60A61

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	1

CONTRACT NO. 60A61

+1 = 54 total sheets

4-28-06 Letting, Item 112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

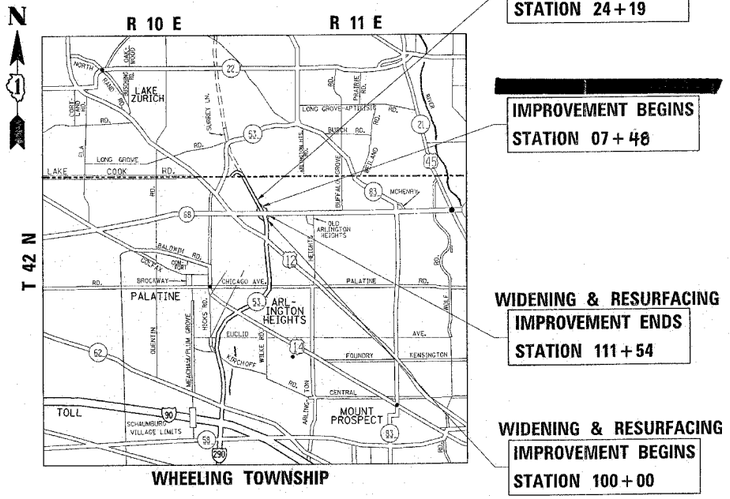
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE VILLAGE OF ARLINGTON HEIGHTS IN COOK COUNTY

F.A.P. ROUTE 342: ILL 53 @ ILL 68
SE EXIT RAMP (RAMP "C") AND NE ENT RAMP (RAMP "B")
SECTION: 530 N-2
PATCHING, WIDENING AND RESURFACING
COOK COUNTY
C-91-089-06

D-91-089-06

LOCATION OF SECTION INDICATED THUS: –



IMPROVEMENT ENDS
STATION 24+19

[redacted]

IMPROVEMENT BEGINS
STATION 07+48

WIDENING & RESURFACING
IMPROVEMENT ENDS
STATION 111+54

WIDENING & RESURFACING
IMPROVEMENT BEGINS
STATION 100+00

TRAFFIC DATA

SE EXIT RAMP (RAMP"C")
1994 ADT = 14000
SPEED LIMIT = 30 MPH
NE ENT RAMP (RAMP"B")
1994 ADT = 2400
SPEED LIMIT = 30 MPH

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

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

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

LOCATION 1: RAMP "C" (WIDENING & RESURFACING)
GROSS & NET LENGTH OF IMPROVEMENT = 1154 FT = 0.22 MILES

LOCATION 2: RAMP"B" [redacted]
GROSS LENGTH OF IMPROVEMENT = 1671 FT = 0.31 MILE
NET LENGTH OF IMPROVEMENT = 1274 FT = 0.24 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb. 10 20 06

Diane M. O'Keefe /cal
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 24 20 06
Mike Hine /cal
ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 20 06
Milton R. Sees P.E. /cal
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 60A61

Rev.

DISTRICT ONE – DESIGN AND PLAN PREPERATION ENGINEER – KEN ENG/J.P. CHANG (847) 705-4432

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	2
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 60A61

INDEX OF SHEETS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-01	CLASS C AND D PATCHES
482011-01	BITUMINOUS SHOULDER STRIPS/SHLDS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
602011	CATCH BASIN TYPE C
604091-01	FRAME AND GRATE TYPE 24
604001-02	FRAME AND LIDS TYPE 1
606001-02	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
606006-02	OUTLET FOR CONCRETE CURB AND GUTTER TYPE B-15.30 (B-6.24)
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm(24") FROM EDGE OF PAVEMENT
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-03	LANE CLOSURE FREEWAY/EXPRESSWAY
701411-03	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEED $\geq$ 45 MPH
701426-02	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS $\geq$ 45 MPH
701701-04	URBAN LANE CLOSURE, MULTILANE INTERSECTION
702001-06	TRAFFIC CONTROL DEVICES
814001	CONCRETE HANDHOLE
814006	DOUBLE HANDHOLE
878001-04	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATION
886006	TYPICAL LAYOUT FOR DETECTION LOOPS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF ARLINGTON HEIGHTS

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

THE CONTRACTOR SHALL PLACE AND MAINTAIN DRUMS WITH MONO DIRECTIONAL STEADY BURNING LIGHTS AT 50 C-C ON THE SHOULDER ADJACENT TO MILLED AREAS, DRUMS WILL REMAIN IN PLACE UNTIL THE PROPOSED SURFACE COURSE HAS BEEN PLACED AND EDGELINJES HAS BEEN INSTALLED.

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

THE RESIDENT ENGINEER SHALL CONTACT MR. PAUL M. SPONHOLZ, AREA TRAFFIC FIELD ENGINEER, AT (847) 705-4153 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

3 METERS (10 FEET) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT 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, ANC 1 INCH WHERE THE SPEED LIMIT IS 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1:3 (V:H)

TEMPORARY INFORMATION SIGNS SHALL NOT BE USED ON EXPRESSWAY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS 53 @ ILLINOIS 68
RAMP "C" (SE EXIT RAMP) &
RAMP "B" (NE ENT RAMP)

INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES

SCALE: VERT. HORIZ.

DRAWN BY

DATE

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	3
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

CONTRACT NO.: 60A61

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000-2A	Y031-IF	Y030-IE			
20200100	EARTH EXCAVATION	CU YD	700	700					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	12	12					
20800150	TRENCH BACKFILL	CU YD	4.5	4.5					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1210	1210					
25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25					
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	22.5	22.5					
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	22.5	22.5					
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	22.5	22.5					
25100630	EROSION CONTROL BLANKET	SQ YD	1210	1210					
25200200	SUPPLEMENTAL WATERING	UNIT	15	15					
28000255	TEMPORARY EROSION CONTROL SEEDING	ACRE	0.25	0.25					
28000400	PERIMETER EROSION BARRIER	FOOT	1200	1200					
31101400	SUB-BASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	1750	1750					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4.5	4.5					
40600300	AGGREGATE (PRIME COAT)	TON	21.5	21.5					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2.5	2.5					
40600895	CONSTRUCTING TEST STRIP	EACH	3	3					
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	30	30					
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	10	10					
42001300	PROTECTIVE COAT	SQ YD	70	70					
44000007	BITUMINOUS SURFACE REMOVAL, 2"	SQ YD	2900	2900					
44000008	BITUMINOUS SURFACE REMOVAL, 2-1/2"	SQ YD	3585	3585					
44000100	PAVEMENT REMOVAL	SQ YD	2515	2515					
44000112	BITUMINOUS REMOVAL OVER PATCHES 3"	SQ YD	35	35					
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	200	200					
44003900	MEDIAN SURFACE REMOVAL AND REPLACEMENT	SQ FT	25		25				
44004250	PAVED SHOULDER REMOVAL	SQ YD	1155	1155					
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	72	72					
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	108	108					
48101200	AGGREGATE SHOULDERS, TYPE B	TON	50	50					

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE I000-2A	Y031-IF	Y030-IE			
48202600	BITUMINOUS SHOULDERS SUPERPAVE 8"	SQ YD	660	660					
550A0050	STORM SEWERS CLASS A, TYPE 1 12 INCH	FOOT	8.5	8.5					
* 55039700	STORM SEWERS TO BE CLEANED	FOOT	60	60					
55100500	STORM SEWER REMOVAL 12 INCH	FOOT	6.5	6.5					
60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME & GRATE	EACH	2	2					
60263000	INLETS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1					
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	8	8					
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	200	200					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4					
67100100	MOBILIZATION	L SUM	1	1					
~~70100800~~	~~TRAFFIC CONTROL AND PROTECTION STANDARD 701401~~	~~L SUM~~	~~1~~	~~1~~					
~~70100420~~	~~TRAFFIC CONTROL AND PROTECTION STANDARD 701411~~	~~EACH~~	~~1~~	~~1~~					
70102635	TRAFFIC CONTROL AND PROTECTION STANDARD 701701	L SUM	1	1					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	735	735					
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	475	475					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4640	4640					
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	6700	6700					
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2655	2655					
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1410	1410					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	100	100					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	54	54					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	7325	7325					
✻78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	475	475					
✻78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4640	4640					

✻ SPECIALITY ITEMS

* NON-PARTICIPATING ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

PLOT DATE: 3/14/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	4
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		

CONTRACT NO.: 60A61

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 1000-2A	Y031-IF	Y030-IE			
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	1120	1120					
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2655	2655					
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1410	1410					
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	100	100					
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	54	54					
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	400	400					
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	306	306					
* 80700140	GROUND ROD, 5/8" DIA. X 10 FT.	EACH	5			5			
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	287		287				
* 81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	120		120				
* 81400200	HEAVY-DUTY HANDHOLE	EACH	2		2				
* 81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1107		287	820			
* 83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	40			40			
* 84200705	REMOVAL OF POLE FOUNDATION PARTIAL	EACH	4			4			
* 84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	4			4			
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1				
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	480		480				
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1786		1786				
* 87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1		1				
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15		15				
87900200	DRILL EXISTING HANDHOLE	EACH	1		1				
* 88000170	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2		2				
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2		2				
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	4		4				

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 1000-2A	Y031-IF	Y030-IE			
* 88600100	DETECTOR LOOP, TYPE I	FOOT	180		180				
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1				
89502375	REMOVAL EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1				
89502380	REMOVAL EXISTING HANDHOLE	EACH	2		2				
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1		1				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4					
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	1			1			
X0324387	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	4			4			
X3550900	BITUMINOUS BASE COURSE SUPERPAVE, 12"	SQ YD	1750	1750					
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	1225	1225					
X0325300	BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE IL-19, N70 , 11-1/2"	SQ YD	2515	2515					
X4067100	POLYMERIZED LEVELING BINDER (MM) SUPERPAVE IL-4.75, N50, 1"	TON	370	370					
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1					
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	2	2					
Z0001050	AGGREGATE SUBGRADE, 12"	SQ YD	2515	2515					
▪ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2					
* X0325254	UNIT DUCT WITH 3-1/C # 1 & 1/C # 1 GROUND, 600V (EPR-TYPE RHW), 2" DIA SCHEDULE 40 POLYETHYLENE	FOOT	1300			1300			
* X0325255	DOUBLE HANDHOLE HEAVY DUTY	EACH	1			1			
81019100	CONDUIT PUSHED, 6" DIA., GALVANIZED STEEL	FOOT	75			75			
81018800	CONDUIT PUSHED 3 1/2" DIA., GALVANIZED STEEL	FOOT	110			110			

* SPECIALITY ITEMS

▪ NON-PARTICIPATING ITEMS

Rev.

REVISIONS	
NAME	DATE

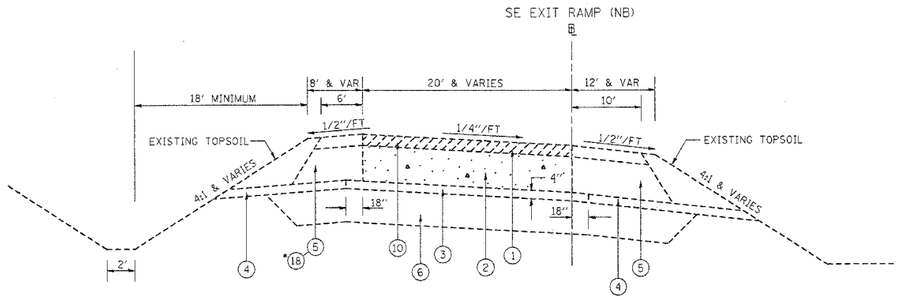
ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

PLOT DATE: 3/14/2006

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	5
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



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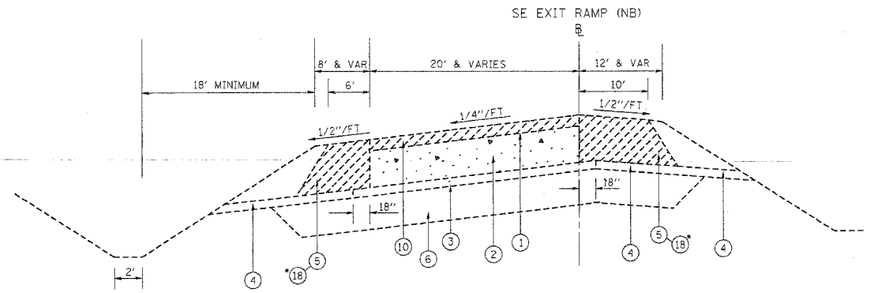
EXISTING TYPICAL SECTION
STATION 100+00 - STATION 104+00



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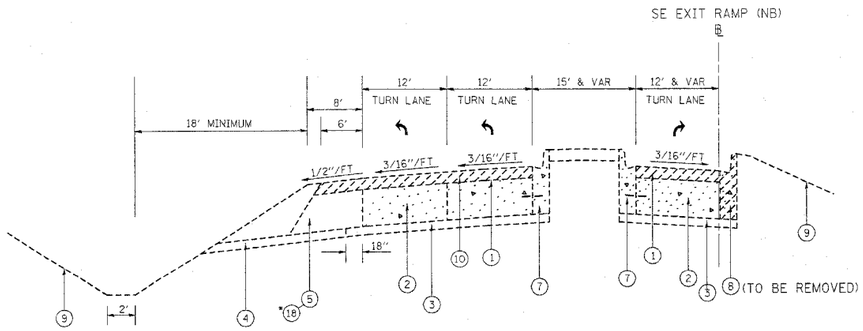
EXISTING TYPICAL SECTION
STATION 104+00 - STATION 110+00



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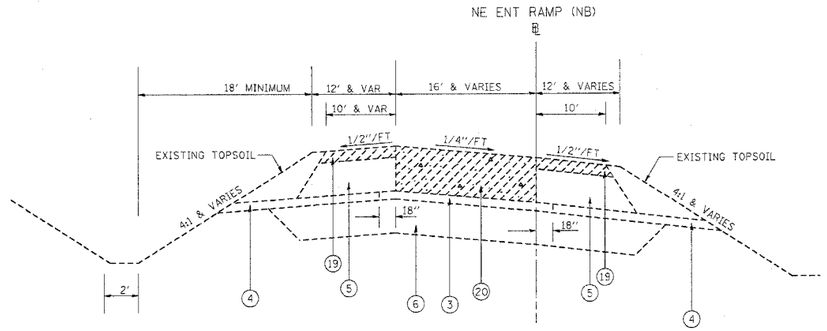

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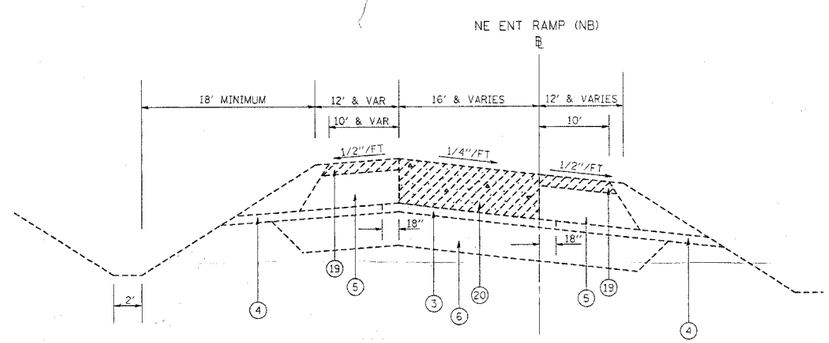
EXISTING TYPICAL SECTION (PATCHING ONLY)
RAMPS ON TANGENT



NE ENT RAMP (RAMP "B")
EXISTING TYPICAL SECTION (PATCHING ONLY)
RAMPS ON CURVE

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT.

MIXTURE TYPE	AC/PG	RAP% MAX	AIR VOIDS (%)	THICKNESS
POLYMERIZED LEVELING BINDER (MM) SUPERPAVE IL-4.75, N50	PG 64-22	10	2.5% @ 50 GYR	1"
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	10	4% @ 70 GYR	2" & 1-1/2"
CLASS D PATCHES BINDER IL-19.0 MM	PG 64-22	15	4% @ 70 GYR	7"
BITUMINOUS REPLACEMENT OVER PATCHES, BINDER IL-19.0 MM	PG 64-22	15	4% @ 70 GYR	3"
BITUMINOUS BASE COUSE SUPERPAVE	PG 58-22	50	2% @ 50 GYR	12"
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	15	4 % @ 70 GYR	11-1/2"

SHOULDER

BITUMINOUS SHOULDER SUPERPAVE	PG 58-22	50	2% @ 30 GYR	8"
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	10	4% @ 70 GYR	2"

NOTE:

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 POUNDS PER SQUARE YARD PER INCH.

LEGEND:

1. EXISTING BITUMINOUS SURFACING, 2-1/2"(±)
2. EXISTING PCC PAVEMENT, 7"
3. EXISTING STABILIZED SUB-BASE (BAM), 4"
4. EXISTING SUB-BASE GRANULAR MATERIAL, TYPCE "C", 4"
5. EXISTING STABILIZED SHOULDERS, 7"
6. EXISTING POROUS GRANULAR EMBANKMENT, 2'(±)
7. EXISTING CURB AND GUTTER, TYPE B-6.12
8. EXISTING CURB AND GUTTER, TYPE B-6.24
9. EXISTING GROUND LINE
10. PROPOSED BITUMINOUS SURFACE REMOVAL, 2-1/2"
11. PROPOSED BITUMINOUS SURFACE COURSE SUPERPAVE, MIX "D" N70, 1-1/2"
12. PROPOSED POLYMERIZED LEVELING BINDER (MM) SUPERPAVE IL-4.75, N50, 1"
13. PROPOSED BITUMINOUS SHOULDER, SUPERPAVE, 8"
14. PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 6"
15. PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE 12"
16. PROPOSED CURB AND GUTTER, TYPE B-6.24
17. PROPOSED COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATION AS DIRECTED BY THE ENGINEER)
18. PROPOSED PAVED SHOULDER REMOVAL
19. PROPOSED BITUMINOUS SURFACE REMOVAL, 2"
20. PROPOSED PAVEMENT REMOVAL
21. PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 11-1/2"
22. PROPOSED AGRREGATE SUBGRADE, 12"
23. PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70, 2"

NOTE: STA. 100+00 - STA. 100+56.16 (RESURFACING)
STA. 100+56.16 - STA. 104+00 (BITUMINOUS SHOULDER)

- LOCATIONS TO BE DETERMINED BY THE ENGINEER

NOTES:

ADDITIONAL SUB-BASE GRANULAR MATERIAL UNDER THE CURB AND GUTTER SHALL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED AS INCLUDED IN THE COST PER SQUARE YARD OF "SUB-BASE GRANULAR MATERIAL, TYPE B 6 IN".

ANY SAW CUTTING REQUIRED TO REMOVE AN ITEM ADJACENT TO AN ITEM TO BE SAVE WILL BE CONSIDERED AS PART OF THE REMOVAL ITEM AND WILL NOT BE PAID SEPARATELY.

THE BITUMINOUS CONCRETE SURFACE REMOVAL SHALL BE PERFORMED AT THE PROPOSED CROSS SLOPE SHOWN ON THE PROPOSED TYPICAL SECTIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THIS REQUIREMENT.

STATION EQUATION:

STA 24+19.5 (ON RAMP B) = STA 455+36.70 (MAINLINE IL 53)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68
(SE EXIT RAMP & NE ENT RAMP)
EXISTING TYPICAL SECTION

SCALE: VERT. NTS
HORIZ. NTS
DRAWN BY
DATE
CHECKED BY

Rev

PLOT DATE = 3/15/2005
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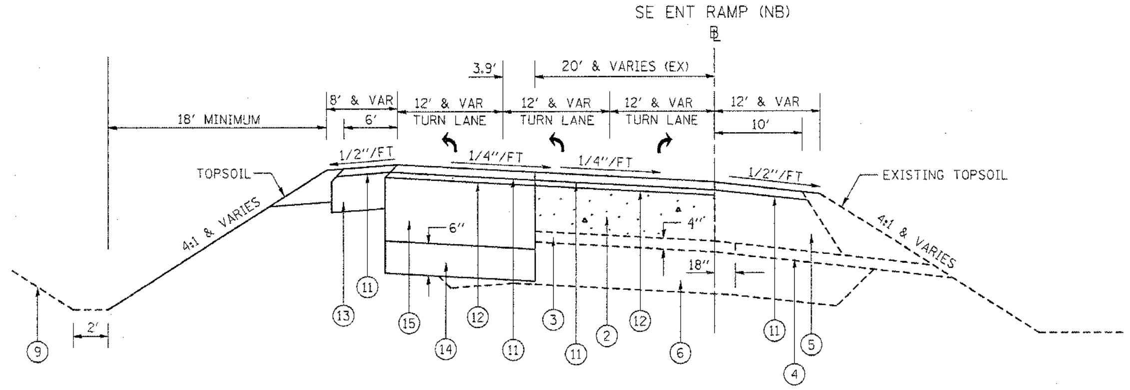
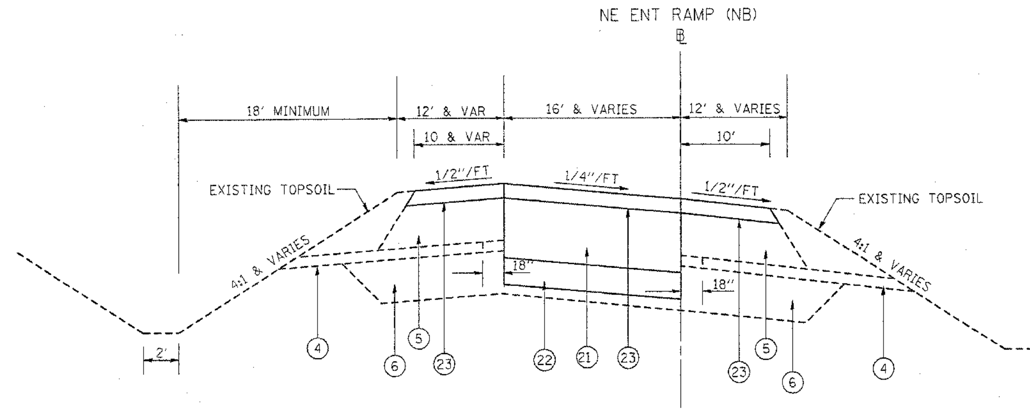
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	6
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

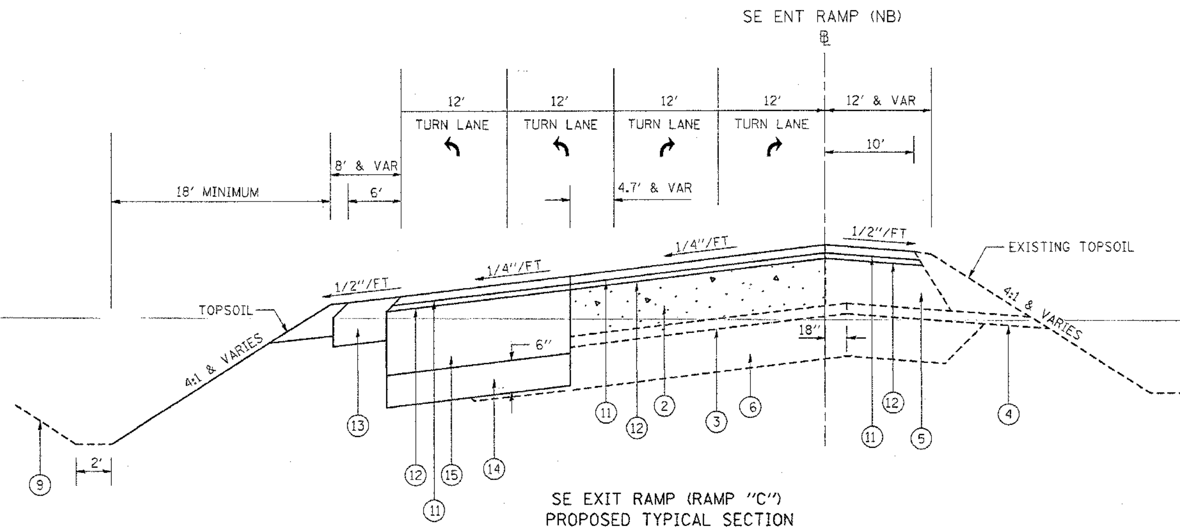
CONTRACT NO. 60A61



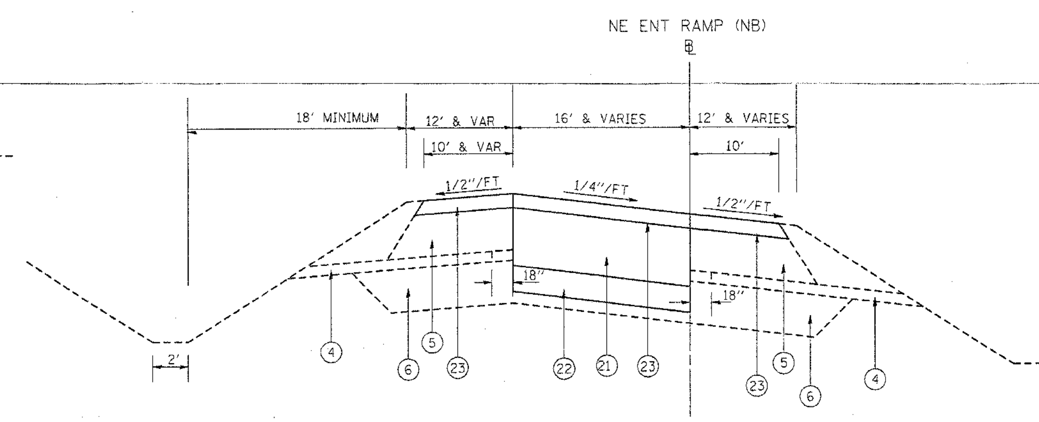
SE EXIT RAMP (RAMP "C")
PROPOSED TYPICAL SECTION
STATION 100+00 - STATION 104+00



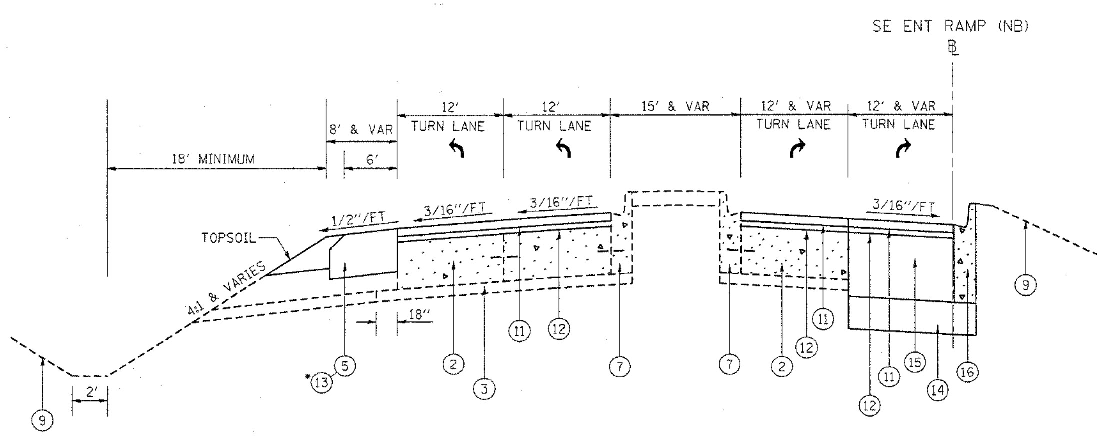
NE ENT RAMP (RAMP "B")
PROPOSED TYPICAL SECTION (PATCHING ONLY)
RAMPS ON TANGENT



SE EXIT RAMP (RAMP "C")
PROPOSED TYPICAL SECTION
STATION 104+00 - STATION 110+00



NE ENT RAMP (RAMP "B")
PROPOSED TYPICAL SECTION (PATCHING ONLY)
RAMPS ON CURVE



SE EXIT RAMP (RAMP "C")
PROPOSED TYPICAL SECTION
STATION 110+00 - IL 68 (INT)

LEGEND:

1. EXISTING BITUMINOUS SURFACING, 2-1/2"(±)
2. EXISTING PCC PAVEMENT, 7"
3. EXISTING STABILIZED SUB-BASE (BAM), 4"
4. EXISTING SUB-BASE GRANULAR MATERIAL, TYPCE "C", 4"
5. EXISTING STABILIZED SHOULDERS, 7"
6. EXISTING POROUS GRANULAR EMBANKMENT, 2'(±)
7. EXISTING CURB AND GUTTER, TYPE B-6.12
8. EXISTING CURB AND GUTTER, TYPE B-6.24
9. EXISTING GROUND LINE
10. PROPOSED BITUMINOUS SURFACE REMOVAL, 2-1/2"
11. PROPOSED BITUMINOUS SURFACE COURSE SUPERPAVE, MIX "D" N70, 1-1/2"
12. PROPOSED POLYMERIZED LEVELING BINDER (MM) SUPERPAVE IL-4.75, N50, 1"
13. PROPOSED BITUMINOUS SHOULDER, SUPERPAVE, 8"
14. PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 6"
15. PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE 12"
16. PROPOSED CURB AND GUTTER, TYPE B-6.24
17. PROPOSED COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATION AS DIRECTED BY THE ENGINEER)
18. PROPOSED PAVED SHOULDER REMOVAL
19. PROPOSED BITUMINOUS SURFACE REMOVAL, 2"
20. PROPOSED PAVEMENT REMOVAL
21. PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 11-1/2"
22. PROPOSED AGGREGATE SUBGRADE, 12"
23. PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX 'D', N70, 2"

• LOCATIONS TO BE DETERMINED BY THE ENGINEER

NOTES:

ADDITIONAL SUB-BASE GRANULAR MATERIAL UNDER THE CURB AND GUTTER SHALL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED AS INCLUDED IN THE COST PER SQUARE YARD OF "SUB-BASE GRANULAR MATERIAL, TYPE B 6 IN".

ANY SAW CUTTING REQUIRED TO REMOVE AN ITEM ADJACENT TO AN ITEM TO BE SAVE WILL BE CONSIDERED AS PART OF THE REMOVAL ITEM AND WILL NOT BE PAID SEPARATELY.

THE BITUMINOUS CONCRETE SURFACE REMOVAL SHALL BE PERFORMED AT THE PROPOSED CROSS SLOPE SHOWN ON THE PROPOSED TYPICAL SECTIONS. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR THIS REQUIREMENT.

