9-19-08 Letting, Item 048

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	1

CONTRACT NO.: 83943

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 3887 (ILLINOIS ROUTE 31)
AND FAU 1307 (WING STREET)
SECTION 96–00159–00–CH
INTERSECTION IMPROVEMENTS
PROJECT M–8003 (958)
KANE COUNTY
JOB NO.: C–91–031–00

FEBRUARY 13, 2008

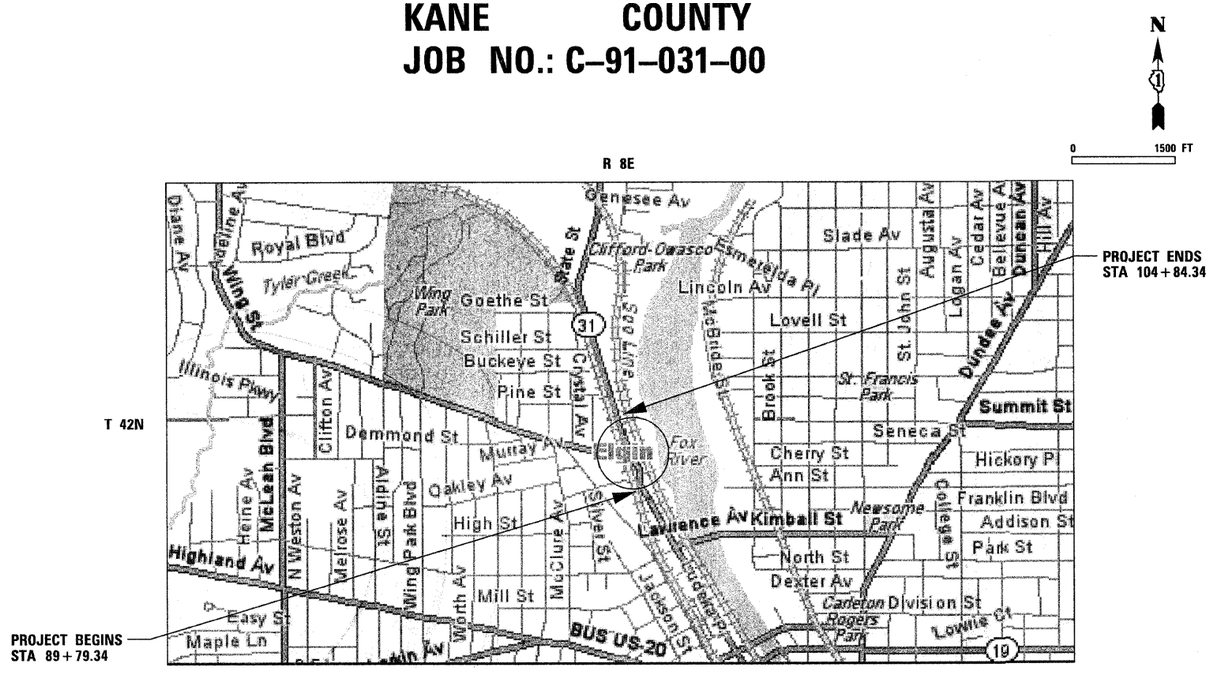
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE CITY OF ELGIN

IL ROUTE 31
ADT: 34,300 (2025)
POSTED SPEED LIMIT: 30 MPH
DESIGN DESIGNATION: PRINCIPAL ARTERIAL
DESIGN SPEED: 30 MPH

WING STREET
ADT: 15,800 (2025)
POSTED SPEED LIMIT: 30 MPH
DESIGN DESIGNATION: COLLECTOR
DESIGN SPEED: 30 MPH

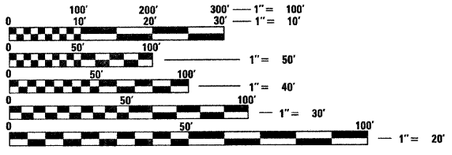
LOCATION OF SECTION INDICATED THUS: –



ELGIN TOWNSHIP

PROJECT NET AND GROSS LENGTH = 1505 FT (0.29 MILE)

SCALES PLAN 1"=50'
PROFILE HORZ. 1"=50'
PROFILE VERT. 1"=5'
CROSS SECTIONS HORZ. 1"=10'
VERT. 1"=5'



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

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

CONTRACT NO. 83943

FIELD ENGINEER: MARILIN SOLOMON (847) 705-4407
2/19/2008 H:\ELGIN\12981A\DESIGN\DGN\01CV.DGN

TIMOTHY CHIN 062-056204 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

February 19 20 08

TIMOTHY CHIN
ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062–056204
EXPIRATION DATE 11–30–2009

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED Joseph Ford
February 19, 2008
CITY OF ELGIN, CITY ENGINEER

PASSED February 20, 2008
Christopher Holt
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW February 20, 2008
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
280001-04	TEMPORARY EROSION CONTROL SYSTEM
420001-07	PAVEMENT JOINTS
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
602001	CATCH BASIN TYPE A
602301-01	INLET TYPE A
602401-1	MANHOLE TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND GRATE TYPE 1
604056-02	FRAME AND GRATE TYPE 11V
604086-01	FRAME AND GRATE TYPE 23
604091-01	FRAME AND GRATE TYPE 24
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-03	PC CONCRETE ISLANDS AND MEDIANS
701001-01	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 M (15') AWAY
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701301-02	LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS
701606-05	URBAN LANE CLOSURE MULTILANE 2W WITH MOUNTABLE MEDIAN
701701-05	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-03	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001	APPLICATION OF TYPE A AND B METAL POSTS
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
814001-01	CONCRETE HANDHOLES
814006-01	DOUBLE HANDHOLES
857006	SUPERVISED RAILROAD INTERCONNECT CIRCUIT
877001-03	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877006-02	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
878001-06	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS

GENERAL NOTES

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION

1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENT SET FORTH IN "THE CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2008; AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.

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

3. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES, IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE DEPARTMENT.

4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF ELGIN ENGINEER, JOE EVERS (847) 931-5958.

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

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SUM PAY ITEMS.

7. ALL STORM SEWERS CONNECTIONS WITH PIPES 27 INCHES (675 MM) DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 27 INCHES (675 MM) DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST "TEE" AND "WYE" PIPE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST FOR THE STORM SEWERS.

8. ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 4 IN BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.

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

10. MAINTENANCE OF TRAFFIC-GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.

11. PAVEMENT GRADES: THE GRADES SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

12. PROTECTION OF AND RESTORATION OF TRAFFIC SIGNS: PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL PROVIDE A SIGN LOG OF ALL EXISTING SIGNS WITHIN THE LIMITS OF THE CONSTRUCTION ZONE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE SIGN LOG THROUGHOUT THE DURATION OF THIS PROJECT. ALL EXISTING TRAFFIC SIGNS SHALL MAINTAIN, FURNISH, AND REPLACE AT HIS EXPENSE, ANY TRAFFIC SIGN OR POST WHICH HAS BEEN DAMAGED OR LOST BY THE CONTRACTOR.

13. ALL EXISTING SIGNING SHALL BE MAINTAINED IN PLACE UNTIL NEW SIGNING IS ERECTED. REMOVAL OF EXISTING SIGNING SHALL NOT PROCEED UNTIL DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL COVER EXISTING SIGNING TO PREVENT CONFUSION AS DIRECTED BY THE ENGINEER. THE COST OF THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

14. TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

15. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

16. A SHRINKAGE FACTOR OF 15% WAS USED FOR EARTH EXCAVATION.

17. SAW CUTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK FOR PAVEMENT PATCHING.

18. THE GENERAL CONTRACTOR IS REQUIRED TO HIRE AN ENVIRONMENTAL FIRM WITH AT LEAST FIVE (5) DOCUMENTED LEAKING UNDERGROUND STORAGE TANK (LUST) CLEANUPS OR THAT IS PREQUALIFIED IN HAZARDOUS WASTE BY THE DEPARTMENT TO REMEDIATE THE SOIL CONTAMINATION AND MONITOR FOR WORKER PROTECTION.

19. REFER TO THE FINAL PRELIMINARY SITE INVESTIGATION REPORT INCLUDED IN THE SPECIAL PROVISIONS FOR THE LIMITS OF THE NON-SPECIAL WASTE.

20. THE CONNECTION OF ALL EXISTING AND PROPOSED STORM SEWERS TO THE EXISTING AND PROPOSED STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER SYSTEM.

NOTE: ALL BOXED GENERAL NOTES ARE INCIDENTAL ITEMS.

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Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\02GN.DGN

SUMMARY OF QUANTITIES				I000	Y031-1F	Y031-3D NON-PARTICIPATING
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY			
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	40	40		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	36	36		
20101200	TREE ROOT PRUNING	EACH	3	3		
20200100	EARTH EXCAVATION	CU YD	1259	1259		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	520	520		
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	234	234		
20800150	TRENCH BACKFILL	CU YD	331	331		
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1511	1511		
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	29	29		
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	29	29		
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	29	29		
* 25200110	SODDING, SALT TOLERANT	SQ YD	1511	1511		
* 28000255	TEMPORARY EROSION CONTROL SEEDING	ACRE	0.30	0.30		
28000400	PERIMETER EROSION BARRIER	FOOT	2232	2232		
28000510	INLET FILTERS	EACH	30	30		
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	3439	3439		
35300210	PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"	SQ YD	2245	2245		
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	163	163		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1208	1208		
40600300	AGGREGATE (PRIME COAT)	TON	24	24		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	40	40		
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	90	90		
40603240	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	430	430		
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	18	18		
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	142	142		
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	1042	1042		
42001300	PROTECTIVE COAT	SQ YD	79	79		
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	11	11		
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	68	68		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	10753	10753		
42400800	DETECTABLE WARNINGS	SQ FT	36	36		
44000100	PAVEMENT REMOVAL	SQ YD	188	188		
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1279	1279		
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	7190	7190		
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	1254	1254		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	960	960		
44000300	CURB REMOVAL	FOOT	124	124		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2731	2731		
44000600	SIDEWALK REMOVAL	SQ FT	10518	10518		
44000705	BARRIER MEDIAN REMOVAL	SQ FT	839	839		
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	4	4		
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	36	36		
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	49	49		
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	458	458		
50104600	CONCRETE RETAINING WALL REMOVAL	FOOT	60	60		
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	338	338		
55019600	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	76	76		
55019800	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 21"	FOOT	196	196		
55021600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 12"	FOOT	331	331		
55021800	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 18"	FOOT	219	219		
55100100	STORM SEWER REMOVAL 4"	FOOT	6	6		
55100400	STORM SEWER REMOVAL 10"	FOOT	18	18		
55100500	STORM SEWER REMOVAL 12"	FOOT	6	6		
55100700	STORM SEWER REMOVAL 15"	FOOT	299	299		
55100900	STORM SEWER REMOVAL 18"	FOOT	196	196		
• 56103300	DUCTILE IRON WATER MAIN 12"	FOOT	10	10		
• 56400100	FIRE HYDRANTS TO BE MOVED	EACH	1	1		
60107600	PIPE UNDERDRAINS 4"	FOOT	668	668		
60201110	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11V FRAME AND GRATE	EACH	2	2		
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	7	7		

