DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: KEN ENG /R. SHAH (847) 705-4437

CONTRACT NO. 60754

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	1316RS-1	COOK	22	1

8-5-05 Letting, Item 064

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAU2760 (SHERMER ROAD)
SECTION 1316RS-1
WILLOW ROAD TO OLD WILLOW ROAD
COOK COUNTY
C-91-245-99

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF GLENVIEW IN COOK COUNTY

AVERAGE DAILY TRAFFIC = 14,600

POSTED SPEED LIMIT = 35 MPH

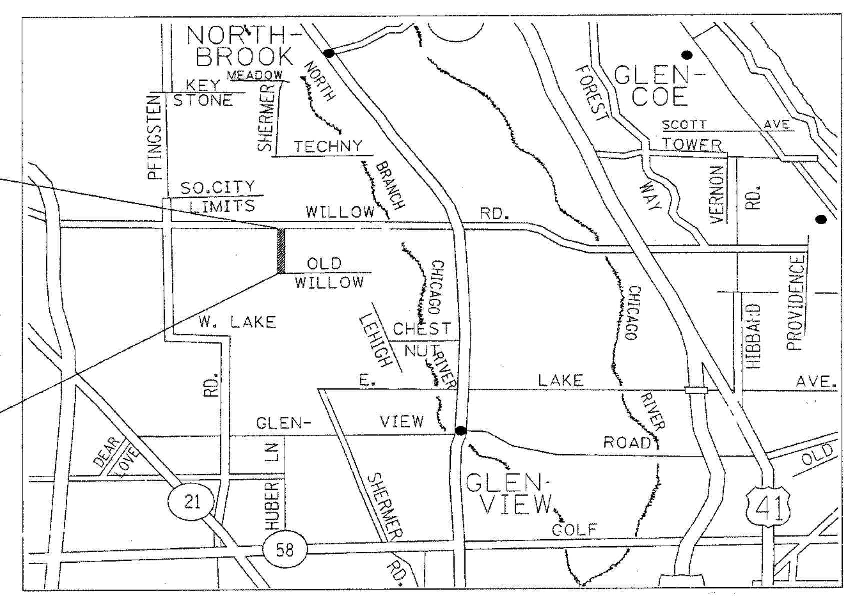
N

R 12 E

T 42 N

IMPROVEMENT ENDS STATION 44+17

IMPROVEMENT BEGINS STATION 18+13



D-91-245-99

LOCATION OF SECTION INDICATED THUS:-

NOTE: WHEREVER IN THESE PLANS OR 42 IS MENTIONED IT SHALL MEAN FAU 2760.

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

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

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

GROSS LENGTH OF IMPROVEMENT = 2,604 LINEAL FEET = 0.500 MILES
NET LENGTH OF IMPROVEMENT = 2,604 LINEAL FEET = 0.500 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 21, 2005
Diane O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 13, 2005
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

May 13, 2005
Victor Modeer
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 60754

Rev

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	2
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60754

INDEX OF SHEETS

STATE STANDARDS:

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-04	CURB RAMPS ACCESSIBLE TO THE DISABLED
442201-01	CLASS C AND D PATCHES
482011-01	BIT. SHLD STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001-02	FRAME AND LIDS, TYPE 1
606001-02	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATION
701501-03	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-04	URBAN LANE CLOSURE MULTILANE, 1-W OR 2-W, WITH NON-TRAVERSABLE MEDIAN, SPEEDS < 45 MPH
701606-04	URBAN LANE CLOSURE MULTILANE 2-W WITH MOUNTABLE MEDIAN
701701-04	URBAN LANE CLOSURE MULTILANE INTERSECTION
702001-05	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
886001	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES:

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OR BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF PALATINE.
3. THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
4. ALL BITUMINOUS PAVEMENT PATCHING SHALL BE CLASS D.
5. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
6. THE RESIDENT ENGINEER SHALL CONTACT MR. WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
7. 3 METER (10 FEET) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNTI PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
8. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H)
9. THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATING PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FULFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF APPROVED MIX DESIGN, PLAN DIMENSIONS, AND DENSITY LIMITATIONS. MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

INDEX OF SHEETS STATE STANDARDS AND GENERAL NOTES

SCALE: VERT.
HORIZ.
DATE 4/5/2005

DRAWN BY
CHECKED BY

09:40:35 04/05/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	3
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

- - -

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		1000					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	30	30					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4	4					
40600300	AGGREGATE (PRIME COAT)	TON	19	19					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2	2					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	75	75					
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	385	385					
44000116	BITUMINOUS REMOVAL OVER PATCHES 4"	SQ YD	1718	1718					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2300	2300					
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	105	105					
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	282	282					
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	59	59					
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	1222	1222					
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	5276	5276					
48101200	AGGREGATE SHOULDERS, TYPE B	TON	370	370					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2					
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2					
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2					
60260100	INLETS TO BE ADJUSTED	EACH	2	2					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	10	10					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1					
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1					
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20					

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		1000			CONTRACT	NO. 60754	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	983	983					
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	210	210					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	6545	6545					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	300	300					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	140	140					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	62	62					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3038	3038					
*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	36.4	36.4					
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6545	6545					
*78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	300	300					
*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	140	140					
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	62	62					
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	100	100					
*88600600	DETECTOR LOOP REPLACEMENT	FOOT	246	246					
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	20	20					
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	781	781					
X4066770	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N70	TON	390	390					
X4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	9222	9222					

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHERMER ROAD

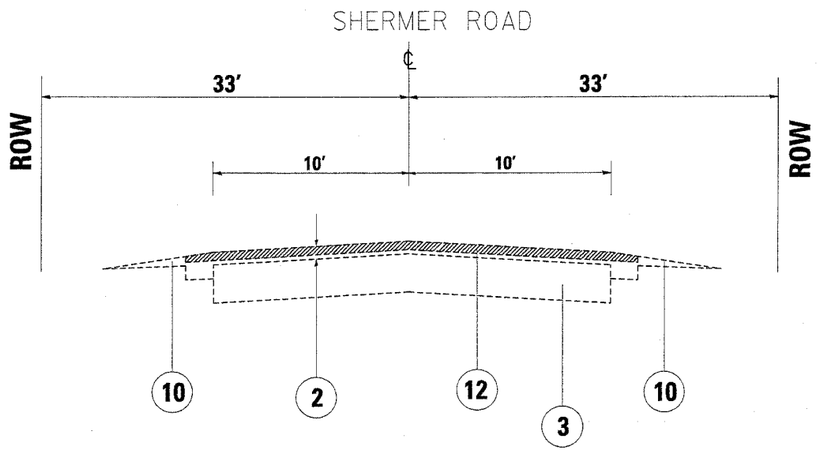
WILLOW RD. TO OLD WILLOW RD.

PLOT DATE: 4/5/2005

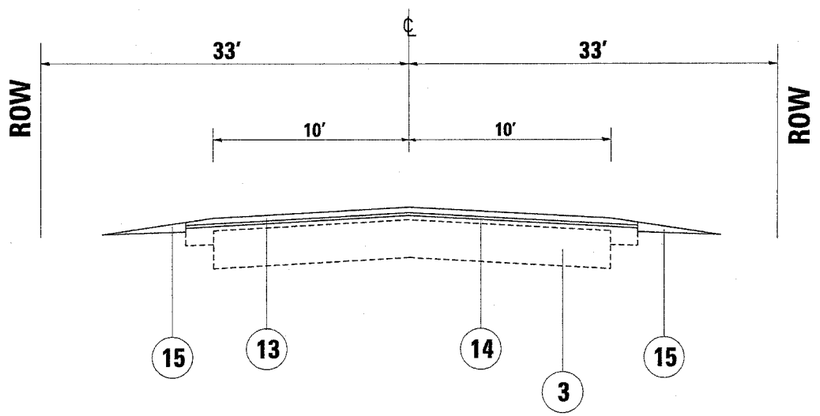
4/5/2005
09:43:45 04/05/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	4
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60754



EXISTING TYPICAL CROSS SECTION
STA. 18+13 TO 36+10



PROPOSED TYPICAL CROSS SECTION
STA. 18+13 TO 36+10

LEGEND

(1) EXISTING COMPACTED EARTH FILL

(2) EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"

(3) EXISTIING P.C.C. PAVEMENT, 9"

(4) EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"

(5) EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24

(6) EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12

(7) EXISTING TIE BARS @ 2'-6" CENTERS

(8) EXISTING CONCRETE MEDIAN SURFACE

(9) EXISTING CONCRETE MEDIAN

(10) EXISTING AGGREGATE SHOULDER

(11) EXISTING CONCRETE CURB, TYPE BA

(12) PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 2¼"

(13) PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N 70, 1½"

(14) PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50, ¾"

(15) PROP. AGGREGATE SHOULDERS, TYPE B

MIXTURE TYPE	AC/PG	RAP% MAX	AIR VOIDS (%)
POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, N50 ¾"	SBS/SBR PG 76-28	0	2.5% @ 50 GYR
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	10	4% @ 70 GYR
CLASS D PATCHES, 9" BINDER IL. 19MM	PG 64-22	15	4% @ 70 GYR
BITUMINOUS REPLACEMENT OVER PATCHES BINDER IL - 19MM	PG 64-22	15	4% @ 70 GYR

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 lbs/syyd/in.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/6/2005

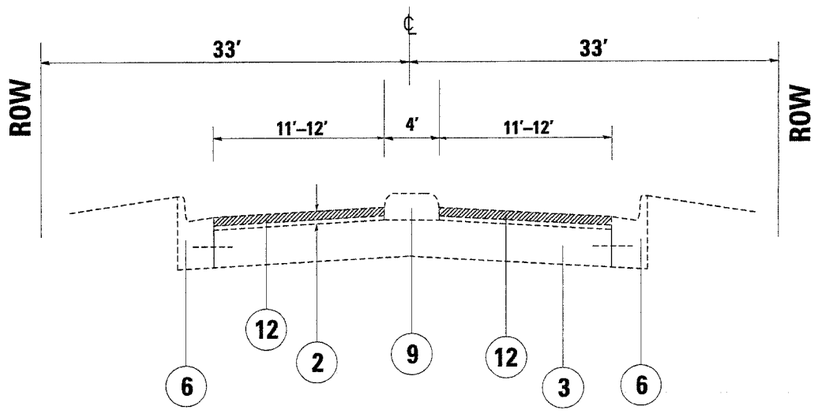
DRAWN BY
CHECKED BY

: 07:59:33 04/06/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	5
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

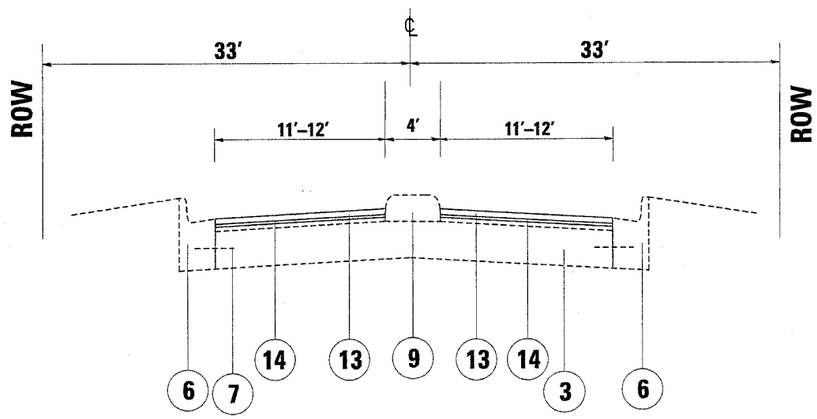
CONTRACT NO. 60754

SHERMER ROAD



EXISTING TYPICAL CROSS SECTION
STA. 36+10 TO 37+34

SHERMER ROAD



PROPOSED TYPICAL CROSS SECTION
STA. 36+10 TO 37+34

LEGEND

(1) EXISTING COMPACTED EARTH FILL

(2) EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"