STATION EQUATION:

STA 24+19.5 (ON RAMP B) = STA 455+36.70 (MAINLINE IL 53)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

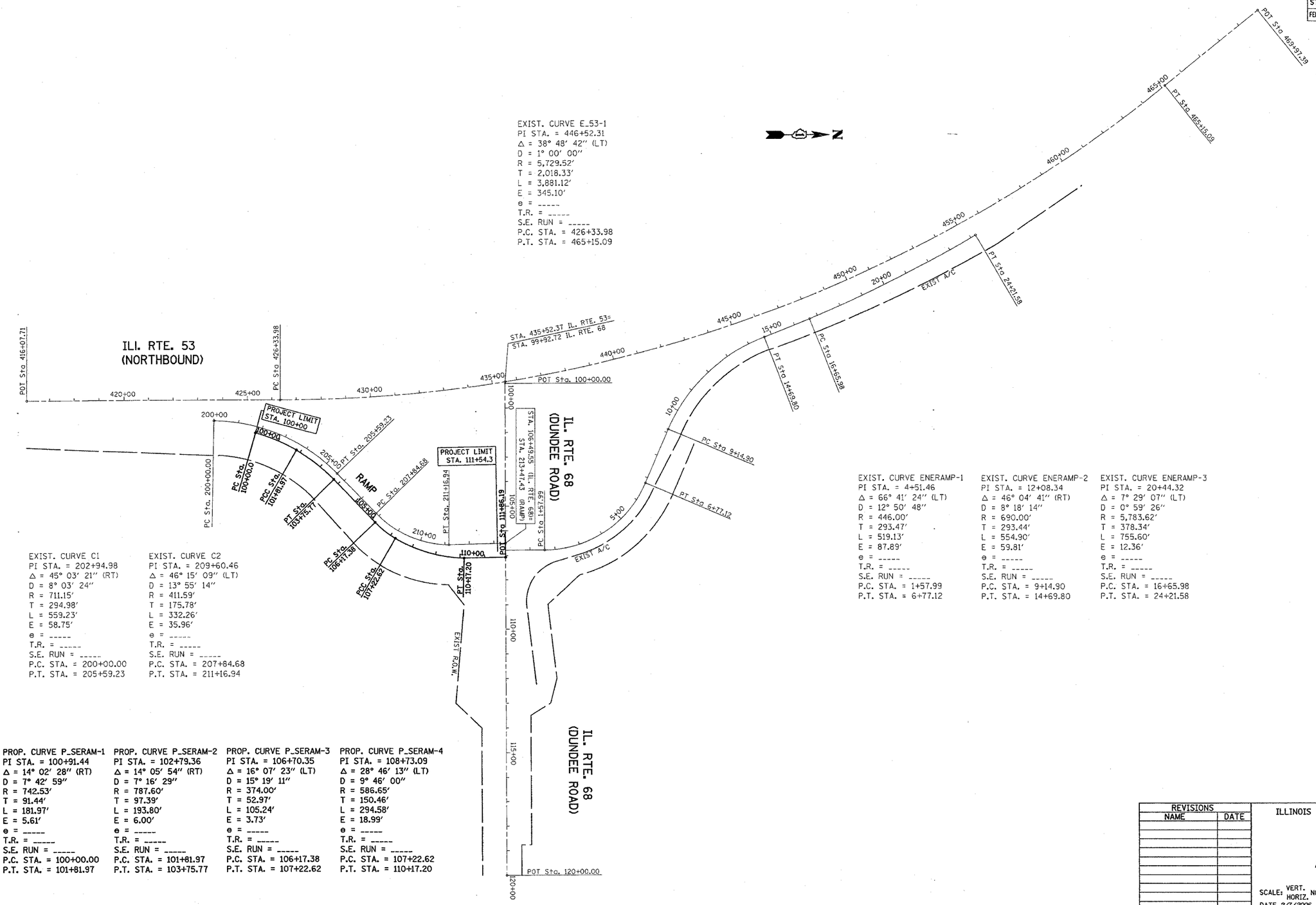
IL 53 @ IL 68
(SE EXIT RAMP & NE ENT RAMP)
PROPOSED TYPICAL SECTION

SCALE: VERT. NTS HORIZ. NTS
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 3/15/2006
FILE NAME = c:\projects\d1809\design-bb.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = galbornb

CONTRACT NO. 60A61

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXIST. CURVE C1
PI STA. = 202+94.98
Δ = 45° 03′ 21″ (RT)
D = 8° 03′ 24″
R = 711.15′
T = 294.98′
L = 559.23′
E = 58.75′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 200+00.00
P.T. STA. = 205+59.23

EXIST. CURVE C2
PI STA. = 209+60.46
Δ = 46° 15′ 09″ (LT)
D = 13° 55′ 14″
R = 411.59′
T = 175.78′
L = 332.26′
E = 35.96′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 207+84.68
P.T. STA. = 211+16.94

EXIST. CURVE ENERAMP-1
PI STA. = 4+51.46
Δ = 66° 41′ 24″ (LT)
D = 12° 50′ 48″
R = 446.00′
T = 293.47′
L = 519.13′
E = 87.89′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 1+57.99
P.T. STA. = 6+77.12

EXIST. CURVE ENERAMP-2
PI STA. = 12+08.34
Δ = 46° 04′ 41″ (RT)
D = 8° 18′ 14″
R = 690.00′
T = 293.44′
L = 554.90′
E = 59.81′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 9+14.90
P.T. STA. = 14+69.80

EXIST. CURVE ENERAMP-3
PI STA. = 20+44.32
Δ = 7° 29′ 07″ (LT)
D = 0° 59′ 26″
R = 5,783.62′
T = 378.34′
L = 755.60′
E = 12.36′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 16+65.98
P.T. STA. = 24+21.58

PROP. CURVE P_SERAM-1
PI STA. = 100+91.44
Δ = 14° 02′ 28″ (RT)
D = 7° 42′ 59″
R = 742.53′
T = 91.44′
L = 181.97′
E = 5.61′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 100+00.00
P.T. STA. = 101+81.97

PROP. CURVE P_SERAM-2
PI STA. = 102+79.36
Δ = 14° 05′ 54″ (RT)
D = 7° 16′ 29″
R = 787.60′
T = 97.39′
L = 193.80′
E = 6.00′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 101+81.97
P.T. STA. = 103+75.77

PROP. CURVE P_SERAM-3
PI STA. = 106+70.35
Δ = 16° 07′ 23″ (LT)
D = 15° 19′ 11″
R = 374.00′
T = 52.97′
L = 105.24′
E = 3.73′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 106+17.38
P.T. STA. = 107+22.62

PROP. CURVE P_SERAM-4
PI STA. = 108+73.09
Δ = 28° 46′ 13″ (LT)
D = 9° 46′ 00″
R = 586.65′
T = 150.46′
L = 294.58′
E = 18.99′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 107+22.62
P.T. STA. = 110+17.20

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL. RTE. 53
AT IL. RTE. 68
ALIGNMENT PLAN

SCALE: VERT. NONE
HORIZ.
DATE 2/7/2006

DRAWN BY
CHECKED BY

PLOT DATE = 2/7/2006
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PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauerdl

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•REF-PROF01
•REF-PROF02

CONTRACT NO.: 60A61

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	8
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EXISTING RAMP PROFILE ALONG PROPOSED BASELINE
PROPOSED RAMP PROFILE ALONG PROPOSED BASELINE
POSSIBLE EXISTING PROFILE FOR RIGHT EDGE OF THRU LANES (IL. RTE. 68 EASTBOUND)
PROP. RAMP BASELINE
EXIST. EDGE AT RT. TURN LANE
EXIST. EDGE OF MEDIAN
EXIST. ℄ IL. RTE. 68

	100+00	101+00	102+00	103+00	104+00	105+00	106+00	107+00	108+00	109+00	110+00	111+00
	722.99	723.02	723.11	723.43	723.88	724.39	724.89	725.39	725.89	726.52	727.18	728.04
	723.05	723.02	723.13	723.43	723.92		724.89		725.91		727.28	
	723.01	723.03	723.27	723.57								
	728.89	729.39	729.81	729.68	728.78	729.64	730.91	731.34				
	728.84		730.15		730.25		730.75					

	107+00	108+00	109+00	110+00
	731.48	730.28	730.39	730.72
	730.75	730.23	730.54	

EXISTING AND PROPOSED PROFILE
IL. RTE. 68 ℄
IL-53 NORTH EXIT RAMP "C"
SCALE: VERT. 1"=5' HORIZ. 1"=50'
DRAWN BY:
DATE: 2/8/2006
CHECKED BY:

PLOT DATE = 2/8/2006
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USER NAME = bauerdl

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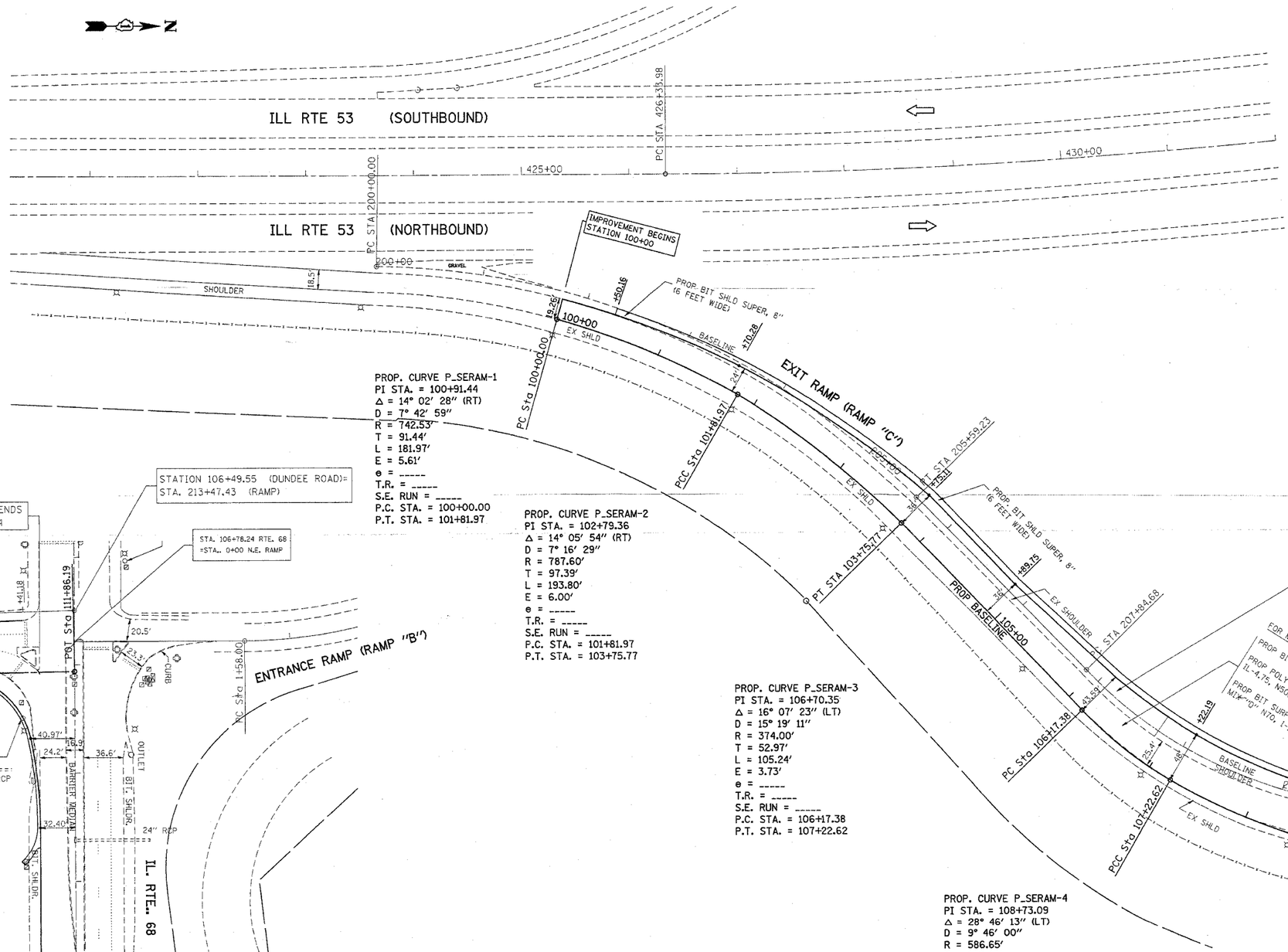
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	9
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



BENCHMARKS:

TBM #100, ELEV. 732.43
SET "□" CHISELED SQUARE
ON IL 68 CENTERLINE, STA 107+00

TBM #101, ELEV. 742.46
SET "□" CHISELED SQUARE
ON IL 68 CENTERLINE, STA 100+00

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

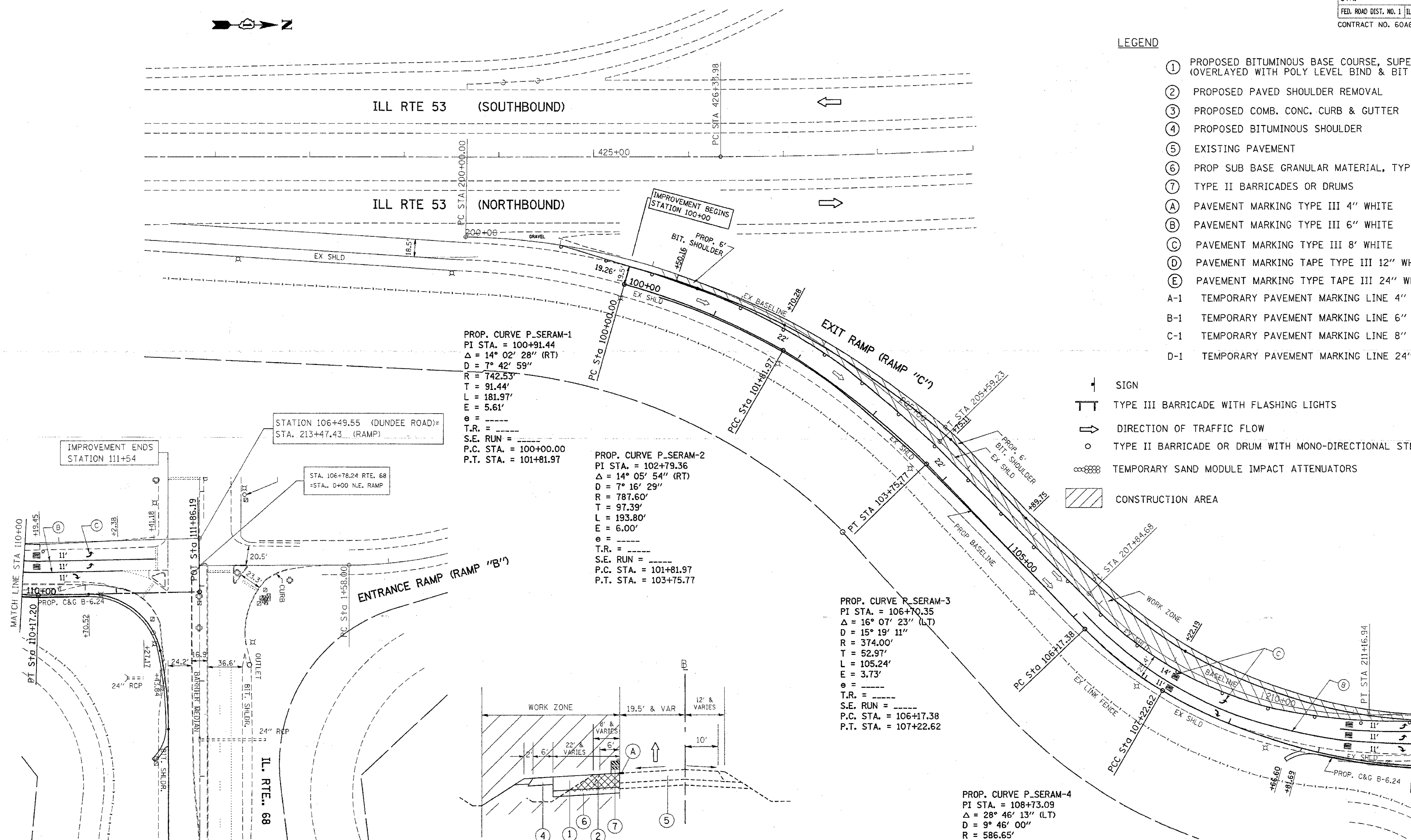
IL 53 @ IL 68 (SE EXIT RAMP) EXISTING AND PROPOSED ROADWAY PLAN

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 3/15/2006
FILE NAME = c:\projects\il68960\design-tbk.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = galbaneb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	10
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



PROP. CURVE P_SERAM-1
PI STA. = 100+91.44
Δ = 14° 02' 28" (RT)
D = 7° 42' 59"
R = 742.53'
T = 91.44'
L = 181.97'
E = 5.61'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 100+00.00
P.T. STA. = 101+81.97

PROP. CURVE P_SERAM-2
PI STA. = 102+79.36
Δ = 14° 05' 54" (RT)
D = 7° 16' 29"
R = 787.60'
T = 97.39'
L = 193.80'
E = 6.00'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 101+81.97
P.T. STA. = 103+75.77

PROP. CURVE P_SERAM-3
PI STA. = 106+70.35
Δ = 16° 07' 23" (LT)
D = 15° 19' 11"
R = 374.00'
T = 52.97'
L = 105.24'
E = 3.73'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 106+17.38
P.T. STA. = 107+22.62

PROP. CURVE P_SERAM-4
PI STA. = 108+73.09
Δ = 28° 46' 13" (LT)
D = 9° 46' 00"
R = 586.65'
T = 150.46'
L = 294.58'
E = 18.99'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 107+22.62
P.T. STA. = 110+17.20

LEGEND

- ① PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 12" (OVERLAYED WITH POLY LEVEL BIND & BIT SURF)
- ② PROPOSED PAVED SHOULDER REMOVAL
- ③ PROPOSED COMB. CONC. CURB & GUTTER
- ④ PROPOSED BITUMINOUS SHOULDER
- ⑤ EXISTING PAVEMENT
- ⑥ PROP SUB BASE GRANULAR MATERIAL, TYPE "B", 6"
- ⑦ TYPE II BARRICADES OR DRUMS
- Ⓐ PAVEMENT MARKING TYPE III 4" WHITE
- Ⓑ PAVEMENT MARKING TYPE III 6" WHITE
- Ⓒ PAVEMENT MARKING TYPE III 8' WHITE
- Ⓓ PAVEMENT MARKING TAPE TYPE III 12" WHITE
- Ⓔ PAVEMENT MARKING TYPE TAPE III 24" WHITE
- A-1 TEMPORARY PAVEMENT MARKING LINE 4" WHITE
- B-1 TEMPORARY PAVEMENT MARKING LINE 6" WHITE
- C-1 TEMPORARY PAVEMENT MARKING LINE 8" WHITE
- D-1 TEMPORARY PAVEMENT MARKING LINE 24" WHITE
- SIGN
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURN LIGHT
- TEMPORARY SAND MODULE IMPACT ATTENUATORS
- CONSTRUCTION AREA

TYPICAL SECTION
IL 53 (SE EXIT RAMP) @ IL 68
STA 100+00 TO STA. 111+54
STAGE I

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68 (SE EXIT RAMP)
MAINTENANCE OF TRAFFIC
STAGE 1

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

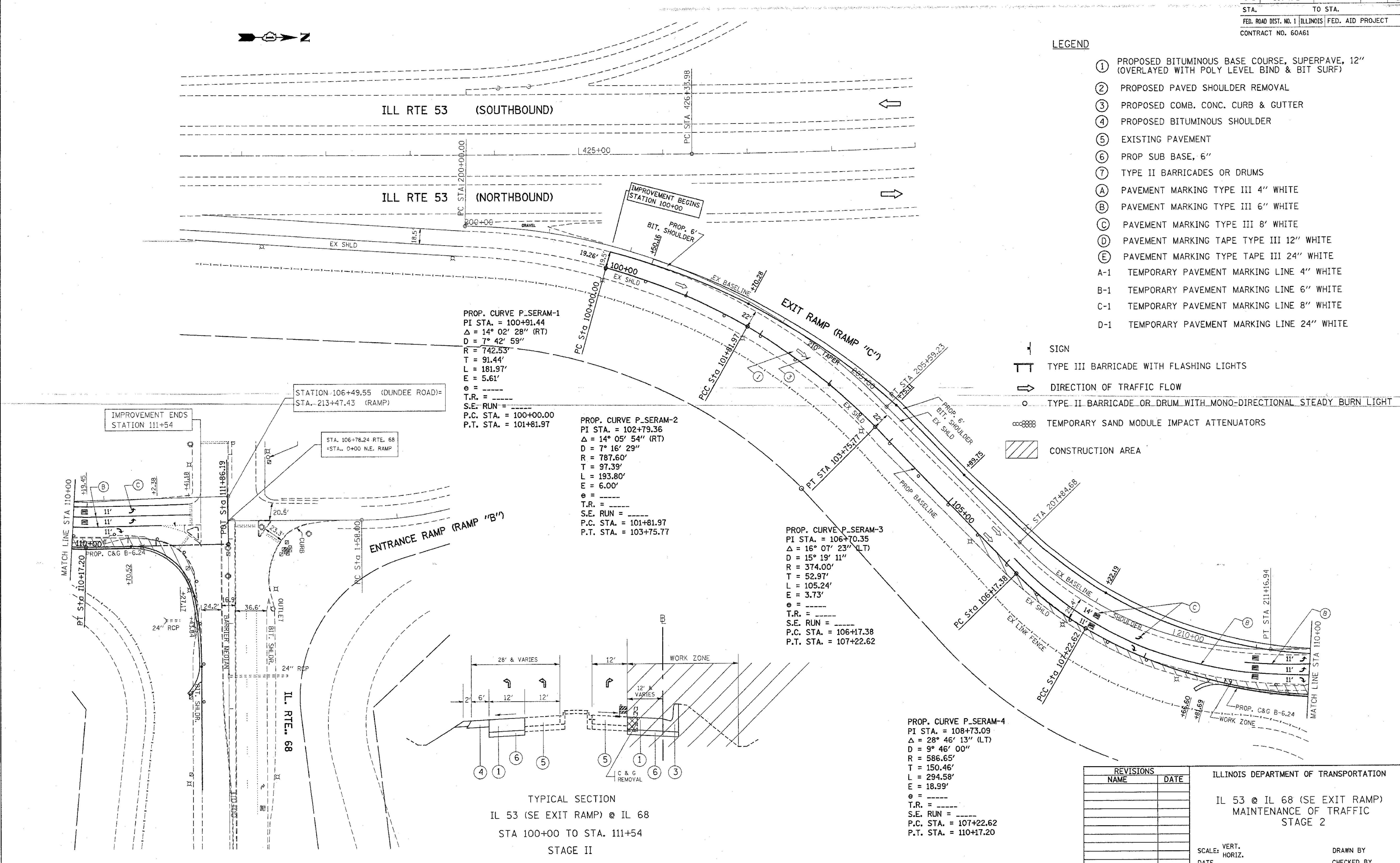
PLOT DATE = 3/15/2006
FILE NAME = ...\designbb.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = gaibarvb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	11

STA. TO STA.

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

CONTRACT NO. 60A61



LEGEND

1. PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 12" (OVERLAYED WITH POLY LEVEL BIND & BIT SURF)
2. PROPOSED PAVED SHOULDER REMOVAL
3. PROPOSED COMB. CONC. CURB & GUTTER
4. PROPOSED BITUMINOUS SHOULDER
5. EXISTING PAVEMENT
6. PROP SUB BASE, 6"
7. TYPE II BARRICADES OR DRUMS

- (A) PAVEMENT MARKING TYPE III 4" WHITE
- (B) PAVEMENT MARKING TYPE III 6" WHITE
- (C) PAVEMENT MARKING TYPE III 8' WHITE
- (D) PAVEMENT MARKING TAPE TYPE III 12" WHITE
- (E) PAVEMENT MARKING TYPE TAPE III 24" WHITE
- A-1 TEMPORARY PAVEMENT MARKING LINE 4" WHITE
- B-1 TEMPORARY PAVEMENT MARKING LINE 6" WHITE
- C-1 TEMPORARY PAVEMENT MARKING LINE 8" WHITE
- D-1 TEMPORARY PAVEMENT MARKING LINE 24" WHITE

- SIGN
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURN LIGHT
- TEMPORARY SAND MODULE IMPACT ATTENUATORS
- CONSTRUCTION AREA

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

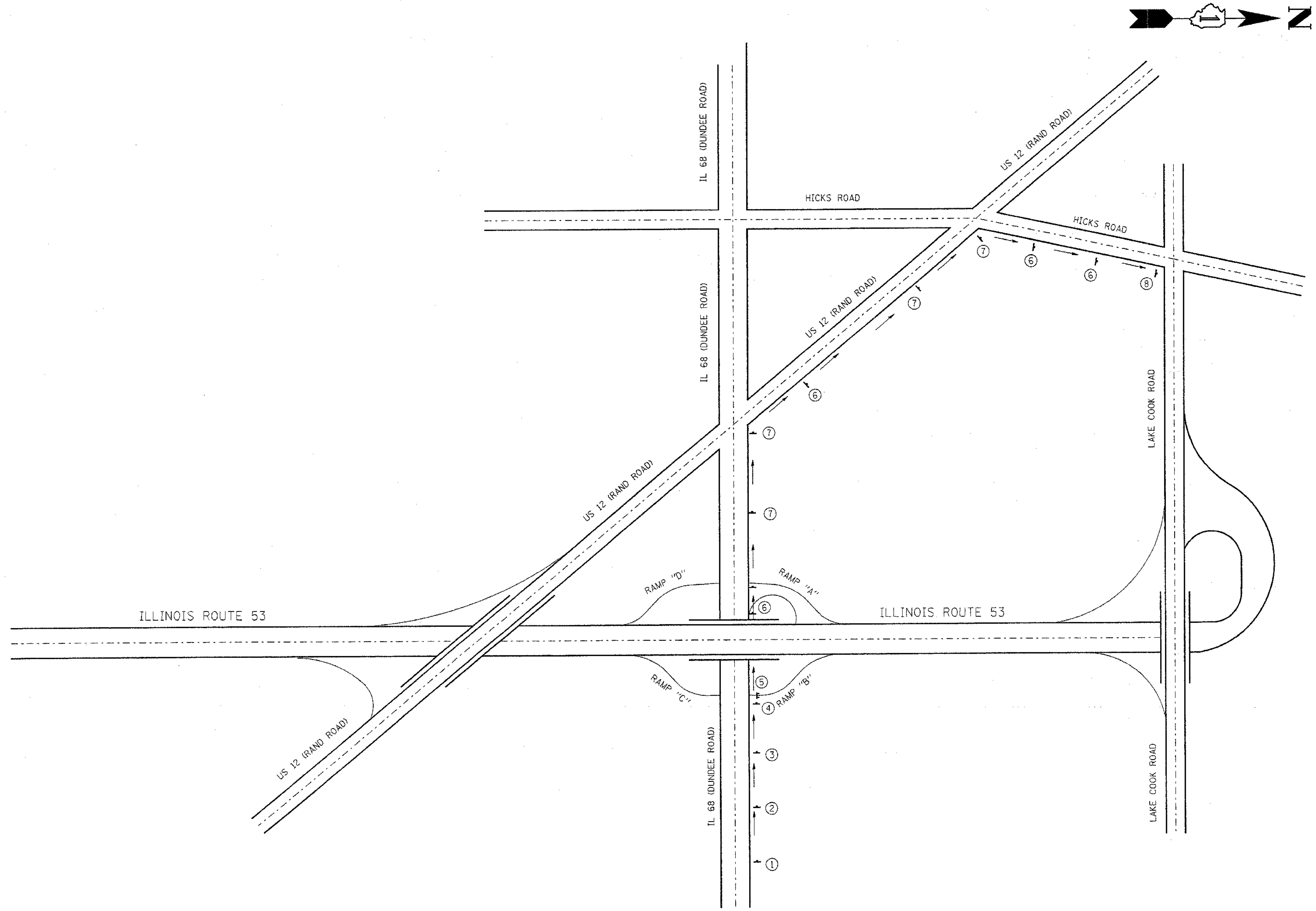
IL 53 @ IL 68 (SE EXIT RAMP)
MAINTENANCE OF TRAFFIC
STAGE 2

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

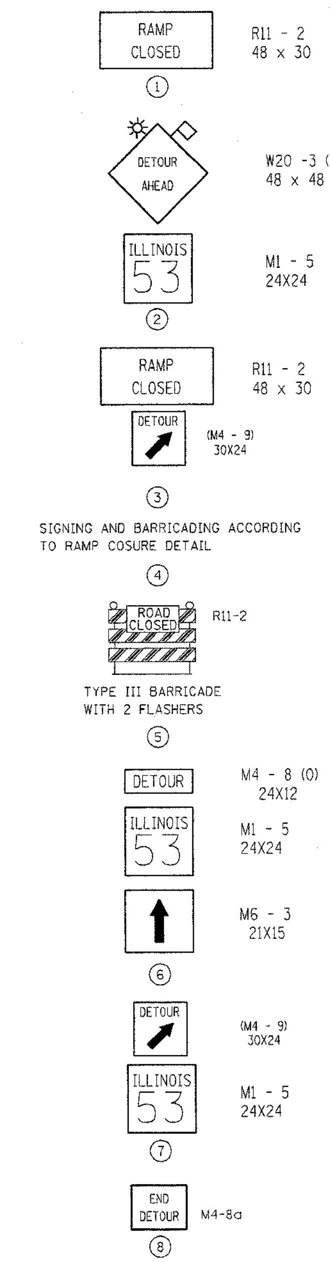
PLOT DATE = 3/15/2006
FILE NAME = c:\projects\d1890860\design-bb.dgn
PLOT SCALE = 50.0000 / IN.
USER NAME = galbennb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	12
STA.		TO STA.		
FED. ROAD DIST. NO. _ ILLINOIS		FED. AID PROJECT		

CONTRACT NO. 60A61



SIGN LEGEND:



NOTE: THIS DETOUR PLAN APPLIES ONLY FOR THE PATCHING OF RAMP "B"

PLOT DATE = 2/6/2006
FILE NAME = c:\projects\d00905\design-bb.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = gelbarmb

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 (NE ENT RAMP) @ IL 68

TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR

SCALE: VERT. NTS HORIZ. NTS

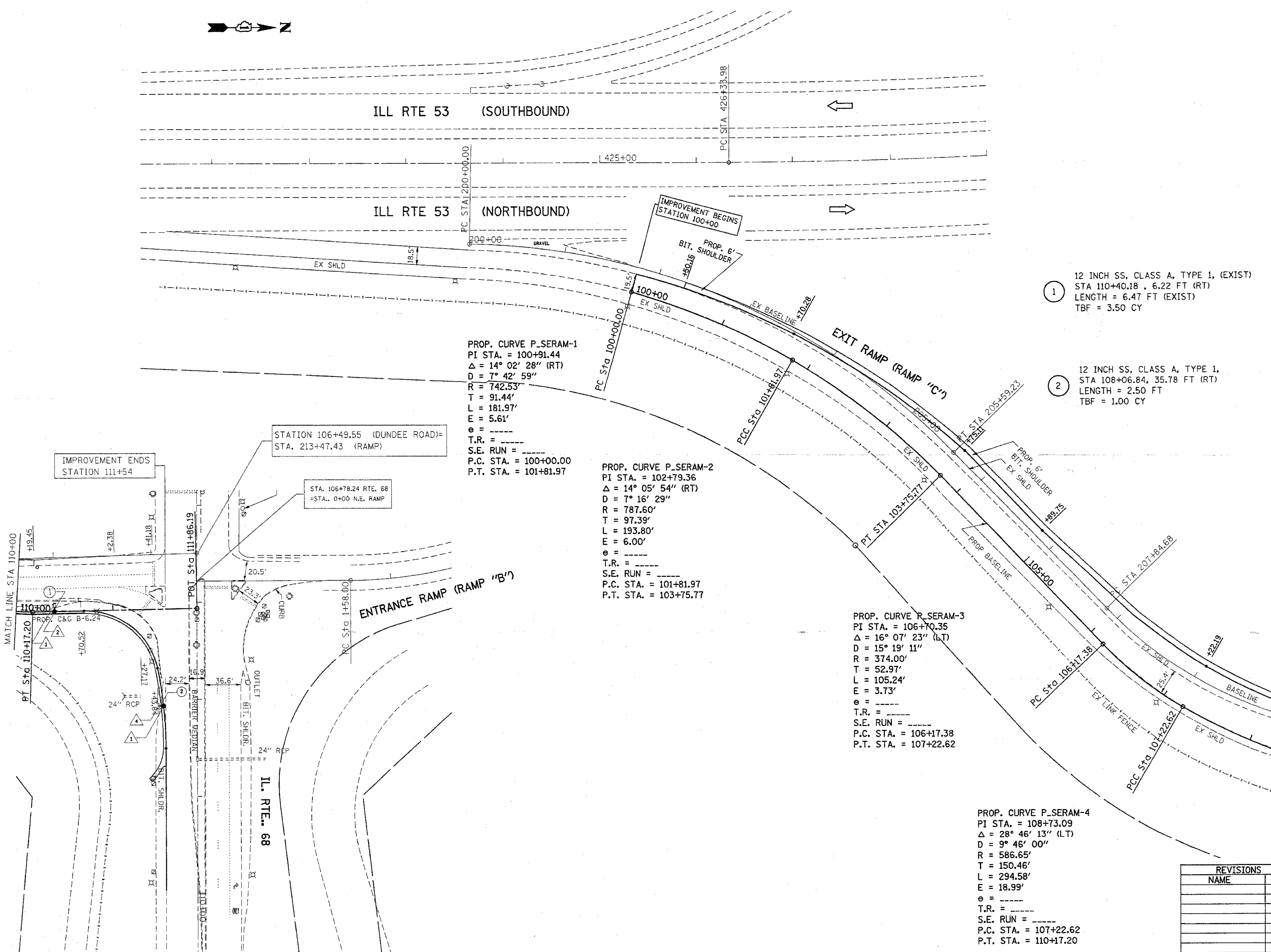
DATE

DRAWN BY

CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	13
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



△1 EXIST INLET, T-A TIF OL
STA 110+40.18, 6.22 FT (LT)
T.G: 729.16 (EXIST)
INV 726.32 (E) EXIST

(1) 12 INCH SS, CLASS A, TYPE 1, (EXIST)
STA 110+40.18 , 6.22 FT (RT)
LENGTH = 6.47 FT (EXIST)
TBF = 3.50 CY

△2 CB, T-C, WITH T24 F&G
STA 110+40.18, 1.25 FT (RT)
T.G: 730.45
INV 725.99 (W) EXIST
INV 725.87 (E) EXIST

(2) 12 INCH SS, CLASS A, TYPE 1,
STA 108+06.84, 35.78 FT (RT)
LENGTH = 2.50 FT
TBF = 1.00 CY

△3 CB, T-C WITH T24 F&G
STA 108+06.84, 34.78 FT (RT)
T.G: 730.26
INV 725.81 (S)

△4 EXIST INLET WITH TIF OL
STA 108+06.84, 39.66 FT (RT)
T.G: 728.80 (EXIST)
INV. 725.79 (N)
INV 725.29 (S) EXIST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68 (SE EXIT RAMP)

