

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2775	14-00057-00-RS	COOK	21	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 61B23	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

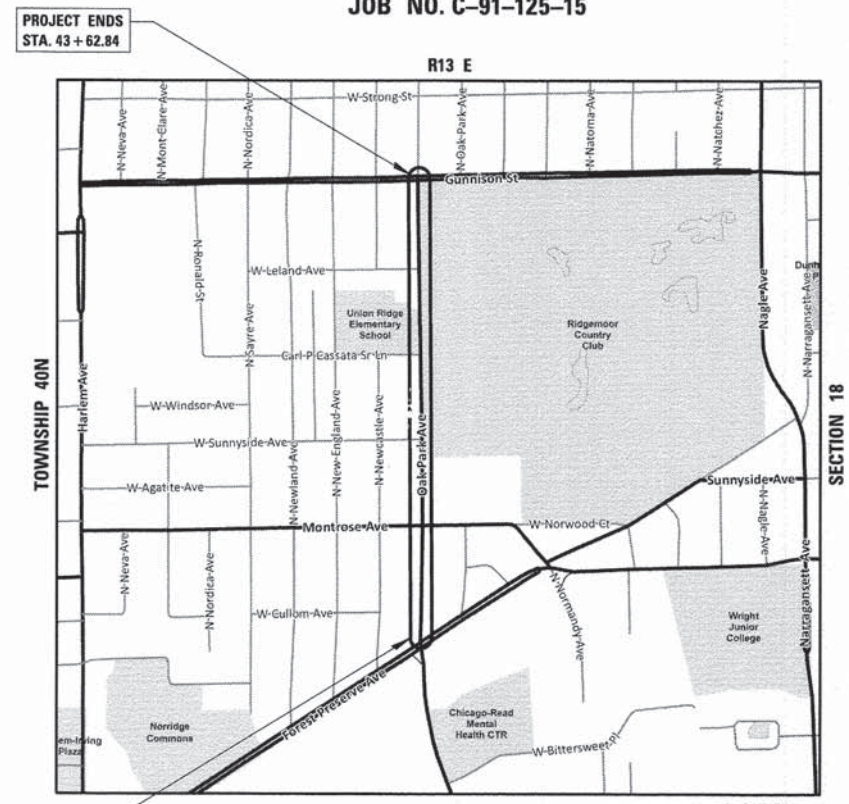
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

FAU 2775 (OAK PARK AVENUE)  
FAU 1363 (GUNNISON STREET) TO FAU 3532 (FOREST PRESERVE AVENUE)  
RESURFACING  
SECTION NO. 14-00057-00-RS  
PROJECT NO. M-4003(419)  
VILLAGE OF HARWOOD HEIGHTS  
COOK COUNTY  
JOB NO. C-91-125-15



THE PROJECT IS LOCATED  
IN THE VILLAGE OF  
HARWOOD HEIGHTS



PROJECT BEGINS  
STA. 10+00.00

PROJECT ENDS  
STA. 43+62.84

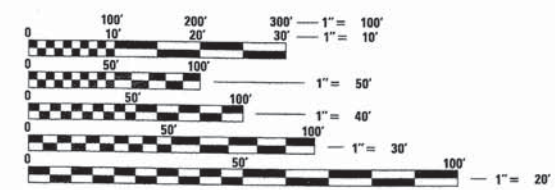
LOCATION MAP

OAK PARK AVENUE  
GROSS LENGTH OF PROJECT = 3,363 LINEAL FEET (0.64 MILES)  
NET LENGTH OF PROJECT = 3,363 LINEAL FEET (0.64 MILES)

TRAFFIC DATA

OAK PARK AVENUE  
ADT (YEAR) = 12,700 (2013)  
POSTED SPEED LIMIT = 20 MPH

DESIGN DESIGNATION: MAJOR COLLECTOR



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  
8-1-1 OR 1-800-892-0123

**CBB** CHRISTOPHER B. BURKE ENGINEERING LTD.  
9575 West Higgins Road, Suite 600  
Rosemont, Illinois 60018 (847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175  
EXPIRATION DATE: 04/30/15

CONTRACT NO. 61B23

FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL, P.E. (847) 705-4021  
SCHAUMBURG, ILLINOIS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED *[Signature]* April 22, 2015  
VILLAGE MAYOR, VILLAGE OF HARWOOD HEIGHTS

PASSED *[Signature]* February 18, 2015  
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR  
BID BASED ON  
LIMITED REVIEW *[Signature]* February 18, 2015  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

**LEE M. FELL**  
062-053708 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

*[Signature]*  
ENGINEER

*[Signature]* 1/24/15  
DATE

LEE M. FELL  
ILLINOIS REGISTRATION No. 062-053708  
EXPIRATION DATE: 11/30/2015

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS





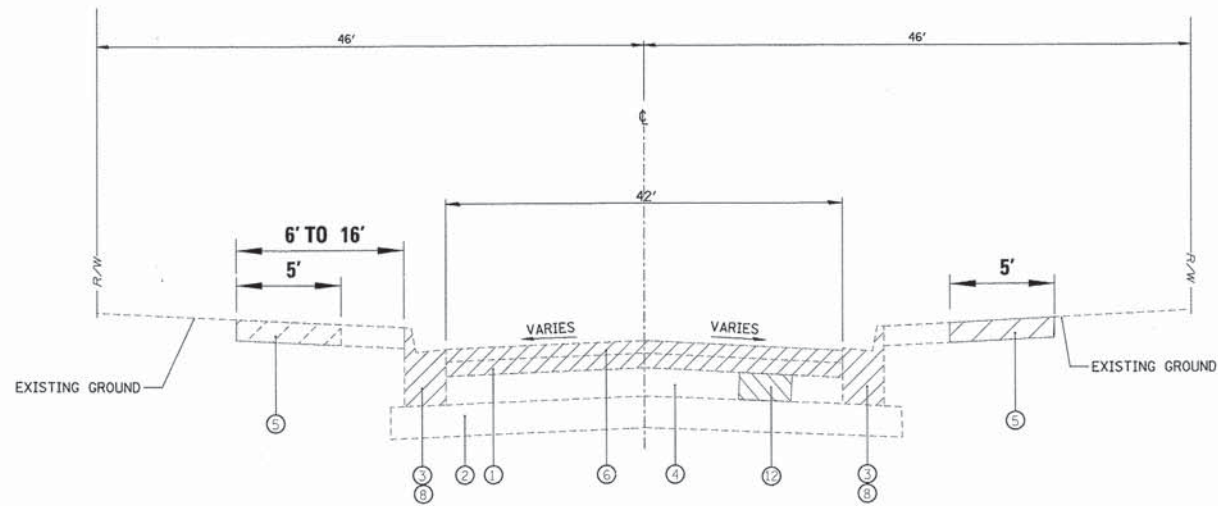


## SUMMARY OF QUANTITIES

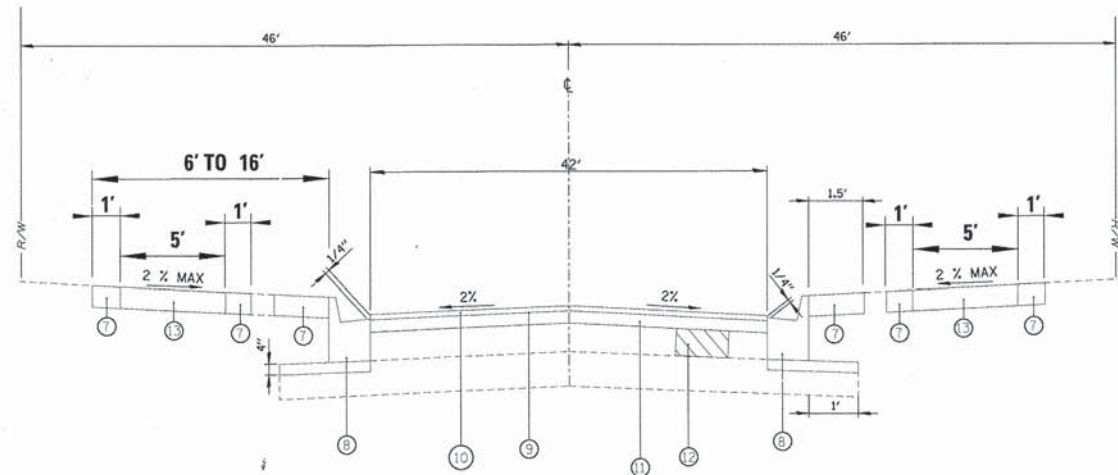
SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	CONSTRUCTION CODE	
				UNIT	TOTAL QUANTITY 0005
~		28000510	INLET FILTERS	EACH	50
~		40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	14000
		40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	100
		40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	750
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	140
		40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1475
		44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	17100
		44000600	SIDEWALK REMOVAL	SQ FT	100
		44201713	CLASS D PATCHES, TYPE I, 6 INCH	SQ YD	215
		44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	215
		44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	215
		44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	215
		67100100	MOBILIZATION	L SUM	1
~		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
~		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
~		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
		70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	750
		70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1000
	*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	175
	*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4050
	x	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	960
	*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	825
	*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	200
~	*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4
~	*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	720
~		X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	30
~		X4023000	TEMPORARY ACCESS (ROAD)	EACH	5
~		X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	100
~		Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	25
~		Z0013798	CONSTRUCTION LAYOUT	L SUM	1

\*INDICATES SPECIALTY ITEM  
~INDICATES SPECIAL PROVISION





**EXISTING TYPICAL SECTION**  
STA. 10+00.00 TO STA 43+62.84, OAK PARK AVENUE



**PROPOSED TYPICAL SECTION**  
STA. 10+00.00 TO STA 43+62.84, OAK PARK AVENUE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 1.5"	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 0.75" (SHALL BE PLACED IN 1 LIFT)	3.5% @ 50 GYR.
CLASS D PATCHES, 6" (HMA BINDER IL-19MM)	4% @ 70 GYR.

**NOTE:**

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
4. THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.

**NOTES:**

1. PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.
2. ALL CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT SHALL BE SPOT REPAIR ONLY AS DIRECTED BY THE ENGINEER.
3. WATER MAIN WORK WILL NOT BE A PART OF THIS CONTRACT.

**LEGEND**

- |  |  |
|--|--|
| ① EXISTING HOT-MIX ASPHALT PAVEMENT  | ⑨ PROPOSED BITUMINOUS MATERIAL (PRIME COAT)  |
| ② EXISTING AGGREGATE SUBBASE   | ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70 - 1.5"   |
| ③ EXISTING CURB AND GUTTER   | ⑪ POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 0.75"   |
| ④ EXISTING AGGREGATE BASE  | ⑫ CLASS D PATCHES, 6" (AS DIRECTED BY THE ENGINEER)  |
| ⑤ EXISTING PCC SIDEWALK  | ⑬ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER) (SIDEWALKS THROUGH DRIVEWAYS SHALL BE 6 INCHES THICK - THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, SPECIAL) |
| ⑥ HOT-MIX ASPHALT SURFACE REMOVAL, 2"  |  |
| ⑦ SODDING, SALT TOLERANT (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AND SIDEWALK REMOVAL AND REPLACEMENT PAY ITEMS) |  |
| ⑧ COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER). INCLUDES 4" SUBBASE GRANULAR MATERIAL TYPE B.      |  |

