CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43 +1 44	1

6-15-07 Letting, Item 220

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

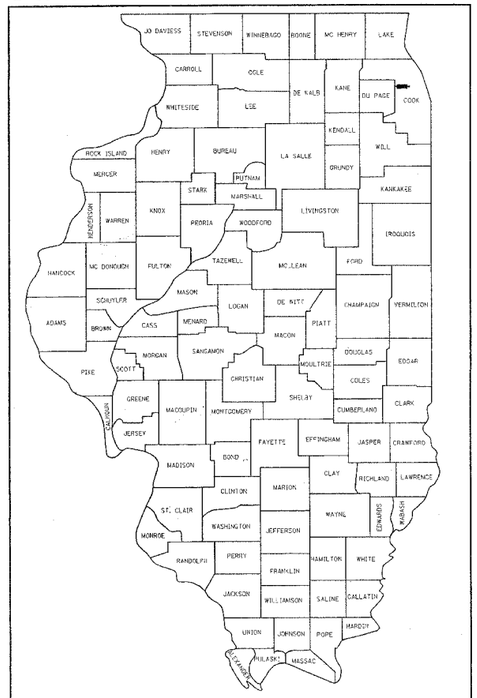
PROPOSED HIGHWAY PLANS

F.A.U. 1374: BELMONT AVENUE AT PLAINFIELD AVENUE SECTION: 0406 WRS WIDENING, RESURFACING & TRAFFIC SIGNAL INSTALLATION COOK COUNTY C-91-106-07

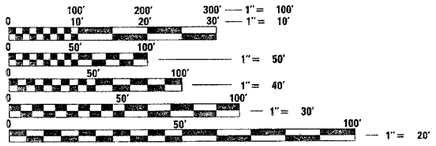
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE CITY OF CHICAGO AND THE VILLAGE OF RIVER GROVE

D-91-106-07



LOCATION OF SECTION INDICATED THUS:- ▬▬



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

CONTRACT NO. 60C03

R 12 E

T 40 N

LEYDEN TOWNSHIP

IMPROVEMENT BEGINS STA. 94+70

IMPROVEMENT ENDS STA. 104+75

TRAFFIC DATA
SPEED LIMIT: 35 MPH
2002 ADT: 21,100

GROSS & NET LENGTH OF IMPROVEMENT = 1,005 FEET (0.2 MILE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 10 20 07
Diane O'Keefe /BL
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11, 20 07
Eric E. Harm /BL
Interim ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 20 07
Milton R. Sees P.E. /BL
DIRECTOR OF HIGHWAY, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DISTRICT ONE-PLAN PREPARATION ENGINEER / LONG TRAN (847) 705-4240

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	42	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

STATE STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-04	CURB RAMPS FOR SIDEWALKS
442201-02	CLASS C AND D PATCHES
604086-01	FRAME AND GRATE TYPE 23
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701326-02	LANE CLOSURE, 2L , 2W, PAVEMENT WIDENING, FOR SPEEDS > 45MPH
701426-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS > 45MPH
701606-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
814001-01	CONCRETE HANDHOLES
814006-01	DOUBLE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
877011-02	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-05	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTION LOOPS

GENERAL NOTES:

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)

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

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

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

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AT (708) 597-9800 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

10 FEET (3 METER) 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 UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE 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).

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.

THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS PRIOR TO MILLING OR RESURFACING.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.

CONSTRUCTION OF A BANK AT THE NORTHEAST CORNER OF PLAINFIELD AVENUE AND BELMONT AVENUE IS ANTICIPATED IN THE YEAR 2007. THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION ACCESS IS MAINTAINED.

GENERAL NOTES CONTINUED:

THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM TO CONTINUOUSLY MONITOR FOR WORKER SAFETY AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SUPPLEMENTAL SPECIFICATIONS FOR DETAILS.

CHICAGO NOTES:

PERMITS FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR ALL WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS ' PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION.
THE LICENSED SEWER CONTRACTOR / SUBCONTRACTOR MUST SUBMIT TWO SETS OF PLANS APPROVED BY THE DEPARTMENT OF SEWERS FOR THE ISSUE OF THE SEWER PERMIT TO SUITE 410, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. INSPECTION WILL BE PROVIDED BY THE DEPARTMENT OF SEWERS.

IN CASE OF DAMAGE TO CITY OF CHICAGO SEWERS, PRIVATE AND PUBLIC DRAINS, SEWERS STRUCTURES AND / OR BENCH MONUMENTS, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE DEPARTMENT OF SEWERS AT (312) 747-7892 OR (312) 747-7893.

CLOSED LIDS SHALL BE PLACED ON ALL MANHOLES EXCEPT AT INTERSECTIONS. PERFORATED LIDS SHALL BE PLACED ON ALL CATCH BASINS.

BENCH MONUMENT LOCATIONS WITHIN THE LIMITS OF THE IMPROVEMENT CAN BE OBTAINED FROM THE DEPARTMENT OF SEWERS AT SUITE 400, 333 SOUTH STATE STREET, CHICAGO, IL 60604-3971. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPLACING ANY BENCH MONUMENT DAMAGED OR DESTROYED DURING CONSTRUCTION.

SIDEWALK ACCESSIBILITY RAMPS SHALL NOT BE CONSTRUCTED DIRECTLY OVER EXISTING OR PROPOSED DRAINAGE STRUCTURES. ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND GRATES OR LIDS ON SEWER STRUCTURES SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES AND GRATES OR LIDS. OLD FRAMES AND GRATES OR LIDS SHALL BE DELIVERED TO THE DEPARTMENT OF SEWERS AT 39TH STREET AND ASHLAND AVE.

CITY OF CHICAGO WATER VALVE VAULTS AND SEWER STRUCTURES SHALL NOT BE CLOSED, COVERED, OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION WITHOUT WRITTEN PERMISSION FROM THE CITY OF CHICAGO DEPARTMENT OF WATER AND/OR DEPARTMENT OF SEWERS.

CURB AND GUTTER CONSTRUCTION SHALL PROVIDE A MINIMUM CURB HEIGHT OF 3 IN. (75 MM).

BACKFILL MATERIAL UNDER SIDEWALKS SHALL BE FA-2 (2"). PAVEMENT REPLACEMENT AROUND FRAMES AND GRATES OR LIDS WHERE DRAINAGE, WATER MAIN, OR ELECTRICAL STRUCTURES ARE ADJUSTED OR RECONSTRUCTED SHALL BE WITH CLASS SI CONCRETE.

ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWERS STANDARDS.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BELMONT AVENUE

INDEX OF SHEETS STATE STANDARDS AND GENERAL NOTES

SCALE: VERT. HORIZ.
DATE 4/19/2007
DRAWN BY AA
CHECKED BY

PLOT DATE = 4/19/2007
FILE NAME = c:\projects\pi10507\design_aa.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = abreush

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	3
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

D-91-106-07

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000 ROADWAY	Y031-IF SIGNAL				
*	XX005934	REOPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1		1				
	20101100	TREE TRUNK PROTECTION	EACH	9	9					
	20101200	TREE ROOT PRUNING	EACH	4	4					
	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	2	2					
	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	2	2					
	20200100	EARTH EXCAVATION	CU YD	191	191					
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	91	91					
	20800150	TRENCH BACKFILL	CU YD	37.5	37.5					
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	795	795					
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	10	10					
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	10	10					
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	10	10					
	25200110	SODDING, SALT TOLERANT	SQ YD	795	795					
	25200200	SUPPLEMENTAL WATERING	UNIT	8	8					
	28000400	PERIMETER EROSION BARRIER	FOOT	1150	1150					
	28000500	INLET AND PIPE PROTECTION	EACH	2	2					
	31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	231	231					
	35400400	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 9"	SQ YD	231	231					
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	5	5					
	40600300	AGGREGATE (PRIME COAT)	TON	25	25					
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	4	4					
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	419	419					
	40600895	CONSTRUCTING TEST STRIP	EACH	1	1					
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	114	114					
	40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	28	28					
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	536	536					
	42001300	PROTECTIVE COAT	SQ YD	1124	1124					

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000 ROADWAY	Y031-IF SIGNAL				
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	44	44					
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	294	294					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2658	2658					
42400800	DETECTABLE WARNINGS	SQ FT	36	36					
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	5964	5964					
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	388	388					
44000300	CURB REMOVAL	FOOT	152	152					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	934	934					
44000600	SIDEWALK REMOVAL	SQ FT	2384	2384					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	189	189					
44002222	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 5 1/2"	SQ YD	91	91					
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	57	57					
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	34	34					
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	4020	4020					
55039700	STORM SEWERS TO BE CLEANED	FOOT	500	500					
550A0030	STORM SEWERS, CLASS A, TYPE 1 8"	FOOT	46	46					
550A0040	STORM SEWERS, CLASS A, TYPE 1 10"	FOOT	70	70					
55100400	STORM SEWER REMOVAL 10"	FOOT	52	52					
60202505	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO)	EACH	2	2					
60235200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID (CITY OF CHICAGO)	EACH	1	1					
60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	1	1					
60260100	INLETS TO BE ADJUSTED	EACH	2	2					
60261530	INLETS TO BE ADJUSTED WITH NEW TYPE 23 FRAME AND GRATE	EACH	2	2					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	5					
60500050	REMOVING CATCH BASINS	EACH	2	2					

* SPECIALTY ITEM

~~** NON-PARTICIPATING ITEM~~

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
BELMONT AVENUE

PLOT DATE: 4/19/2007

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	4
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

D-91-106-07

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 1000 ROADWAY	Y031-1F SIGNAL
	60600605	CONCRETE CURB, TYPE B	FOOT	135	135	
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1011	1011	
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	7	7	
*	66900450	SPECIAL WASTE PLANS AND REPORT	L SUM	1	1	
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	
*	66900665	TCL SOIL ANALYSIS	EACH	1	1	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
	67100100	MOBILIZATION	L SUM	1	1	
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	4	4	
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2	
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	846	846	
	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	135.5	135.5	
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3107	3107	
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	438	438	
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	41	41	
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	76	76	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	94	94	
*	72000100	SIGN PANEL - TYPE 1	SQ FT	34.5		34.5
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	135.5	135.5	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3107	3107	
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	438	438	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	41	41	

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE: 1000 ROADWAY	Y031-1F SIGNAL
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	76	76	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	110	110	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	60	60	
*	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1065		1065
*	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	6		6
*	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	25		25
*	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10		10
*	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	466		466
*	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	14		14
*	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	223		223
*	81400100	HANDHOLE	EACH	7		7
*	81400200	HEAVY-DUTY HANDHOLE	EACH	2		2
*	81400300	DOUBLE HANDHOLE	EACH	1		1
*	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1210		1210
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1
*	85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1
*	86400100	TRANSCEIVER - FIBER OPTIC	EACH	1		1
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	496		496
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	910		910
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1280		1280
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	592		592
*	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1557		1557
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1		1

* SPECIALTY ITEM

** NON-PARTICIPATING ITEM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

BELMONT AVENUE

PLOT DATE: 4/19/2007

4/19/2007

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	5
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

D-91-106-07

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000 ROADWAY	Y031-1F SIGNAL				
* 87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1		1				
* 87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1				
* 87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1		1				
* 87702870	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1		1				
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	4		4				
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	1		1				
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30		30				
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15		15				
* 87900200	DRILL EXISTING HANDHOLE	EACH	1		1				
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6		6				
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		2				
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2		2				
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2		2				
* 88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2		2				
* 88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2		2				
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8		8				
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	6		6				
* 88600100	DETECTOR LOOP, TYPE I	FOOT	623	66	557				
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		4				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4					
* X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	793		793				
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1					
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	4	4					
X6040220	FRAMES AND LIDS, TYPE 1, OPEN LID (CITY OF CHICAGO)	EACH	2	2					

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000 ROADWAY	Y031-1F SIGNAL				
* X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	1		1				
* X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1		1				
* X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	793		793				
* X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	842		842				
* XX003418	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 4, 2/C	FOOT	398		398				
* XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1		1				
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	23	23					

* SPECIALTY ITEM

~~** NON-PARTICIPATING ITEM~~

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

BELMONT AVENUE

PLOT DATE: 4/19/2007

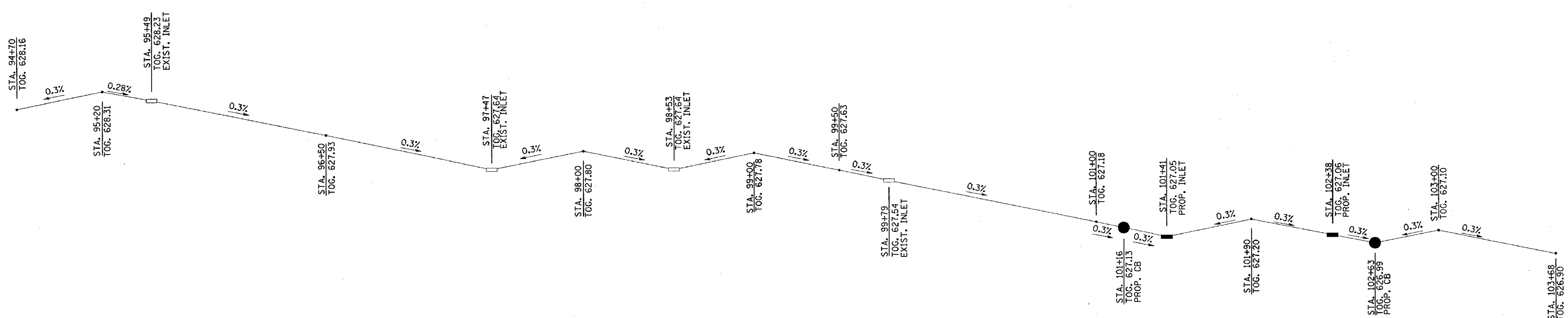
4/19/2007

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	6
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EARTHWORK						
1	2	3	4	5	6	7
BELMONT AVE & PLAINFIELD AVE.	EARTH EXCAVATION (CU YD)	UNSUITABLE MATERIAL (CU YD)	EMBANKMENT (CU YD)	ADJUSTMENT FOR SHRINKAGE (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	TOP SOIL FURNISH AND PLACE (SQ YD)
BELMONT AVE. (STA. 95+00 TO STA. 100+00)	22	41	12	19	+7	
BELMONT AVE. (STA. 100+00 TO STA. 103+68)	169	50	0	144	+144	
TOTAL	191	91	12	163	+151	795

COLUMN 1: LOCATION FROM PLANS
COLUMN 2: CUT QUANTITIES FROM CROSS SECTIONS, WHICH DOES NOT INCLUDE UNSUITABLE MATERIAL
COLUMN 3: CUT MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT (TOP SOIL EXCAVATED AT 4" AVERAGE DEPTH)
COLUMN 4: QUANTITIES FROM CROSS SECTIONS (FILL)
COLUMN 5: EARTH EXCAVATION THAT IS TO BE USED AS FILL MATERIAL IN THE EMBANKMENT, SHRINKAGE FACTOR WAS DETERMINED TO BE 15%
COLUMN 6: COLUMN 5 - COLUMN 4, POSITIVE QUANTITY= EXTRA EXCAVATION, NEGETIVE QUANTITY= FURNISHED EXCAVATION NEEDED
COLUMN 7: TOPSOIL FURNISH AND PLACE= AREA OF SEEDING AND SODDING



EB EOP WARPING

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BELMONT AVENUE

SCHEDULE OF QUANTITIES & DRAINAGE DETAILS

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 4/3/2007
FILE NAME = c:\projects\p118507\design.ee.dgn
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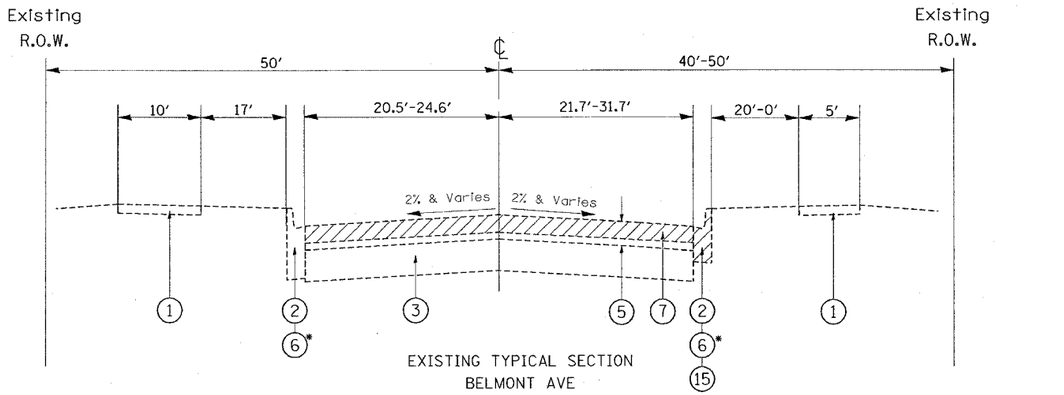
USER NAME = ebreuh

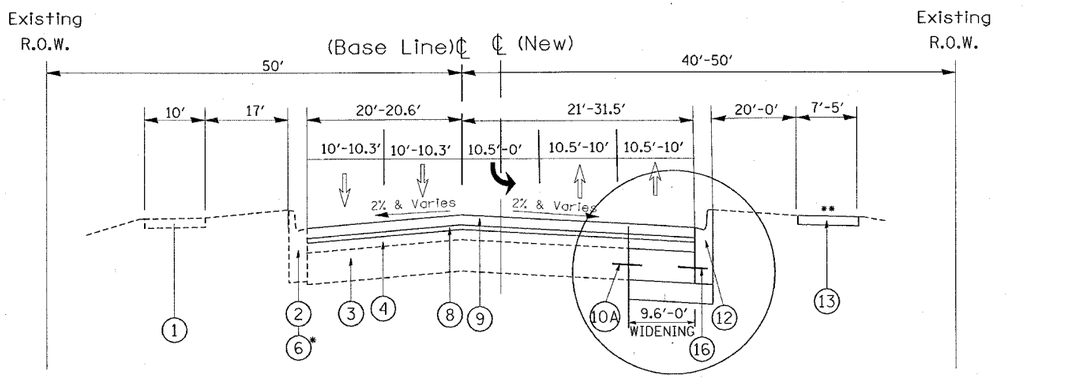
CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	7
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION
BELMONT AVE
STA. 94+70 TO STA. 104+75
LOOKING EAST

*NORTH SIDE STA. 94+70 TO STA. 98+30
SOUTH SIDE STA. 94+70 TO STA. 97+22



PROPOSED TYPICAL SECTION
BELMONT AVE
STA. 94+70 TO STA. 104+75
LOOKING EAST

DETAIL 'A'

**PROPOSED P.C.C. SIDEWALK ON SOUTH SIDE
FROM STA. 94+70 TO STA. 97+22.5

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
PAVEMENT RESURFACING		
LEVELING BINDER (MACHINE METHOD), N70 (IL-9.5 MM)	PG 64-22 *	4.0% @ 70 GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5MM)	PG 64-22	4.0% @ 70 GYR
PATCHING		
CLASS D PATCHES (BINDER IL-19MM)	PG 64-22 *	4.0% @ 70 GYR
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (BINDER IL-19MM)	PG 64-22 *	4.0% @ 70 GYR

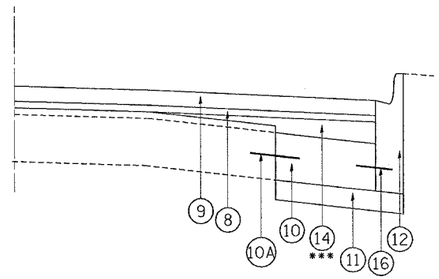
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIX QUANTITIES IS 112 LBS/SQYD/IN

*WHEN RAP EXCEEDS 20% THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

LEGEND

1. EXISTING P.C. CONCRETE SIDEWALK
2. EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
3. EXISTING PC CONC. BASE COURSE ±8"
4. EXISTING HOT-MIX ASPHALT OVERLAY AFTER MILLING
5. EXISTING HOT-MIX ASPHALT OVERLAY ±5 1/2"
6. EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.24
7. PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
8. PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 1"
9. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
10. PROPOSED PC CONC. BASE COURSE WIDENING 9"
10A. PROPOSED NO. 8 EPOXY COATED TIE BAR, DEFORMED, (DRILL AND GROUT), 24" LONG AT 24" SPACING. (INCLUDED IN THE COST OF THE PAVEMENT WIDENING)
11. PROPOSED SUB-BASE GRANULAR MATERIAL, TYP B 4"
12. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B 6.12
13. PROPOSED PC CONCRETE SIDEWALK, 5"
14. PROPOSED LEVELING BINDER (MACHINE METHOD) N70
15. PROPOSED CURB & GUTTER REMOVAL (SAW CUT SHALL BE INCLUDED IN THE PRICE OF REMOVAL)
16. PROPOSED NO. 6 EPOXY COATED TIE BAR, DEFORMED, (DRILL AND GROUT), 24" LONG AT 24" SPACING. (INCLUDED IN THE COST OF COMBINATION CURB AND GUTTER)

DETAIL A



RESURFACING AT PROPOSED WIDENING
(STA. 101+00 TO STA. 103+25)

***USE LEVELING BINDER FOR CROSS SLOPE CORRECTION

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BELMONT AVENUE
AT PLAINFIELD AVENUE
TYPICAL CROSS SECTIONS

SCALE: N.T.S. DRAWN BY
DATE CHECKED BY

PLOT DATE = 4/10/2007
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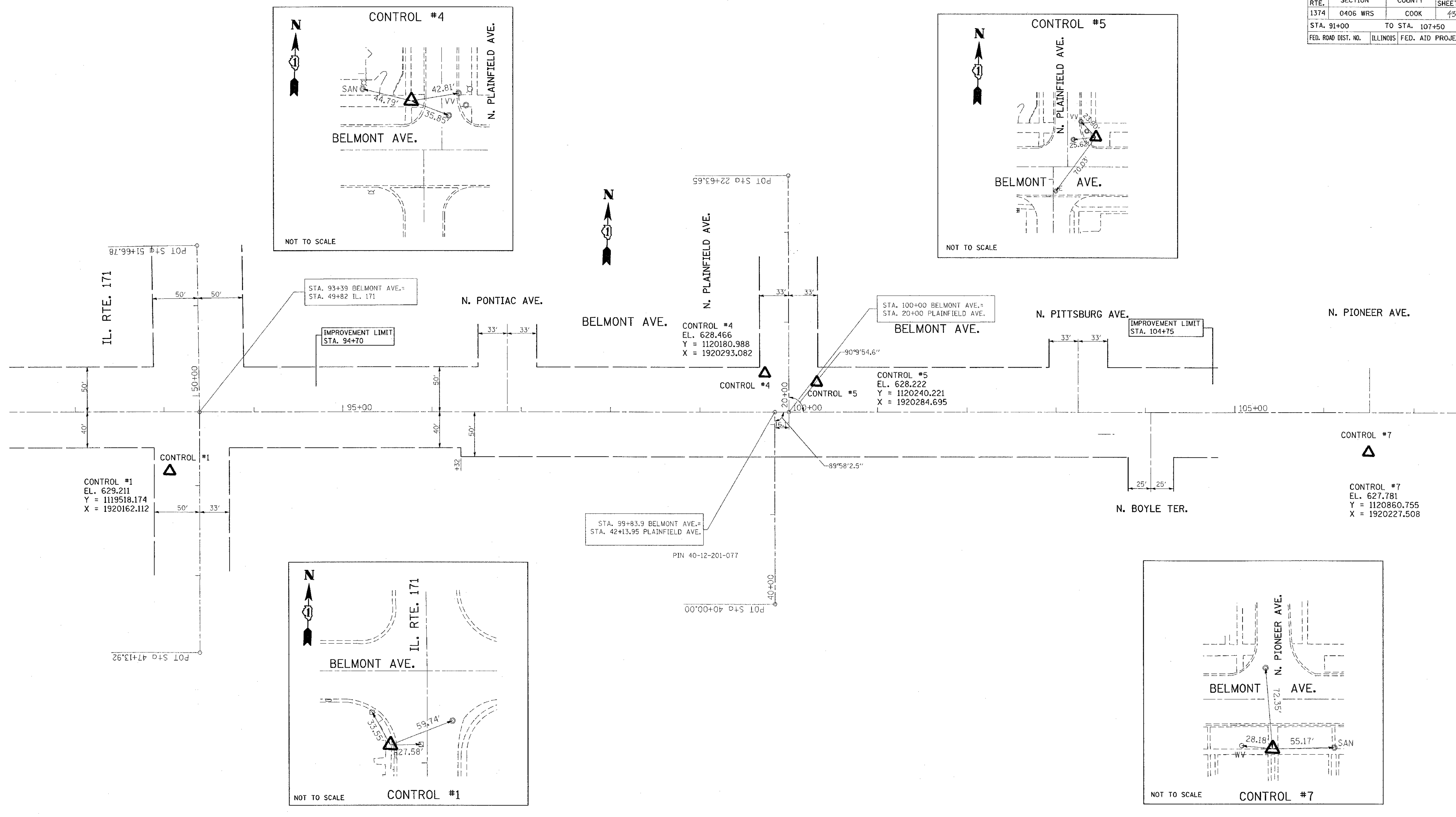
USER NAME = abr-mash

*REF-pp03

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	8
STA. 91+00	TO STA. 107+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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USER NAME = liszekrf

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

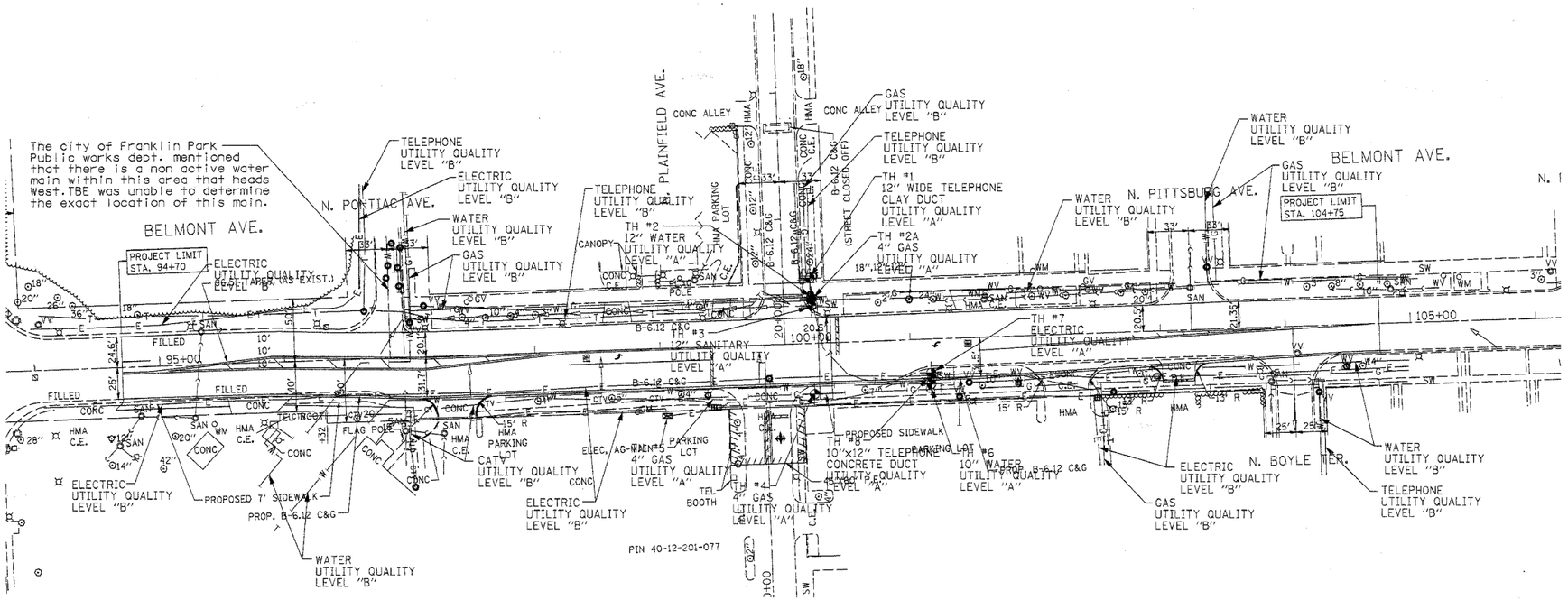
ALIGNMENT & TIES PLAN
BELMONT AVE. AT
PLAINFIELD AVE.