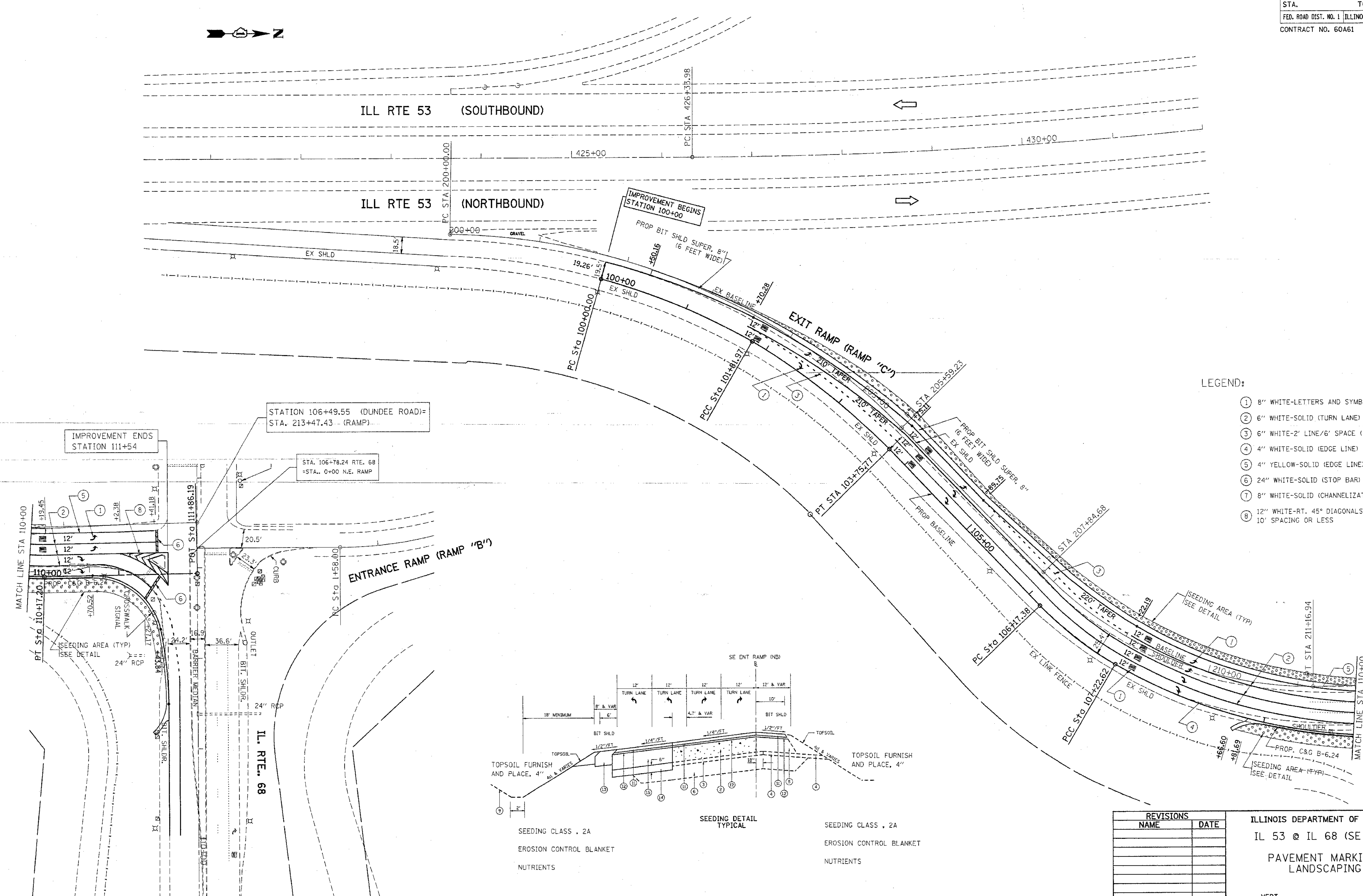
EXISTING & PROPOSED DRAINAGE AND UTILITY PLAN

SCALE: VERT. HORIZ. DRAWN BY
DATE CHECKED BY

PLOT DATE = 3/15/2006
FILE NAME = c:\projects\d100906\design-bb.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = gelbermb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	14
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



LEGEND:

1. 8" WHITE-LETTERS AND SYMBOLS
2. 6" WHITE-SOLID (TURN LANE)
3. 6" WHITE-2' LINE/6' SPACE (TURN LANE)
4. 4" WHITE-SOLID (EDGE LINE)
5. 4" YELLOW-SOLID (EDGE LINE)
6. 24" WHITE-SOLID (STOP BAR)
7. 8" WHITE-SOLID (CHANNELIZATION)
8. 12" WHITE-RT. 45° DIAGONALS 10' SPACING OR LESS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68 (SE EXIT RAMP)

PAVEMENT MARKINGS AND LANDSCAPING PLAN

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

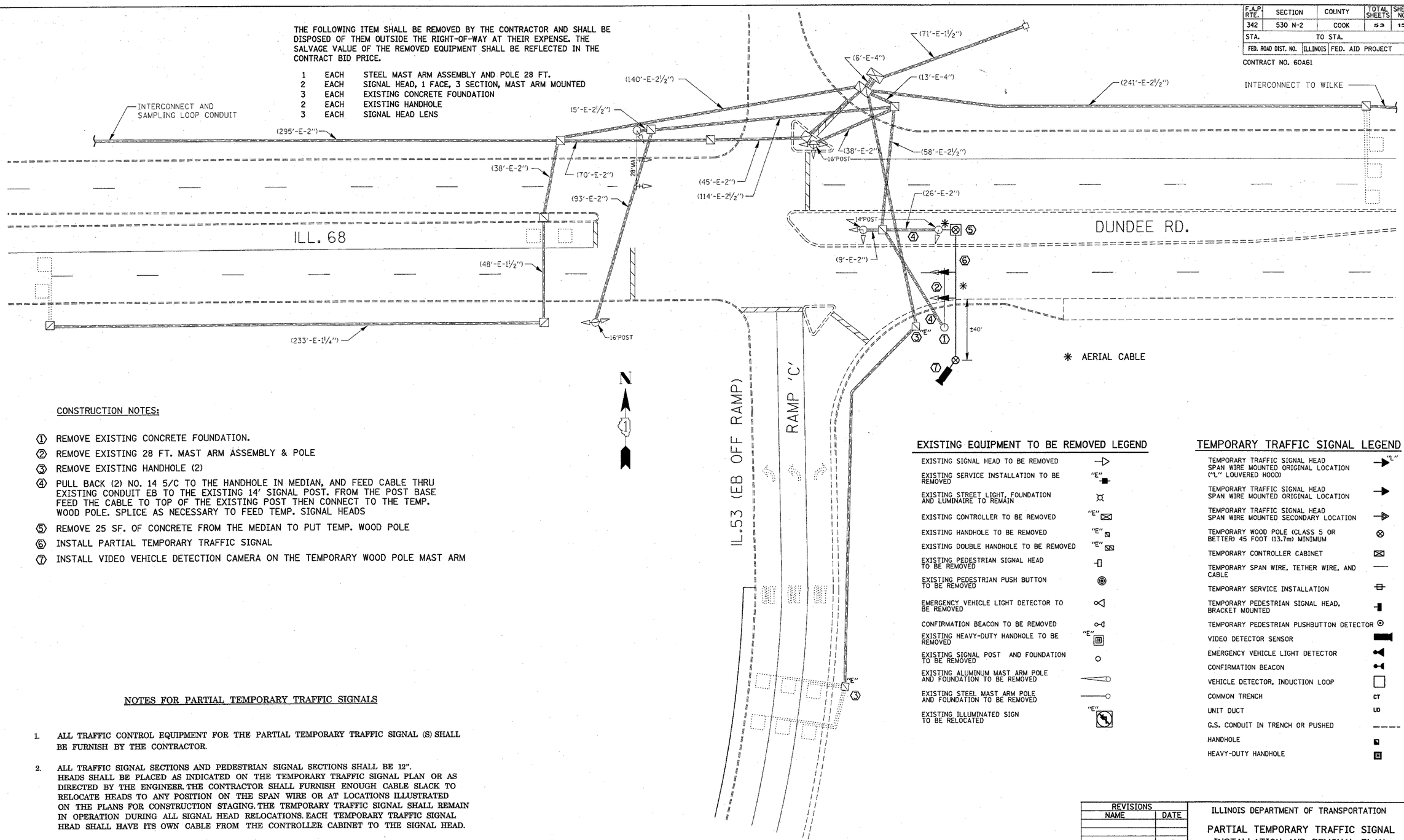
PLOT DATE = 3/15/2006
FILE NAME = c:\projects\d180906\design-bb.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = gelbenrb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61

THE FOLLOWING ITEM SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1	EACH	STEEL MAST ARM ASSEMBLY AND POLE 28 FT.
2	EACH	SIGNAL HEAD, 1 FACE, 3 SECTION, MAST ARM MOUNTED
3	EACH	EXISTING CONCRETE FOUNDATION
2	EACH	EXISTING HANDHOLE
3	EACH	SIGNAL HEAD LENS



CONSTRUCTION NOTES:

① REMOVE EXISTING CONCRETE FOUNDATION.
② REMOVE EXISTING 28 FT. MAST ARM ASSEMBLY & POLE
③ REMOVE EXISTING HANDHOLE (2)
④ PULL BACK (2) NO. 14 5/C TO THE HANDHOLE IN MEDIAN, AND FEED CABLE THRU EXISTING CONDUIT EB TO THE EXISTING 14' SIGNAL POST. FROM THE POST BASE FEED THE CABLE TO TOP OF THE EXISTING POST THEN CONNECT TO THE TEMP. WOOD POLE. SPLICE AS NECESSARY TO FEED TEMP. SIGNAL HEADS
⑤ REMOVE 25 SF. OF CONCRETE FROM THE MEDIAN TO PUT TEMP. WOOD POLE
⑥ INSTALL PARTIAL TEMPORARY TRAFFIC SIGNAL
⑦ INSTALL VIDEO VEHICLE DETECTION CAMERA ON THE TEMPORARY WOOD POLE MAST ARM

NOTES FOR PARTIAL TEMPORARY TRAFFIC SIGNALS

1. ALL TRAFFIC CONTROL EQUIPMENT FOR THE PARTIAL TEMPORARY TRAFFIC SIGNAL (S) SHALL BE FURNISH BY THE CONTRACTOR.

2. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.

3. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.

EXISTING EQUIPMENT TO BE REMOVED LEGEND

EXISTING SIGNAL HEAD TO BE REMOVED	
EXISTING SERVICE INSTALLATION TO BE REMOVED	"E"
EXISTING STREET LIGHT, FOUNDATION AND LUMINAIRE TO REMAIN	
EXISTING CONTROLLER TO BE REMOVED	"E"
EXISTING HANDHOLE TO BE REMOVED	"E"
EXISTING DOUBLE HANDHOLE TO BE REMOVED	"E"
EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED	
EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED	
EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED	
CONFIRMATION BEACON TO BE REMOVED	
EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED	"E" HD
EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED	
EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	
EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	
EXISTING ILLUMINATED SIGN TO BE RELOCATED	"E"

TEMPORARY TRAFFIC SIGNAL LEGEND

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION ("L" LOUVERED HOOD)	"L"
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION	
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION	
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	
TEMPORARY CONTROLLER CABINET	
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	
TEMPORARY SERVICE INSTALLATION	
TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED	
TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR	
VIDEO DETECTOR SENSOR	
EMERGENCY VEHICLE LIGHT DETECTOR	
CONFIRMATION BEACON	
VEHICLE DETECTOR, INDUCTION LOOP	
COMMON TRENCH	CT
UNIT DUCT	UD
G.S. CONDUIT IN TRENCH OR PUSHED	
HANDHOLE	
HEAVY-DUTY HANDHOLE	HD

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PARTIAL TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN

IL.53 (EAST RAMP) AT IL.68 (DUNDEE RD.)

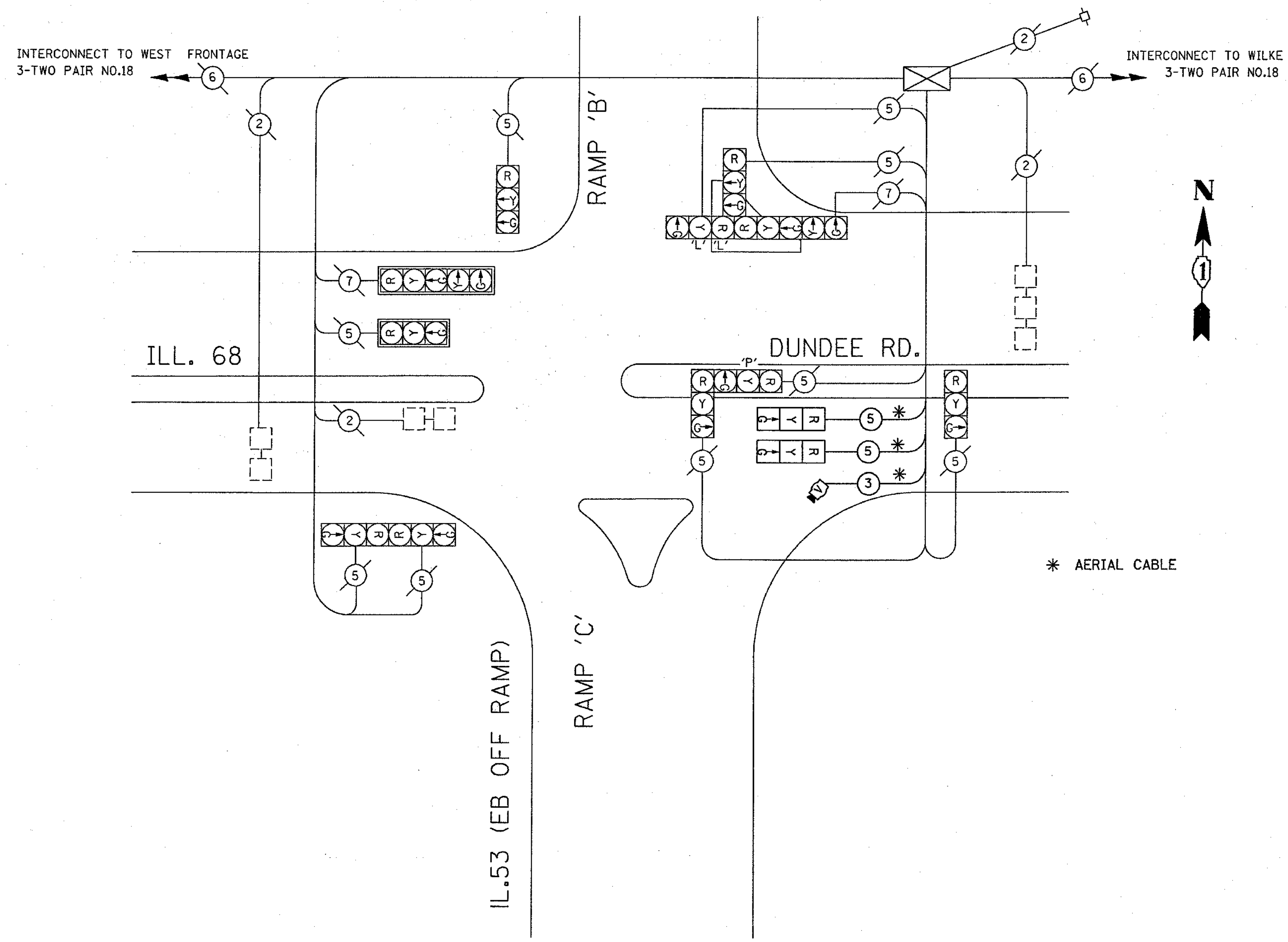
SCALE: 1"=20'
DATE : 01-10-2006

DRAWN BY SN
DESIGNED BY SN
CHECKED BY DAD

PLOT DATE = 1/25/2006
FILE NAME = c:\projects\d0890\traf_ee.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = nguyensn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	16
STA.		TO STA.		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



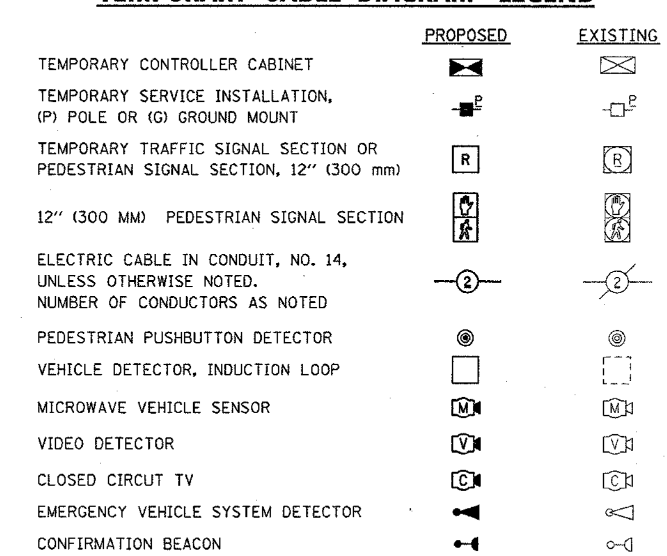
TEMPORARY CABLE PLAN

NOT TO SCALE

TEMPORARY SEQUENCE OF OPERATIONS

MOVEMENT															FLASH
PHASE	1+6				2+6					3					
INTERVAL	1	2	3A	3B	4	5A	5B	6A	6B	7	8A	8B	9A	9B	
CHANGE TO		2+6	3			1+6		3			1+6		2+6		
ILL.68 E/B TEMPORARY THRU SIGNALS AT ILL.53 E/RAMPS	↑G	↑G	Y	R	↑G	↑G	↑G	Y	R	R	R	R	R	R	R
ILL.68 E/B LEFT TURN SIGNALS AT ILL.53 E/RAMPS	←G	Y	Y	R	R	R	R	R	R	R	R	R	R	R	R
ILL.68 W/B NEAR & FAR SIGNALS AT ILL.53 E/RAMPS	R	R	R	R	G↑ G→	Y	R	Y G→	R G→	R G→	R Y→	R	R G→	R G→	R
ILL.68 W/B THRU SIGNALS AT ILL.53 E/RAMPS	R	R	R	R	↑G	Y	R	Y	R	R	R	R	R	R	R
ILL.53 N/B RIGHT TURN SIGNALS AT ILL.68	R	R	R	R	R	R	R	R	R	G→	Y	R	Y	R	R
ILL.53 N/B LEFT TURN SIGNALS AT ILL.68	R	R	R	R	R	R	R	R	R	←G	Y	R	Y	R	R

TEMPORARY CABLE DIAGRAM LEGEND



I.D.O.T
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS ×	WATTAGE INCAND.	WATTAGE LED	× %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	135	17	0.50	877.50
(YELLOW)	13	135	25	0.25	438.75
(GREEN)	13	135	15	0.25	438.75
ARROW	4	135	12	0.10	54.00
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	1909.00

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: ______
PHONE: ______
COMPANY: COMMONWEALTH EDISON

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)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	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)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PARTIAL TEMPORARY CABLE PLAN, SEQUENCE OF OPERATIONS

IL.53 (EAST RAMP) AT IL.68 (DUNDEE RD.)

SCALE: NONE
DATE 1/25/2006

DRAWN BY SN
DESIGNED BY: SN
CHECKED BY DAD

PLOT DATE = 1/25/2006
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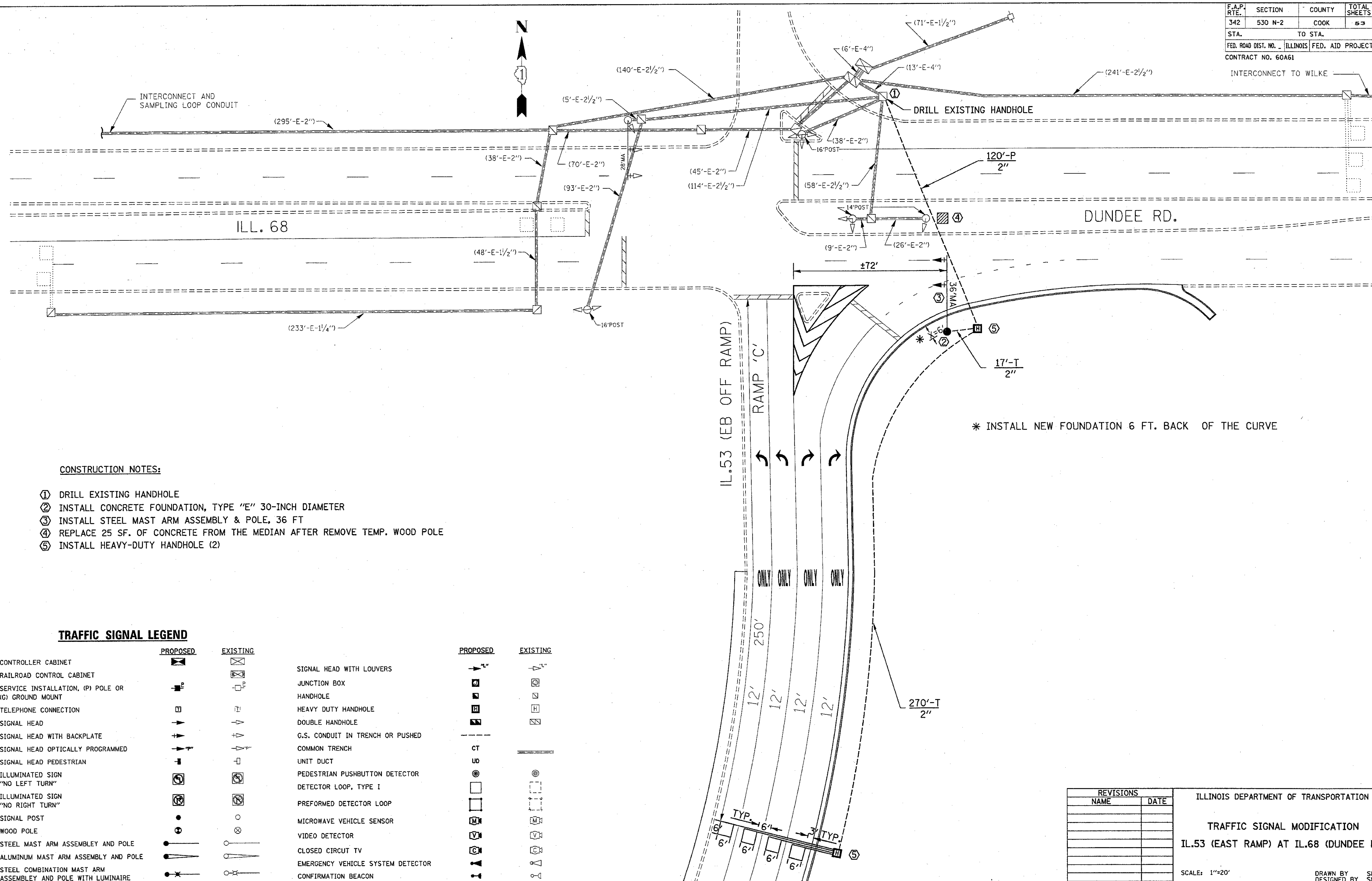
PLOT SCALE = 20.0000 '/ IN.
USER NAME = nguyensm



CONSTRUCTION NOTES:

① DRILL EXISTING HANDHOLE
② INSTALL CONCRETE FOUNDATION, TYPE "E" 30-INCH DIAMETER
③ INSTALL STEEL MAST ARM ASSEMBLY & POLE, 36 FT
④ REPLACE 25 SF. OF CONCRETE FROM THE MEDIAN AFTER REMOVE TEMP. WOOD POLE
⑤ INSTALL HEAVY-DUTY HANDHOLE (2)

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET		
RAILROAD CONTROL CABINET		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT		
TELEPHONE CONNECTION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD PEDESTRIAN		
ILLUMINATED SIGN "NO LEFT TURN"		
ILLUMINATED SIGN "NO RIGHT TURN"		
SIGNAL POST		
WOOD POLE		
STEEL MAST ARM ASSEMBLEY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLEY AND POLE WITH LUMINAIRE		

	PROPOSED	EXISTING
SIGNAL HEAD WITH LOUVERS		
JUNCTION BOX		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
COMMON TRENCH	CT	
UNIT DUCT	UD	
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP		
MICROWAVE VEHICLE SENSOR		
VIDEO DETECTOR		
CLOSED CIRCUIT TV		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION

IL.53 (EAST RAMP) AT IL.68 (DUNDEE RD.)

SCALE: 1"=20'
DATE : 01-10-2006

DRAWN BY SN
DESIGNED BY SN
CHECKED BY DAD

PLOT DATE = 1/25/2006
FILE NAME = c:\projects\d18986\tr-of.ea.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = nguyensn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	18
STA.	TO STA.			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

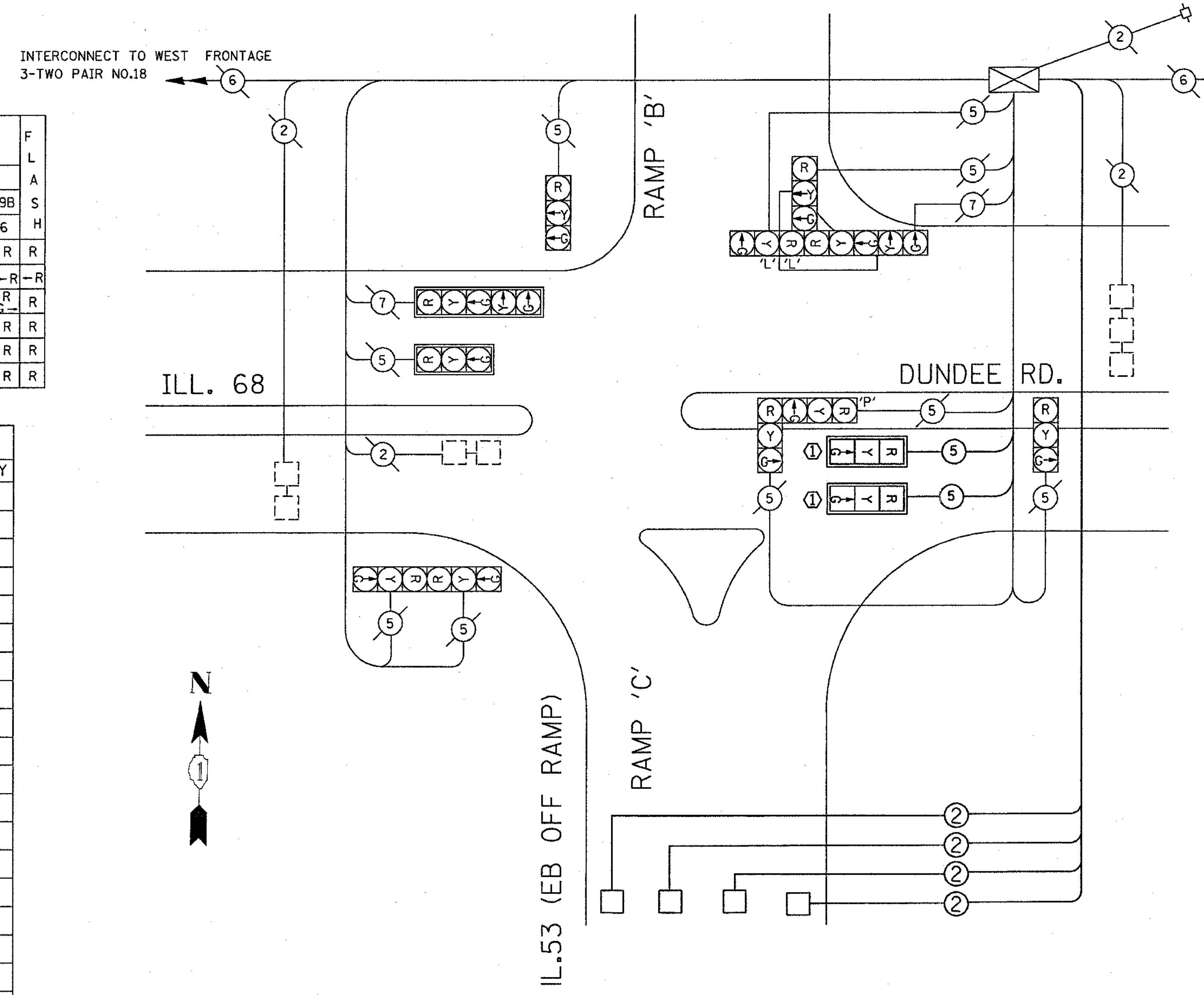
CONTRACT NO. 60A61

SEQUENCE OF OPERATIONS

MOVEMENT															FLASH
PHASE	1+6				2+6					3					
INTERVAL	1	2	3A	3B	4	5A	5B	6A	6B	7	8A	8B	9A	9B	
CHANGE TO	/	2+6	3		/	1+6		3		/	1+6		2+6		
ILL.68 E/B THRU SIGNALS AT ILL.53 E/RAMPS	↑G	↑G	Y	R	↑G	↑G	↑G	Y	R	R	R	R	R	R	R
ILL.68 E/B LEFT TURN SIGNALS AT ILL.53 E/RAMPS	←G	←Y	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
ILL.68 W/B NEAR & FAR SIGNALS AT ILL.53 E/RAMPS	R	R	R	R	G↑ G→	Y	R	Y G→	R G→	R G→	R Y→	R	R G→	R G→	R
ILL.68 W/B THRU SIGNALS AT ILL.53 E/RAMPS	R	R	R	R	↑G	Y	R	Y	R	R	R	R	R	R	R
ILL.53 N/B RIGHT TURN SIGNALS AT ILL.68	R	R	R	R	R	R	R	R	R	G→	Y	R	Y	R	R
ILL.53 N/B LEFT TURN SIGNALS AT ILL.68	R	R	R	R	R	R	R	R	R	←G	Y	R	Y	R	R

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
44003900	MEDIAN SURFACE REMOVAL AND REPLACEMENT	SQ. FT.	25
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FEET	287
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FEET	120
81400200	HEAVY-DUTY HANDHOLE	EACH	2
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FEET	287
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5/C	FEET	480
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FEET	1756
87700220	STEEL MAST ARM ASSEMBLY & POLE, 36 FT.	EACH	1
87800400	CONCRETE FOUNDATION, TYPE "E" 30-INCH DIAMETER	FEET	15
87900200	DRILL EXISTING HANDHOLE	EACH	1
88000170	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
88500100	INDUCTIVE LOOP DETECTOR	EACH	4
88600100	DETECTOR LOOP, TYPE 1	FEET	180
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89502380	REMOVAL EXISTING HANDHOLE	EACH	2
89502385	REMOVAL EXISTING CONCRETE FOUNDATION	EACH	1
89502375	REMOVAL EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1



CABLE PLAN
NOT TO SCALE

CONSTRUCTION NOTES:

① INSTALL NEW SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED

CABLE PLAN LEGEND

PROPOSED / EXISTING

- CONTROLLER CABINET
- RAILROAD CONTROL CABINET
- SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT
- TELEPHONE CONNECTION
- GROUND ROD AT (C) CONTROLLER, (H)HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE
- FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED
- ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED. NUMBER OF CONDUCTORS AS NOTED
- GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)
- SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
- 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE
- 12" (300mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNT-DOWN
- PUSHBUTTON DETECTOR
- ACCESSIBLE PEDESTRIAN PUSHBUTTON
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- DETECTOR LOOP
- PREFORMED DETECTOR LOOP
- MICROWAVE VEHICLE SENSOR
- VIDEO DETECTOR
- CLOSED CIRCUT TV
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- CONFIRMATION BEACON

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS ×	WATTAGE INCAND.	WATTAGE LED	× %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	135	17	0.50	877.50
(YELLOW)	13	135	25	0.25	438.75
(GREEN)	13	135	15	0.25	438.75
ARROW	4	135	12	0.10	54.00
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	1909.00

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT:
PHONE:
COMPANY: COMMONWEALTH EDISON

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)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	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)

REVISIONS NAME	DATE

Rev.

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, SEQUENCE OF OPERATIONS AND SCHEDULE OF QUANTITIES

IL.53 (EAST RAMP) AT IL.68 (DUNDEE RD.)

SCALE: NONE
DATE 2/3/2006

DRAWN BY SN
DESIGNED BY: SN
CHECKED BY DAD

PLOT DATE = 2/3/2006
FILE NAME = c:\projects\traffic\050012\il53ebrpdu168.dgn
PLOT SCALE = 20.0000 ' / IN.
USER NAME = nguyensn

*REF-plan02

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	530-N-2	COOK	53	19
STA. 100+00	TO STA.111+54.3406			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.