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES				I000	Y031-1F	Y031-3D NON-PARTICIPATING
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY			
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4	4		
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	7	7		
60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2		
60251740	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	5	5		
60256940	MANHOLES TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	1	1		
60260100	INLETS TO BE ADJUSTED	EACH	1	1		
60266500	VALVE VAULTS TO BE REMOVED	EACH	1	1		
60300350	MANHOLE FRAMES TO BE ADJUSTED	EACH	6	6		
60300405	VALVE BOX FRAMES TO BE ADJUSTED	EACH	4	4		
60500040	REMOVING MANHOLES	EACH	4	4		
60500050	REMOVING CATCH BASINS	EACH	9	9		
60500060	REMOVING INLETS	EACH	1	1		
60600605	CONCRETE CURB, TYPE B	FOOT	245	245		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	58	58		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	2766	2766		
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	534	534		
60619200	CONCRETE MEDIAN, TYPE SB-6.06	SQ FT	565	565		
63200310	GUARDRAIL REMOVAL	FOOT	16	16		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1194	1194		
* 66900450	SPECIAL WASTE PLANS AND REPORT	L SUM	1	1		
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	6	6		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7		
67100100	MOBILIZATION	L SUM	1	1		
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	1		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1		
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1		
70300610	TEMPORARY PAINT PAVEMENT MARKING, LETTERS AND SYMBOLS	SQ FT	170	170		
70300725	TEMPORARY PAINT PAVEMENT MARKING 4" WHITE	FOOT	4235	4235		
70300735	TEMPORARY PAINT PAVEMENT MARKING 6" WHITE	FOOT	832	832		
70300760	TEMPORARY PAINT PAVEMENT MARKING 24" WHITE	FOOT	136	136		
70300825	TEMPORARY PAINT PAVEMENT MARKING 4" YELLOW	FOOT	9702	9702		
70300845	TEMPORARY PAINT PAVEMENT MARKING 12" YELLOW	FOOT	226	226		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5729	5729		
72000100	SIGN PANEL - TYPE 1	SQ FT	64		64	
72000200	SIGN PANEL - TYPE 2	SQ FT	25		25	
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	12	12		
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	463	463		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6955	6955		
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1551	1551		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	342	342		
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	150	150		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	157	157		
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	146	146		
• 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1696		1696	
• 81000700	CONDUIT IN TRENCH, 2 1/2 " DIA., GALVANIZED STEEL	FOOT	33		33	
• 81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	51		51	
• 81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	125		125	
• 81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	12		12	
• 81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	80		80	
• 81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	585		585	
• 81400100	HANDHOLE	EACH	9		9	
• 81400200	HEAVY-DUTY HANDHOLE	EACH	3		3	
• 81400300	DOUBLE HANDHOLE	EACH	2		2	

• SPECIALITY ITEMS

RHA&A
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Consulting Engineers
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220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

SUMMARY OF QUANTITIES

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

H:\ELGIN\12901A\DESIGN\DGN\03SUM1.DGN
2/12/2008

		SUMMARY OF QUANTITIES			I000	Y031-1F	Y031-3D NON-PARTICIPATING
	CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY			
•	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2070		2070	
•	84200700	LIGHTING FOUNDATION REMOVAL	EACH	1		1	
•	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
•	86000105	MASTER CONTROLLER (SPECIAL)	EACH	1		1	
•	86400100	TRANSCEIVER - FIBER OPTIC	EACH	2		2	
•	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	900		900	
•	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3500		2700	800
•	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3200		3200	
•	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	400		400	
•	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4078		4078	
•	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	40		40	
•	87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1		1	
•	87502450	TRAFFIC SIGNAL POST, GALVANIZED STEEL 11 FT.	EACH	1		1	
•	87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1		1	
•	87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1		1	
•	87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1		1	
•	87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1	
•	87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1	
•	87702450	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 38 FT.	EACH	1		1	
•	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16		16	
•	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4	
•	87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20		20	
•	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	22		22	
•	87900200	DRILL EXISTING HANDHOLE	EACH	1		1	
•	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9		9	
•	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3		3	
•	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1		1	
•	88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1	
•	88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1		1	
•	88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2		2	
•	88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	3		3	
•	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10		10	
•	88500100	INDUCTIVE LOOP DETECTOR	EACH	24		24	
•	88600100	DETECTOR LOOP, TYPE I	FOOT	541		541	
•	88700200	LIGHT DETECTOR	EACH	4		0	4
•	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		0	1
•	88800100	PEDESTRIAN PUSH-BUTTON	EACH	5		5	
•	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
•	89100400	ILLUMINATED SIGN, LED	EACH	4		4	
•	89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1		1	
•	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		2	
•	89502380	REMOVE EXISTING HANDHOLE	EACH	3		3	
•	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5		5	
	Z0048665	RAILROAD LIABILITY INSURANCE	L SUM	1	1		
△	Z0076600	TRAINEES	HOUR	500	500		
*	A2007116	TREE, QUERCUS RUBRA (RED OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	7	7		
*	D2003124	EVERGREEN, PSUEDOTSUGA MENZIESII (DOUGLAS FIR), 2' HEIGHT, BALLED AND BURLAPPED	EACH	1	1		
•	XX002264	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	120		120	
	XX005656	INLET FILTER CLEANING	EACH	168	168		
•	X8620020	UNINTERRUPTABLE POWER SUPPLY	EACH	1		1	
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	204	204		
	X0322662	TEMPORARY SIGNING	EACH	7	7		
	X0322923	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	133	133		
•	X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1840		1840	
	X0323463	BILLBOARD REMOVAL	EACH	1	1		
	X0323800	FENCE REMOVAL SPECIAL	L SUM	1	1		
•	X0324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1		1	
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1		
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	7	7		
•	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	17	17		
•	X7240205	REMOVE SIGN COMPLETE	EACH	2	2		
•	X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	2		2	
•	X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1866		1866	
•	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	542		542	
•	X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	1100		0	1100

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	4
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

		SUMMARY OF QUANTITIES			I000	Y031-1F	Y031-3D NON-PARTICIPATING
	CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY			
•	X0325737	TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1		1	
•	X0325706	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1		1	
•	X0325836	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1		1	
•	XX000679	CUT AND CAP EXISTING WATER MAIN	EACH	1	1		
•	XX006923	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	13		13	

• SPECIALITY ITEMS
△ Y080

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Robert H. Anderson & Associates, Inc.
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220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

SUMMARY OF QUANTITIES

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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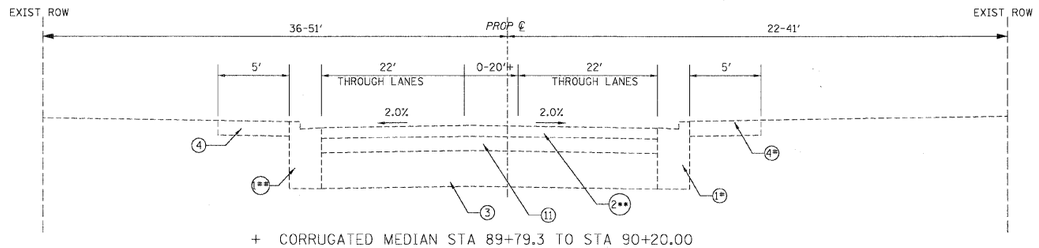
2/12/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