SCALE: VERT. HORIZ. 1"=50'
DATE 3/30/2007

DRAWN BY
CHECKED BY

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406WRS	Cook	43	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



N

FOR INFORMATION ONLY

The SBC locations depicted have been obtained through the application of geophysical methods to determine the existence and approximate horizontal position of these facilities. However, SBC will not provide TBE Group, Inc. with utility records to help verify the locations of their existing underground facilities. Therefore, TBE is unable to verify the completeness of the SBC locations depicted in accordance with the CI/ASCE Standard 38-02.

TBE GROUP, INC.
CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL • PLANNING • UTILITY ENGINEERING/LOCATING

IL09500268, 275
TBE SUE PAGE NO: 1 of 1
Checked by: KLC

Utility Quality Level "A" : Test Holes
Utility Quality Level "B" : Designating

◆	TEST HOLE
CTV	CABLE TV
T	TELEPHONE
W	WATER
G	GAS
E	ELECTRIC

Utilities shown in color on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards. All other information shown has been provided to TBE Group, Inc by others. TBE's SUE field investigation was performed during the period 2-01-07 through 2-23-07. Test holes were performed during the period 4-18-07 through 4-23-07. Changes to utilities after these dates may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUE Investigation

Belmont Avenue at Plainfield Avenue
River Grove, Cook Co. IL
Section No. 0406WRS
Contract No. 60C03

DRAWN BY : KLC
SCALE : 1" = 50'

Rev.

CONTRACT. NO.	SHEET NO.
60C03	1

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	STATION	OFFSET	TOP OF UTILITY ELEVATION	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS
1	12" Wide BT	1920303.68	1120229.32	100+21.396	52.32 LT	623.68'	4.31'	627.99'	UTILITY QUALITY LEVEL "A"
2	12" W	1920287.79	1120230.38	100+21.938	36.41 LT	623.64'	4.45'	628.09'	UTILITY QUALITY LEVEL "A"
2A	4" G	1920286.52	1120230.49	100+22.002	35.13 LT	624.98'	3.10'	628.08'	UTILITY QUALITY LEVEL "A"
3	12" SAN	1920281.67	1120230.50	100+21.861	30.29 LT	617.57'	10.56'	628.13'	UTILITY QUALITY LEVEL "A"
4	4" G	1920210.89	1120233.34	100+22.404	40.55 RT	625.42'	2.84'	628.26'	UTILITY QUALITY LEVEL "A"
5	4" G	1920208.33	1120152.85	99+41.880	40.50 RT	625.15'	3.08'	628.23'	UTILITY QUALITY LEVEL "A"
6	10" W	1920218.46	1120326.59	101+15.854	35.99 RT	623.28'	4.88'	628.16'	UTILITY QUALITY LEVEL "A"
7	See Notes E	1920227.32	1120326.48	101+16.031	27.14 RT	622.78'	4.74'	627.52'	UTILITY QUALITY LEVEL "A"
8	10"x12" BT	1920223.25	1120327.05	101+16.466	31.23 RT	625.14'	2.60'	627.74'	UTILITY QUALITY LEVEL "A"

VERIFIED UTILITY INFORMATION

TEST HOLE #	SIZE & TYPE	NORTHING	EASTING	STATION	OFFSET	TOP OF UTILITY ELEVATION	EXISTING CUT	REFERENCE GROUND ELEVATION	COMMENTS

NOTES

Test Hole #7 - TBE found (2) 4" steel, rubber coated pipes. Within test hole a third line was found in between the (2) 4" pipes that appears to be larger, but was unable to measured due to configuration of the pipes. It was also coated in unknown material.

ALL INFORMATION SHOWN WAS OBTAINED FROM A LOCATION SURVEY. OFFSETS AND STATIONS ARE IN RELATION TO THE BASELINE OF SURVEY.

FOR INFORMATION ONLY

Illinois Department of Transportation

Belmont Avenue at Plainfield Avenue
River Grove, Cook Co. IL
Section No. 0406WRS
Contract No. 60C03
TBE Project No.: IL09500268, 275

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TBE GROUP, INC.
CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL • PLANNING • UTILITY ENGINEERING/LOCATING

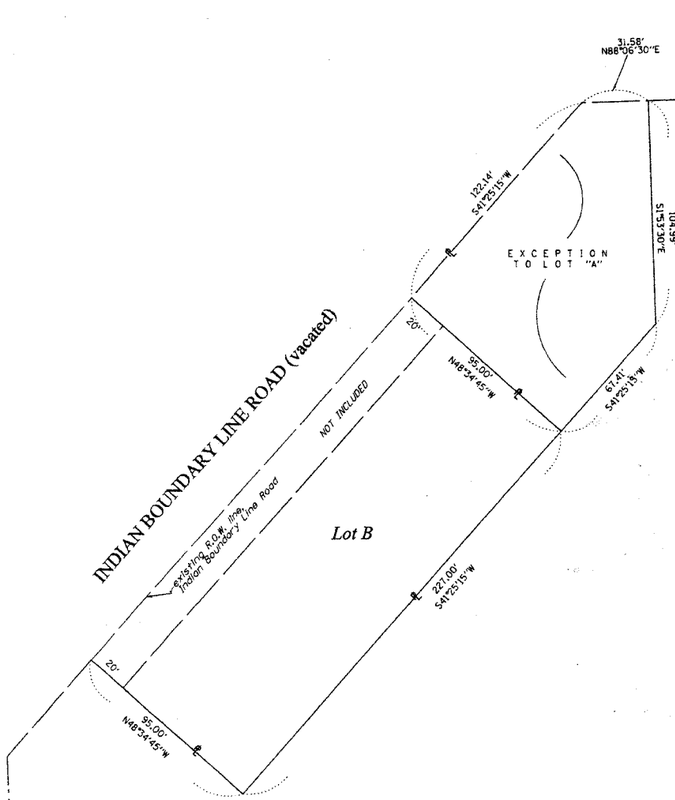
VERIFIED UTILITY LOCATIONS

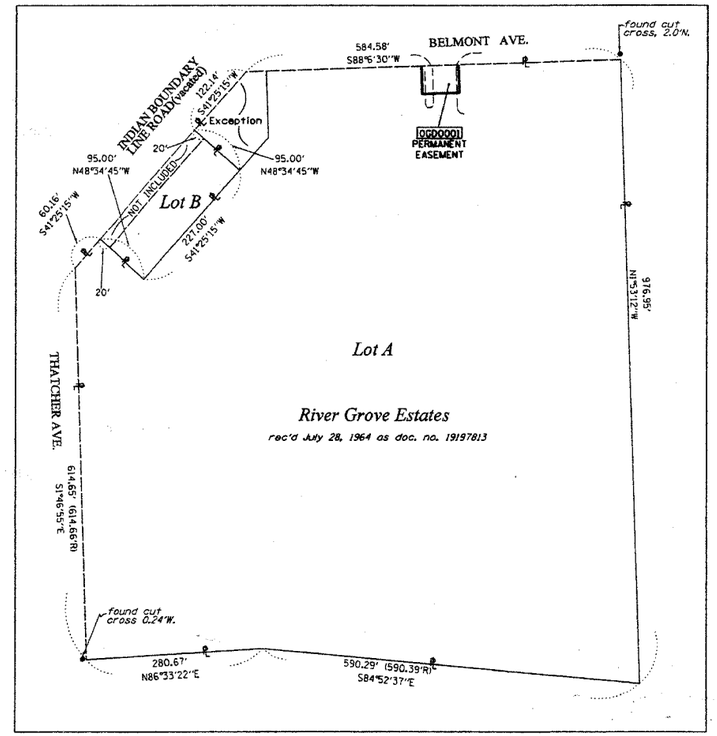
PART OF THE NE 1/4, SEC. 26, T40N, R12 EAST OF THE 3rd PM, COOK COUNTY, ILLINOIS

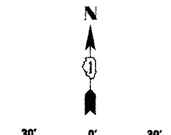
BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83.

F.A.RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BELMONT AVE. (1379)	PLAINFIELD AVE. (0956 WRS)	COOK	13	10
STATION	TO STATION			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	R.O.W. REQUIRED ACRES	PREVIOUSLY DEDICATED ACRES	REMAINDER ACRES	EASEMENTS TEMP ACRES	EASEMENTS PERM ACRES	EASEMENT PURPOSE	PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
0GD0001	INLAND REAL ESTATE THATCHER WOODS L.L.C.	17.037	N/A	N/A	17.037	N/A	0.062	N/A	12-26-201-077	







LEGEND

- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED PERMANENT EASEMENT LINE
- PROPOSED TEMPORARY EASEMENT LINE
- SECTION LINE
- PROPERTY (DEED) LINE
- 121.45 MEASURED DIMENSION
- 123.45 (COMP) COMPUTED DIMENSION
- (123.45) RECORDED DIMENSION
- FOUND IRON PIPE OR IRON ROD
- SET ⅝ INCH IRON ROD PERMANENT SURVEY MONUMENT.
- I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- TEL EXISTING TELEPHONE SPLICE BOX
- LGT EXISTING STREET LIGHT
- MAIL BOX EXISTING MAIL BOX
- WELL EXISTING WELL HEAD

■ STAKING OF PROPOSED RIGHT OF WAY. SET ⅝ INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

■M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. SET ⅝ INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

SECTION CORNER — QUARTER SECTION CORNER

STATE OF ILLINOIS)
) SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 26, TOWNSHIP 40 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY. THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS THIS 7 DAY OF Dec., 2007 A.D.

RONALD F. HODDEN P.L.S. NO. 2630
MY LICENSE EXPIRES 11-30-2008

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET, JOLIET, ILLINOIS 60435, PH. (815) 744-6600 FAX (815) 744-0101
2603 SOUTH WASHINGTON STREET SUITE 170, NAPERVILLE, ILLINOIS 60565, PH. (630) 420-7740 FAX (630) 420-7741

RECEIVED
JAN 16 2007
PLATS & LEGALS

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
BELMONT AVE - PLAINFIELD AVE
COOK COUNTY
JOB NO. R-90-002-07

SCALE: 1"=30' SHEET 1 OF 1

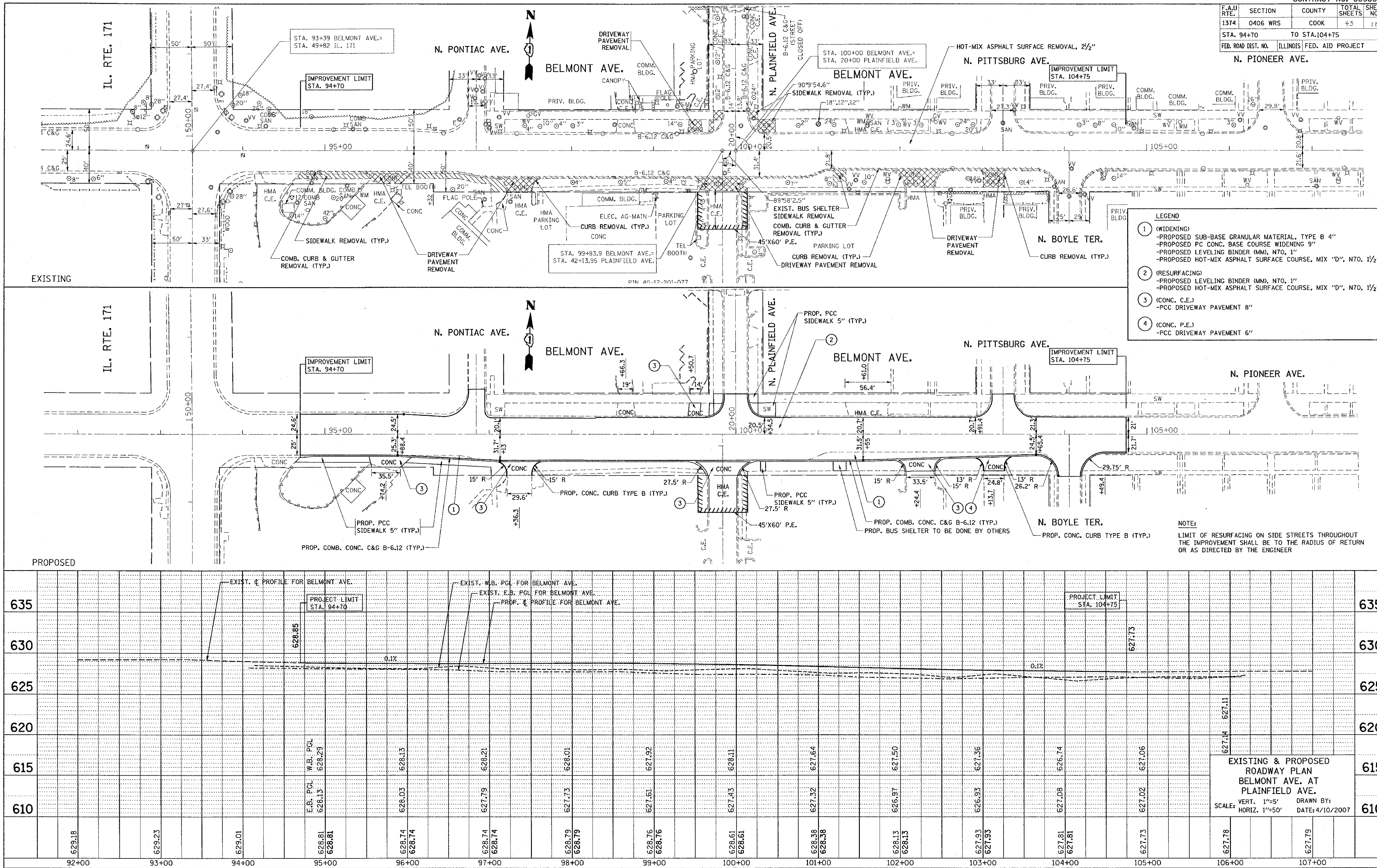
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

FOR INFORMATION ONLY

*REF-topo02
*REF-pp02
*REF-prof02

CONTRACT NO. 60C03

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	11
STA. 94+70		TO STA.104+75		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING
IL. RTE. 171
N. PONTIAC AVE.
BELMONT AVE.
N. PLAINFIELD AVE.
N. PITTSBURG AVE.
N. PIONEER AVE.
N. BOYLE TER.
STA. 93+39 BELMONT AVE.= STA. 49+82 IL. 171
IMPROVEMENT LIMIT STA. 94+70
IMPROVEMENT LIMIT STA. 104+75
STA. 100+00 BELMONT AVE.= STA. 20+00 PLAINFIELD AVE.
STA. 99+83.9 BELMONT AVE.= STA. 42+13.95 PLAINFIELD AVE.
HOT-MIX ASPHALT SURFACE REMOVAL, 2½"
DRIVEWAY PAVEMENT REMOVAL
SIDEWALK REMOVAL (TYP.)
COMB. CURB & GUTTER REMOVAL (TYP.)
CURB REMOVAL (TYP.)
EXIST. BUS SHELTER
45'X60' P.E.
PARKING LOT
PROPOSED
PROP. PCC SIDEWALK 5" (TYP.)
PROP. COMB. CONC. C&G B-6.12 (TYP.)
PROP. CONC. CURB TYPE B (TYP.)
PROP. BUS SHELTER TO BE DONE BY OTHERS
EXIST. ℄ PROFILE FOR BELMONT AVE.
EXIST. W.B. PGL FOR BELMONT AVE.
EXIST. E.B. PGL FOR BELMONT AVE.
PROP. ℄ PROFILE FOR BELMONT AVE.
PROJECT LIMIT STA. 94+70
PROJECT LIMIT STA. 104+75
635
630
625
620
615
610
92+00
93+00
94+00
95+00
96+00
97+00
98+00
99+00
100+00
101+00
102+00
103+00
104+00
105+00
106+00
107+00

LEGEND

① (WIDENING)
- PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B 4"
- PROPOSED PC CONC. BASE COURSE WIDENING 9"
- PROPOSED LEVELING BINDER (MM), N70, 1"
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1½"

② (RESURFACING)
- PROPOSED LEVELING BINDER (MM), N70, 1"
- PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1½"

③ (CONC. C.E.)
- PCC DRIVEWAY PAVEMENT 8"

④ (CONC. P.E.)
- PCC DRIVEWAY PAVEMENT 6"

NOTE:
LIMIT OF RESURFACING ON SIDE STREETS THROUGHOUT THE IMPROVEMENT SHALL BE TO THE RADIUS OF RETURN OR AS DIRECTED BY THE ENGINEER

EXISTING & PROPOSED ROADWAY PLAN
BELMONT AVE. AT PLAINFIELD AVE.

SCALE: VERT. 1"=5' HORIZ. 1"=50'
DRAWN BY:
DATE: 4/10/2007

PLOT DATE = 4/18/2007
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl

CONTRACT NO. 60003

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	12
STA. 94+70		TO STA.104+75		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTE: ALL LATERALS FROM STA. 92+00 TO STA. 106+00 WILL BE JETTED AND CLEANED

R REMOVE STRUCTURE

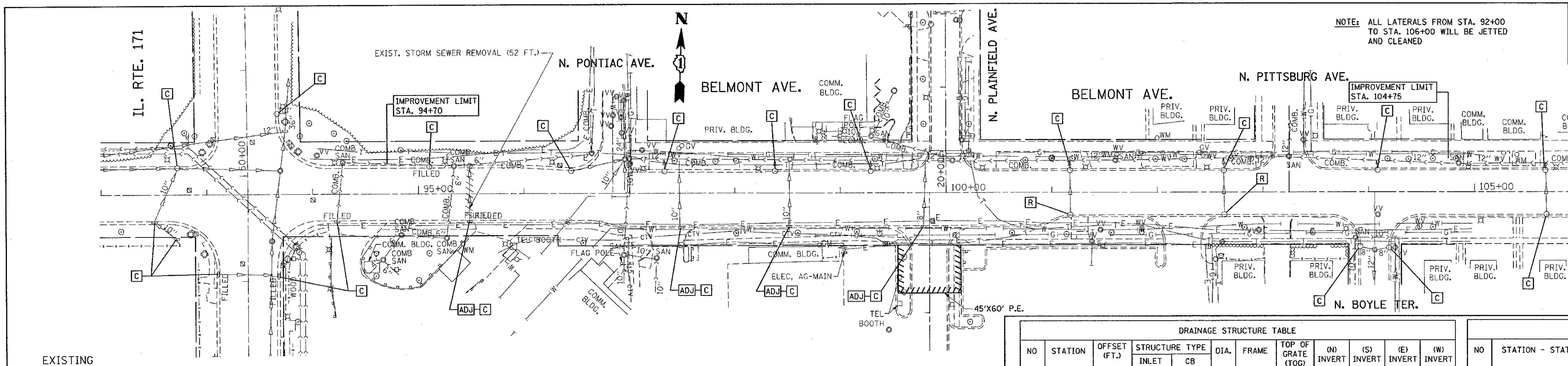
ADJ ADJUST STRUCTURE

C CLEAN STRUCTURE

DRAINAGE STRUCTURE REMOVAL		
STA.	OFFSET	TYPE
101+17.7	21 S	CB
102+63	21 S	CB

PIPE REMOVAL		
STA.	DIA. (IN.)	LIN. FT.
95+49	10″	52

EXISTING



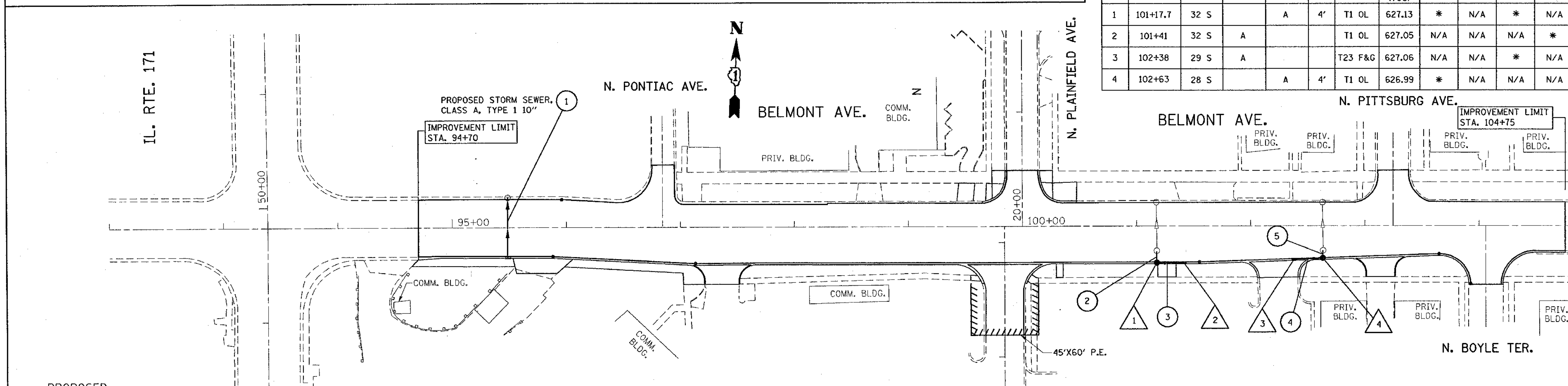
DRAINAGE STRUCTURE TABLE											
NO	STATION	OFFSET (FT.)	STRUCTURE TYPE		DIA.	FRAME	TOP OF GRATE (TOG)	(N) INVERT	(S) INVERT	(E) INVERT	(W) INVERT
			INLET	CB							
1	101+17.7	32 S		A	4′	T1 OL	627.13	*	N/A	*	N/A
2	101+41	32 S	A			T1 OL	627.05	N/A	N/A	N/A	*
3	102+38	29 S	A			T23 F&G	627.06	N/A	N/A	*	N/A
4	102+63	28 S		A	4′	T1 OL	626.99	*	N/A	N/A	N/A

PIPE TABLE						
NO	STATION - STATION	TYPE	DIA. (IN.)	LIN. FT.	TB (CU.YD.)	SLOPE FT/FT
1	95+49(N) - 95+49(S)	1 RCP	10″	52	17.2	**
2	101+17.7(N) - 101+17.7(S)	1 RCP	10″	11	3.6	**
3	101+17.7 - 101+41	1 RCP	8″	23.3	7.4	**
4	102+38 - 102+63	1 RCP	8″	22	7.0	**
5	102+63(N) - 102+63(S)	1 RCP	10″	7	2.3	**

* STRUCTURE FILLED WITH WATER INVERT TO BE DETERMINED BY THE ENGINEER IN FIELD ONCE STRUCTURE IS CLEANED

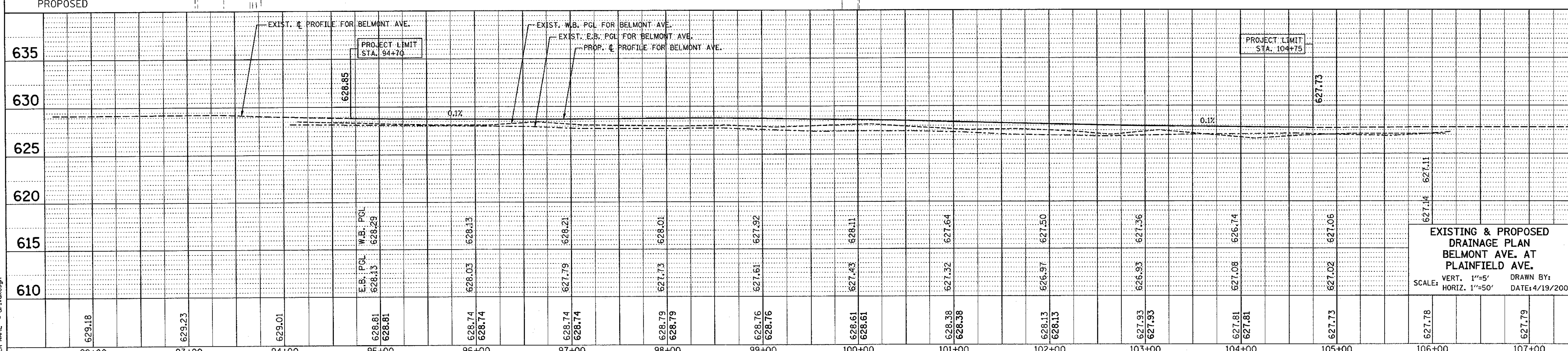
** TO BE DETERMINED BY ENGINEER ONCE STRUCTURES ARE CLEANED

PROPOSED



NOTE

THE ENVIRONMENTAL FIRM IS REQUIRED TO CONTINUOUSLY MONITOR FOR WORKER PROTECTION AND SOIL CONTAMINATION AT SEVERAL AREAS. SEE SPECIAL PROVISION AND SPECIFICATIONS FOR DETAILS.



