

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096 RS	WILL	29	1

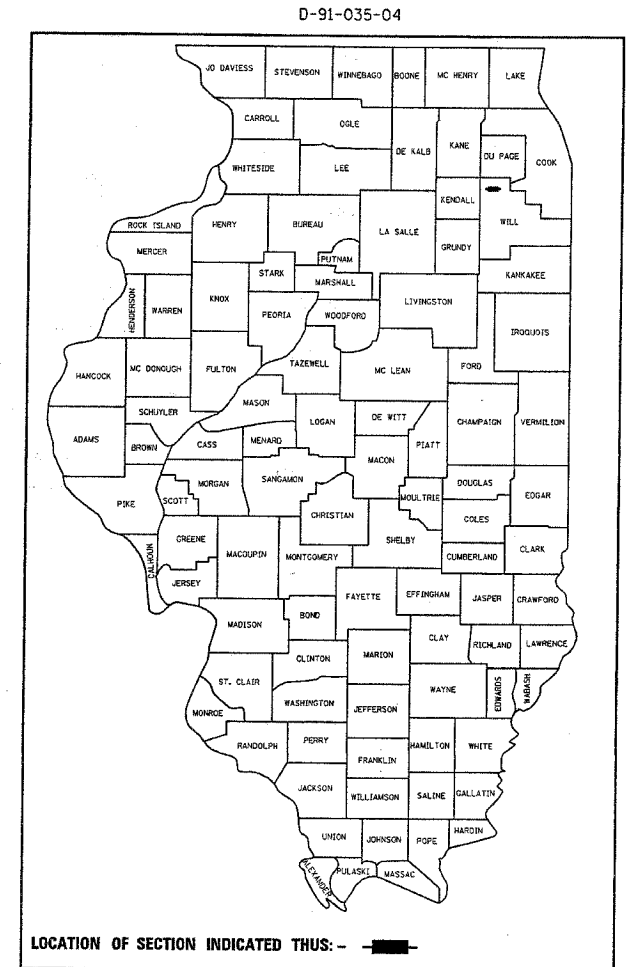
CONTRACT# 62672

FOR INDEX OF SHEETS, SEE SHEET NO. 2

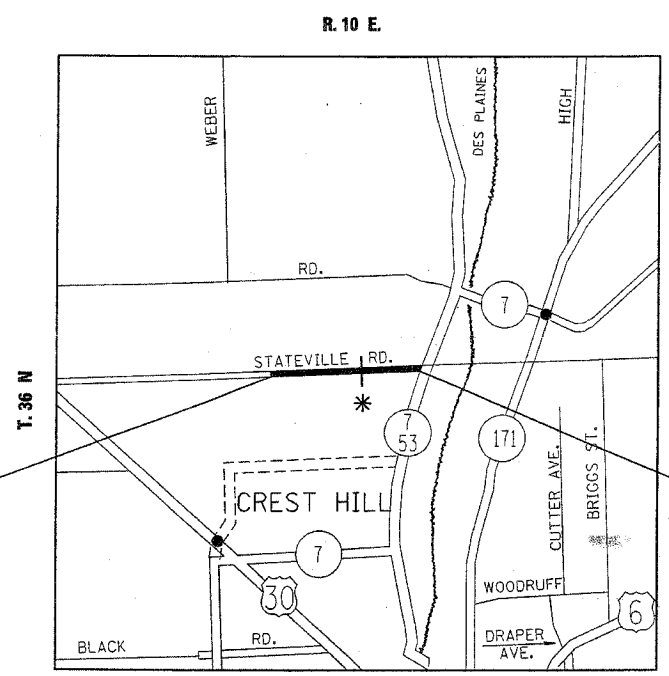
THE IMPROVEMENT IS LOCATED
 IN THE CITY OF CREST HILL

PLANS FOR PROPOSED HIGHWAY

FAU ROUTE 0291 (DIVISION STREET/STATEVILLE ROAD)
 STATEVILLE ENTRANCE TO IL. 53
 SECTION: 2003-096 RS
 RESURFACING (MAINTENANCE)
 WILL COUNTY
 C-91-035-04



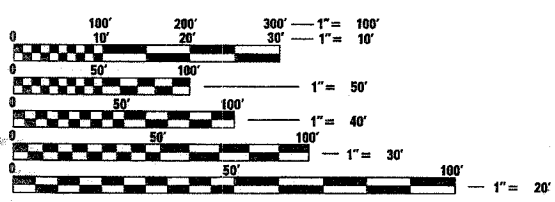
*
 STATION EQUATION
 STA. 0+00 BACK =
 STA. 0+00 AHEAD



TRAFFIC DATA:
 ADT 2000 = 5,100
 SPEED LIMIT = 50 MPH

IMPROVEMENT BEGINS
 STA. 51+84

IMPROVEMENT ENDS
 STA. 26+78



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

LOCKPORT TOWNSHIP
 GROSS LENGTH OF IMPROVEMENT = 7862 FT. = 1.490 MILES
 NET LENGTH OF IMPROVEMENT = 7862 FT. = 1.490 MILES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED April 29, 2005
Dina O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 1, 2005
Mike Hine
 ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 2005
Victoria Moders
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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 OF THE STATE OF ILLINOIS

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: KEN ENG / JENPAI CHANG (847)705-4432

CONTRACT NO. 62672

F. A. N. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT #62672

INDEX OF SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>	<u>STANDARDS</u>
1	COVER SHEET	
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	000001 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
3	SUMMARY OF QUANTITIES	442201 CLASS C AND D PATCHES
4	TYPICAL SECTIONS	542001 REINFORCED CONCRETE END SECTIONS WITH PARALLEL WING WALLS FOR PIPE CULVERTS 12" THRU 48" DIA. AT RIGHT ANGLES WITH ROADWAY
5-7	RESURFACING AND PAVEMENT MARKING PLANS	701011 OFF-ROAD MOVING OPERATIONS 2L, 2W DAY ONLY FOR SPEED > 45MPH
8-14	DRAINAGE PLANS (CULVERT REPLACEMENT & DITCHES)	701301 LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS, DAY ONLY, SPEEDS > 45 MPH. 701311 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
15	EROSION CONTROL DETAILS & SCHEDULE	
16	TEMPORARY EASEMENT	702001 TRAFFIC CONTROL DEVICES
17	DELETED	780001 TYPICAL PAVEMENT MARKINGS
18	DETECTOR LOOP REPLACEMENT	
19	PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT	
20	BUTT JOINT AND BITUMINOUS TAPER DETAILS	
21	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS	
22	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	
23	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	
24	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING	
25	TEMPORARY INFORMATION SIGNING	
26-29	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
30	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR "CUAN" (CHICAGO UTILITY ALERT NETWORK), 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 MM (1 1/2 INCHES) WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH) OR LESS AND 25 MM (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80 KM/H (45 MPH). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75 MM (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MS. CORA MATHIS AREA TRAFFIC FIELD ENGINEER AT (815) 485-6475 AT LEAST TWO(2) WEEKS PRIOR TO INSTALLATION OF FINAL PAVEMENT MARKING.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION ST./STATEVILLE RD.
INDEX OF SHEETS, STANDARDS,
AND GENERAL NOTES

SCALE: VERT. 1"=50'
HORIZ. 1"=50'
DATE 4/28/2005

DRAWN BY
CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096 RS	WILL	30	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

CONTRACT #: 62672

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		URBAN 100% STATE 1000				
20201006	GRADING AND SHAPING SHOULDERS	UNIT	149	149				
20300100	CHANNEL EXCAVATION	CU YD	14	14				
20800150	TRENCH BACKFILL	CU YD	5	5				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	48	48				
21400100	GRADING AND SHAPING DITCHES	FOOT	750	750				
25000210	SEEDING, CLASS 2A	ACRE	0.21	0.21				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	20	20				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	20	20				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	20	20				
25100630	EROSION CONTROL BLANKET	SQ YD	1031	1031				
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	22	22				
28000300	TEMPORARY DITCH CHECKS	EACH	15	15				
28000500	INLET AND PIPE PROTECTION	EACH	2	2				
2800100	AGGREGATE (EROSION CONTROL)	TON	26	26				
28200400	FILTER FABRIC	SQ YD	12	12				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	8	8				
40600300	AGGREGATE (PRIME COAT)	TON	39	39				
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	41	41				
44000100	PAVEMENT REMOVAL	SQ YD	16	16				
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	1152	1152				
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	32	32				
44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	643	643				
48101200	AGGREGATE SHOULDERS, TYPE B	TON	403	403				
54200439	PIPE CULVERTS, TYPE 1 RCCP 24"	FOOT	29	29				
50200100	STRUCTURE EXCAVATION	CU. YD.	13	13				
54215408	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 24"	EACH	2	2				
67000400	ENGINEER'S FIELD OFFICE, TYP. A	CAL. MO.	3	3				
67100100	MOBILIZATION	L SUM	1	1				

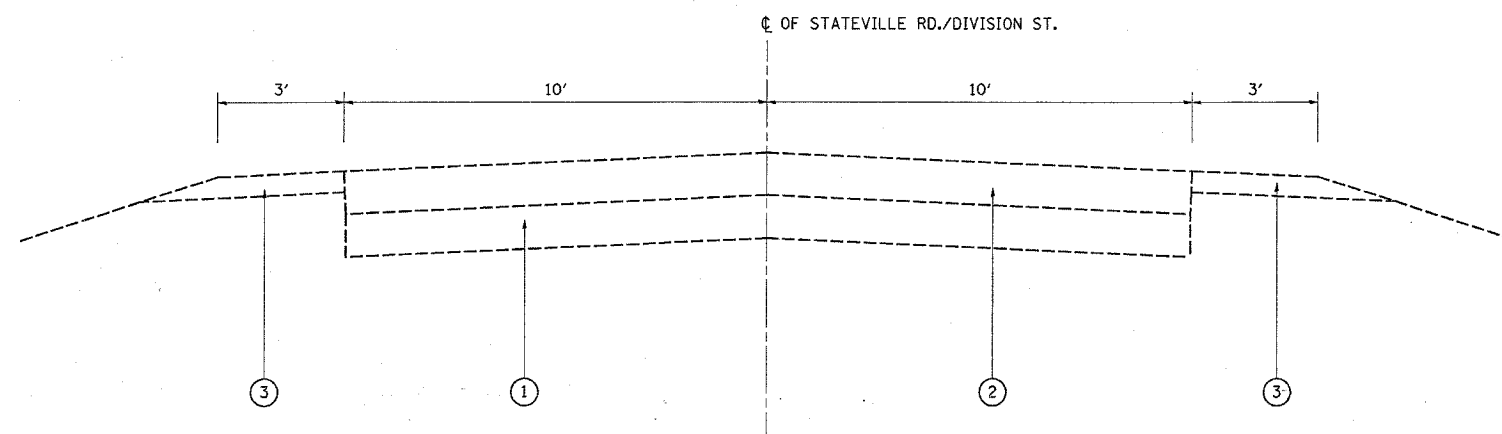
SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		URBAN 100% STATE 1000				
70100460	TRAFFIC CONTROL AND PROTECTION STANDARD 701306	L SUM	1	1				
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2445	2445				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	18016	18016				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	15	15				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	814	814				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	18016	18016				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	15	15				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	107	107				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	226	226				
X0300894	PIPE CULVERT REMOVAL 18"	FOOT	36	36				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52				
X4066424	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50	TON	1609	1609				
X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N50	TON	329	329				
X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	TON	790	790				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

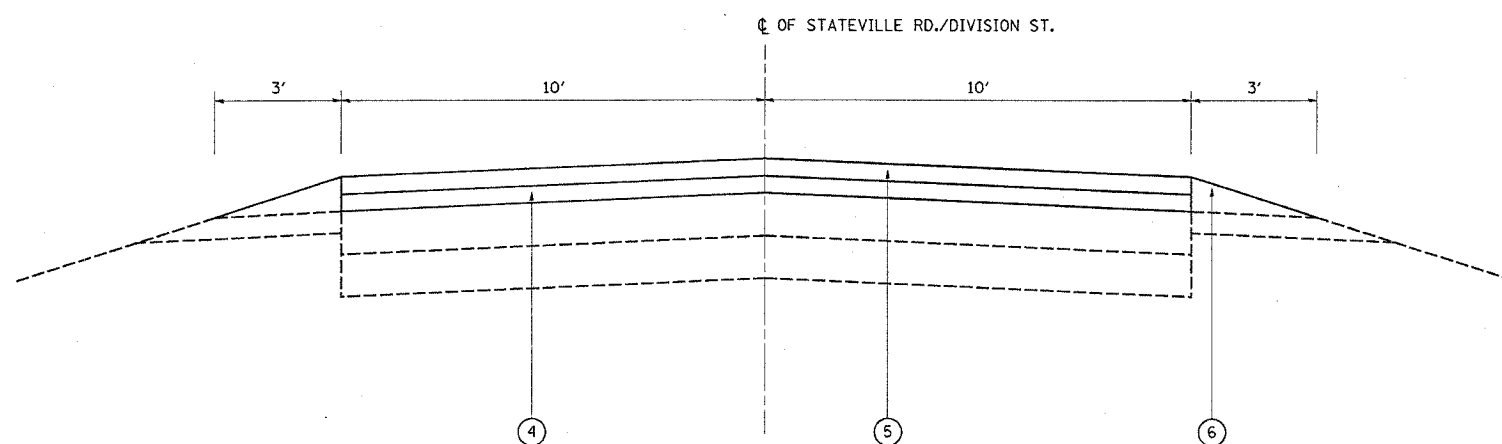
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
DIVISION ST./STATEVILLE RD.
PLOT DATE: 4/28/2005

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62672				



EXISTING TYPICAL SECTION
STATEVILLE RD./DIVISION ST.

- LEGEND**
- ① EXISTING AGGREGATE BASE
 - ② EXISTING BITUMINOUS SURFACE, VARIES 4" TO 6"
 - ③ EXISTING AGGREGATE SHOULDER
 - ④ PROPOSED POLYMERIZED LEVELING BINDER (MM) SUPERPAVE, IL-4.75, N50, 3/4"
 - ⑤ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX, "D", N50, 1 1/2"
 - ⑥ PROPOSED AGGREGATE SHOULDER, TYPE "B", 2 1/4"



PROPOSED TYPICAL SECTION
STATEVILLE RD./DIVISION ST.

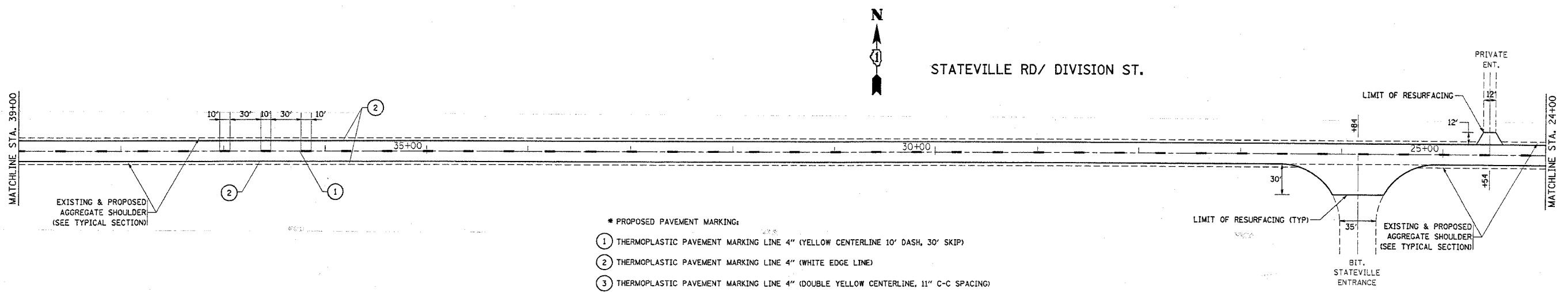
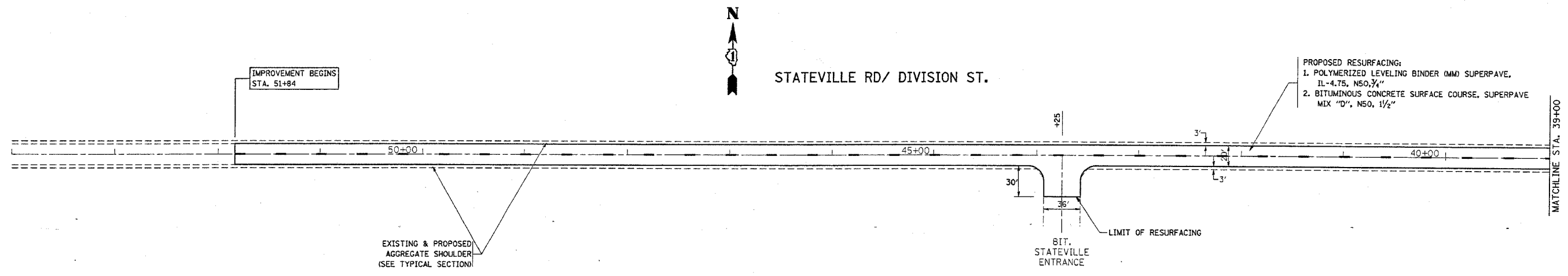
BITUMINOUS MIXTURE REQUIREMENTS

MIXTURE	PG	MAX RAP. (%)	AIR VOIDS (%)
BITUMINOUS CONC. SURFACE COURSE SUPERPAVE, MIX "D" N50	PG 64-22	15%	4% @ 50 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE IL-4.75, N50	SPG/SBR 76-28	0%	2.5% @ 50 GYR.
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N50	PG 58-22	25%	4% @ 50 GYR.
CLASS D PATCHING, 6"	PG 64-22	15%	4% @ 70 GYR.