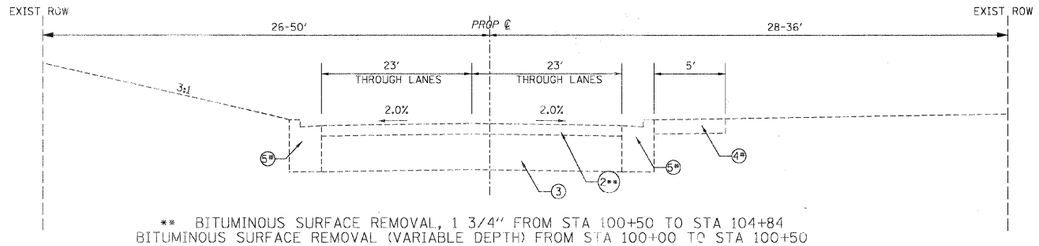


\+ CORRUGATED MEDIAN STA 89+79.3 TO STA 90+20.00

\#\# CURB AND GUTTER TO BE REMOVED FROM STA 97+50 TO 99+46

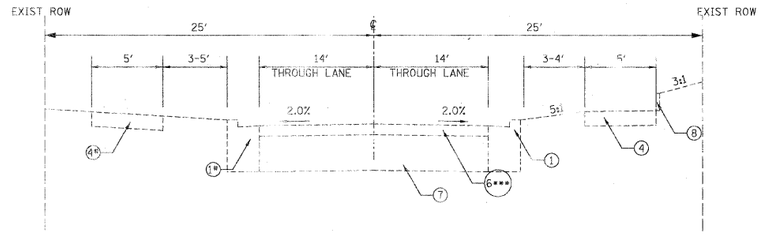
** BITUMINOUS SURFACE REMOVAL, 1 3/4" FROM STA 89+79 TO STA 98+00
BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH) FROM STA 98+00 TO STA 100+00

ILLINOIS ROUTE 31
EXISTING SECTION
STA 89+79.3 TO STA 100+00

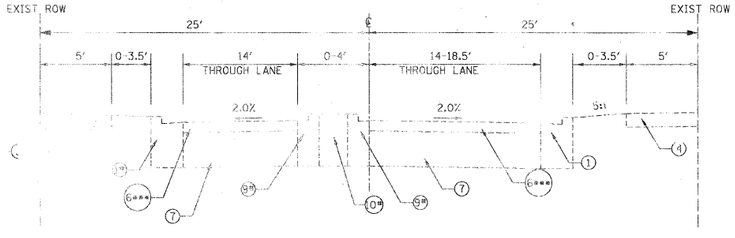


** BITUMINOUS SURFACE REMOVAL, 1 3/4" FROM STA 100+50 TO STA 104+84
BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH) FROM STA 100+00 TO STA 100+50

ILLINOIS ROUTE 31
EXISTING SECTION
STA 100+00 TO STA 104+84.30



WING STREET
EXISTING SECTION
STA 4+60.40 TO STA 7+53.20



WING STREET
EXISTING SECTION
STA 7+53.20 TO STA 9+71.45

LEGEND - EXISTING

(1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
(2) BITUMINOUS CONCRETE OVERLAY, 1 - 10 1/4"
(3) PORTLAND CEMENT CONCRETE BASE, 5 1/4 - 10 3/4"
(4) PORTLAND CEMENT CONCRETE SIDEWALK
(5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(6) BITUMINOUS CONCRETE OVERLAY, 4 1/4 - 6 1/4"
(7) PORTLAND CEMENT CONCRETE BASE, 9 1/4 - 8"
(8) RETAINING WALL
(9) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06
(10) CONCRETE MEDIAN
(11) PAVING BRICK, 0 - 4"

* ITEM TO BE REMOVED
** HOT-MIX ASPHALT SURFACE REMOVAL REMOVAL 1 3/4"
*** HOT-MIX ASPHAL SURFACE REMOVAL REMOVAL 1 1/2"

LEGEND - PROPOSED

(A) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
(B) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
(C) PORTLAND CEMENT BASE COURSE, 7 1/2"
(D) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
(E) TOPSOIL FURNISH AND PLACE, 4"
(F) SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
(G) LONGITUDINAL CONSTRUCTION JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, GROUTED IN PLACE, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE PCC BASE COURSE)
(H) LONGITUDINAL JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE CURB AND GUTTER)
(I) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
(J) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2""
(K) CONCRETE MEDIAN, TYPE SB-6.06
(L) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 1/4"
(M) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06, REVERSE PITCH
(N) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, VARIABLE DEPTH
(O) POROUS GRANULAR EMBANKMENT, SUBGRADE, 12"

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

EXISTING TYPICAL SECTIONS

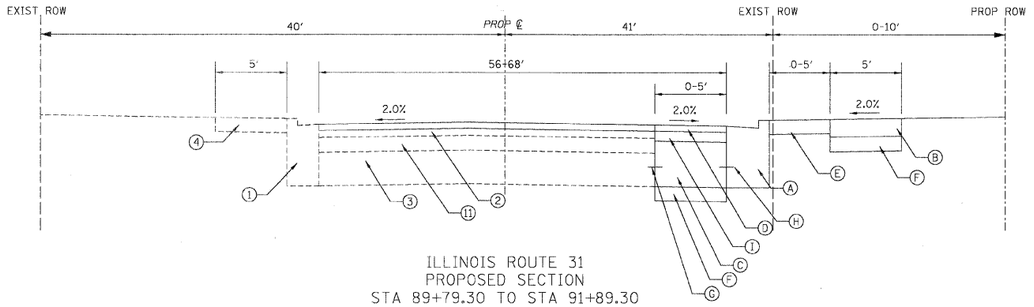
SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