EXISTING & PROPOSED DRAINAGE PLAN BELMONT AVE. AT PLAINFIELD AVE.

SCALE: VERT. 1″=5′ HORIZ. 1″=50′

DRAWN BY:

DATE:4/19/2007

PLAN | SURVEYED | PLOTTED | ALIGNMENT CHECKED | R.O.W. CHECKED | CADD FILE NAME | NOTE BOOK NO.

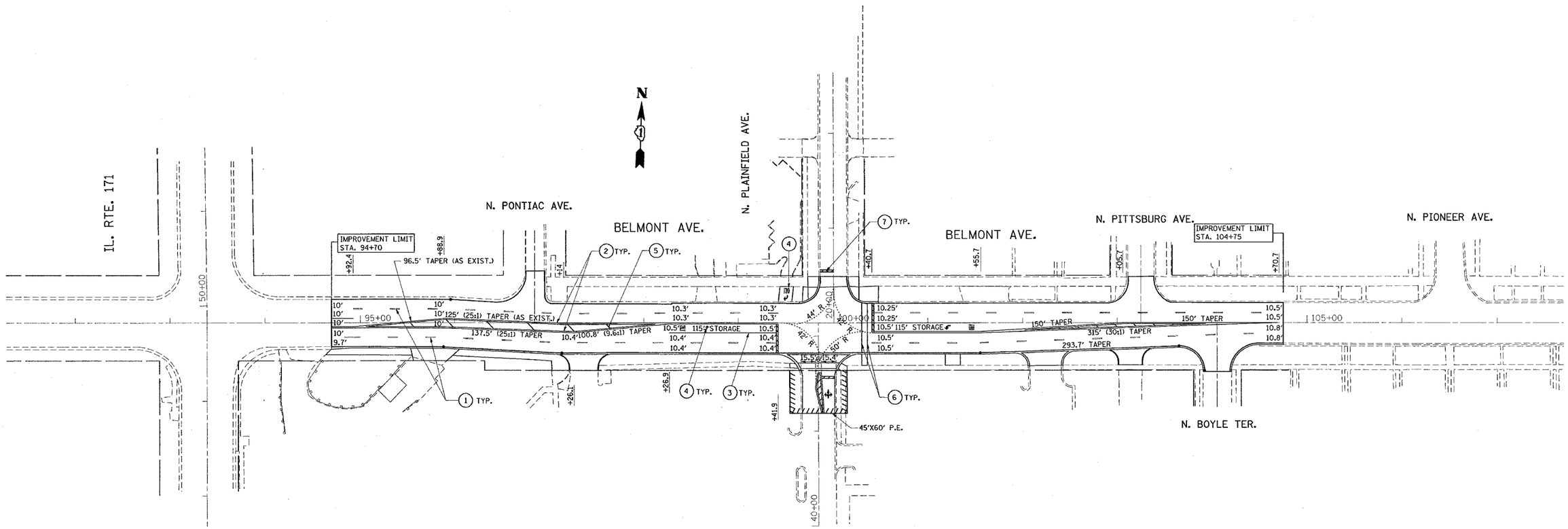
PROFILE | SURVEYED | PLOTTED | GRADES CHECKED | B.M. NOTED | STRUCTURE NOTATIONS CHECKED | NOTE BOOK NO.

PLOT DATE = 4/19/2007
FILE NAME = c:\pw_work\pwidot\d0158716\sh_drain.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = devakogn

*REF-draft01

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0906 WRS	COOK	43	13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING LEGEND

1. 4" LANE LINE- WHITE SKIP DASH
2. 4" DOUBLE YELLOW SOLID LINE
3. 6" TURN LANE-WHITE
4. LETTERS & SYMBOLS-WHITE
5. 12" DIAGONALS-YELLOW @ 45°
6. 6" CROSS WALK-WHITE
7. 24" STOP BAR-WHITE

NOTES

ALL FINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC (OF THE EXTRUDED TYPE) AND SHOULD BE PLACED IN ACCORDANCE WITH "CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS" DETAIL, (TC-24).

ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE DISTRICT ONE "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKER DETAIL." (TC-11).

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BELMONT AVENUE @ PLAINFIELD AVENUE PAVEMENT MARKING PLAN

SCALE: 1"=50' DRAWN BY

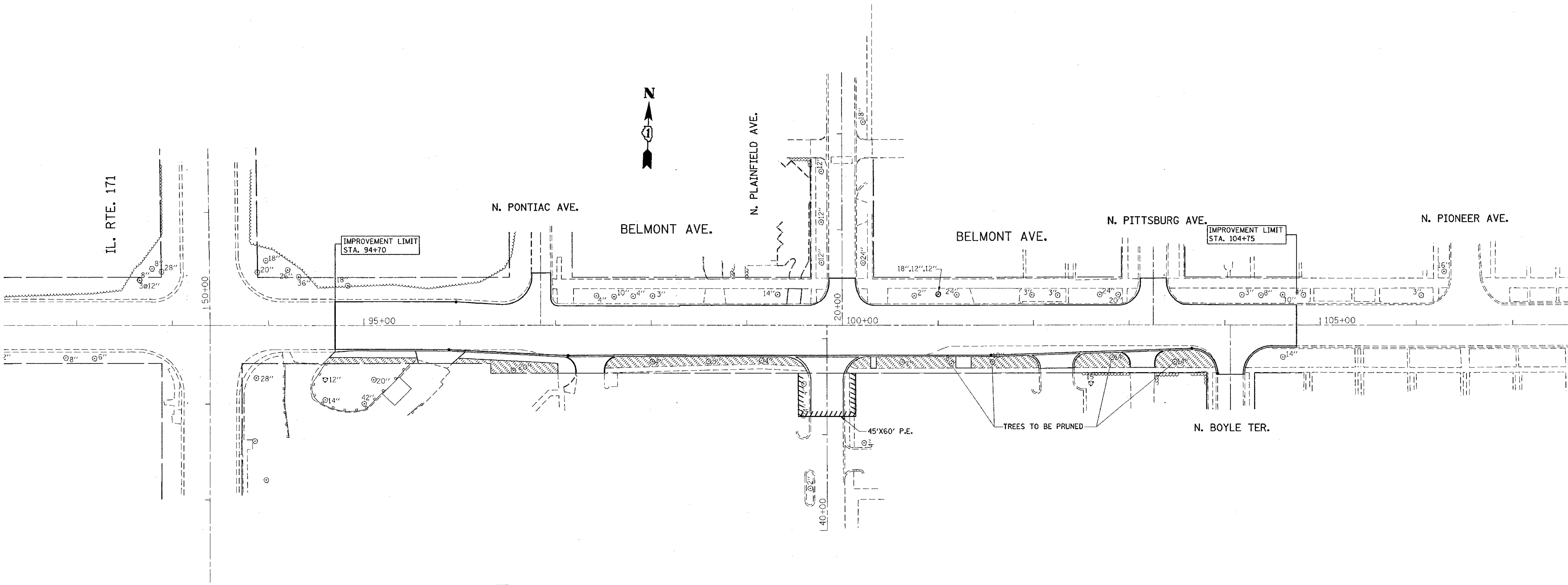
DATE: 4/2/2007 CHECKED BY

PLOT DATE = 4/2/2007
FILE NAME = c:\projects\p11858?\sh_pmk.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = ursowd

*REF-drain01

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SODDING
NITROGEN FERTILIZER NUTRIENT
PHOSPHOROUS FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
TOPSOIL 4"
SUPPLEMENTAL WATERING

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

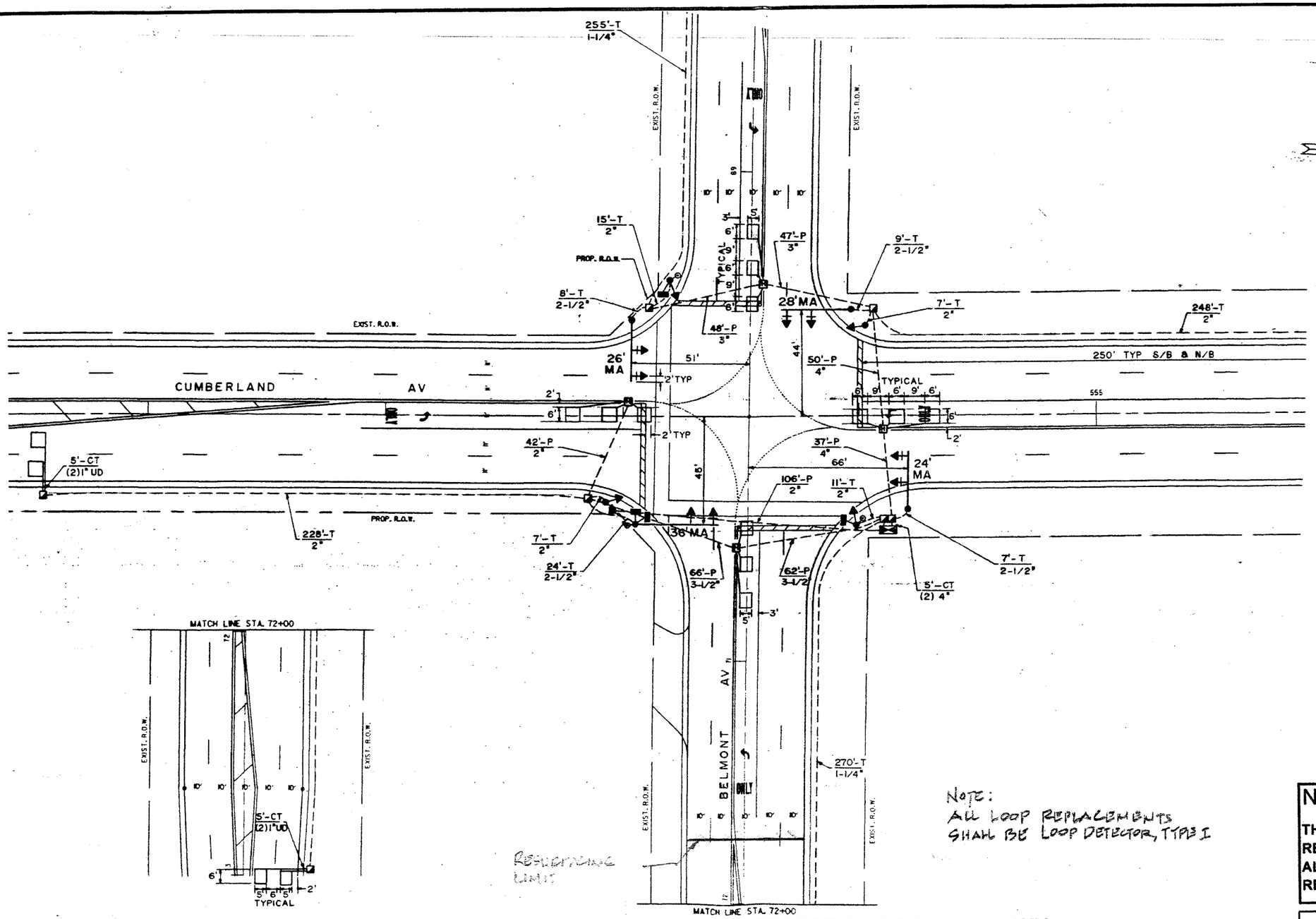
BELMONT AVENUE
@ PLAINFIELD AVENUE
LANDSCAPING PLAN

SCALE: 1"=50'
DATE: 3/23/2007
DRAWN BY
CHECKED BY

PLOT DATE = 3/23/2007
FILE NAME = c:\projects\p110507\sh_landscape.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = ulrichkd

CONTRACT 60C03

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1374	0406WRS	Cook	43	15
STA.		TO STA.		
FED. ROAD DIST NO 7	ILLINOIS	FED AID PROJECT		



NOTE:
ALL LOOP REPLACEMENTS SHALL BE LOOP DETECTOR, TYPE I

NOTE:

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

REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
88600100	66	Foot	Detector Loop, Type I

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT

Ill. Route 171 @ Belmont Avenue

SCALE None
DATE May, 2007

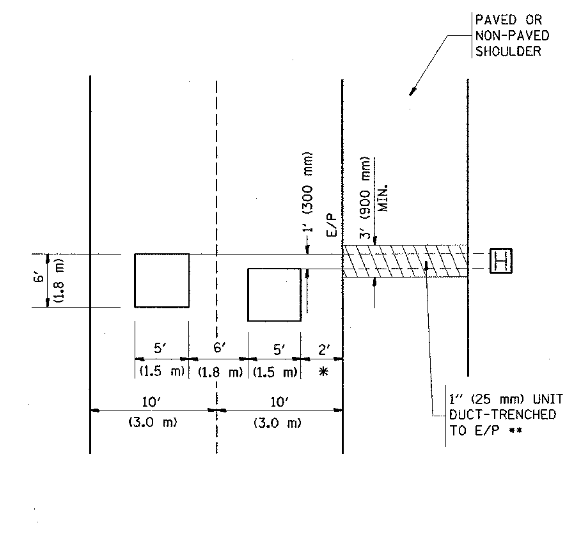
DRAWN BY J.H.E.
DESIGNED BY: J.H.E.
CHECKED BY D.A.D.

CONTRACT NO. 60C03

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0906 WRS	COOK	43	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

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



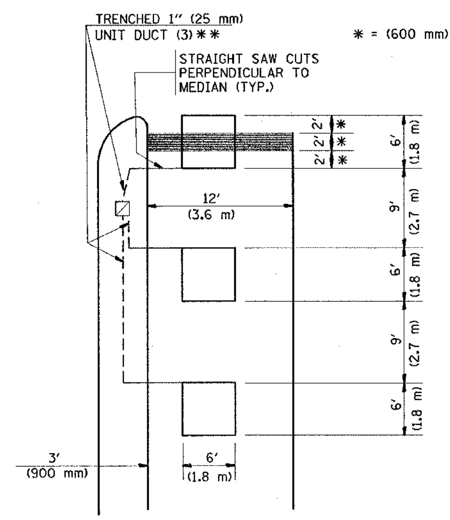
* = (600 mm)

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

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

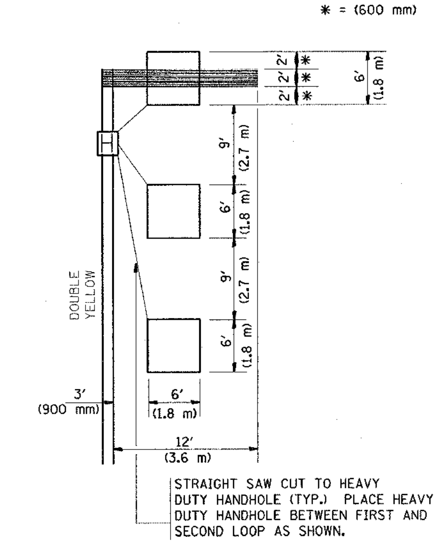


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

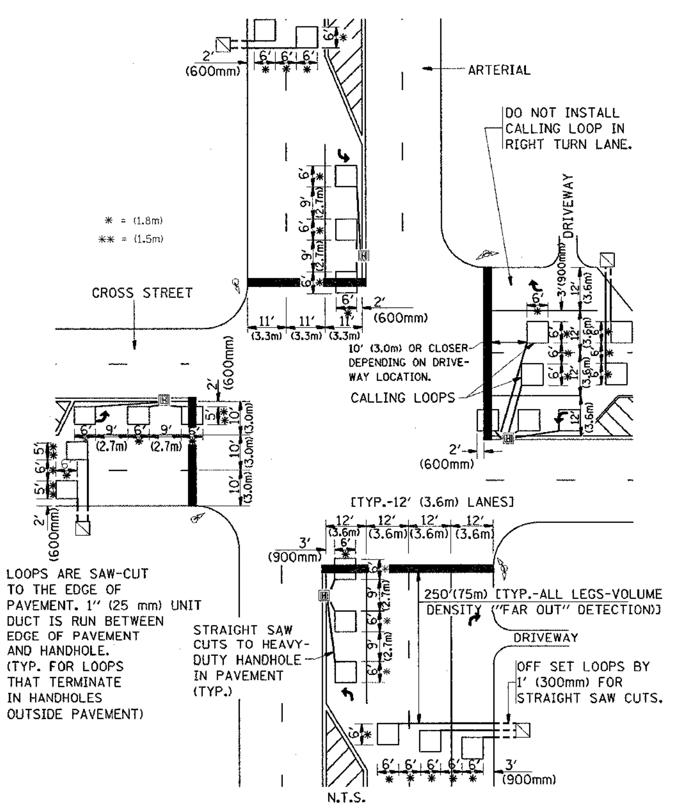
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



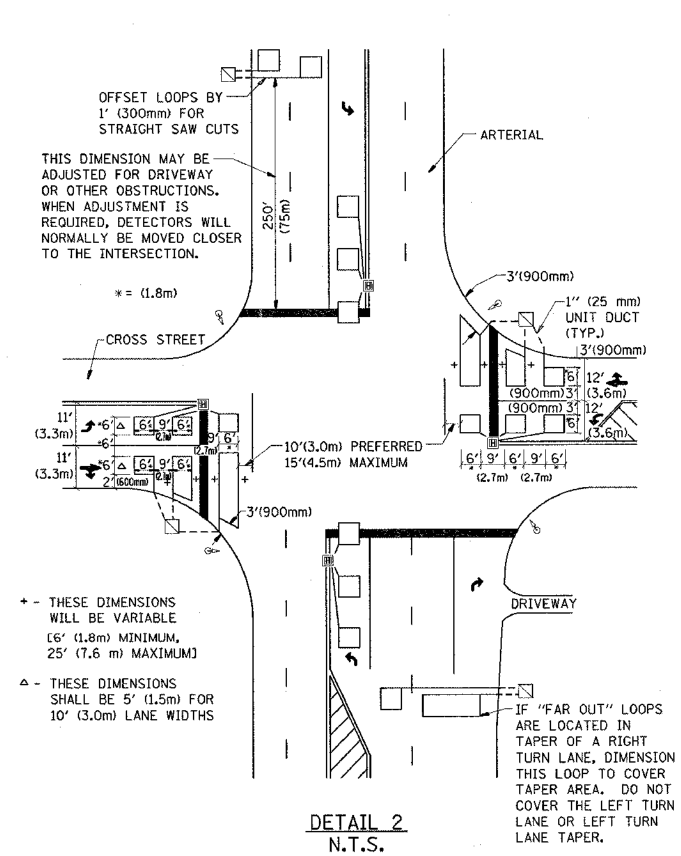
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1
N.T.S.

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



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR 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

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

TS07

PLOT DATE = 3/15/2007
FILE NAME = w:\diststd\ts07.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = abreuah

CONTRACT NO. 60C03

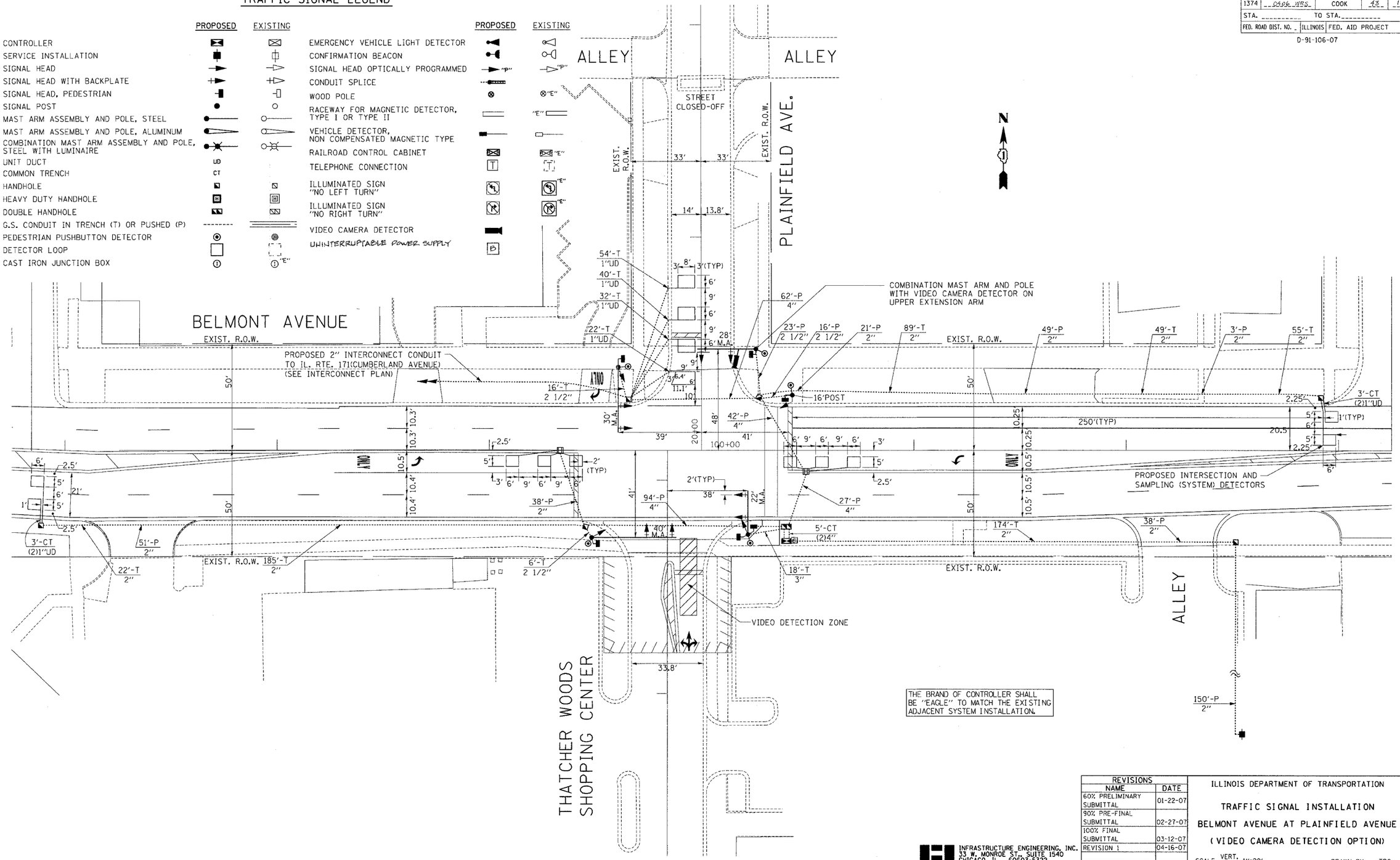
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	06K-4BS	COOK	43	17
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

D-91-106-07

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	●—	○—
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—✳	○—✳
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◪	◪
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◪◪	◪◪
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	----------	==========
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	[ ]
CAST IRON JUNCTION BOX	①	① "E"

	PROPOSED	EXISTING
EMERGENCY VEHICLE LIGHT DETECTOR	◀	◁
CONFIRMATION BEACON	◀	◁
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	▷ "P"
CONDUIT SPLICE	⊶	
WOOD POLE	⊗	⊗ "E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	▬	▯
RAILROAD CONTROL CABINET	▣	▣ "E"
TELEPHONE CONNECTION	T	T "E"
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
VIDEO CAMERA DETECTOR	▬	
UNINTERRUPTABLE POWER SUPPLY	UPS	



THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

REVISIONS	
NAME	DATE
60% PRELIMINARY SUBMITTAL	01-22-07
90% PRE-FINAL SUBMITTAL	02-27-07
100% FINAL SUBMITTAL	03-12-07
REVISION 1	04-16-07