CONTRACT NO. 60A61

IL-53 @ IL-68 SUMMARY OF QUATITIES ELECTRICAL PAY ITEMS

ITEM DESCRIPTION QUANTITY	UNIT	QUANTITY
LIGHT POLE FOUNDATION 30" DIAMETER	FOOT	40
GROUND ROD 5/8" DIA x 10'	EACH	5
UNIT DUCT WITH 3-1/C #1 & 1/C #1 GROUND, 600V (EPR-TYPE RHW), 2" DIA. SCHEDULE 40 POLYETHYLENE	FOOT	1300
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	820
REMOVAL OF POLE FOUNDATION PARTIAL	EACH	4
RELOCATE EXISTING LIGHTING UNIT	EACH	4
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	1
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	4
DOUBLE HANDHOLE HEAVEY DUTY	EACH	1
6" RGS CONDUIT PUSHED	FOOT	75
3-1/2" RGS CONDUIT PUSHED	FOOT	110

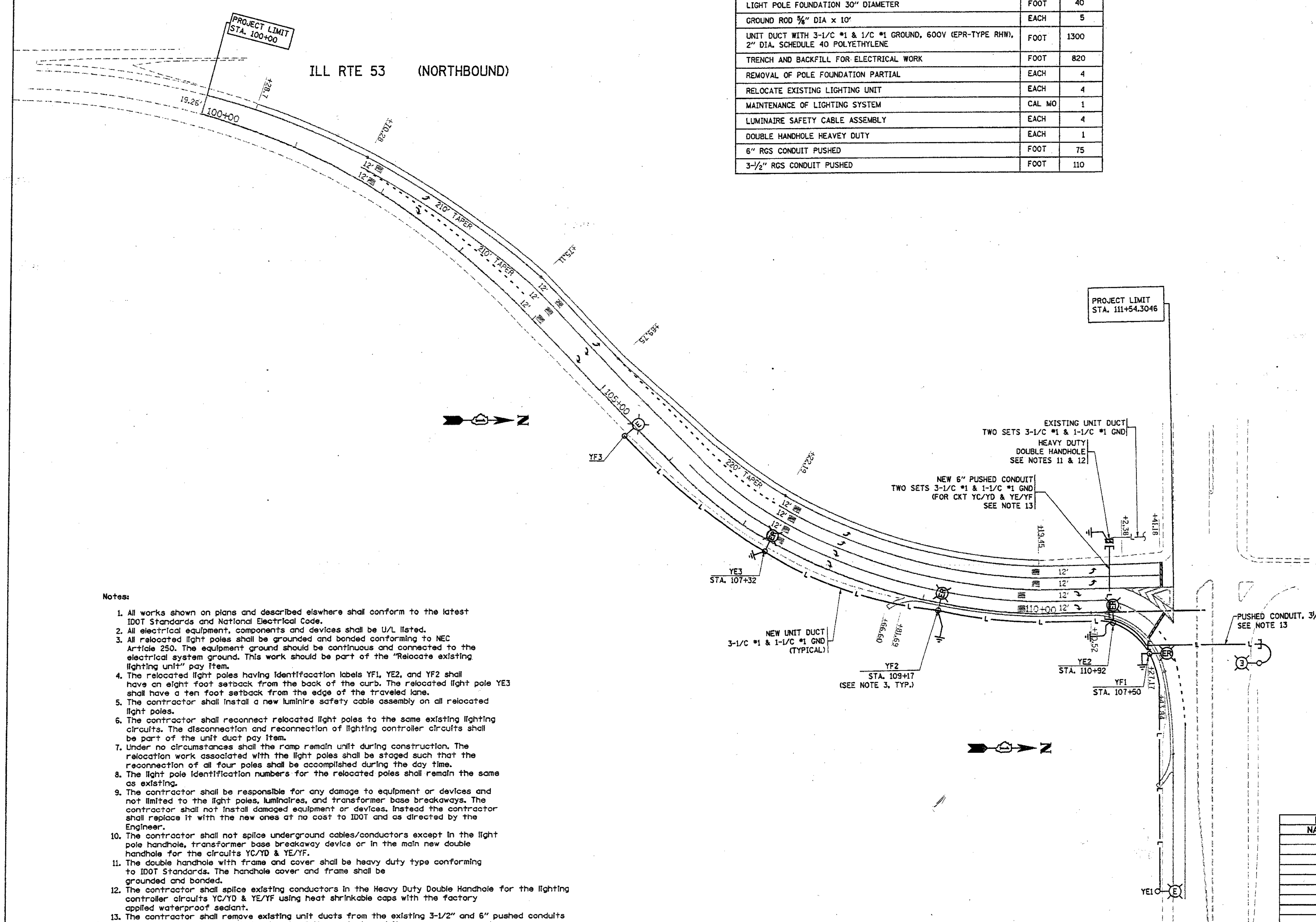
RELOCATED EXISTING LIGHT POLE WITH LUMINAIRE, 47.5' POLE 12' MA, 400 W HPS

GROUND ROD

EXISTING LIGHT POLE

3-1/C #1 & 1-1/C #1 GND NEW 2" UNIT DUCT

NEW PUSHED RGS CONDUIT UNDER PAVED SURFACE SIZE AS SHOWN ON PLAN



Notes:

1. All works shown on plans and described elswhere shall conform to the latest IDOT Standards and National Electrical Code.
2. All electrical equipment, components and devices shall be U/L listed.
3. All relocated light poles shall be grounded and bonded conforming to NEC Article 250. The equipment ground should be continuous and connected to the electrical system ground. This work should be part of the "Relocate existing lighting unit" pay item.
4. The relocated light poles having identifaction labels YF1, YE2, and YF2 shall have an eight foot setback from the back of the curb. The relocated light pole YE3 shall have a ten foot setback from the edge of the traveled lane.
5. The contractor shall install a new luminire safety cable assembly on all relocated light poles.
6. The contractor shall reconnect relocated light poles to the same existing lighting circuits. The disconnection and reconnection of lighting controller circuits shall be part of the unit duct pay item.
7. Under no circumstances shall the ramp remain unlit during construction. The relocation work associated with the light poles shall be staged such that the reconnection of all four poles shall be accomplished during the day time.
8. The light pole identification numbers for the relocated poles shall remain the same as existing.
9. The contractor shall be responsible for any damage to equipment or devices and not limited to the light poles, luminaires, and transformer base breakaways. The contractor shall not install damaged equipment or devices. Instead the contractor shall replace it with the new ones at no cost to IDOT and as directed by the Engineer.
10. The contractor shall not splice underground cables/conductors except in the light pole handhole, transformer base breakaway device or in the main new double handhole for the circuits YC/YD & YE/YF.
11. The double handhole with frame and cover shall be heavy duty type conforming to IDOT Standards. The handhole cover and frame shall be grounded and bonded.
12. The contractor shall splice existing conductors in the Heavy Duty Double Handhole for the lighting controller circuits YC/YD & YE/YF using heat shrinkable caps with the factory applied waterproof sealant.
13. The contractor shall remove existing unit ducts from the existing 3-1/2" and 6" pushed conduits across traveled lanes and abandoned existing pushed conduits.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY LIGHTING PLAN
IL-53 NORTH EXIT RAMP "C"
FOR IL. 68 (E&W)

SCALE: VERT. HORIZ. 1"=50'
DATE 12/21/2005

DRAWN BY CADO
CHECKED BY

PLOT DATE = 12/21/2005
PLOT SCALE = 50.0000 ' / IN.

*REF-plan01

CONTRACT NO.

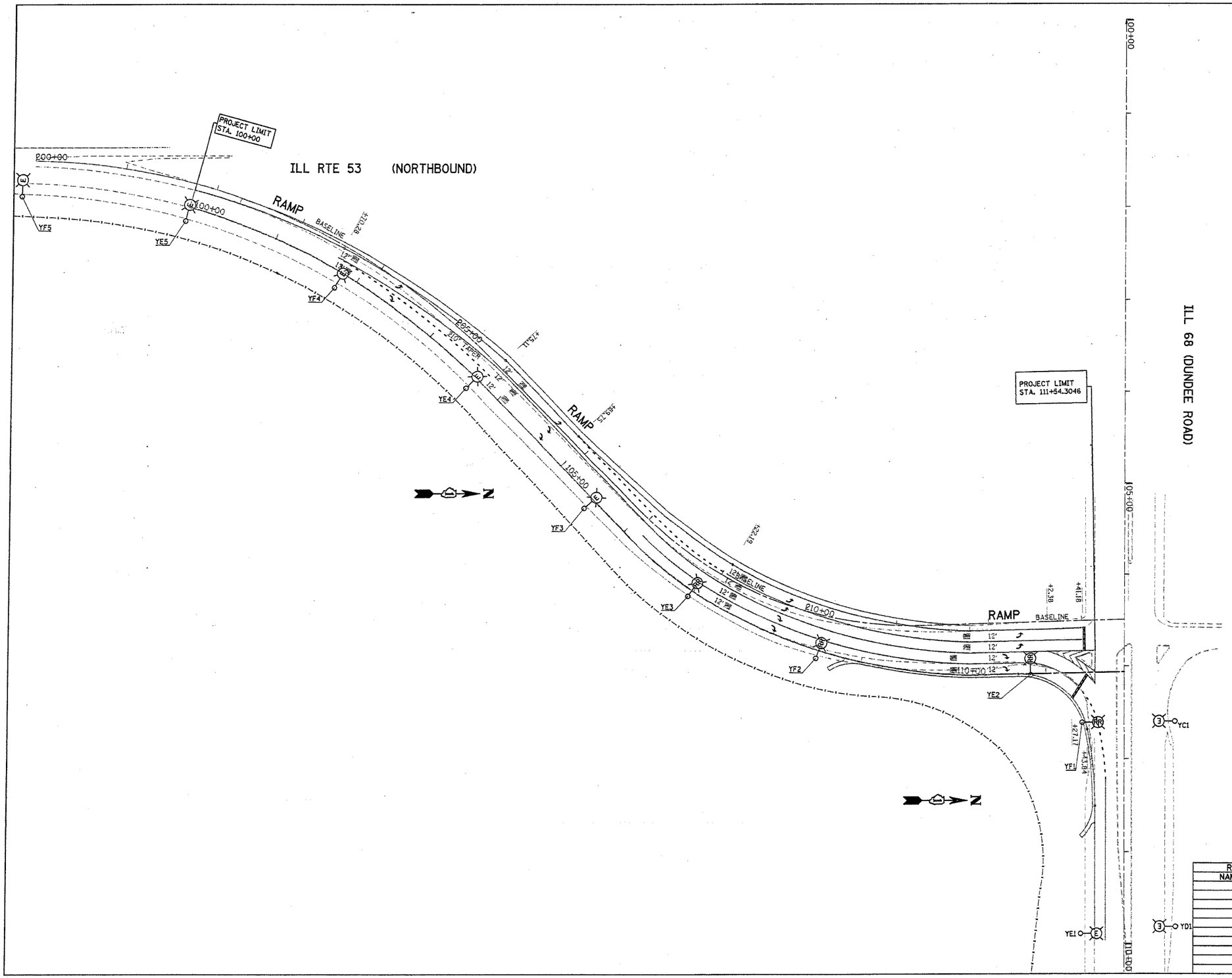
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	530-N-2	COOK	53	20

STA. 100+00 TO STA.111+54.3406

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

CONTRACT NO. 60A61

ER	RELOCATED EXISTING LIGHT POLE WITH LUMINAIRE, 47.5' POLE 12' MA, 400 W HPS
⏚	GROUND ROD
E	EXISTING LIGHT POLE
——L——	3-1/C #1 & 1-1/C #1 GND NEW 2" UNIT DUCT
]——L—[	PUSHED RGS CONDUIT UNDER PAVED SURFACE SIZE AS SHOWN ON PLAN
RR	EXISTING LIGHTING UNIT TO BE REMOVED AND RELOCATED



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING ROADWAY LIGHTING PLAN
IL-53 NORTH EXIT RAMP "C"
FOR IL. 68 (E&W)

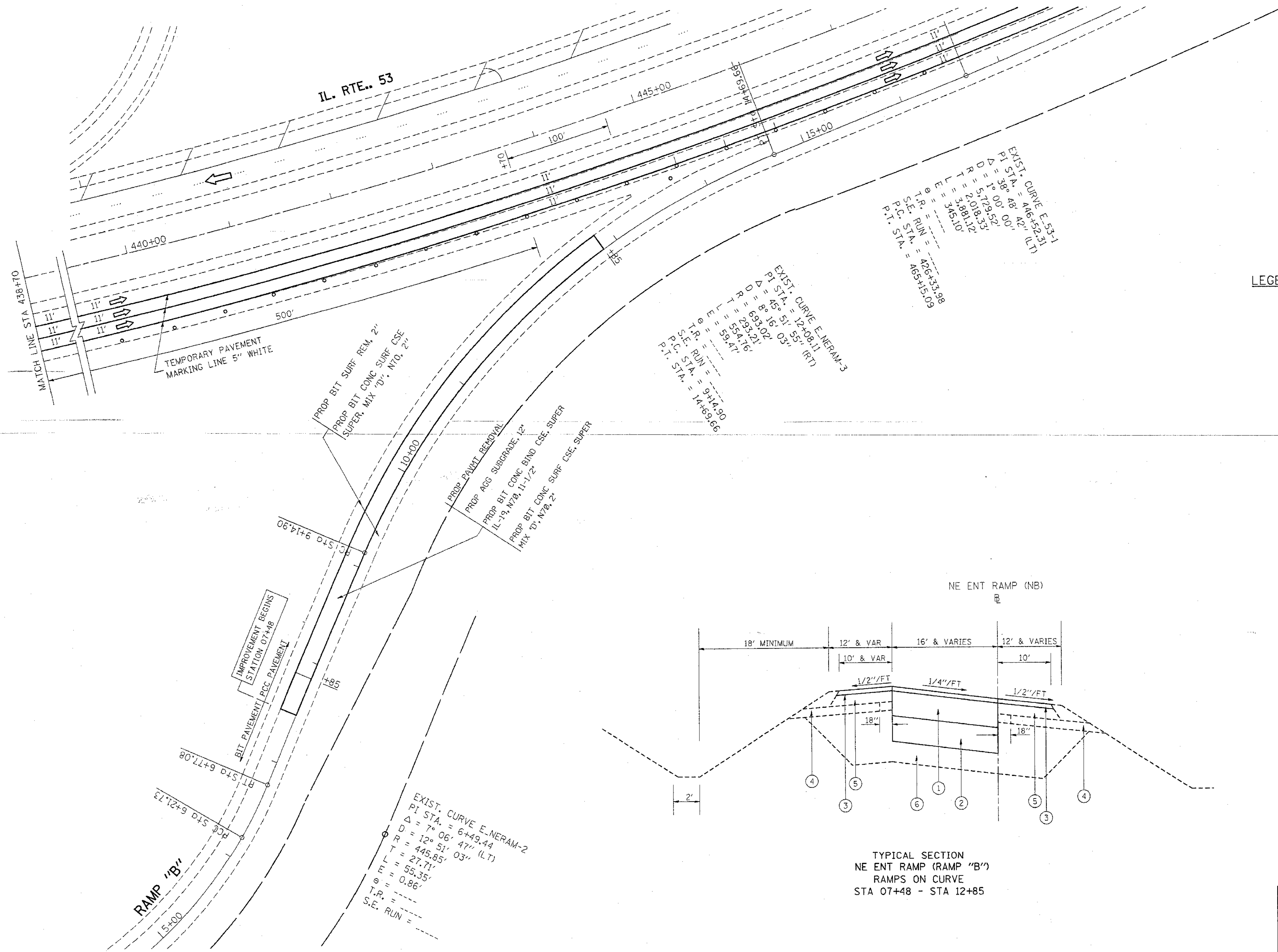
SCALE: VERT. HORIZ. 1"=50'
DATE 12/21/2005

DRAWN BY CADD
CHECKED BY

PLOT DATE = 12/21/2005
FILE NAME = c:\projects\d100906\sh_lgt_ea.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = ulrichkd

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	21
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



LEGEND

1. PROP CONC BIND CSE, SUPERPAVE, 11-1/2" WITH BIT CONC SURF CSE, SUPER, MIX "D" N70, 2"
2. PROP AGG SUBGRADE, 12"
3. PROP BIT CONC SURF CSE, SUPER, MIX "D", N70, 2"
4. EX SUB BASE GRANULAR MAT'L, TYPE "C", 4"
5. EX BIT SHLD
6. EX POROUS GRANULAR EMBANKMENT, 2' (±)
7. TYPE II BARRICADES OR DRUMS

(A) PAVEMENT MARKING TYPE III 4" WHITE
(B) PAVEMENT MARKING TYPE III 6" WHITE
(C) PAVEMENT MARKING TYPE III 8' WHITE
(D) PAVEMENT MARKING TAPE TYPE III 12" WHITE
(E) PAVEMENT MARKING TYPE TAPE III 24" WHITE
A-1 TEMPORARY PAVEMENT MARKING LINE 4" WHITE
B-1 TEMPORARY PAVEMENT MARKING LINE 6" WHITE
C-1 TEMPORARY PAVEMENT MARKING LINE 8" WHITE
D-1 TEMPORARY PAVEMENT MARKING LINE 24" WHITE

TYPICAL SECTION
NE ENT RAMP (RAMP "B")
RAMPS ON CURVE
STA 07+48 - STA 12+85

NOTE:
STATION EQUATION:
STA 24+19.5 (ON RAMP 'B') = STA 455+36.70 (MAINLINE IL 53)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68
NORTHEAST ENTRANCE RAMP

RAMP "B" (NE ENT RAMP PLAN) AND MAINTENANCE OF TRAFFIC

SCALE: VERT. HORIZ. DRAWN BY
DATE CHECKED BY

PLOT DATE = 3/15/2006
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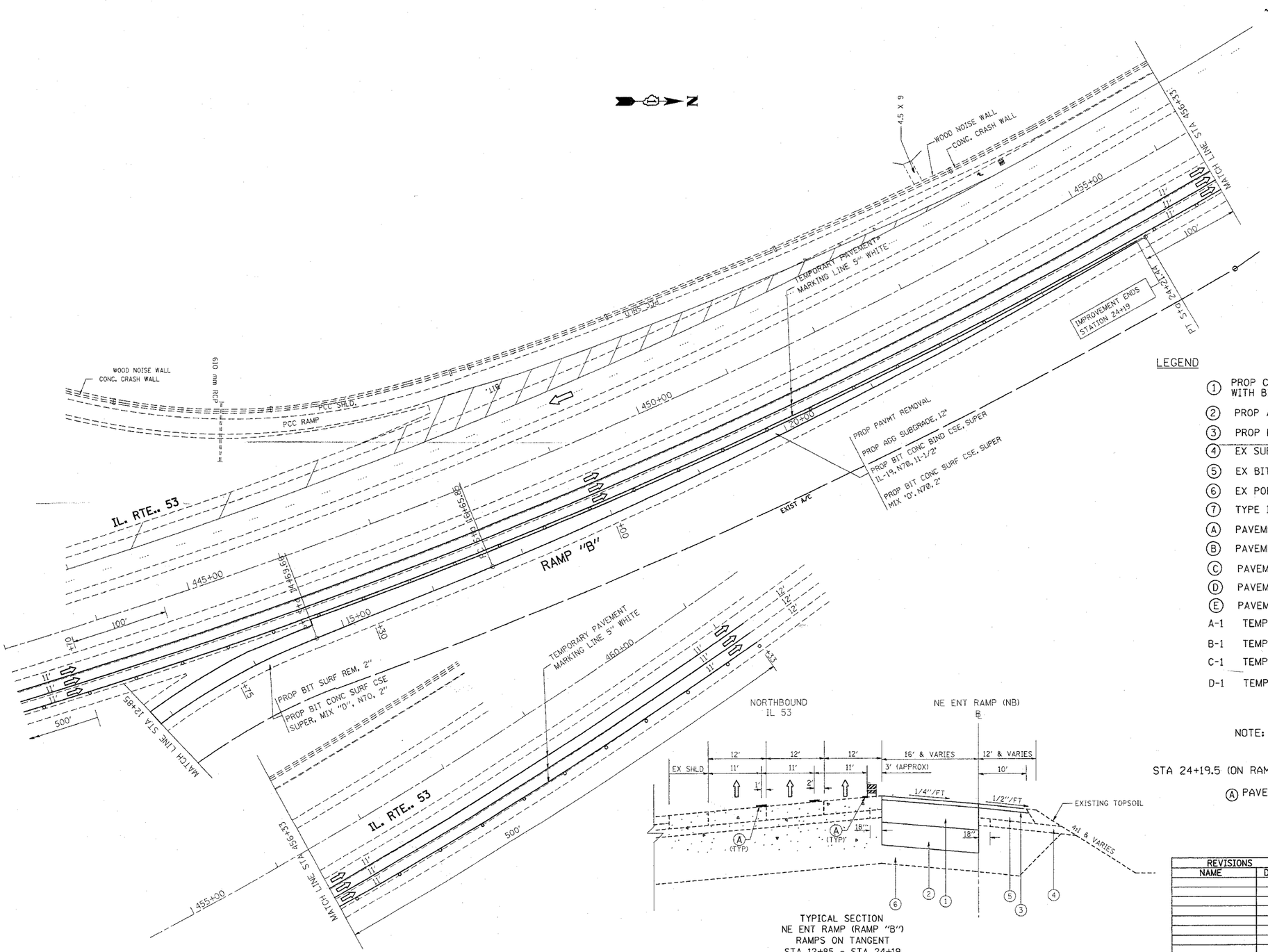
PLOT SCALE = 50.0000 ' / IN.
USER NAME = gaibennb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	22
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



TYPICAL SECTION
NE ENT RAMP (RAMP "B")
RAMPS ON TANGENT
STA 12+85 - STA 24+19

LEGEND

1. PROP CONC BIND CSE, SUPERPAVE, 11-1/2" WITH BIT CONC SURF CSE, SUPER, MIX "D" N70, 2"
2. PROP AGG SUBGRADE, 12"
3. PROP BIT CONC SURF CSE, SUPER, MIX "D", N70, 2"
4. EX SUB BASE GRANULAR MAT'L, TYPE "C", 4"
5. EX BIT SHLD
6. EX POROUS GRANULAR EMBANKMENT, 2' (±)
7. TYPE II BARRICADES OR DRUMS

(A) PAVEMENT MARKING TYPE III 4" WHITE
(B) PAVEMENT MARKING TYPE III 6" WHITE
(C) PAVEMENT MARKING TYPE III 8' WHITE
(D) PAVEMENT MARKING TAPE TYPE III 12" WHITE
(E) PAVEMENT MARKING TYPE TAPE III 24" WHITE
A-1 TEMPORARY PAVEMENT MARKING LINE 4" WHITE
B-1 TEMPORARY PAVEMENT MARKING LINE 6" WHITE
C-1 TEMPORARY PAVEMENT MARKING LINE 8" WHITE
D-1 TEMPORARY PAVEMENT MARKING LINE 24" WHITE

NOTE:

STATION EQUATION:

STA 24+19.5 (ON RAMP "B") = STA 455+36.70 (MAINLINE IL 53)

(A) PAVEMENT MARKING TYPE III 5" WHITE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL 53 @ IL 68
NORTHEAST ENTRANCE RAMP

RAMP "B" (NE ENT RAMP PLAN)
AND MAINTENANCE OF TRAFFIC

SCALE: VERT.
HORIZ.
DRAWN BY
DATE
CHECKED BY

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USER NAME = gabbamb

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CONTRACT NO.

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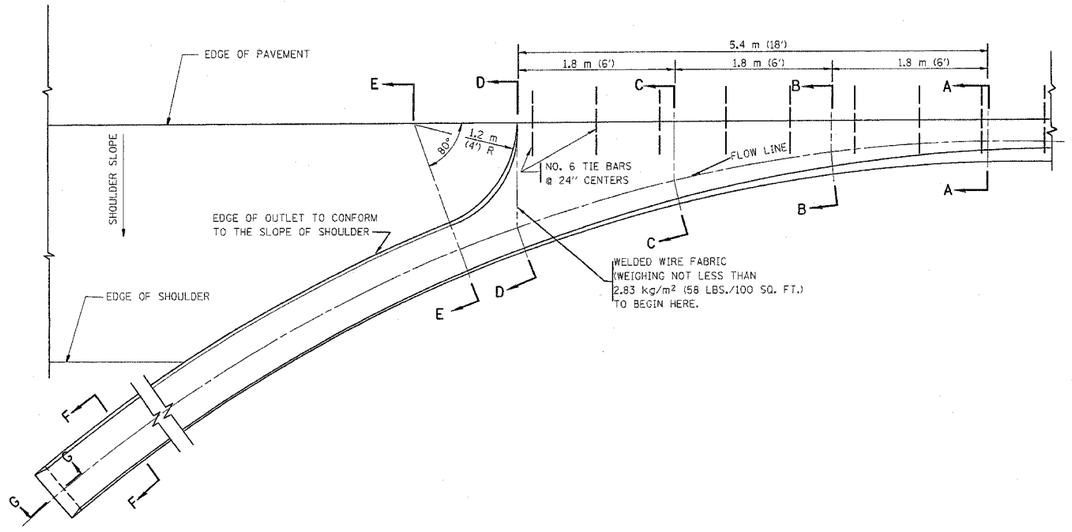
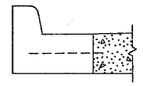
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

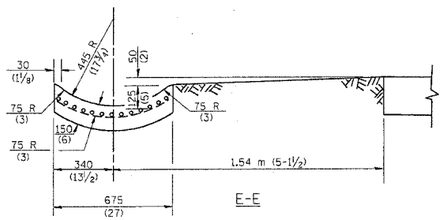
CONTRACT NO. 60A61



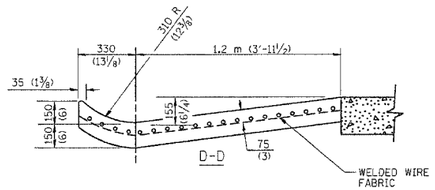


A-A *

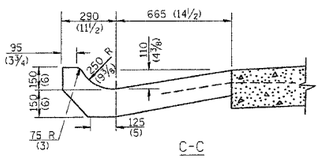
* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-15.60 (B-6.24) SEE STATE STANDARD 606006.



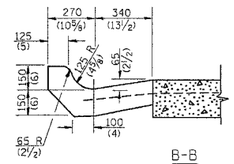
E-E



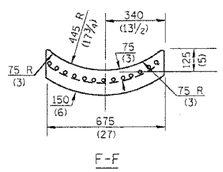
D-D



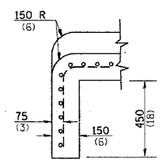
C-C



B-B



F-F



G-G

GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 600 (24) CENTERS UNLESS OTHERWISE SHOWN.

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 1.8 m (6') FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
0.96 m³ (1.25 CU. YDS.) CLASS SI CONCRETE (OUTLET) FOR 225 (9) PAV'T.
0.97 m³ (1.27 CU. YDS.) CLASS SI CONCRETE (OUTLET) FOR 250 (10) PAV'T.
FOR SECTION F-F=
0.03 m³ (0.045 CU. YDS.) CLASS SI CONCRETE PER m (ft.).

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

REVISIONS	
NAME	DATE
M. DE YONG	8/4/86
R. SHAH	09/09/94
R. SHAH	10/25/94
E. GOMEZ	12/21/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

OUTLET FOR CONCRETE CURB AND GUTTER

SCALE: VERT. HORIZ.
DATE: 1/20/2006
DRAWN BY
CHECKED BY

BD600-01 (BD-03)
REVISION DATE: 12/21/00

PLOT DATE = 1/20/2006
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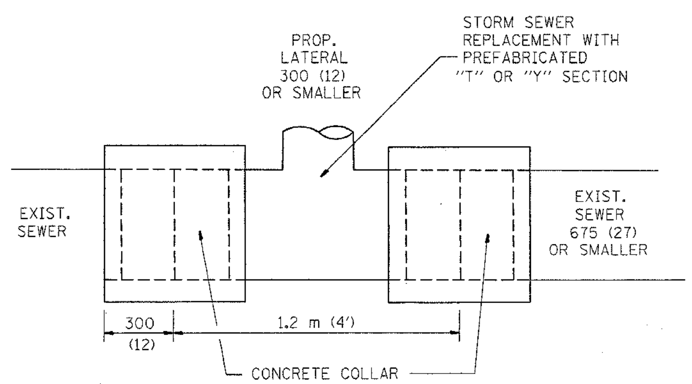
bd03.dgn 1/20/2006 1:12:32 PM User=gaibond

CONTRACT NO.

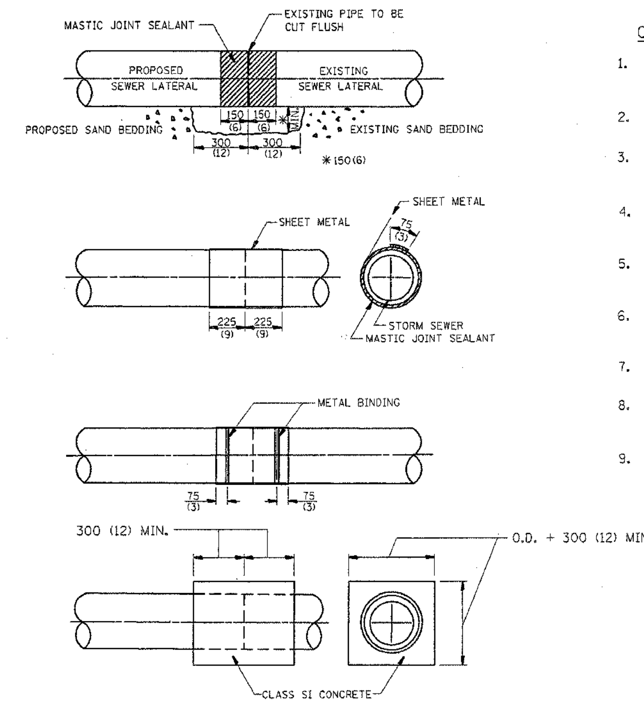
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	24
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER

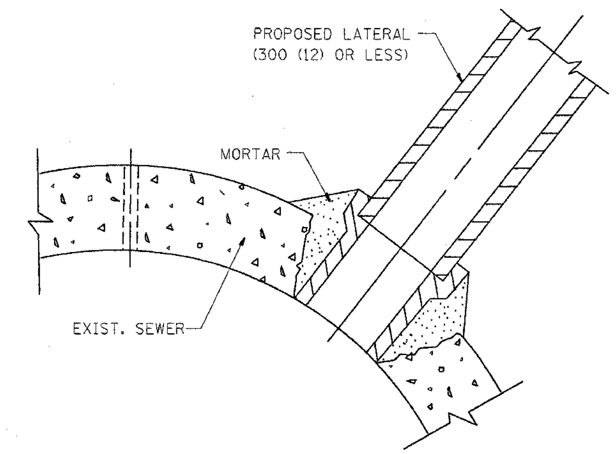


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 150 (6) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 x 150 (12 x 6) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 450 (18) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 75 (3) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES. 225 (9) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 75 (3) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

I THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 675 (27) OR SMALLER SEE DETAIL "A" AND "B".

B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 750 (30) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

REVISIONS	
NAME	DATE
M. DE YONG	07/25/90
M. DE YONG	02/05/92
M. DE YONG	05/08/92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	06/12/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER

SCALE: VERT. HORIZ.

DATE:1/20/2006

DRAWN BY

CHECKED BY

BD500-01 (BD-7)

REVISION DATE:06/12/96

PLOT DATE = 1/20/2006
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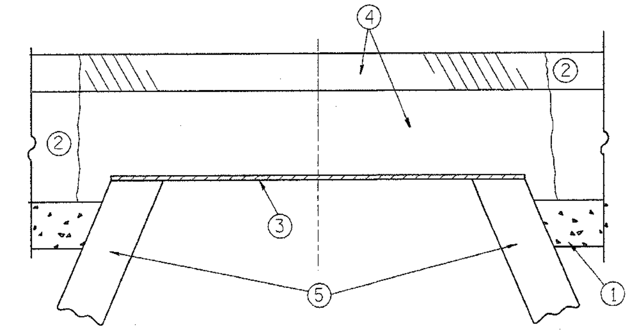
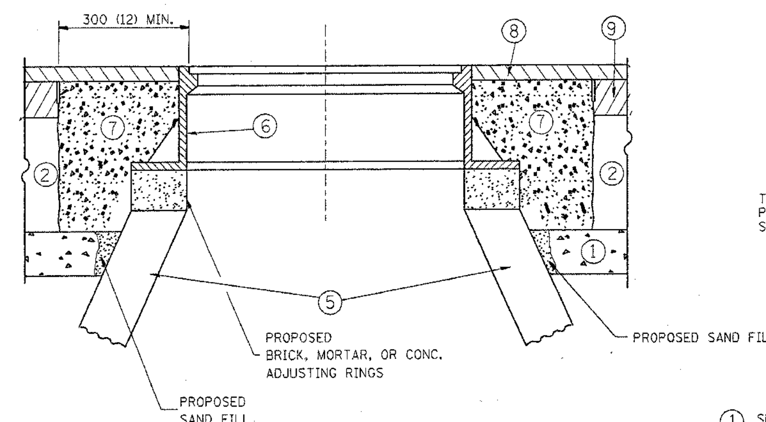
USER NAME = galbanvb

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61





CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

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

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

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

D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 40 ($1\frac{1}{2}$) THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE BITUMINOUS MATERIAL AND CRUSHED STONE.

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

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

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

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 900 (36) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL
8. PROPOSED BITUMINOUS CONCRETE SURFACE COURSE
9. PROPOSED BITUMINOUS CONCRETE BINDER COURSE

NOTES:

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

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

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

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

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

LOCATION OF STRUCTURES:

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: VERT. HORIZ.