(3) EXISTIING P.C.C. PAVEMENT, 9"

(4) EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"

(5) EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24

(6) EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12

(7) EXISTING TIE BARS @ 2'-6" CENTERS

(8) EXISTING CONCRETE MEDIAN SURFACE

(9) EXISTING CONCRETE MEDIAN

(10) EXISTING AGGREGATE SHOULDER

(11) EXISTING CONCRETE CURB, TYPE BA

(12) PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 2¼"

(13) PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE. MIX "D", N 70. 1½"

(14) PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50, ¾"

(15) PROP. AGGREGATE SHOULDERS, TYPE B

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED TYPICAL SECTIONS

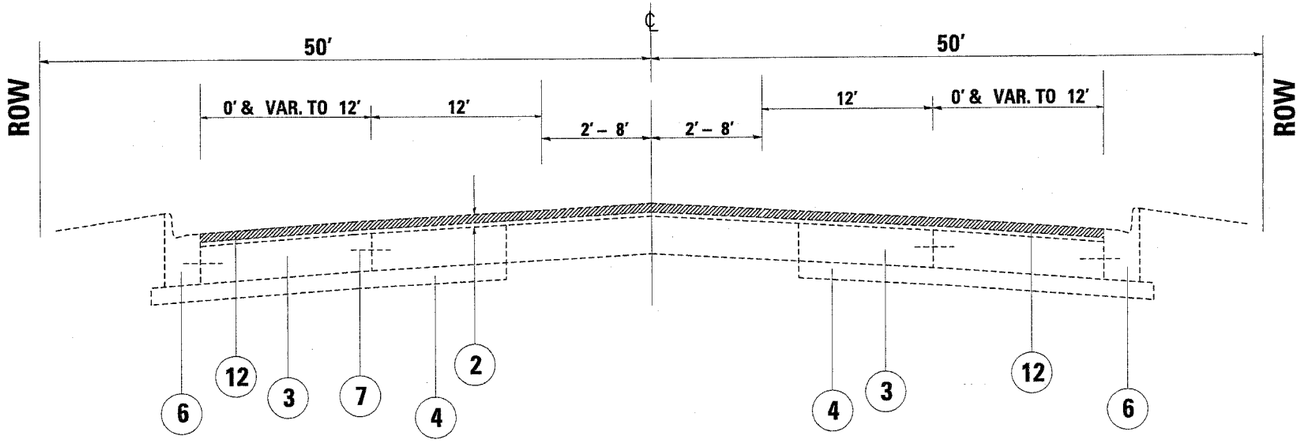
SCALE: VERT.
HORIZ.
DATE 4/6/2005

DRAWN BY
CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	6
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

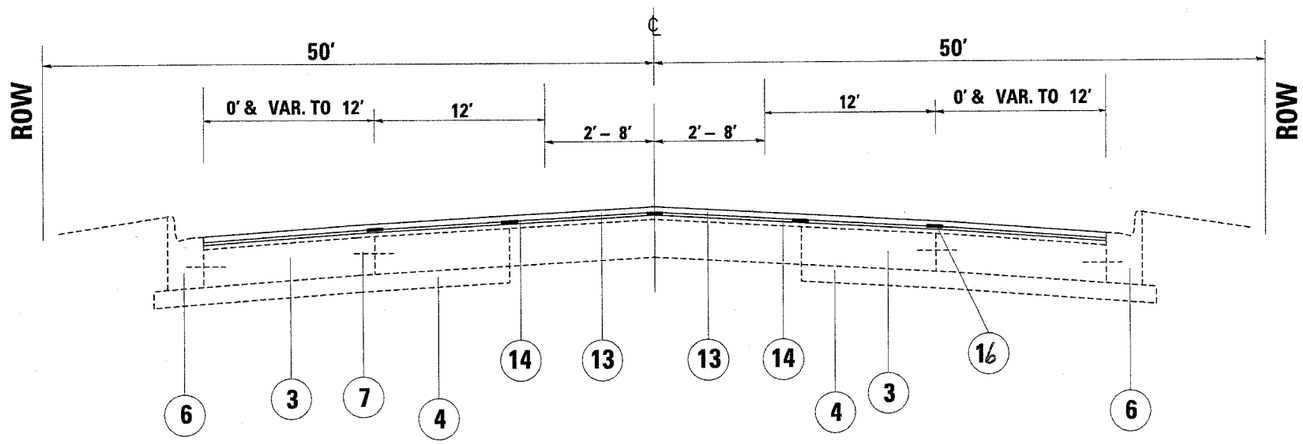
CONTRACT NO. 60754

SHERMER ROAD



EXISTING TYPICAL CROSS SECTION
STA. 37+34 TO 38+23

SHERMER ROAD



PROPOSED TYPICAL CROSS SECTION
STA. 37+34 TO 38+23

LEGEND

1. EXISTING COMPACTED EARTH FILL
2. EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
3. EXISTIING P.C.C. PAVEMENT, 9"
4. EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
5. EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
6. EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
7. EXISTING TIE BARS @ 2'-6" CENTERS
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10. EXISTING AGGREGATE SHOULDER
11. EXISTING CONCRETE CURB, TYPE BA
12. PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 2¼"
13. PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE. MIX "D", N 70, 1½"
14. PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50, ¾"
15. PROP. AGGREGATE SHOULDERS, TYPE B
16. PROP. STRIP REFLECTIVE CRACK CONTROL TREATMENT

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/6/2005

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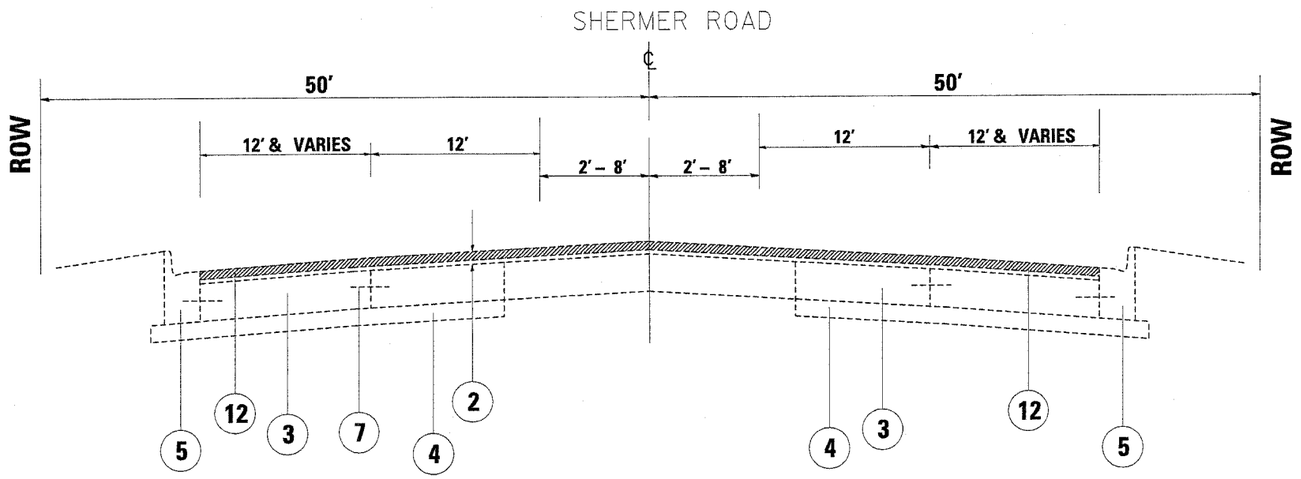
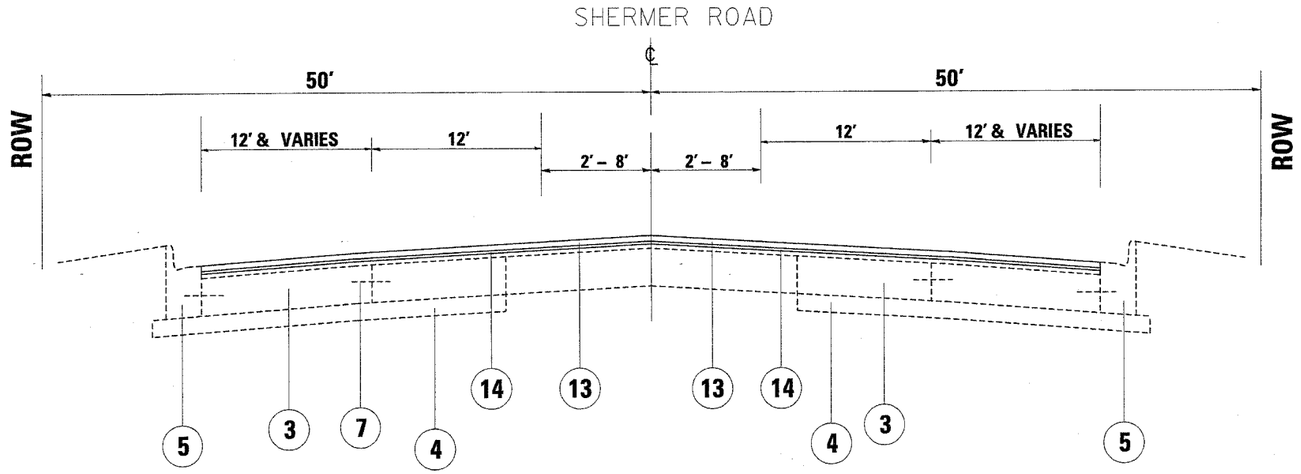
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	7
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60754



EXISTING TYPICAL CROSS SECTION
STA. 38+23 TO 43+72



PROPOSED TYPICAL CROSS SECTION
STA. 38+23 TO 43+72

LEGEND

(1)	EXISTING COMPACTED EARTH FILL
(2)	EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
(3)	EXISTIING P.C.C. PAVEMENT, 9"
(4)	EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
(5)	EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
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(14)	PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50, ¾"
(15)	PROP. AGGREGATE SHOULDERS, TYPE B