INFRASTRUCTURE ENGINEERING, INC.
33 W. MONROE ST., SUITE 1540
CHICAGO, IL. 60603-5322
PHONE 312.425.9560
FAX 312.425.9564

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION

BELMONT AVENUE AT PLAINFIELD AVENUE

(VIDEO CAMERA DETECTION OPTION)

SCALE: VERT. 1"=20'
HORIZ.
DATE 04-16-07

DRAWN BY TPC
DESIGNED BY TPC
CHECKED BY ER

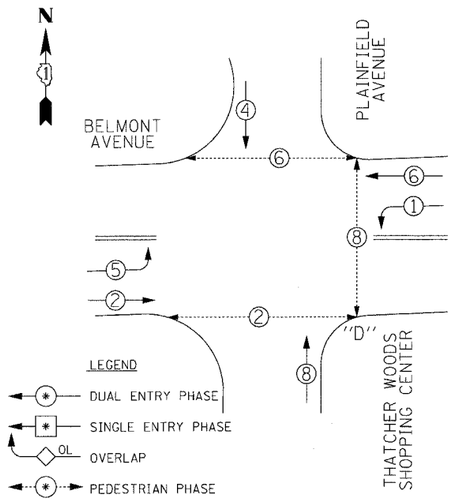
PLOT DATE = $DATE$
FILE NAME = $FILE$
PLOT SCALE = $SCALE$
USER NAME = $USER$

CONTRACT NO. 60C03

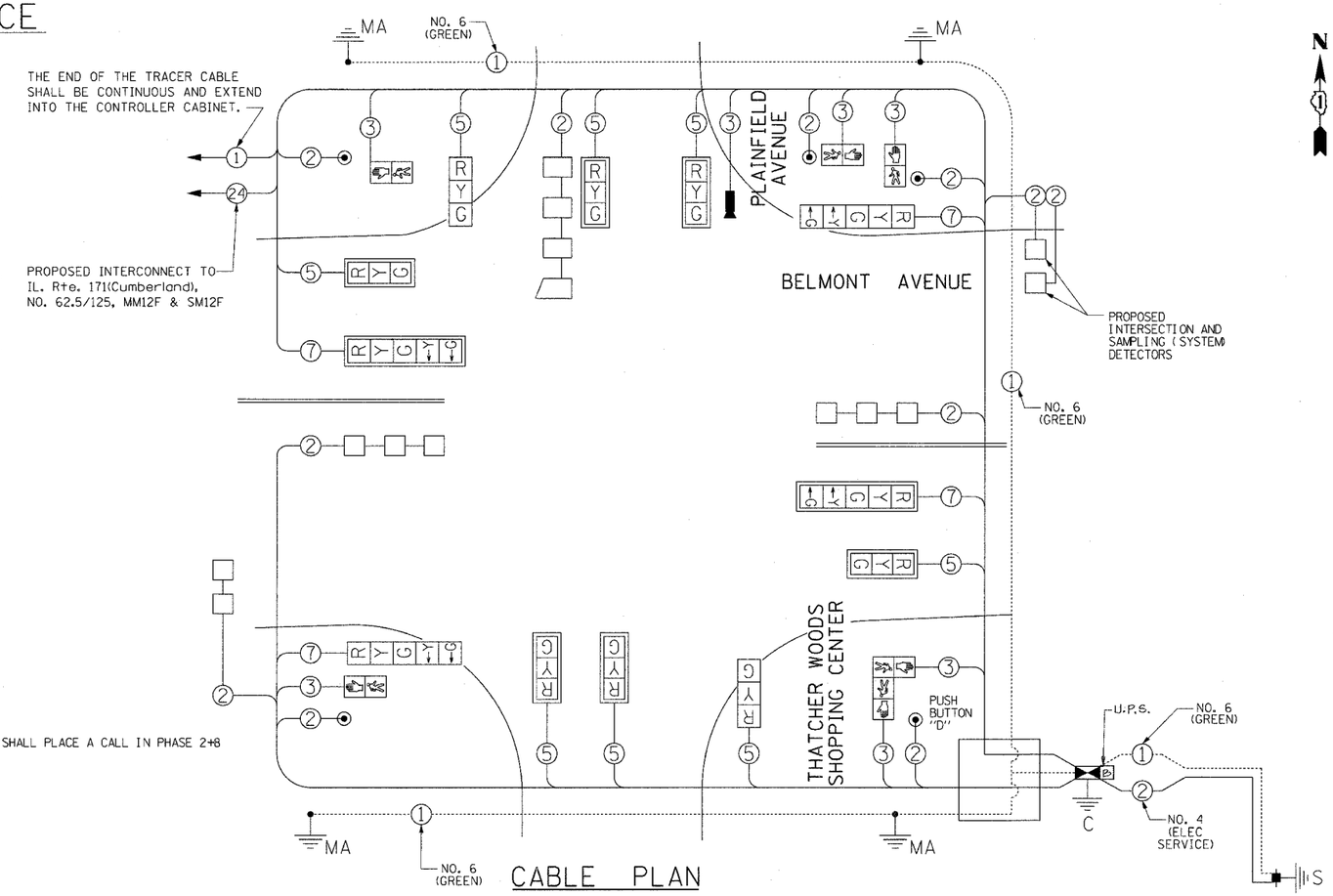
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0906 WR3	COOK	42	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

D-91-106-07

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
	T	TELEPHONE CONNECTION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		VIDEO CAMERA DETECTOR
B	B	UNINTERRUPTABLE POWER SUPPLY

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	34.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	574
CONDUIT IN TRENCH, 2½ DIA., GALVANIZED STEEL	FOOT	6
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	18
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	350
CONDUIT PUSHED, 2½ DIA., GALVANIZED STEEL	FOOT	55
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	225
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	748
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	639
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	911
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1292
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	591
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1559
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 4 2 C	FOOT	398
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1

ITEM	UNIT	QUANTITY
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	607
PEDESTRIAN PUSH-BUTTON	EACH	4
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	842
VIDEO CAMERA DETECTION SYSTEM (COMPLETE)	L SUM	1
UPS BATTERY BACK-UP	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II	L SUM	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	12	90	25	1.00	300.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	0	84		0.05	0.00
	-				-
	-				-
	-				-
FLASHER	0			0.50	0.00
				TOTAL =	631.60

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: MR. LARRY KESLINKE
PHONE: (708) 410-5314
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
30" (750mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
36" (900mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

NOTE:
EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

REVISIONS	
NAME	DATE
60% PRELIMINARY SUBMITTAL	01-22-07
90% PRE-FINAL SUBMITTAL	02-27-07
100% FINAL SUBMITTAL	03-12-07
REVISION 1	04-16-07

INFRASTRUCTURE ENGINEERING, INC.
33 W. MONROE ST., SUITE 1540
CHICAGO, IL 60603-5322
PHONE 312.425.9560
FAX 312.425.9564

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
(VIDEO CAMERA DETECTION OPTION)

BELMONT AVENUE AT PLAINFIELD AVENUE

SCALE: VERT. NONE
HORIZ.
DATE 04-16-07

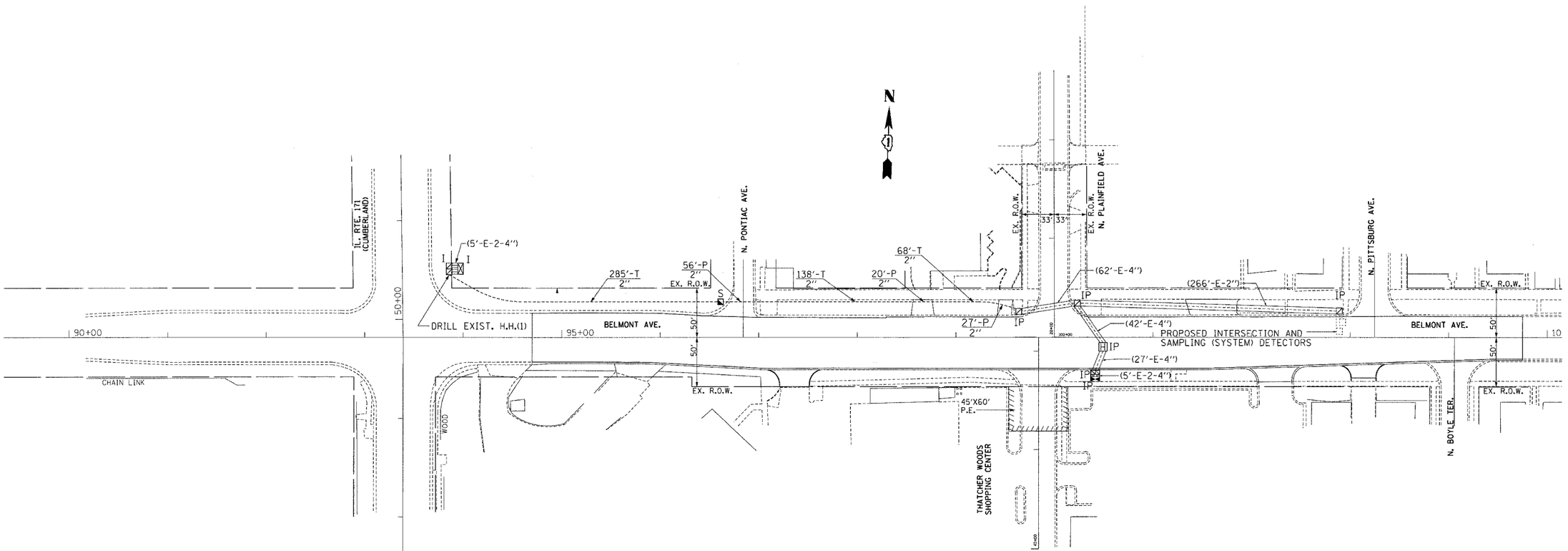
DRAWN BY TPC
DESIGNED BY TPC
CHECKED BY ER

PLOT DATE = #DATE#
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
USER NAME = #USER#

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	19
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

D-91-106-07



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	⧓	⊠
HANDHOLE	◩	◪
DOUBLE HANDHOLE	◩	◪
HEAVY DUTY HANDHOLE	H	H
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	.....	-----
DETECTOR LOOP	□	□
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

PLOT DATE = $DATE$
FILE NAME = $FILE$
PLOT SCALE = $SCALE$
USER NAME = $USER$

REVISIONS	
NAME	DATE
60% PRELIMINARY SUBMITTAL	01-22-07
90% PRE-FINAL SUBMITTAL	02-27-07
100% FINAL SUBMITTAL	03-12-07
REVISION 1	04-16-07

INFRASTRUCTURE ENGINEERING, INC.
33 W. MONROE ST., SUITE 1540
CHICAGO, IL. 60603-5322
PHONE 312.425.9560
FAX 312.425.9564

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN

BELMONT AVENUE

FROM IL. RTE. 171 (Cumberland) TO PLAINFIELD AVE.

SCALE: VERT. 1"=50'
HORIZ.
DATE 04-16-07

DRAWN BY TPC
DESIGNED BY TPC
CHECKED BY ER

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	20
STA. ________	TO STA. ________			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

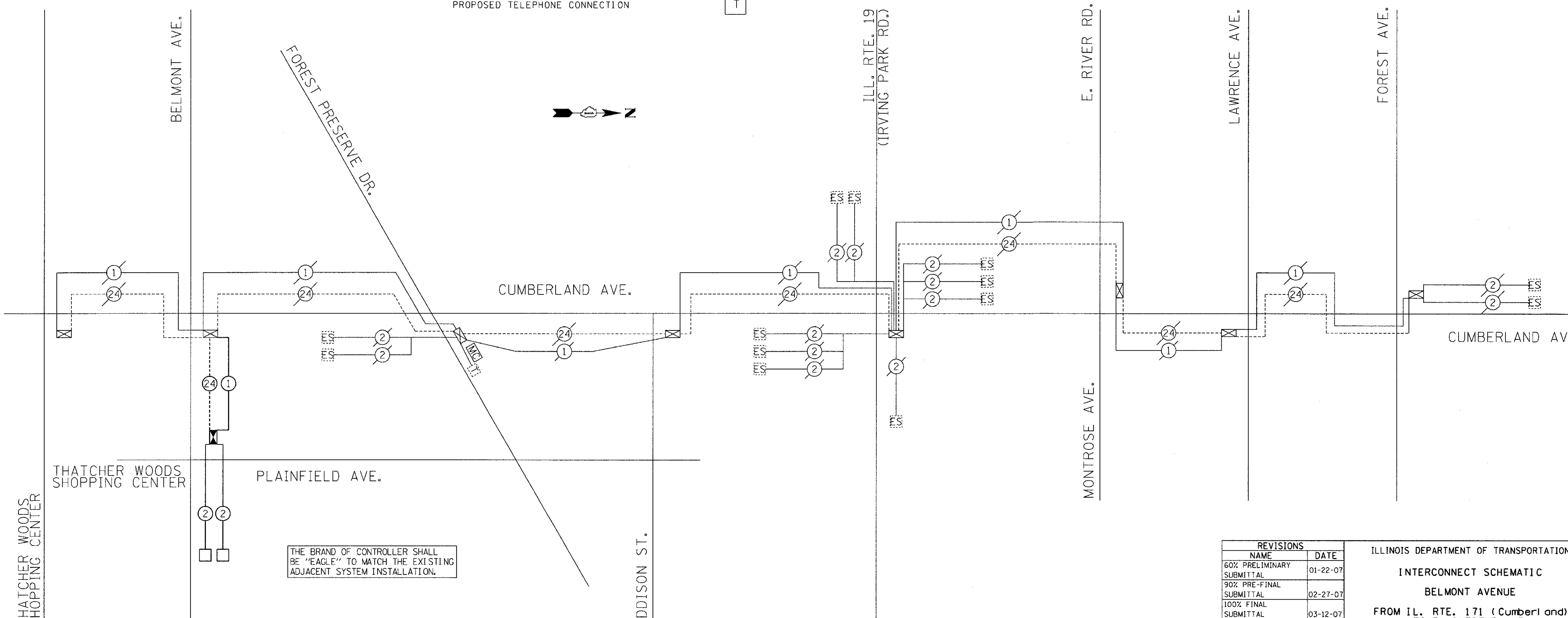
D-91-106-07

INTERCONNECT SCHEMATIC LEGEND

Description	Symbol
EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	EMC
PROPOSED MASTER CONTROLLER	MC
MASTER MASTER CONTROLLER	MMC
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS	P
EXISTING SAMPLING (SYSTEM) DETECTORS	ES
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	ESP
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS.	ESPS
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	ESPD
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
EXISTING ELECTRIC CABLE, 1/C (NO. 10 OR AS SPECIFIED)	1
PROPOSED ELECTRIC CABLE, 1/C (NO. 14 OR AS SPECIFIED)	1
EXISTING TELEPHONE CONNECTION	T
PROPOSED TELEPHONE CONNECTION	T

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	491
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	103
HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	491
DRILL EXISTING HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT TRACER, NO. 14 1C	FOOT	793
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	793



THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

INFRASTRUCTURE ENGINEERING, INC.
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REVISIONS NAME	DATE
60% PRELIMINARY SUBMITTAL	01-22-07
90% PRE-FINAL SUBMITTAL	02-27-07
100% FINAL SUBMITTAL	03-12-07
REVISION 1	04-16-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC

BELMONT AVENUE

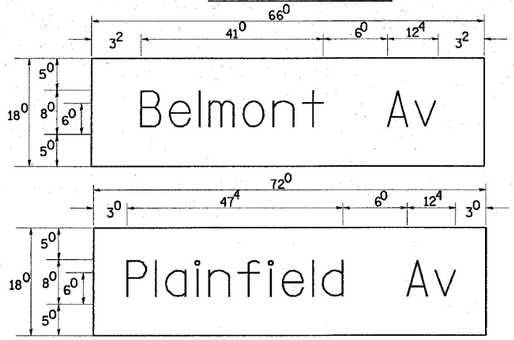
FROM IL. RTE. 171 (Cumberland) TO PLAINFIELD AVE.

SCALE: VERT. HORIZ. NONE
DATE 04-16-07

DRAWN BY TPC
DESIGNED BY TPC
CHECKED BY ER

PLOT DATE = $DATE$ FILE NAME = $FILEL$ PLOT SCALE = $SCALE$ USER NAME = $USER$

PANEL SIGN DESIGN TYPE 1

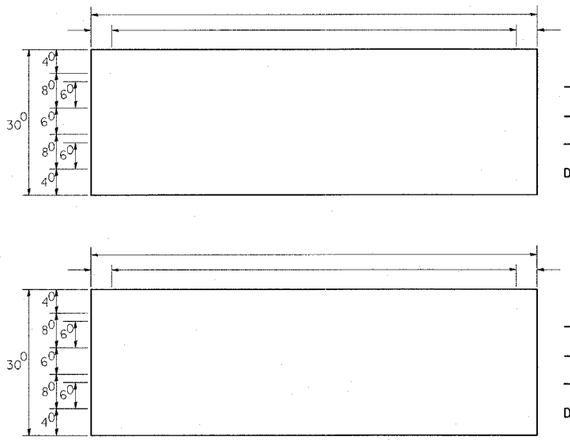


___ Sq. M. each
8.25 Sq. Ft. each
2 Required
Design Series D

___ Sq. M. each
9.00 Sq. Ft. each
2 Required
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

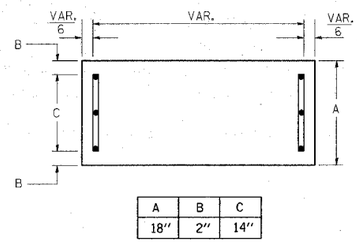
PANEL SIGN DESIGN TYPE 2



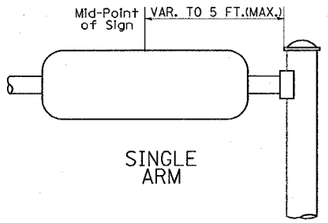
___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

SUPPORTING CHANNELS

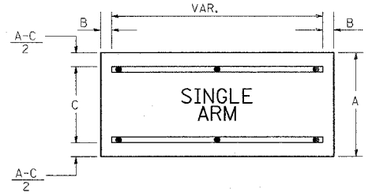


A	B	C
18″	2″	14″



SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18″	2″	12″
30″	2″	22″

GENERAL NOTES

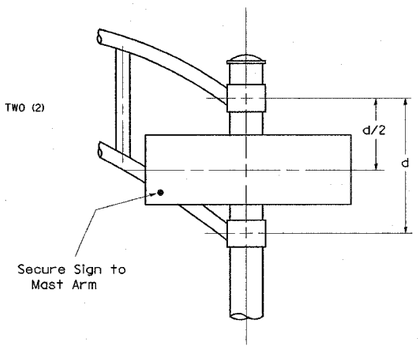
1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2′-6″ x 6′-0″ MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6′-0″.
4. ALL BORDERS SHALL BE ¾″ WIDE AND CORNER RADIUS SHALL BE 2-1/4 ″.
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

* A.K.T. CORPORATION, SCHAUMBURG, IL
* AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
* TUCKER COMPANY, INC., WAUWATOSA, WI
* WESTERN TRAFFIC CONTROL INC., CICERO, IL

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼″ x 14 x 1″ H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM
Shall be used. See Note *5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2 (3) DENOTES 3″/8

FIRST LETTER \ SECOND LETTER	a c d e g o q	b h i k l m n p r u	f w	j	s t	v y	x	z
SERIES	C D	C D	C D	C D	C D	C D	C D	C D
A W X	1² 1⁴	1⁴ 1⁵	1² 1⁴	0⁶ 1⁰	1¹ 1⁴	0⁶ 1⁰	1¹ 1²	1² 1⁴
B	1⁴ 1⁵	2⁰ 2¹	1⁴ 1⁵	1¹ 1²	1⁴ 1⁵	1² 1⁴	1² 1⁴	1⁶ 1⁷
C E G	1⁴ 1⁵	2⁰ 2¹	1² 1⁴	0⁶ 1⁰	1² 1⁴	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵
D O Q R	1⁴ 1⁵	2⁰ 2¹	1⁴ 1⁵	0⁶ 1⁰	1² 1⁴	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵
F	0⁵ 0⁶	1⁴ 1⁵	0⁶ 1⁰	0⁵ 0⁶	0⁶ 1⁰	0⁶ 1⁰	0⁶ 1⁰	1¹ 1²
H I M N	2⁰ 2¹	2² 2⁴	2⁰ 2¹	1⁴ 1⁵	1⁶ 1⁷	1⁶ 1⁷	2⁰ 2¹	2⁰ 2¹
J U	2⁰ 2¹	2⁰ 2¹	1⁶ 1⁷	1⁴ 1⁵	1⁶ 1⁷	1⁶ 1⁷	1⁶ 1⁷	2⁰ 2¹
K L	1¹ 1²	1⁶ 1⁷	1¹ 1²	0⁵ 0⁶	1¹ 1²	1¹ 1²	1¹ 1²	1² 1⁴
P	1² 1⁴	1⁴ 1⁵	1² 1⁴	0⁵ 0⁶	1¹ 1²	1¹ 1²	1² 1⁴	1² 1⁴
S	1² 1⁴	1⁶ 1⁷	1² 1⁴	0⁶ 1⁰	1² 1⁴	1² 1⁴	1² 1⁴	1² 1⁴
T	1¹ 1²	1⁶ 1⁷	0⁶ 1⁰	0⁶ 1⁰	1¹ 1²	1¹ 1²	1¹ 1²	1² 1⁴
V	0⁶ 1⁰	1⁴ 1⁵	1¹ 1²	0⁶ 1⁰	1² 1⁴	1² 1⁴	1² 1⁴	1² 1⁴
Y	0⁵ 0⁶	1⁴ 1⁵	0⁶ 1⁰	0⁵ 0⁶	0⁵ 0⁷	0⁵ 0⁶	0⁶ 1⁰	1¹ 1²
Z	1⁶ 1⁷	2² 2⁴	1⁶ 1⁷	1² 1⁴	1⁶ 1⁷	1⁶ 1⁷	1⁶ 1⁷	2⁰ 2¹

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER \ SECOND LETTER	a o d e g o q	b h i k l m n p r u	f w	j	s t	v y	x	z
SERIES	C D	C D	C D	C D	C D	C D	C D	C D
a d h g l j l m n q u	1⁶ 1⁷	2² 2⁴	1⁶ 1⁷	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵	1⁶ 1⁷	1⁶ 1⁷
b f k o p s	1² 1⁴	1⁶ 1⁷	1¹ 1²	0⁵ 0⁶	1¹ 1²	1¹ 1²	1² 1⁴	1² 1⁴
c e	1² 1⁴	1⁶ 1⁷	1² 1⁴	0⁶ 1⁰	1² 1⁴	1² 1⁴	1² 1⁴	1² 1⁴
r	0⁶ 1⁰	1² 1⁴	0⁶ 1⁰	0³ 0³	0⁵ 0⁶	0⁵ 0⁶	0⁶ 1⁰	0⁶ 1⁰
t z	1² 1⁴	1⁶ 1⁷	1² 1⁴	0⁶ 1⁰	1¹ 1²	1¹ 1²	1² 1⁴	1² 1⁴
v y	1¹ 1²	1⁴ 1⁵	1¹ 1²	0⁵ 0⁶	0⁶ 1⁰	0⁶ 1⁰	1¹ 1²	1¹ 1²
w	1¹ 1²	1⁴ 1⁵	1¹ 1²	0⁵ 0⁶	1¹ 1²	1¹ 1²	1¹ 1²	1² 1⁴
x	1² 1⁴	1⁶ 1⁷	1¹ 1²	0⁵ 0⁶	1¹ 1²	1¹ 1²	1¹ 1²	1² 1⁴

Number To Number
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER \ SECOND NUMBER	0	1	2	3	4	5	6	7	8	9
SERIES	C D	C D	C D	C D	C D	C D	C D	C D	C D	C D
0 9	1⁶ 1⁷	1⁶ 1⁷	1⁴ 1⁵	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵	1⁶ 1⁷	1² 1⁴	1⁶ 1⁷	1⁶ 1⁷
1	2⁰ 2¹	2⁰ 2¹	2⁰ 2¹	1⁶ 1⁷	1⁴ 1⁵	2⁰ 2¹	2⁰ 2¹	1⁴ 1⁵	2⁰ 2¹	2⁰ 2¹
2 3 4	1⁴ 1⁵	1⁴ 1⁵	1⁴ 1⁵	1² 1⁴	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵	1¹ 1²	1⁶ 1⁷	1⁴ 1⁵
5	1⁴ 1⁵	1⁴ 1⁵	1⁴ 1⁵	1¹ 1²	1¹ 1²	1⁴ 1⁵	1⁴ 1⁵	1¹ 1²	1⁴ 1⁵	1⁴ 1⁵
6	1⁶ 1⁷	1⁴ 1⁵	1⁴ 1⁵	1² 1⁵	1² 1⁴	1⁴ 1⁵	1⁴ 1⁵	1¹ 1²	1⁴ 1⁵	1⁴ 1⁵
7	1² 1⁴	1² 1⁴	1⁴ 1⁵	1² 1⁵	0⁵ 0⁶	1² 1⁴	1⁴ 1⁵	1¹ 1²	1⁴ 1⁵	1² 1⁴
8	1⁶ 1⁷	1⁶ 1⁷	1⁴ 1⁵	1² 1⁵	1² 1⁴	1⁴ 1⁵	1⁶ 1⁷	1² 1⁴	1⁶ 1⁷	1⁴ 1⁵