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE IS 112 LBS./SQ. YD./IN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		STATEVILLE RD./ DIVISION ST. STATEVILLE ENTRANCE TO IL-53 EXISTING & PROPOSED TYPICAL SECTION
SCALE: VERT. NONE HORIZ. DATE 4/27/2005	DRAWN BY CHECKED BY	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				

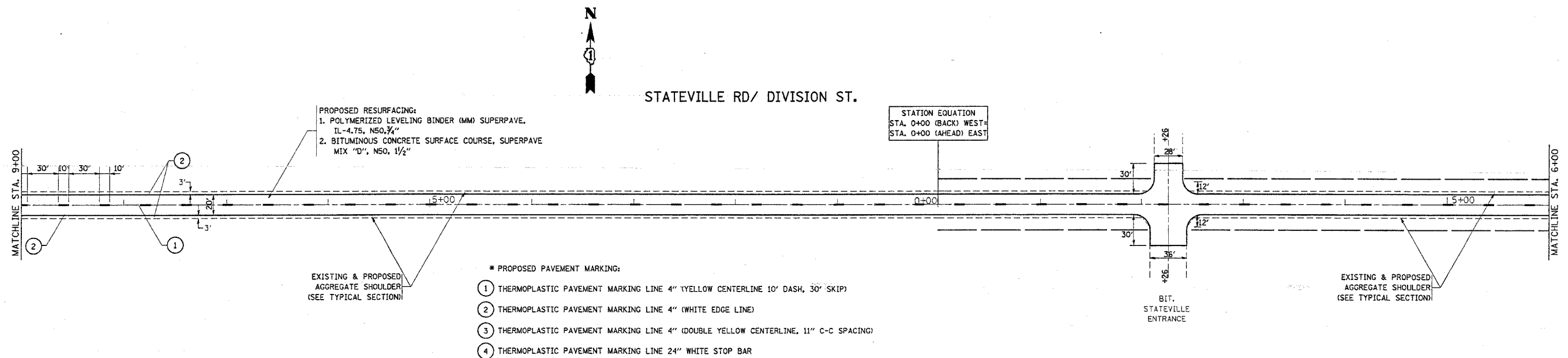
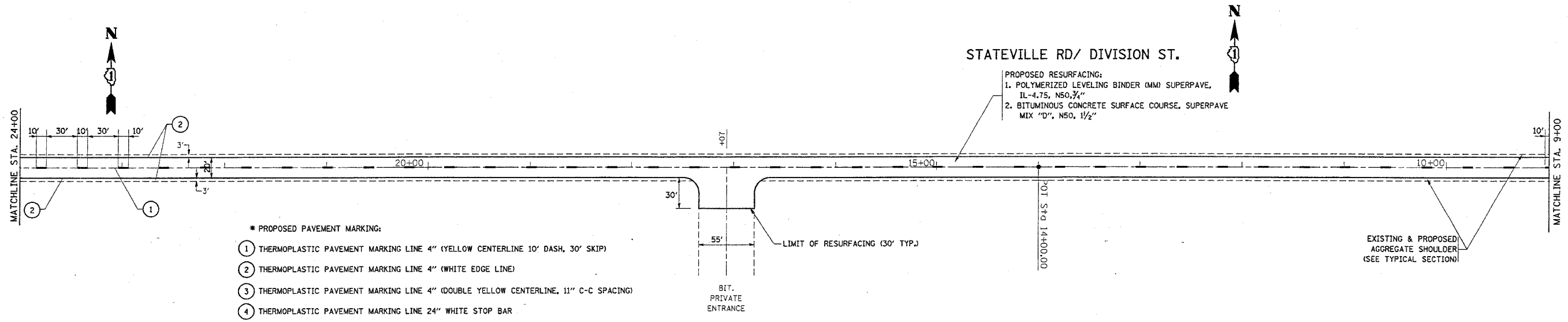


- * PROPOSED PAVEMENT MARKING:
- ① THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW CENTERLINE 10' DASH, 30' SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE EDGE LINE)
 - ③ THERMOPLASTIC PAVEMENT MARKING LINE 4" (DOUBLE YELLOW CENTERLINE, 11" C-C SPACING)
 - ④ THERMOPLASTIC PAVEMENT MARKING LINE 24" WHITE STOP BAR

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 STATEVILLE RD/ DIVISION ST.
 STATEVILLE ENTRANCE TO IL-53
 ROADWAY AND PAVEMENT
 MARKING PLAN
 SCALE: VERT.
 HORIZ.
 DATE 3/16/2005
 DRAWN BY
 CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				



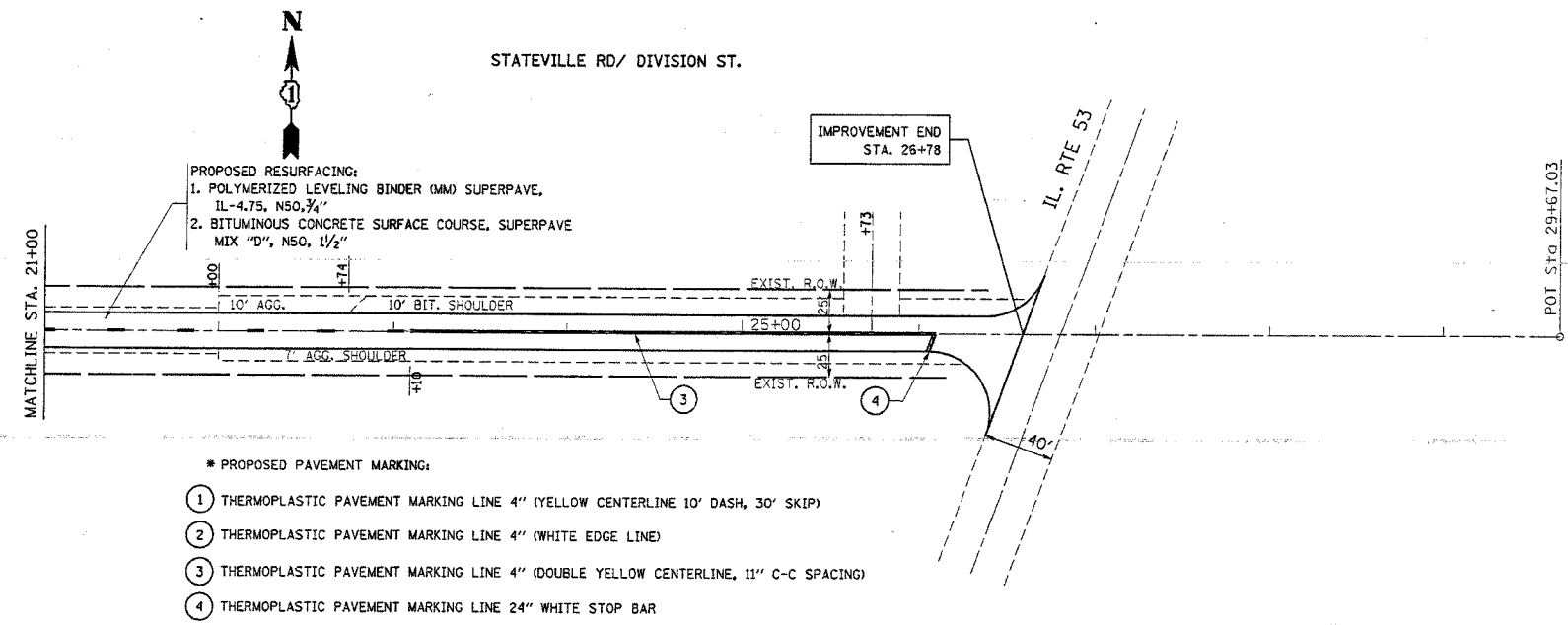
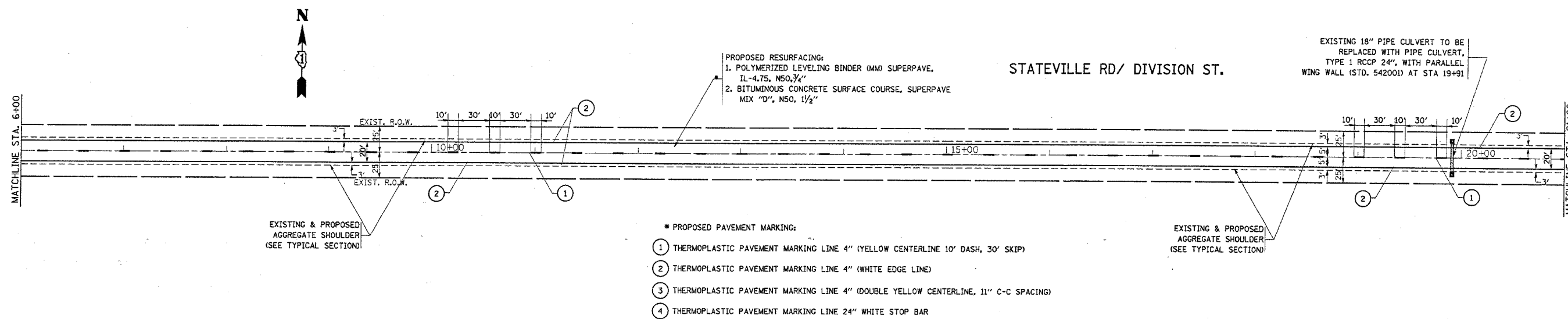
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE RD/ DIVISION ST.
 STATEVILLE ENTRANCE TO IL-53
 ROADWAY AND PAVEMENT
 MARKING PLAN

SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE 3/17/2005

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				



REVISIONS		NAME	DATE
NO.	DESCRIPTION		

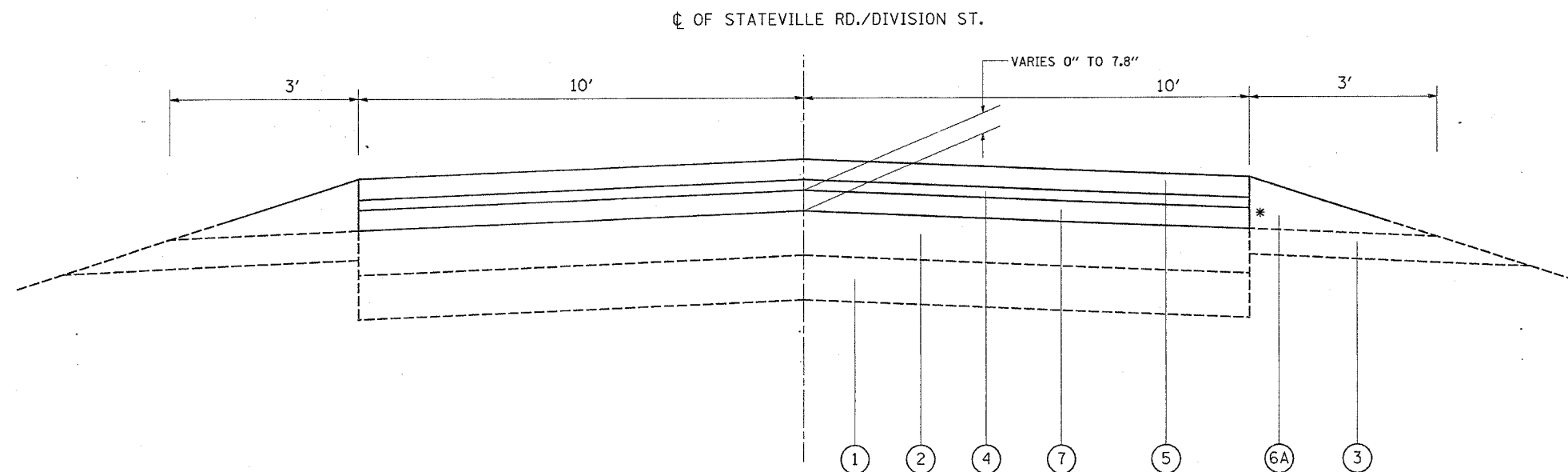
ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE RD/ DIVISION ST.
 STATEVILLE ENTRANCE TO IL-53
 ROADWAY AND PAVEMENT
 MARKING PLAN

SCALE: VERT. _____
 HORIZ. _____
 DATE 3/24/2005

DRAWN BY _____
 CHECKED BY _____

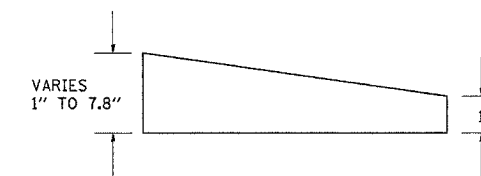
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				



PROPOSED TYPICAL SECTION
FOR RAISED PROFILE FROM
STA. 17+50 TO STA. 22+50

- LEGEND**
- ① EXISTING AGGREGATE BASE
 - ② EXISTING BITUMINOUS SURFACE, VARIES 4" TO 6"
 - ③ EXISTING AGGREGATE SHOULDER
 - ④ PROPOSED POLYMERIZED LEVELING BINDER (MM) SUPERPAVE, IL-4.75, N50, 3/4"
 - ⑤ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX, "D", N50, 1 1/2"
 - ⑥A PROPOSED AGGREGATE SHOULDER, TYPE "B", THICKNESS VARIES 1" TO 7.8" (* SEE DETAIL)
 - ⑦ PROPOSED BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE, IL-19, N50 (THICKNESS VARIES 0" TO 7.8")

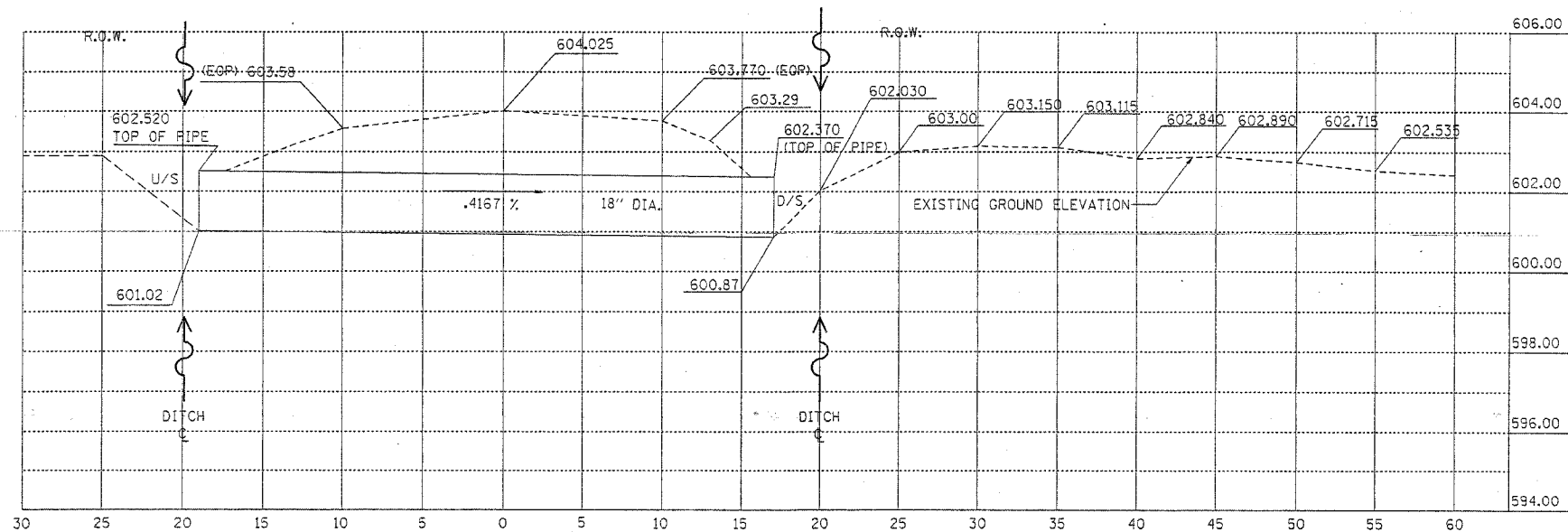
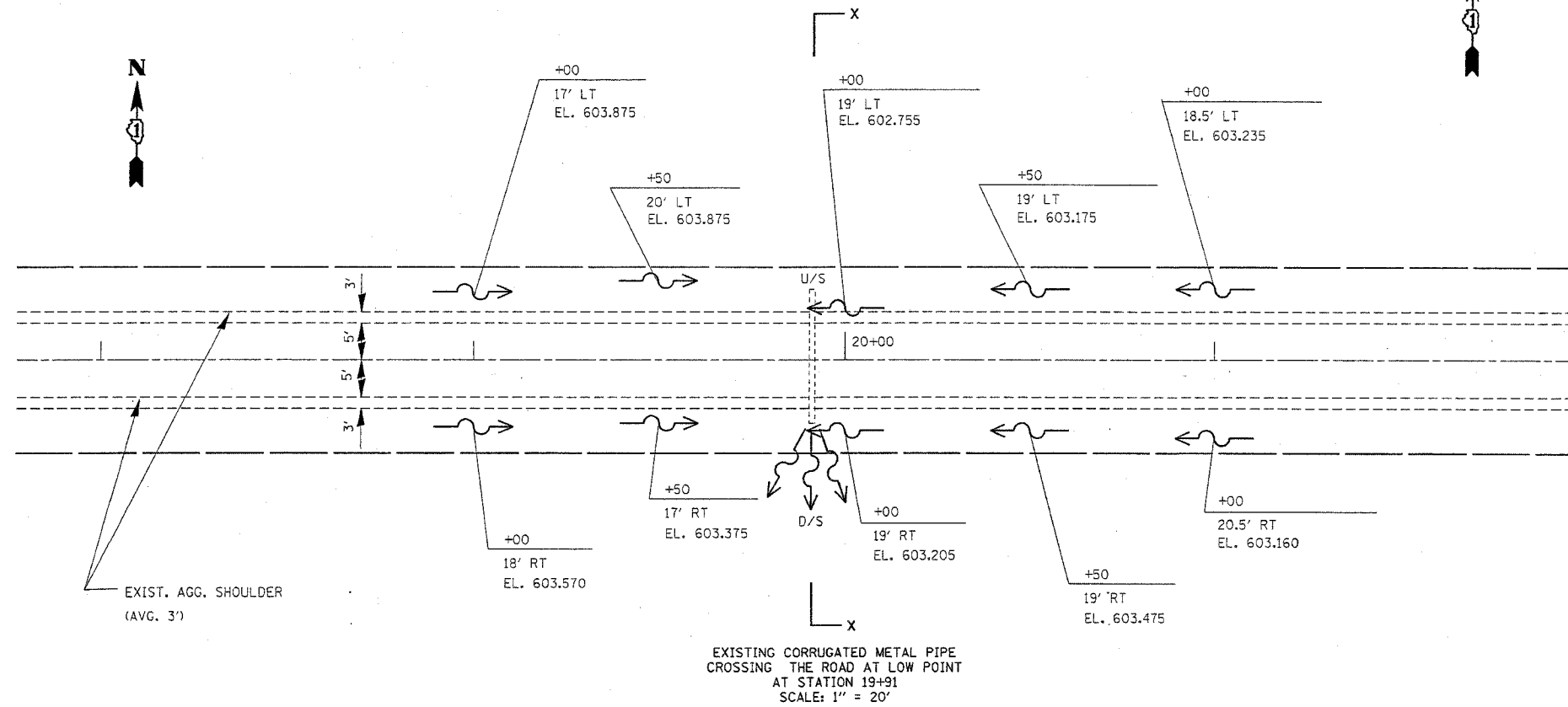
* DETAIL: PROPOSED AGGREGATE SHOULDER, TYPE "B"