DATE: 1/20/2006

DRAWN BY

CHECKED BY

BD600-03 (BD-8)

REVISION DATE: 05/17/04

PLOT DATE = 1/20/2006
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USER NAME = galbannb

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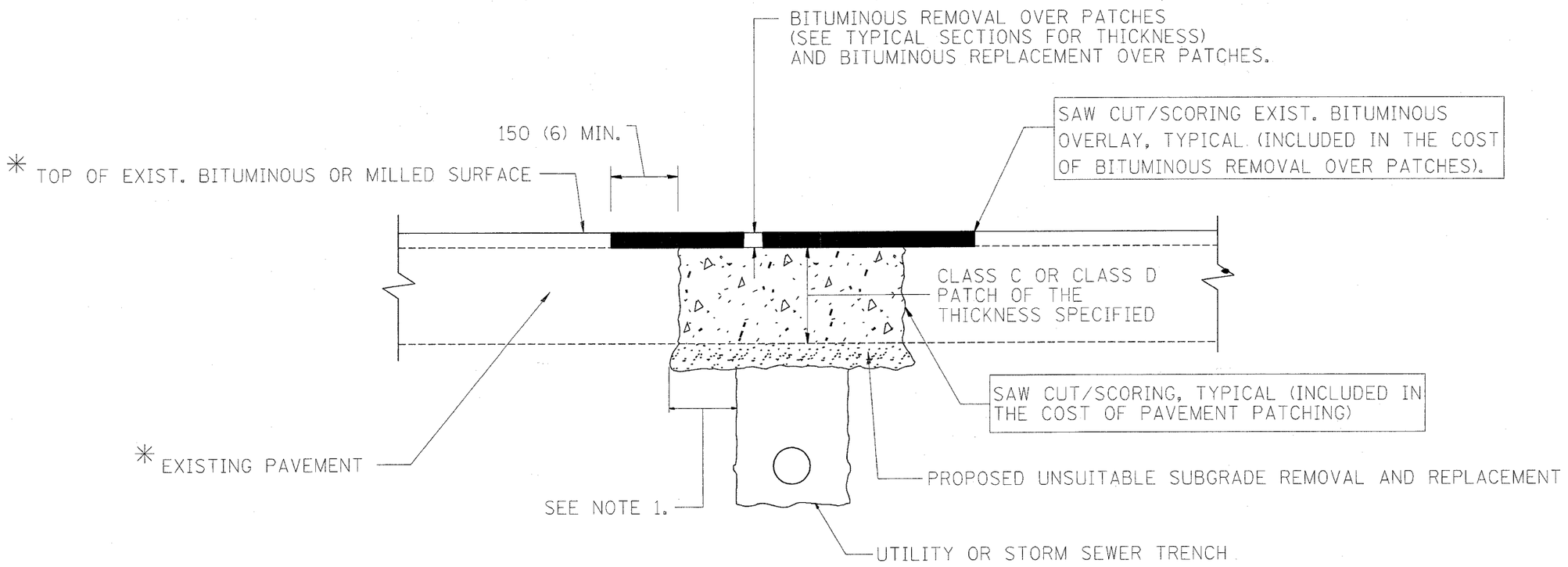
CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

SCALE: VERT.
HORIZ.
DATE: 1/20/2006

DRAWN BY
CHECKED BY

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

PLOT DATE = 1/20/2006
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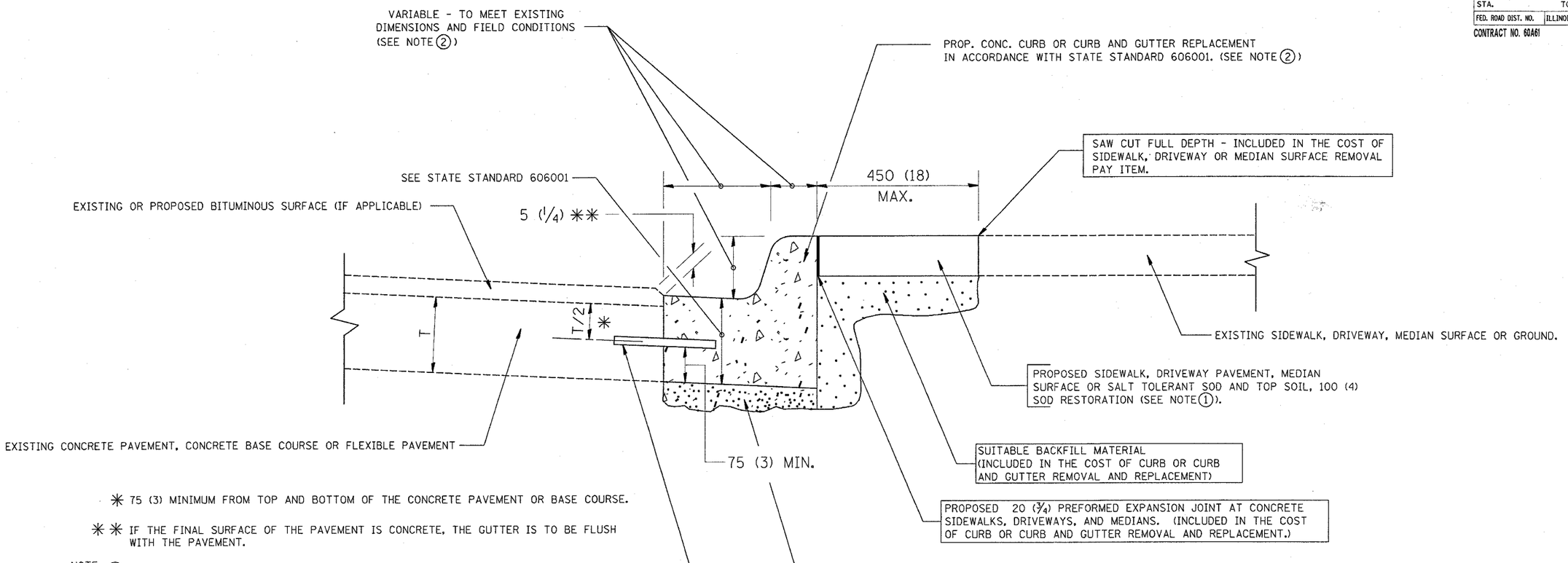
USER NAME = gshlomb

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	27
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



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

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

NOTE:

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

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

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

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

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

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

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

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

BASIS OF PAYMENT:

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. HORIZ.
DATE: 1/20/2006
DRAWN BY
CHECKED BY

BD600-06 (BD-24)

REVISION DATE: 12/06/88

PLOT DATE = 1/20/2006
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USER NAME = gatsonnb

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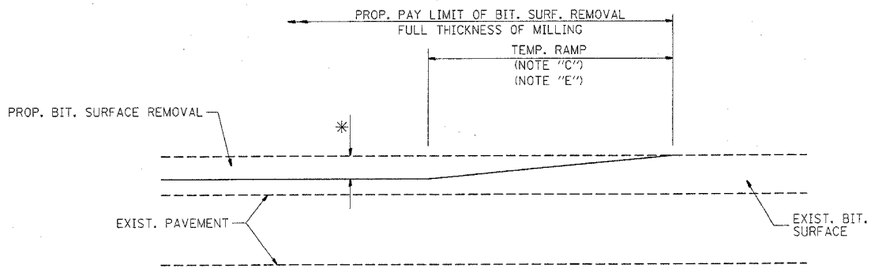
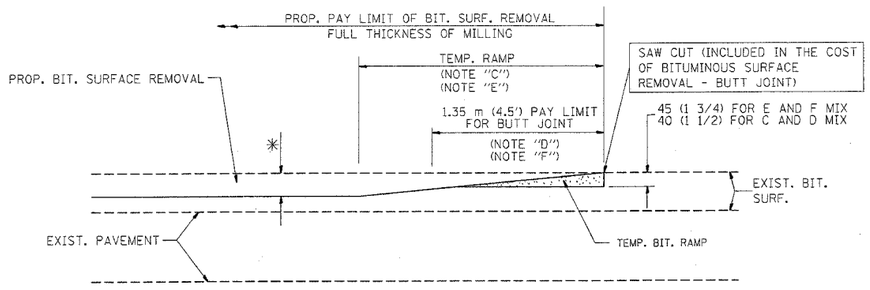


MILLED TEMPORARY RAMP

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

OPTION 1

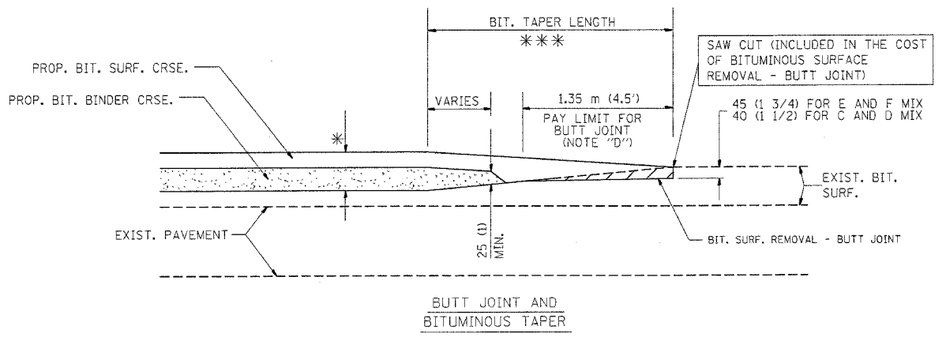


BITUMINOUS CONSTRUCTED TEMPORARY RAMP

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

OPTION 2

TYPICAL TEMPORARY RAMP



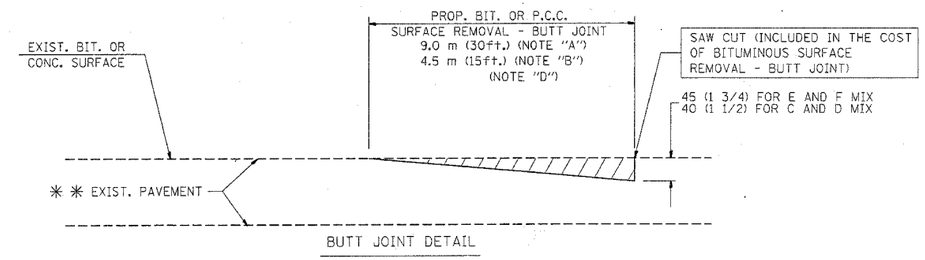
BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER
FOR MILLING AND RESURFACING

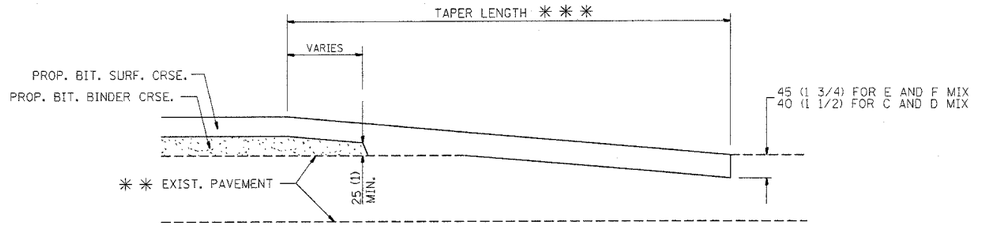
CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	28
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

TYPICAL BUTT JOINT AND BITUMINOUS TAPER
FOR RESURFACING ONLY

✳✳ PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

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

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

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

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

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

✳ SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

BASIS OF PAYMENT:

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: VERT.
HORIZ.
DATE: 1/20/2006

DRAWN BY
CHECKED BY

BD400-05 (VI=BD32)

REVISION DATE: 04/06/01

PLOT DATE = 1/20/2006
FILE NAME = W:\district\bd32.dgn
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USER NAME = galbarvb

32.dgn 1/20/2006 1:12:41 PM User=galbarvb

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

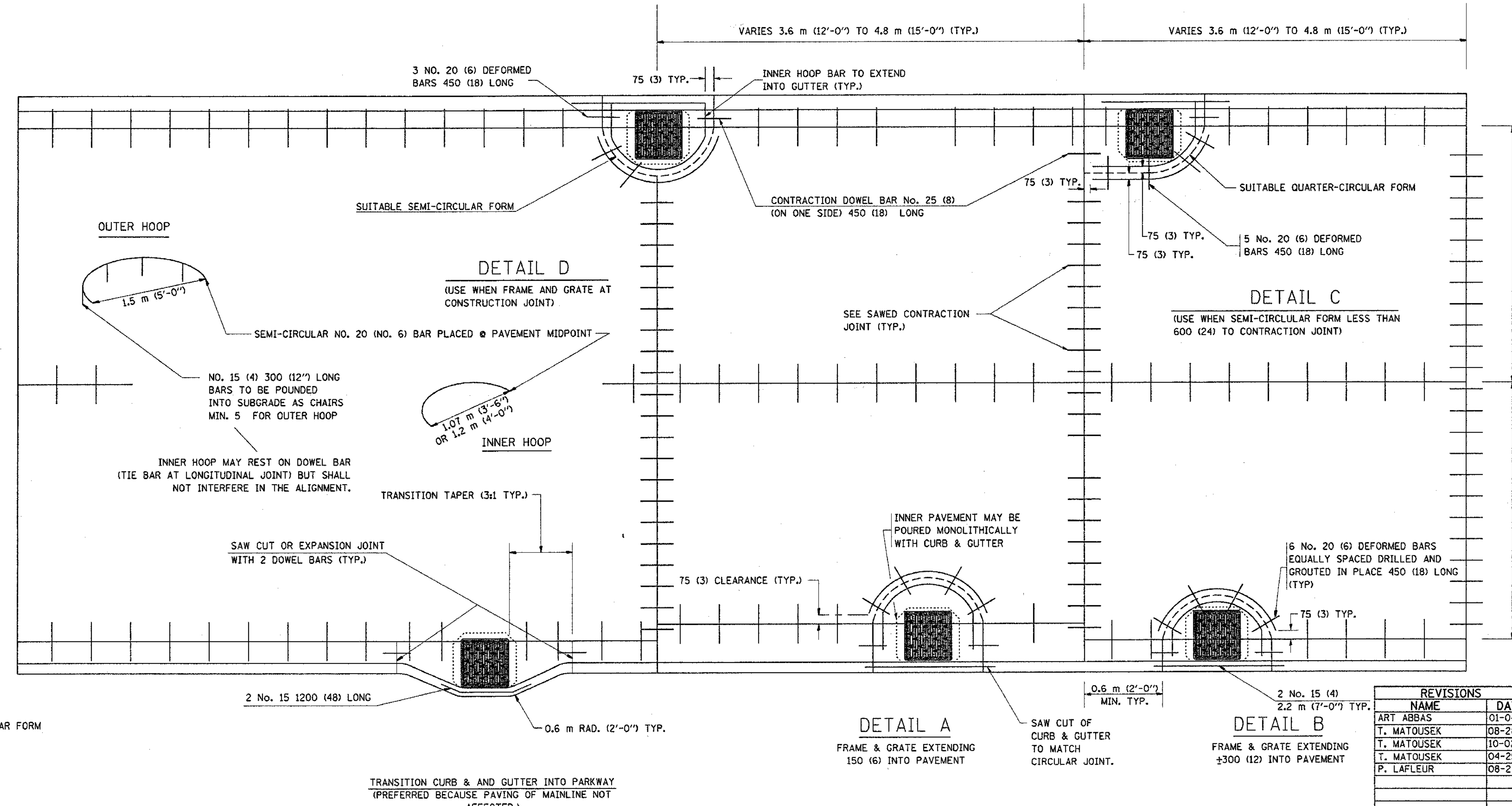
CONTRACT NO. 60A61

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 200 (8)	1.1 m (3'-6")	1.2 m (4'-0")	1.5 m (5'-0")
> 200 (8) TO 360 (14)	1.2 m (4'-0")	1.4 m (4'-6")	1.5 m (5'-0")

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 300 (12) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 50 (2) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.

DESIGNER NOTE:
THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"



LEGEND:

.... CASTING

- - - - - - SUITABLE SEMI-CIRCULAR FORM

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

REVISIONS NAME	DATE
ART ABBAS	01-04-99
T. MATOUSEK	08-28-00
T. MATOUSEK	10-02-00
T. MATOUSEK	04-25-02
P. LAFLEUR	08-27-02

ILLINOIS DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER

SCALE: VERT. HORIZ.
DATE: 1/20/2006
DRAWN BY
CHECKED BY

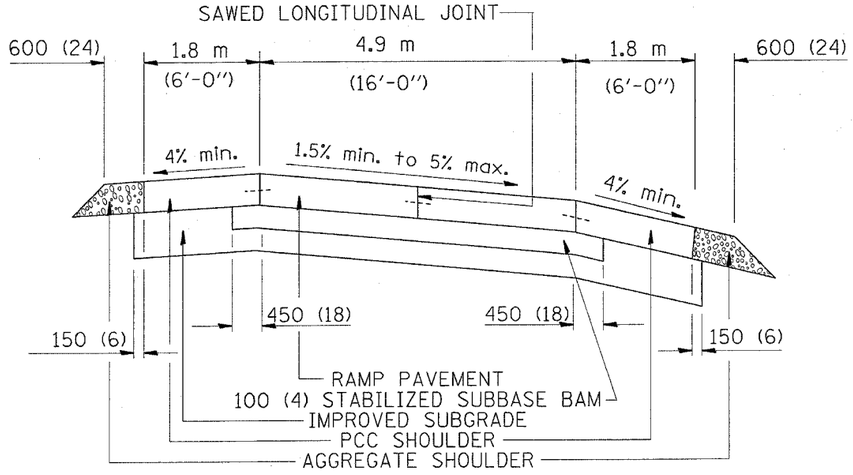
PLOT DATE = 1/20/2006
FILE NAME = W:\distsrd\bd48.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = galbernb

RECD FROM DI. 1/2/83--CEL CREATED 7/18/83

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	30
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



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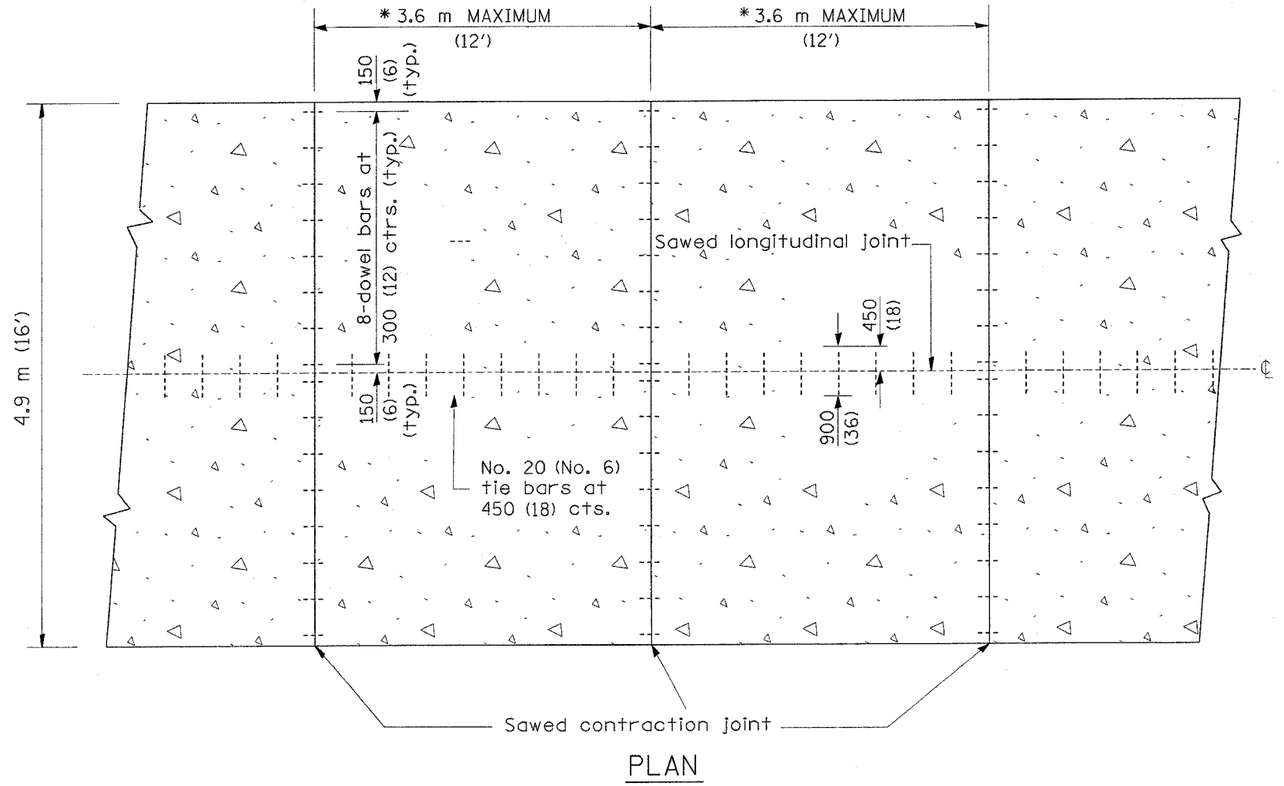
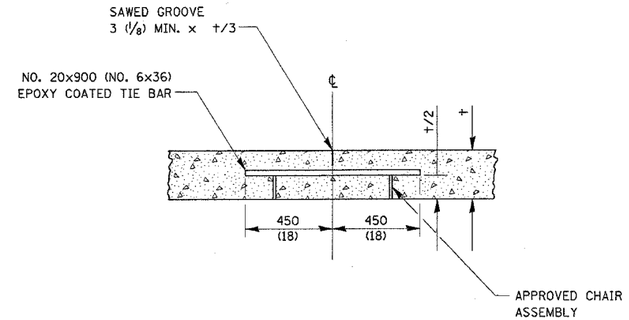


PLAN

NOTES:

1. CENTERLINE JOINT REMAINS IN THE CENTER WHEN RAMP TRANSITIONS TO TWO (2) RAMPS AT 3.6 m (12').

2. ALL BARS TO BE EPOXY COATED.



SAWED LONGITUDINAL JOINT

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAIL FOR CENTERLINE SAWCUT 4.9 m (16') AND VARIABLE JOINTED PCC PAVEMENT FOR RAMPS

SCALE: VERT. HORIZ.
DATE: 1/20/2006

DRAWN BY TOM MATOUSEK
CHECKED BY A. ABBAS

BD49
REVISION DATE:

PLOT DATE = 1/20/2006
FILE NAME = M:\district\bd49.dgn
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USER NAME = galbanob

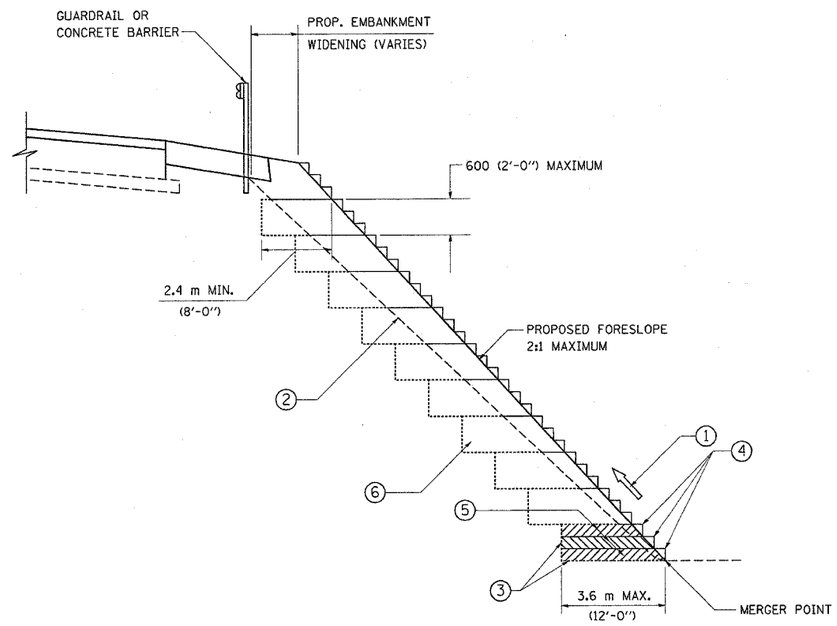
cell.dgn 1/20/2006 8:12:45 PM User=galbanob

RECD FROM DL 1/2/83--CEL CREATED 7/18/83

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	31
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 200 (8-INCH) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION ". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5)

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL FOR EMBANKMENT WIDENING

SCALE: VERT.
HORIZ.
DATE: 1/20/2006

DRAWN BY: CADD
CHECKED BY: S.E.B.

BD-51

REVISION DATE: 6-16-2004

PLOT DATE = 1/20/2006
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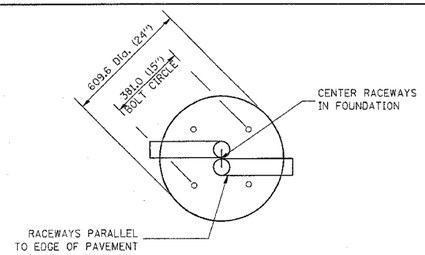
USER NAME = galtenb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

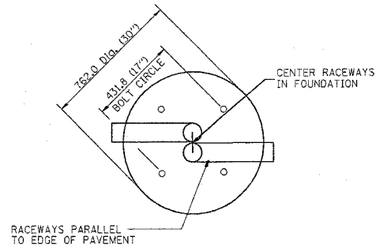
CONTRACT NO. 60A61

LIGHT POLE FOUNDATION DEPTH TABLE
12.192M (40 FT.) TO 14.478M (47.5 FT.) MOUNTING HEIGHT

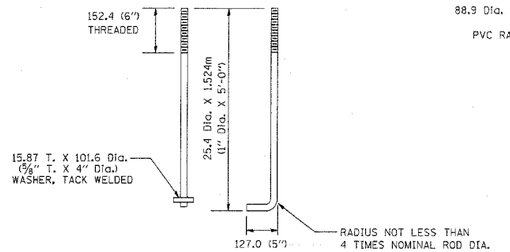
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	3.96M (13'-0")	4.57M (15'-0")
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	2.09M (9'-6")	3.23M (10'-9")
STIFF CLAY Qu = 1.50 TON/SQ. FT.	2.13M (7'-0")	2.44M (8'-0")
LOOSE SAND ø = 34°	2.74M (9'-0")	3.05M (10'-0")
MEDIUM SAND ø = 37.5°	2.52M (8'-3")	2.74M (9'-0")
DENSE SAND ø = 40°	2.36M (7'-9")	2.74M (9'-0")



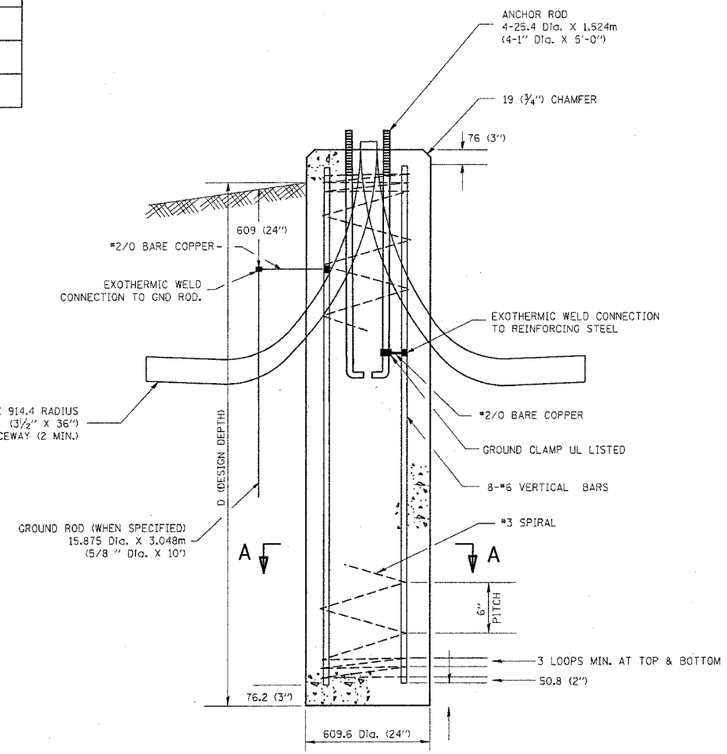
TOP VIEW



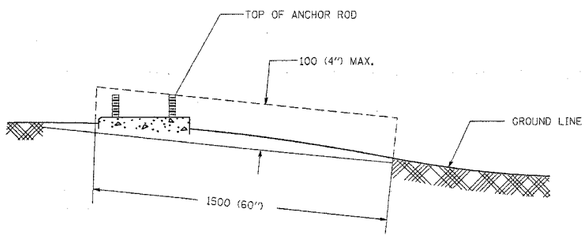
TOP VIEW



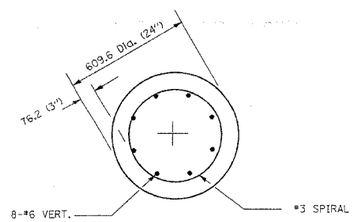
ANCHOR ROD DETAIL



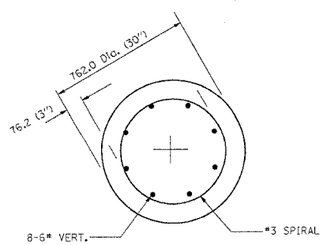
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 20MM (3/4-IN.).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 69.9MM (2¾") ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 152.4MM (6") PITCH OR MAY SUBSTITUTE #3 TIES AT 304.8MM (12") O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.

E-301

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
12.192M (40') TO 14.478M (47½') M.H.
381 (15") BOLT CIRCLE

SCALE: VERT. HORIZ.
DATE 1/20/2006
DRAWN BY
CHECKED BY
BE301
REVISION DATE: 04/22/02

1/20/2006
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galbannb

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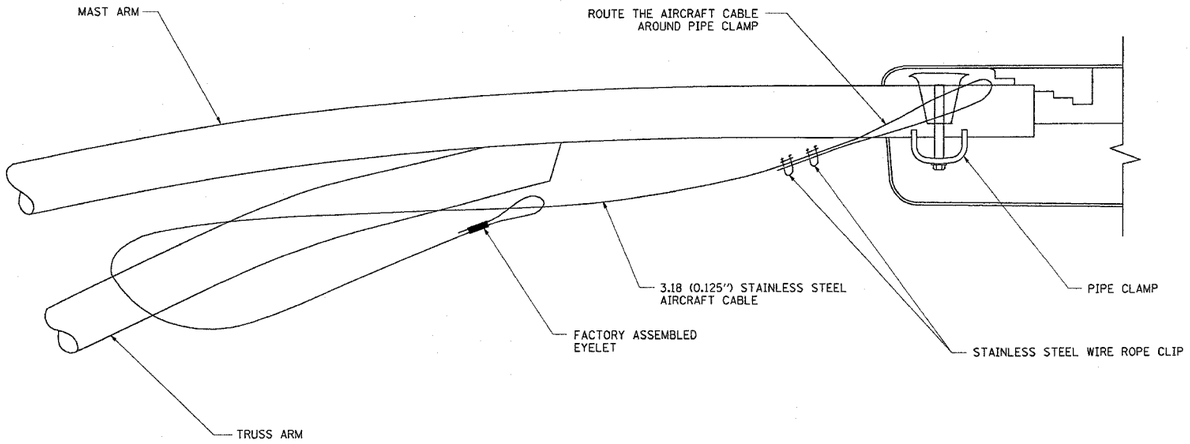
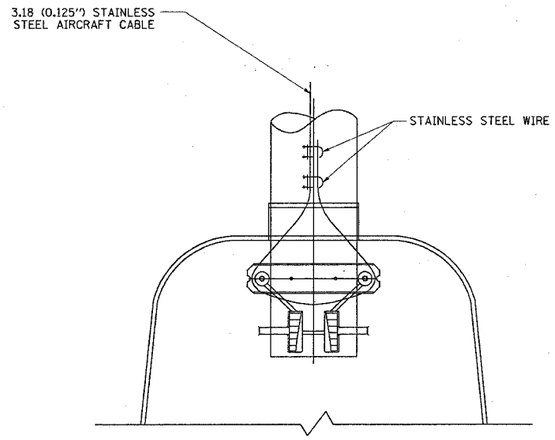
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



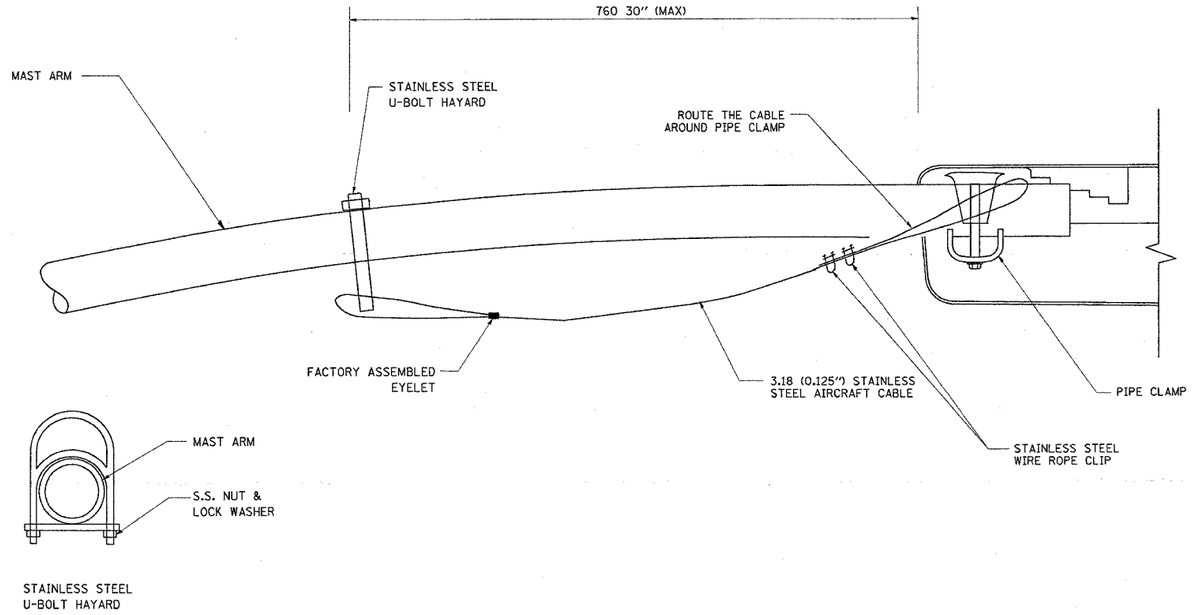
SIDE VIEW (TRUSS ARM)

N.T.S.