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

UPPER AND LOWER CASE LETTER WIDTHS — CONTRACT NO. 60C03

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	D	8 INCH UPPER CASE LETTERS SERIES C	D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	D
A	3⁶	5⁰	5⁰	6⁵	a	3⁵	4²
B	3²	4⁰	4³	5³	b	3⁵	4²
C	3²	4⁰	4³	5³	c	3⁵	4¹
D	3²	4⁰	4³	5³	d	3⁵	4²
E	3⁰	3⁵	4⁰	4⁷	e	3⁵	4²
F	3⁰	3⁵	4⁰	4⁷	f	2³	2⁶
G	3²	4⁰	4³	5³	g	3⁵	4²
H	3²	4⁰	4³	5³	h	3⁵	4²
I	0⁷	0⁷	1¹	1²	i	1¹	1¹
J	3⁰	3⁶	4⁰	5⁰	j	2⁰	2²
K	3²	4¹	4³	5⁴	k	3⁵	4²
L	3⁰	3⁵	4⁰	4⁷	l	1¹	1¹
M	3⁷	4⁵	5¹	6¹	m	6⁰	7⁰
N	3²	4⁰	4³	5³	n	3⁵	4²
O	3⁴	4²	4⁵	5⁵	o	3⁶	4³
P	3²	4⁰	4³	5³	p	3⁵	4²
Q	3⁴	4²	4⁵	5⁵	q	3⁵	4²
R	3²	4⁰	4³	5³	r	2⁶	3²
S	3²	4⁰	4³	5³	s	3⁶	4²
T	3⁰	3⁵	4⁰	4⁷	t	2⁷	3²
U	3²	4⁰	4³	5³	u	3⁵	4²
V	3⁵	4⁴	4⁷	6⁰	v	4²	4⁷
W	4⁴	5²	6⁰	7⁰	w	5⁵	6⁴
X	3⁴	4⁰	4⁵	5³	x	4⁴	5¹
Y	3⁶	5⁰	5⁰	6⁶	y	4⁶	5³
Z	3²	4⁰	4³	5³	z	3⁶	4³

NUMBER	6 INCH SERIES C	D	8 INCH SERIES C	D
1	1²	1⁴	1⁵	2⁰
2	3²	4⁰	4³	5³
3	3²	4⁰	4³	5³
4	3⁵	4³	4⁷	5⁷
5	3²	4⁰	4³	5³
6	3²	4⁰	4³	5³
7	3²	4⁰	4³	5³
8	3²	4⁰	4³	5³
9	3²	4⁰	4³	5³
0	3⁴	4²	4⁵	5⁵

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS

03-21-07

DRAWN BY TPC
DESIGNED BY TPC
CHECKED BY ER

PLOT DATE = 3/22/2007
FILE NAME = c:\projects\trafficflasher\flasher.m32
PLOT SCALE = 50.0000 '/ IN.
USER NAME = rgagerman

: 14:35:05 03/22/2007

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0486-WRS	COOK	43	27
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

D-91-106-07

LOOP DETECTOR NOTES

1. 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.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

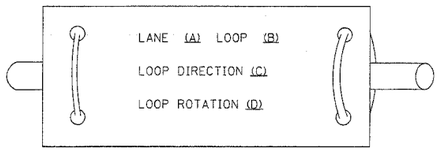
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

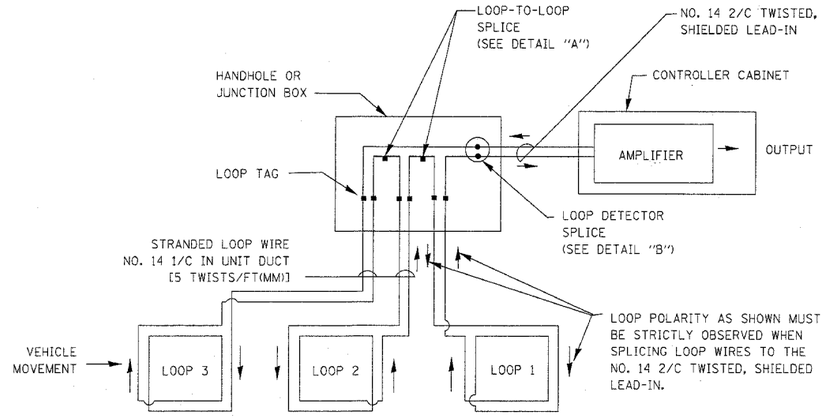


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

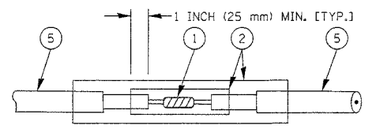
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

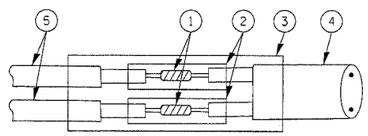


DETECTOR LOOP WIRING SCHEMATIC

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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 01-31-2006

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

$FILE$
DATE-TIME
DGN-SPEC

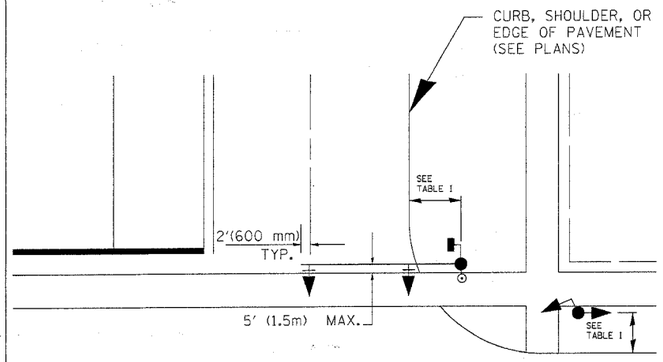
CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406-WRS	COOK	43	23
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

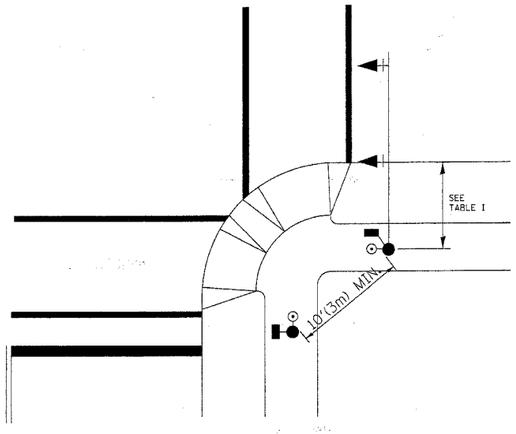
D-91-106-07

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:

1. 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

2. 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.

3. 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.

4. 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

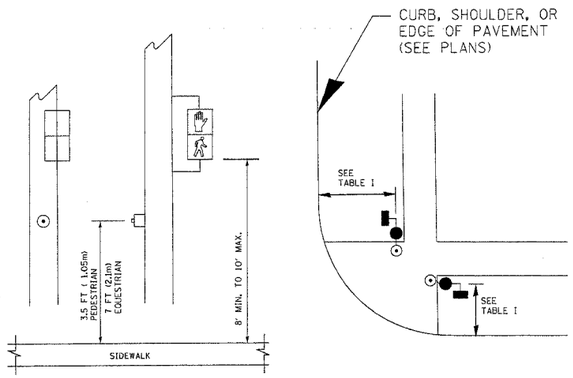


TABLE I

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.
DATE 01-31-2006

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

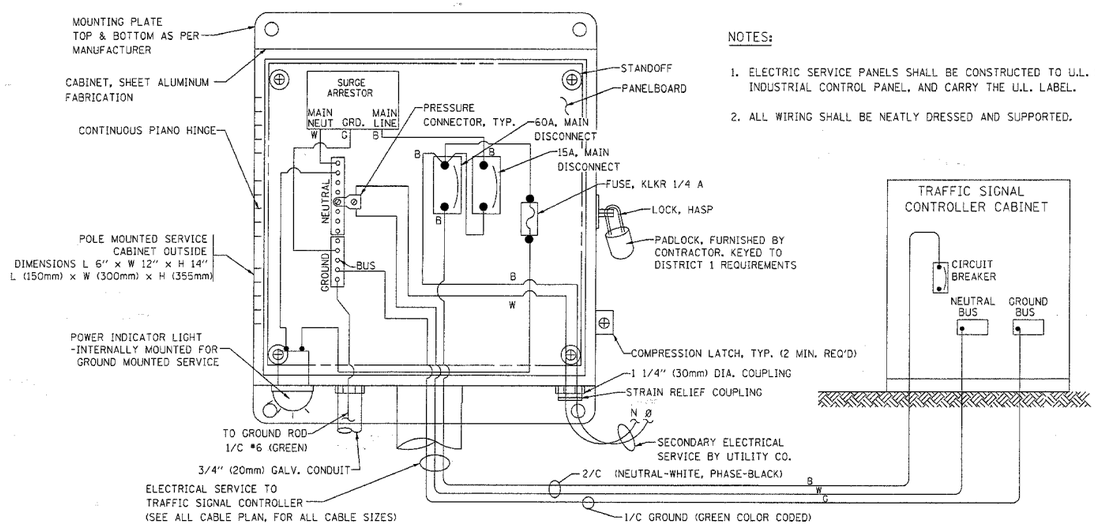
TS05

FILE
DATE-TIME
DGN-SPEC

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406-WRS	COOK	43	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

D-91-106-07



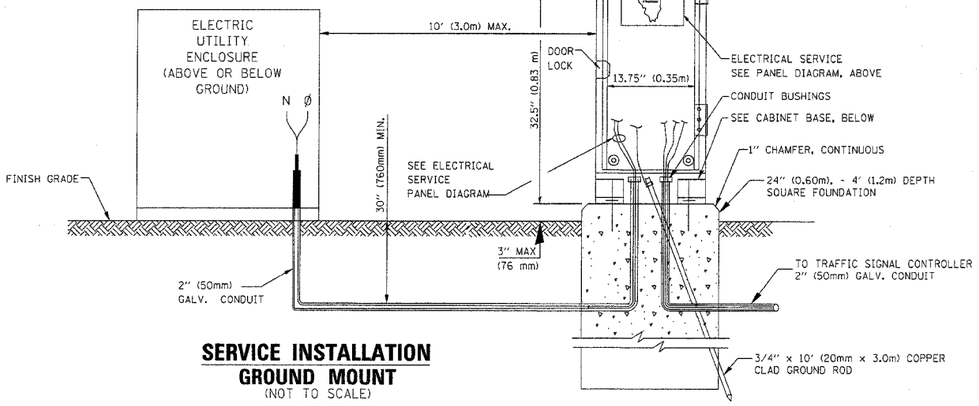
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

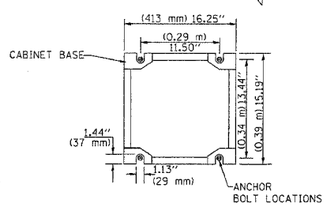
SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



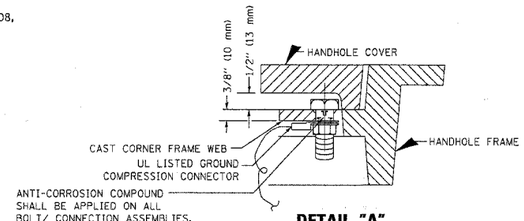
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)

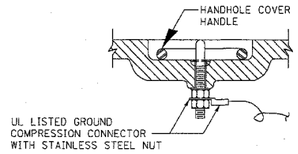


CABINET – BASE BOLT PATTERN

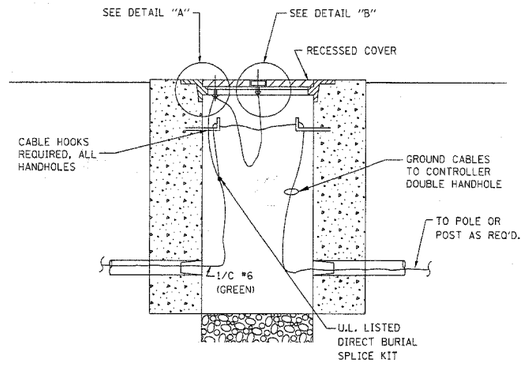
(NOT TO SCALE)



DETAIL "A"

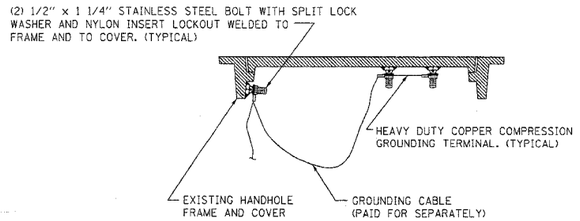


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



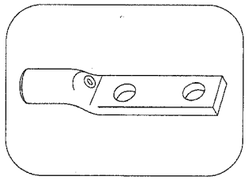
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

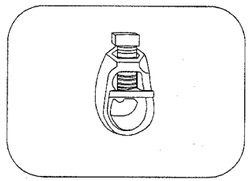
NOTES:

GROUNDING SYSTEM

1. 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.
2. 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.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



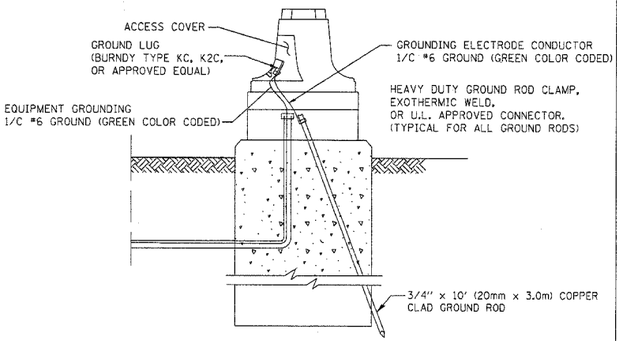
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

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.



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 01-31-2006

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

TS05

$FILE$
•DATE-TIME•
•DGN-SPEC•

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406-WRS	COOK	43	25
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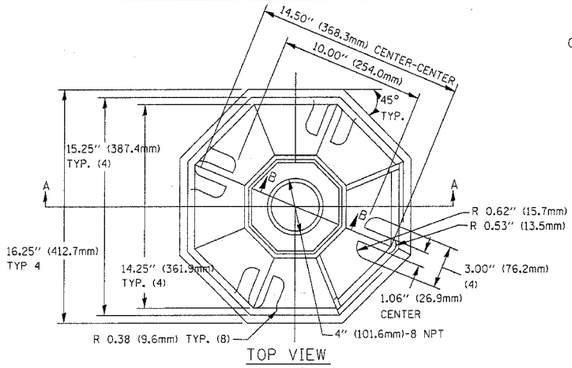
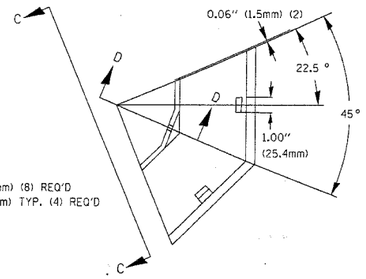
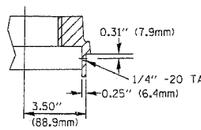
D-91-106-07

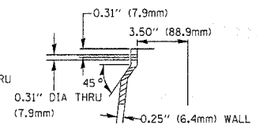


TOP VIEW

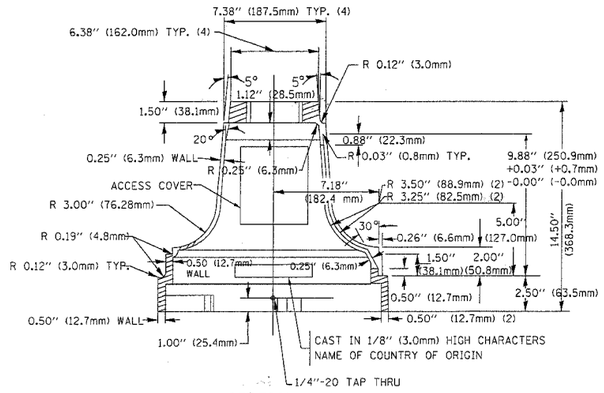




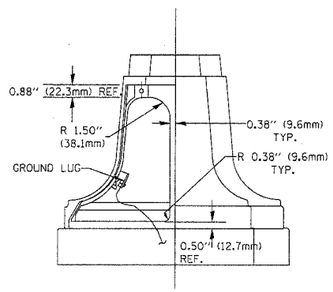
SECTION B-B



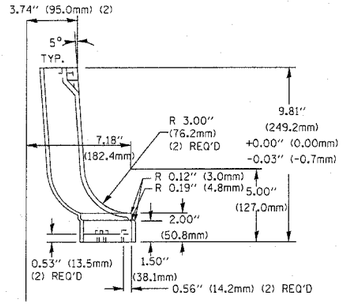
SECTION D-D



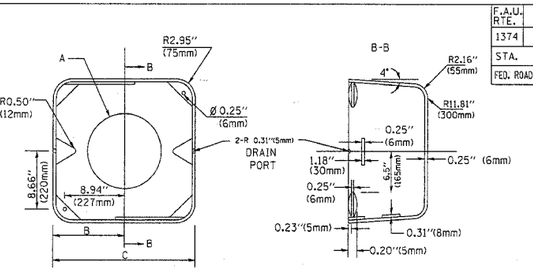
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



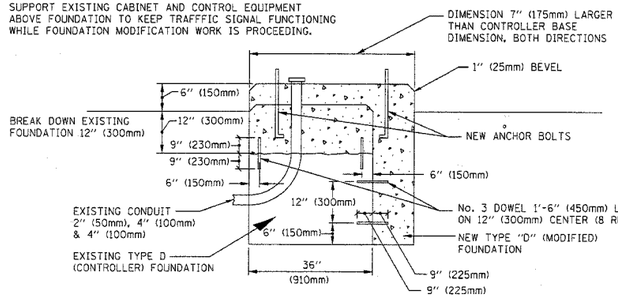
MATERIAL:

- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125"(257mm)	9.5"(241mm)	19"(483mm)	12" (300mm)	24kg
II	Ø 11.125"(283mm)	10.75"(273mm)	21.5"(546mm)	12" (300mm)	26kg

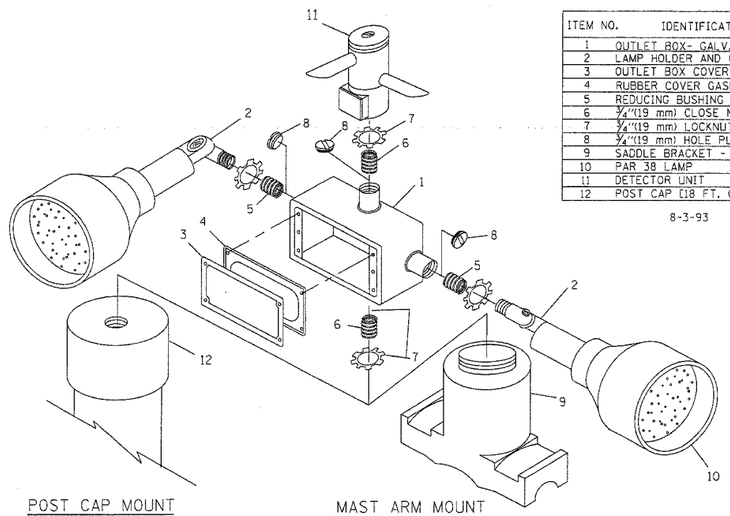
SHROUD DETAIL

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



POST CAP MOUNT

MAST ARM MOUNT

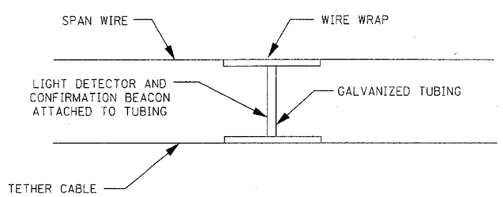
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

NOTES:

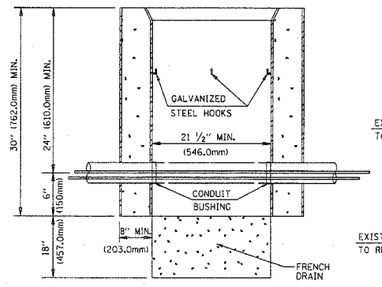
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



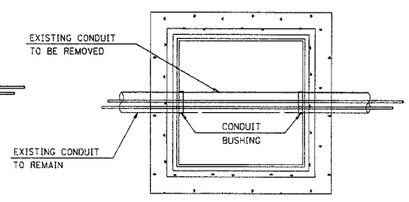
LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

NOTES:
1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



ELEVATION



PLAN

DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT
N.T.S.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.
DATE 01-31-2006

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

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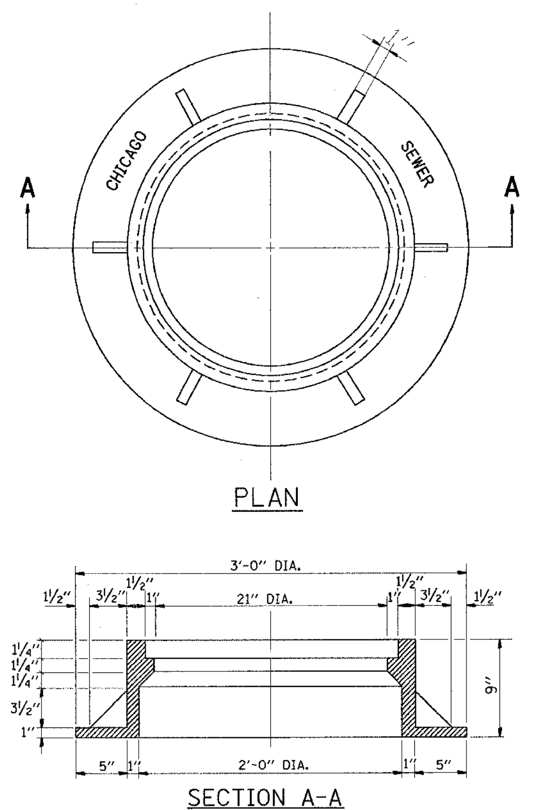
CONTRACT NO. 60003

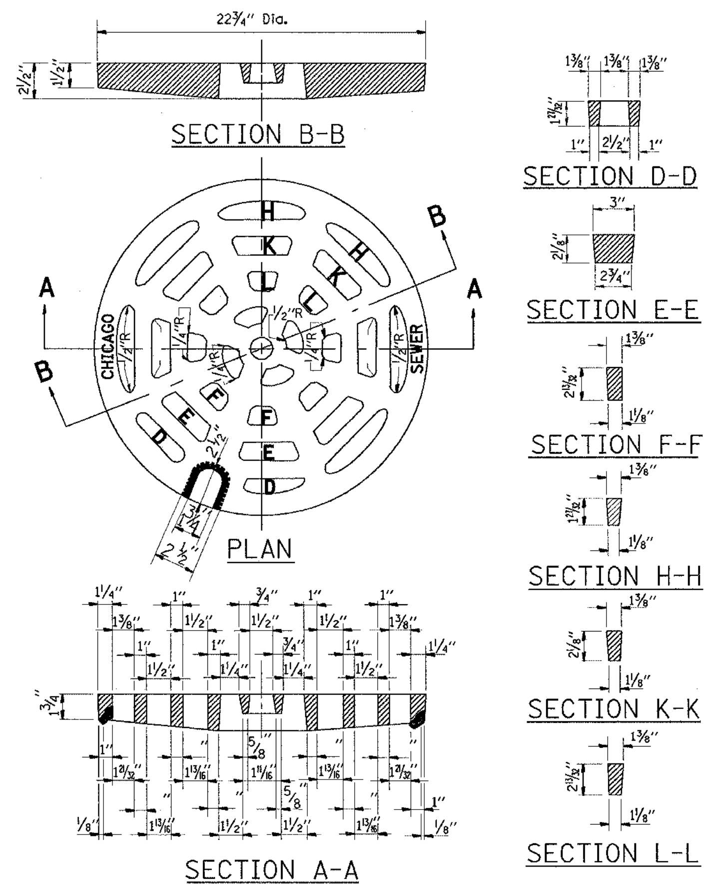
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE: METAL PLATES MUST BE FURNISHED FOR PERFORATED LIDS ON MANHOLES