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION STATEVILLE RD./ DIVISION ST. STATEVILLE ENTRANCE TO IL-53 PROPOSED TYPICAL SECTION FOR RAISED PROFILE FROM STA. 17+50 TO STA. 22+50
NAME	DATE	
		SCALE: VERT. NONE HORIZ. NONE DATE 4/27/2005
DRAWN BY		CHECKED BY

STATEVILLE RD/ DIVISION ST.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	10
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				



CROSS SECTION X-X
EXISTING PIPE CULVERT LOOKING EAST
SCALE: VERT: 1"=2'
HORIZ: 1"=5'

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

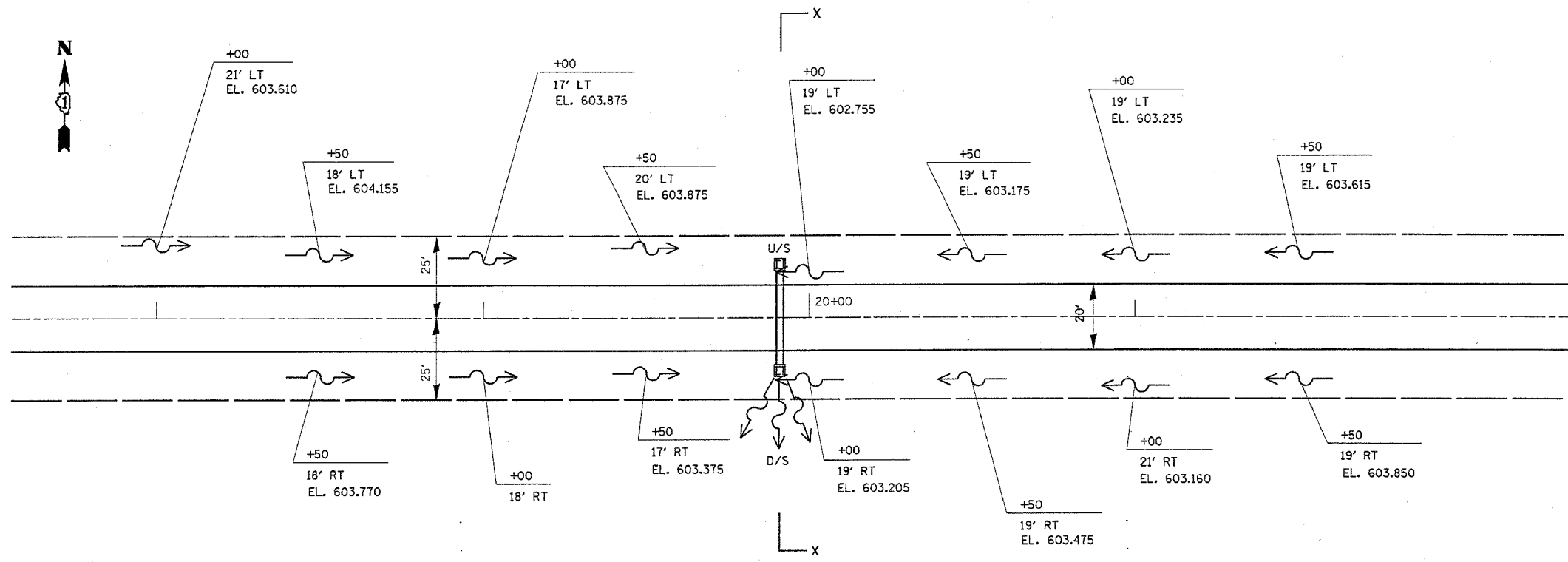
STATEVILLE RD
DRAINAGE PLANS
EXISTING
PIPE CULVERT DETAILS

SCALE: VERT.
HORIZ.
DATE 3/16/2005

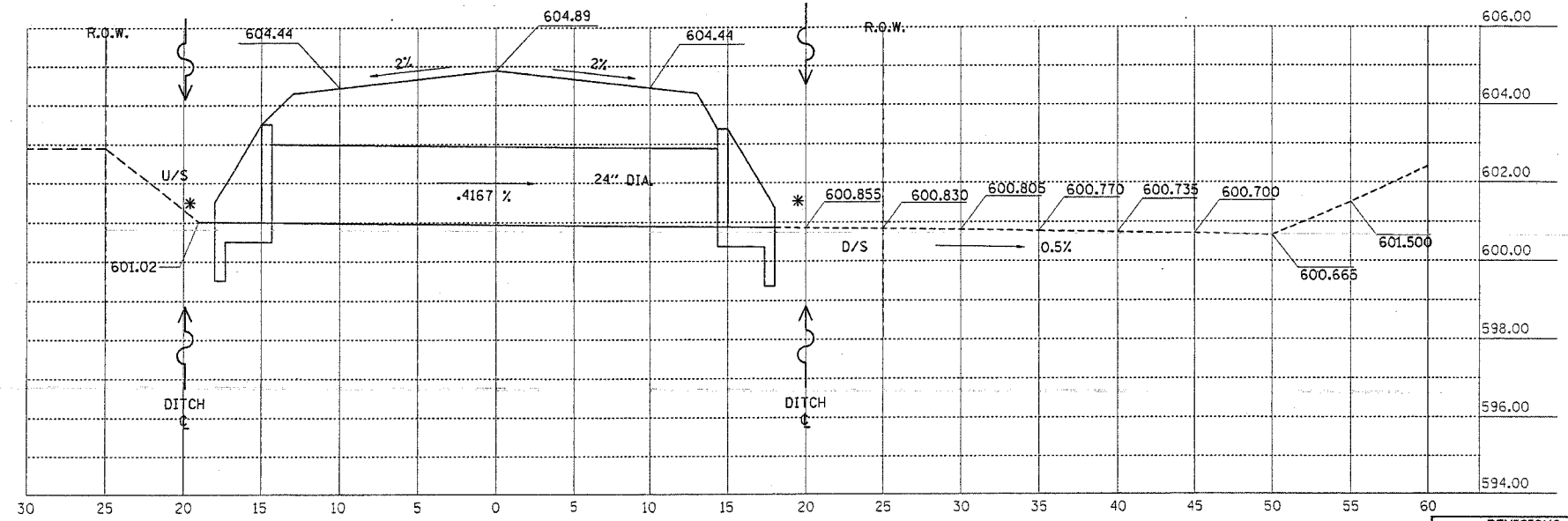
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL.	30	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.: 62672				

STATEVILLE RD/ DIVISION ST.



PROPOSED PIPE CULVERT
24" DIA. WITH REINFORCED CONCRETE END SECTIONS
WITH PARALLEL WING WALL (STD. 542001)
SCALE : VERT: 1"= 20'



CROSS SECTION X-X
PROPOSED PIPE CULVERT
24" DIA. WITH REINFORCED CONCRETE END SECTIONS
WITH PARALLEL WING WALL (STD. 542001)
SCALE : VERT: 1"=2'
HORIZ: 1"=5'

* SEE EROSION CONTROL
DETAILS SHEET

REVISIONS	
NAME	DATE

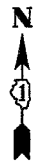
ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE RD
DRAINAGE PLANS
PROPOSED
PIPE CULVERT DETAILS

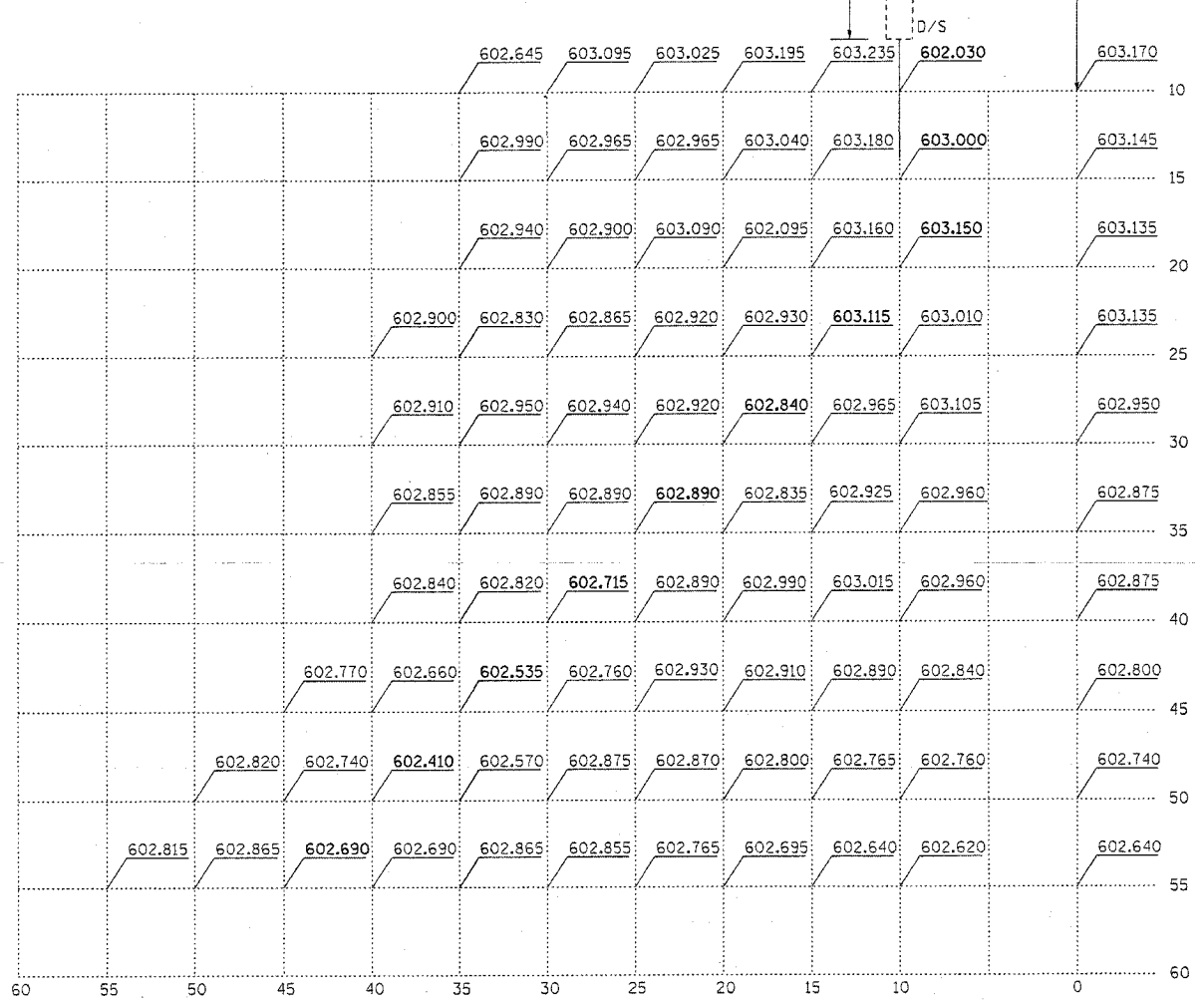
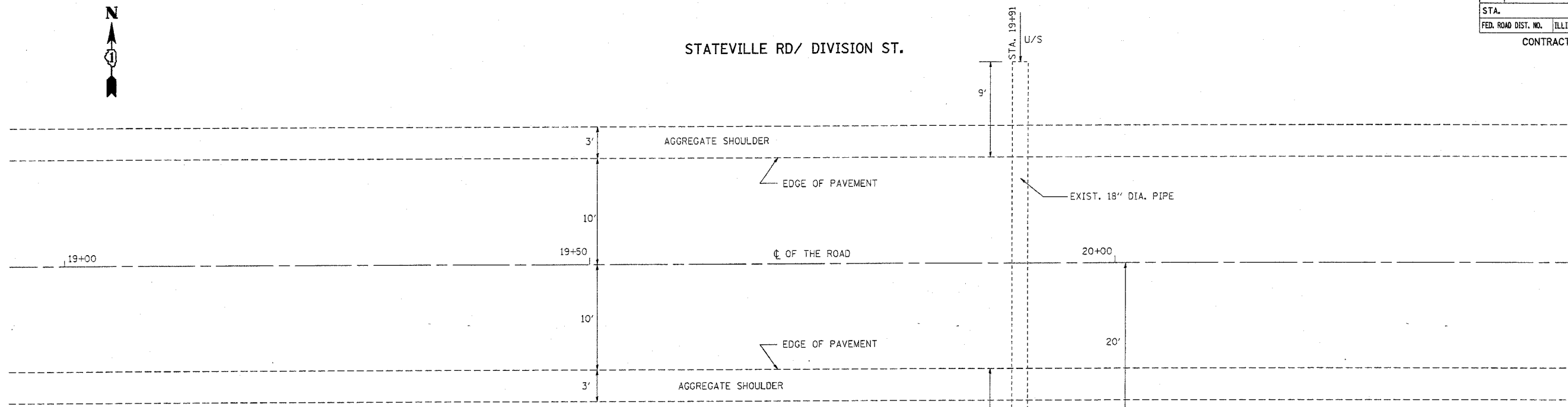
SCALE: VERT.
HORIZ.
DATE 3/24/2005

DRAWN BY
CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62672				



STATEVILLE RD/ DIVISION ST.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE ROAD
DRAINAGE PLAN
EXISTING GROUND ELEVATIONS
ON DOWN STREAM SITE

SCALE: VERT. 1"=5'
HORIZ. 1"=5'

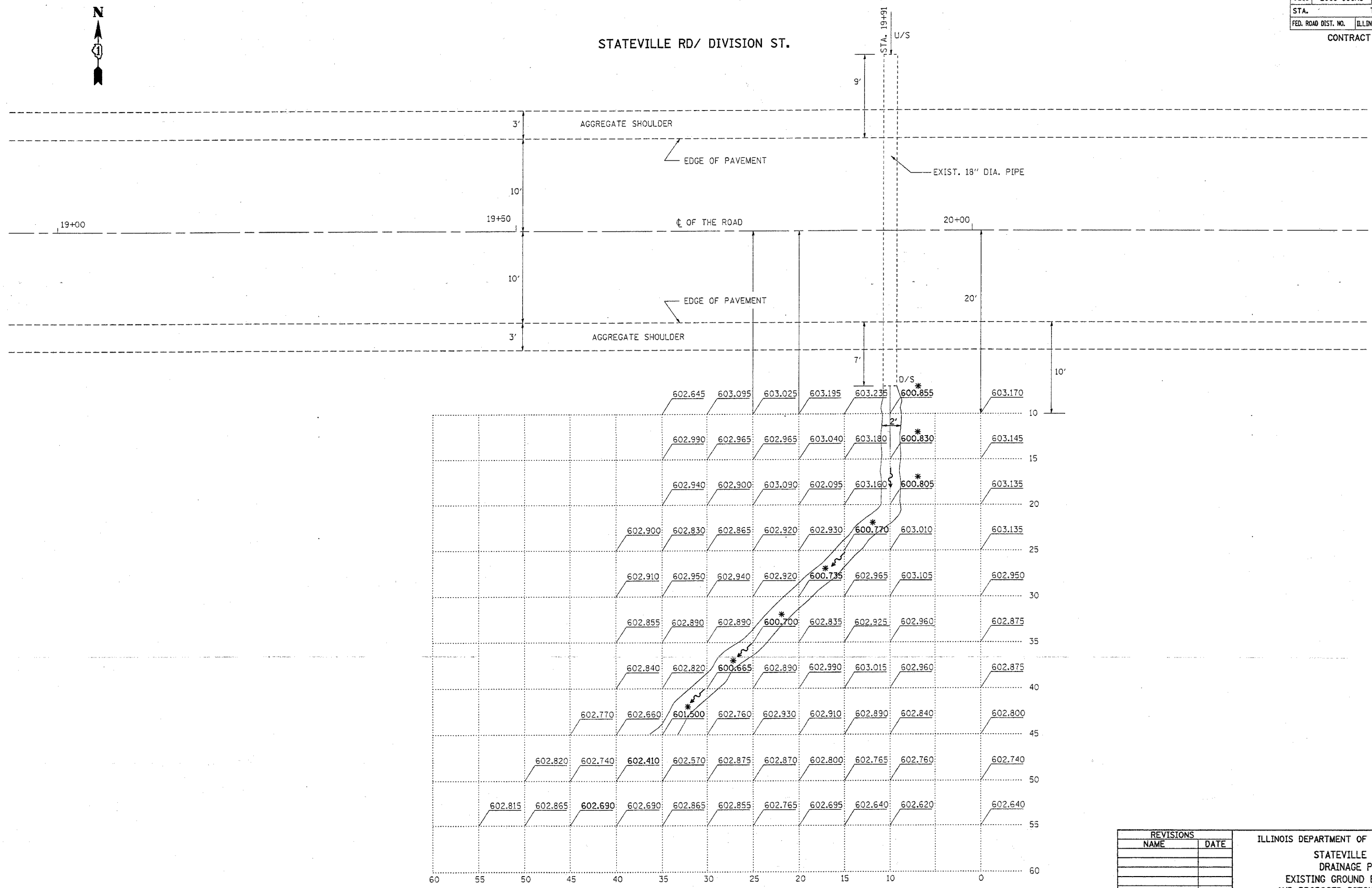
DATE 3/17/2005

DRAWN BY
CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62672				



STATEVILLE RD/ DIVISION ST.