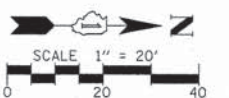
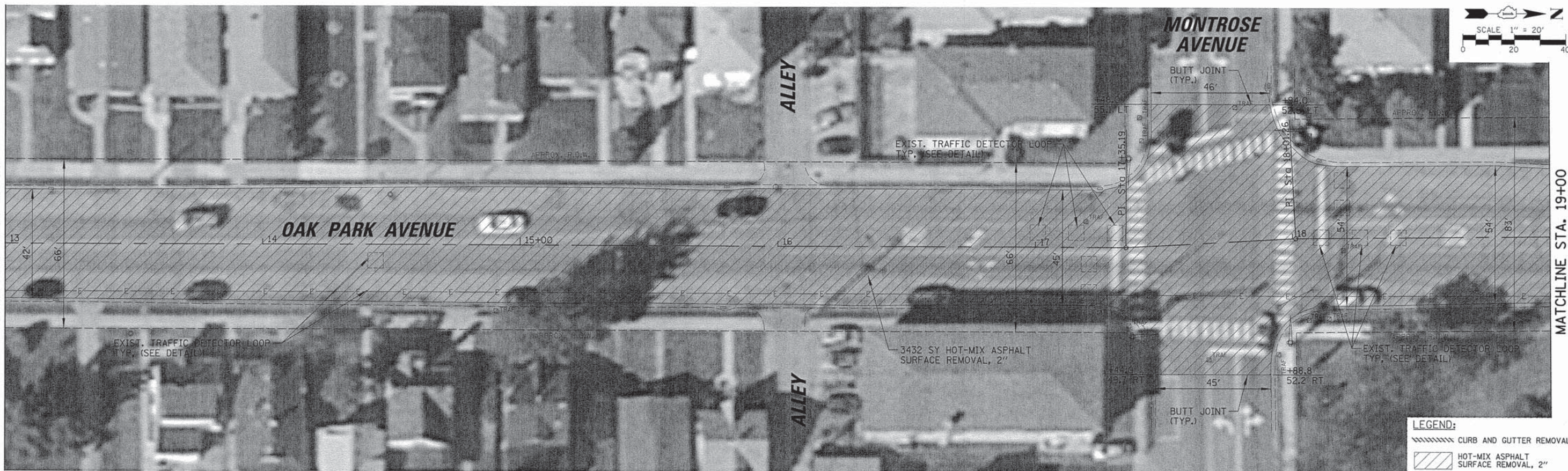
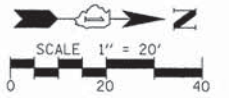
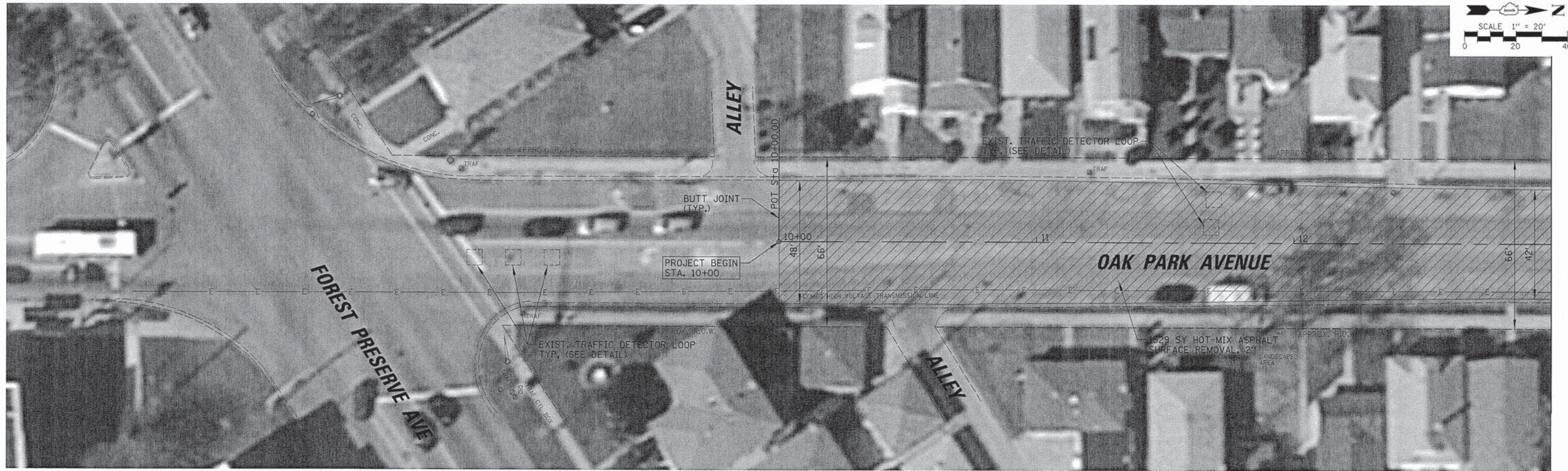
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PLOT DATE = 2/18/2015	DATE = 12/05/14		REVISED =

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
TYPICAL SECTIONS**

F.A.U. RTE. 2775	SECTION 14-00057-00-RS	COUNTY COOK	TOTAL SHEETS 21	SHEET NO. 4
CONTRACT NO. 61B23				
SCALE: 5/8"	SHEET NO. 4 OF 21 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	





**LEGEND:**

	CURB AND GUTTER REMOVAL
	HOT-MIX ASPHALT SURFACE REMOVAL, 2"

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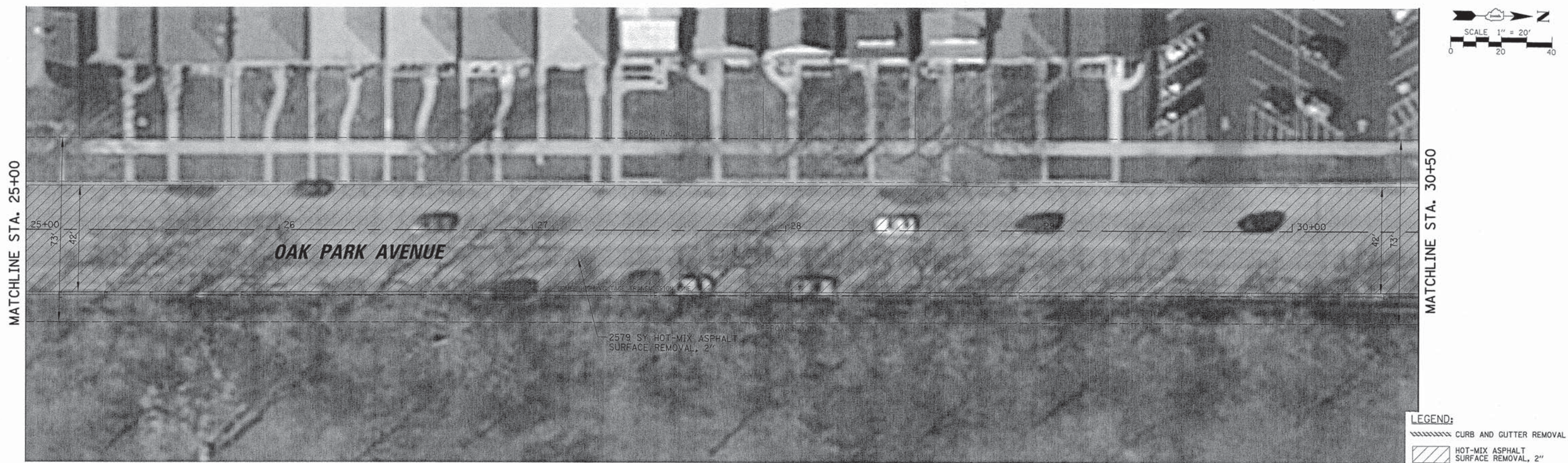
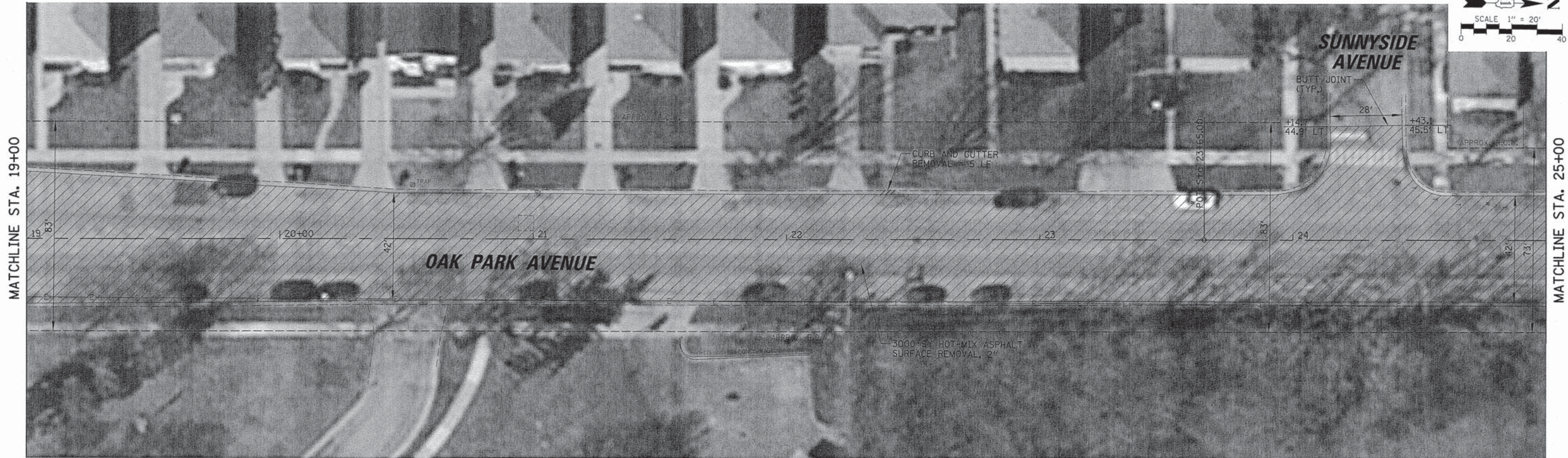
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
EXISTING CONDITIONS AND REMOVAL PLAN**

SCALE: 20' SHEET NO. 5 OF 21 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2775	14-00057-00-RS	COOK	21	5
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				





**LEGEND:**

	CURB AND GUTTER REMOVAL
	HOT-MIX ASPHALT SURFACE REMOVAL, 2"

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PLOT DATE = 1/30/2015		DATE - 12/05/14	REVISED -

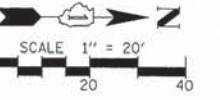
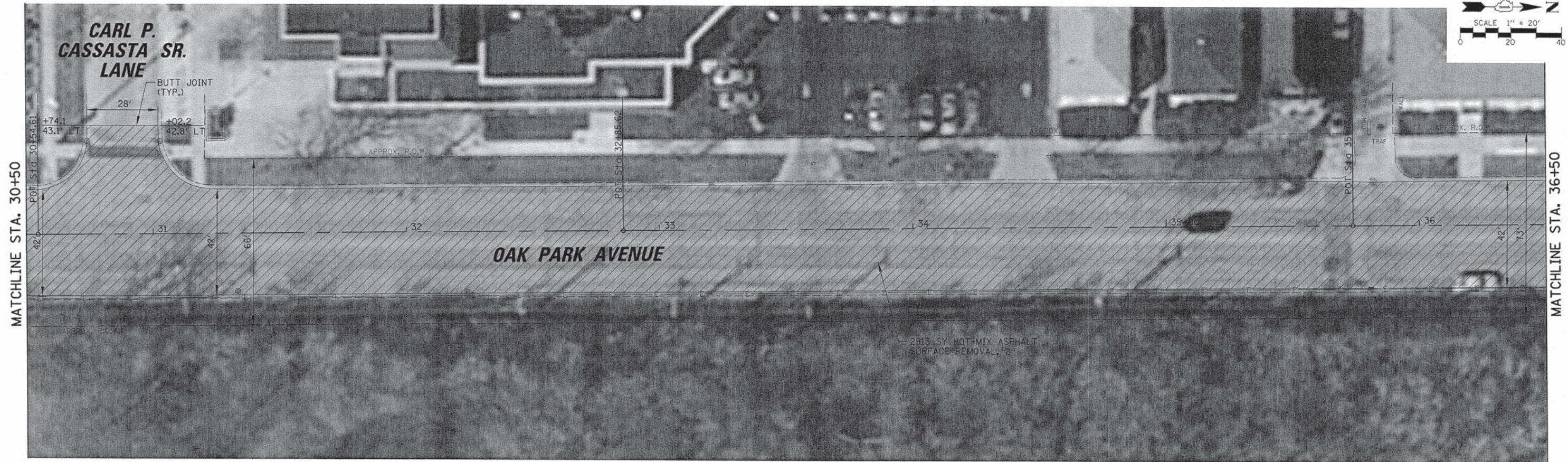
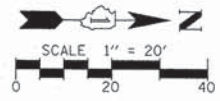
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
EXISTING CONDITION AND REMOVAL PLAN**

SCALE: 20' SHEET NO. 6 OF 21 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2775	14-00057-00-RS	COOK	21	6
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				





**LEGEND:**

	CURB AND GUTTER REMOVAL
	HOT-MIX ASPHALT SURFACE REMOVAL, 2"