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: VERT. HORIZ.
DATE 4/6/2005
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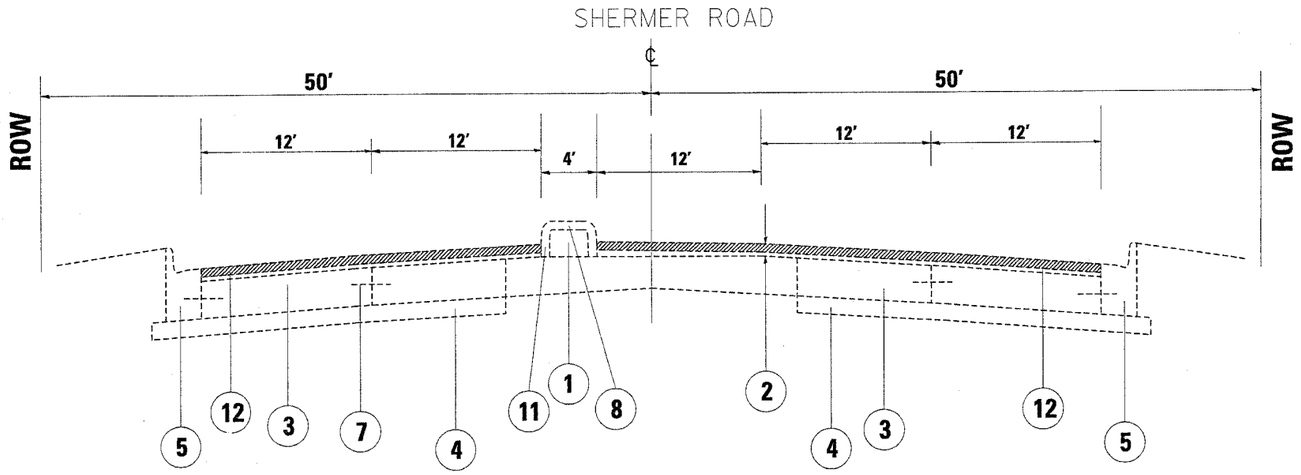
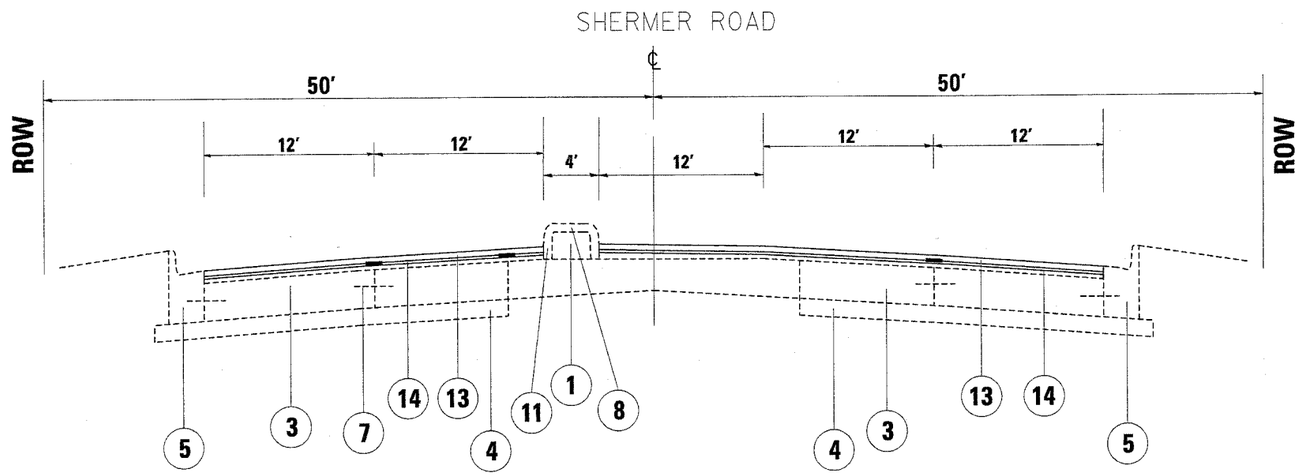
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	8
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60754



EXISTING TYPICAL CROSS SECTION
STA. 43+72 TO 44+17



PROPOSED TYPICAL CROSS SECTION
STA. 43+72 TO 44+17

LEGEND

(1)	EXISTING COMPACTED EARTH FILL
(2)	EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
(3)	EXISTIING P.C.C. PAVEMENT, 9"
(4)	EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
(5)	EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
(6)	EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
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(15)	PROP. AGGREGATE SHOULDERS, TYPE B

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/6/2005

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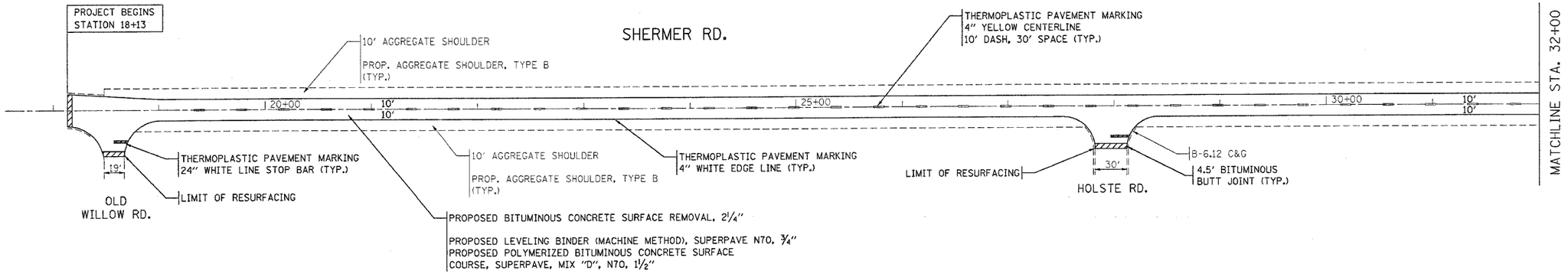
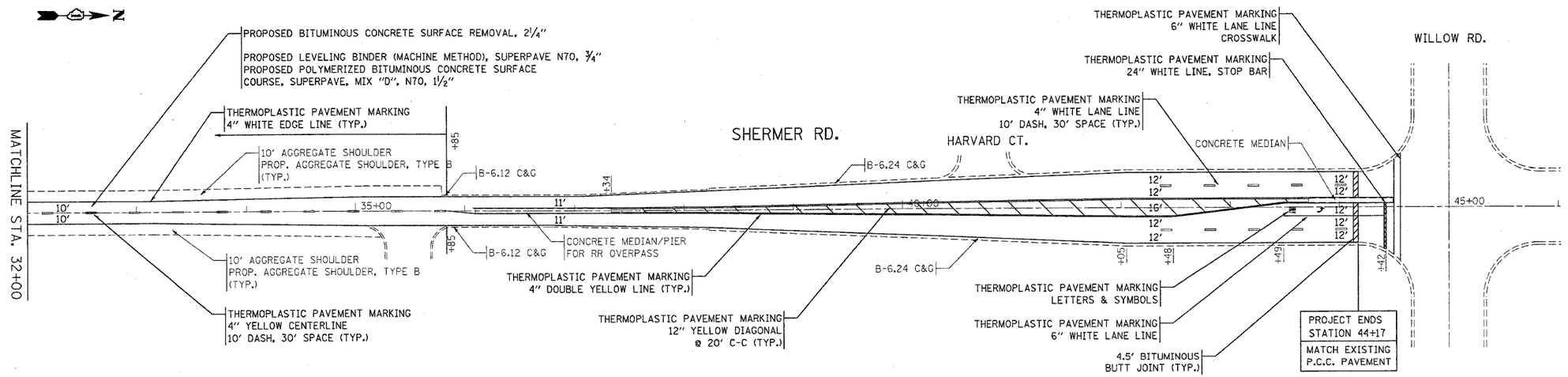
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	9
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60754





REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

ROADWAY PLAN

SCALE: VERT. 1" = 50'
HORIZ.

DRAWN BY

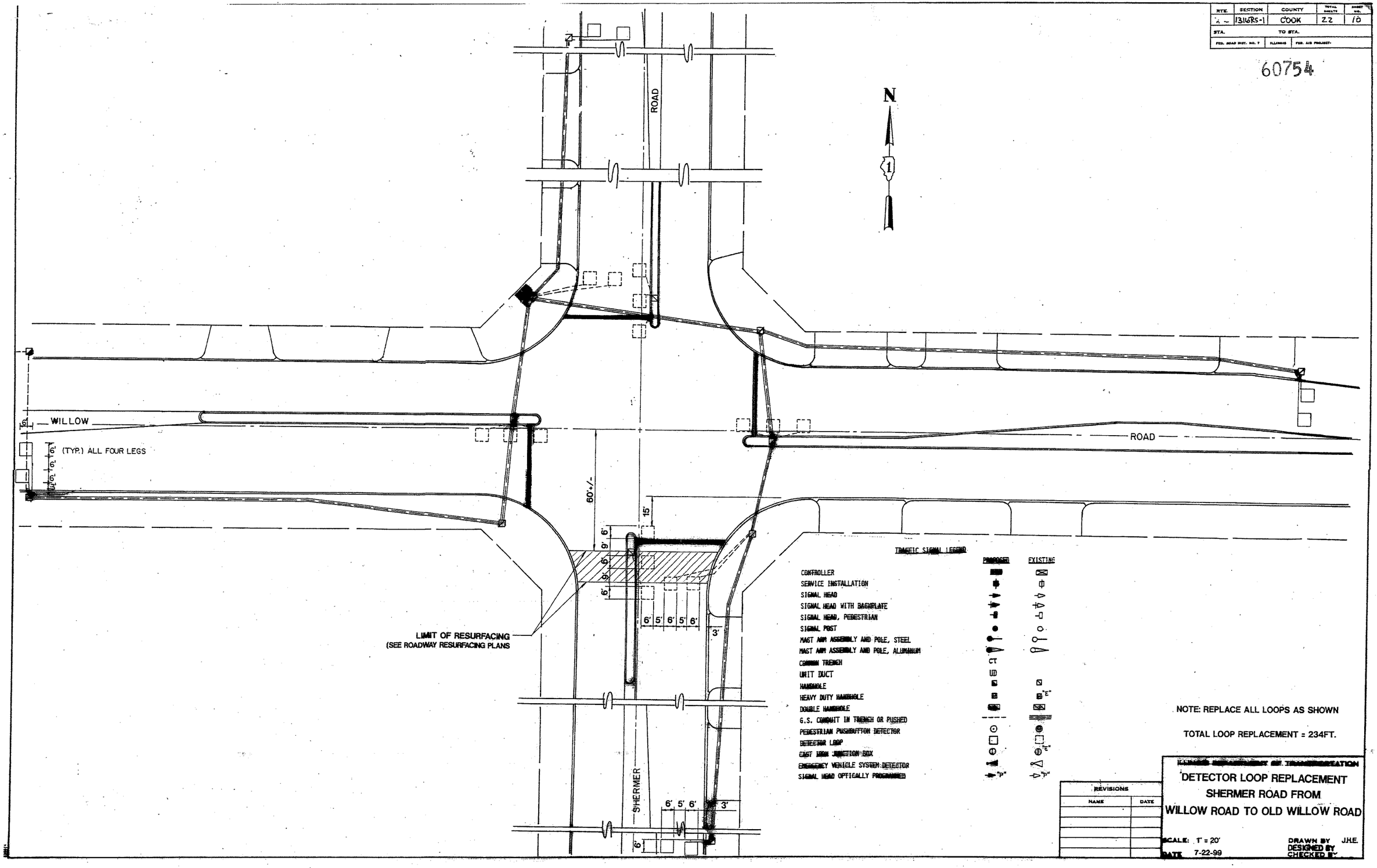
DATE 4/6/2005

CHECKED BY

: 07:55:01 04/06/2005

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	13116RS-1	COOK	22	10
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

60754



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	■	⊠
SERVICE INSTALLATION	●	⊕
SIGNAL HEAD	●	⊕
SIGNAL HEAD WITH BACKPLATE	●	⊕
SIGNAL HEAD, PEDESTRIAN	●	⊕
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●	○
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●	○
COMMON TRENCH	CT	
UNIT DUCT	UD	
HANDHOLE	■	⊠
HEAVY DUTY HANDHOLE	■	⊠ "E"
DOUBLE HANDHOLE	■	⊠
G.S. CONDUIT IN TRENCH OR PUSHED	----	═══
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	□ "E"
CAST IRON JUNCTION BOX	⊕	⊕ "E"
EMERGENCY VEHICLE SYSTEM DETECTOR	◢	△
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	⊕ "P"

NOTE: REPLACE ALL LOOPS AS SHOWN

TOTAL LOOP REPLACEMENT = 234FT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT SHERMER ROAD FROM WILLOW ROAD TO OLD WILLOW ROAD

SCALE: 1" = 20'

DATE 7-22-99

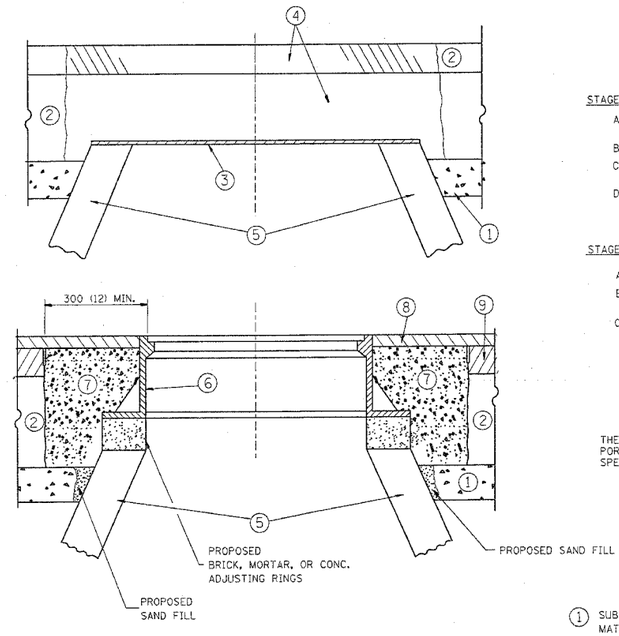
DRAWN BY J.H.E.