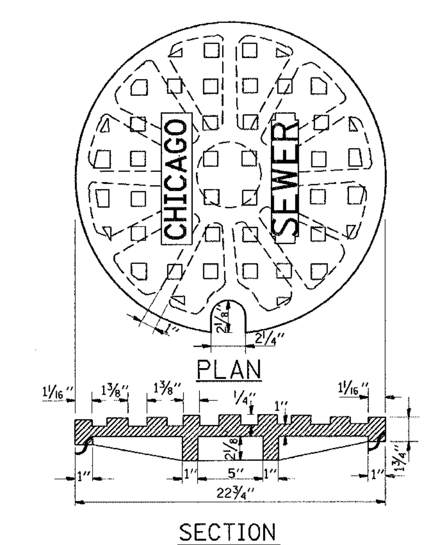
CHICAGO STANDARD MANHOLE FRAME

SCALE: 1½"=1'-0"
MATERIAL: CAST IRON



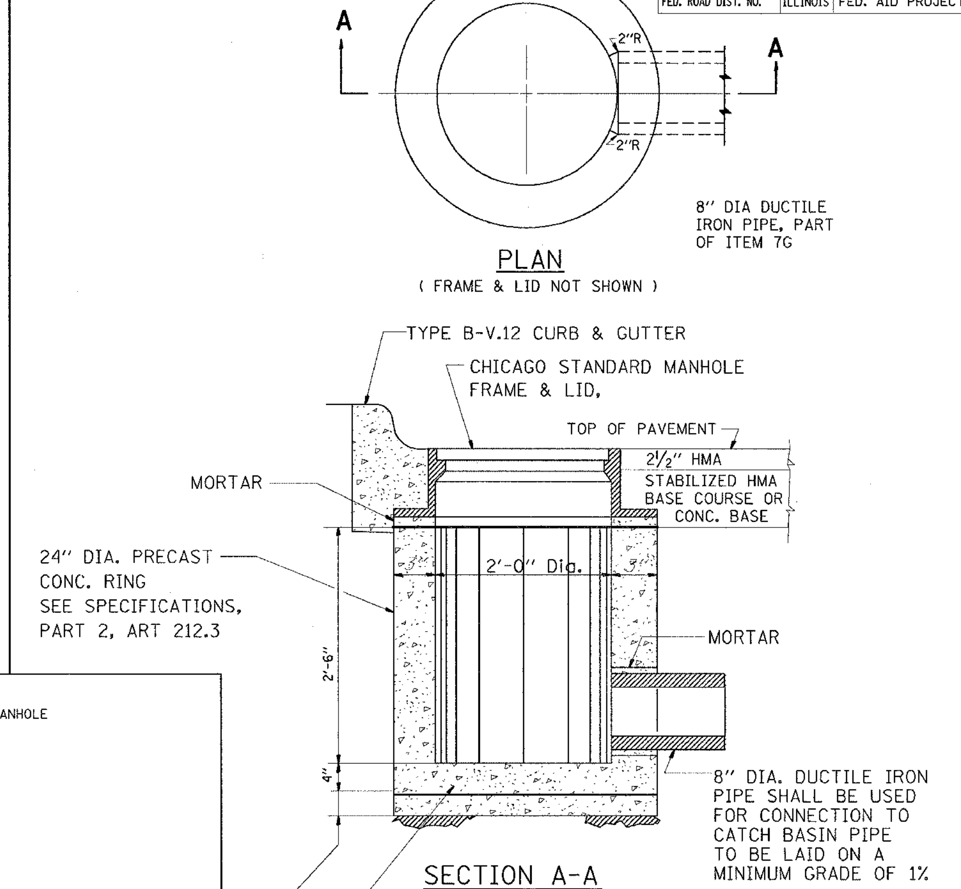
PERFORATED LID FOR CATCH BASINS & MANHOLES

SCALE: 2"=1'-0"
MATERIAL: CAST IRON



SOLID LID FOR MANHOLES

SCALE: NONE
MATERIAL: CAST IRON



REINF. CONC. BASE CAST AS INTEGRAL PART OF 24" DIA. PRECAST CONC. RING

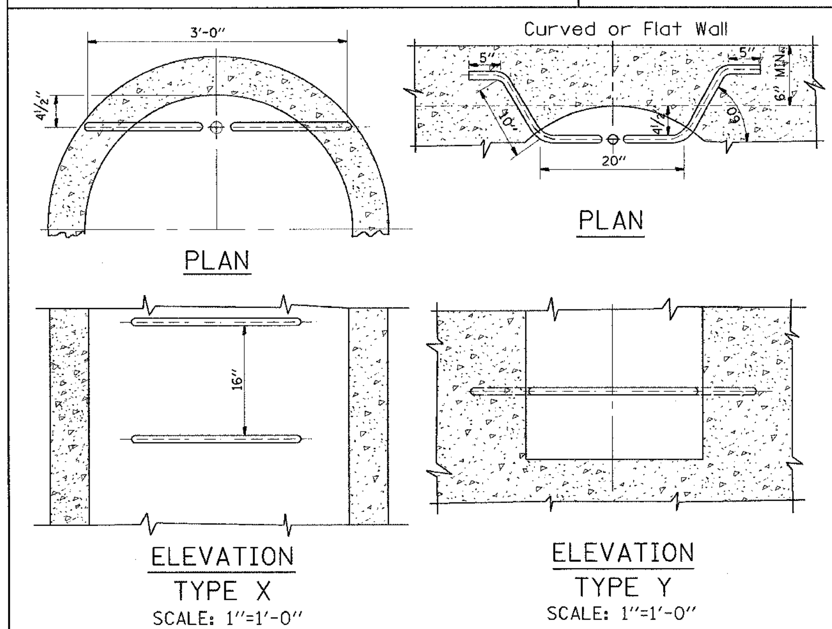
6" MINIMUM GRANULAR EMBEDMENT UNDER ALL INLETS. FURNISHING AND INSTALLING GRANULAR EMBEDMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 12

STANDARD INLETS

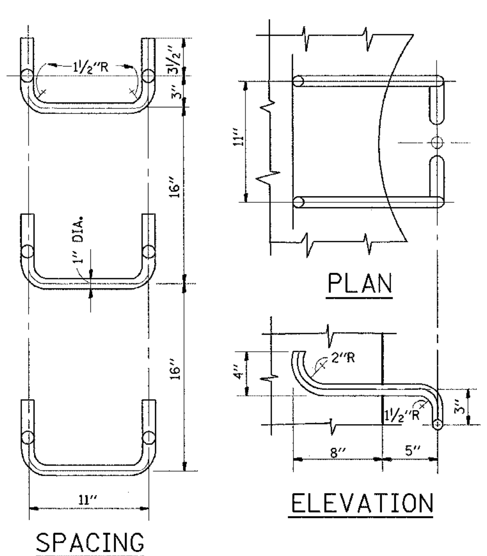
SCALE 1"= 1'-0"
ITEM 12

THIS INLET DETAIL IS SOMETIMES REFERRED TO AS "CHICAGO STANDARD INLET, TYPE A"

NOTE:
INLETS SHALL NOT BE CONSTRUCTED UNLESS IT IS IMPOSSIBLE TO CONSTRUCT A CATCH BASIN. THE CONTRACTOR SHALL HAVE THE DEPARTMENT OF SEWERS APPROVAL BEFORE CONSTRUCTING INLETS.



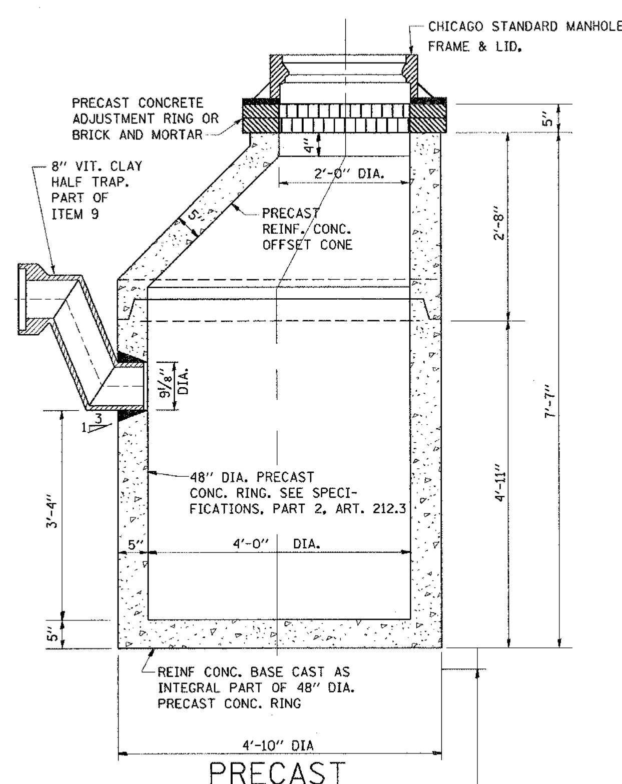
STANDARD LADDER RUNGS



HANDHOLD-TYPE Z RUNG

Scale: 1½"=1'-0"

ALL LADDER RUNGS SHALL BE ALUMINUM OR GALVANIZED WROUGHT IRON AS SPECIFIED IN THE SPECIFICATIONS, PART 2, ARTICLE 214.2. RUNGS SHALL BE 1" DIAMETER OR OF A SHAPE HAVING AN EQUIVALENT CROSS-SECTIONAL AREA.



NOTE:
6" MINIMUM GRANULAR EMBEDMENT UNDER ALL CATCH BASINS

STANDARD CATCH BASINS

SCALE: ¾"= 1'-0"
ITEM 9

CITY OF CHICAGO
DEPARTMENT OF SEWERS
ENGINEERING DIVISION

REVISIONS	
NAME	DATE
M. GOMEZ	01/25/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
CATCH BASIN, INLET AND MANHOLE DETAILS

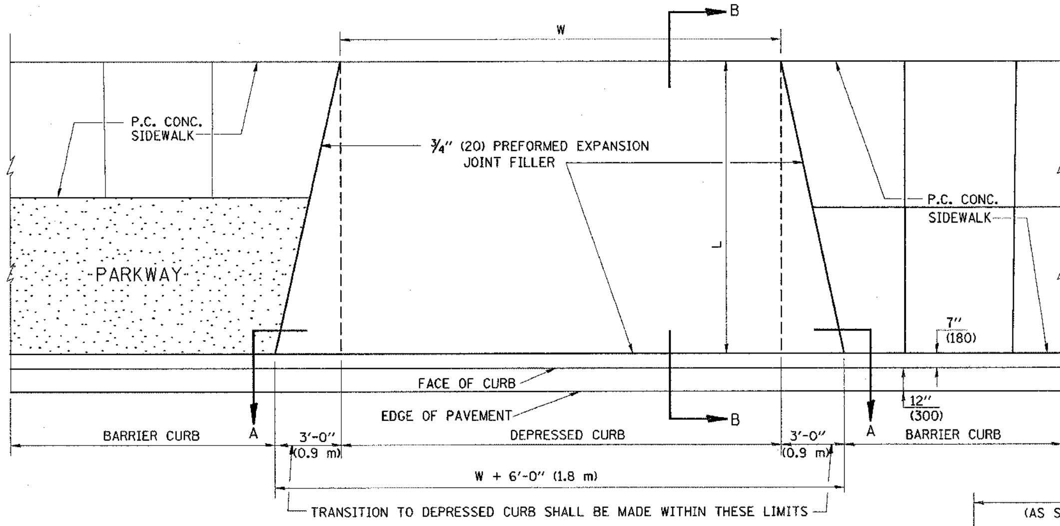
SCALE: VERT. HORIZ. NONE
DRAWN BY
CHECKED BY

BD600-13 (BD47)

PLOT DATE = 3/15/2007
FILE NAME = W:\diststd\bd47.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = abreuah

CONTRACT NO. 60C03

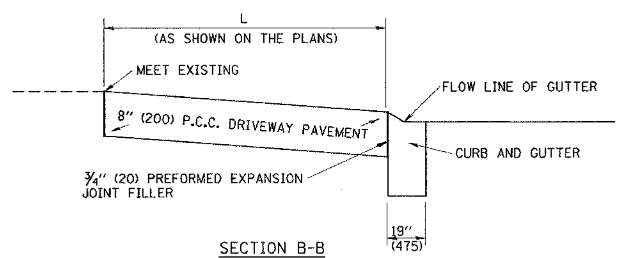
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 W-RS	COOK	43	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



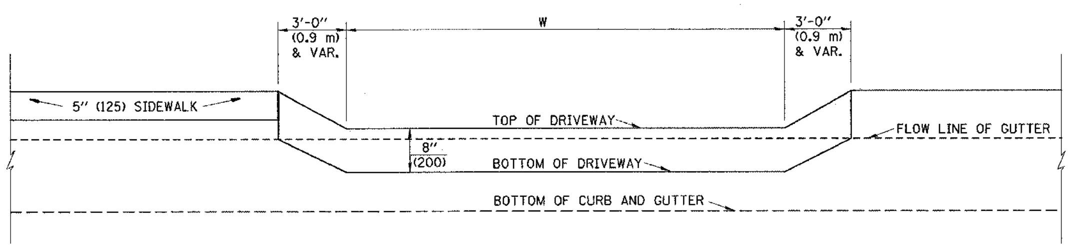
PLAN VIEW

NOTES:

1. EXPANSION JOINTS SHALL BE CONSTRUCTED AS SHOWN ON THE DETAILS FOR P.C.C. SIDEWALK.
2. THE CURB BETWEEN ADJACENT DRIVEWAYS SHALL BE FULL HEIGHT FOR A DISTANCE OF AT LEAST FOUR 4 FEET (1.2 METERS)
3. P.C. CONCRETE DRIVEWAYS SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
4. ¾″ (20) PREFORMED EXPANSION JOINTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO P.C.C. DRIVEWAY PAVEMENT 8″ (200).
5. COMBINATION CONC. CURB AND GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE TRANSITION CURB AND GUTTER.

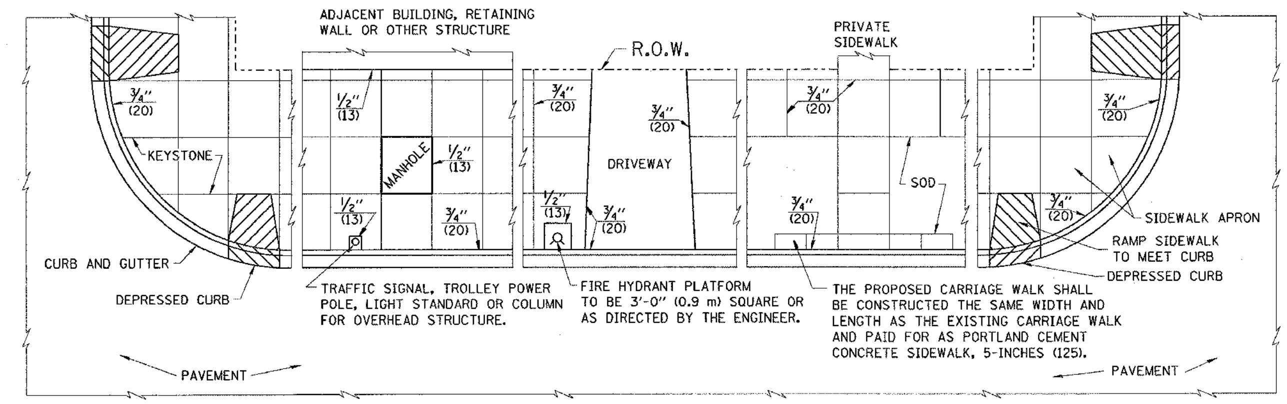


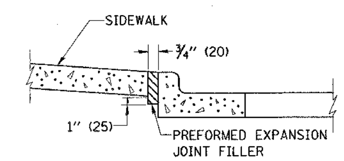
SECTION B-B



SECTION A-A

P.C.C. DRIVEWAY PAVEMENT DETAIL





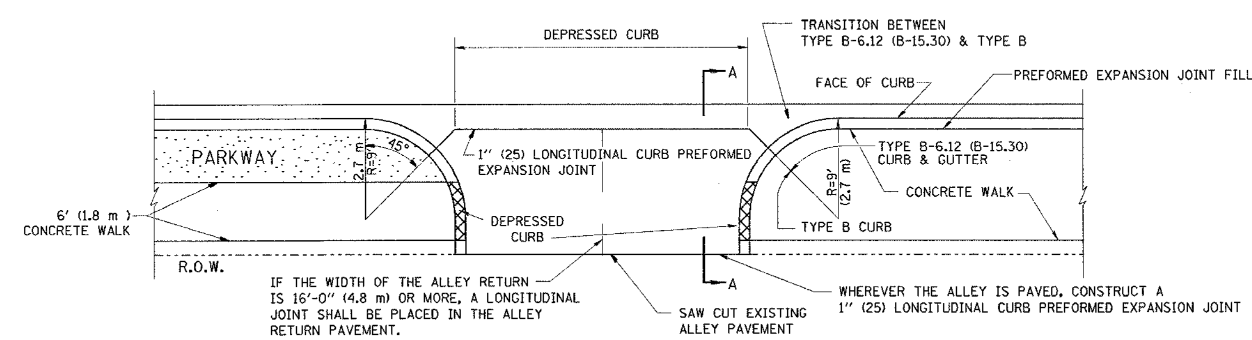
SLOPE FOR SIDEWALK
1″ (25) IN 3′-0″ (0.9 m) IN CHICAGO

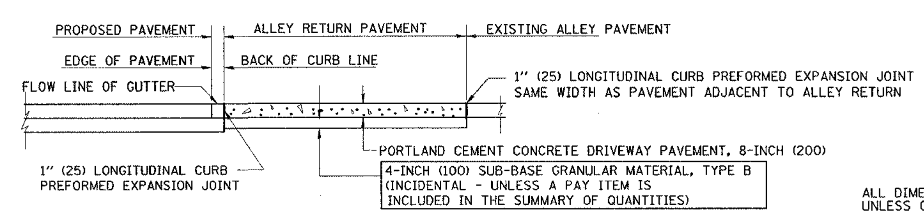
NOTES:

1. ONE-HALF INCH THICK EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIDEWALK AND ALL STRUCTURES SUCH AS LIGHT STANDARDS, TRAFFIC LIGHT STANDARDS, MANHOLES, WHICH EXTEND THROUGH THE SIDEWALK.
2. ¾″ (20) THICK EXPANSION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 100 FEET (30 METERS) IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT-TO PAVEMENT OR CURB HAVING EXPANSION JOINTS, THE EXPANSION JOINTS IN THE SIDEWALK SHALL BE PLACED OPPOSITE THE EXISTING EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL ALSO BE PLACED WHERE THE SIDEWALK ABUTS EXISTING SIDEWALKS, BETWEEN DRIVEWAY PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK AND CURBS WHERE THE SIDEWALK ABUTS A CURB.

PORTLAND CEMENT CONCRETE SIDEWALK DETAILS

NOTES: NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE GUTTER FLARE





SECTION A-A

ALLEY RETURN DETAIL

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
M. DE YONG	06/13/90

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO DETAILS FOR P.C. CONCRETE DRIVEWAY, ALLEY RETURN AND SIDEWALK

SCALE: VERT. HORIZ. NONE

DRAWN BY

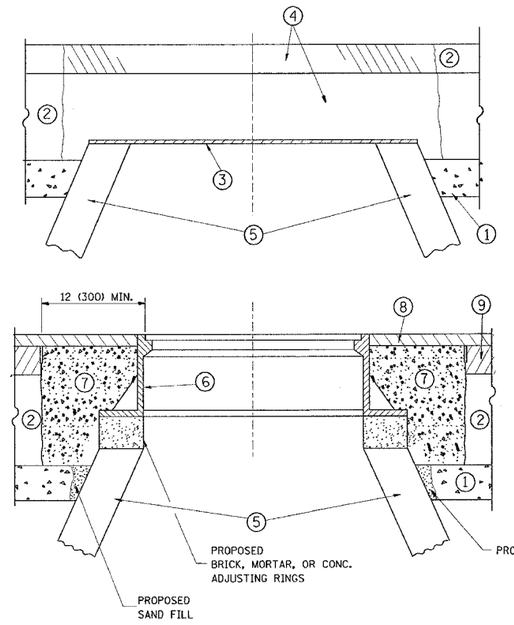
CHECKED BY

BD400-03 (BD-17)

PLOT DATE = 3/15/2007
FILE NAME = W:\diststd\bd17.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = ebrauah

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	28
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

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

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

D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.

B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA 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: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: VERT. NONE HORIZ.

DRAWN BY

CHECKED BY

BD600-03 (BD-8)

PLOT DATE = 3/15/2007
FILE NAME = w:\district1\bd08.dgn
PLOT SCALE = 64.0000 '/ IN.
USER NAME = abrauch

CONTRACT NO. 66C03

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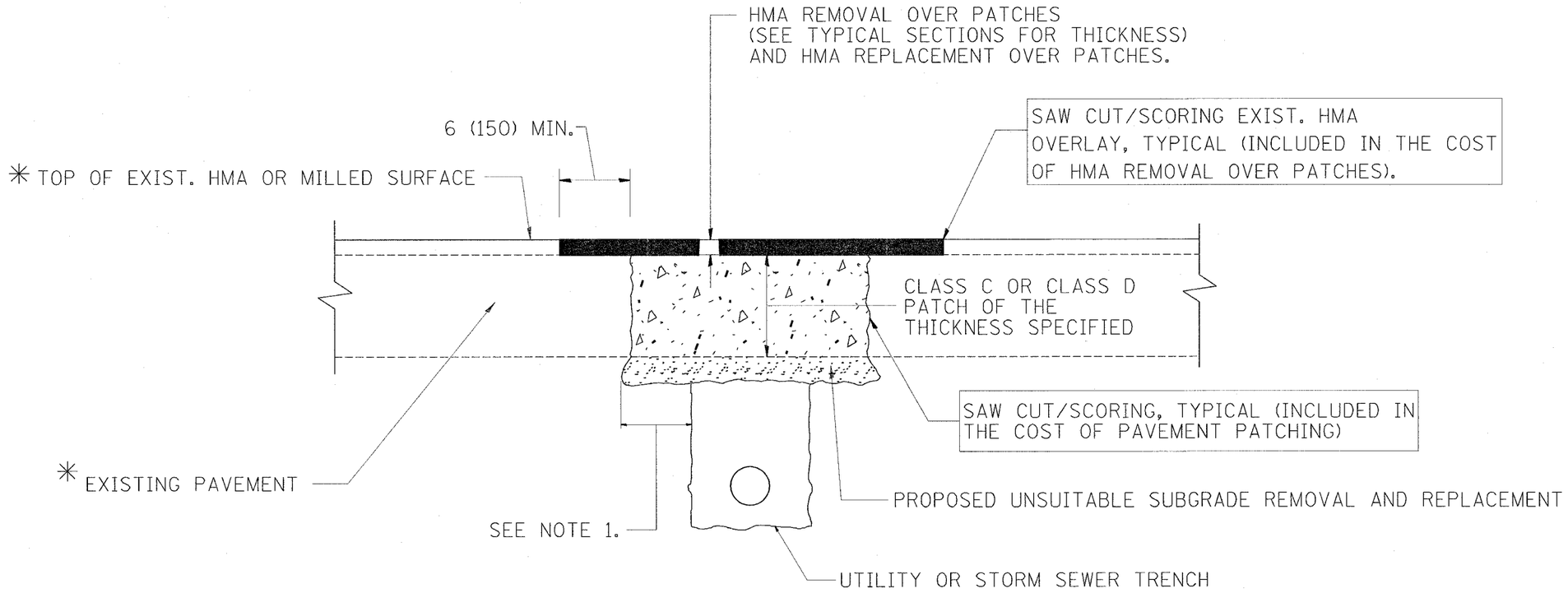
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) 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
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. HORIZ. NONE

DRAWN BY

CHECKED BY

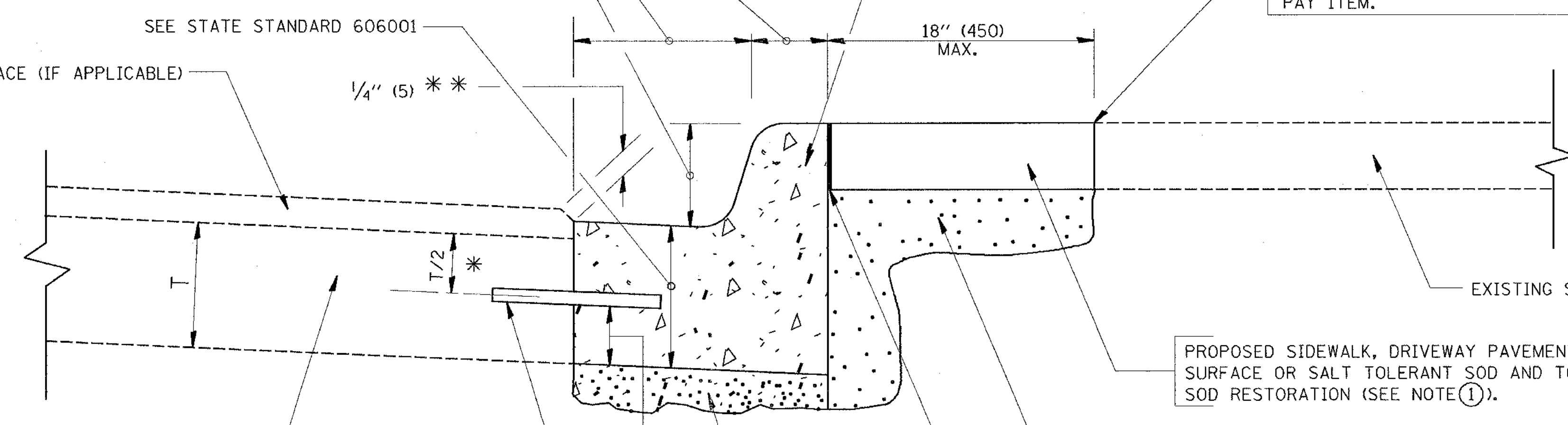
BD400-04 (BD-22)

PLOT DATE = 3/15/2007
FILE NAME = W:\district\bd22.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = dcrouch

W:\district\bd22.dgn 3/15/2007 10:41:19 AM User=dcrouch

CONTRACT NO. 60C03

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	30
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



✱ 3″ (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

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

NOTE:

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

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

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

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

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

BASIS OF PAYMENT:

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

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS NAME	DATE
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
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. HORIZ. NONE