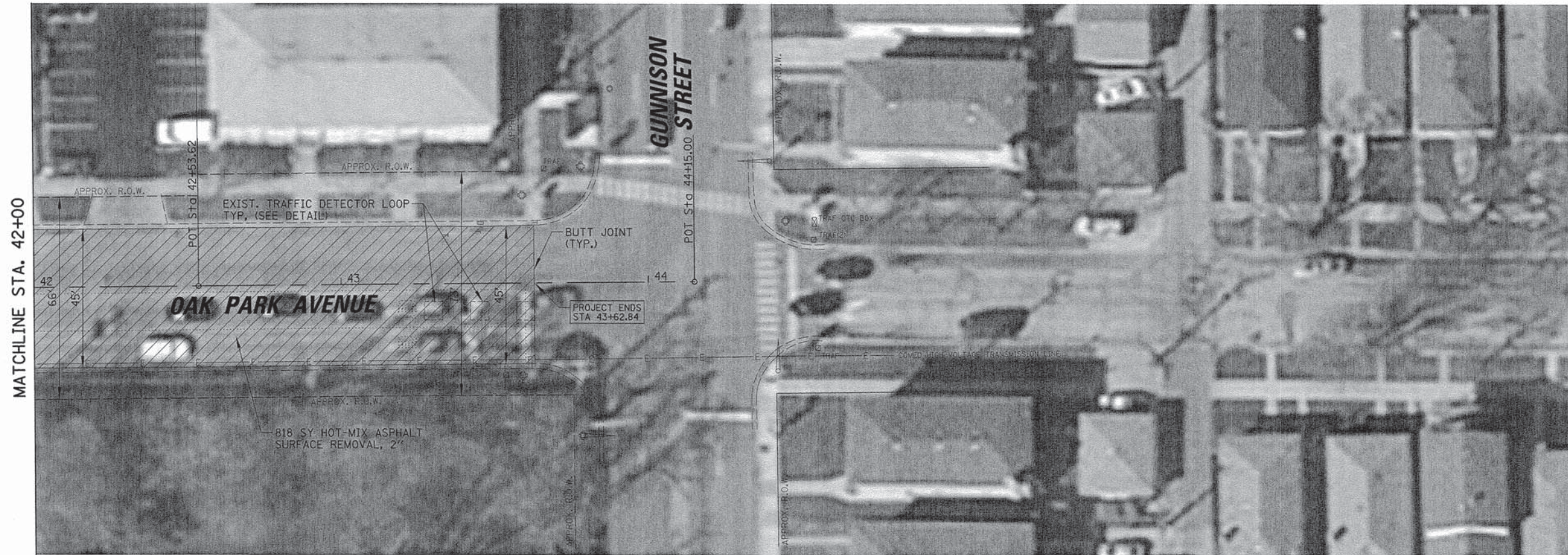
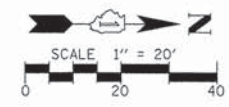
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PLOT DATE = 1/30/2015		DATE - 12/05/14	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>OAK PARK AVENUE EXISTING CONDITIONS AND REMOVAL PLAN</b>			
SCALE: 20'	SHEET NO. 7 OF 21 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2775	14-00057-00-RS	COOK	21	7
				CONTRACT NO.
ILLINOIS FED. AID PROJECT				

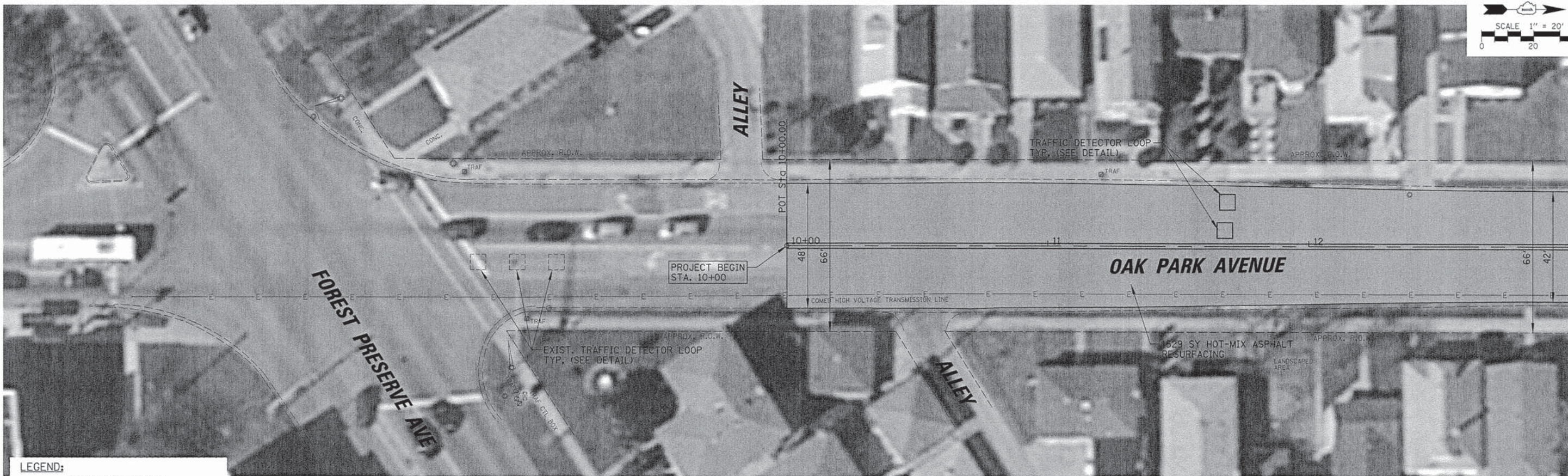
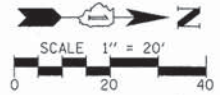