DESIGNED BY

CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	13LRS-1	COOK	22	11
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

60754



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 300 (12) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.

C) COVER THE STRUCTURE OPENING WITH A 900 (36) DIAMETER METAL PLATE.

D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 40 (1½) THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE BITUMINOUS MATERIAL 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 BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL 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

(2) EXISTING PAVEMENT

(3) 900 (36) DIAMETER METAL PLATE

(4) PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL

(5) EXISTING STRUCTURE

(6) FRAME AND LID (SEE NOTES)

(7) CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL

(8) PROPOSED BITUMINOUS CONCRETE SURFACE COURSE

(9) PROPOSED BITUMINOUS CONCRETE BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT: FRAMES AND LIDS TO BE ADJUSTED, SPECIAL EACH

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE

DRAWN BY

DATE: 3/18/2005

CHECKED BY

BD600-03 (BD-8)

REVISION DATE:05/17/04

3/18/2005
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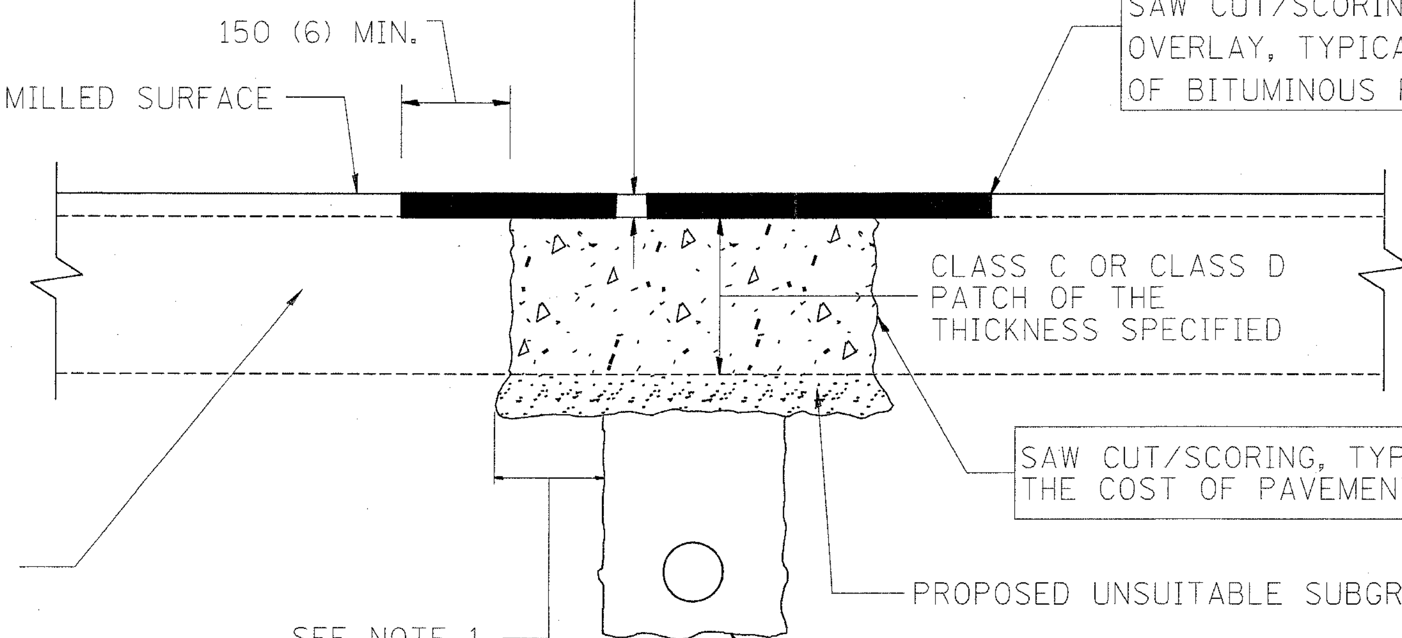
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60754



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.

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

REVISIONS NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	03/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

SCALE: VERT. HORIZ.
DATE 3/18/2005

DRAWN BY
CHECKED BY
BD400-04 (BD-22)
REVISION DATE: 04/27/98

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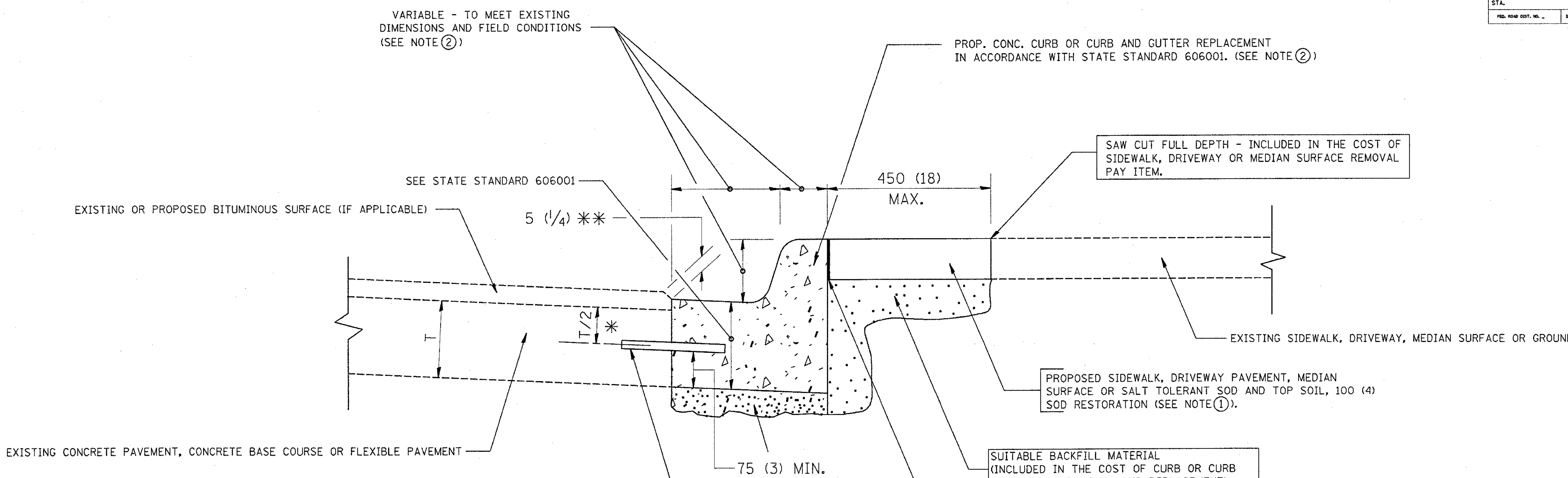
3/18/2005
VI-BD22
banksl

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
	1316RS-1	COOK	22	13
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

60754



✻ 75 (3) 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 TOLERANT SOD AND TOP SOIL, 100 (4) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ 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.

⑤ THE COST OF BITUMINOUS SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ 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.

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

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

PROPOSED NO. 20 (NO. 6) EPOXY COATED TIE BARS 600 (24) LONG AT 600 (24) 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 METER (FOOT) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS NAME	DATE
M. DE YONG	05/28/91
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: NONE
DATE 3/18/2005
DRAWN BY
CHECKED BY

BD600-06 (BD-24)

REVISION DATE: 12/06/88

3/18/2005
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VI-BD24
banksl

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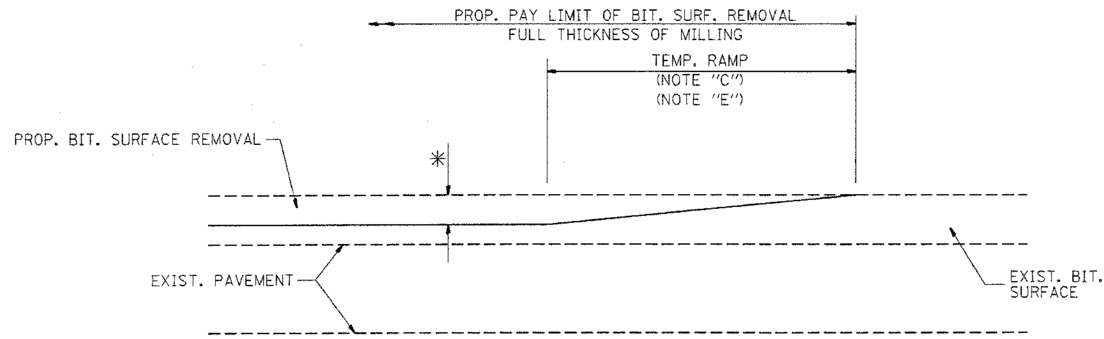
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	14

STA. TO STA.