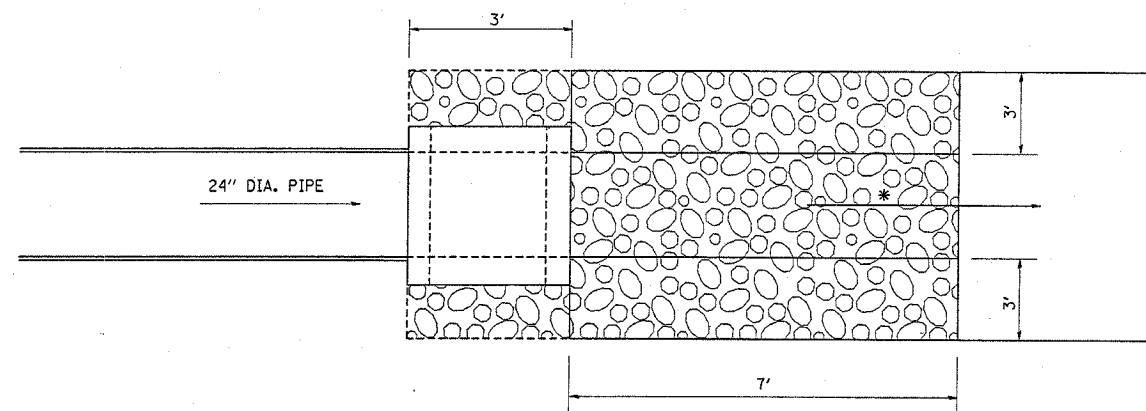
*PROPOSED DITCH ELEVATIONS

REVISIONS	
NAME	DATE

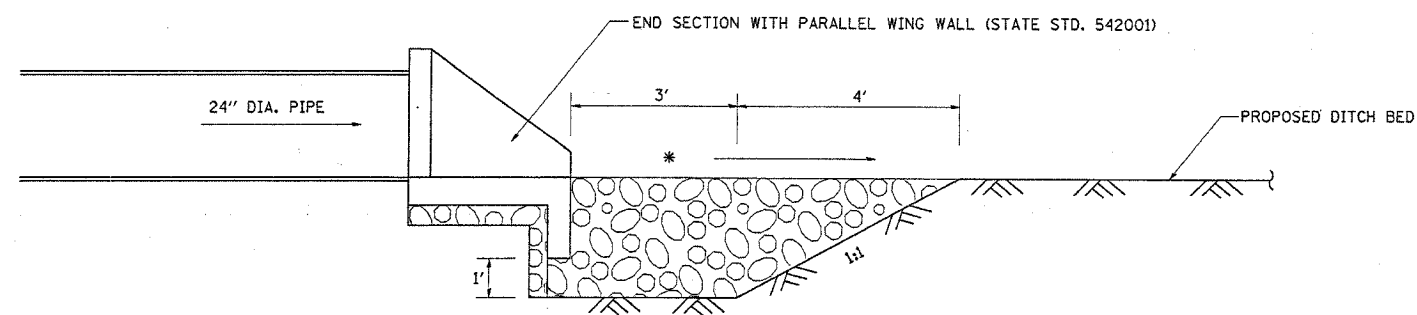
ILLINOIS DEPARTMENT OF TRANSPORTATION
STATEVILLE ROAD
DRAINAGE PLAN
EXISTING GROUND ELEVATIONS
AND PROPOSED DITCH ELEVATIONS
ON DOWN STREAM SITE

SCALE: VERT. 1"=5'
HORIZ. 1"=5'
DATE 3/18/2005
DRAWN BY
CHECKED BY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62672				

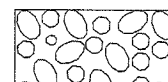


PLAN



LONGITUDINAL SECTION

* EROSION CONTROL PROTECTION AT U/S & D/S (NOT TO SCALE)



AGGREGATE (EROSION CONTROL)

"EROSION CONTROL & PROTECTION SCHEDULE"

STATION	LOCATION	UNIT	QUANTITY	REMARKS
1. TEMPORARY DITCH CHECK				
17+50 TO 22+50	NORTH	EACH	10	FOR 500' LENGTH @ 50' INTERVAL
22+50 TO 20+00	SOUTH	EACH	5	FOR 250' LENGTH @ 50' INTERVAL
2. TEMPORARY EROSION CONTROL SEEDING				
17+50 TO 22+50	NORTH	POUND	22	① FOR GRADING & SHAPING THE DITCHES ROADSIDE AREA AS PER CALCS 0.203 ACRES ② FOR CHANNEL EXCAVATION (DITCH AS D/S) AREA 0.010 ACRES 0.203+0.010=0.213 ACRES @ 100 LBS/AC=22 POUNDS
22+50 TO 20+00	SOUTH			
3. INLET & PIPE PROTECTION				
19+91	NORTH & SOUTH ENDS OF CULVERT	EACH	2	AT INLET & OUTLET OF CULVERT END SECTION
4. AGGREGATE (EROSION CONTROL)				
19+91	NORTH & SOUTH ENDS OF CULVERT	TON	26	FOR PERMANENT EROSION CONTROL AT INLET & OUTLET OF CULVERT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE ROAD
DRAINAGE PLAN
EROSION CONTROL DETAILS
AND SCHEDULE

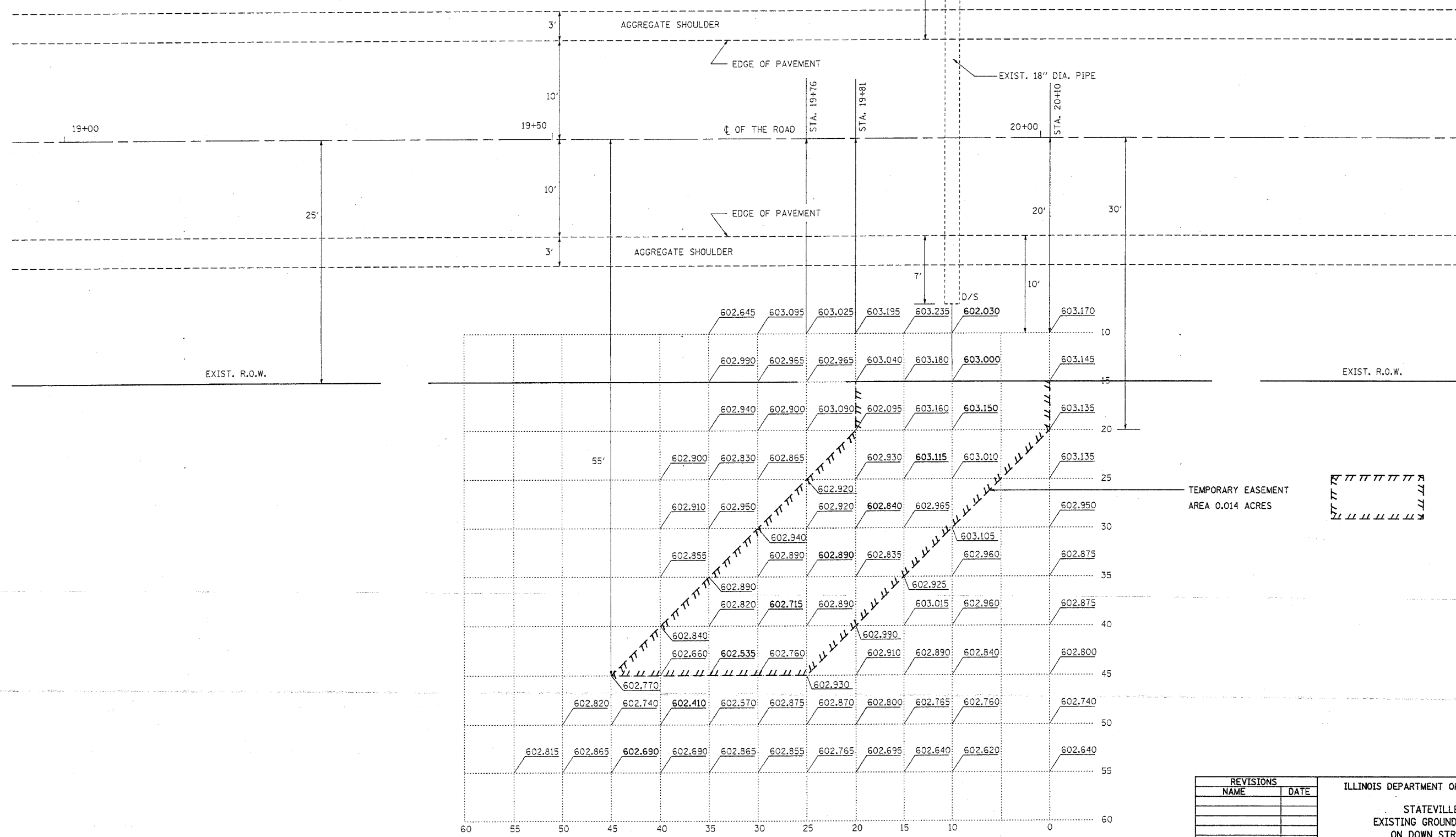
SCALE: VERT. NONE
HORIZ. DATE 3/17/2005

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0291	2003-096RS	WILL	30	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62672				



STATEVILLE RD/ DIVISION ST.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STATEVILLE ROAD
EXISTING GROUND ELEVATIONS
ON DOWN STREAM SITE
AND PROPOSED PERMANENT EASEMENT

SCALE: VERT. 1"=5'
HORIZ. 1"=5'
DATE 3/24/2005

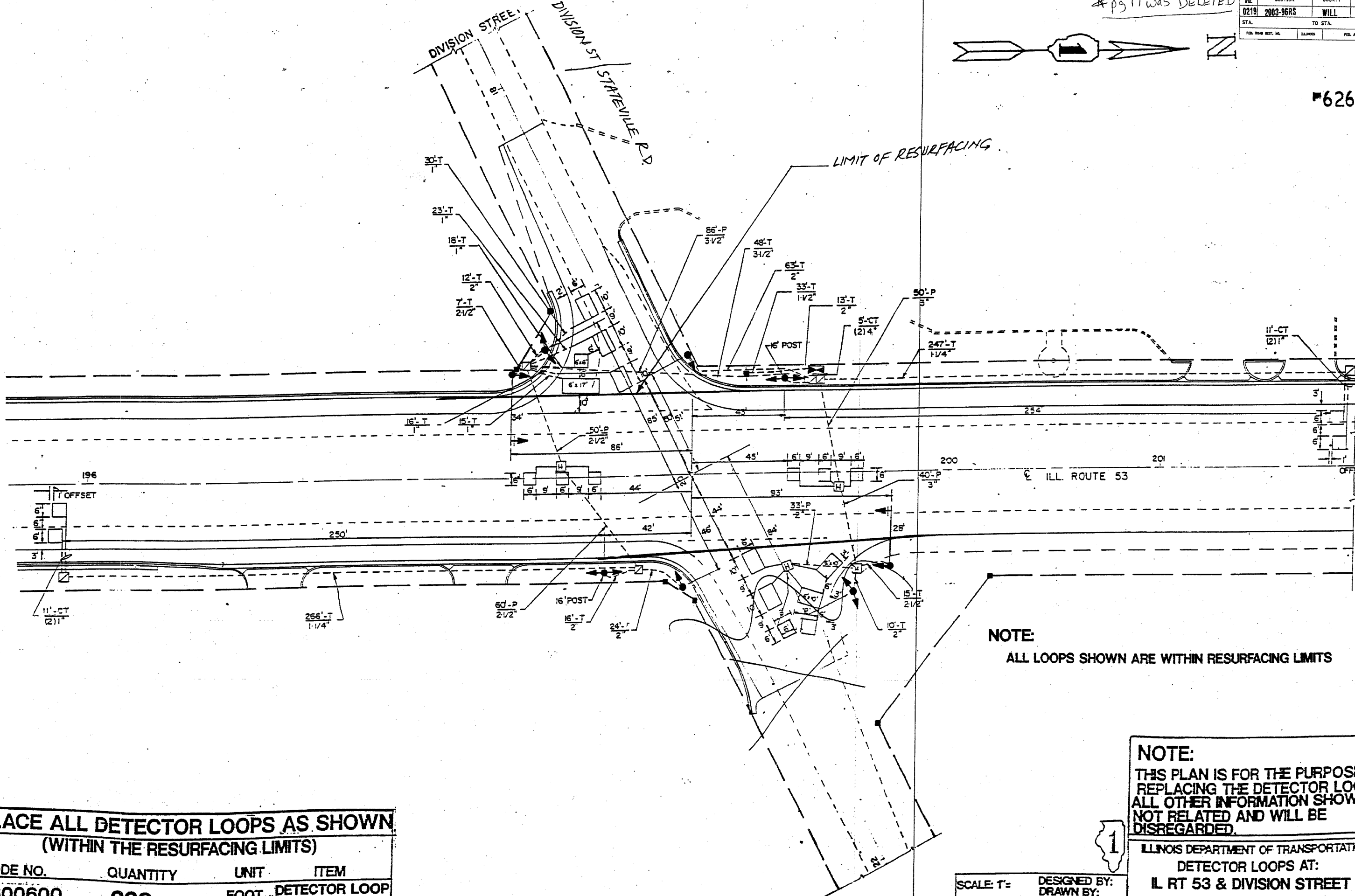
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P. A.U. RITE	SECTION	COUNTY	TOTAL SHEETS	NO.
0219	2003-96RS	WILL	30	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



#62672



NOTE:
ALL LOOPS SHOWN ARE WITHIN RESURFACING LIMITS

NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOPS AT:
IL RT 53 & DIVISION STREET

REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
83600600	226	FOOT	DETECTOR LOOP REPLACEMENT

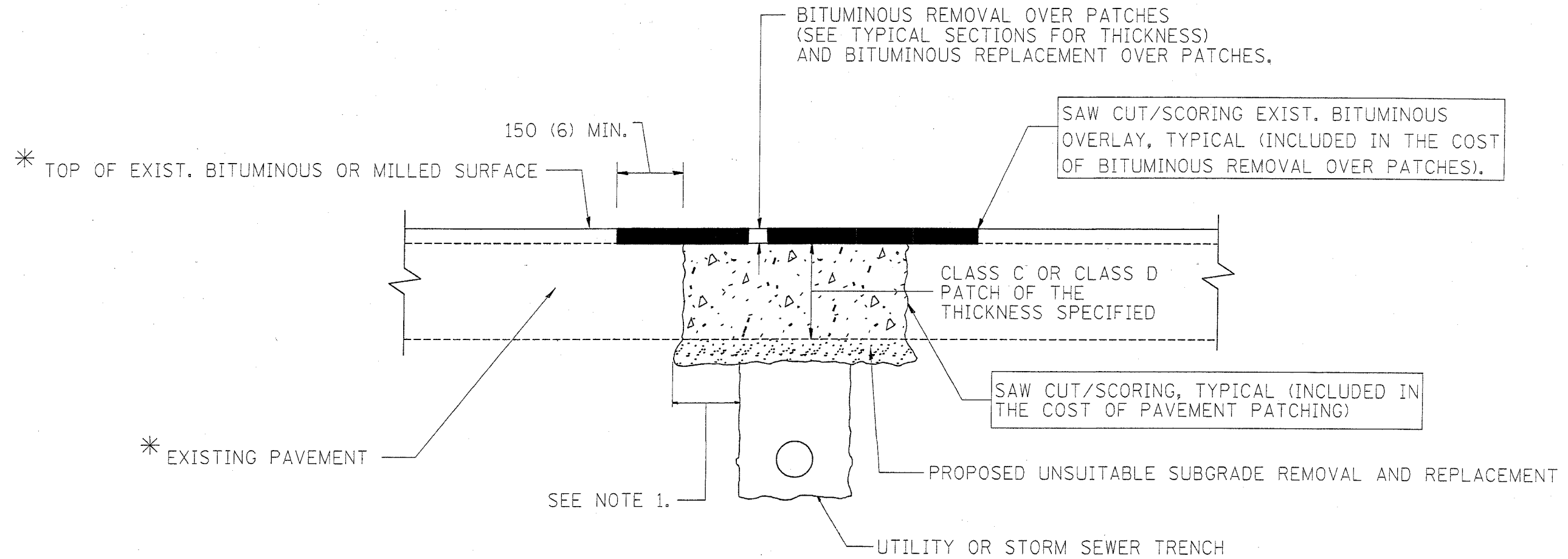
SCALE: T=
DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

' 62672



* 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. DATE 04/12/2004

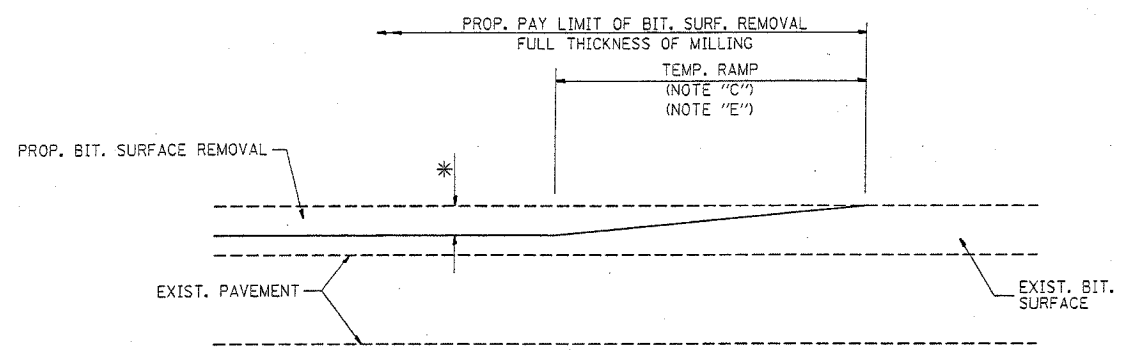
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BD400-04 (BD-22)

