRAFFIC ST	ACINC		330	465 X-RS-2	COOK	18	16
Ì		ron inarric 3i	MOHAG			TC-16	CONTRACT	NO. 6	0F24
	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1   ILLINOIS FED. AD	D PROJECT		

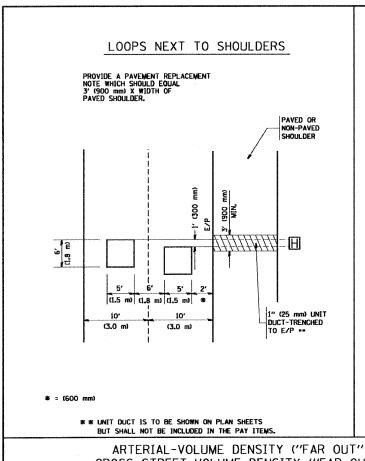


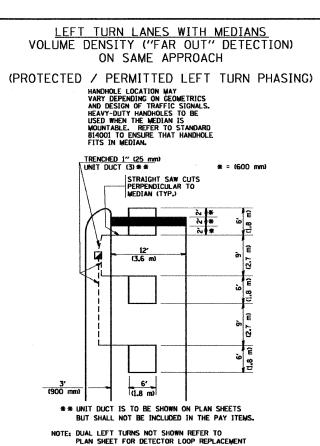
### NOTES:

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

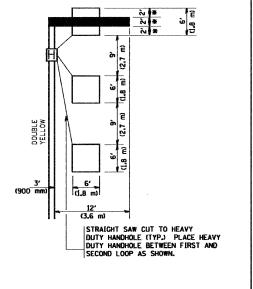
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		APPENIAL POAR	F.A.P. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	ARTERIAL ROAD	330 465 X-RS-2	COOK 18 17
i i	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN	TC-22	CONTRACT NO. 60F24
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT





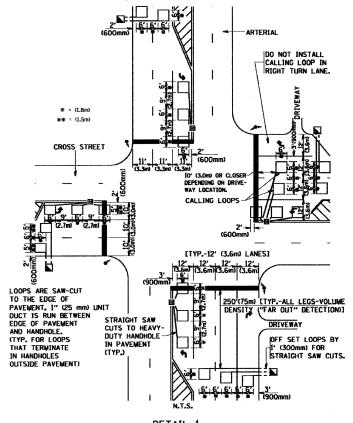
# LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) # = (600 mm)

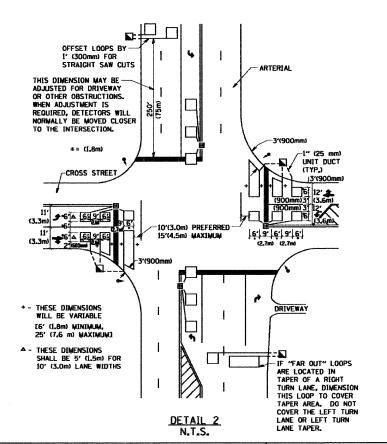


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





NOTES:

#### VEHICLES LOOP DETECTORS

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

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.

DESIGNED REVISED FILE NAME USER NAME = geglionobt l:\diststd\22x34\tsØ7.dgr DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED R.K.F. REVISED PLOT DATE = 1/4/2008 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TOTAL SHEE SHEETS NO. SECTION COUNTY DISTRICT 1 - DETECTOR LOOP INSTALLATION COOK DETAILS FOR ROADWAY RESURFACING CONTRACT NO. 60F24 TS-07 SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE TO STA.