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

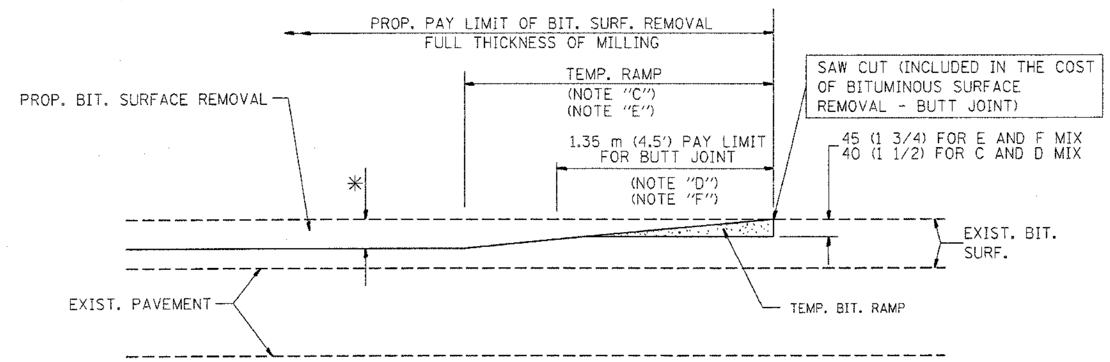
60754



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

OPTION 1

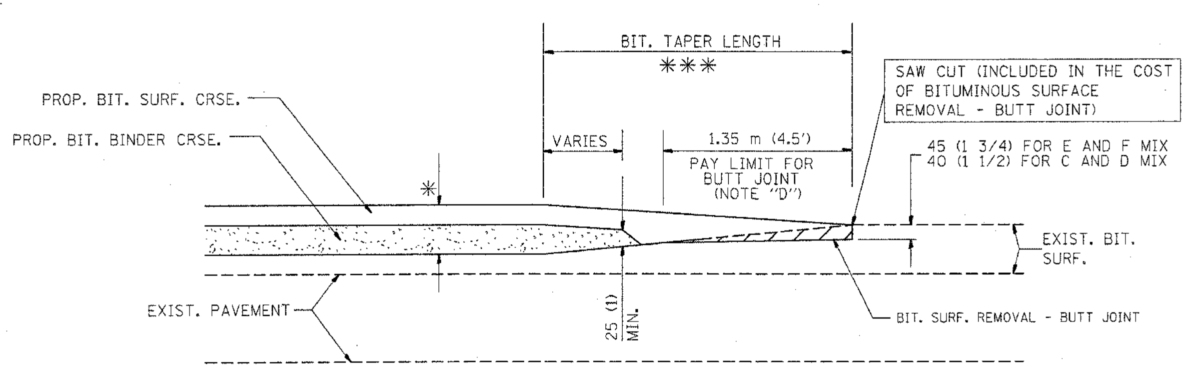


BITUMINOUS CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

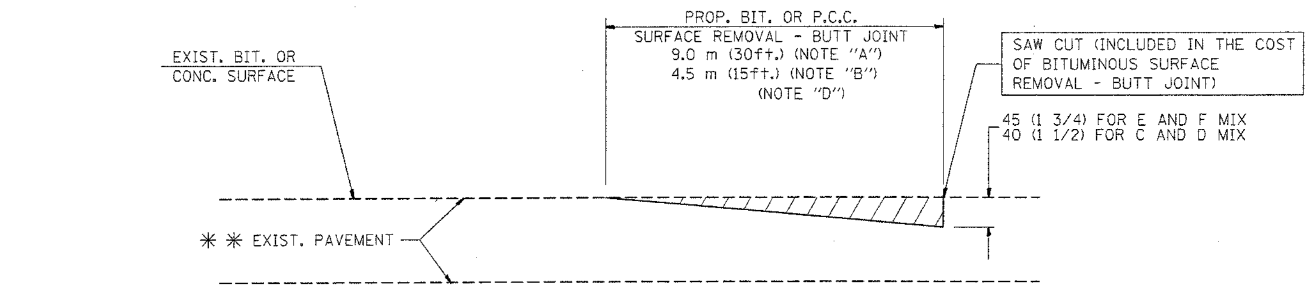
OPTION 2

TYPICAL TEMPORARY RAMP

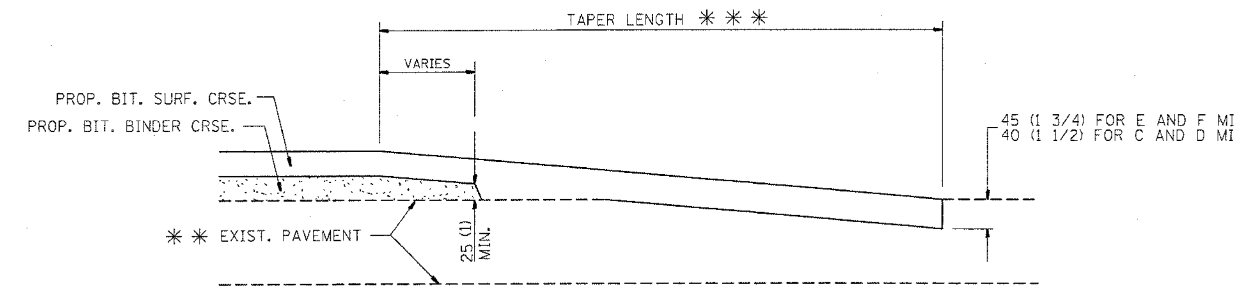


BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

** PC CONCRETE, BITUMINOUS OR BITUMINOUS 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 BITUMINOUS SURFACE.

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

E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".

G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE

DATE PLOTTED: 3/18/2005

DRAWN BY

CHECKED BY

BD400-05 (VI-BD32)

REVISION DATE: 04/06/01

3/18/2005
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VI-BD32
banksl

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F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
	1316RS-1	Cook	22	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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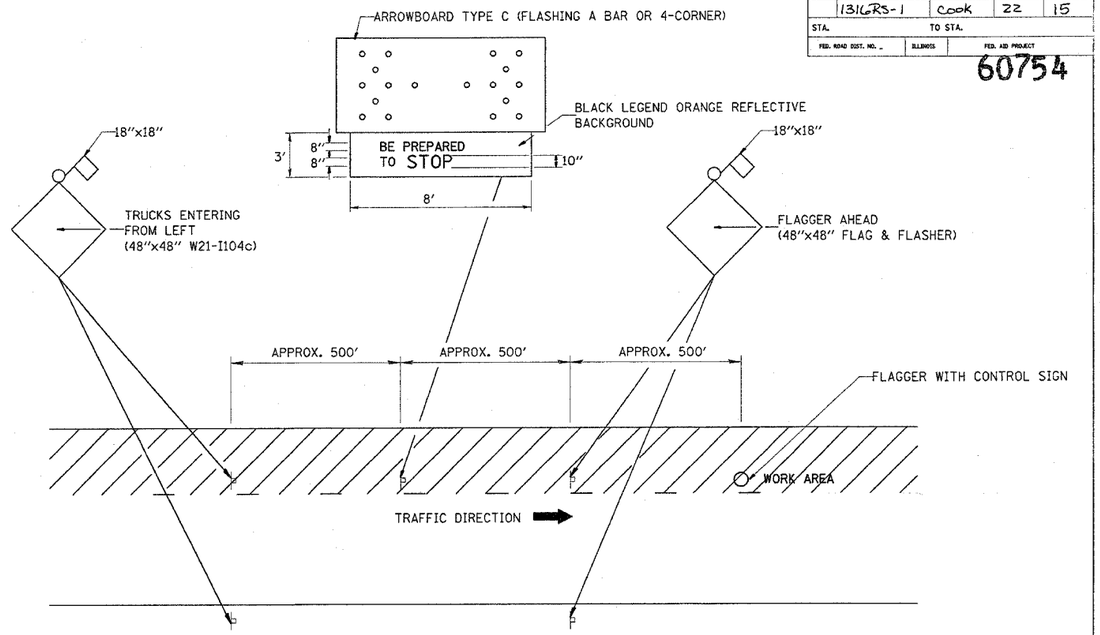

METHOD OF FLAGGING

NOTE:

1. SIGNS SHALL BE MOUNTED AT A MINIMUM CLEARANCE HEIGHT OF 5 FEET
2. ALL SIGNS SHALL BE REMOVED WHEN THE FLAGGING OPERATION CEASES.
3. THIS CASE ALSO APPLIES WHEN THE WORK ZONE IS ON THE RIGHT. UNDER THESE CONDITIONS "TRUCKS ENTERING FROM RIGHT" SIGNS SHALL BE SUBSTITUTED FOR "TRUCKS ENTERING FROM LEFT" SIGNS. ALSO THE ARROWBOARD AND "BE PREPARED TO STOP" SIGNS SHALL BE RELOCATED TO THE RIGHT SIDE OF THE ROAD.
4. WORK ZONE ACCESS POINTS SHOULD BE A MINIMUM OF ONE HALF MILE APART. MEDIAN WORK ZONE ACCESS POINTS SHOULD NOT BE LOCATED OPPOSITE OF EACH OTHER.
5. NIGHTTIME FLAGGING OPERATIONS: THE FLAG STATION SHALL BE LIGHTED WITH ADDITIONAL LIGHTS OTHER THAN STREET LIGHTS. THE FLAGGER CONTROL SIGN AND THE FLAGGER'S VEST SHALL BE REFLECTORIZED. IN ADDITION, THE FLAGGER SHALL HAVE A FLASHLIGHT OR LIGHTED WAND.

REVISIONS	
NAME	DATE
RAY RITCHIE	5/10/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

METHOD OF FLAGGING

SCALE: NOT TO SCALE
DATE 3/21/2005
DRAWN BY C.A.D.
CHECKED BY
BM-14
REVISION DATE: 05/10/00

3/21/2005
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VI-BM14
leec

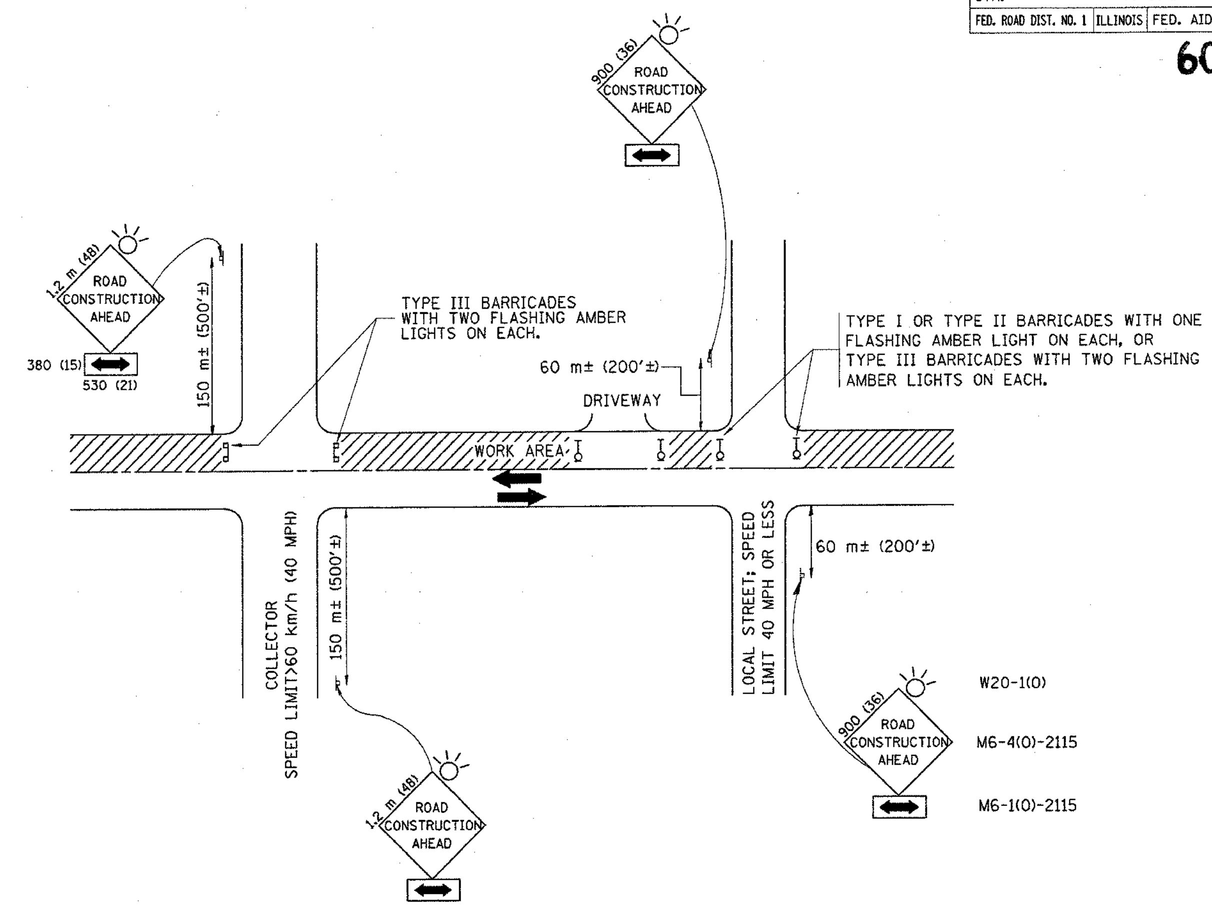
8:42:40 03/21/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	16

STA. TO STA.