REVISION DATE: 04/27/98

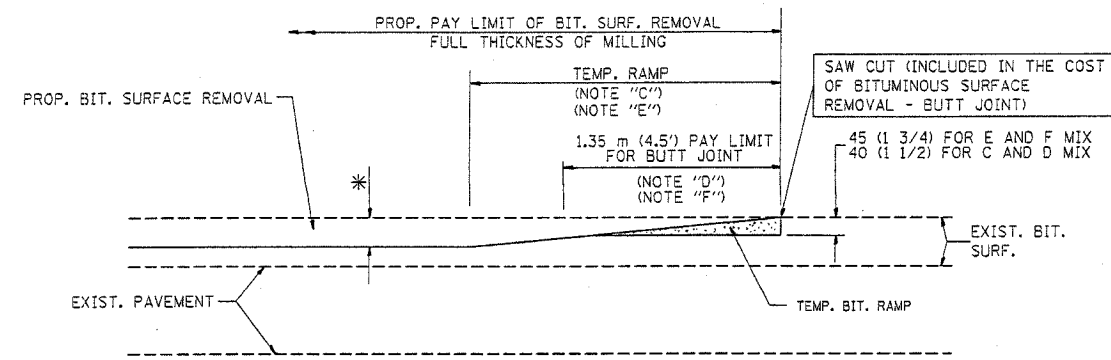
P.L.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	20
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62672



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

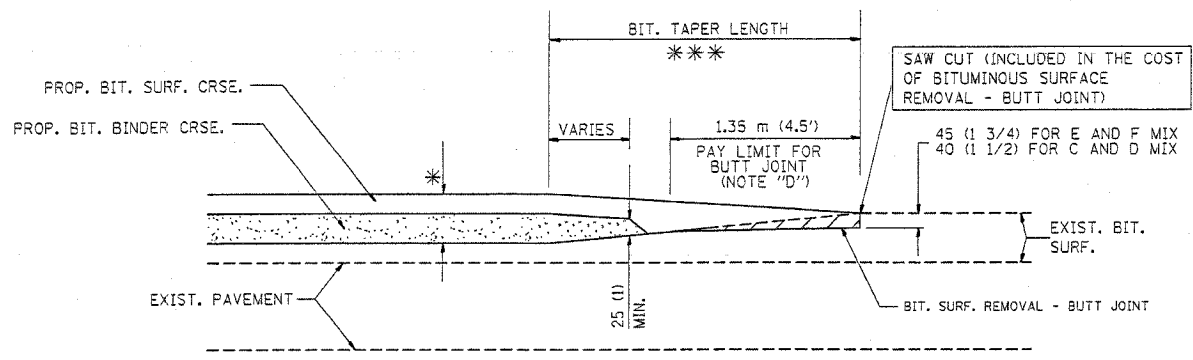
OPTION 1



BITUMINOUS CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

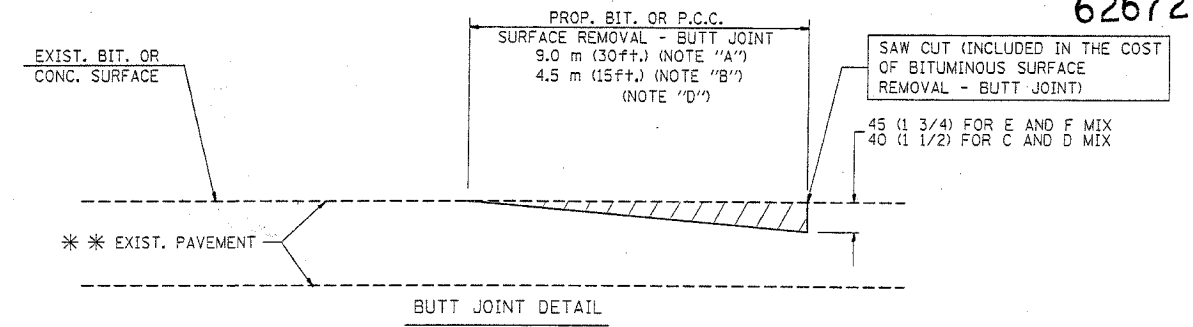
OPTION 2

TYPICAL TEMPORARY RAMP

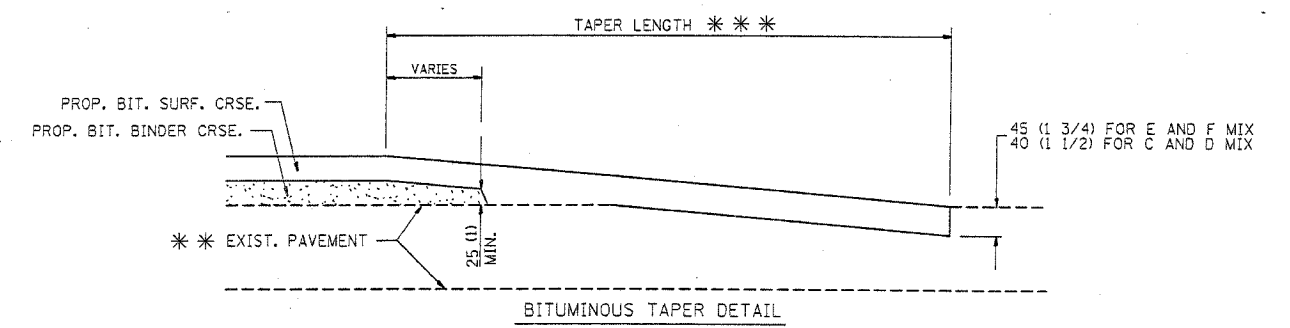


BUTT JOINT AND BITUMINOUS TAPER

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: 04/12/2004

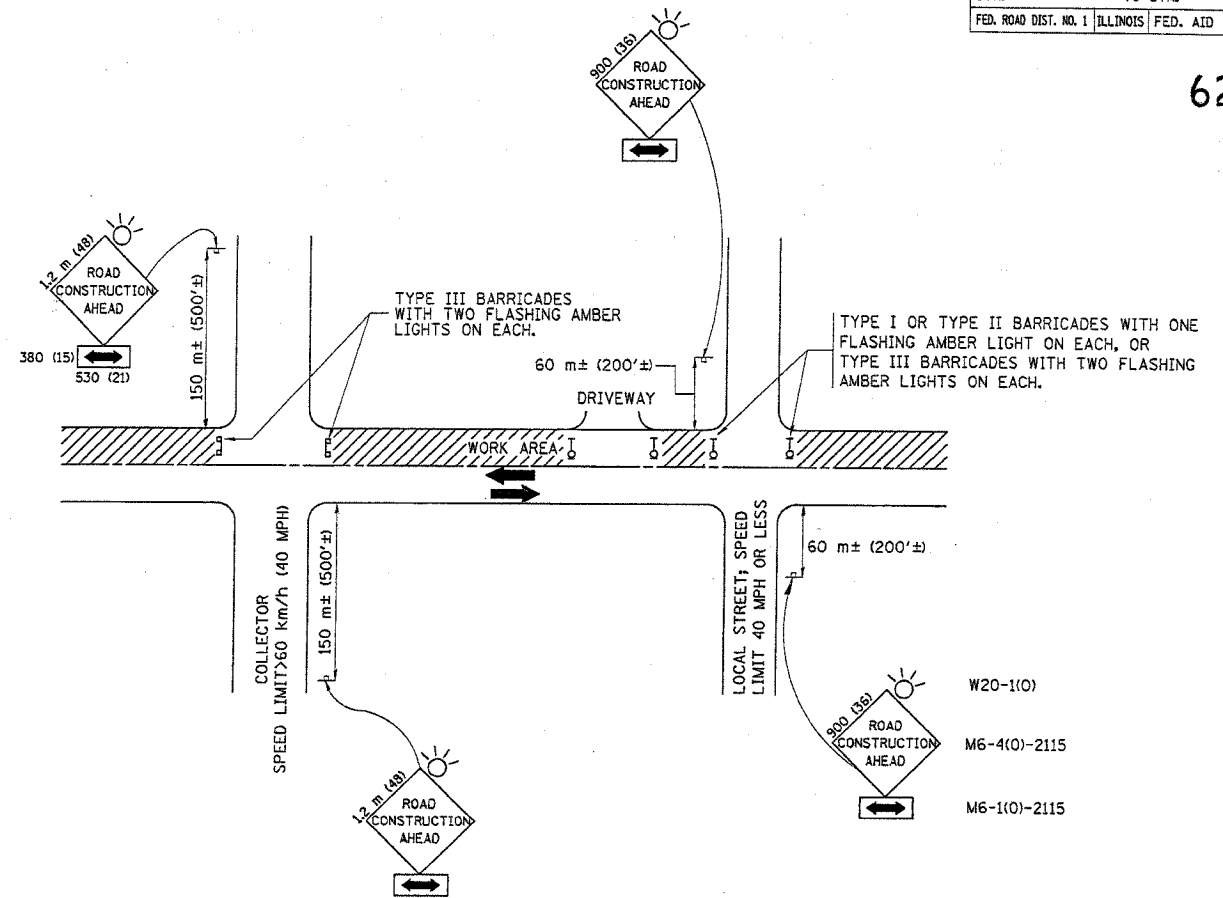
DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)

REVISION DATE: 04/06/01

F.A.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	21
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62672



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (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

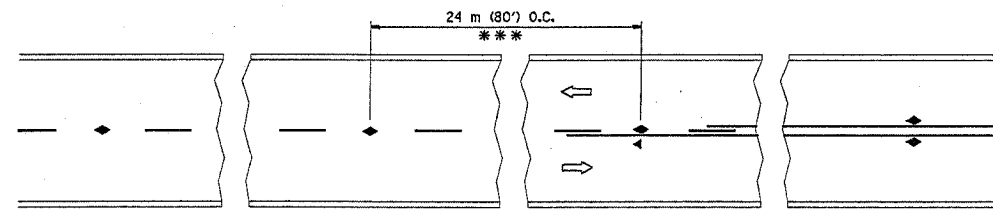
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: VERT. _____
 HORIZ. _____
 DATE 04/12/2004

DRAWN BY _____
 CHECKED BY _____
 TC-10

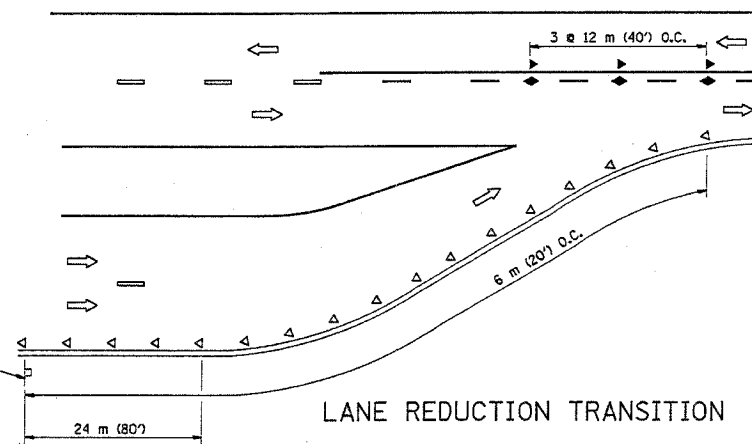
K.L.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	BLANKS	FED. AID PROJECT		

62672

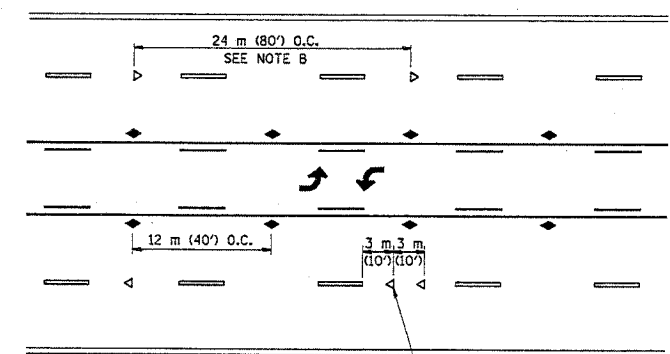


*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

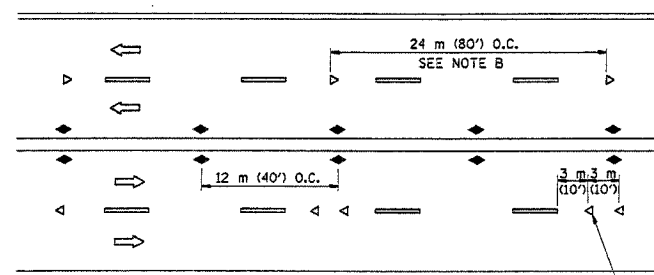
TWO-LANE/TWO-WAY



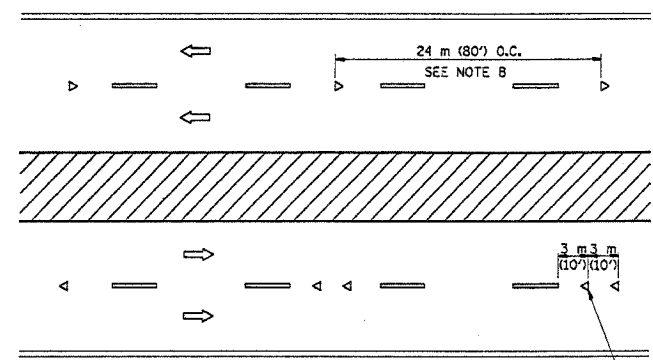
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

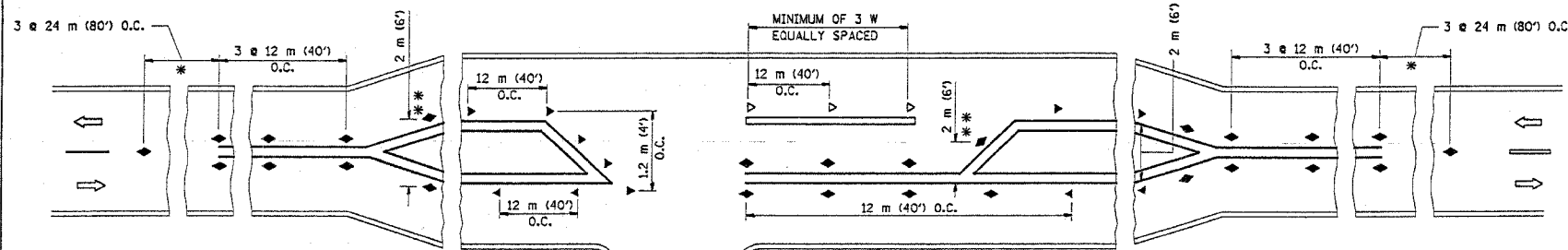
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- 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.



LEFT TURN

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

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

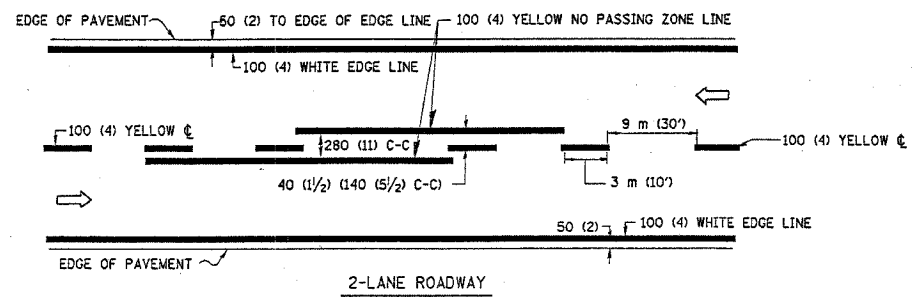
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS
 (SNOW-PLOW RESISTANT)

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

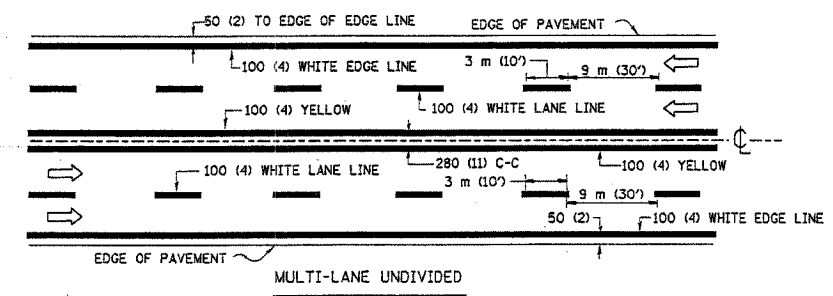
SCALE: NONE
 DATE: 04/12/2004
 DRAWN BY CADD
 CHECKED BY TC-11

F.A.L. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

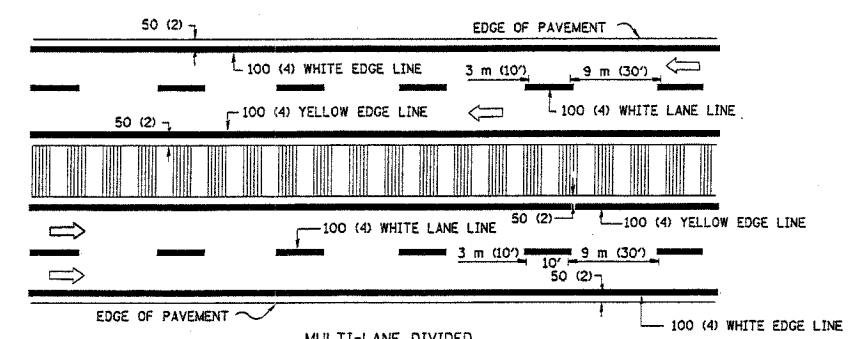
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2-LANE ROADWAY



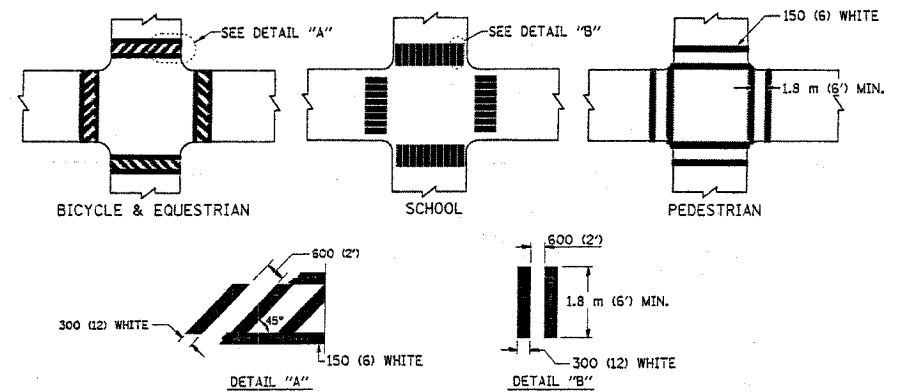
MULTI-LANE UNDIVIDED



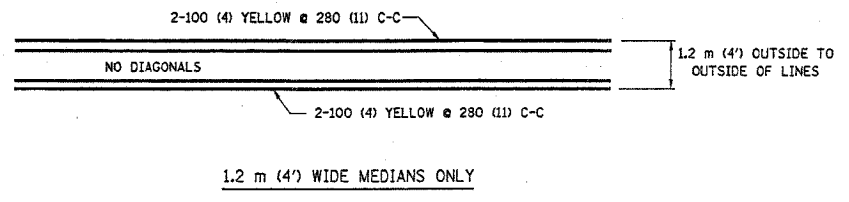
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