BOTTOM VIEW

N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 3.18 (0.125") STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: NONE — DRAWN BY

DATE 1/20/2006 — CHECKED BY

BE-701

REVISION DATE:

1/20/2006
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galbannb

be701.dgn 1/20/2006 1:24:45 PM user=galbannb

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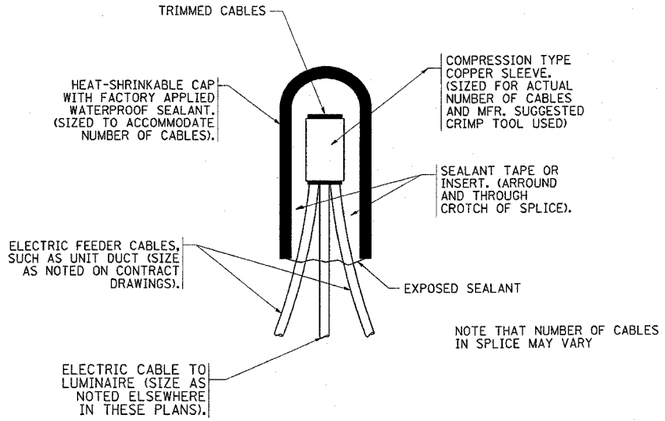
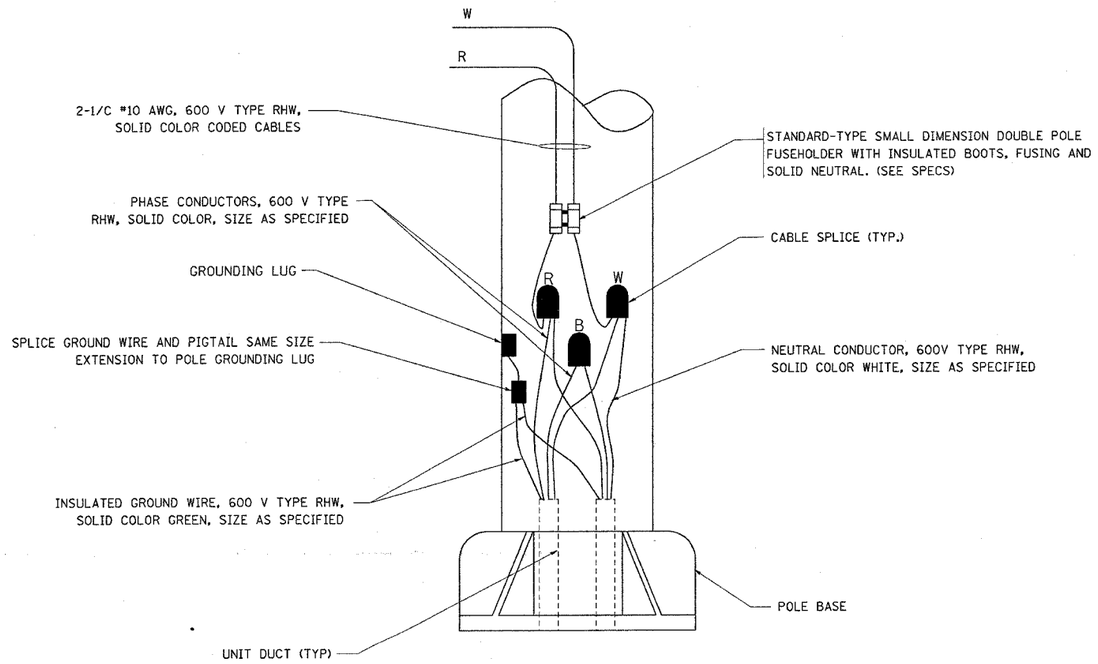
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A81



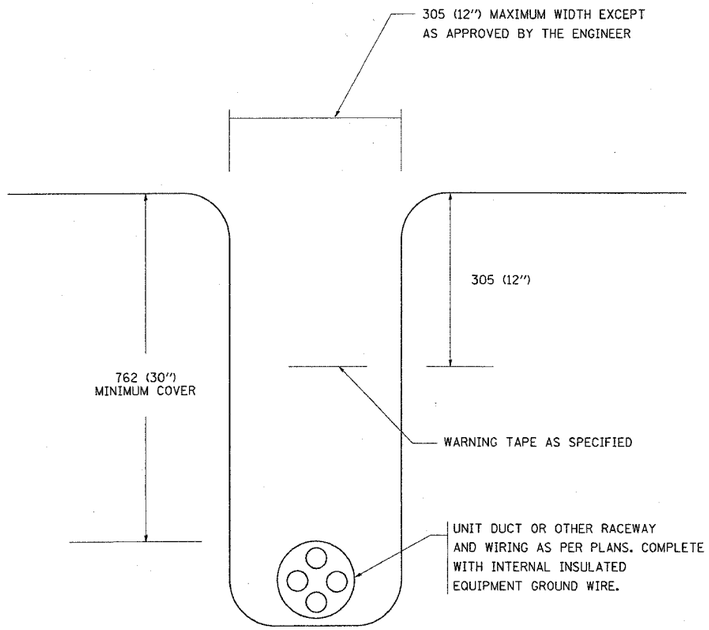
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

MISC. ELECTRICAL DETAILS SHEET A

SCALE: NONE
DATE 1/20/2006
DRAWN BY
CHECKED BY

BE-702

REVISION DATE:

1/20/2006
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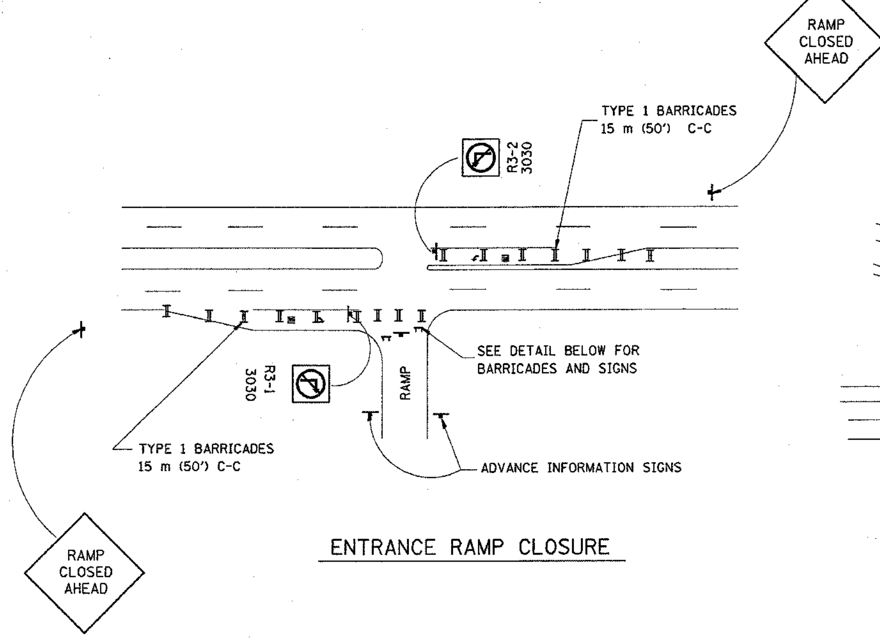
galbannb

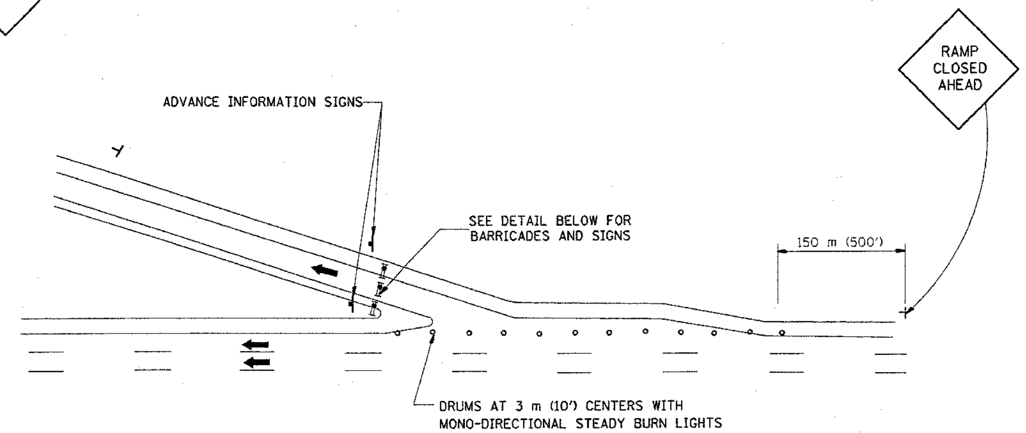
be702.dgn 1/26/2006 1:24:55 PM user:galbannb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	35
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61

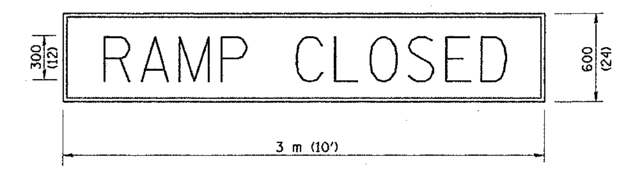


ENTRANCE RAMP CLOSURE



EXIT RAMP CLOSURE

RAMP CLOSURE ADVANCE WARNING SIGN

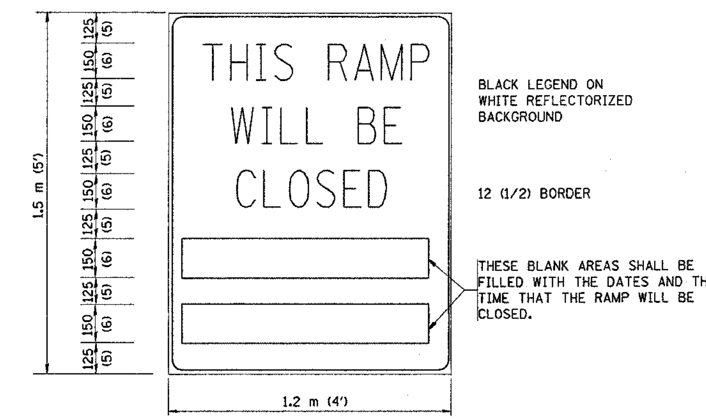


BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND

25 (1) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

RAMP CLOSURE ADVANCE INFORMATION SIGN

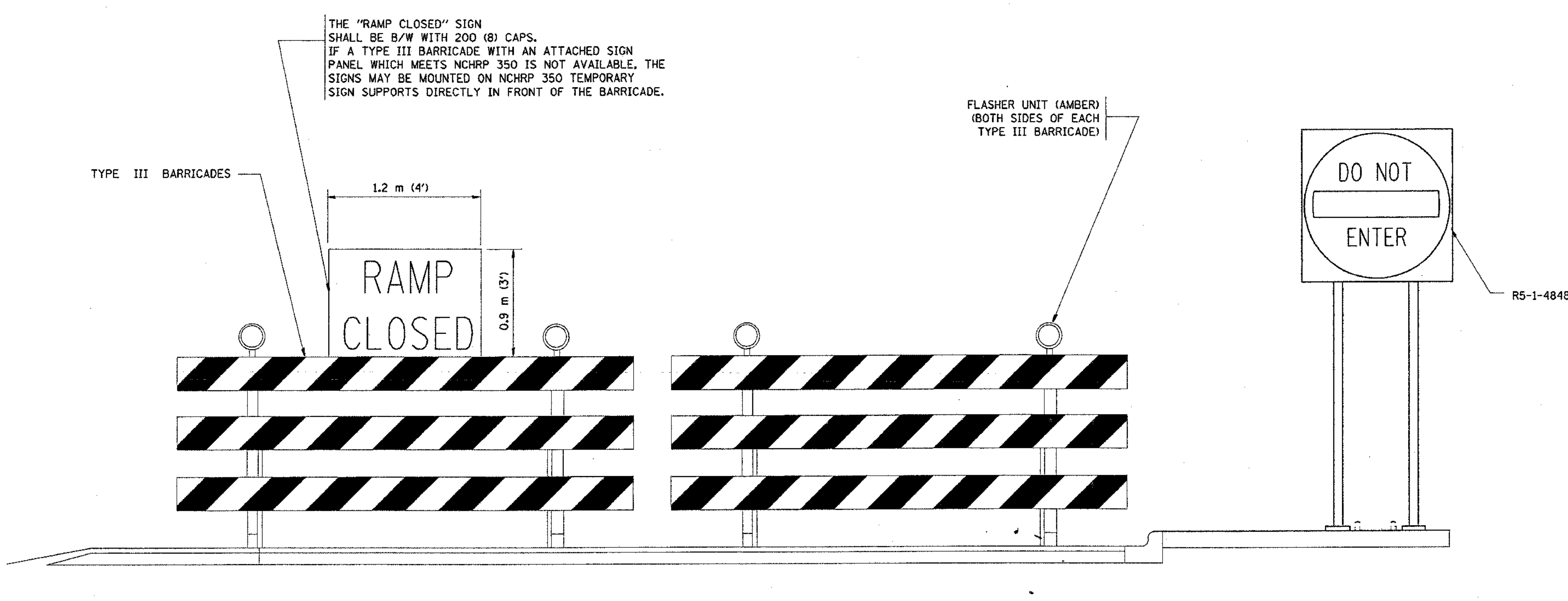


BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND

12 (1/2) BORDER

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, 4 MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.



DETAIL FOR REQUIRED BARRICADES & SIGNS

GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
4. FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
5. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
6. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
7. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

NOTES:

1. CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
3. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY- FOUR (24) HOURS.
4. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

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

REVISIONS NAME	DATE
DWS	2-83
DWS	1/90
DWS	9/94
DWS	12/94
DWS/JAF	12/02
Revise devices to meet NCHRP 350	4/03

ILLINOIS DEPARTMENT OF TRANSPORTATION

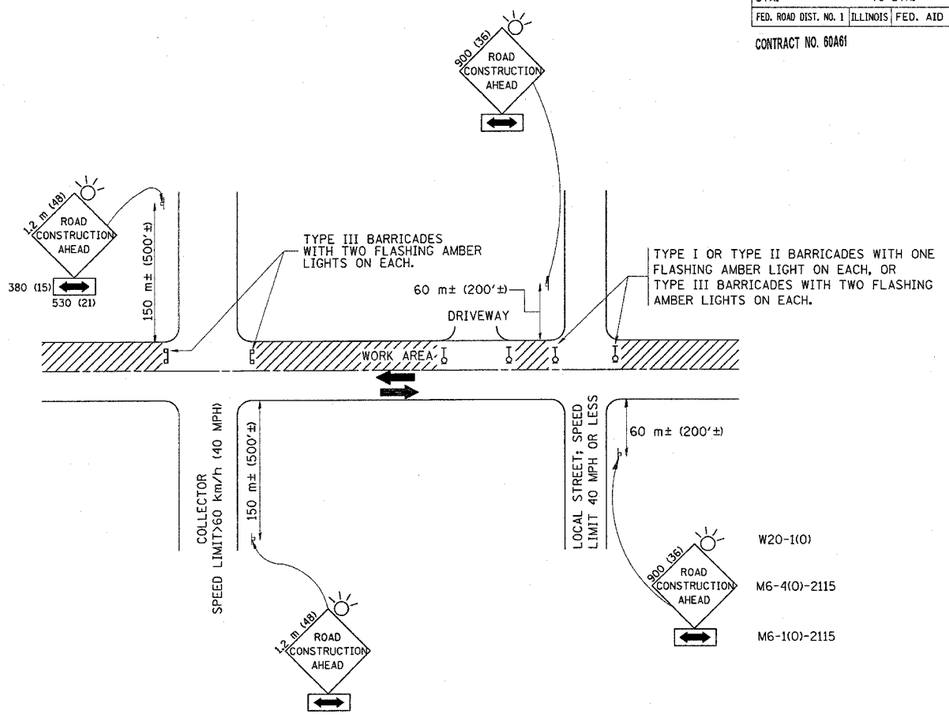
FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

SCALE: VERT. HORIZ.
DATE 1/20/2006
DRAWN BY
CHECKED BY

TC-8
REVISION DATE: 04/03/03

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	36
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



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

NOTES:

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

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

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.

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

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

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

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

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

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: VERT.
HORIZ.
DATE 1/20/2006

DRAWN BY
CHECKED BY
TC-10

REVISION DATE: 01/06/00

1/20/2006
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galbannb

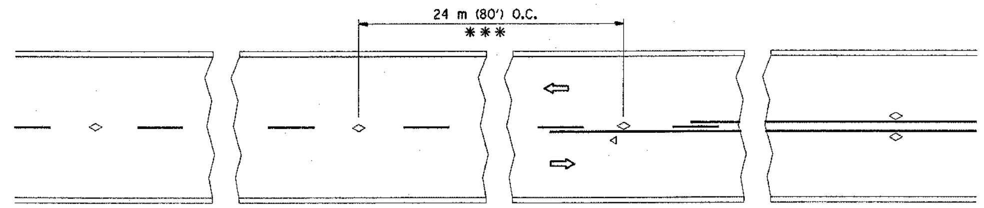
tc10.dgn 1/20/2006 1:26:17 PM User=galbannb

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	36A

STA. TO STA.

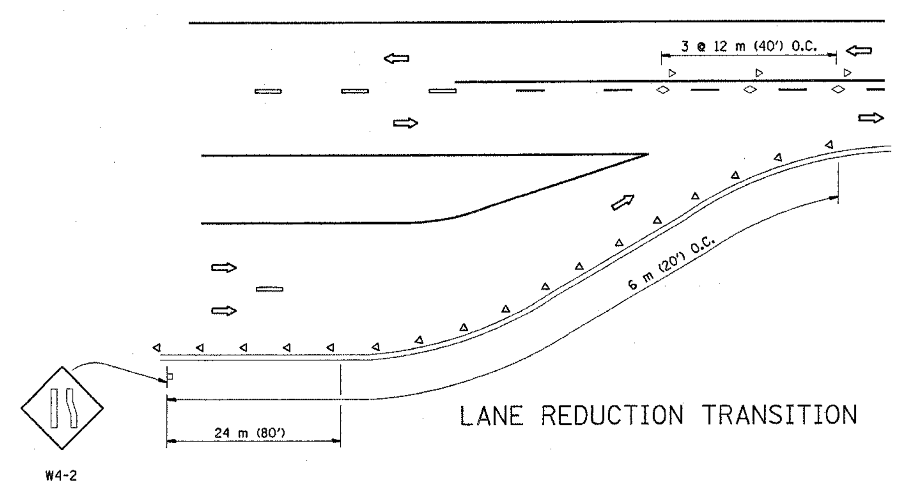
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

CONTRACT NO. 60A61

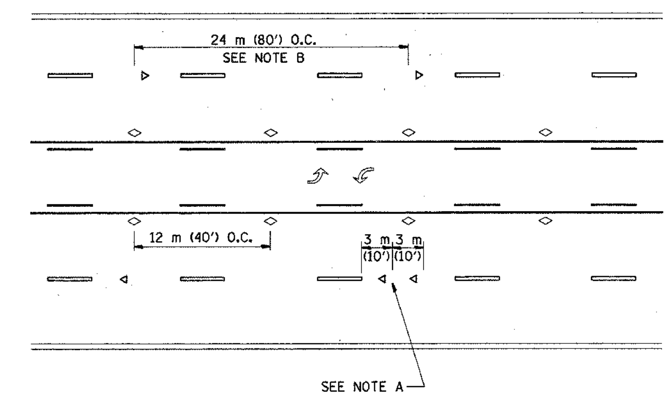


* * * REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

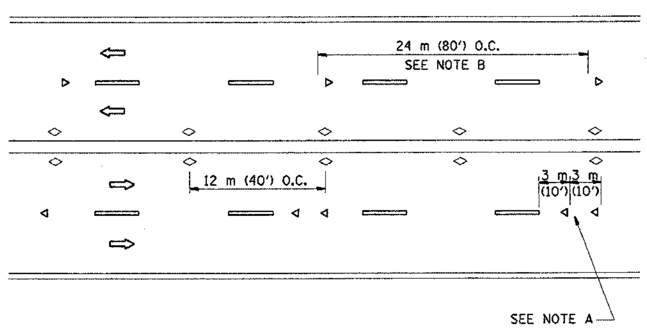
TWO-LANE/TWO-WAY



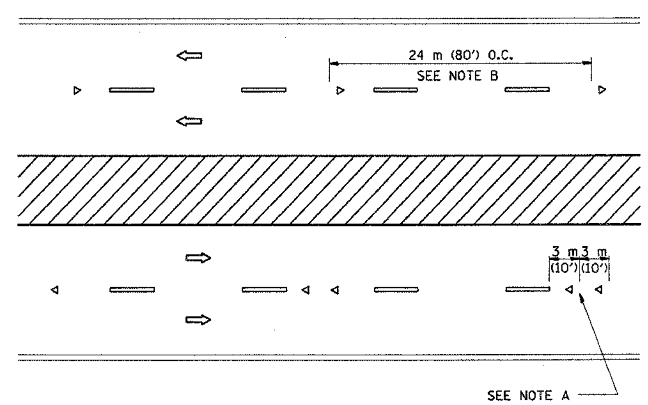
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

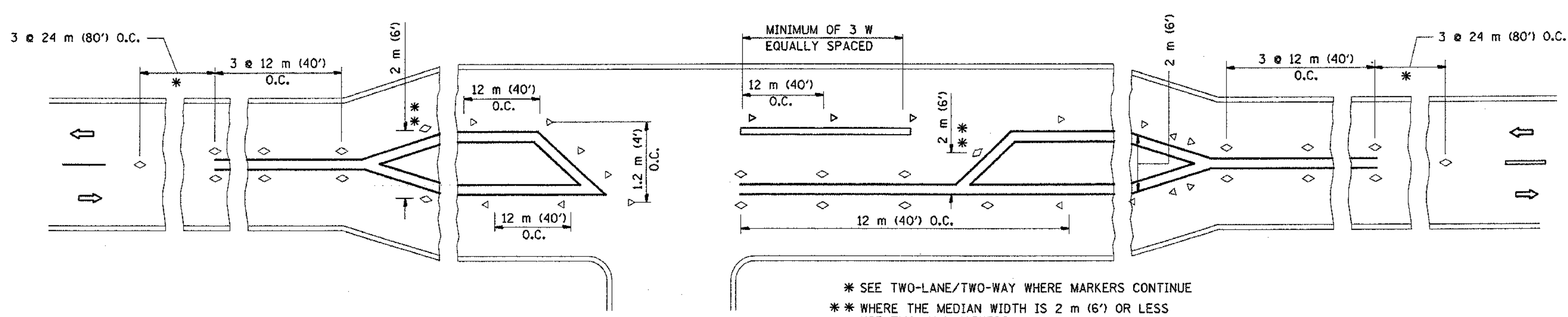
LANE MARKER NOTES

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

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

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



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

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

LEFT TURN

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

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

SCALE: NONE

DATE: 2/10/2006

DRAWN BY CADD

CHECKED BY

TC-11

REVISION DATE: 01/06/00

2/10/2006
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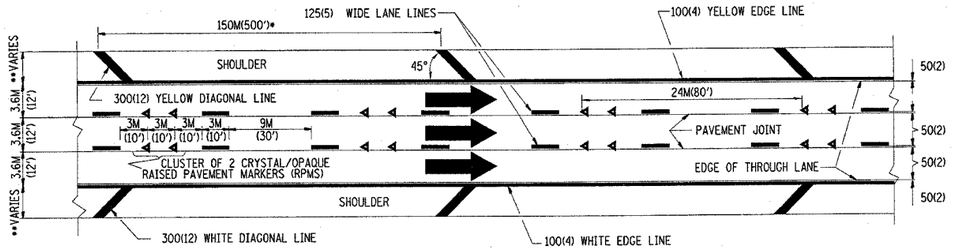
VI-TC11
galbannb

F. A. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	37
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

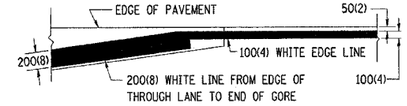
CONTRACT NO. 60A61

* THE DIAGONAL LINES SHALL BE SPACED AT 12M (40') C-C ACROSS ALL STRUCTURES WHICH ARE 150M (500') OR LESS IN LENGTH
** THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 1.8M (6') OR LESS IN WIDTH

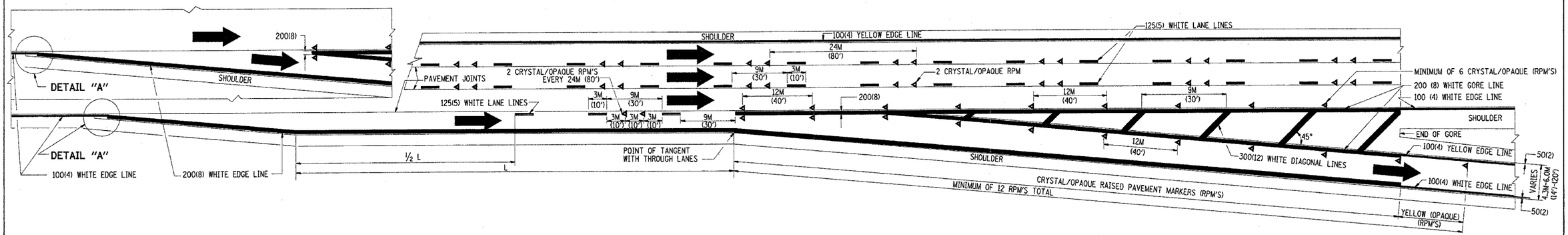


TYPICAL EDGE LINES & LANE LINES

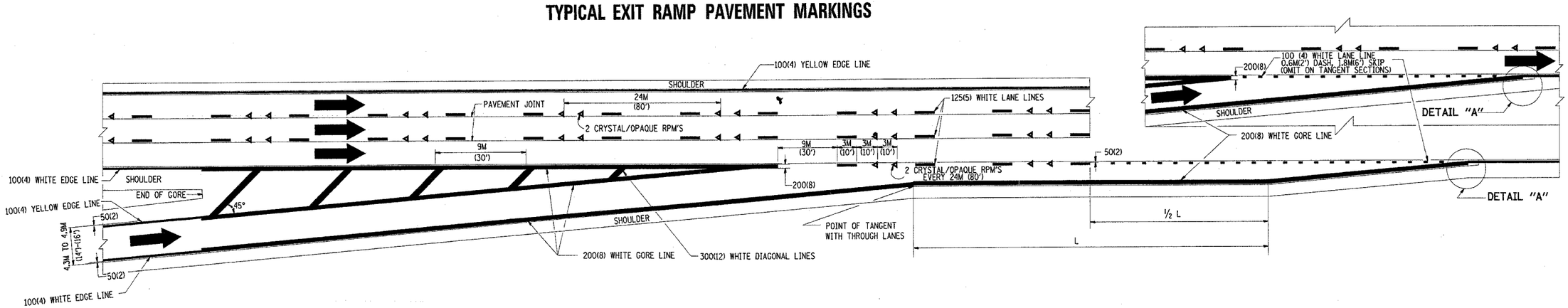
NOTES:
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES
3. PREFORMED PLASTIC PAVEMENT MARKING LINE SHALL BE USED ON PCC PAVEMENT.



DETAIL "A"



TYPICAL EXIT RAMP PAVEMENT MARKINGS



TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91
AH	3/96
DWS	7/96

ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

SCALE: NONE — DRAWN BY C.A.D.D.

DATE: 1/20/2006 — CHECKED BY

TC12 SHEET 1 OF 2

REVISION DATE: 01/01/96

1/20/2006
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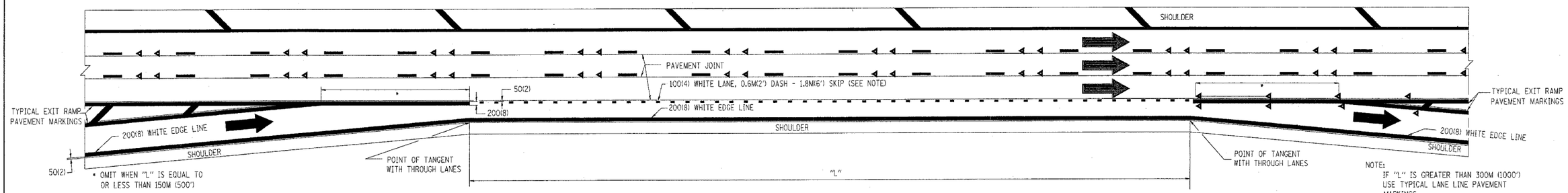
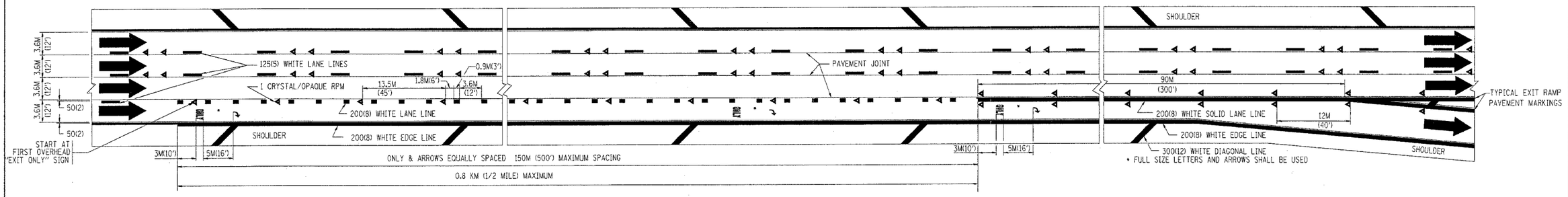
galbannb

F. A. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	38
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

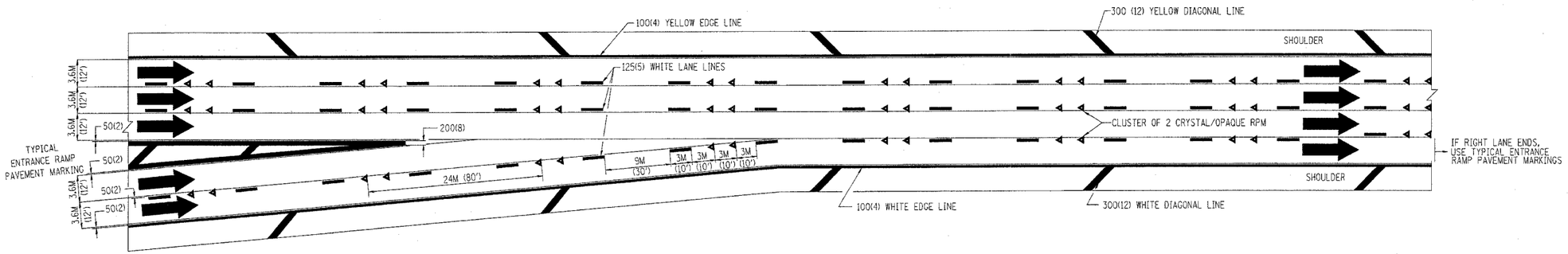
CONTRACT NO. 60A61



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
DWS	1/90
DWS	5/91

ILLINOIS DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS

SCALE: NONE
DATE: 1/20/2006
DRAWN BY C.A.D.D.
CHECKED BY
TC12 SHEET 2 OF 2
REVISION DATE: 01/01/96

1/20/2006
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VI-TC12
galbanno

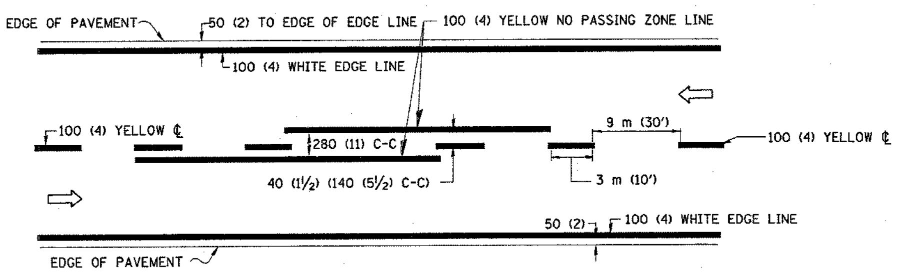
tc12.dgn 1/20/2006 1:25:28 PM user=galbanno

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	39

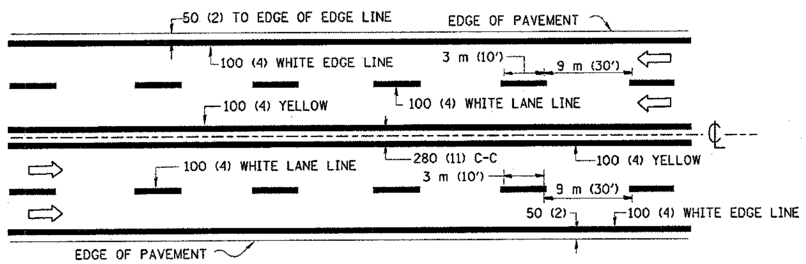
STA. TO STA.