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

60754



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 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') 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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.

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

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

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

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

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

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: VERT. HORIZ.

DRAWN BY

CHECKED BY

DATE 3/18/2005

TC-10

REVISION DATE: 01/06/00

3/18/2005
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banksl

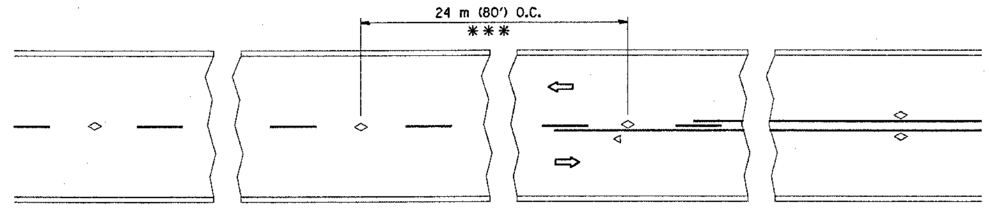
09:41:19 03/18/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	17

STA. TO STA.

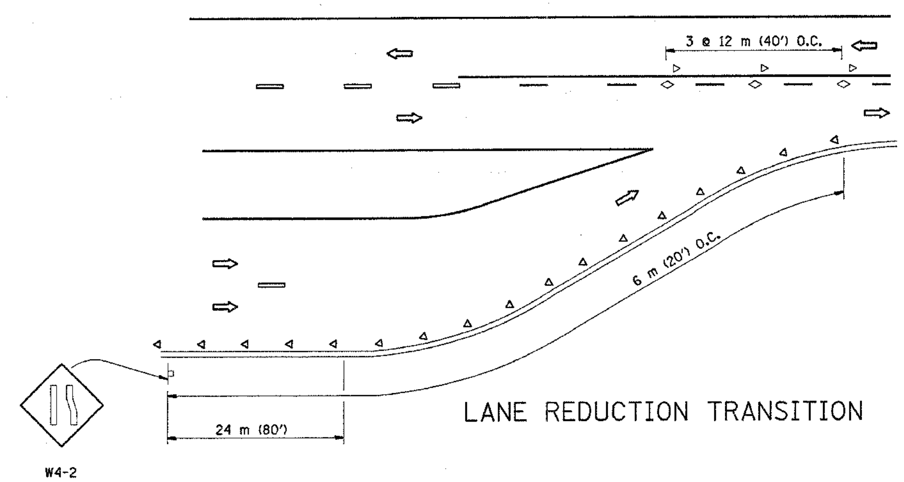
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

60754

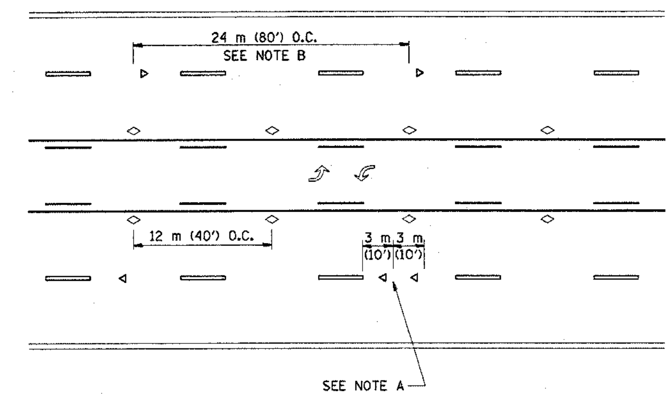


*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

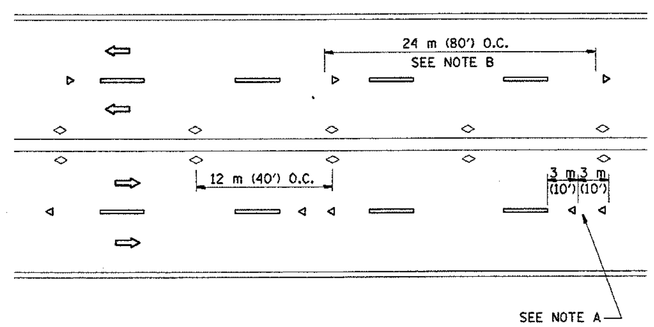
TWO-LANE/TWO-WAY



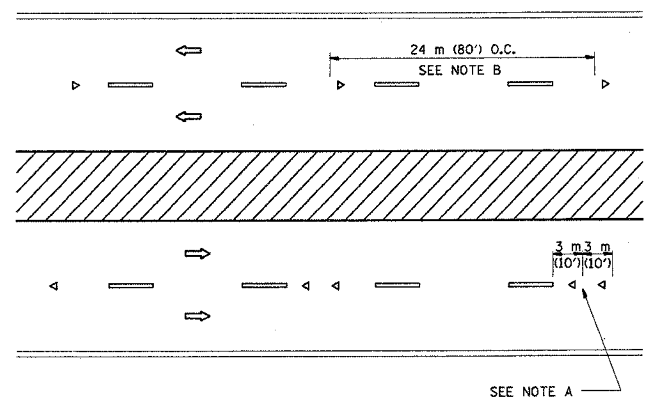
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

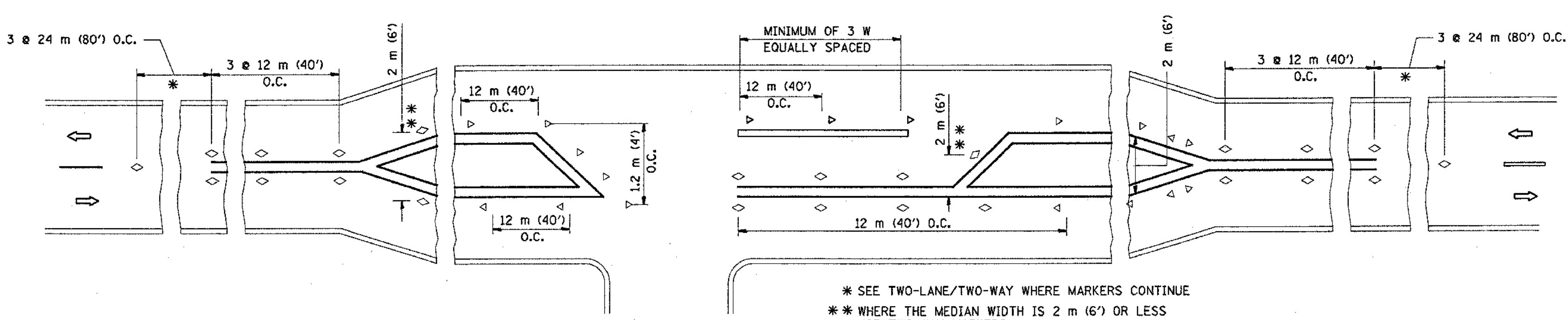
YELLOW STRIPE

WHITE STRIPE

ONE-WAY AMBER MARKER

ONE-WAY CRYSTAL MARKER (W/O)

TWO-WAY AMBER MARKER



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 2 m (6') OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

DATE: 3/18/2005

DRAWN BY CADD

CHECKED BY

TC-11

REVISION DATE: 01/06/00

3/18/2005
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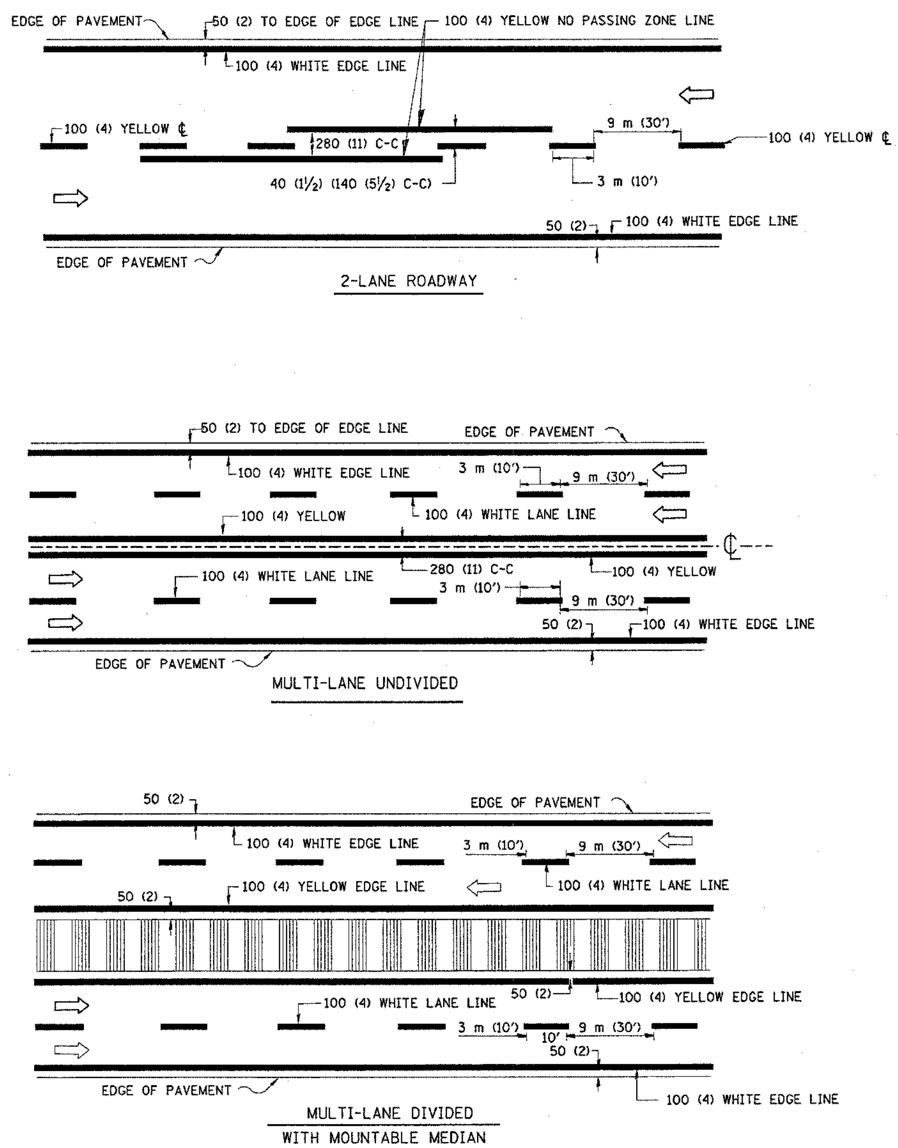
VI-TC11
banksl