**LEGEND:**  
 ~~~~~ CURB AND GUTTER REMOVAL  
 [Hatched Box] HOT-MIX ASPHALT SURFACE REMOVAL, 2"

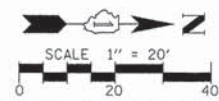
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| PLOT SCALE = 20'                                                | CHECKED - JGS        | REVISED -      | SCALE: 20'                |                                                           |                                                                 | SHEET NO. 8 OF 21 SHEETS | STA.                      | TO STA.        | CONTRACT NO.       |                |  |  |
| PLOT DATE = 1/30/2015                                           | DATE - 12/05/14      | REVISED -      | ILLINOIS FED. AID PROJECT |                                                           |                                                                 |                          |                           |                |                    |                |  |  |
|                                                                 |                      |                |                           |                                                           |                                                                 |                          |                           |                |                    |                |  |  |



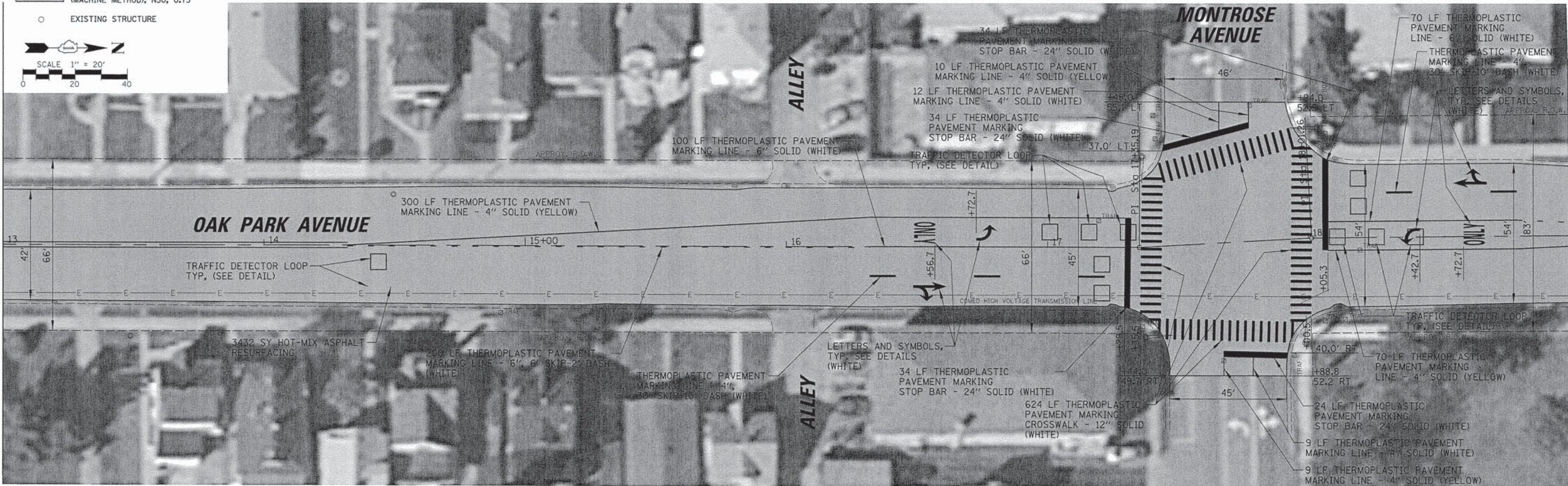


**LEGEND:**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1.5" POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50, 0.75"
- EXISTING STRUCTURE



MATCHLINE STA. 13+00



MATCHLINE STA. 19+00

|                                                  |                       |                 |           |
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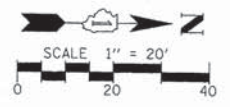
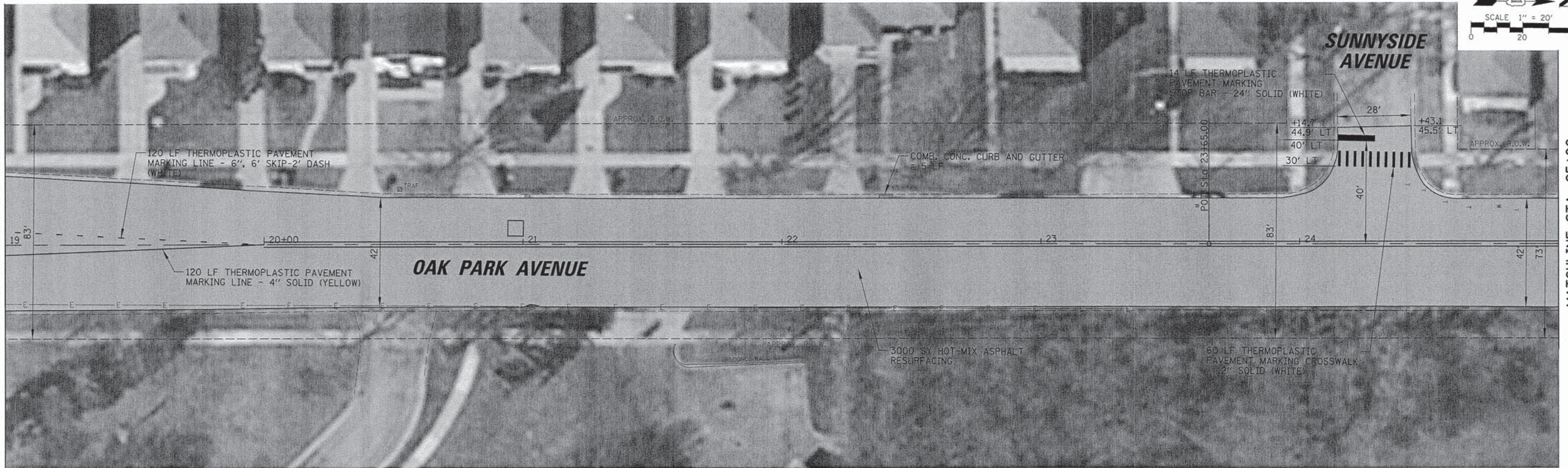
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
PROPOSED PLAN**

SCALE: 20' SHEET NO. 9 OF 21 SHEETS STA. TO STA.

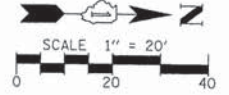
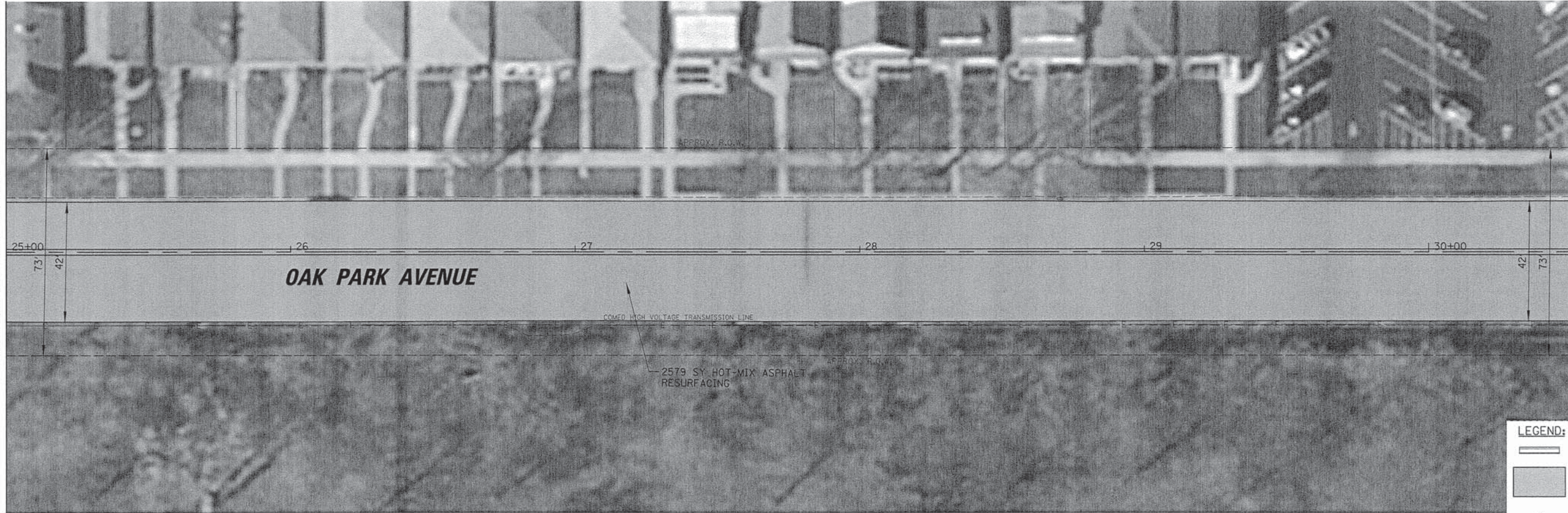
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| F.A.U. RTE.               | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO.    |
| 2775                      | 14-00057-00-RS | COOK   | 21           | 9            |
|                           |                |        |              | CONTRACT NO. |
| ILLINOIS FED. AID PROJECT |                |        |              |              |





MATCHLINE STA. 19+00

MATCHLINE STA. 25+00



MATCHLINE STA. 25+00

MATCHLINE STA. 30+50

**LEGEND:**

|  |                                                          |
|--|----------------------------------------------------------|
|  | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12        |
|  | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1.5"       |
|  | POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50, 0.75" |
|  | EXISTING STRUCTURE                                       |

|                                                   |                       |                 |           |
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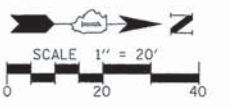
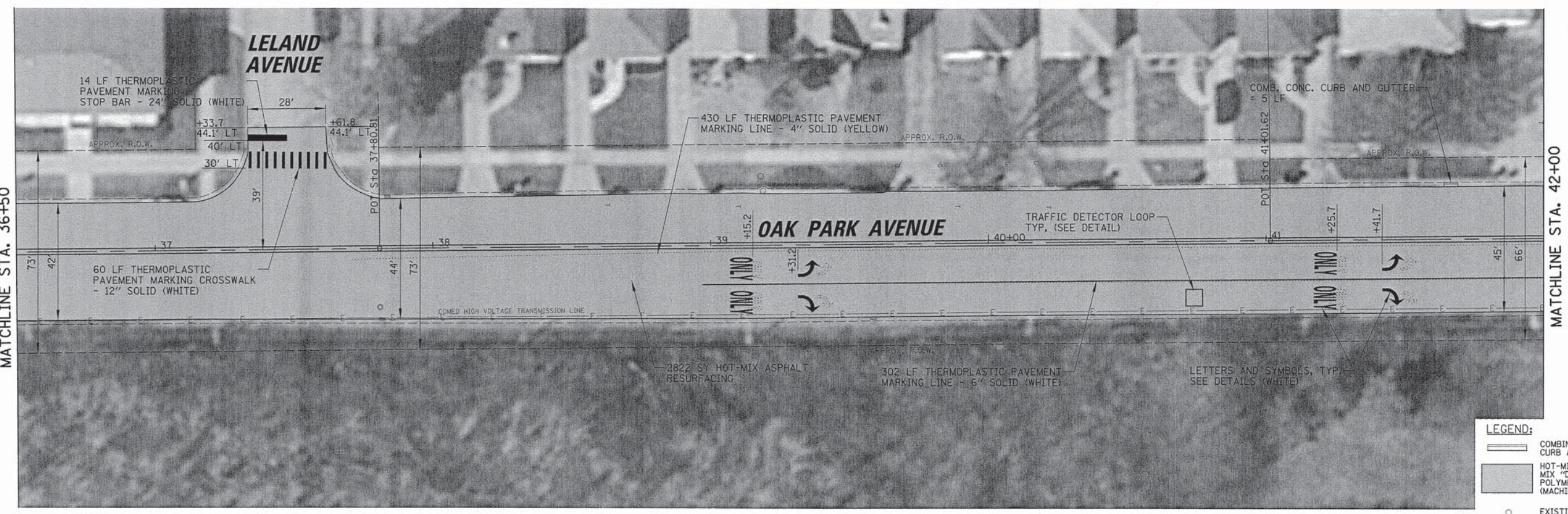
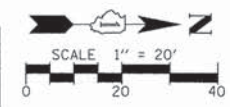
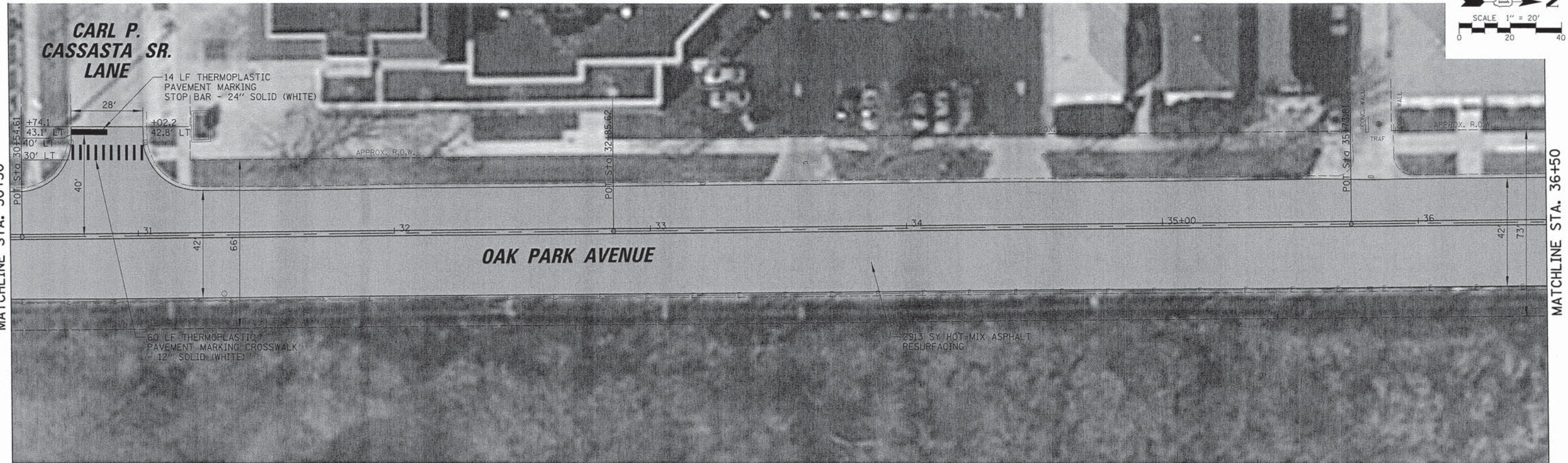
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
PROPOSED PLAN**

SCALE: 20' SHEET NO. 10 OF 21 SHEETS STA. TO STA.

|                           |                |        |              |           |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE.               | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2775                      | 14-00057-00-RS | COOK   | 21           | 10        |
| CONTRACT NO.              |                |        |              |           |
| ILLINOIS FED. AID PROJECT |                |        |              |           |





**LEGEND:**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NSO, 1.5"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), NSO, 0.75"
- EXISTING STRUCTURE

|                                                  |                       |                 |           |
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|                                                  | PLOT DATE = 1/30/2015 | DATE = 12/05/14 | REVISED - |

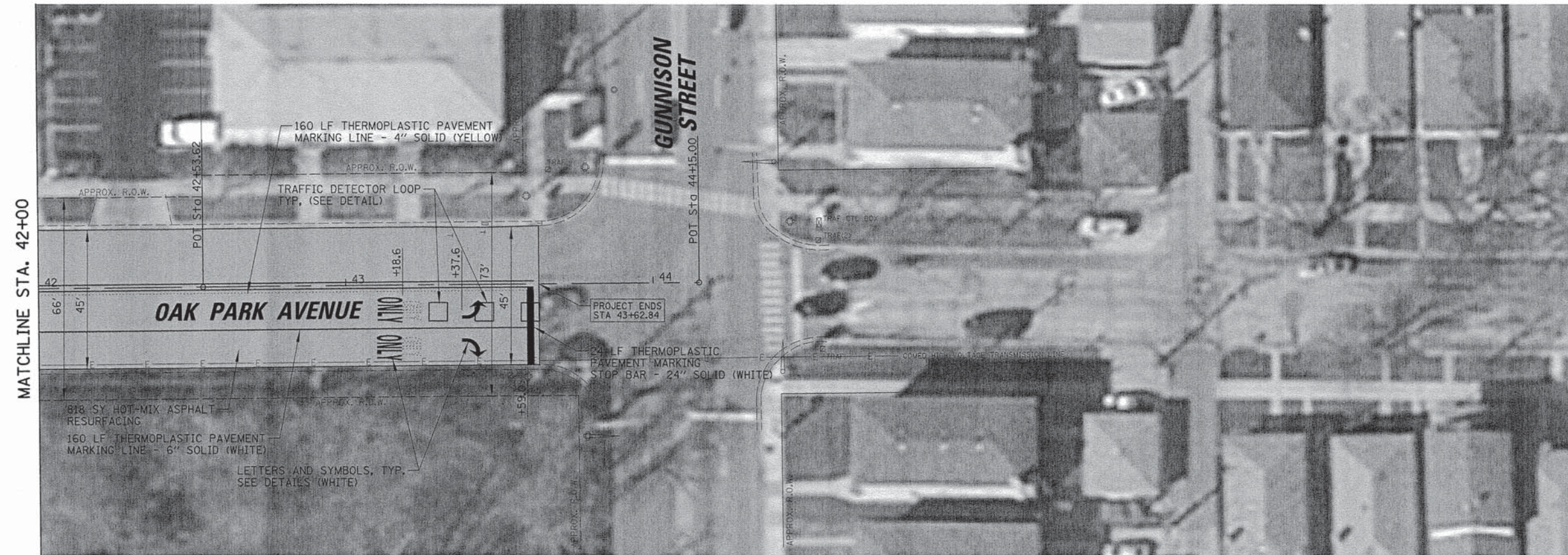
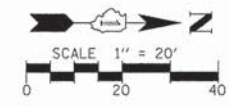
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OAK PARK AVENUE  
PROPOSED PLAN**

SCALE: 20'      SHEET NO. 11 OF 21 SHEETS      STA.      TO STA.

| F.A.U. RTE.               | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 2775                      | 14-00057-00-RS | COOK   | 21           | 11        |
| CONTRACT NO.              |                |        |              |           |
| ILLINOIS FED. AID PROJECT |                |        |              |           |





**LEGEND:**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1.5" POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50, 0.75"
- EXISTING STRUCTURE

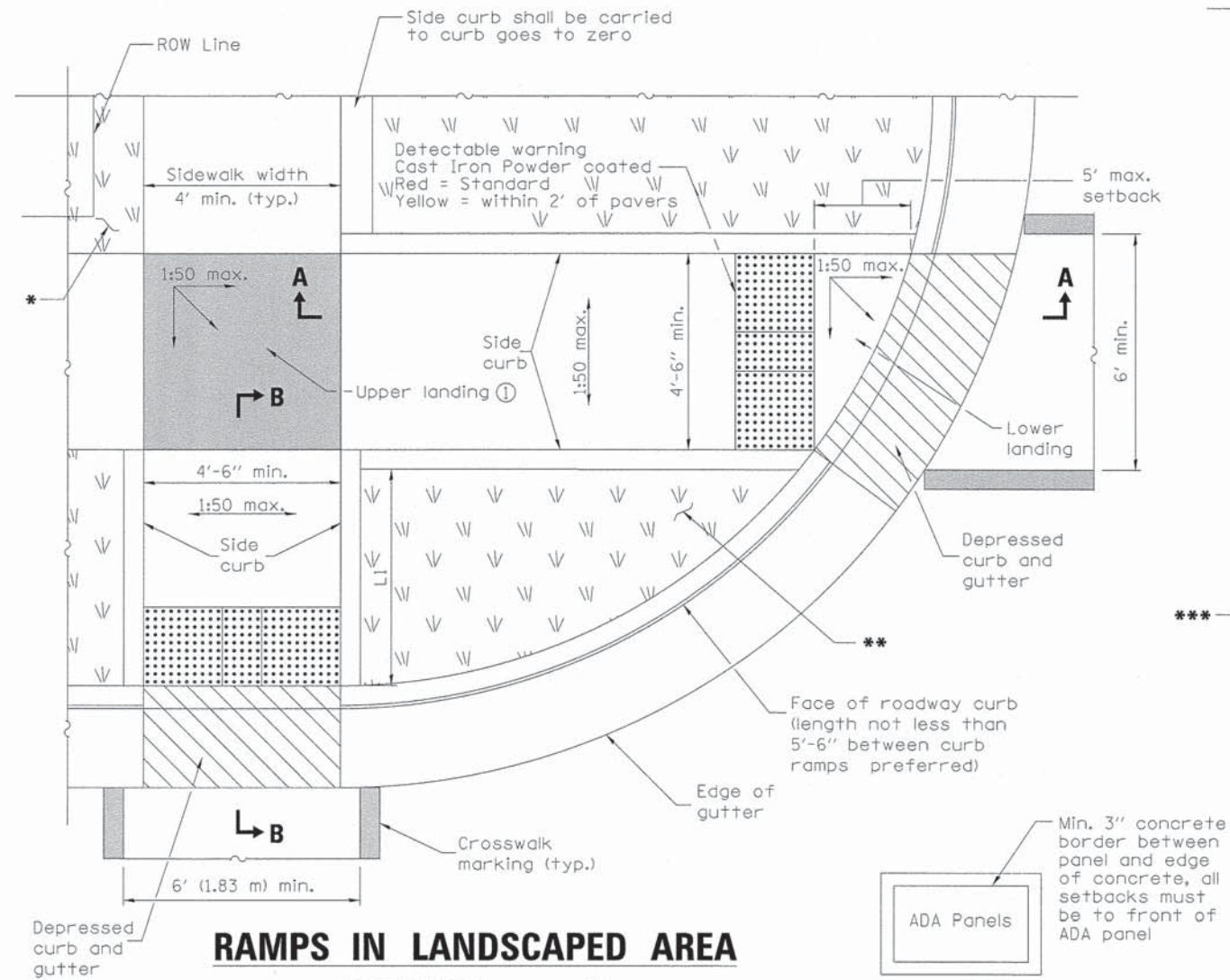