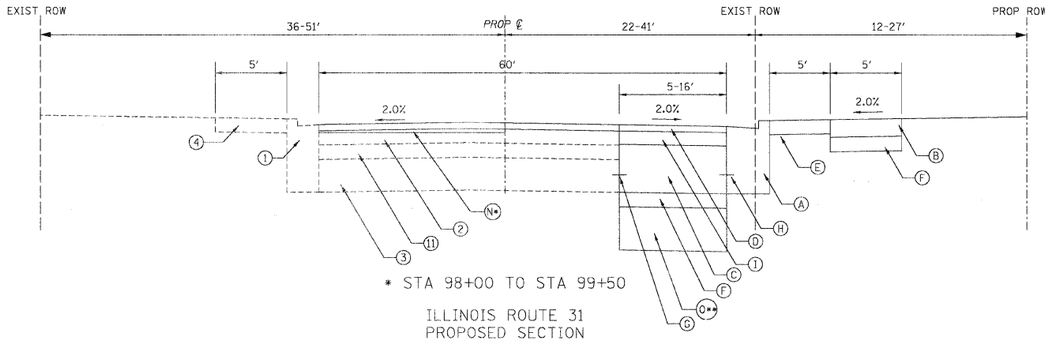
2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\85TX01.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

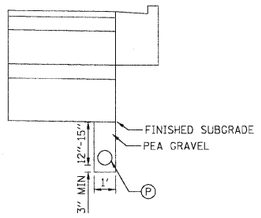


ILLINOIS ROUTE 31
PROPOSED SECTION
STA 89+79.30 TO STA 91+89.30

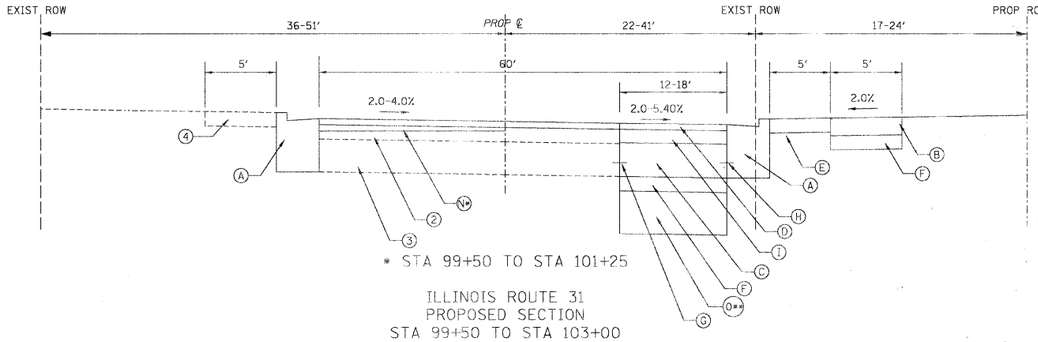


* STA 98+00 TO STA 99+50

ILLINOIS ROUTE 31
PROPOSED SECTION
STA 91+89.30 TO STA 99+50

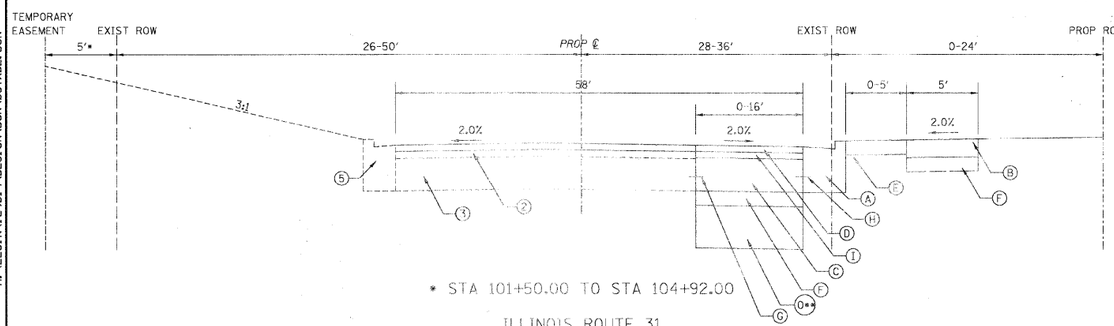


UNDERDRAIN DETAIL



* STA 99+50 TO STA 101+25

ILLINOIS ROUTE 31
PROPOSED SECTION
STA 99+50 TO STA 103+00



* STA 101+50.00 TO STA 104+92.00

ILLINOIS ROUTE 31
PROPOSED SECTION
STA 103+00.00 TO STA 104+84.30

LEGEND - EXISTING

(1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
(2) BITUMINOUS CONCRETE OVERLAY, 1 - 10 1/4"
(3) PORTLAND CEMENT CONCRETE BASE, 5 1/4 - 10 3/4"
(4) PORTLAND CEMENT CONCRETE SIDEWALK
(5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(6) BITUMINOUS CONCRETE OVERLAY, 4 1/4 - 6 1/4"
(7) PORTLAND CEMENT CONCRETE BASE, 9 1/4 - 8"
(8) RETAINING WALL
(9) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06
(10) CONCRETE MEDIAN
(11) PAVING BRICK, 0 - 4"

NOTES

1. PIPE UNDERDRAINS TO BE PLACED IN AREAS WHERE POROUS GRANULAR EMBANKMENT IS USED.
2. CAPS, PLUGS, WYES, AND TEES ARE CONSIDERED INCLUDED IN THE COST OF THE UNDERDRAINS.
3. ALL END RUNS SAHLL HAVE A CAP OR PLUG.
4. UNDERDRAINS SHALL BE CONNECTED TO THE NEAREST DRAINAGE STRUCTURE TO CREATE POSITIVE DRAINAGE.
5. UNDERDRAIN MATERIAL SHALL BE PERFORATED CORRUGATED POLYETHYLENE TUBING.
6. EXCAVATION AND PEA GRAVEL OR EQUIVALENT SHALL BE INCLUDED IN THE COST OF THE UNDERDRAIN.

LEGEND - PROPOSED

(A) • COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
(B) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
(C) PORTLAND CEMENT BASE COURSE, 7 1/2"
(D) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
(E) TOPSOIL FURNISH AND PLACE, 4"
(F) SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
(G) LONGITUDINAL CONSTRUCTION JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, GROUTED IN PLACE, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE PCC BASE COURSE)
(H) LONGITUDINAL JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE CURB AND GUTTER)
(I) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
(J) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2""
(K) CONCRETE MEDIAN, TYPE SB-6.06
(L) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 1/4"
(M) • COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06, REVERSE PITCH
(N) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, VARIABLE DEPTH
(O) POROUS GRANULAR EMBANKMENT, SUBGRADE, 12"
(P) PIPE UNDERDRAIN 4"

• THICKNESS OF CURB AND GUTTER SHALL BE EQUAL TO THICKNESS OF ASPHALT AND CONCRETE BASE COURSE.