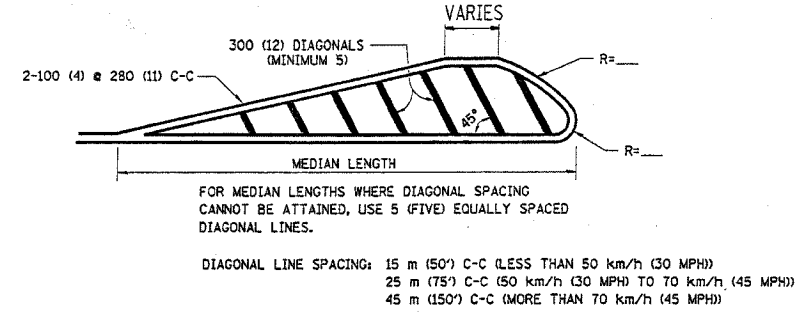
TYPICAL LANE AND EDGE LINE MARKING



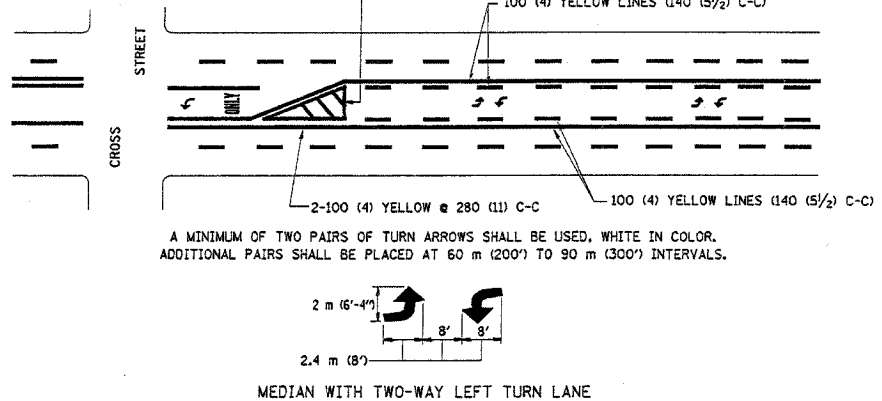
TYPICAL CROSSWALK MARKING



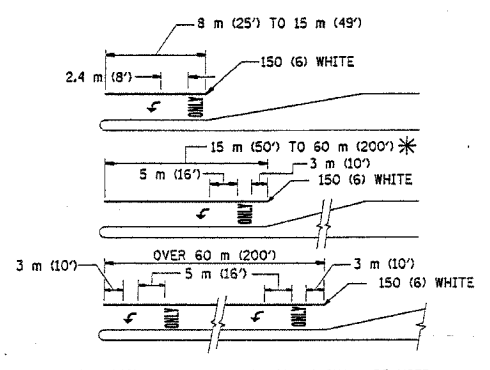
1.2 m (4') WIDE MEDIANS ONLY



MEDIANS OVER 1.2 m (4') WIDE



TYPICAL PAINTED MEDIAN MARKING

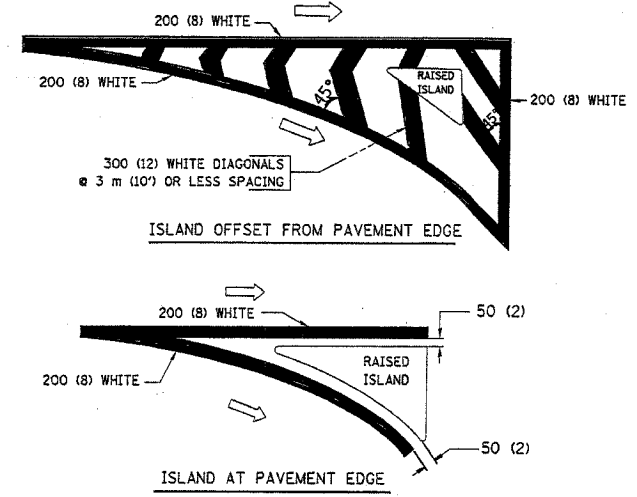


TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED. AREA = 1.5 m² (15.6 SQ. FT.) 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 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 UNDIVIDED 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 (5 1/2) 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 (5 1/2) 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 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'=0.33m ² (3.5 SQ. FT.) EACH 'X'=5.0 m ² (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 78000L

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 04/12/2004

DRAWN BY CADD

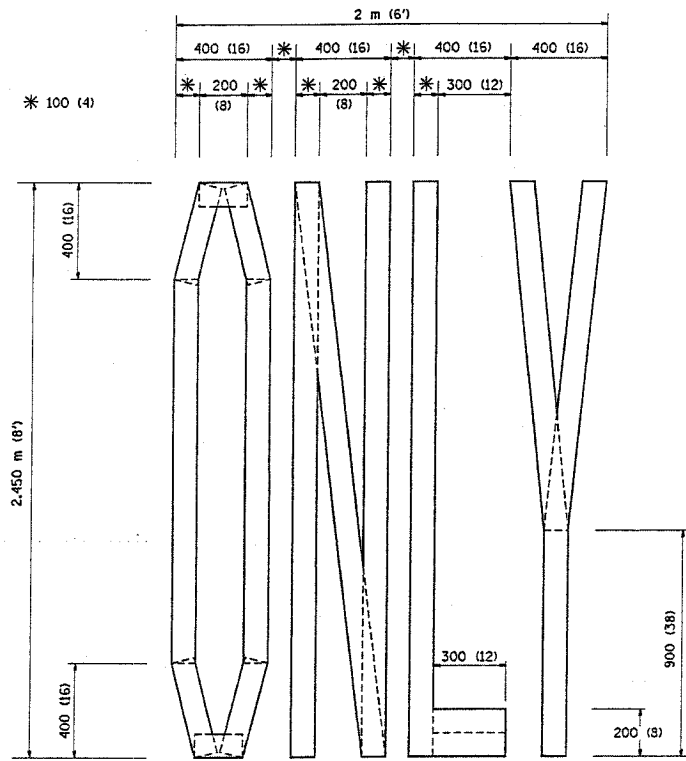
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TC-13

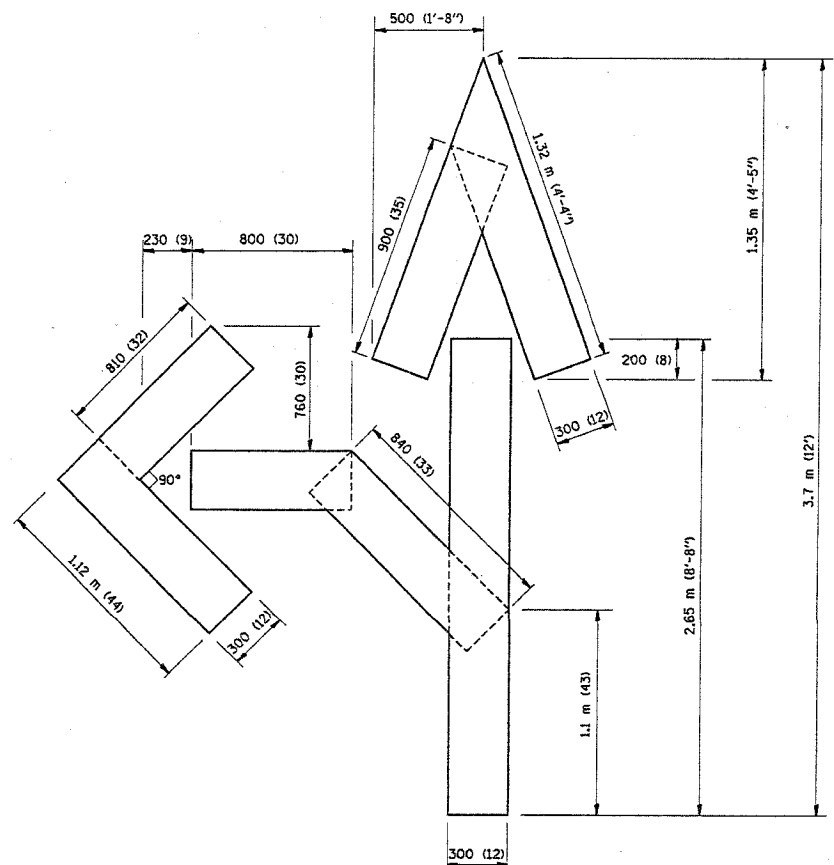
REVISION DATE: 01/06/00

P.L.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ALIGNMENT	FED. AID PROJECT		

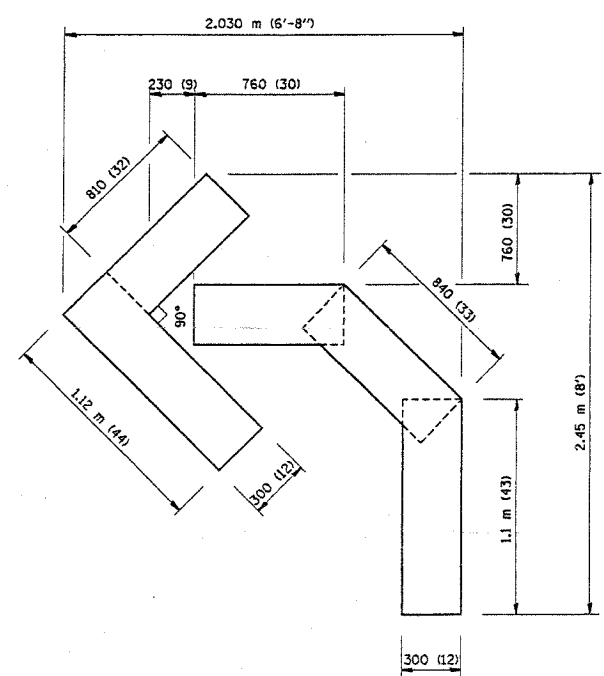
62672



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.

ILLINOIS DEPARTMENT OF TRANSPORTATION

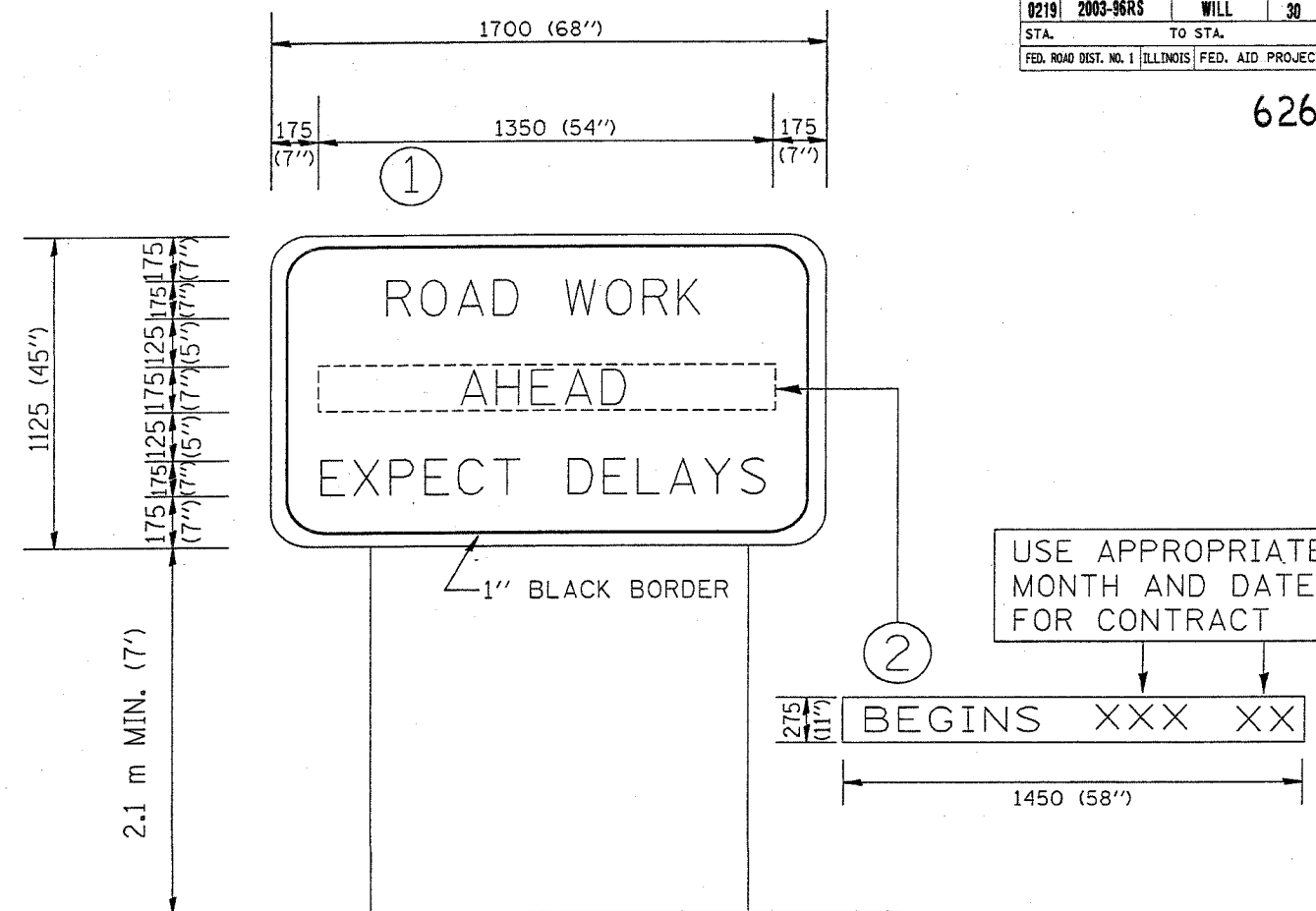
PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

SCALE: NONE
 DATE 04/12/2004

DRAWN BY CADD
 CHECKED BY

62672



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:
DATE 04/12/2004

DRAWN BY: BUR. OF DESIGN
CHECKED BY:

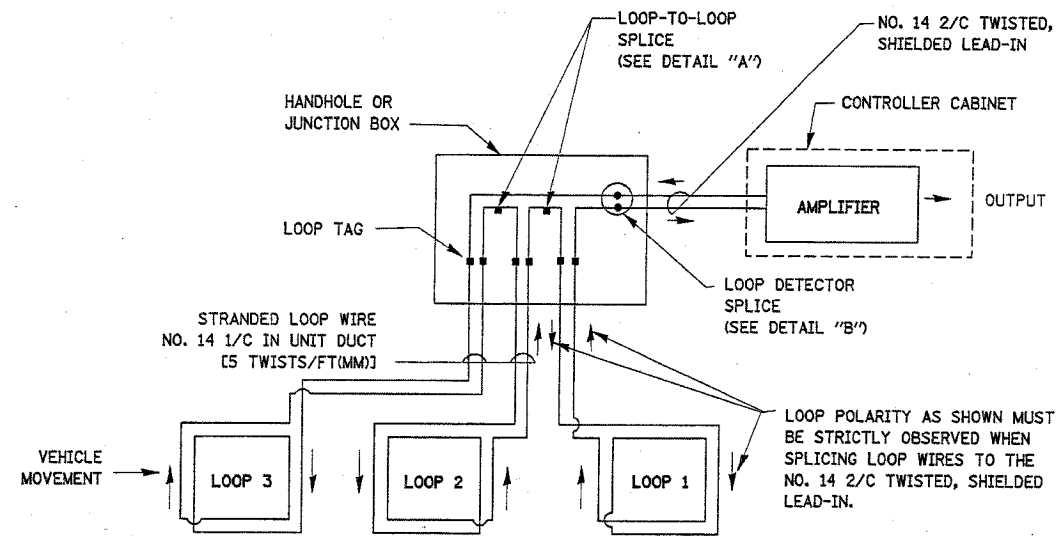
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REVISION DATE: 02/02/99

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	26
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

62672

LOOP DETECTOR NOTES

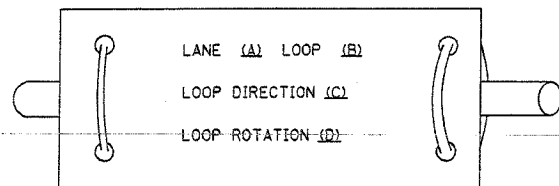
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PERFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PERFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



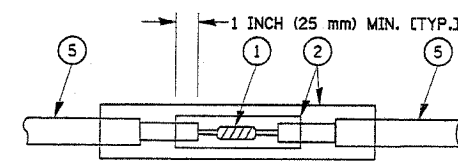
DETECTOR LOOP WIRING SCHEMATIC

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

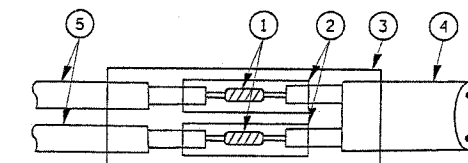
LOOP LEAD-IN CABLE TAG



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



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 04/12/2004

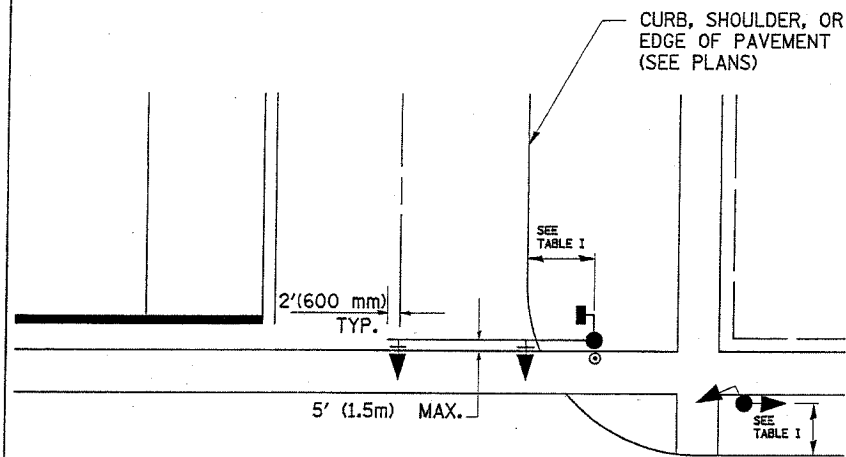
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