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|-----------------------------------------------------------------|-----------------------|-----------------|-----------|
| FILE NAME =<br>N:\HARWOODHEIGHTS\140579\Civil\p1n_140579-04.sht | USER NAME = jlapaglia | DESIGNED - LMF  | REVISED - |
|                                                                 |                       | DRAWN - EDT     | REVISED - |
|                                                                 | PLOT SCALE = 20'      | CHECKED - JGS   | REVISED - |
|                                                                 | PLOT DATE = 1/30/2015 | DATE - 12/05/14 | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

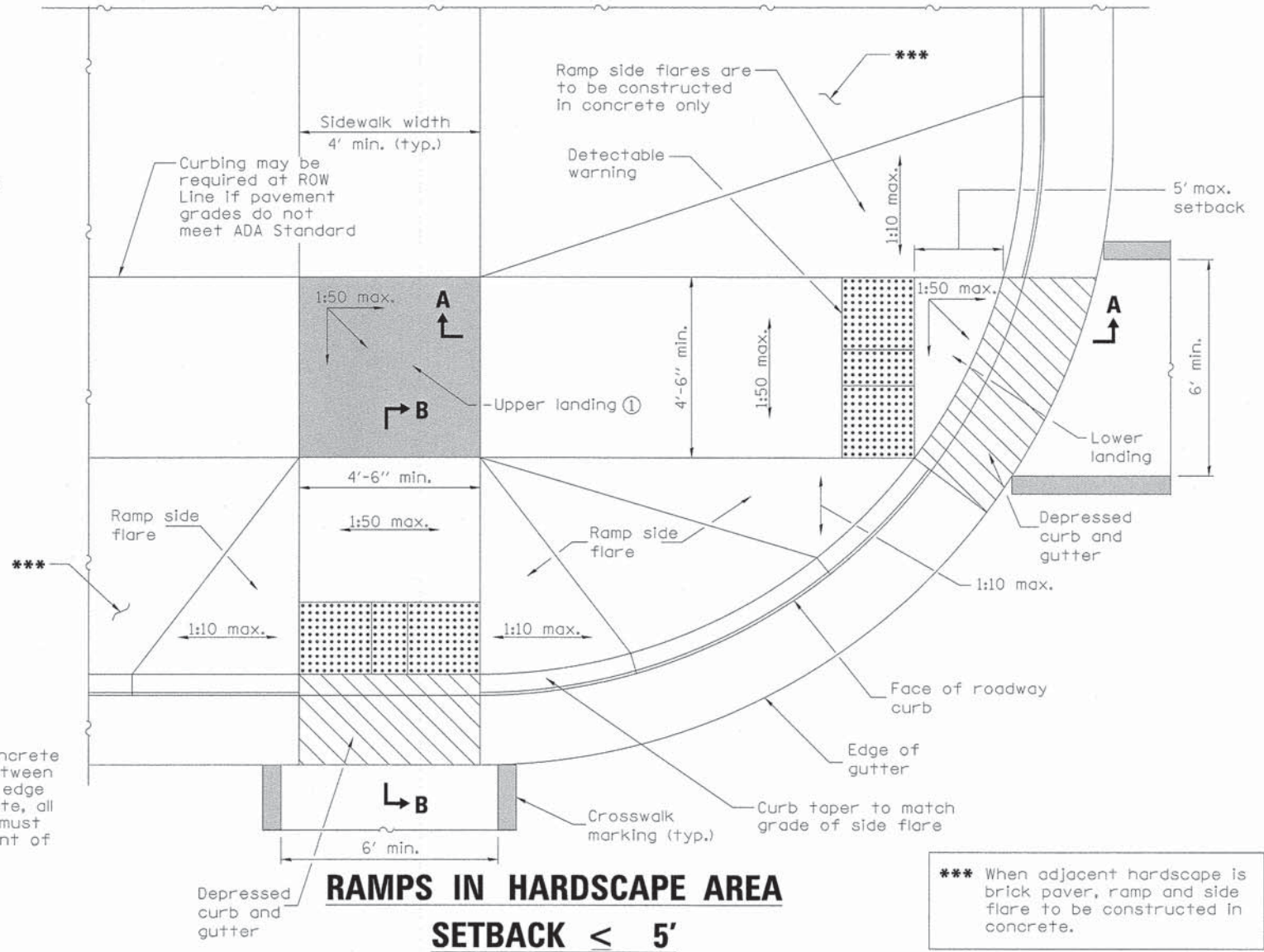
**OAK PARK AVENUE  
PROPOSED PLAN**

|            |                           |      |         |                                             |                           |                |                    |                 |
|------------|---------------------------|------|---------|---------------------------------------------|---------------------------|----------------|--------------------|-----------------|
| SCALE: 20' | SHEET NO. 12 OF 21 SHEETS | STA. | TO STA. | F.A.U. RTE.<br>2775                         | SECTION<br>14-00057-00-RS | COUNTY<br>COOK | TOTAL SHEETS<br>21 | SHEET NO.<br>12 |
|            |                           |      |         | CONTRACT NO.<br>[ILLINOIS] FED. AID PROJECT |                           |                |                    |                 |

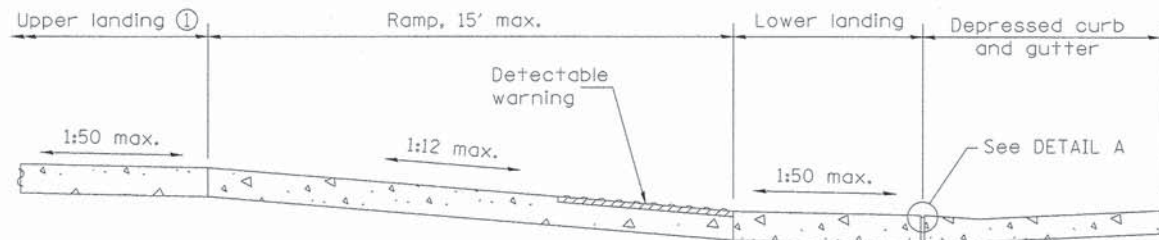




**RAMPS IN LANDSCAPED AREA  
SETBACK < 5'**

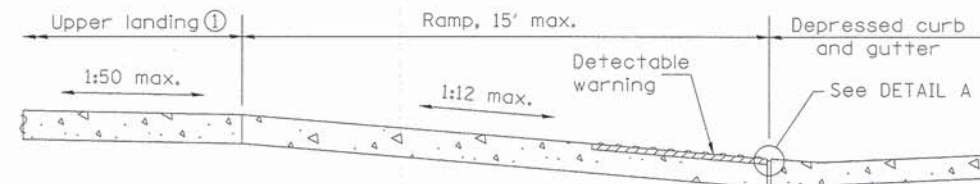


**RAMPS IN HARDSCAPE AREA  
SETBACK < 5'**



**SECTION A-A**

① Upper landing not required for ramp slopes flatter than 1:20.



**SECTION B-B**

① Upper landing not required for ramp slopes flatter than 1:20.

**GENERAL NOTES**

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where 1:50 maximum slope is shown, 1:64 is preferred.

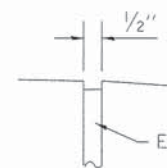
All dimensions are in inches.

\* If Grading exceeds 3:1 from walk to ROW then install back of walk side curb. If grade from top of back of walk curb to ROW exceeds 3:1 then a temporary easement is required for grading.

\*\* Trapped Material must be:

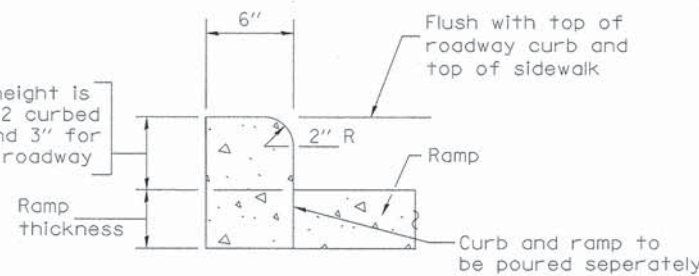
| L1 Length    | TOPSOIL & SEED |       | BRICK PAVER |       |
|--------------|----------------|-------|-------------|-------|
|              | B6:12          | M3:12 | B6:12       | M3:12 |
| 3 ft or less |                |       | x           | x     |
| 3 - 6 feet   |                | x     | x           |       |
| 6 - 9+ feet  | x              | x     |             |       |

Must have mower access (3' wide uncurbed area from sidewalk to trapped material) in all cases in order for Topsoil & Seed to be installed, otherwise brick pavers are required.



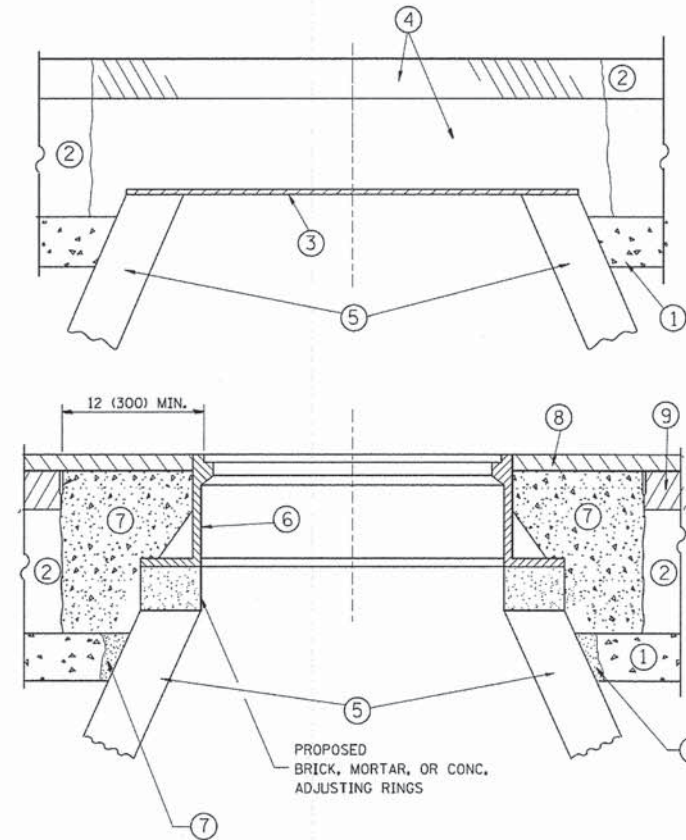
**DETAIL A**

Max curb height is 6" for B6:12 curbed roadway and 3" for M3:12 curb roadway



**SIDE CURB DETAIL**





**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

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

**STAGE 2 (AFTER PAVEMENT MILLING)**

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

\*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**LEGEND**

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

**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.

**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.

**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 |
| ct:\pe_work\pwsdot\bauerdl\d0108315\bd08.dgn |                           | DRAWN -            | REVISED - R. BORO 01-01-07     |
|                                              | PLOT SCALE = 1/8" = 1'-0" | CHECKED -          | REVISED - R. BORO 03-09-11     |
|                                              | PLOT DATE = 12/6/2011     | DATE - 10-25-94    | REVISED - R. BORO 12-06-11     |

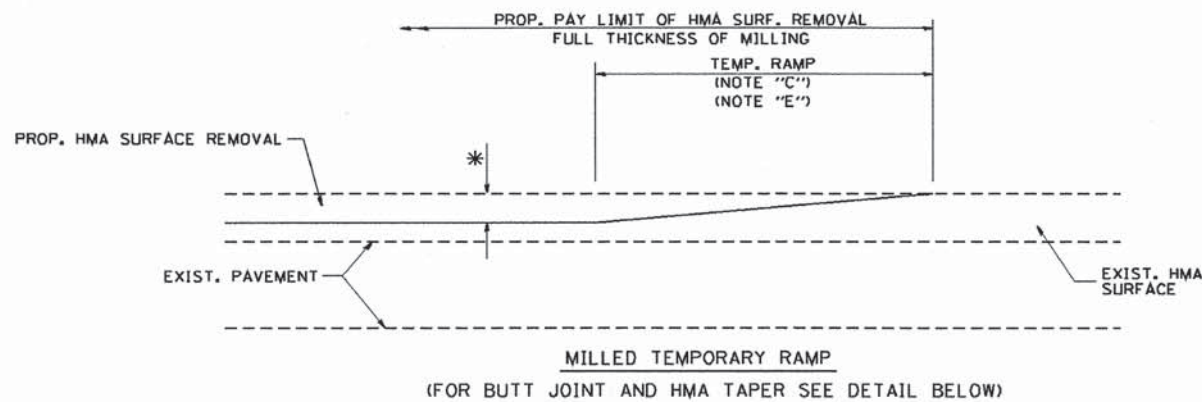
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

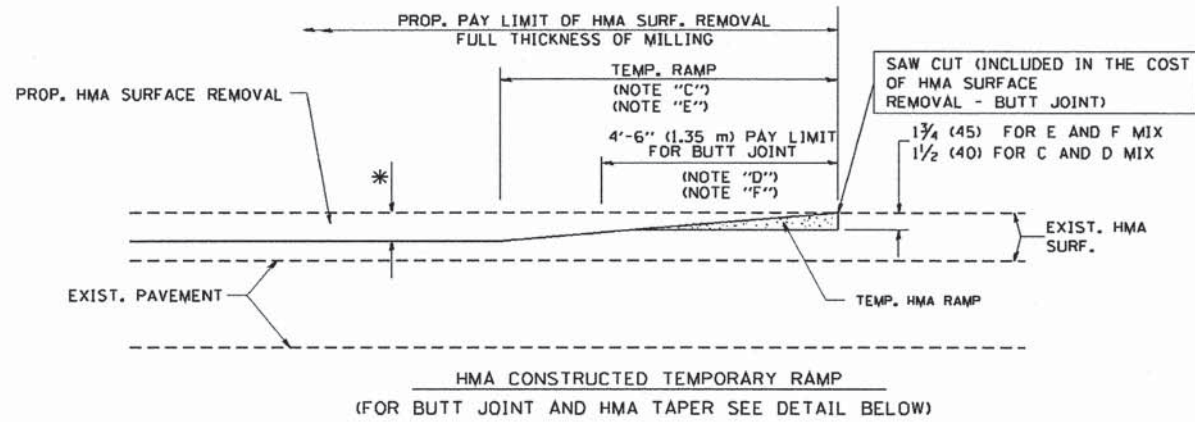
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|                                                 |                |        |              |           |
|-------------------------------------------------|----------------|--------|--------------|-----------|
| F.A. RTE.                                       | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| 2775                                            | 14-00057-00-RS | COOK   | 21           | 14        |
| BD600-03 (BD-8)                                 |                |        | CONTRACT NO. |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



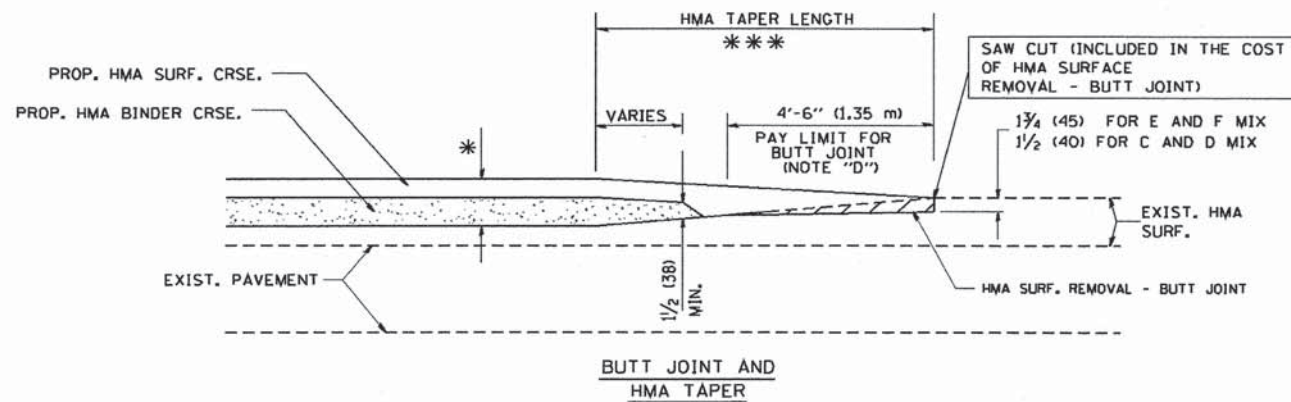


OPTION 1

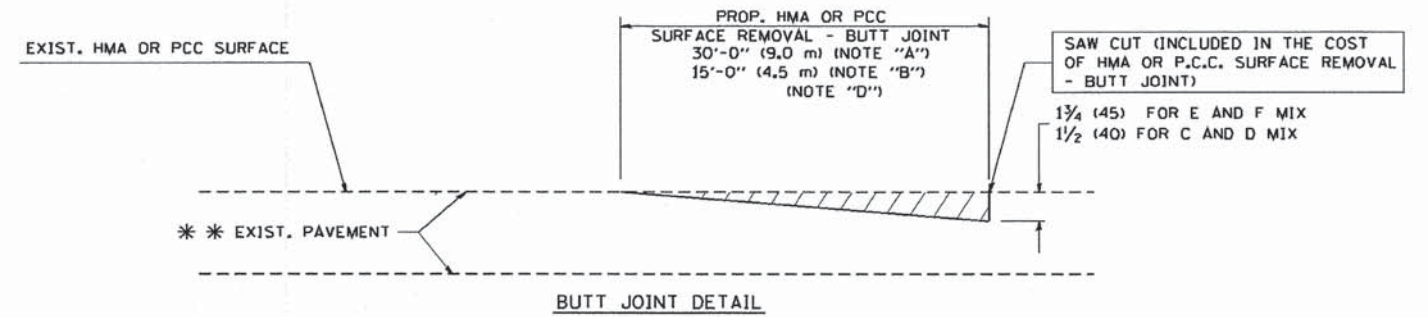


OPTION 2

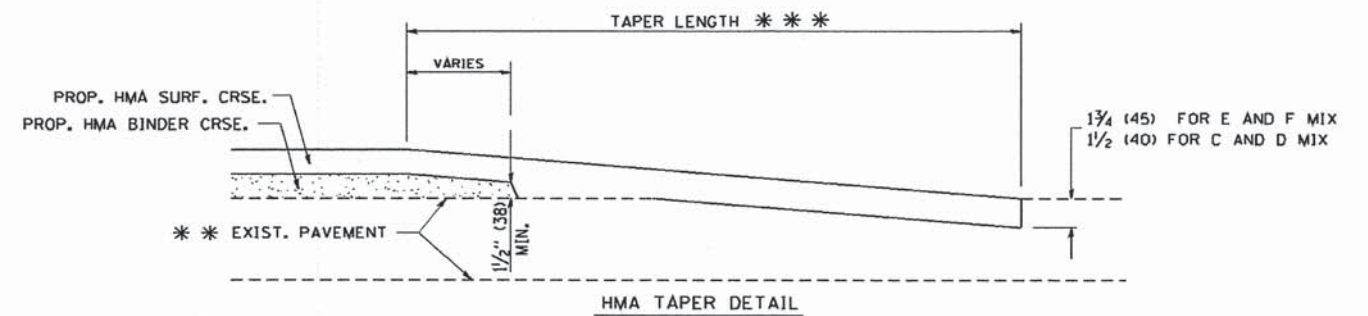
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

NOTES

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

BASIS OF PAYMENT:

ALL BUTT JOINTS ARE INCIDENTAL TO THE SURFACE COURSE.

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

|                                       |                             |                       |                             |