08:41:22 03/18/2005

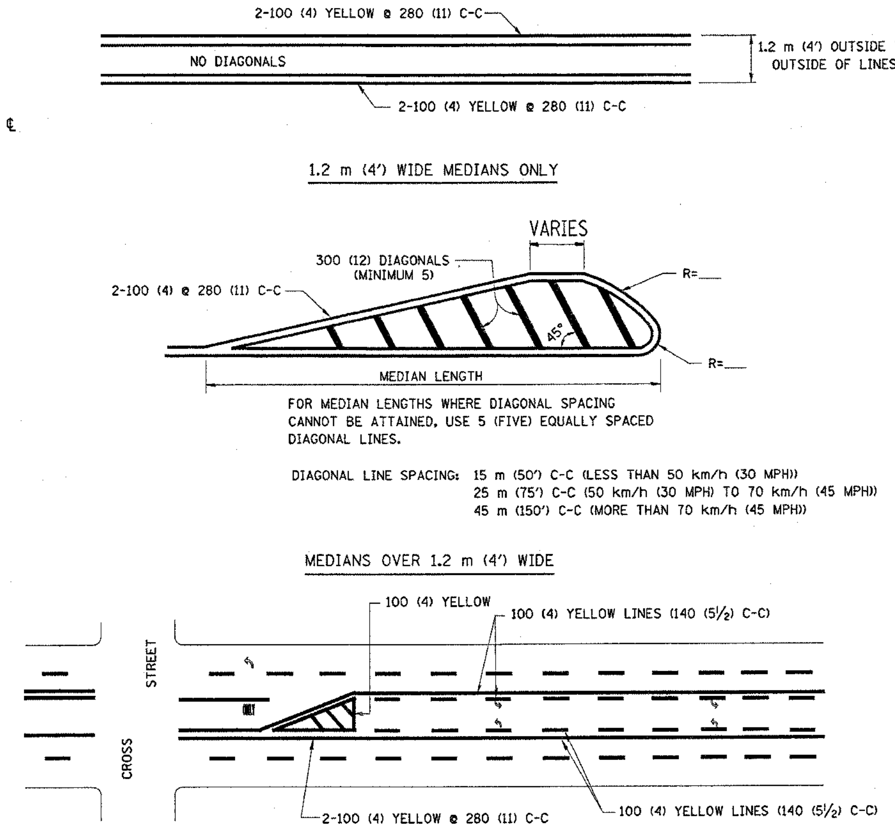
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	18
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60754

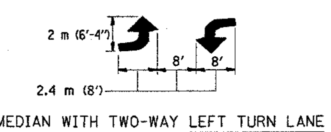


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

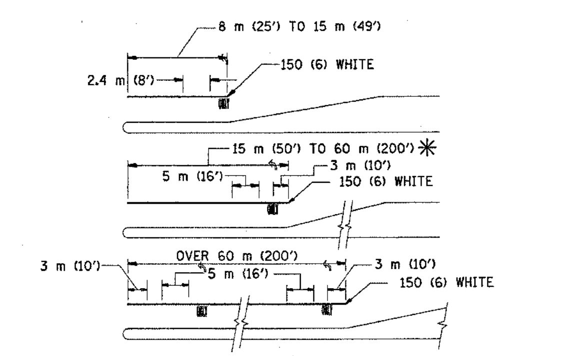
TYPICAL LANE AND EDGE LINE MARKING



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



TYPICAL PAINTED MEDIAN MARKING

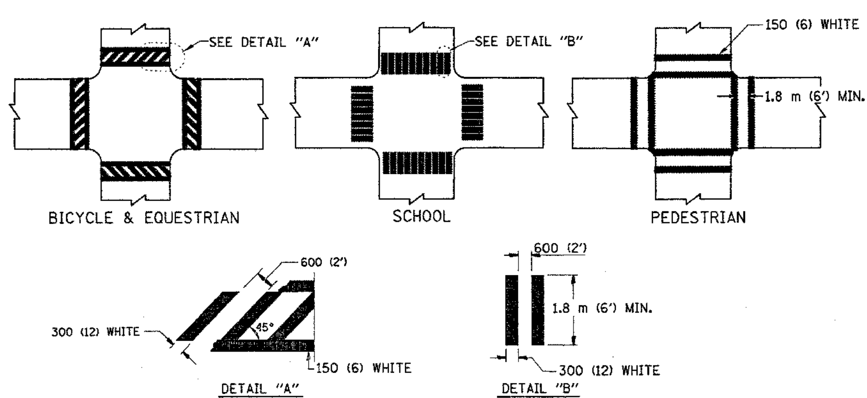


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
↰ AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)

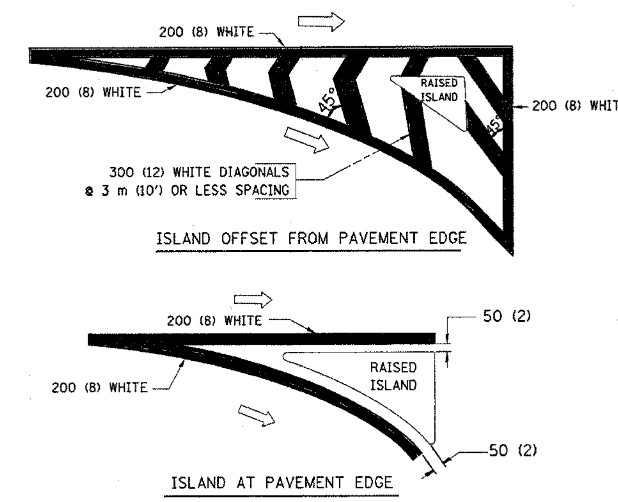
✱ TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL CROSSWALK MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5½) C-C FROM SKIP-DASH CENTERLINE 280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5½) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m² (3.6 SQ. FT.) EACH "X"=5.0 m² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

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

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

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

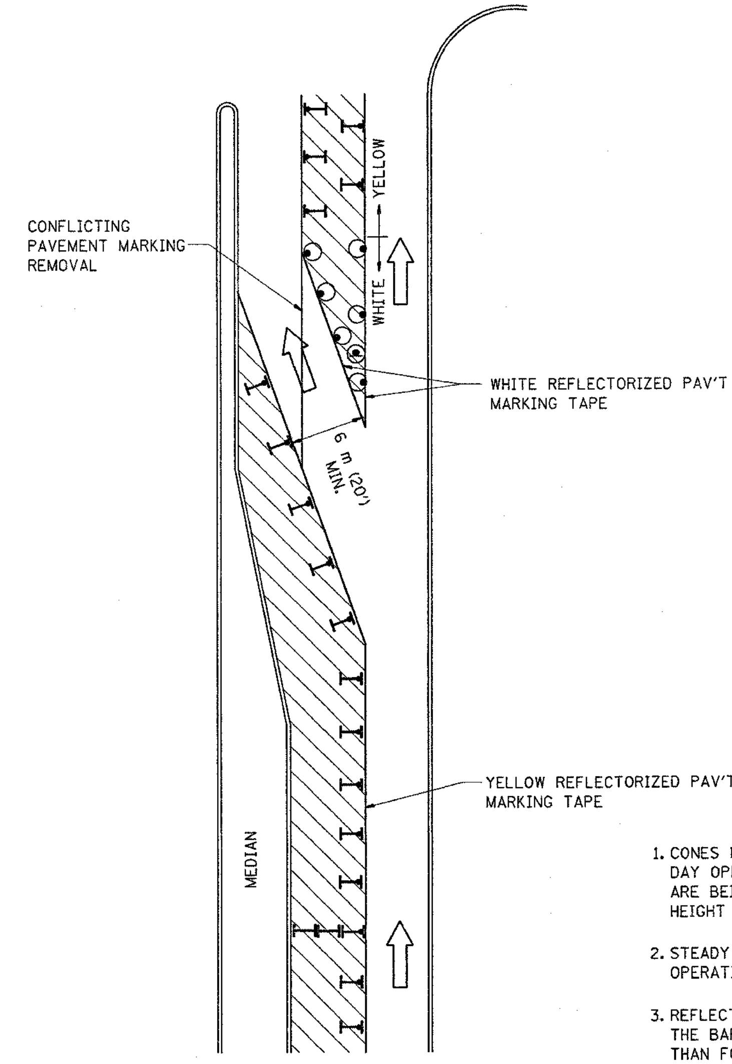
SCALE: NONE
DATE 3/18/2005
DRAWN BY CADD
CHECKED BY
TC-13
REVISION DATE: 01/06/00

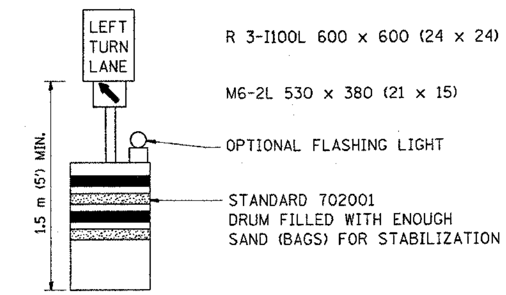
F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
	1316RS-1	COOK	22	19

STA.	TO STA.

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

60754





GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

WORK AREA

LANE OPEN TO TRAFFIC

TYPE I OR II BARRICADE WITH STEADY BURN LIGHT

DRUM WITH STEADY BURN LIGHT

DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL

TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE
DRAWN BY
DATE: 3/18/2005
CHECKED BY LHA

TC-14

REVISION DATE: 01/06/00

3/18/2005
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banksl

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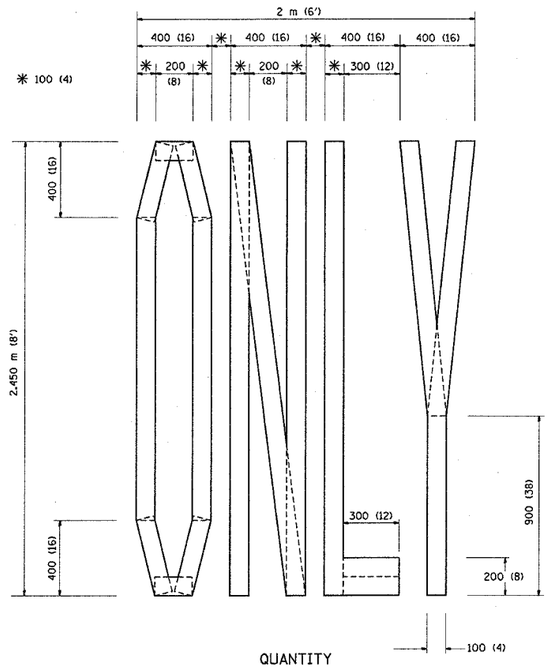
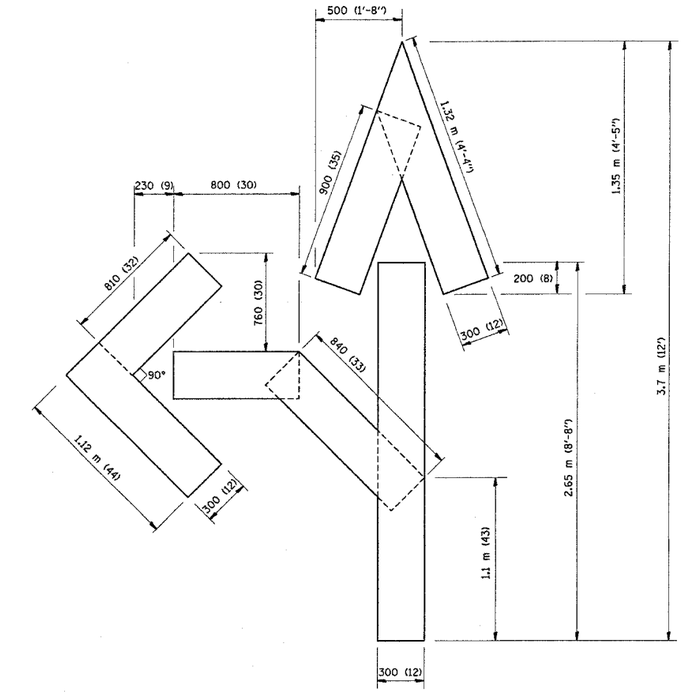
F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
	1316RS-1	COOK	22	20
STA.	TO STA.			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