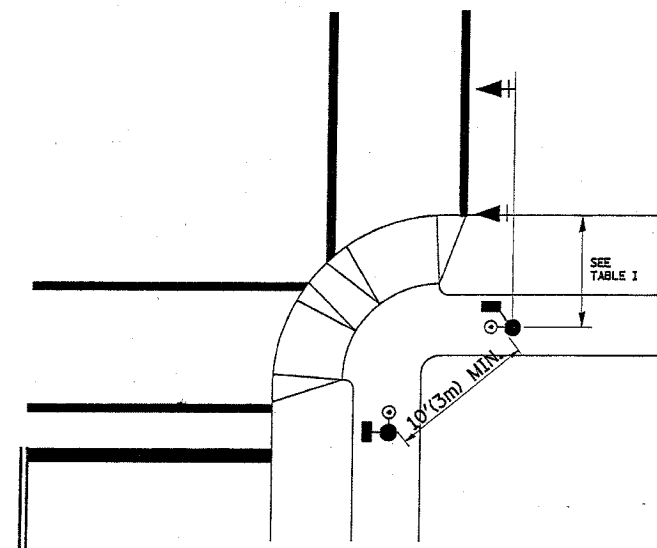
62672

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

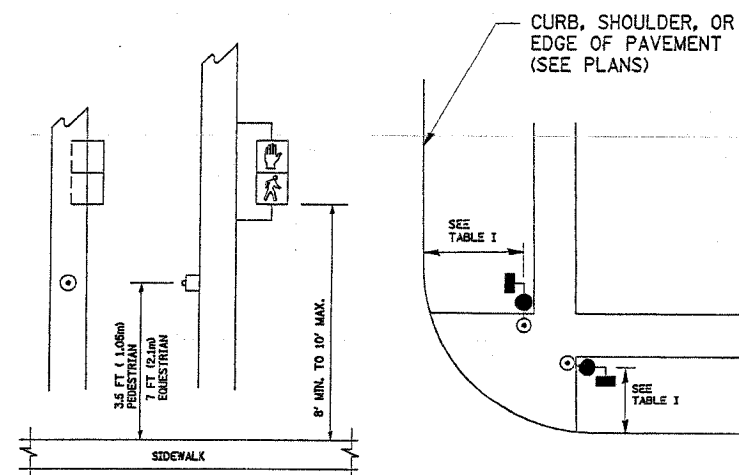


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

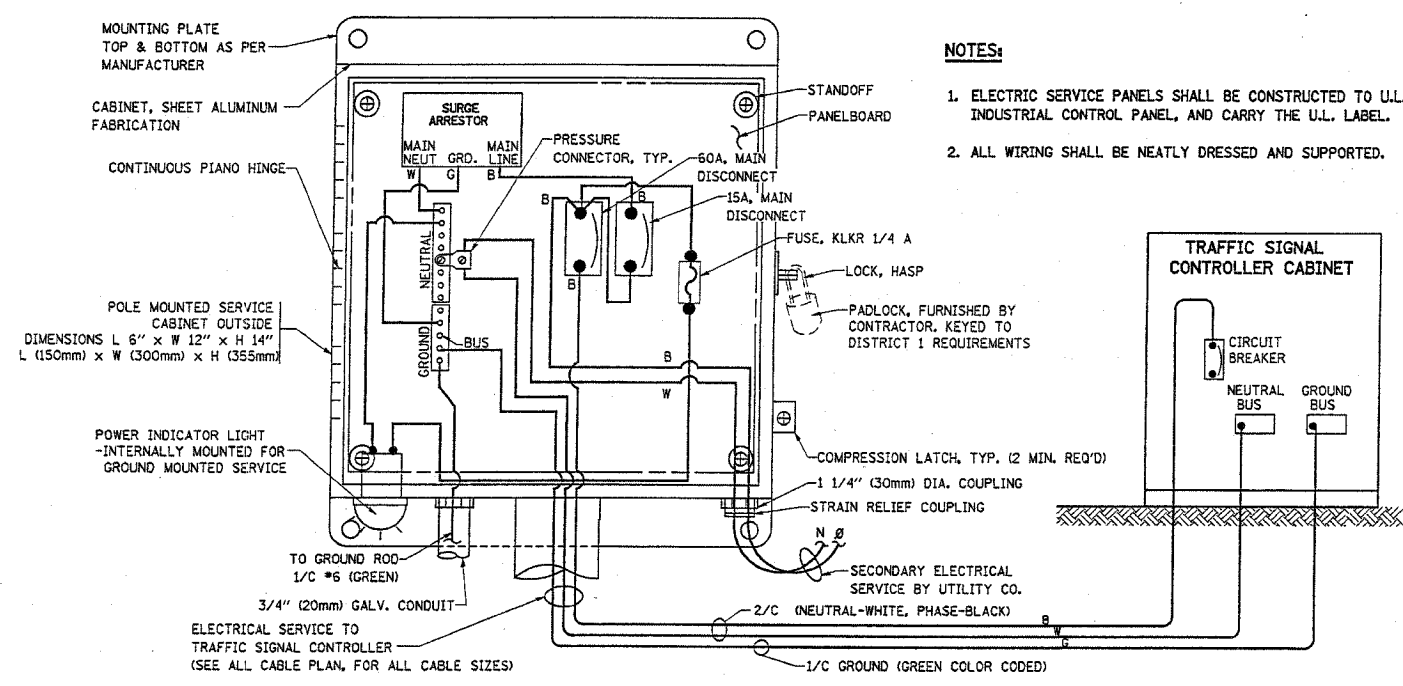
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 04/12/2004

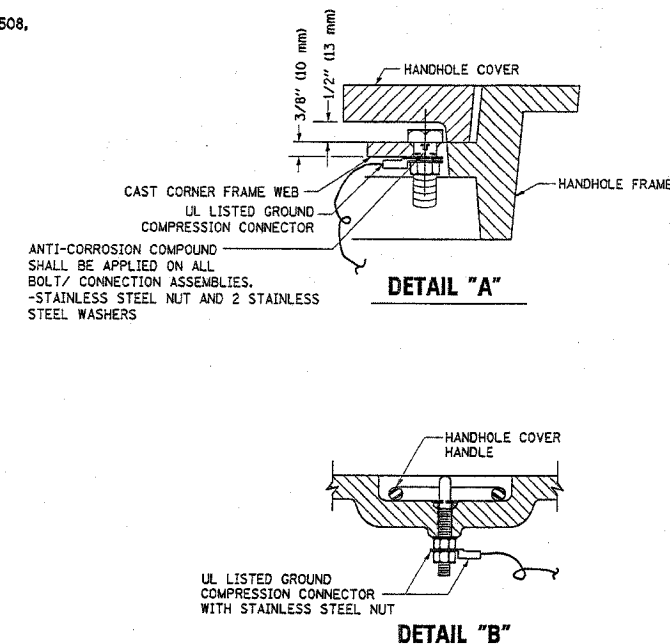
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

F.A.A. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	28
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

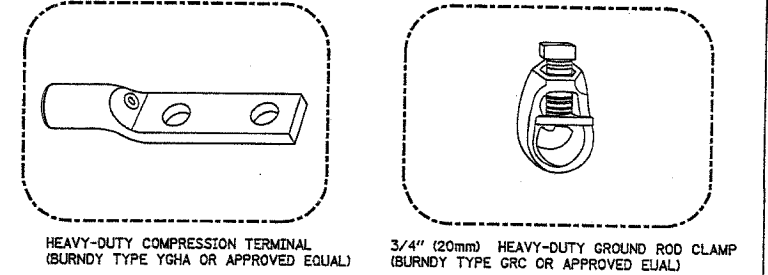
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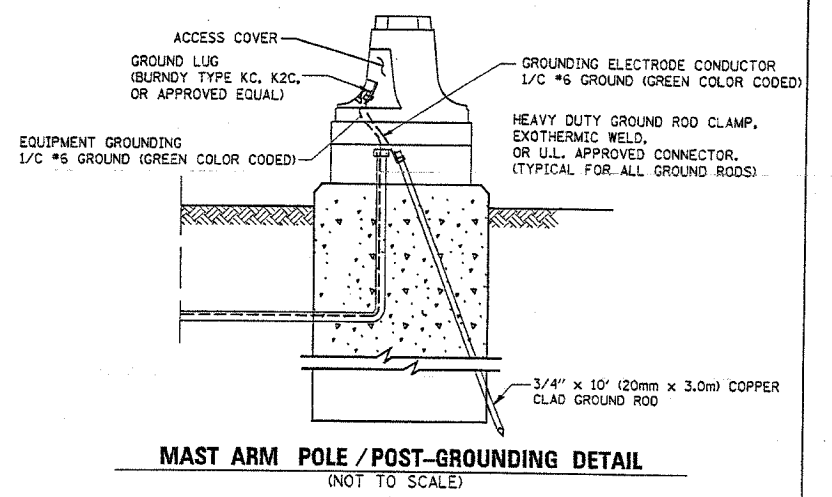
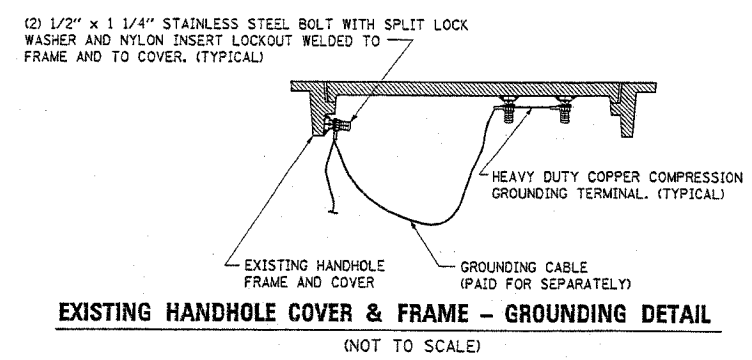
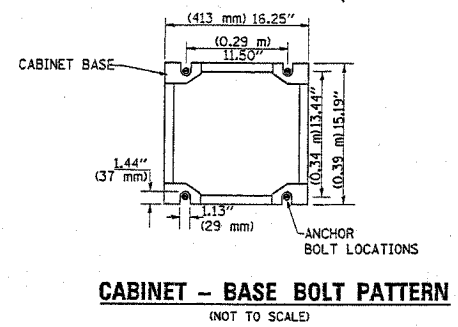
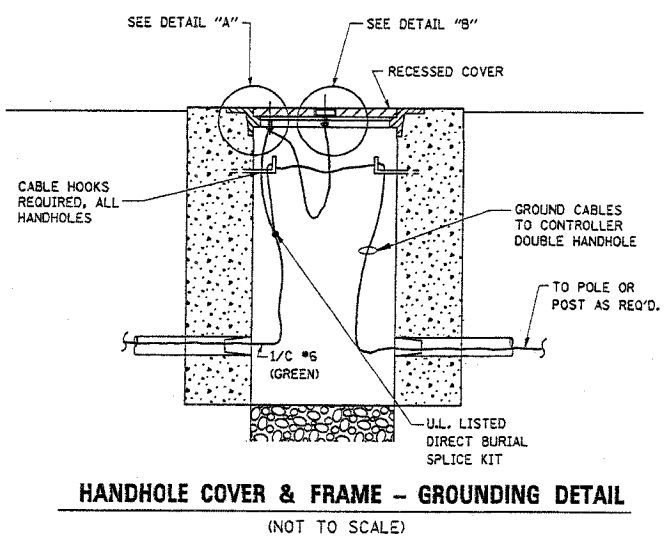
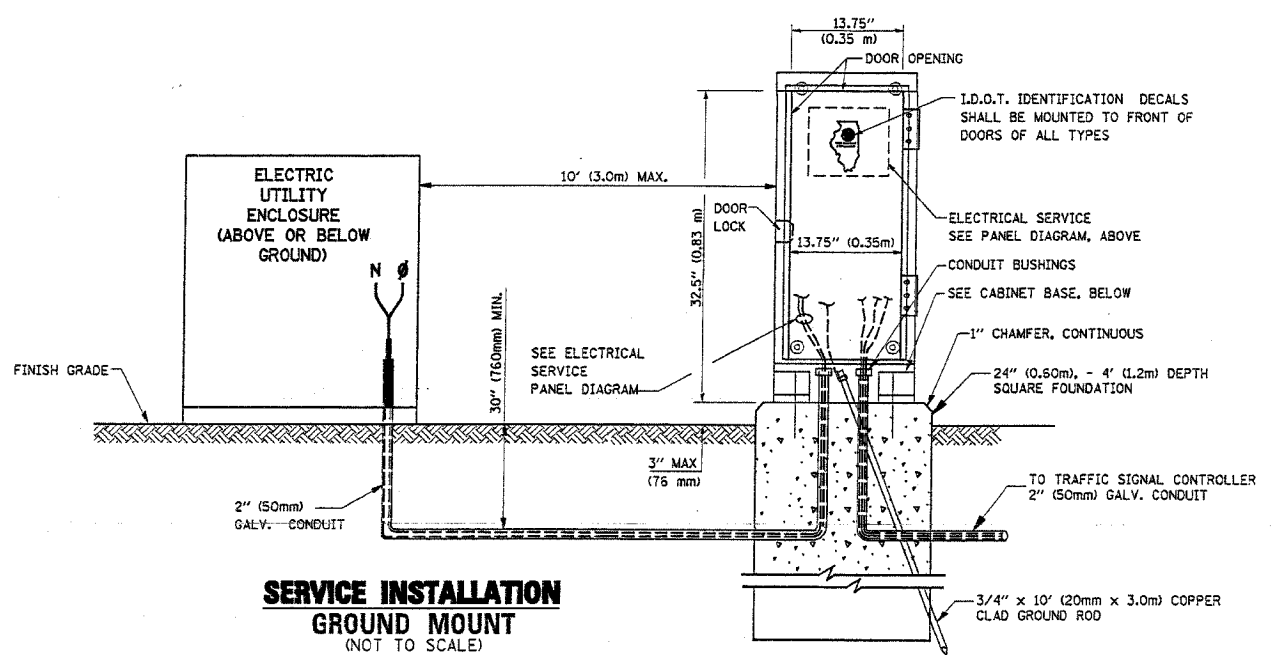
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



- NOTES:**
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 - THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 - ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 - THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