|---------------------------------------|-----------------------------|-----------------------|-----------------------------|
| FILE NAME = W:\distatd\22x34\bd32.dgn | USER NAME = gaglionob       | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94  |
|                                       |                             | DRAWN -               | REVISED - A. ABBAS 03-21-97 |
|                                       | PLOT SCALE = 50.0000 / 1/4" | CHECKED -             | REVISED - M. GOMEZ 04-06-01 |
|                                       | PLOT DATE = 1/4/2008        | DATE - 06-13-90       | REVISED - R. BORO 01-01-07  |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

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

|                                                 |                |              |              |           |
|-------------------------------------------------|----------------|--------------|--------------|-----------|
| F.A. - RTE.                                     | SECTION        | COUNTY       | TOTAL SHEETS | SHEET NO. |
| 2775                                            | 14-00057-00-RS | COOK         | 21           | 15        |
| BD400-05 BD32                                   |                | CONTRACT NO. |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |              |              |           |



VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

T/2 \*

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND/OR SIDEWALK REMOVAL AND REPLACEMENT.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

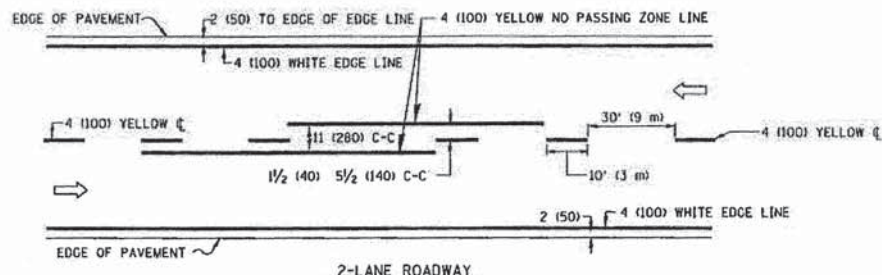
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

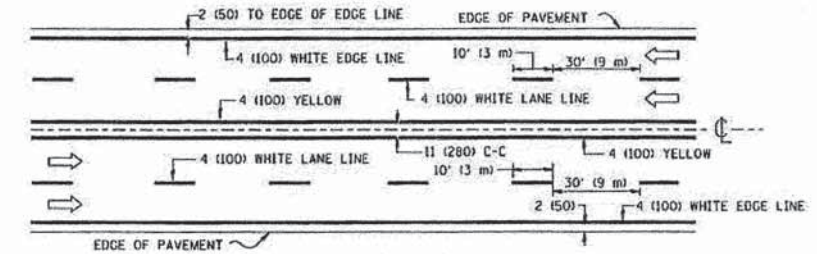
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

|                                                              |                                              |                                                  |                                                            |                           |                   |                           |                |                    |                 |
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|                                                              |                                              |                                                  | SCALE: NONE                                                | SHEET NO. 21 OF 21 SHEETS | STA.              | TO STA.                   |                | CONTRACT NO.       |                 |
| ILLINOIS FED. AID PROJECT                                    |                                              |                                                  |                                                            |                           |                   |                           |                |                    |                 |

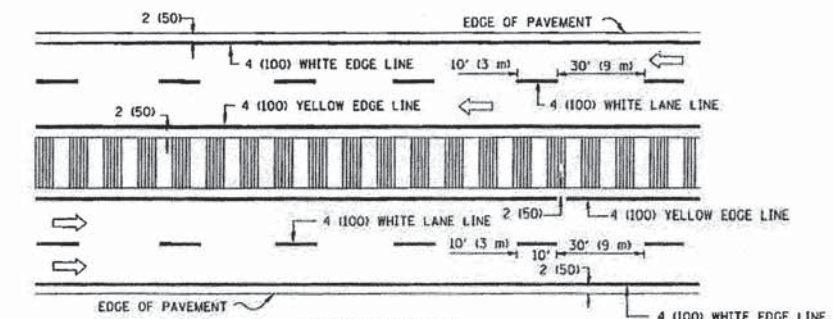




2-LANE ROADWAY



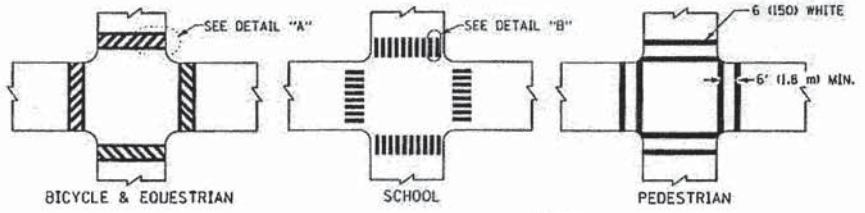
MULTI-LANE UNDIVIDED



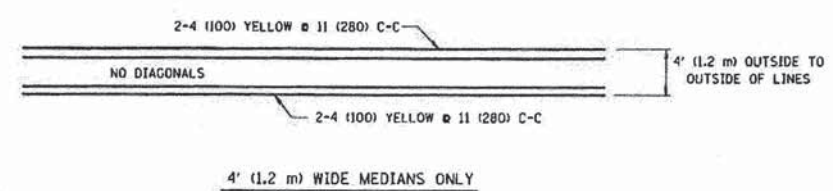
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

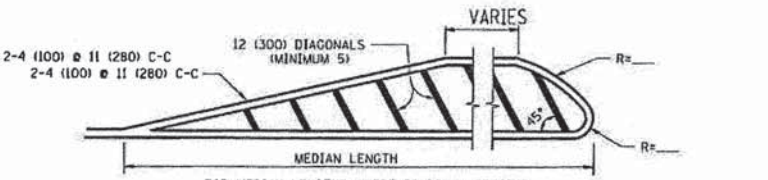
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



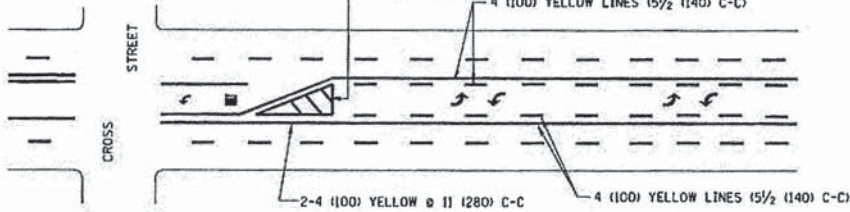
4' (1.2 m) WIDE MEDIANS ONLY



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

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

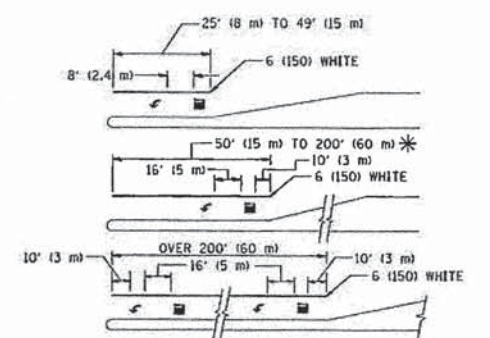
MEDIANS OVER 4' (1.2 m) WIDE



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

MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

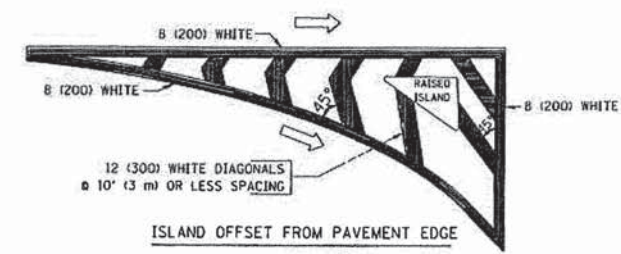


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

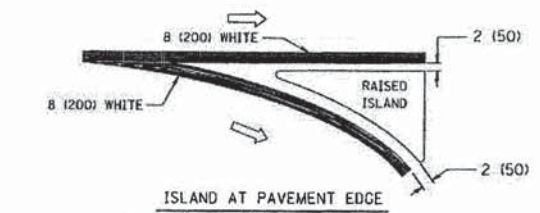
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

| TYPE OF MARKING                                                                                   | WIDTH OF LINE                                                                              | PATTERN                         | COLOR                                                   | SPACING / REMARKS                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CENTERLINE ON 2 LANE PAVEMENT                                                                     | 4 (100)                                                                                    | SKIP-DASH                       | YELLOW                                                  | 10' (3 m) LINE WITH 30' (9 m) SPACE                                                                                                                                |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT                                                       | 2 @ 4 (100)                                                                                | SOLID                           | YELLOW                                                  | 11 (280) C-C                                                                                                                                                       |
| NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS                                       | 4 (100)<br>2 @ 4 (100)                                                                     | SOLID<br>SOLID                  | YELLOW<br>YELLOW                                        | 5/2' (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN                                                                      |
| LANE LINES                                                                                        | 4 (100)<br>5 (125) ON FREEWAYS                                                             | SKIP-DASH<br>SKIP-DASH          | WHITE<br>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<br>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 18' (2.4m)                                       | SOLID                           | WHITE                                                   | SEE TYPICAL TURN LANE MARKING DETAIL                                                                                                                               |
| TWO WAY LEFT TURN MARKING                                                                         | 2 @ 4 (100) EACH DIRECTION<br>8' (2.4m) LEFT ARROW                                         | SKIP-DASH AND SOLID<br>IN PAIRS | YELLOW<br>WHITE                                         | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2' (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL            |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150)<br>12 (300) @ 45°<br>12 (300) @ 90°                                            | SOLID<br>SOLID<br>SOLID         | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2' (600) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.                                                       |
| STOP LINES                                                                                        | 24 (600)                                                                                   | SOLID                           | WHITE                                                   | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS                                                                                   | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°<br>NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | SOLID                           | YELLOW;<br>TWO WAY TRAFFIC<br>WHITE;<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.                                                                                            |
| GORE MARKING AND CHANNELIZING LINES                                                               | 8 (200) WITH 12 (300) DIAGONALS @ 45°                                                      | SOLID                           | WHITE                                                   | DIAGONALS:<br>15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)<br>30' (9 m) C-C (OVER 45MPH (70 km/h))              |
| RAILROAD CROSSING                                                                                 | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"               | SOLID                           | WHITE                                                   | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )                                              |
| SHOULDER DIAGONALS                                                                                | 12 (300) @ 45°                                                                             | SOLID                           | WHITE - RIGHT<br>YELLOW - LEFT                          | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>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.

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

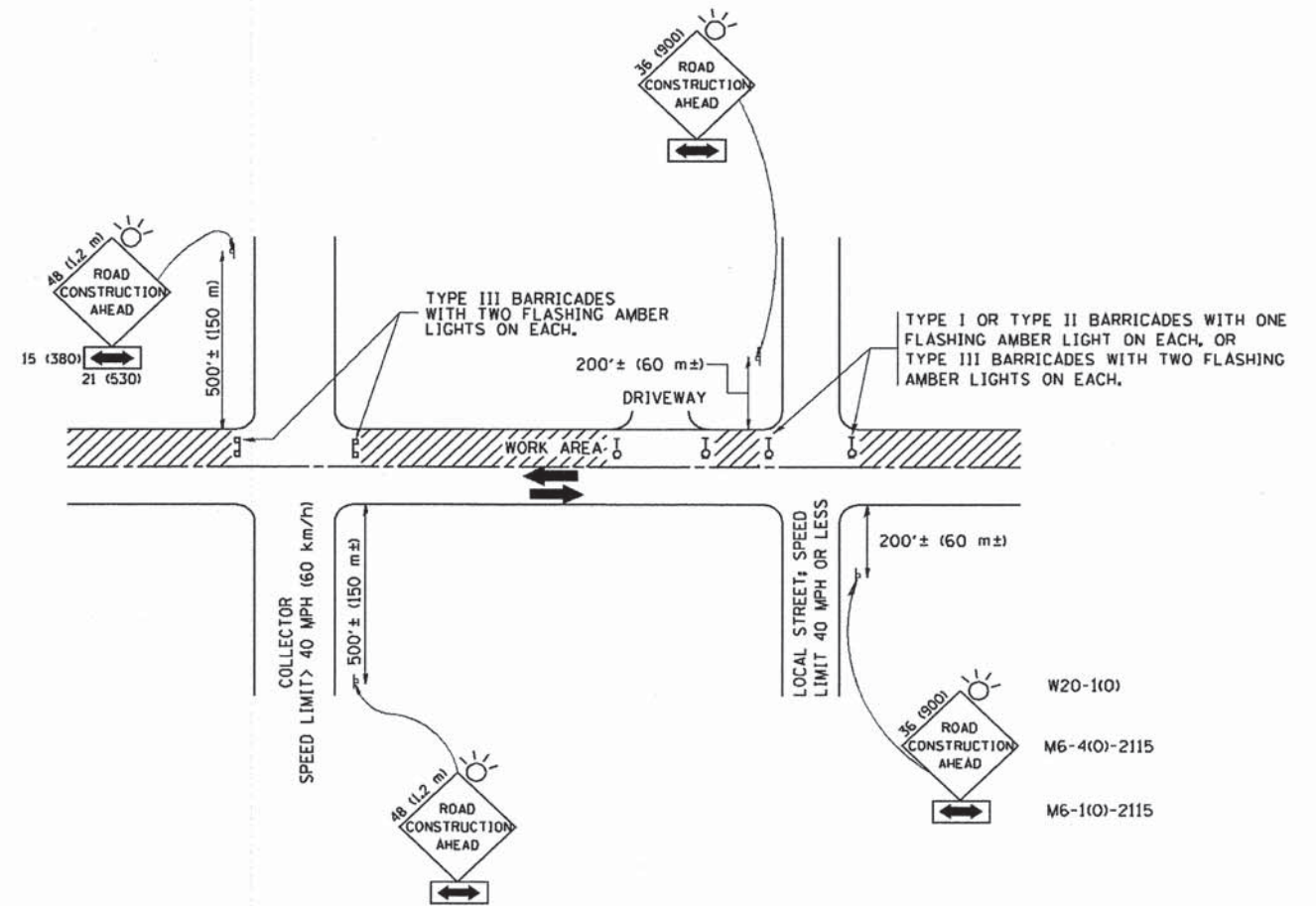
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|                                         | PLOT SCALE = 50.000' / IN. | CHECKED -        | REVISED -                       |
|                                         | PLOT DATE = 9/9/2009       | DATE - 03-19-90  | REVISED -                    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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                           |  |                         |                |        |              |           |
|---------------------------|--|-------------------------|----------------|--------|--------------|-----------|
| DISTRICT ONE              |  | F.A. RTE.               | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
| TYPICAL PAVEMENT MARKINGS |  | 2775                    | 14-00057-00-RS | COOK   | 21           | 17        |
| SCALE: NONE               |  | SHEET NO. 1 OF 1 SHEETS |                | STA.   | TO STA.      |           |

FED. ROAD DIST. NO. 1 (ILLINOIS) 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 ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150L, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

|                                          |                          |                   |                                    |