DRAWN BY

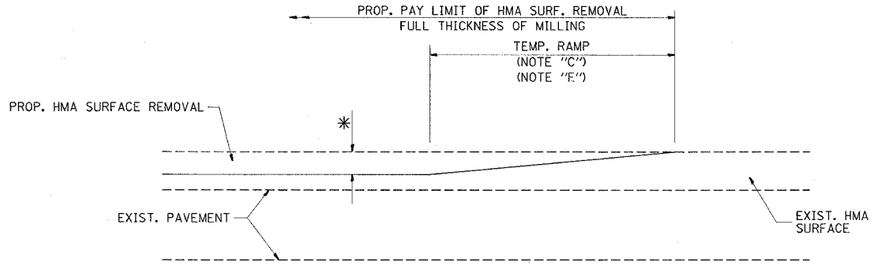
CHECKED BY

BD600-06 (BD-24)

PLOT DATE = 3/15/2007
FILE NAME = W:\diststd\bd24.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = abreuah

CONTRACT NO. 60C03

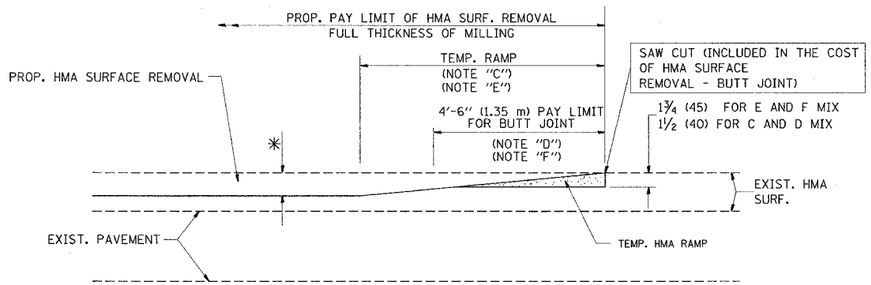
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1379	0406 WRS	Cook	43	31
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

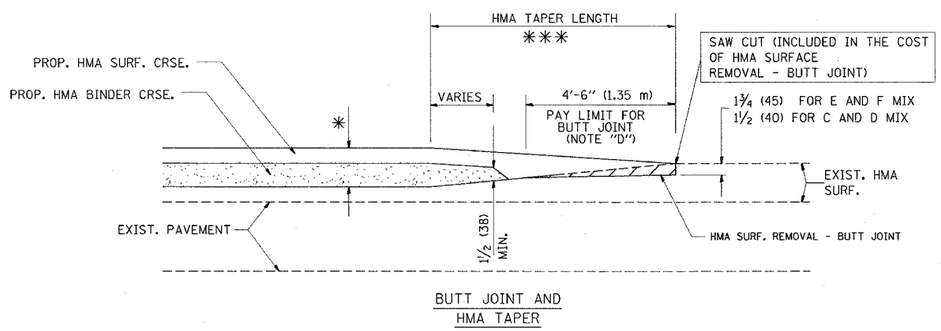


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

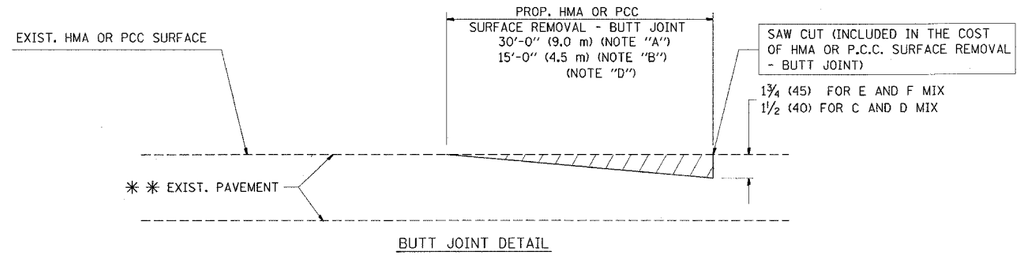
OPTION 2

TYPICAL TEMPORARY RAMP

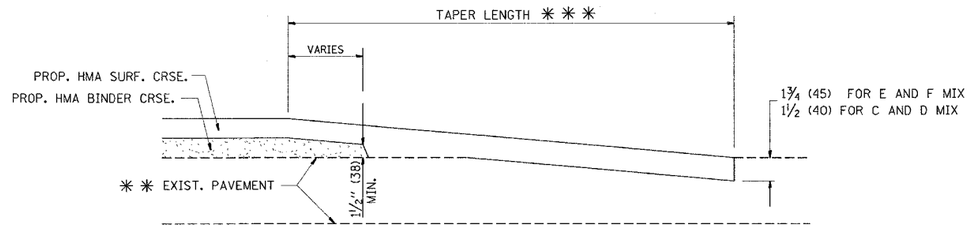


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

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

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE HORIZ. NONE

DRAWN BY

CHECKED BY

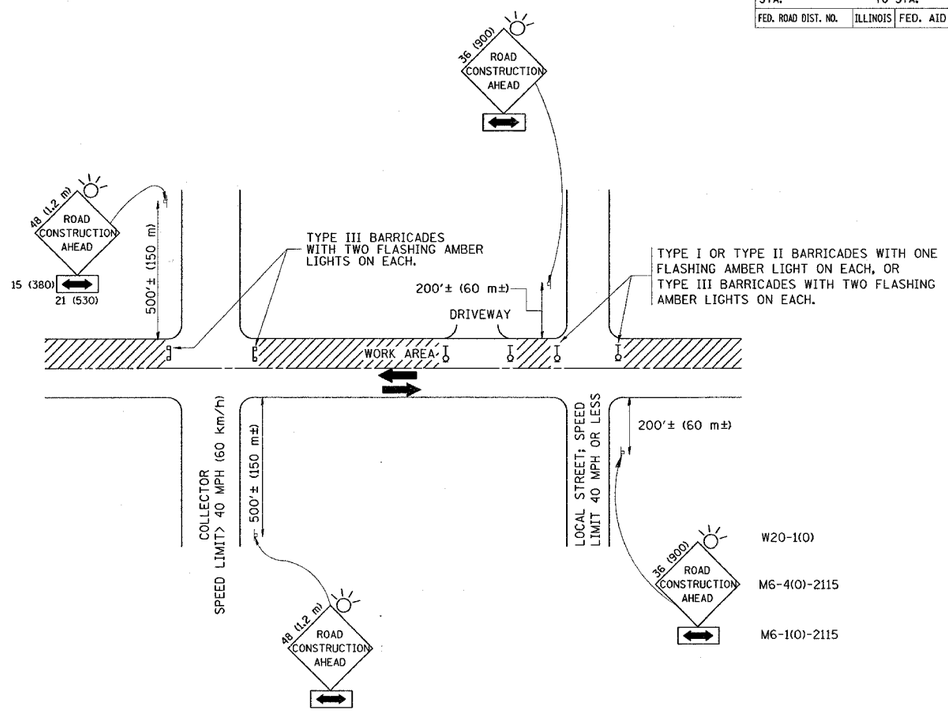
BD400-05 (VI=BD32)

PLOT DATE = 3/15/2007
FILE NAME = N:\dist61\bd32.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = dbrandish

N:\dist61\bd32.dgn 3/15/2007 10:41:25 AM User=dbrandish

CONTRACT NO. 60203

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	Cook	43	32
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

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

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

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

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

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

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

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

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

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: NONE

DRAWN BY

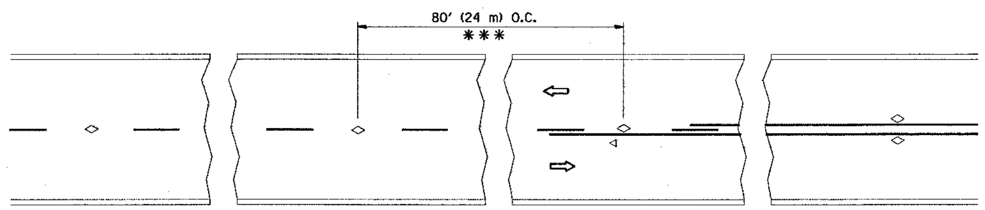
CHECKED BY

TC-10

PLOT DATE = 3/15/2007
FILE NAME = c:\projects\tc10.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = abreuch

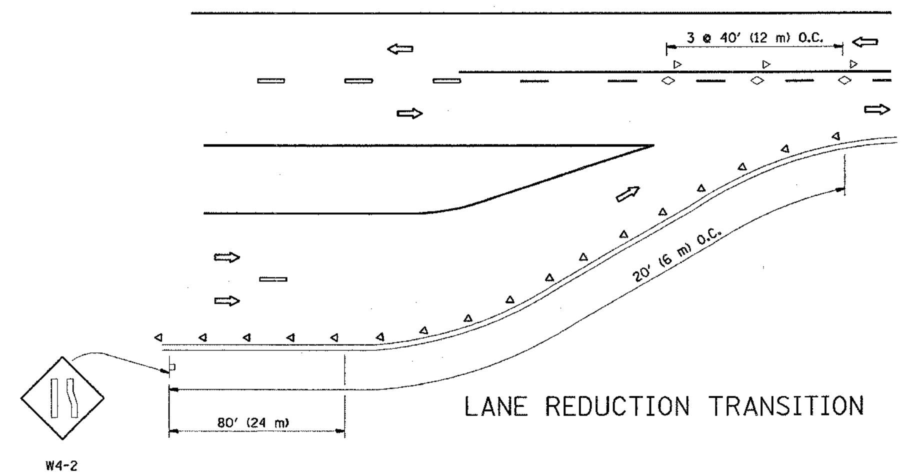
CONTRACT NO. 60C03

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

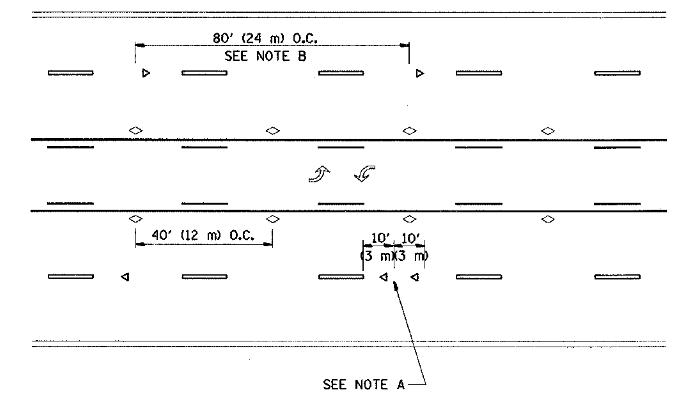


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

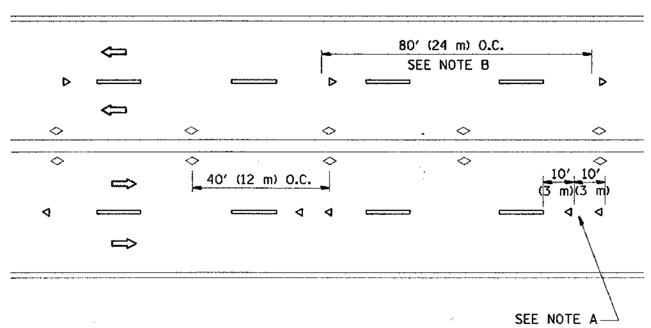
TWO-LANE/TWO-WAY



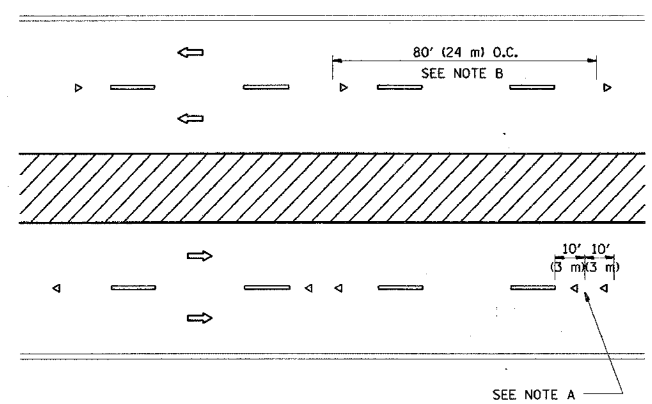
LANE REDUCTION TRANSITION



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 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

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

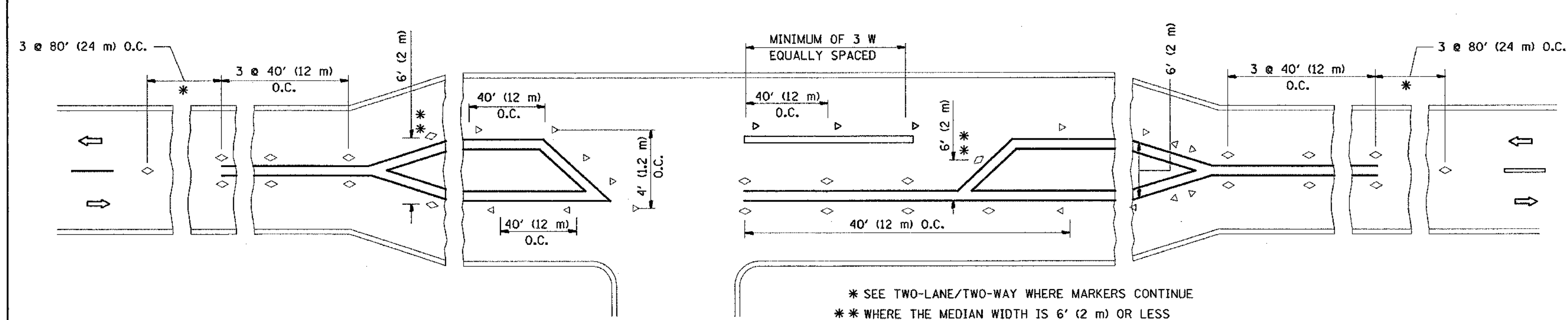
A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

Symbol	Meaning
——	YELLOW STRIPE
▭	WHITE STRIPE
◁	ONE-WAY AMBER MARKER
◀	ONE-WAY CRYSTAL MARKER (W/O)
◇	TWO-WAY AMBER MARKER

DESIGN NOTES

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



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

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

LEFT TURN

All dimensions are in inches (millimeters) 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

DRAWN BY CADD

CHECKED BY

TC-11

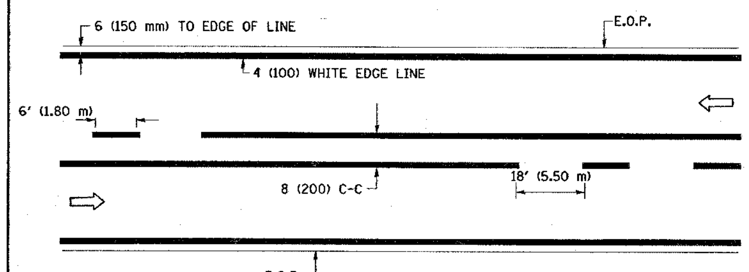
PLOT DATE = 3/15/2007
FILE NAME = w:\diststd\tc11.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = obreush

CONTRACT NO. 60C03

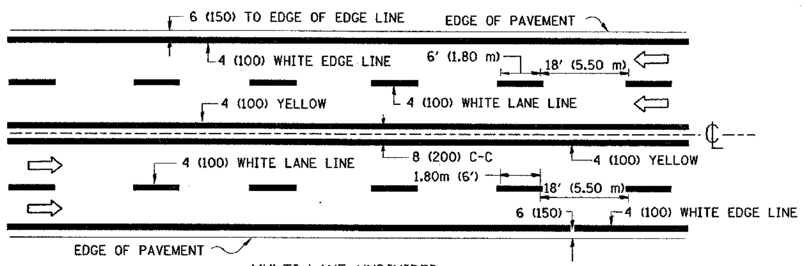
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	34

STA. TO STA.

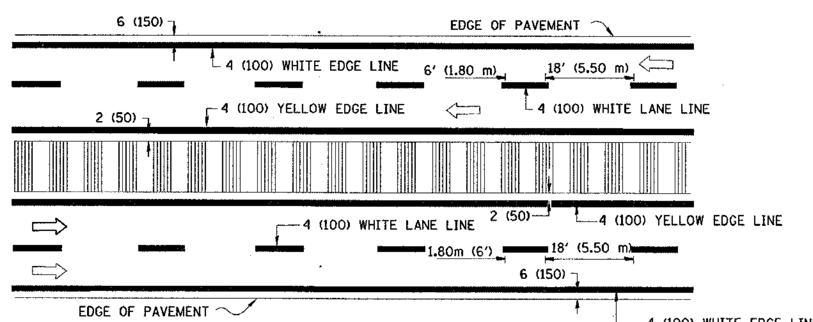
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



2-LANE ROADWAY



MULTI-LANE UNDIVIDED

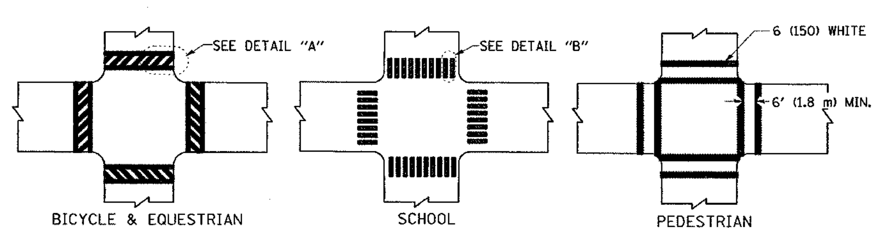


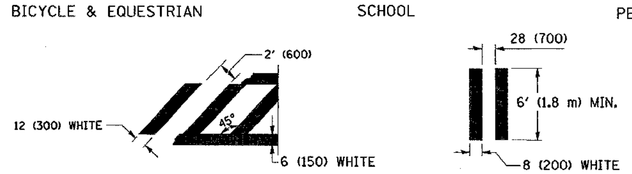
MULTI-LANE DIVIDED

WITH MOUNTABLE MEDIAN

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

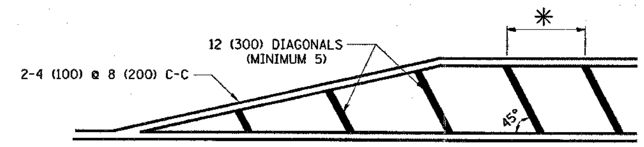
TYPICAL LANE AND EDGE LINE MARKING





DETAIL "A" DETAIL "B"

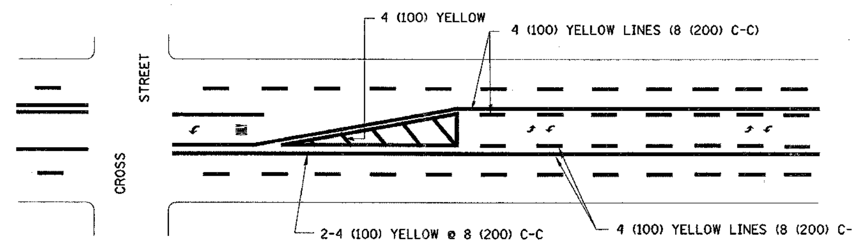
TYPICAL CROSSWALK MARKING



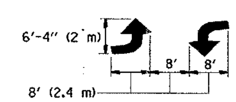
*FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

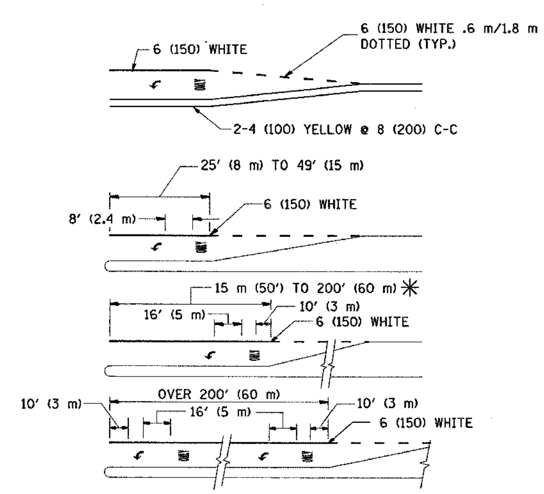


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

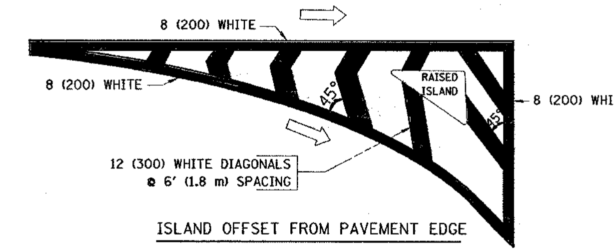


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.8 SQ. FT. (1.47 m^2) ONLY AREA = 22.9 SQ. FT. (2.13 m^2)

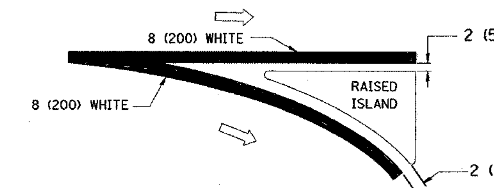
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) 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 @ 6 (150) 12 (300) @ 45° 8 (200) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2'-4" (700) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

1 OF 2

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
TYPICAL PAVEMENT
MARKINGS

SCALE: NONE

DRAWN BY CADD
CHECKED BY

TC-24

PLOT DATE = 3/15/2007
FILE NAME = w:\distd\tc24.dgn
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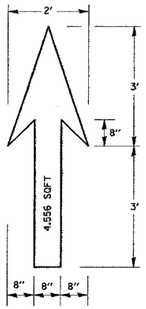
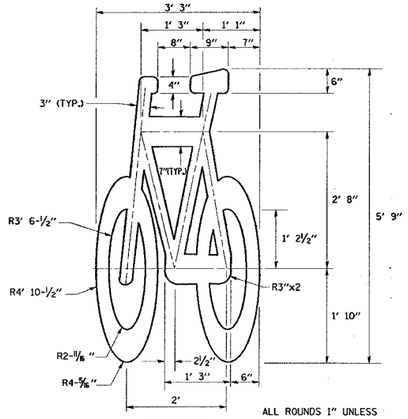
USER NAME = abreuah

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	25
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





ALL ROUNDS 1" UNLESS OTHERWISE NOTED.

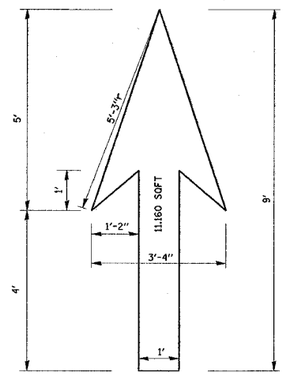
BICYCLE LANE SYMBOL

NOTE:
1.) FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.