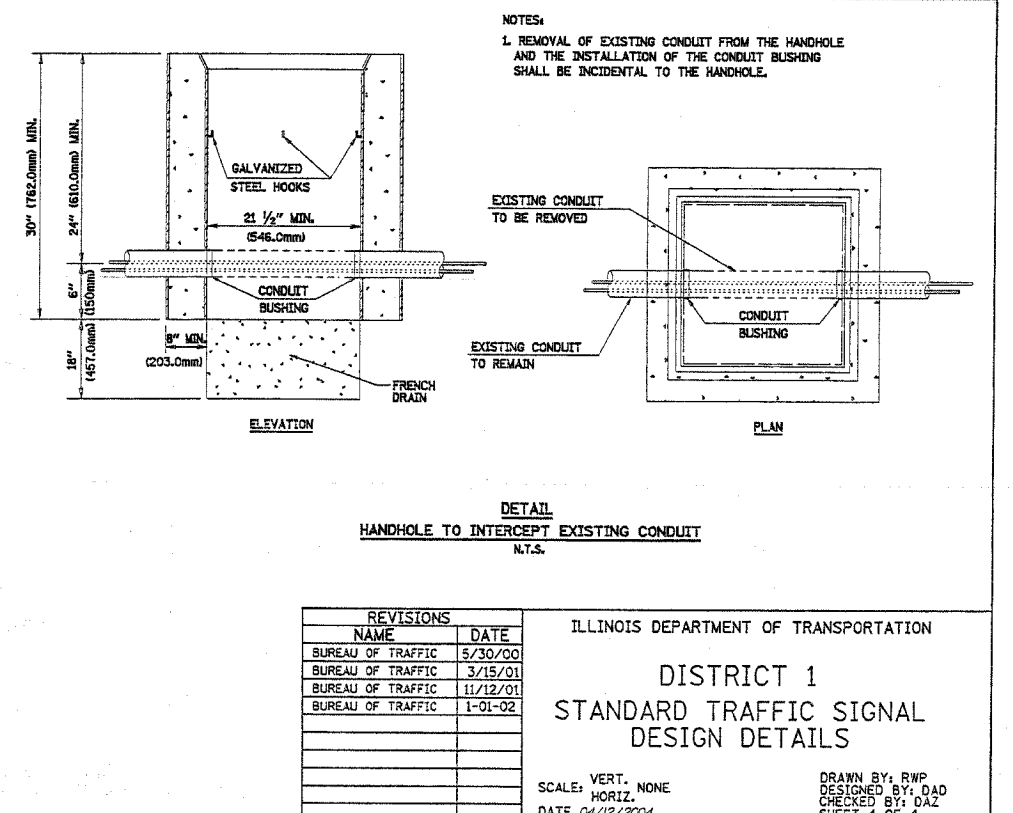
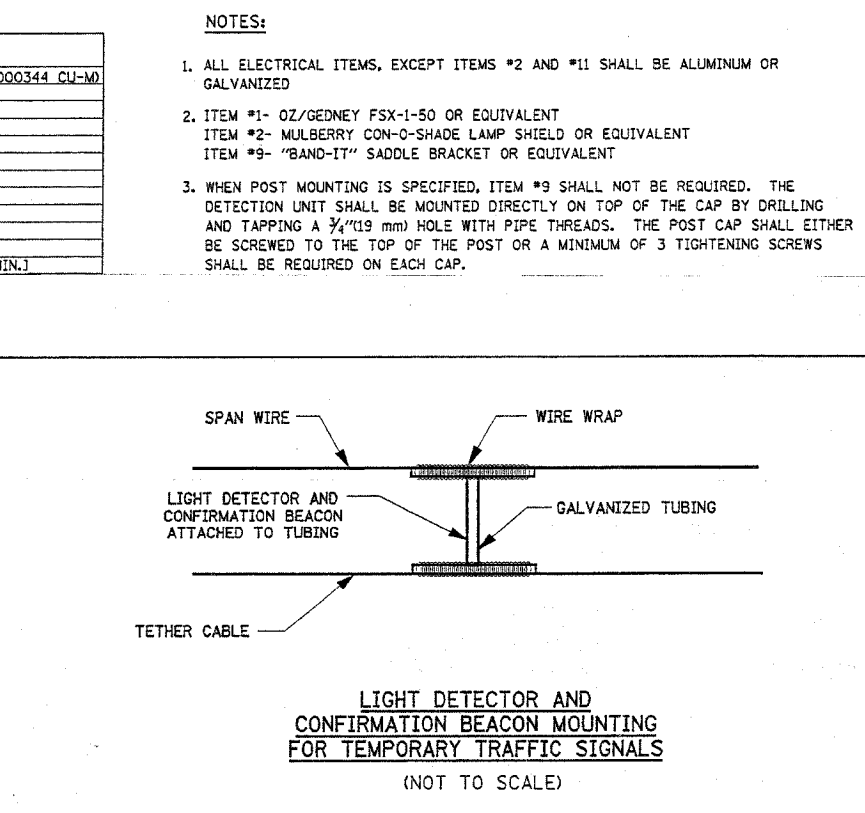
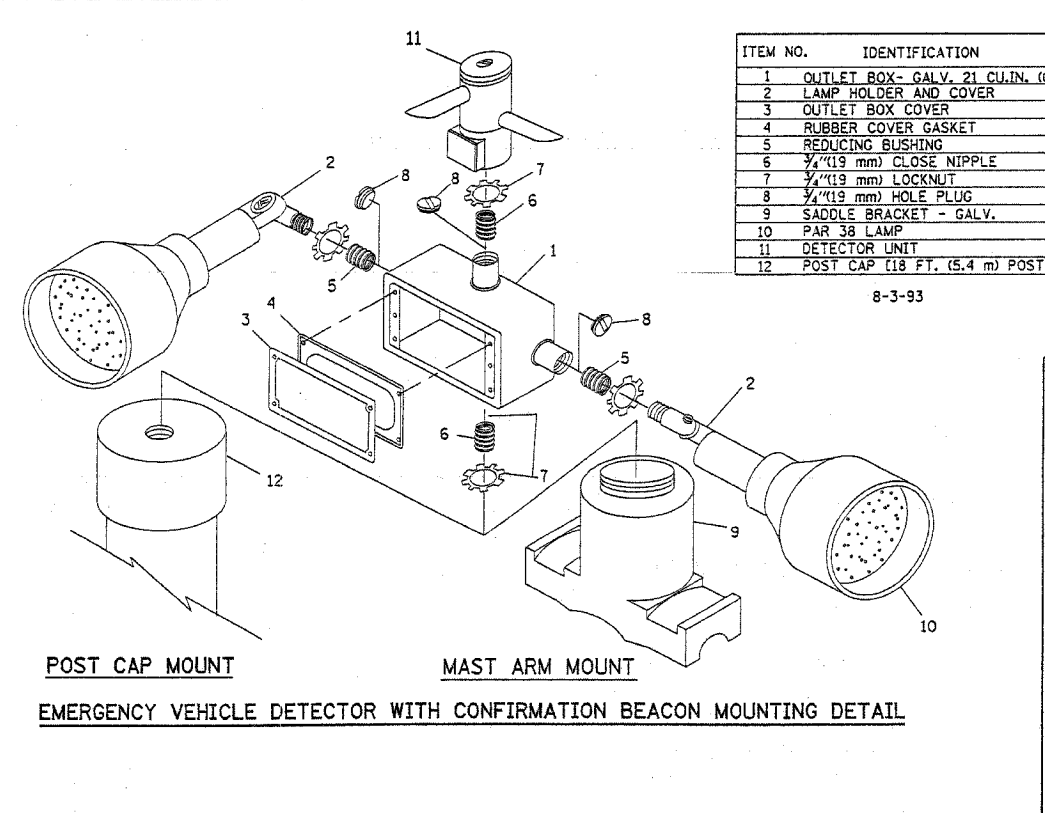
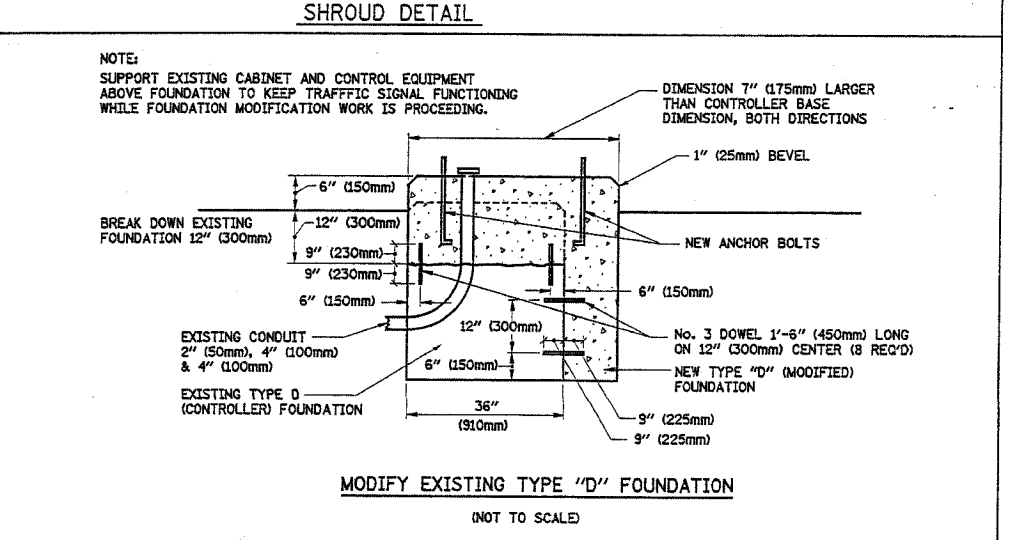
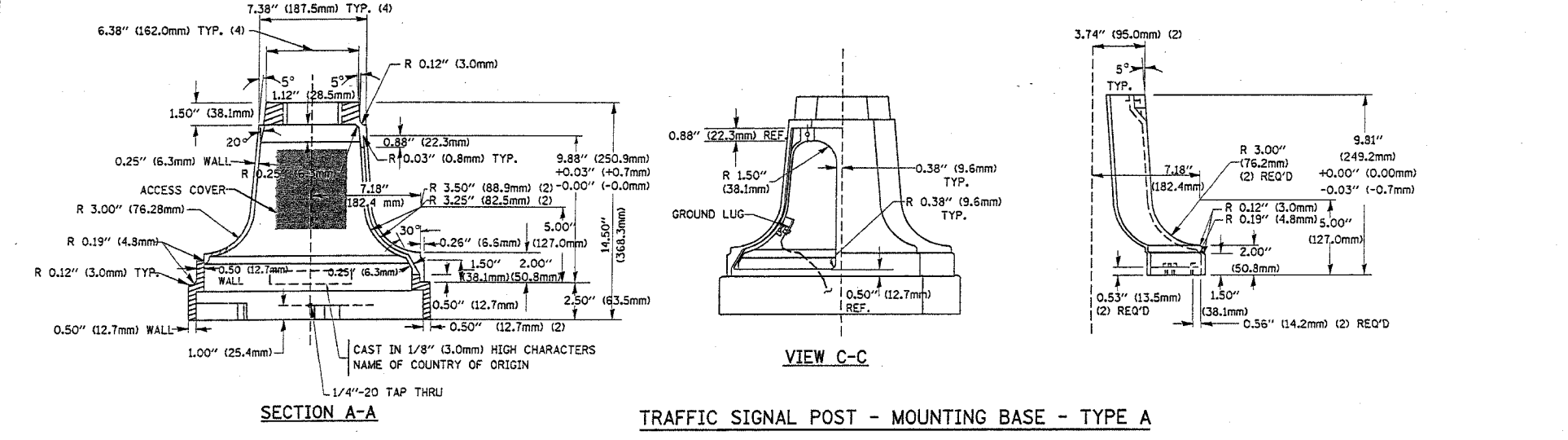
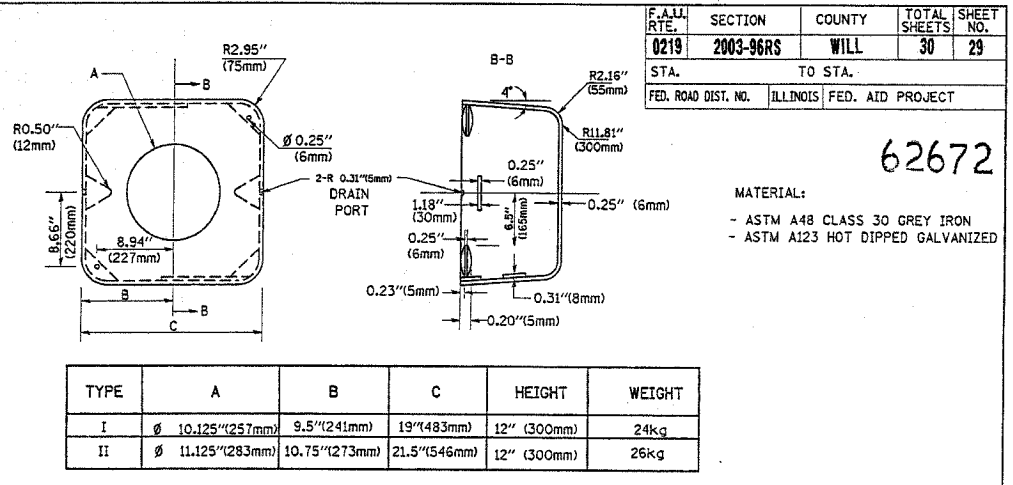
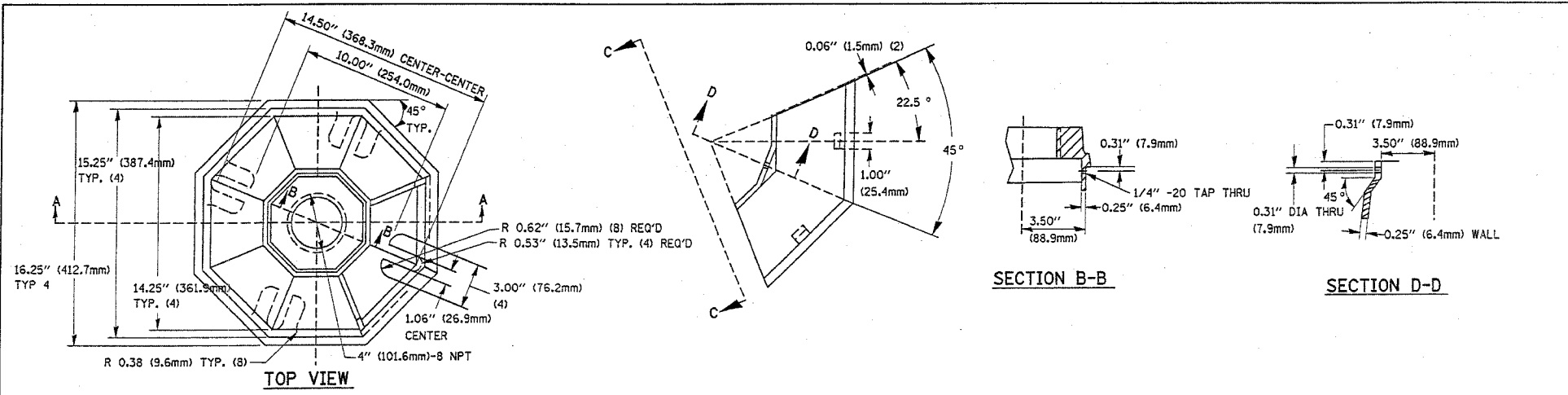


REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 04/12/2004

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

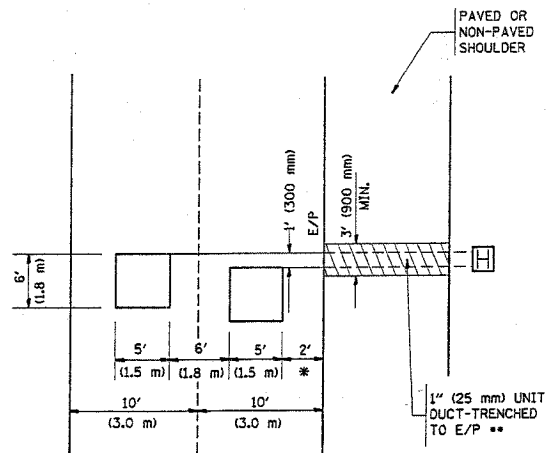


P.L.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0219	2003-96RS	WILL	30	30
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

62672

LOOPS NEXT TO SHOULDERS

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

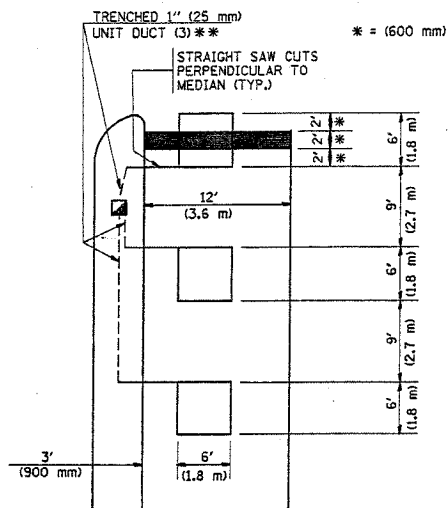


* = (600 mm)

** 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.

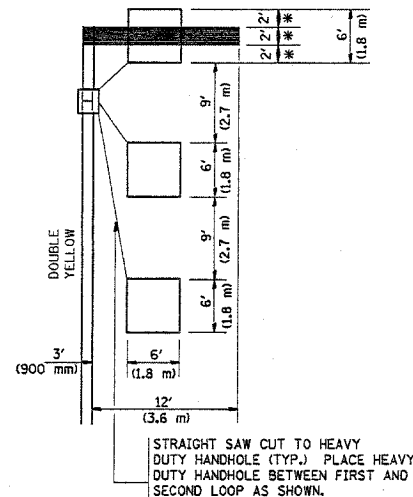


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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)

* = (600 mm)



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

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 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

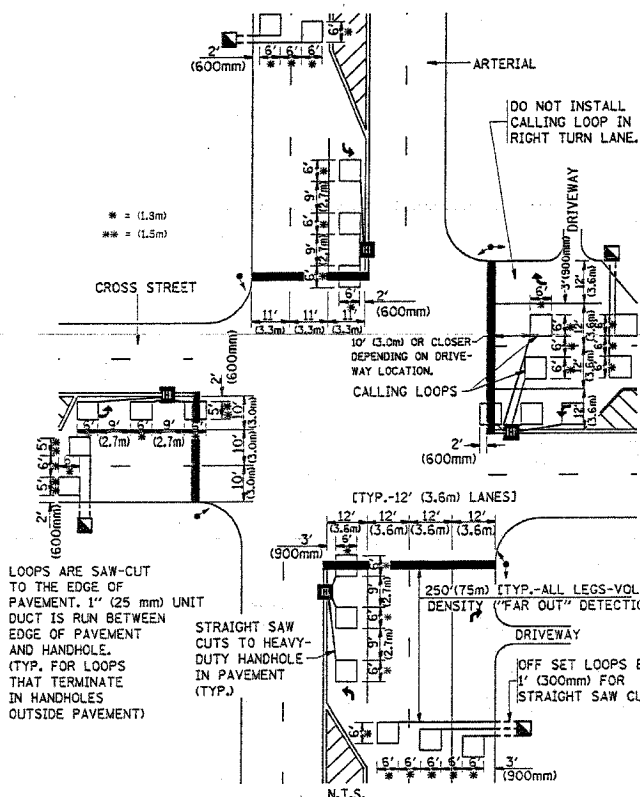
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING

SCALE: NONE
DATE 04/12/2004

DRAWN BY CADD
DESIGNED BY
CHECKED BY R.K.F.
TSOT

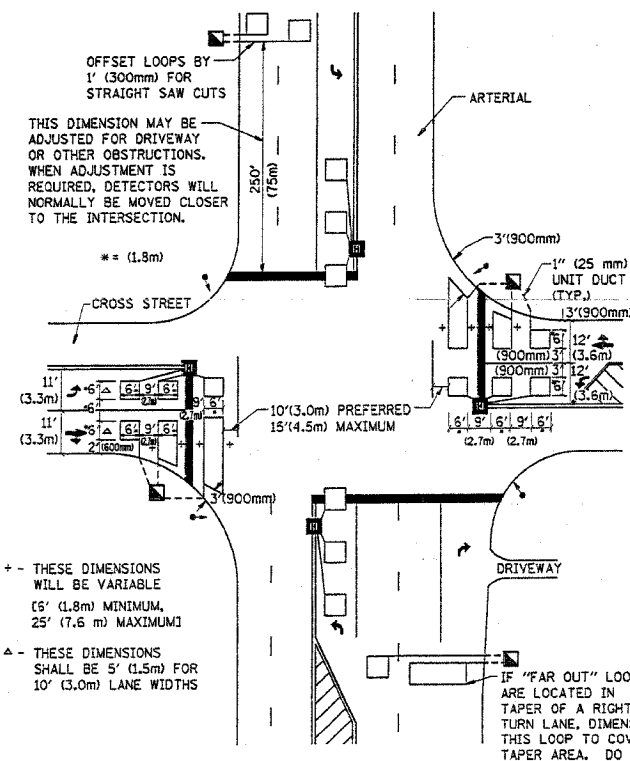
REVISION DATE:

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.