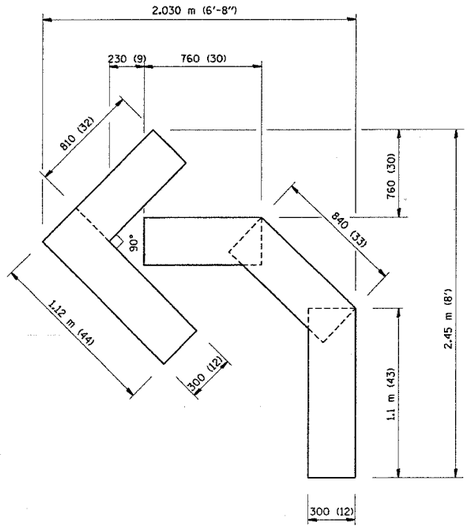
60754



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



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



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

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE
DATE 3/18/2005
DRAWN BY CADD
CHECKED BY TC-16

REVISION DATE: 08/28/00

3/18/2005
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banks1

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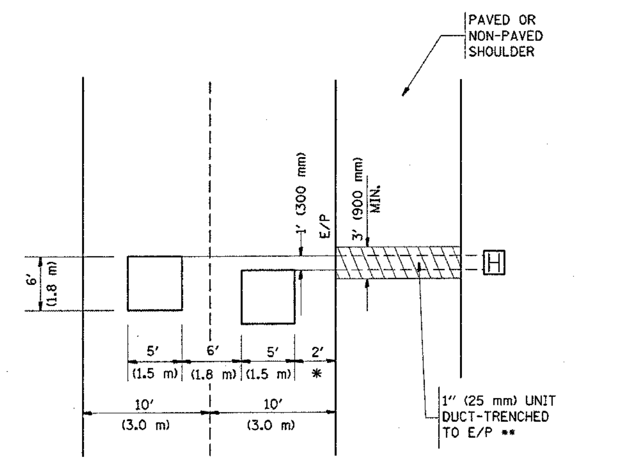
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	21
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

60754

LOOPS NEXT TO SHOULDERS

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

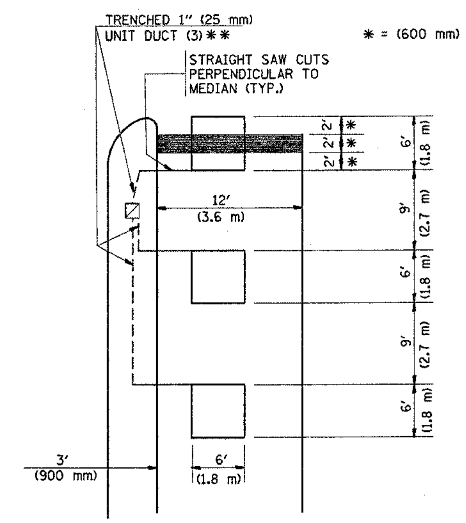


* = (600 mm)

** 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)

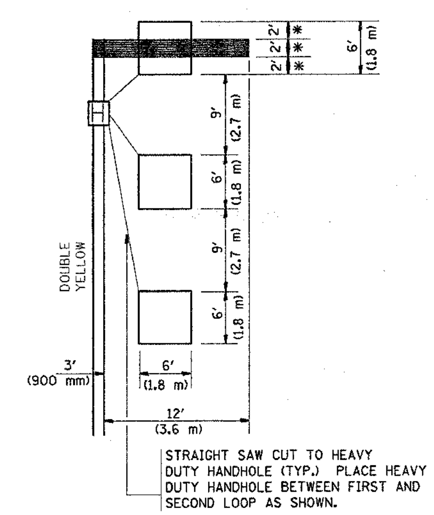
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

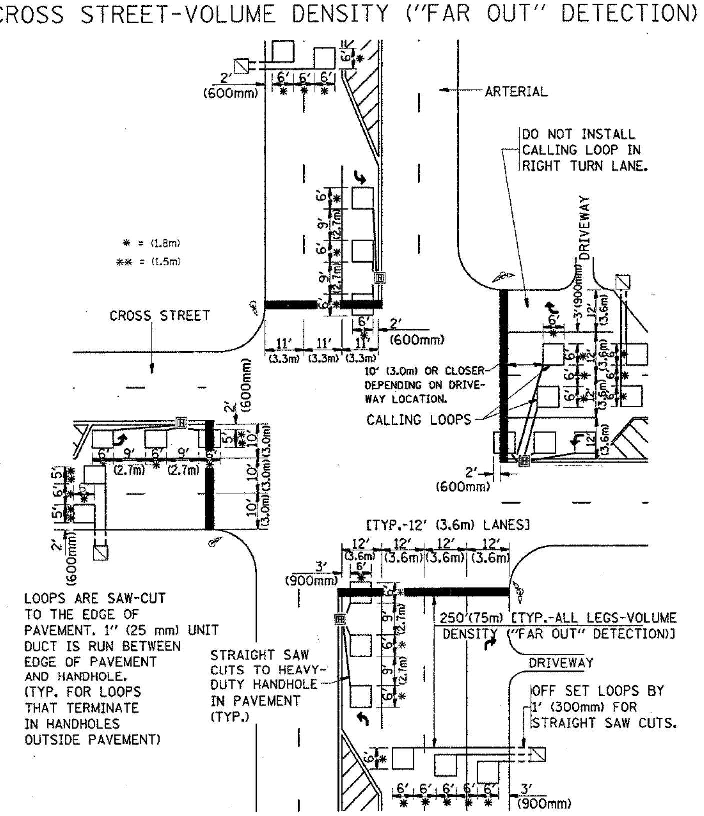
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



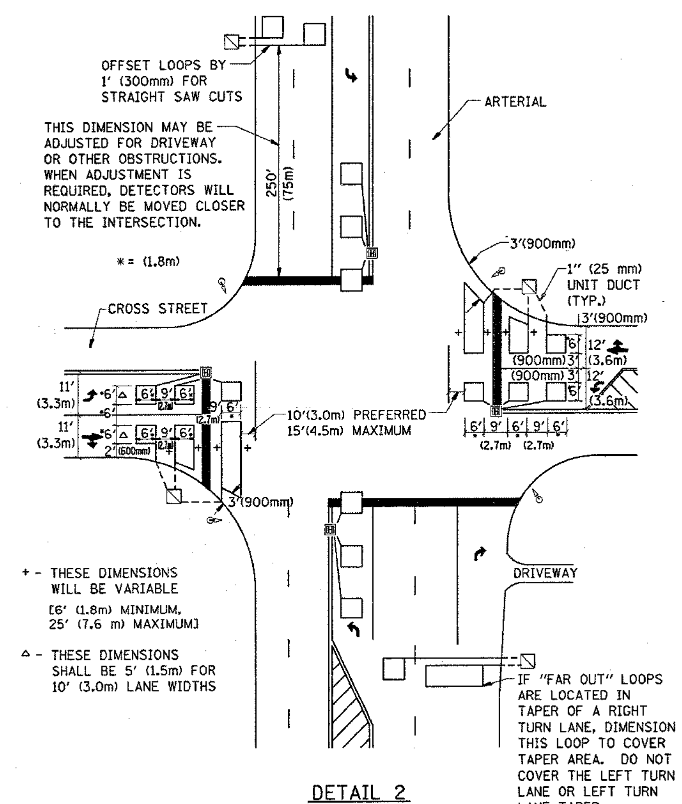
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

SCALE: NONE
DATE 3/18/2005
DRAWN BY CADD
DESIGNED BY
CHECKED BY R.K.F.
TS07
REVISION DATE:

3/18/2005
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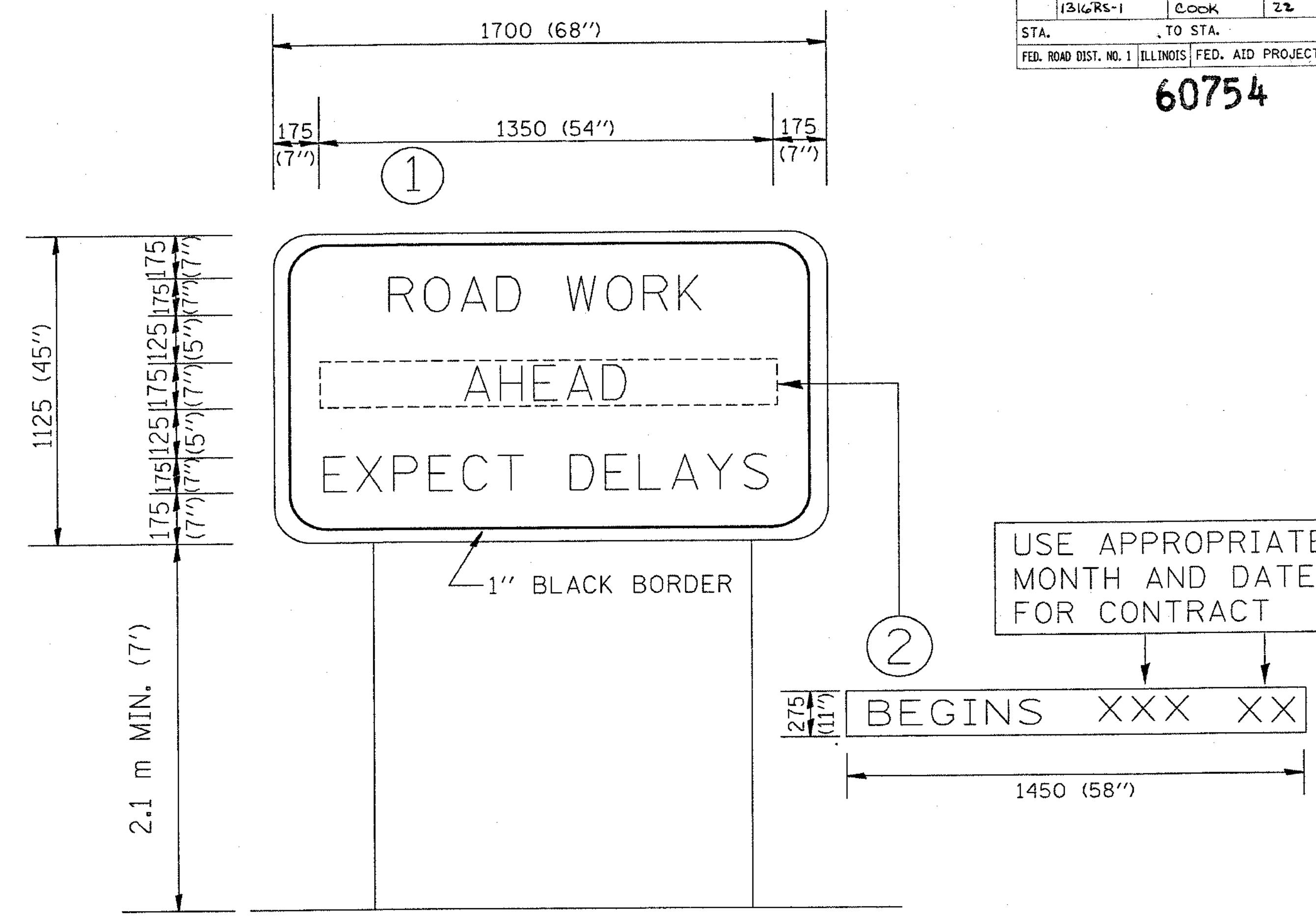
VI-TS07
banksl

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1316RS-1	COOK	22	22

STA. TO STA.

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

60754



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 2.3 SQ. M. (25.70 SQ. FT.)

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

REVISIONS NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY INFORMATION SIGNING

SCALE:

DRAWN BY: BUR. OF DESIGN

DATE 3/18/2005

CHECKED BY

TC22

REVISION DATE: 02/02/99

3/18/2005
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bankal

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