2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

TYPICAL BIKE LANE SYMBOLS
DRAWING #28

DRAWING #29



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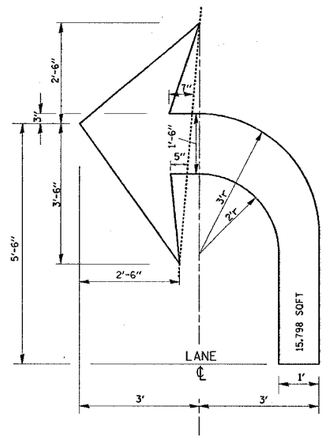

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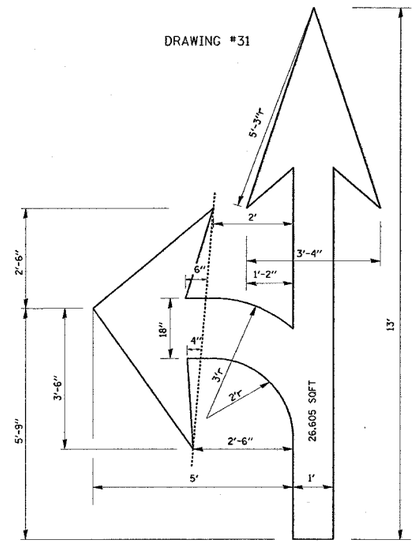

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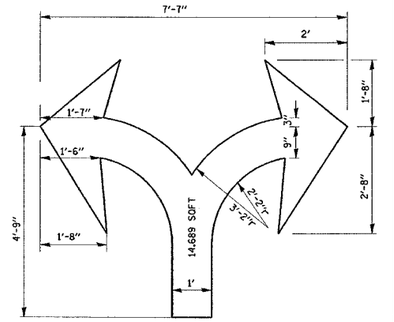

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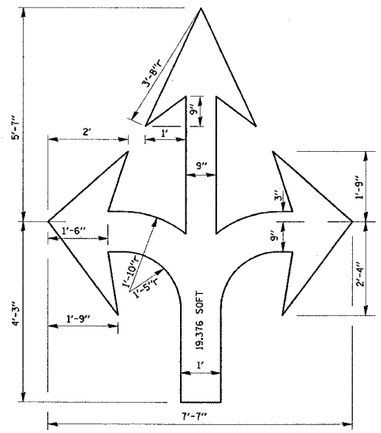

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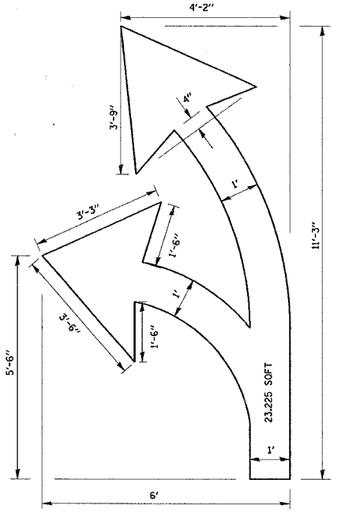

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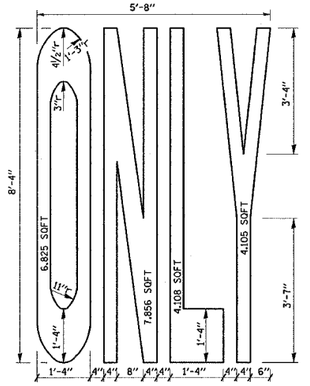

NOTE:
ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

2 OF 2

REVISIONS	
NAME	DATE
T. RAMMACHER	12/07/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS

SCALE: NONE

DRAWN BY

CHECKED BY

TC-24

PLOT DATE = 3/15/2007
FILE NAME = c:\projects\tc24.dgn
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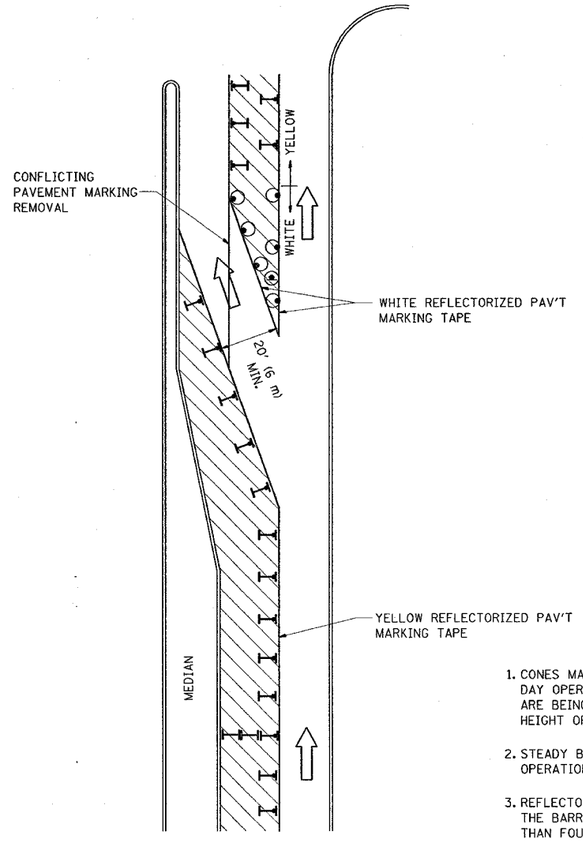
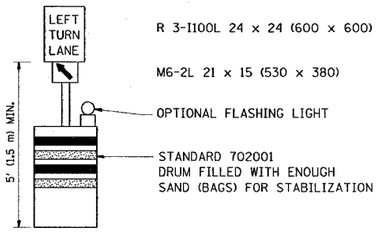
USER NAME = abreuch

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	06GWRS	COOK	43	36
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
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 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) 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 inches (millimeters) 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

CHECKED BY LHA

TC-14

PLOT DATE = 3/15/2007
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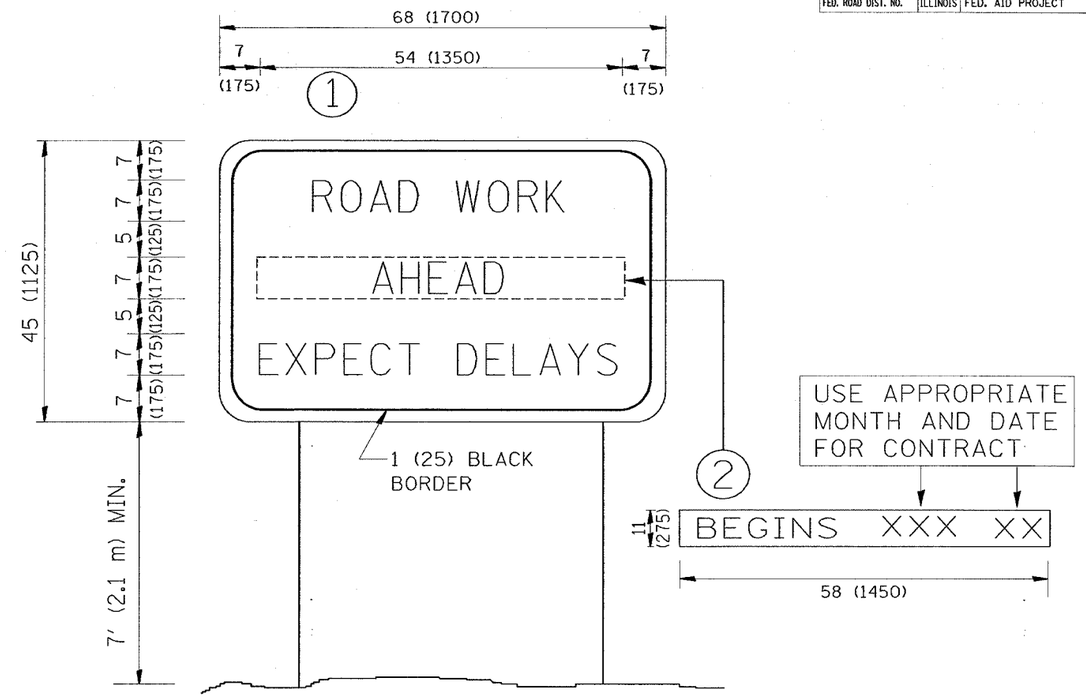
USER NAME = abr-eush

CONTRACT NO. 60C03

F.A.I./ RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
137	1606WRS	COOK	43	37
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN

CHECKED BY

TC22

PLOT DATE = 3/15/2007
FILE NAME = c:\projects\tc22.dgn
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USER NAME = abr-eush

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USER NAME = dbreuch

ORIGINAL SURVEY NO.		BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY NOTE BOOK NO.		BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100

635
630

Belmont Ave.
℄
628.94
94+34.20

Belmont Ave.
℄
629.01
94+00.00

Belmont Ave.
℄
629.24
Irregular Pavement Found
93+39.00

Belmont Ave.
℄
629.23
93+00.00

Belmont Ave.
℄
629.18
92+00.00

Belmont Ave.
℄
629.18
91+00.00

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100

CONTRACT NO. 60023

FED. ROAD DIST. NO.	FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS FED. AID PROJECT	1374	0406 WRS	COOK	15	14

STA. 91+00.00 TO STA. 94+34.20

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USER NAME = obreuah

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	PLOTTED		
	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
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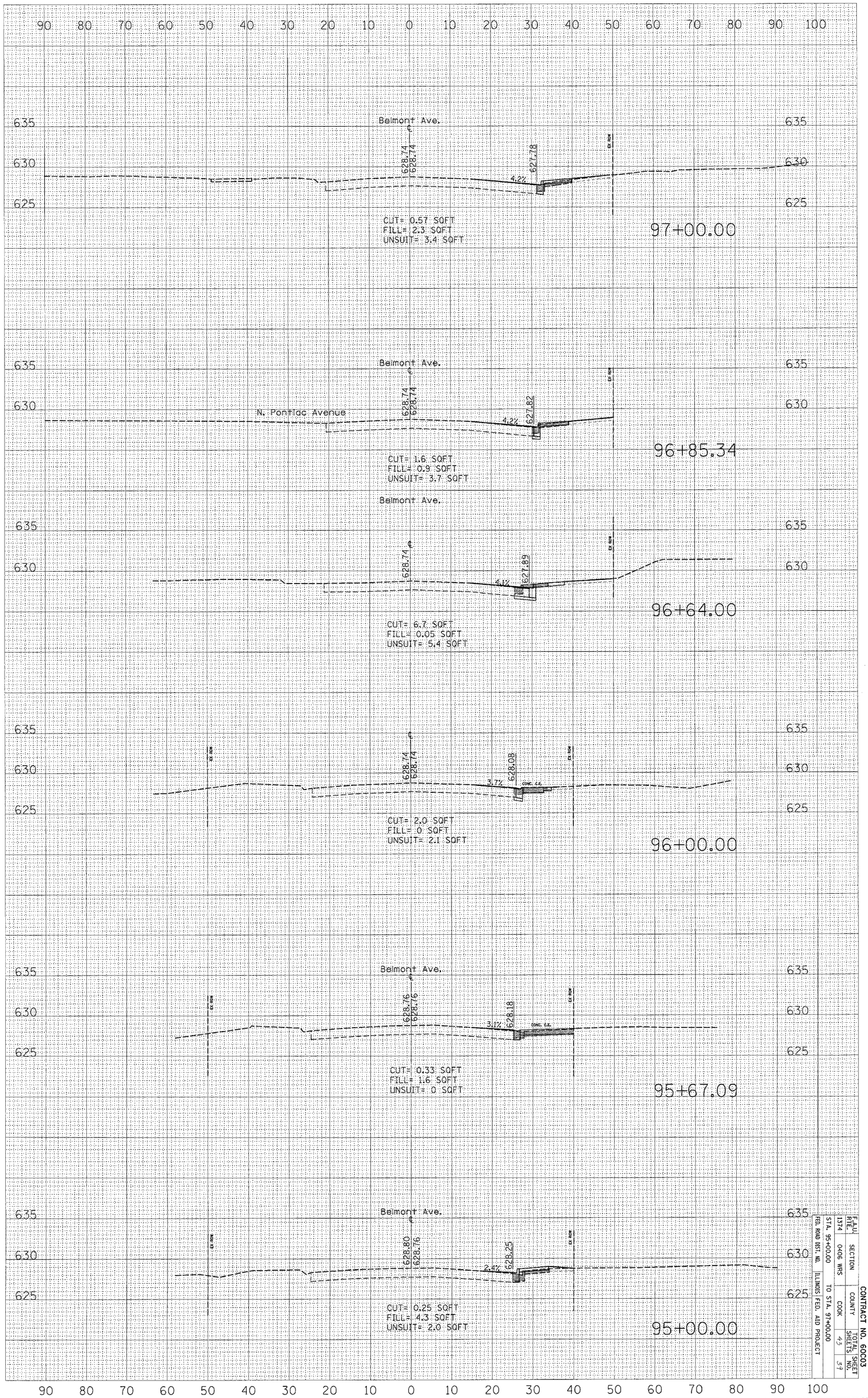
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	39

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

STA. 95+00.00 TO STA. 97+00.00

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	TEMPLATE		
	AREAS		
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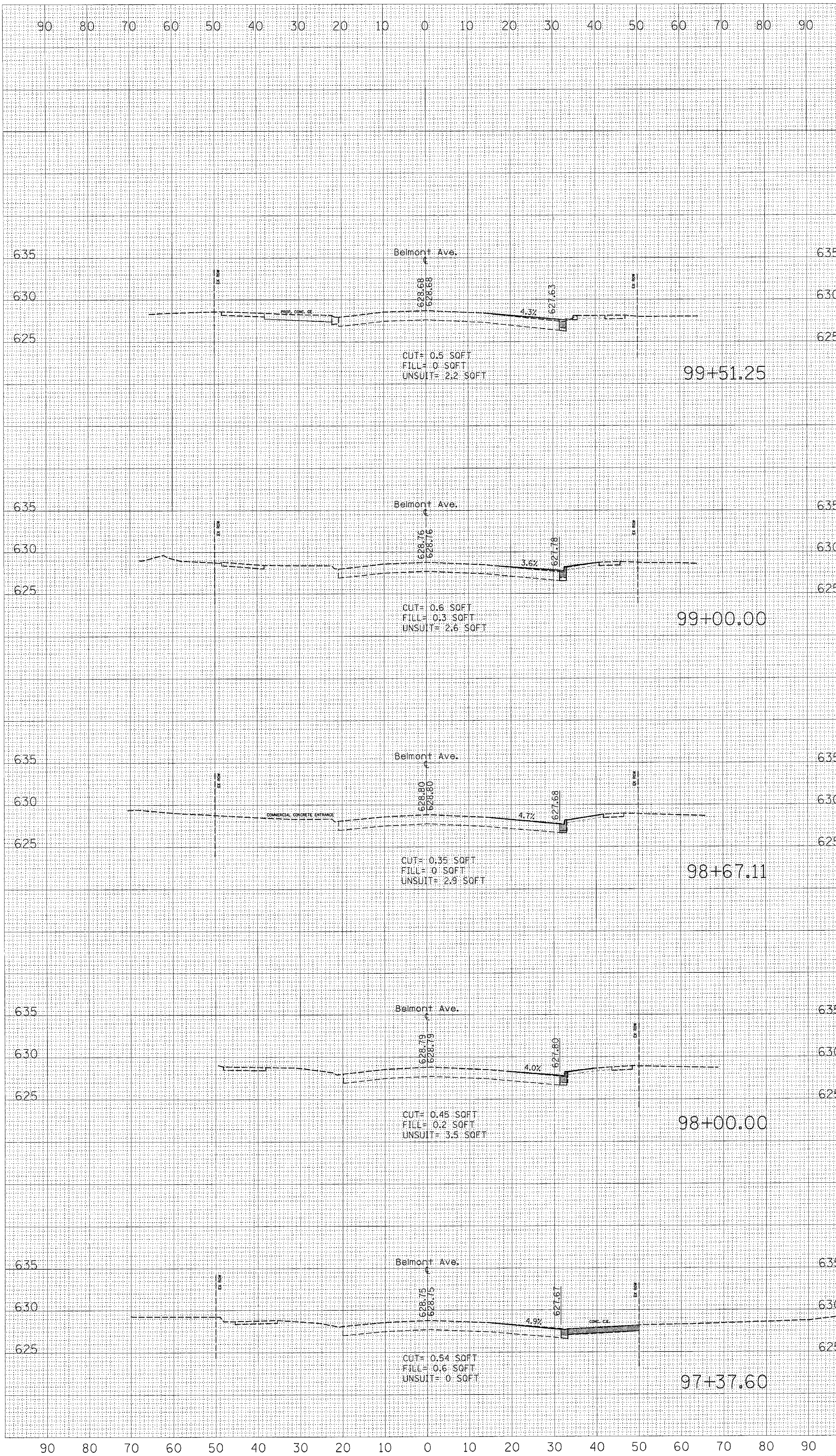
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



CONTRACT NO. 60C03

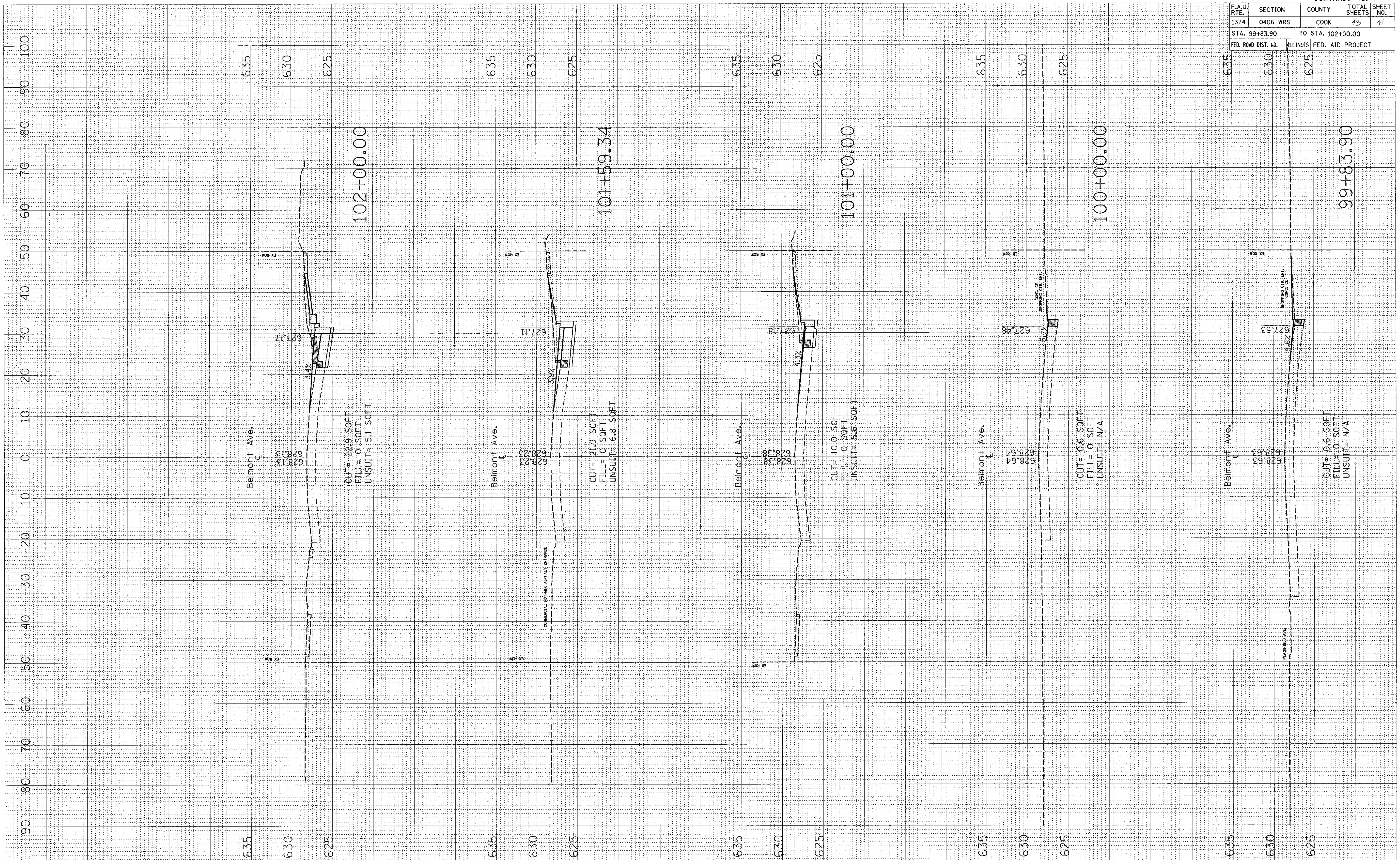
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	40
STA. 97+37.60	TO STA. 99+51.25			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	41

STA. 99+83.90 TO STA. 102+00.00

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



FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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	AREAS		
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	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

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USER NAME = abreush

PLOT DATE = 4/4/2007
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ORIGINAL SURVEY		BY	DATE
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	PLOTTED		
	TEMPLATE		
	AREAS		
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FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
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	TEMPLATE		
NO.	AREAS		
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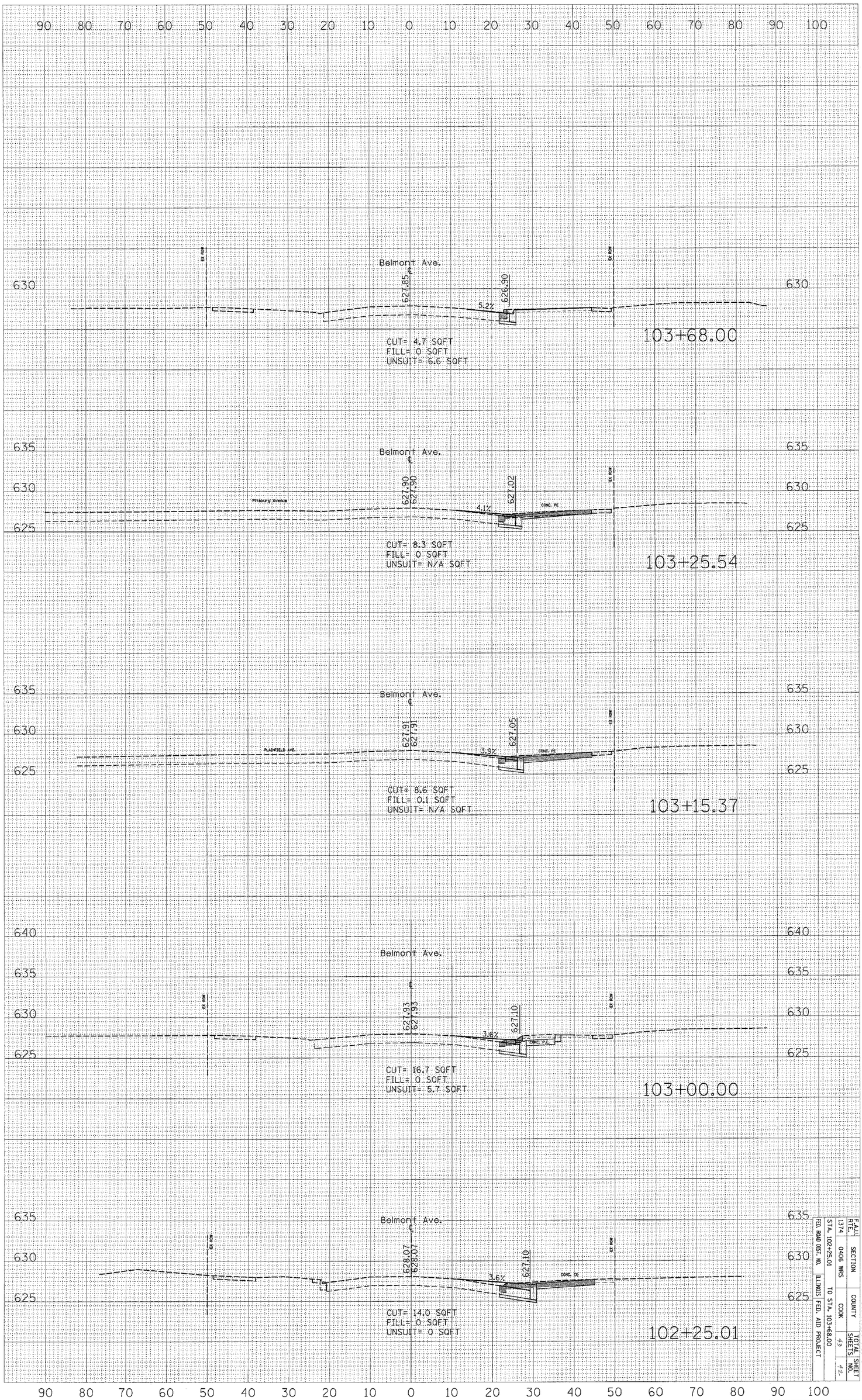


FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	49	42

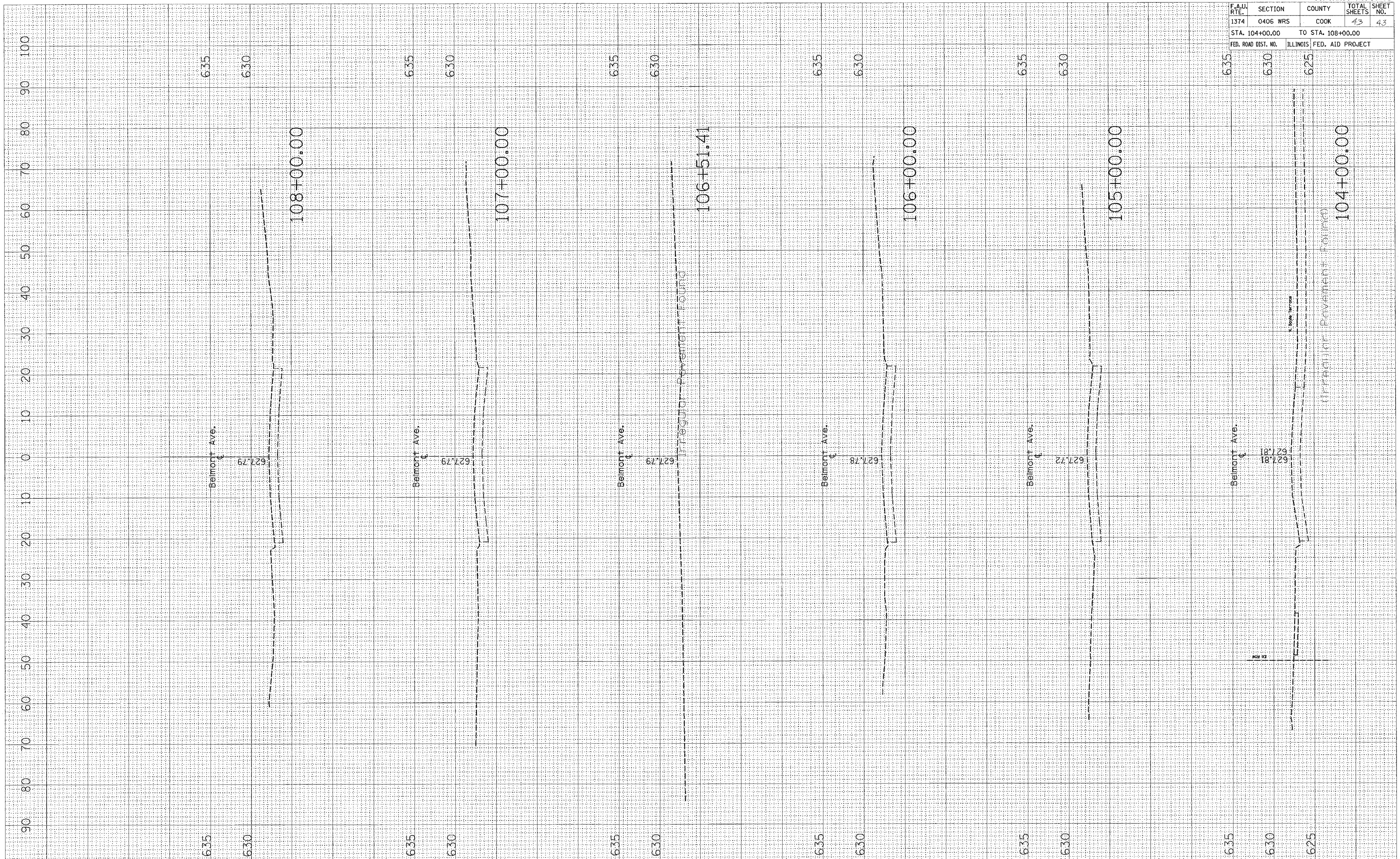
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

STA. 102+25.01 TO STA. 103+68.00

CONTRACT NO. 60613

CONTRACT NO. 60C03

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	43	43
STA. 104+00.00	TO STA. 108+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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