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

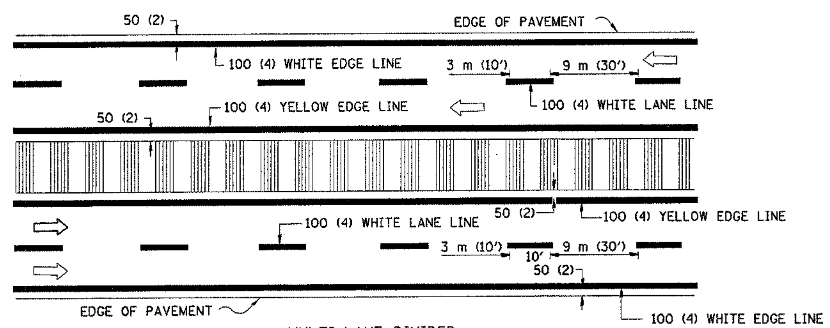
CONTRACT NO. 60A61



2-LANE ROADWAY



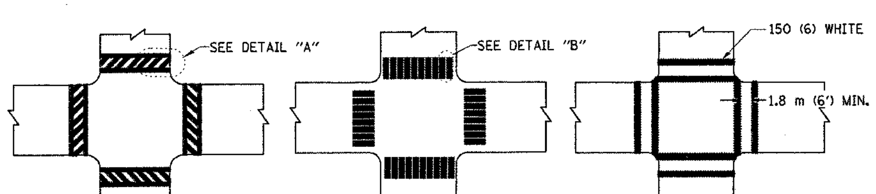
MULTI-LANE UNDIVIDED



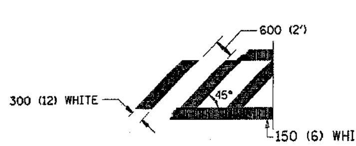
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

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

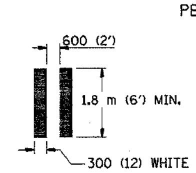
TYPICAL LANE AND EDGE LINE MARKING



BICYCLE & EQUESTRIAN SCHOOL PEDESTRIAN

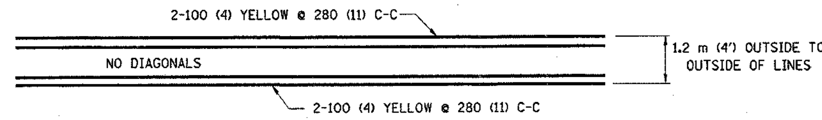


DETAIL "A"

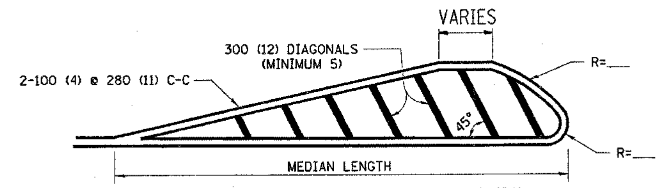


DETAIL "B"

TYPICAL CROSSWALK MARKING



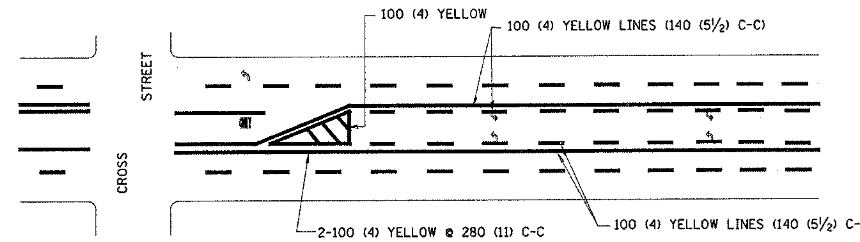
1.2 m (4') WIDE MEDIANS ONLY



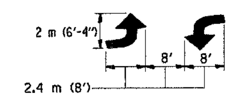
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 1.2 m (4') WIDE

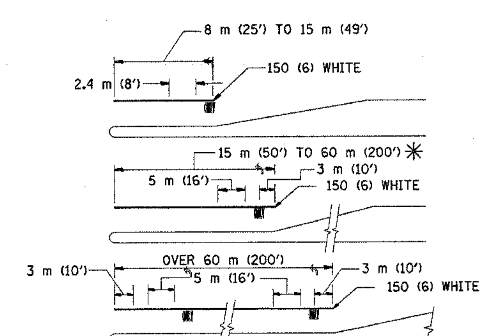


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED. WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

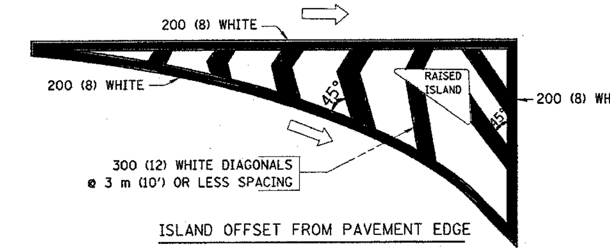


FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
↰ AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)

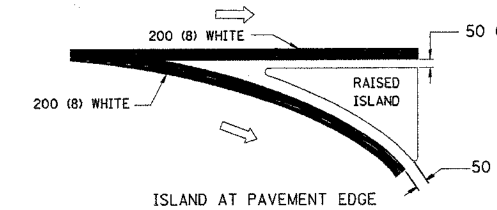
✱ TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

SCALE: NONE DRAWN BY CADD
DATE 1/20/2006 CHECKED BY

TC-13
REVISION DATE: 01/06/00

1/20/2006
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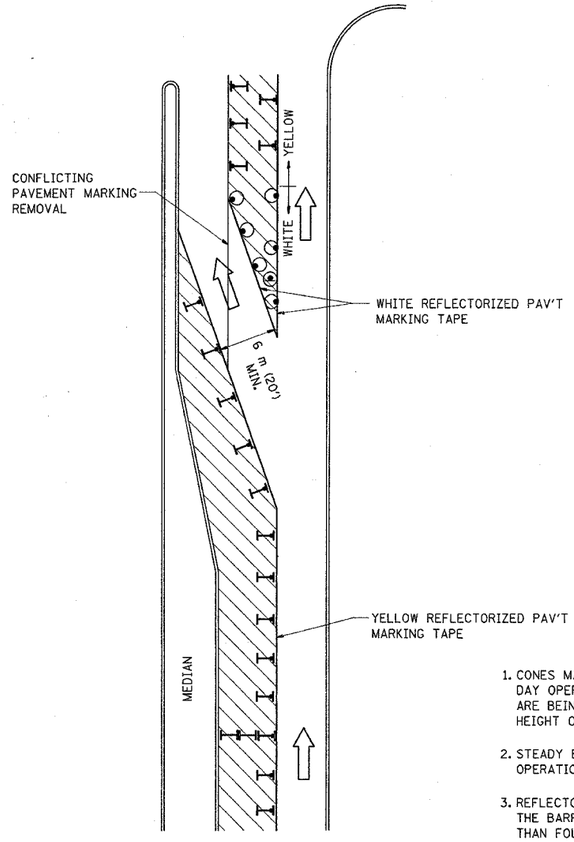
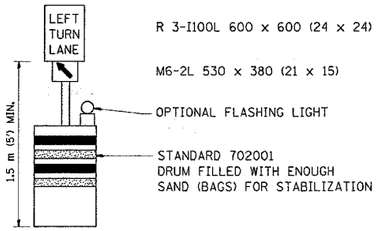
VI-TC13
galbannb

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	40
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61





GENERAL NOTES

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

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE
DATE: 1/20/2006

DRAWN BY
CHECKED BY LHA

TC-14

REVISION DATE: 01/06/00

1/20/2006
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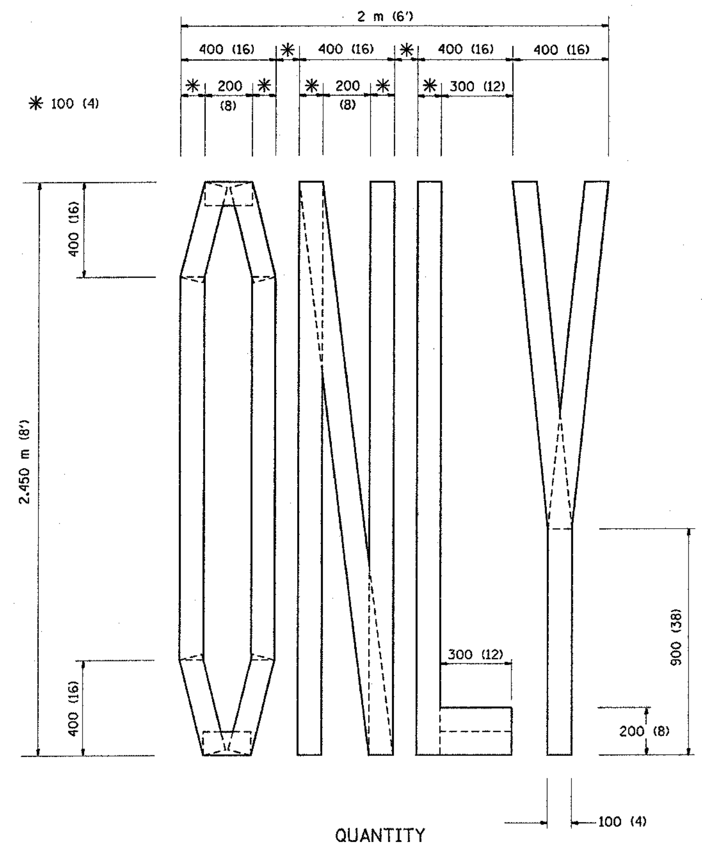
V1-TC14
galbannb

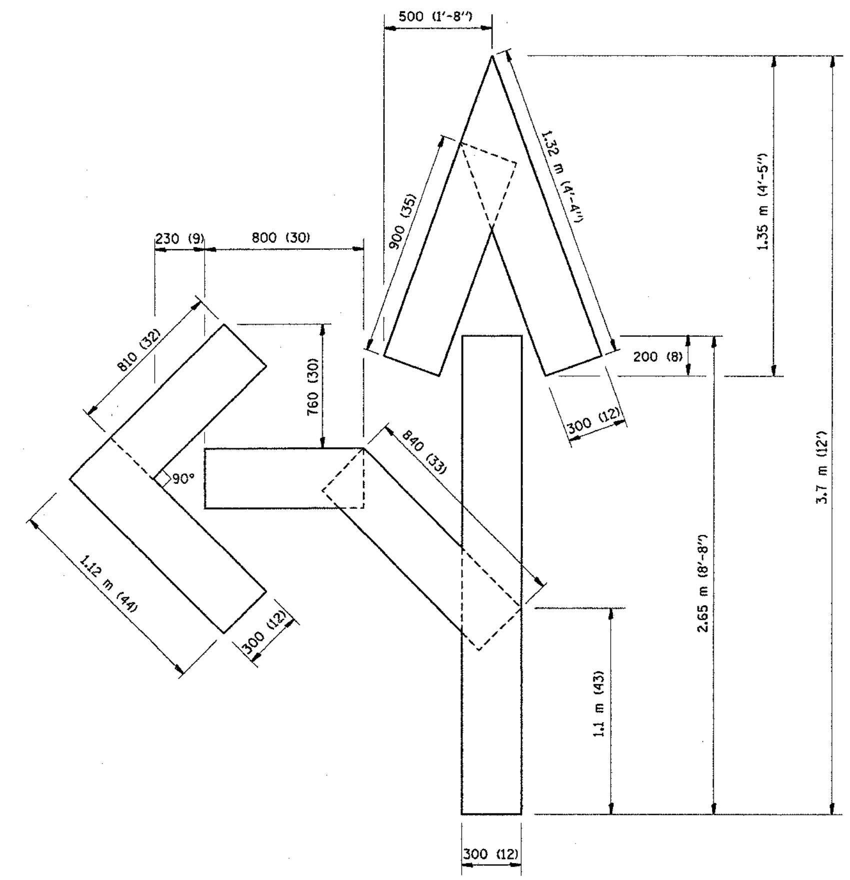
14.dgn 1/20/2006 1:28:48 PM User-galbannb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	41
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

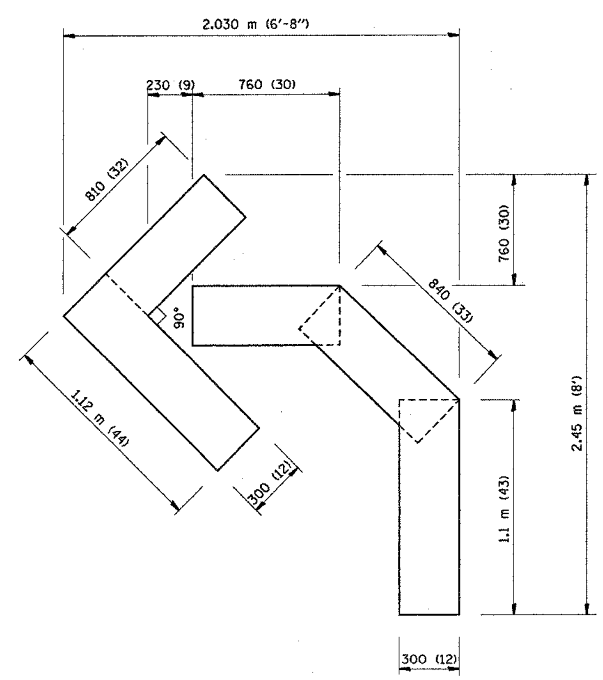
CONTRACT NO. 60A61



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



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



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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

SCALE: NONE
DATE 1/20/2006
DRAWN BY CADD
CHECKED BY
TC-16
REVISION DATE: 08/28/00

1/20/2006
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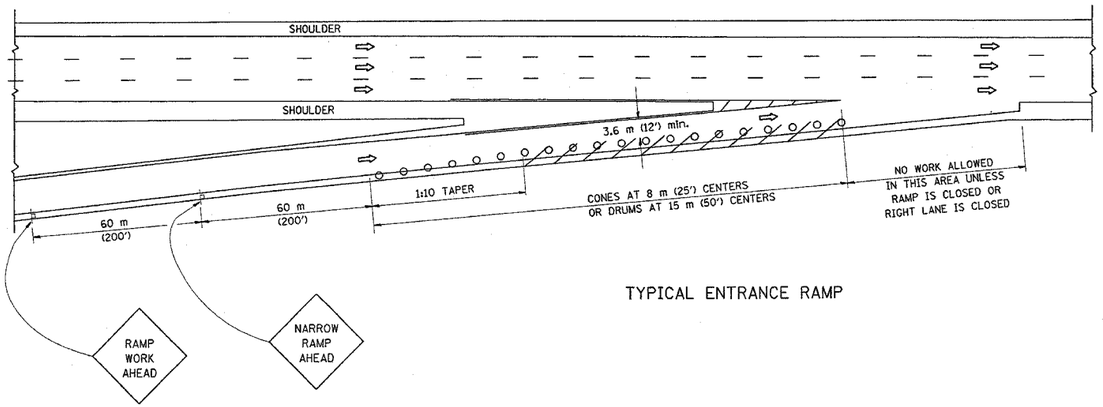
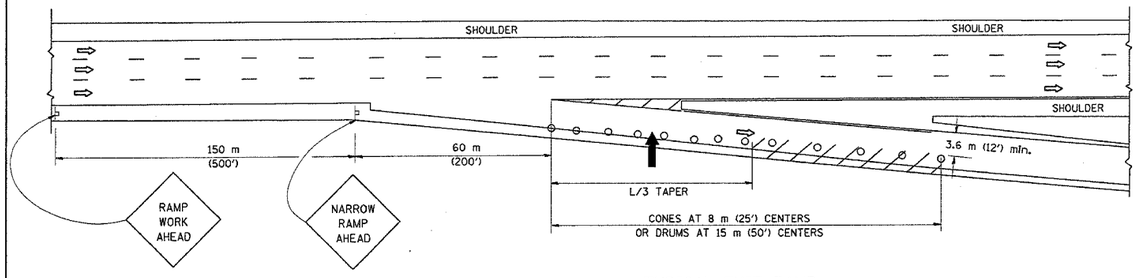
V:\TC16
galbannb

Create Date: 03-23-95

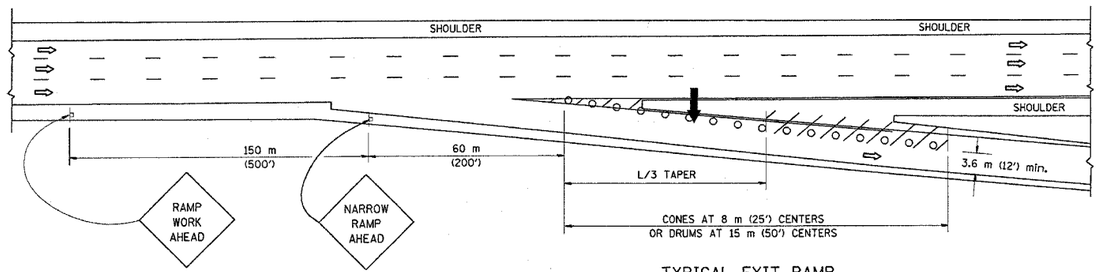
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS	
	METRIC	ENGLISH
80 km/h (45 mph) OR GREATER:	L=0.65(W)(S)	L=(W)(S)

W = WIDTH OF OFFSET IN METERS (FEET)
S = NORMAL POSTED SPEED KM/H (MPH)

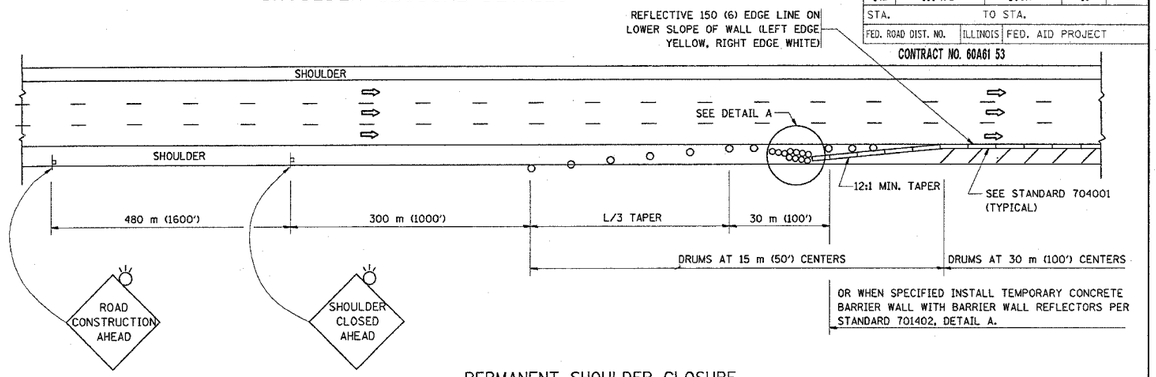
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS OUTSIDE THE CLEAR ZONE OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

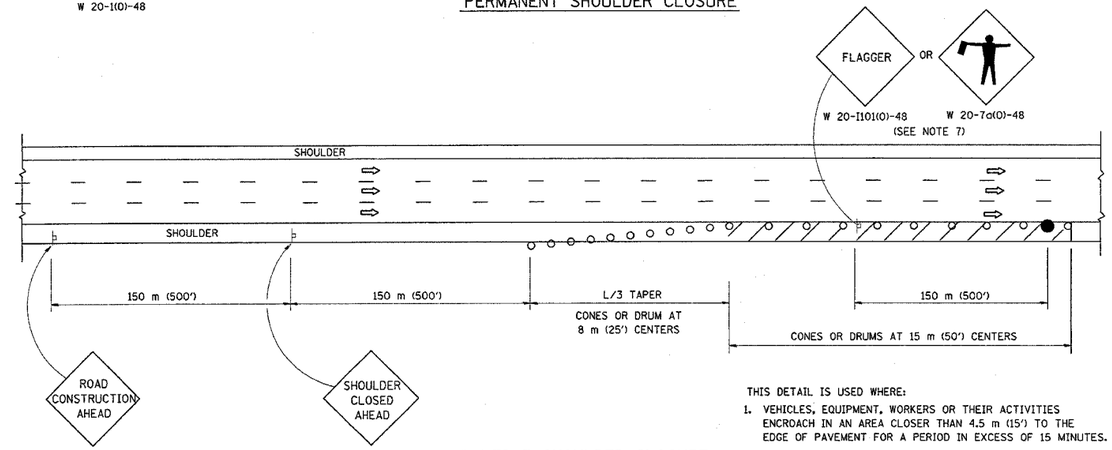
SHOULDER CLOSURE DETAILS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	42
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61 53



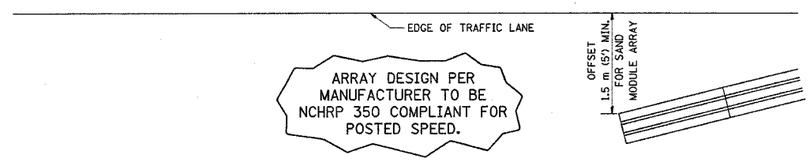
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 4.5 m (15') TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENTUATOR, TEMPORARY
(SEE NOTE 5)

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

SCALE: NONE
DATE: 1/20/2006
DRAWN BY
DESIGNED BY: DWS
CHECKED BY
TC-17

REVISION DATE: 04/24/03

1/20/2006
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V1+TC17
galbannb

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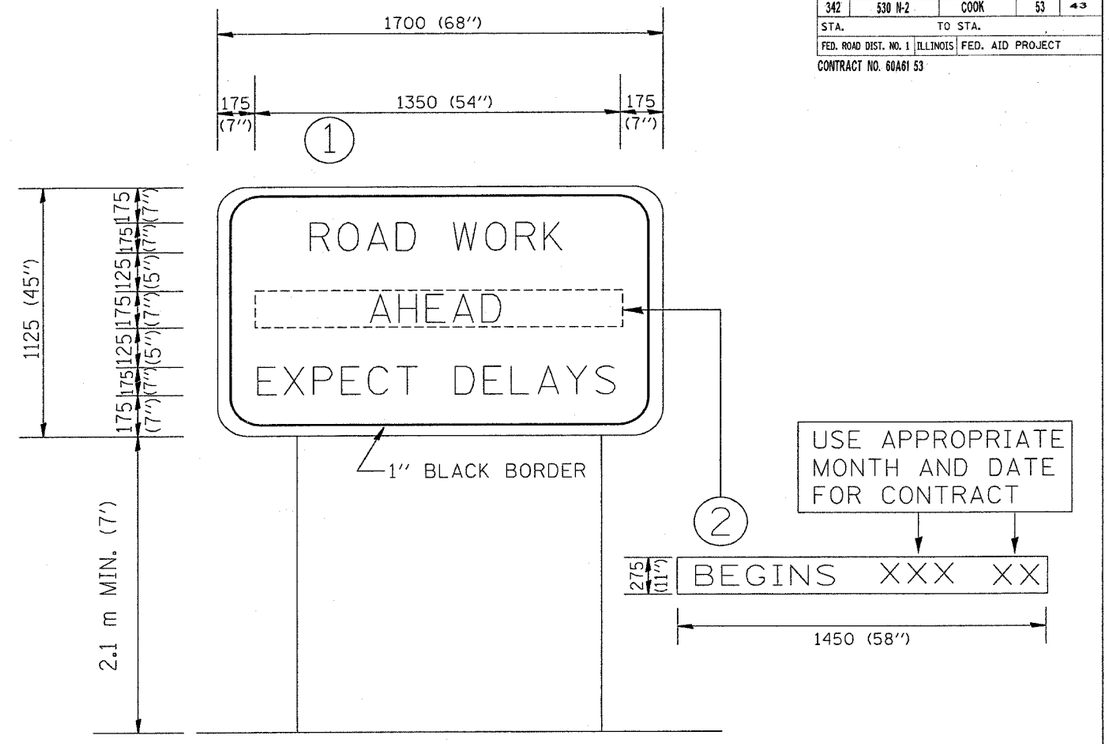
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	43
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61 53



NOTES:

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY INFORMATION SIGNING

SCALE:
DATE 1/20/2006
DRAWN BY: BUR. OF DESIGN
CHECKED BY
TC22
REVISION DATE: 02/02/99

1/20/2006
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galbannb

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	44
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61

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.

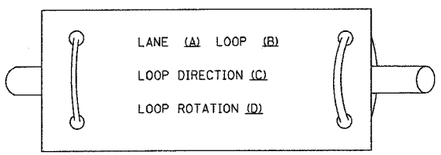
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

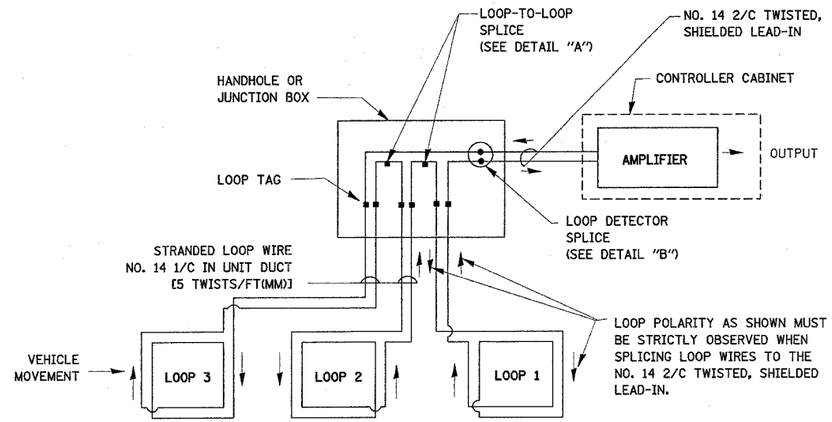


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

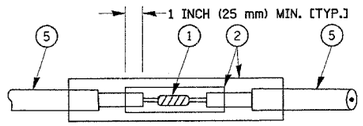
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

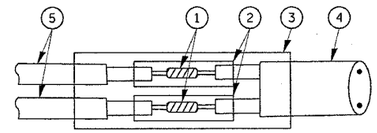


DETECTOR LOOP WIRING SCHEMATIC

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1/20/2006

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

REVISION DATE: 01/01/02

1/20/2006
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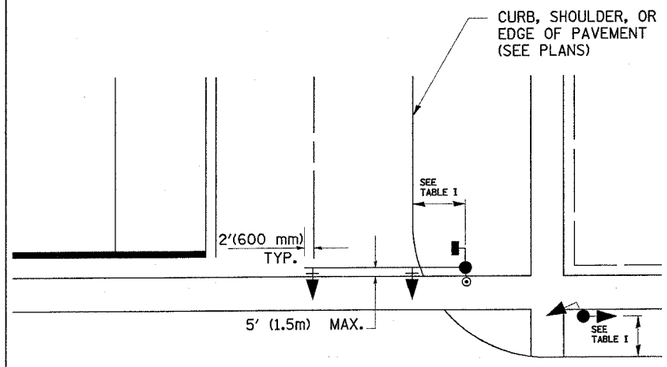
galbannb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	45
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

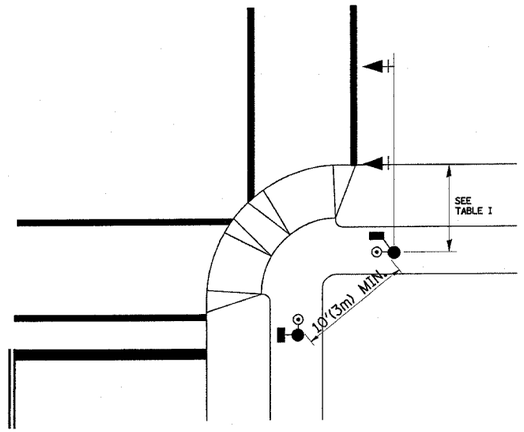
CONTRACT NO. 60A61

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

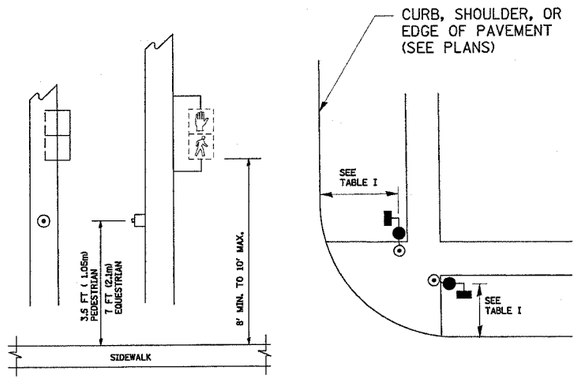


TABLE I

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
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. HORIZ. NONE

DATE 1/20/2006

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

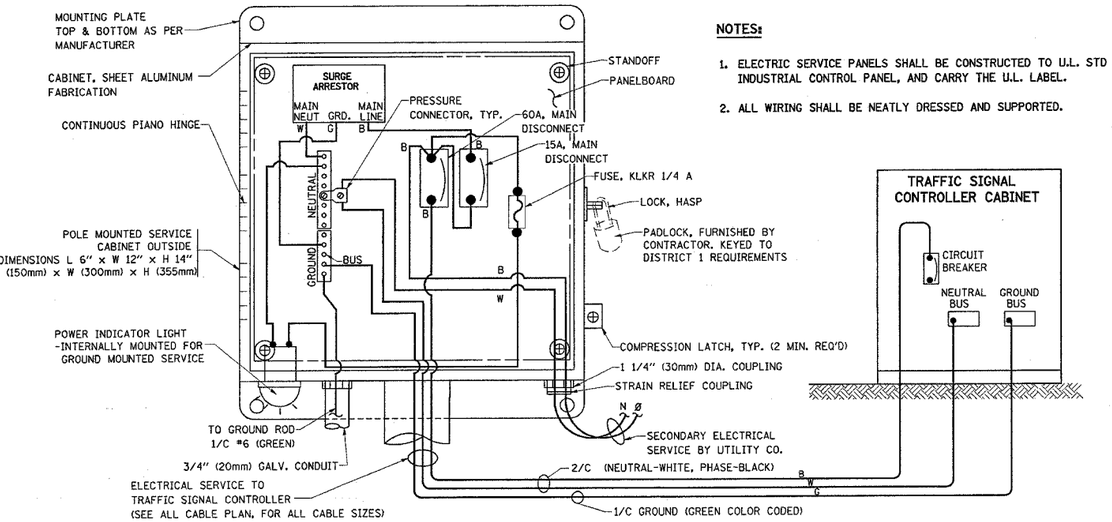
TS05

REVISION DATE: 01/01/02

1/20/2006
w:\d1stsfd\ts05.dgn
V1=TS05
galbannb

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	46
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61

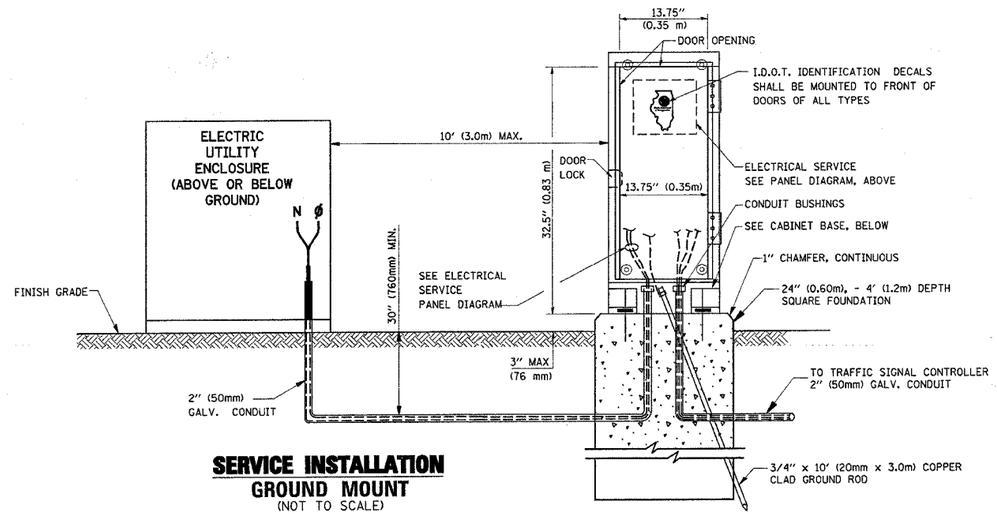


NOTES:

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.

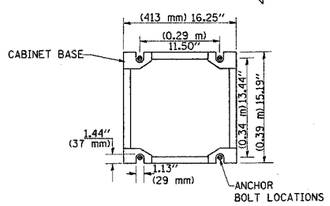
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

(NOT TO SCALE)



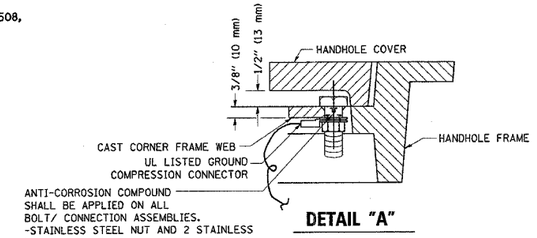
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)

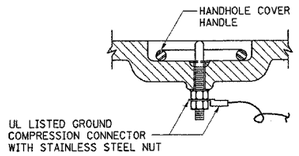


CABINET – BASE BOLT PATTERN

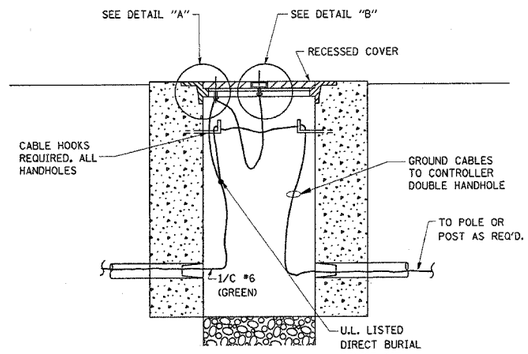
(NOT TO SCALE)



DETAIL "A"

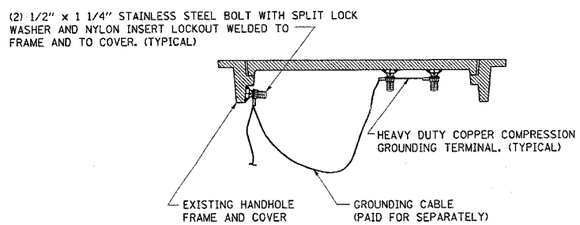


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



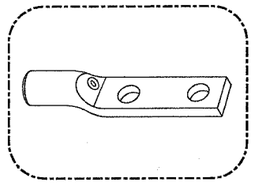
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

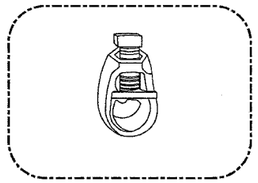
NOTES:

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.