•• ANTICIPATED LIMITS OF POROUS GRANULAR EMBANKMENT, SUBGRADE

LOCATION	TREATMENT DEPTH	TREATMENT WIDTH
STA 96+19 TO STA 100+19	12 INCHES	ENTIRE PAVEMENT WIDENING
STA 102+19 TO STA 104+84	12 INCHES	ENTIRE PAVEMENT WIDENING

STRUCTURAL PAVEMENT DESIGN FOR ILLINOIS ROUTE 31 AND WING STREET

STRUCTURAL DESIGN TRAFFIC: Year 2025
PV = 39770 SU = 1240 MU = 415
ROAD/STREET CLASSIFICATION: Class 1
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 32 S = 45 M = 45
TRAFFIC FACTOR: Actual TF = 4.15 AC Type = SBS/SBR PG 70-22 (IL 31) PG 64-22 (WING ST)
Minimum TF = 5.33
PG GRADE: Binder = SBS/SBR PG 70-22 (IL 31) PG 64-22/58-22 (WING ST) Surface = 1 3/4" (IL RT 31) 1 1/2" (WING ST)
SUBGRADE SUPPORT RATING:
IBR = 2

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

ITEM	AC TYPE	VOIDS
ILLINOIS ROUTE 31		
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm)	SBS/SBR PG 70-22	4% @ 90 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	SBS/SBR PG 70-22	4% @ 90 GYR.
WING STREET		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	PG 64-22	4% @ 70 GYR.
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm)	SBS/SBR PG 70-22	4% @ 90 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	PG 64-22/58-22 *	4% @ 70 GYR.
DRIVEWAYS		
8" HOT-MIX ASPHALT BASE COURSE (BINDER IL-19mm)	PG 64-22/58-22 *	4% @ 50 GYR.
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (BINDER IL 9.5 mm)	PG 64-22	4% @ 50 GYR.
PATCHING		
CLASS D PATCHES, TYPE I-IV, 10 INCH (BINDER IL-19 mm)	PG 64-22/58-22 *	4% @ 70 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.
* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

PROPOSED TYPICAL SECTIONS

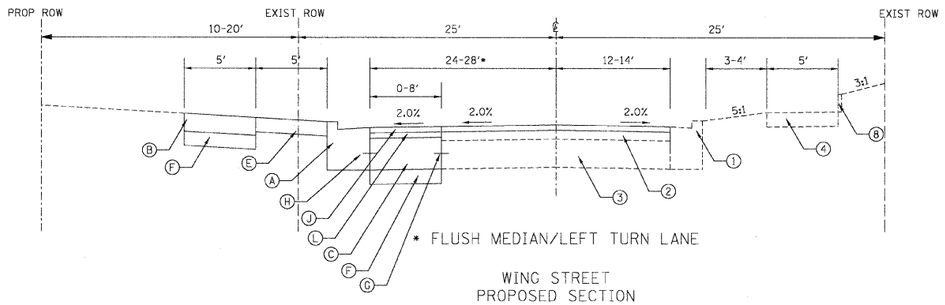
SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

H:\ELGIN\12901A\DESIGN\DGN\96TX02.DGN
2/12/2008

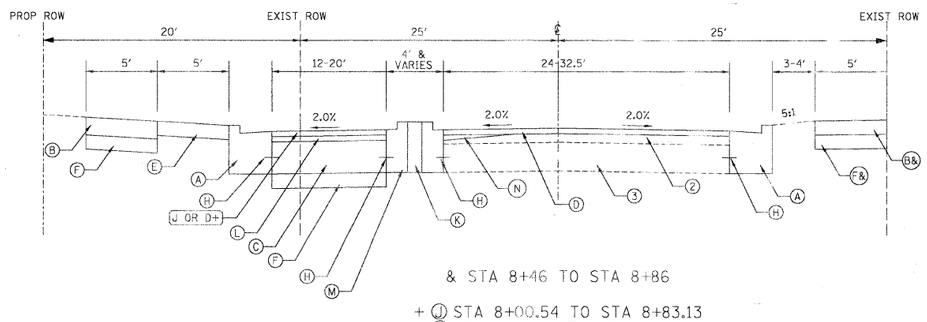
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



* FLUSH MEDIAN/LEFT TURN LANE

WING STREET
PROPOSED SECTION
STA 4+60.40 TO STA 8+00.54



& STA 8+46 TO STA 8+86

+ (J) STA 8+00.54 TO STA 8+83.13
(D) STA 8+83.13 TO STA 9+71.45

WING STREET
PROPOSED SECTION
STA 8+00.54 TO STA 9+71.45

LEGEND - EXISTING

(1) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
(2) BITUMINOUS CONCRETE OVERLAY, 2 3/4 - 4 3/4"
(3) PORTLAND CEMENT CONCRETE BASE, 8 - 9 1/4"
(4) PORTLAND CEMENT CONCRETE SIDEWALK
(5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(6) BITUMINOUS CONCRETE OVERLAY, 4 1/4 - 6 1/4"
(7) PORTLAND CEMENT CONCRETE BASE, 9 1/4 - 8"
(8) RETAINING WALL
(9) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06
(10) CONCRETE MEDIAN
(11) PAVING BRICK, 0 - 4"

LEGEND - PROPOSED

(A) • COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
(B) PORTLAND CEMENT CONCRETE SIDEWALK, 5"
(C) PORTLAND CEMENT BASE COURSE, 7 1/2"
(D) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 3/4"
(E) TOPSOIL FURNISH AND PLACE, 4"
(F) SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
(G) LONGITUDINAL CONSTRUCTION JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, GROUTED IN PLACE, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE PCC BASE COURSE)
(H) LONGITUDINAL JOINT NO. 6 TIE BAR, DEFORMED, EPOXY COATED, 24" LONG AT 24" CTS. (INCLUDED IN THE COST OF THE CURB AND GUTTER)
(I) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 1/4"
(J) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2""
(K) CONCRETE MEDIAN, TYPE SB-6.06
(L) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 2 1/4"
(M) • COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06, REVERSE PITCH
(N) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, VARIABLE DEPTH
(O) POROUS GRANULAR EMBANKMENT, SUBGRADE, 12"
(P) PIPE UNDERDRAIN 4"

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 SHALL BE USED ON THE CHANNELIZING ISLANDS.