|------------------------------------------|--------------------------|-------------------|------------------------------------|
| FILE NAME =<br>W:\diststd\22x34\tcl8.dgn | USER NAME =<br>gaglianob | DESIGNED -<br>LHA | REVISED -<br>J. OBERLE 10-18-95    |
|                                          |                          | DRAWN -           | REVISED -<br>A. HOUSEH 03-06-96    |
|                                          |                          | CHECKED -         | REVISED -<br>A. HOUSEH 10-15-96    |
|                                          |                          | DATE -<br>06-89   | REVISED -<br>T. RAMMACHER 01-06-00 |

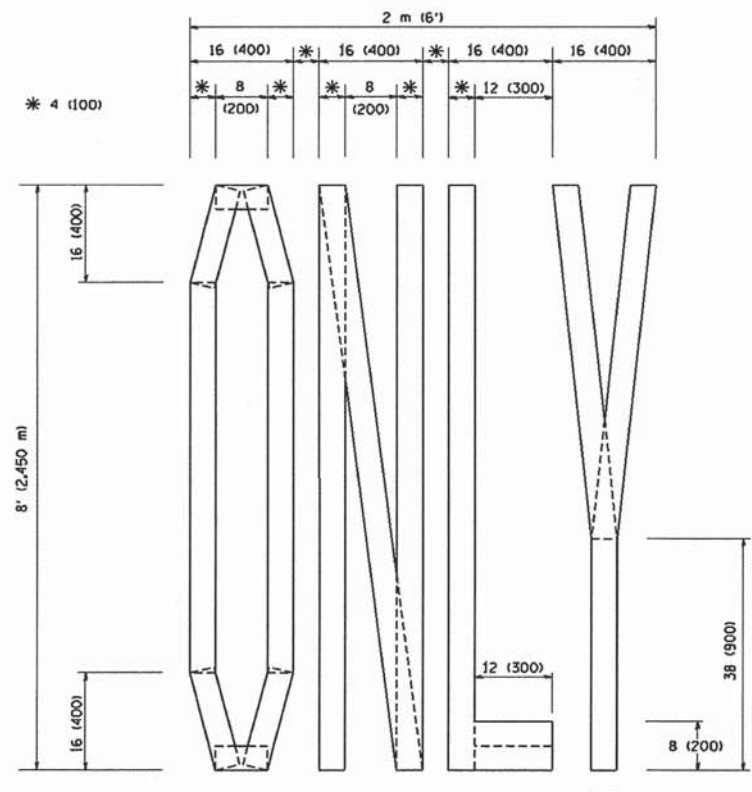
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

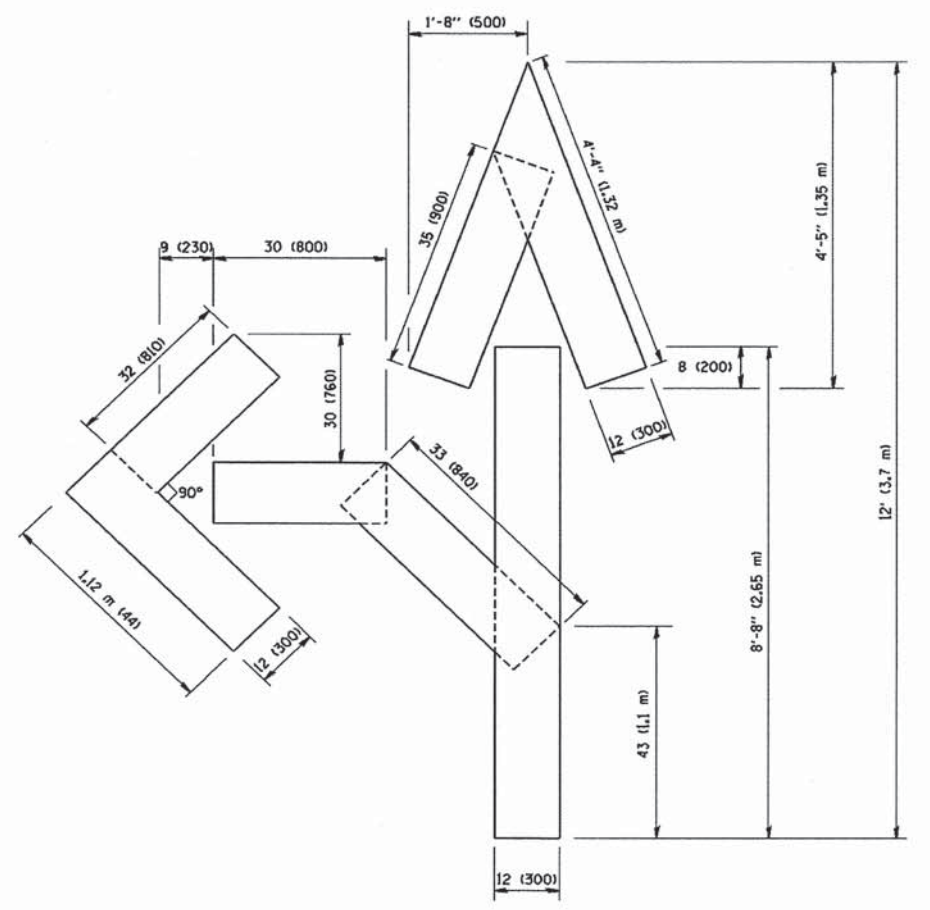
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|                                                 |                           |                |                    |                 |
|-------------------------------------------------|---------------------------|----------------|--------------------|-----------------|
| F.A. RTE.<br>2775                               | SECTION<br>14-00057-00-RS | COUNTY<br>COOK | TOTAL SHEETS<br>21 | SHEET NO.<br>18 |
| TC-10                                           |                           |                | CONTRACT NO.       |                 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                           |                |                    |                 |

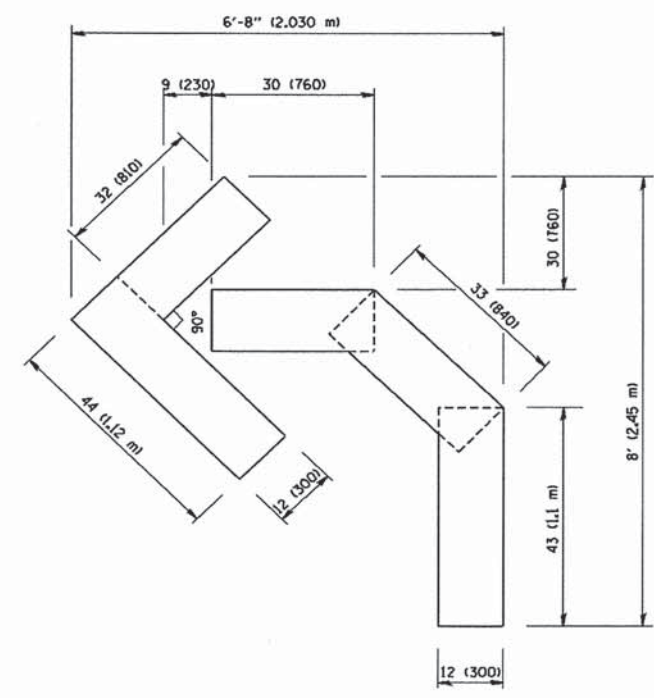




QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



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



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

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

|                                          |                          |                                |                                                                  |
|------------------------------------------|--------------------------|--------------------------------|------------------------------------------------------------------|
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| PLOT SCALE =<br>50.0000 / IN.            | CHECKED -                | REVISED -T. RAMMACHER 03-02-98 |                                                                  |
| PLOT DATE =<br>1/4/2008                  | DATE -<br>09-18-94       | REVISED -E. GOMEZ 08-28-00     |                                                                  |

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

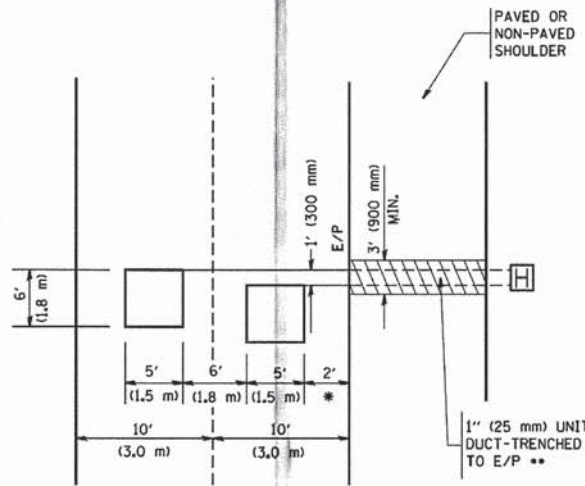
| PAVEMENT MARKING LETTERS AND SYMBOLS<br>FOR TRAFFIC STAGING |              |                 |              |
|-------------------------------------------------------------|--------------|-----------------|--------------|
| SCALE: NONE                                                 | SHEET NO. 21 | SHTDF 21 SHEETS | STA. TO STA. |

| F.A. RTE.                                       | SECTION        | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------------------------------------------|----------------|--------|--------------|-----------|
| 2775                                            | 14-00057-00-RS | COOK   | 21           | 19        |
| TC-16                                           |                |        | CONTRACT NO. |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |        |              |           |



**LOOPS NEXT TO SHOULDERS**

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

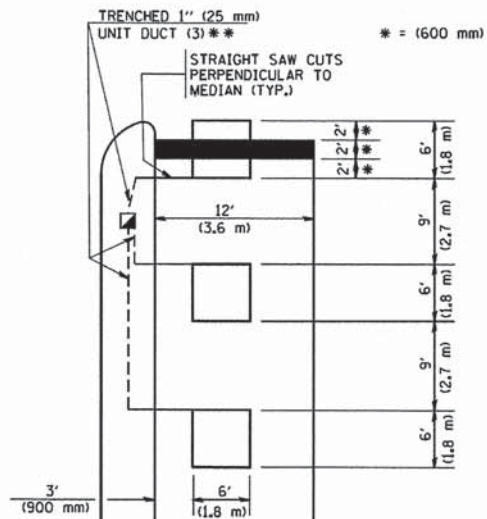


\* = (600 mm)

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

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

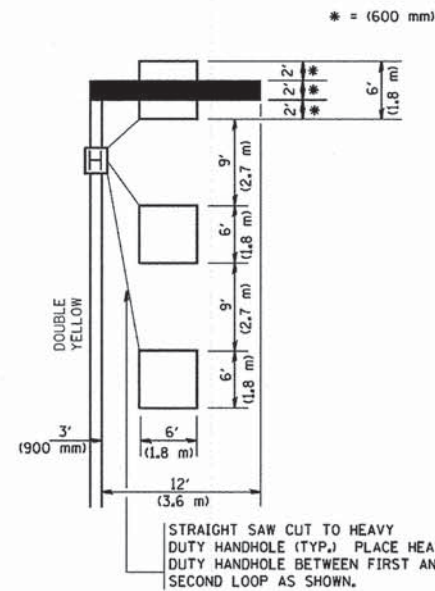
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

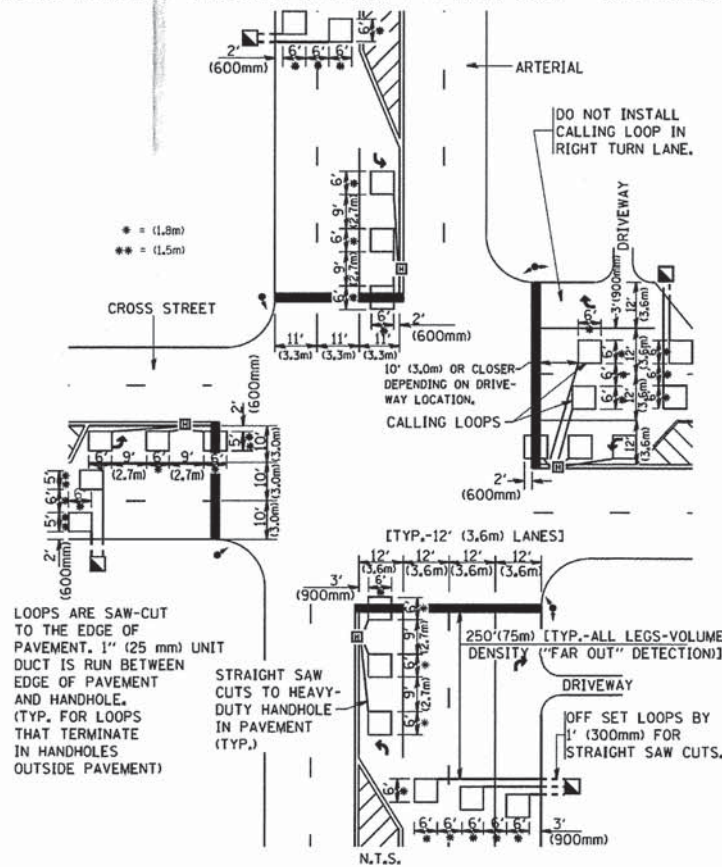
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



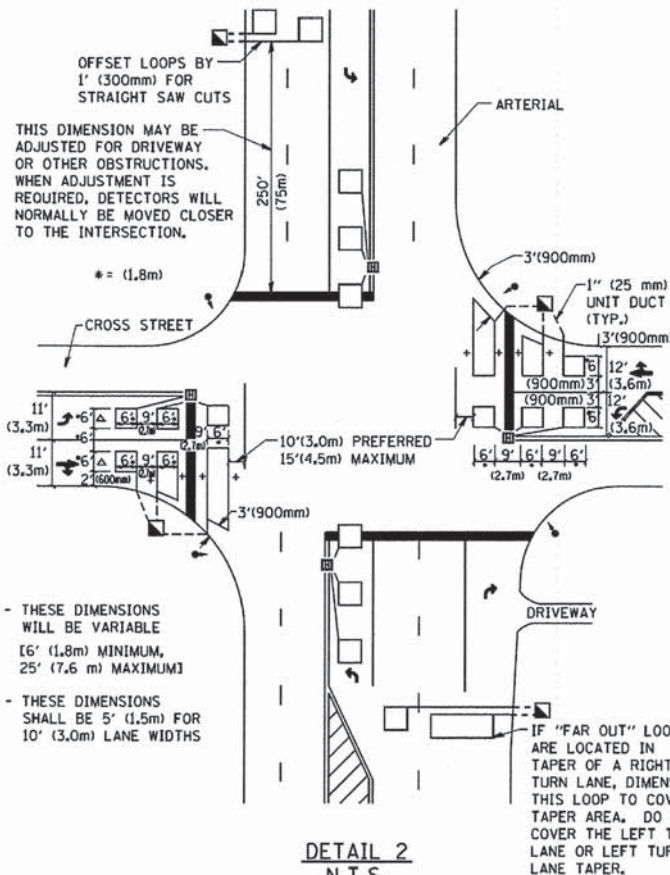
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

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

**PLACEMENT OF DETECTORS**

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

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

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN 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.

FILE NAME = W:\diststd\22x34\ts07.dgn

USER NAME = gegienobt  
PLOT SCALE = 50.0000 "/ IN.  
PLOT DATE = 1/4/2008

DESIGNED -  
DRAWN -  
CHECKED - R.K.F.  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING**

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

| F.A. RTE.                                       | SECTION        | COUNTY       | TOTAL SHEETS | SHEET NO. |
|-------------------------------------------------|----------------|--------------|--------------|-----------|
| 2775                                            | 14-00057-00-RS | COOK         | 21           | 20        |
| TS-07                                           |                | CONTRACT NO. |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                |              |              |           |