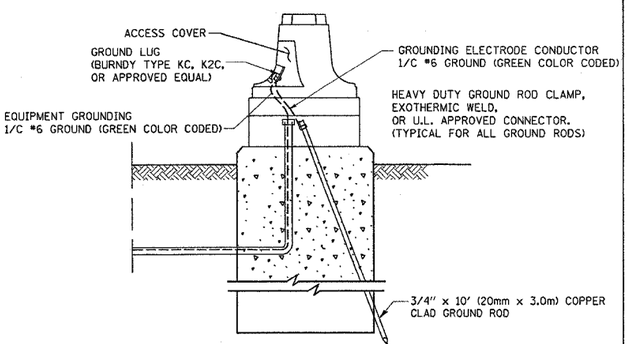
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1/20/2006

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

TS05

1/20/2006
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V1-TS05
galbannb

REVISION DATE: 01/01/02

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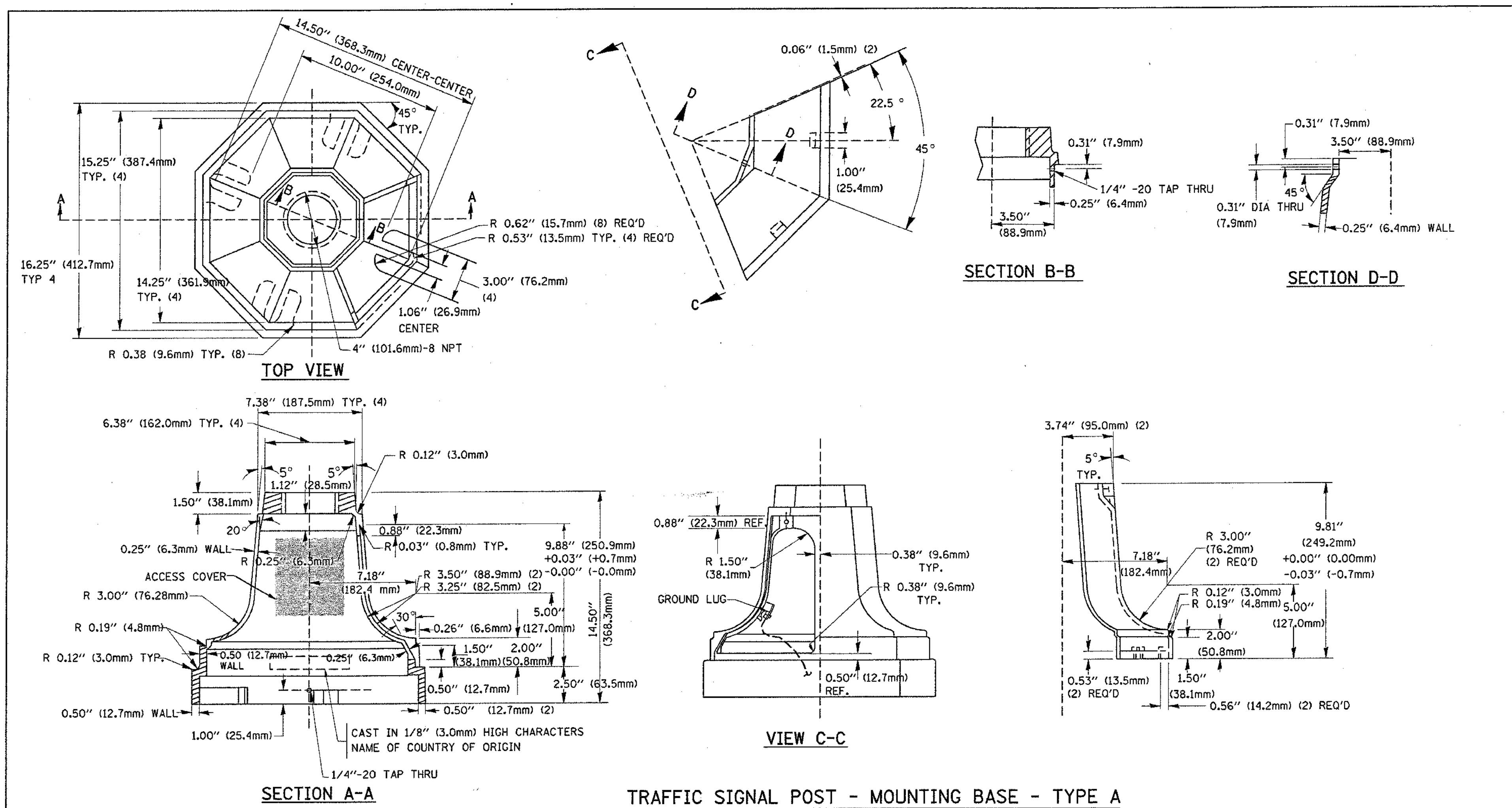
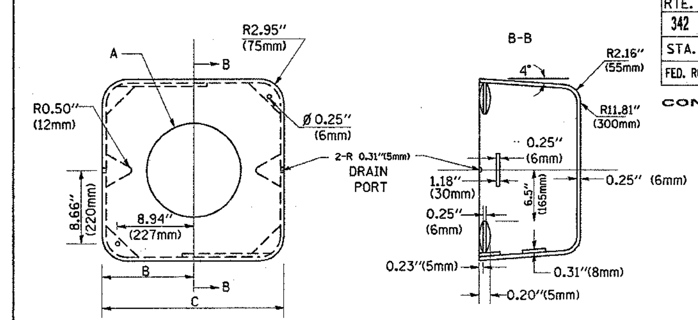
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	47
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

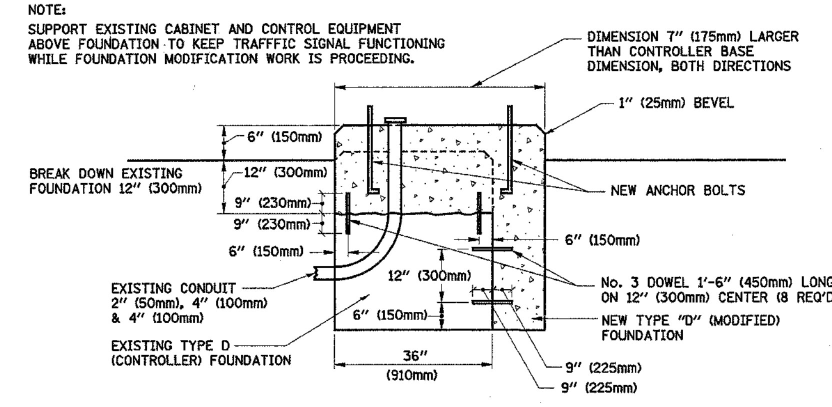


MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

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

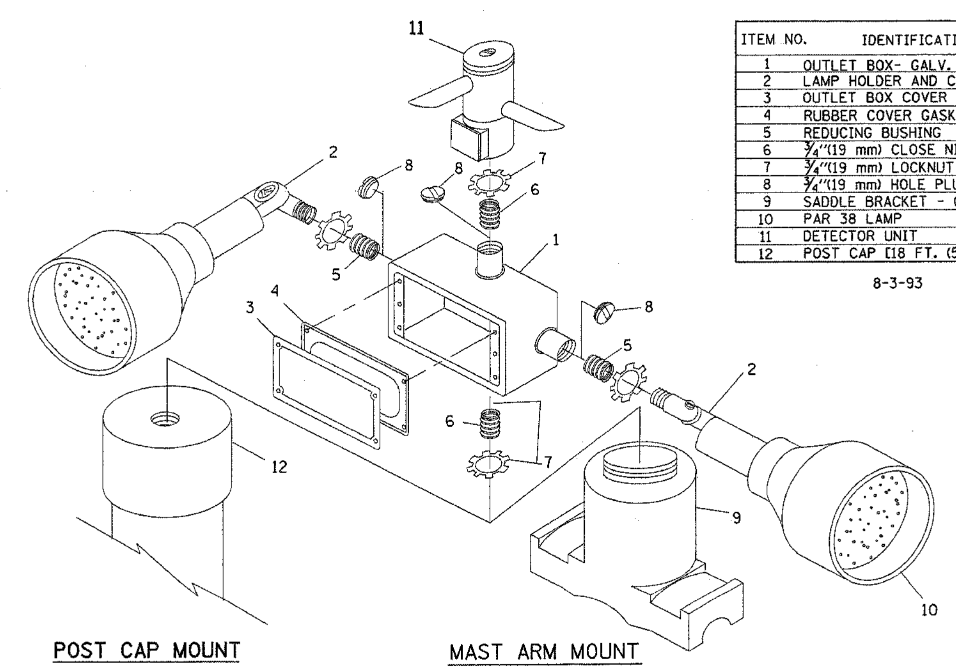
SHROUD DETAIL

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

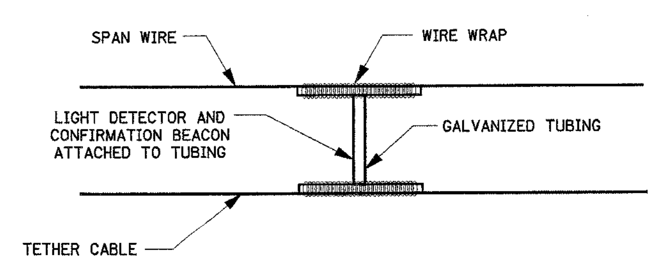
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(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:

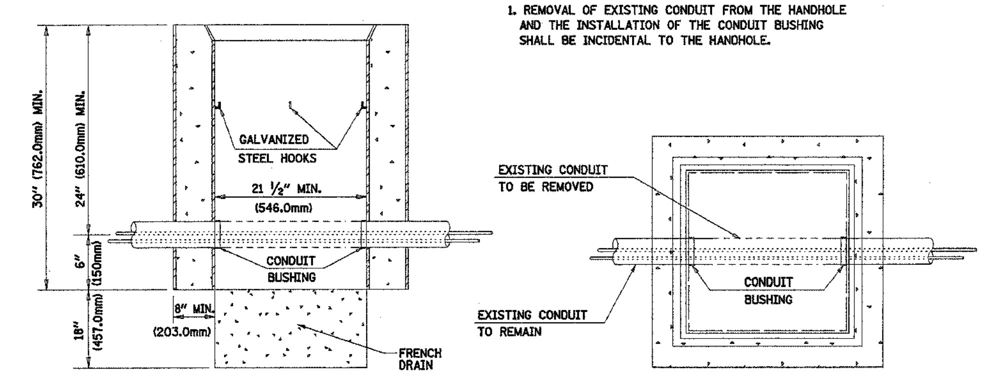
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4"(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.



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

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. HORIZ. NONE

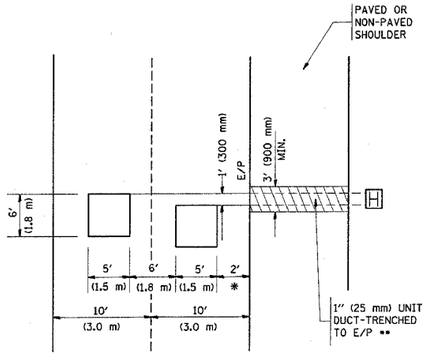
DATE 1/20/2006

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

TS05

LOOPS NEXT TO SHOULDERS

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

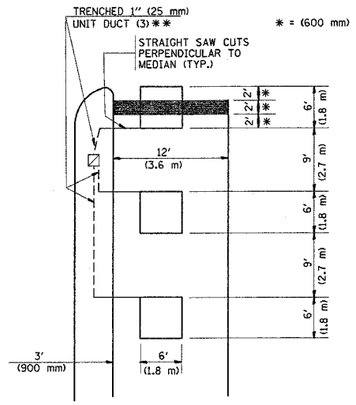


* = (600 mm)

** 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)

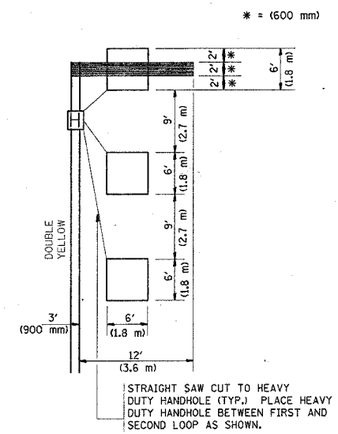
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** 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

F. A. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
342	530 N-2	COOK	53	48
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60A61

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.

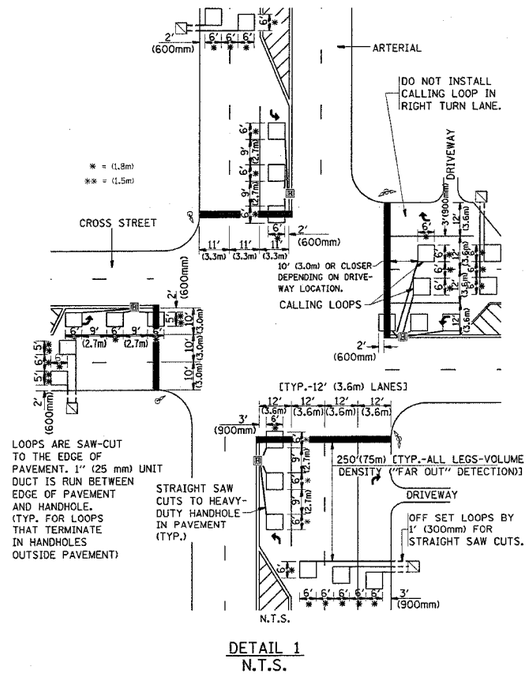
"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0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

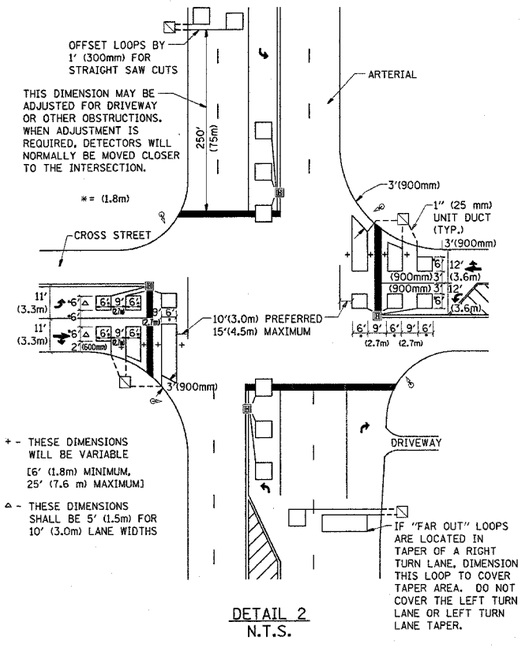
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

SCALE: NONE

DATE 1/20/2006

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

TS07

REVISION DATE:

1/20/2006
w:\dist1\dvs07.dgn
VHT 507
galbannb

PLOT DATE = 3/15/2006
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PLOT SCALE = 10.0000 ' / IN.
USER NAME = gelbennb

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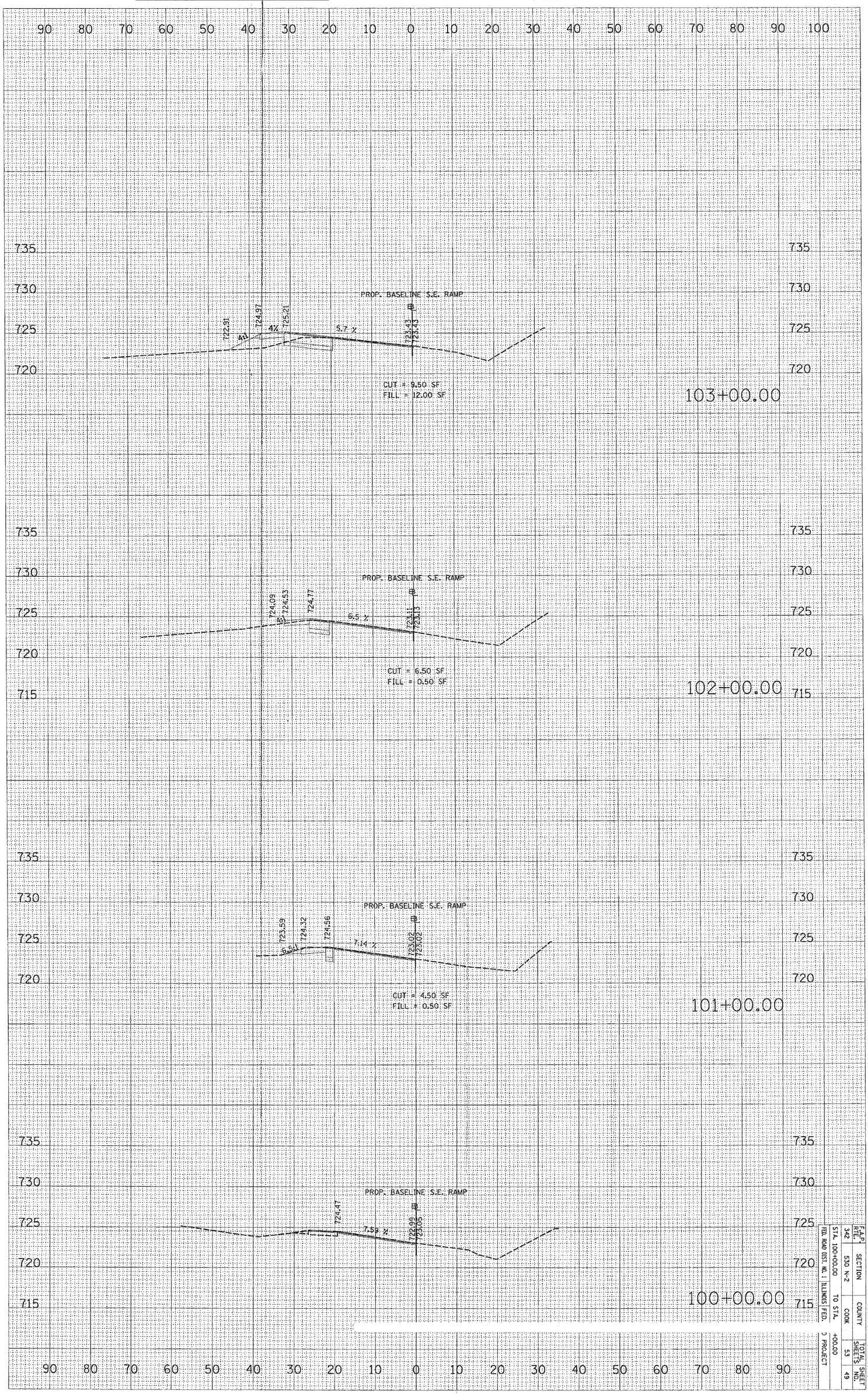
NOTE BOOK	SURVEYED		
	PLOTTED		
NO.	PLATE		
	AREAS		
	AREAS CHECKED		

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



CONTRACT NO. 60A61

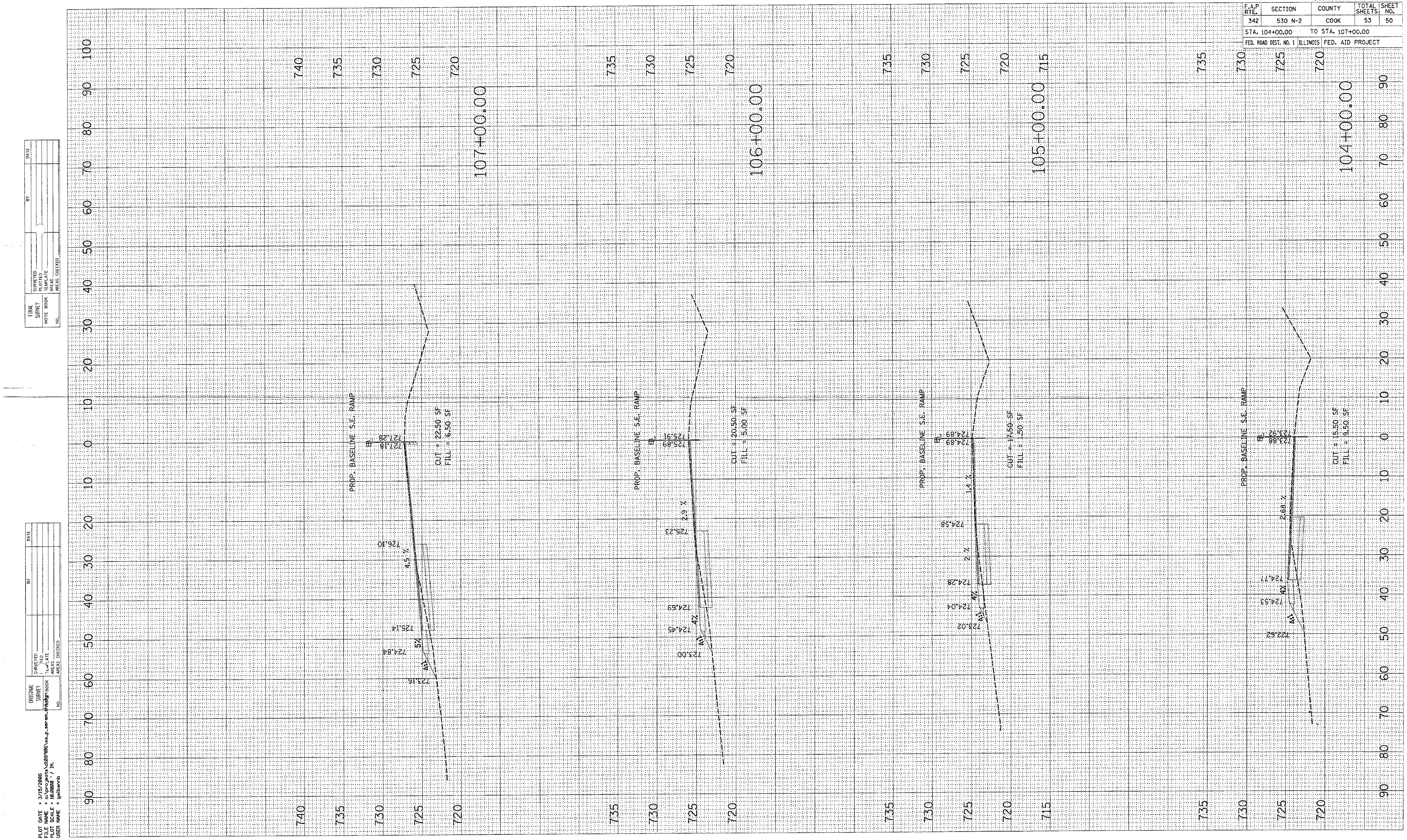
FED. ROAD DIST. NO. 1 ILLINOIS FED.	FED. AID PROJECT	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA. 100+00.00 TO STA. +00.00	342	530 N-2	COOK	53	49

CONTRACT NO. 60A61

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	50

STA. 104+00.00 TO STA. 107+00.00

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



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ORIGINAL SURVEY		BY	DATE
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	DITTED		
	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

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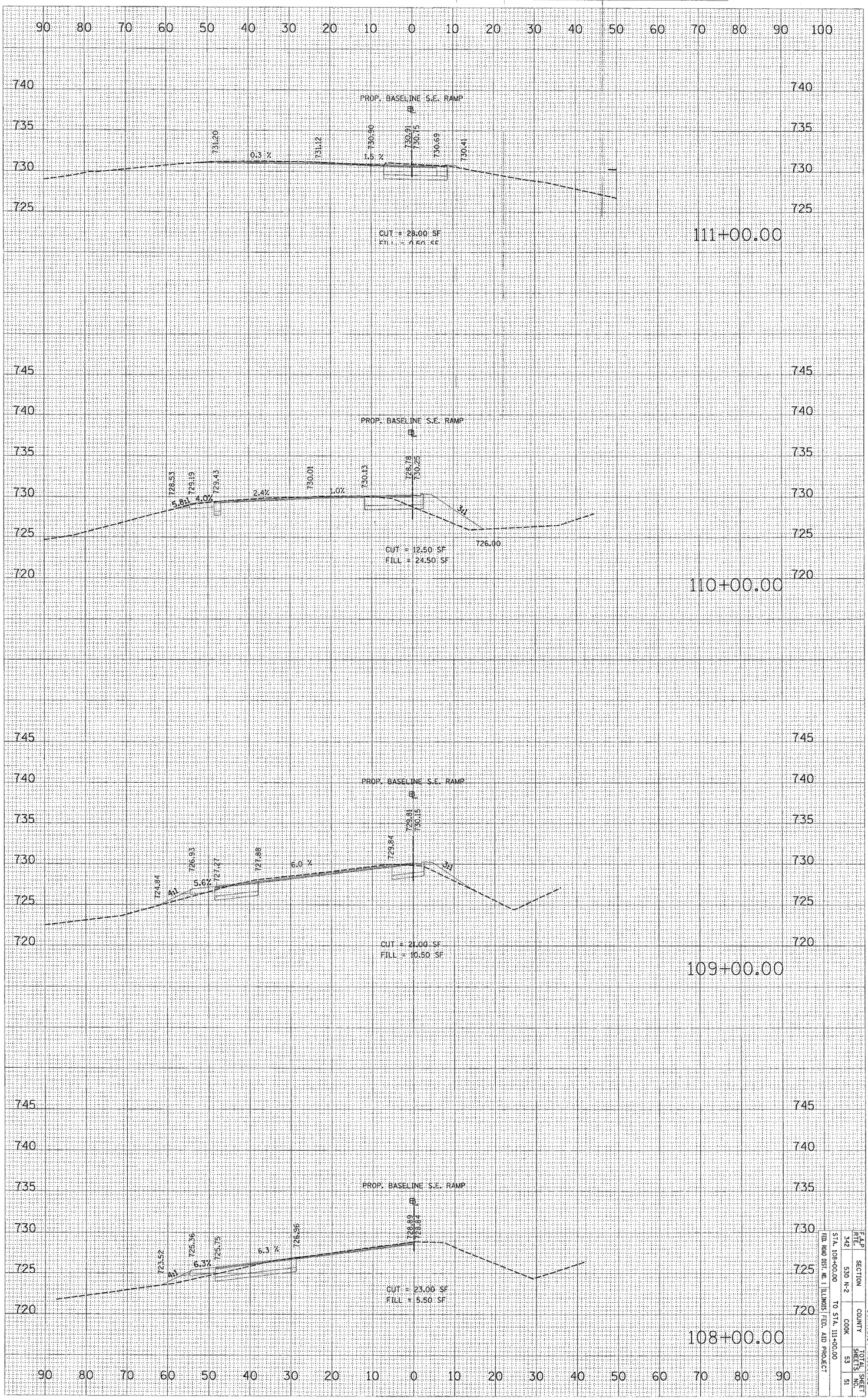
	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		



CONTRACT NO.60A61

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	51

STA. 108+00.00 TO STA. 111+00.00

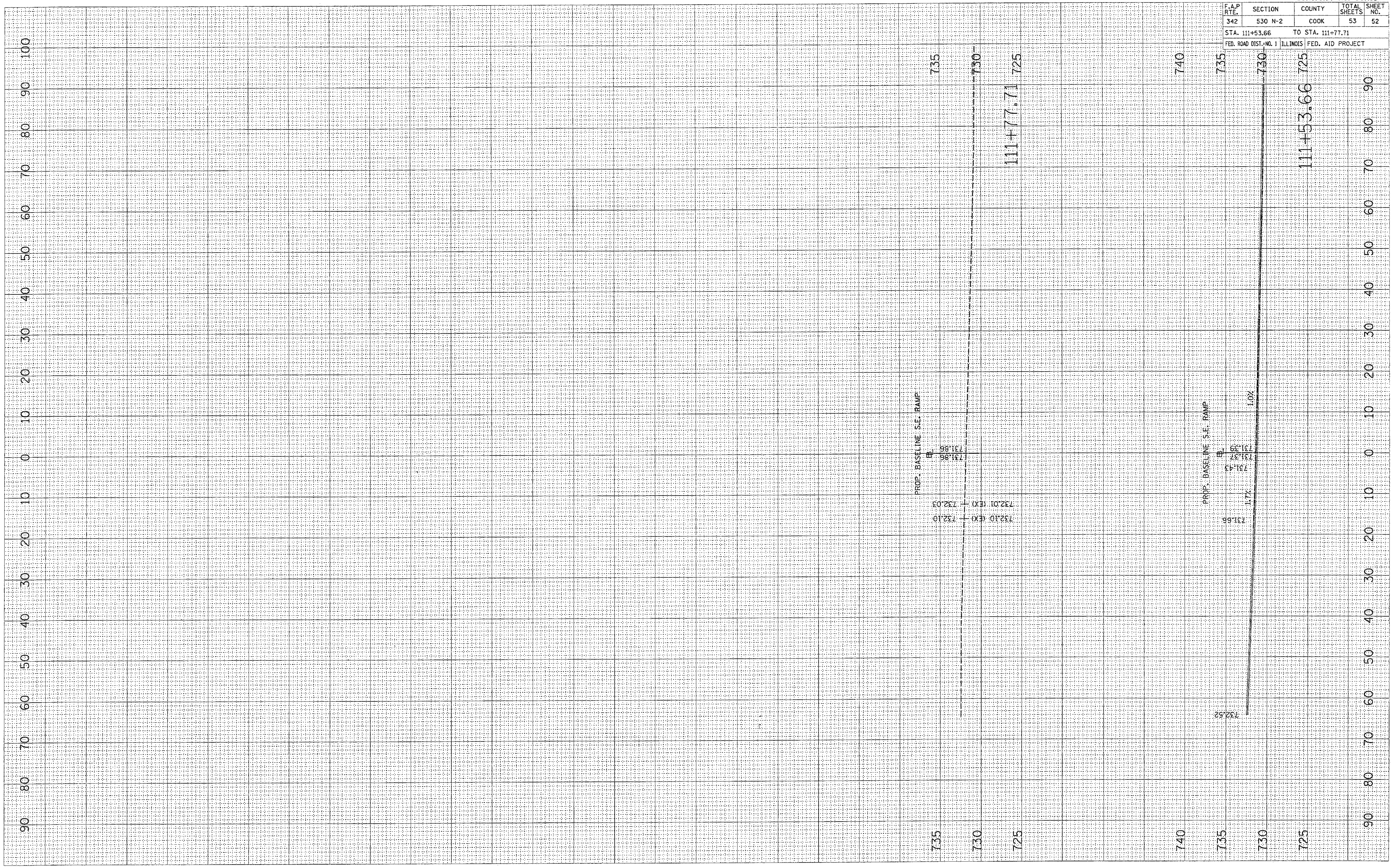
FEB ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

CONTRACT NO. 60A61

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	52

STA. 111+53.66 TO STA. 111+77.71

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



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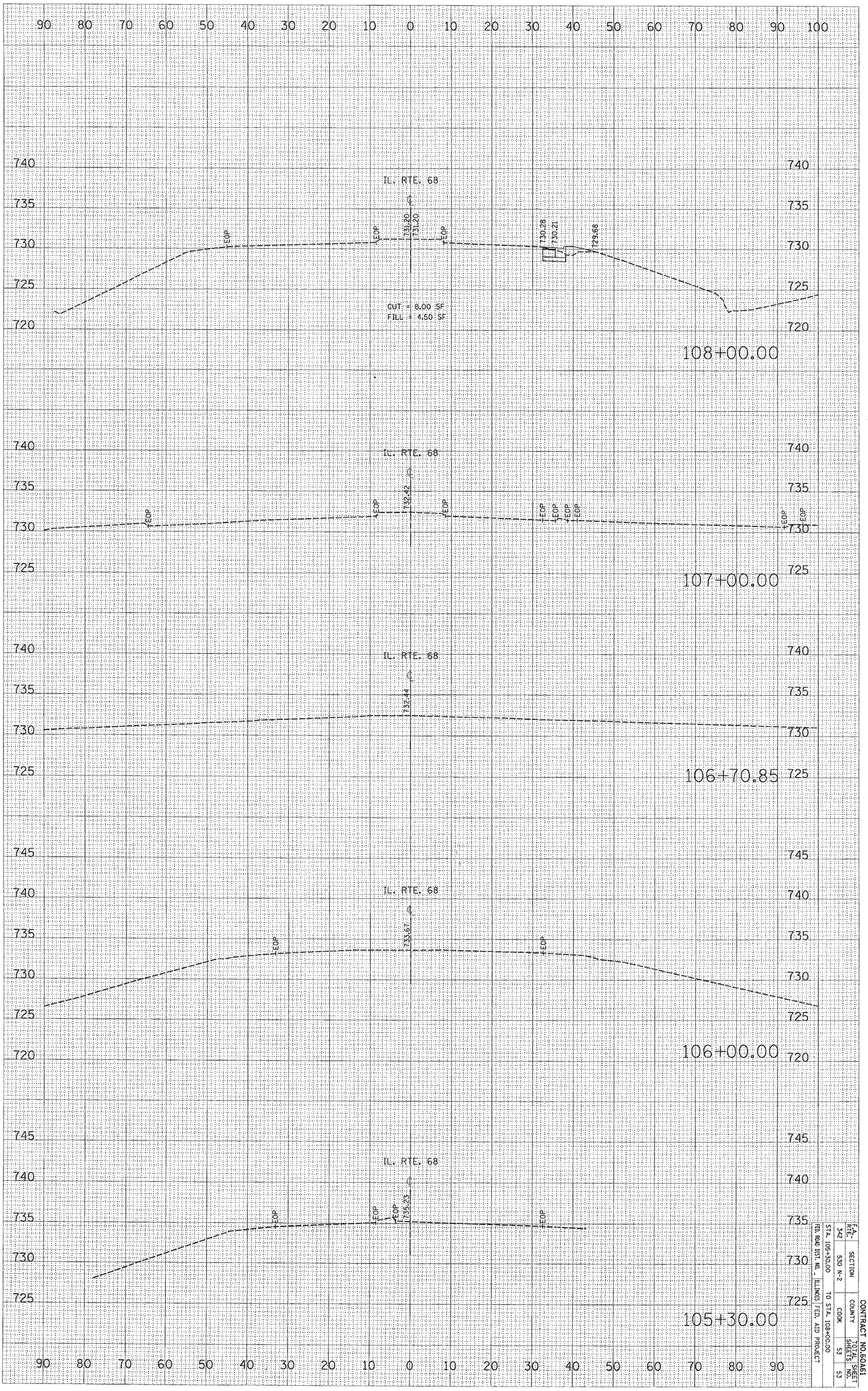
USER NAME = gallbannb

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	TIED		
NO.	PLATE		
	AREAS		
	AREAS CHECKED		

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



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
342	530 N-2	COOK	53	53

STA. 105+30.00 TO STA. 108+00.00
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT NO. 60A61