• THICKNESS OF CURB AND GUTTER SHALL BE EQUAL TO THICKNESS OF ASPHALT AND CONCRETE BASE COURSE

RHA&A
Robert H. Anderson & Associates, Inc.
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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

PROPOSED TYPICAL SECTIONS

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\129014\DESIGN\DGN\07TX03.DGN

SCHEDULE OF QUANTITIES FOR ELECTRICAL ITEMS ARE SHOWN IN THE TRAFFIC PLANS.

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK, LANDSCAPING, EROSION CONTROL

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	40	0	0	40
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	0	0	36	36
20101200	TREE ROOT PRUNING	EACH	1	0	2	3
20200100	EARTH EXCAVATION	CU YD	1025	25	209	1259
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	457	6	57	520
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	234	0	0	234
20800150	TRENCH BACKFILL	CU YD	239	70	22	331
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1111	192	208	1511
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	21	4	4	29
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	21	4	4	29
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	21	4	4	29
25200110	SODDING, SALT TOLERANT	SQ YD	1111	192	208	1511
28000255	TEMPORARY EROSION CONTROL SEEDING	ACRE	0.23	0.04	0.04	0.30
28000400	PERIMETER EROSION BARRIER	FOOT	1491	308	433	2232
28000510	INLET FILTERS	EACH	16	5	9	30
A2007116	TREE, QUERCUS RUBRA (RED OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	5	0	2	7
D2003124	EVERGREEN, PSUEDOTSUGA MENZIESII (DOUGLAS FIR), 2' HEIGHT, BALLED AND BURLAPPED	EACH	1	0	0	1

BASE COURSES

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	2721	102	616	3439
35300210	PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"	SQ YD	1880	0	365	2245
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	125	38	0	163

SURFACE COURSES, PAVEMENTS, REHABILITATION AND SHOULDERS

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	946	98	164	1208
40600300	AGGREGATE (PRIME COAT)	TON	19	2	3	24
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	16	15	9	40
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	43	0	47	90
40603240	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	430	0	0	430
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	14	4	0	18
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	0	0	142	142
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	947	95	0	1042
42001300	PROTECTIVE COAT	SQ YD	12	0	67	79
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	0	0	11	11
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	12	0	56	68
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	7570	919	2264	10753
42400800	DETECTABLE WARNINGS	SQ FT	30	0	6	36
44000100	PAVEMENT REMOVAL	SQ YD	131	0	57	188
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	0	0	1279	1279
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	6245	945	0	7190
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	1254	0	0	1254
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	787	41	132	960
44000300	CURB REMOVAL	FOOT	79	0	45	124
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1818	370	543	2731
44000600	SIDEWALK REMOVAL	SQ FT	7329	829	2360	10518
44000705	BARRIER MEDIAN REMOVAL	SQ FT	531	0	308	839
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	0	0	4	4
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	24	0	12	36
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	49	0	0	49
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	278	180	0	458

STRUCTURES

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
50104600	CONCRETE RETAINING WALL REMOVAL	FOOT	60	0	0	60
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	282	0	56	338
55019600	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	42	0	34	76
55019800	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 21"	FOOT	0	196	0	196
55021600	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 12"	FOOT	331	0	0	331
55021800	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III 18"	FOOT	219	0	0	219
55100100	STORM SEWER REMOVAL 4"	FOOT	0	0	6	6
55100400	STORM SEWER REMOVAL 10"	FOOT	18	0	0	18
55100500	STORM SEWER REMOVAL 12"	FOOT	6	0	0	6
55100700	STORM SEWER REMOVAL 15"	FOOT	260	0	39	299
55100900	STORM SEWER REMOVAL 18"	FOOT	0	196	0	196
56103300	DUCTILE IRON WATER MAIN 12"	FOOT	10	0	0	10
56400100	FIRE HYDRANTS TO BE MOVED	EACH	1	0	0	1

INCIDENTAL CONSTRUCTION

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
60107600	PIPE UNDERDRAINS 4"	FOOT	484	184	0	668
60201110	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11V FRAME AND GRATE	EACH	1	0	1	2
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	4	0	3	7
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	1	0	4
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	5	0	2	7
60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	0	0	2	2
60251740	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	1	4	0	5
60256940	MANHOLES TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE	EACH	1	0	0	1
60260100	INLETS TO BE ADJUSTED	EACH	1	0	0	1
60266500	VALVE VAULTS TO BE REMOVED	EACH	1	0	0	1
60300350	MANHOLE FRAMES TO BE ADJUSTED	EACH	5	0	1	6
60300405	VALVE BOX FRAMES TO BE ADJUSTED	EACH	4	0	0	4
60500040	REMOVING MANHOLES	EACH	3	1	0	4
60500050	REMOVING CATCH BASINS	EACH	6	0	3	9
60500060	REMOVING INLETS	EACH	1	0	0	1
60600605	CONCRETE CURB, TYPE B	FOOT	129	31	85	245
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	25	0	33	58
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	1897	370	499	2766
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	534	0	0	534
60619200	CONCRETE MEDIAN, TYPE SB-6.06	SQ FT	331	0	234	565
63200310	GUARDRAIL REMOVAL	FOOT	16	0	0	16
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD				1194
66900450	SPECIAL WASTE PLANS AND REPORT	L SUM				1
66900530	SOIL DISPOSAL ANALYSIS	EACH				6
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO				7
67100100	MOBILIZATION	L SUM				1
Z0076600	TRAINEES	HOUR				500
XX005656	INLET FILTER CLEANING	EACH	91	28	49	168
X0322923	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	133	0	0	133
X0323463	BILLBOARD REMOVAL	EACH	1	0	0	1
X0323800	FENCE REMOVAL SPECIAL	L SUM	0	0	0	1
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	0	0	1	1
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	3	2	2	7
X7240205	REMOVE SIGN COMPLETE	EACH	2	0	0	2
	REMOVE WATER STRUCTURE	EACH	1	0	0	1

SIGNING AND PAVEMENT MARKING

CODE NO.	PAY ITEM	UNIT	STA. 89+79 TO STA. 103+00	STA. 103+00 TO STA. 104+84	STA. 4+60 TO STA. 8+83	TOTAL
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM				1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM				1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM				1
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM				1
70300610	TEMPORARY PAINT PAVEMENT MARKING, LETTERS AND SYMBOLS	SQ FT	109	0	61	170
70300725	TEMPORARY PAINT PAVEMENT MARKING 4" WHITE	FOOT	3031	804	400	4235
70300735	TEMPORARY PAINT PAVEMENT MARKING 6" WHITE	FOOT	742	0	90	832
70300760	TEMPORARY PAINT PAVEMENT MARKING 24" WHITE	FOOT	100	0	36	136
70300825	TEMPORARY PAINT PAVEMENT MARKING 4" YELLOW	FOOT	7866	1036	800	9702
70300845	TEMPORARY PAINT PAVEMENT MARKING 12" YELLOW	FOOT	226	0	0	226
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4538	613	578	5729
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	5	0	7	12
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	268	0	195	463
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5144	468	1343	6955
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1250	0	301	1551
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	324	0	18	342
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	126	0	24	150
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	125	16	16	157
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	112	18	16	146
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51	64	89	204
X0322662	TEMPORARY SIGNING	EACH	2	0	5	7
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA				17

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION (CY)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CY)	EMBANKMENT (CY)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CY)	UNSUITABLE MATERIAL (CY)	APPROXIMATE UNSUITABLE MATERIAL DUE TO UNDERCUTS (CY)	TOPSOIL FURNISH AND PLACE (SQ YD)
STA 89+79 TO STA 103+00 AND STA 8+91 TO STA 9+38	1025	871	243	628	223	234	1111
STA 103+00 TO STA 104+84	25	21	0	21	6	0	192
STA 4+50 TO STA 8+50	209	178	19	158	57	0	208
TOTAL	1259	1070	262	808	286	234	1511

SHRINKAGE FACTOR: EARTH EXCAVATION: 15%

LOCATION	TOTAL UNSUITABLE MATERIAL (CY)
STA 89+79 TO STA 103+00 AND STA 8+91 TO STA 9+38	457
STA 103+00 TO STA 104+84	6
STA 4+50 TO STA 8+50	57
TOTAL	520

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

SCHEDULE OF QUANTITIES

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\2901A\DESIGN\DGN\BSCH.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SITE CONTROL POINT
BEYOND PROJECT LIMITS
"+" CUT IN S/W (FOUND)
N 10353.82
E 9127.24
ELEV 791.45
Sta 1+01.34
Off -28.07 FT

SITE CONTROL POINT
BEYOND PROJECT LIMITS
IR (FOUND)
N 10244.04
E 9251.93
ELEV 783.49
Sta 2+58.24
Off 26.53 FT

SITE CONTROL POINT
BEYOND PROJECT LIMITS
IR (FOUND)
N 10328.10
E 9189.76
ELEV 786.14
Sta 1+68.95
Off -27.84 FT

℄ CURVE DATA No. 1

P.C.	STA.	91+23.44
P.T.	STA.	95+68.56
R		1792.0'
Δ		14°13'55"
L		445.12'
T		223.71'
C		443.97'
D		3.197309°
P.I.	STA.	93+47.15
e		0%

℄ CURVE DATA No. 2

P.C.	STA.	97+82.57
P.R.C.	STA.	99+45.00
R		506.0'
Δ		18°23'33"
L		162.43'
T		81.92'
C		161.73'
D		11.323277°
P.I.	STA.	98+64.49
e		0%

℄ CURVE DATA No. 3

P.R.C.	STA.	99+45.00
P.T.	STA.	103+11.90
R		1200.0'
Δ		17°31'05"
L		366.90'
T		184.89'
C		365.47'
D		4.774648°
P.I.	STA.	101+29.90
e		MAINTAIN EXISTING CROSS SLOPES

℄ CURVE DATA No. 4

P.C.	STA.	8+48.09.
P.T.	STA.	10+00.0
R		209.0'
Δ		41°38'49"
L		151.92'
T		79.49'
C		148.60'
D		27.414249°
P.I.	STA.	9+27.58
e		0%

CENTERLINE P.O.T.
N 10215.10
E 9393.21
Sta 4+00.00

SITE CONTROL POINT
IP (FOUND)
N 10109.81
E 9585.88
Sta 6+18.16
Off 24.77 FT

SIGN POST
IRON POST
52.0'
93.6'
IP (FOUND)
WING STREET
89.8'
SIGN POST

GRAPHIC SCALE
METERS
20 0 20 40 60 80 100
50 0 50 100 150 200 250
FEET

CENTERLINE P.C.
N 10045.96
E 9808.15
Sta 8+48.09

SITE CONTROL POINT
"+" CUT IN S/W (FOUND)
N 10027.01
E 9792.04
Sta 8+40.32
Off 23.63 FT

"X" CUT (FOUND)

CENTERLINE P.T.
N 10345.25
E 9885.67
Sta 103+11.90

M.H.
"X" CUT (SET)
B-BOX
39.5'
57.0'
BLDG COR.
39.6'
CURVE NO. 3
CURVE No. 4

CENTERLINE P.O.T.
N 10532.40
E 9866.80
Sta 105+00.00

CENTERLINE P.C.
N 9834.57
E 10016.62
STA 97+82.57

CURVE No. 2

SITE CONTROL POINT
"+" CUT IN CONC. (SET)
N 10286.83
E 9922.30
ELEV 750.17
Sta 102+48.55
Off 28.96 FT

CENTERLINE P.T. - WING
CENTERLINE P.C.C. Rt 31
N 10042.45
E 9956.71
Sta 10+00.00 WING
Sta 100+00.00 Rt 31

IP (FOUND)
BENT

CENTERLINE P.R.C.
N 9991.45
E 9977.27
Sta 99+45.00
Off 0.00 FT

SITE CONTROL POINT
BEYOND PROJECT LIMITS
I R (FOUND)
N 11006.48
E 9848.41
Sta 109+73.53
Off 29.26 FT

IRON POST
66.9'
14.8'
IRON POST
"X" CUT (SET)
37.2'
IP (FOUND)

CURVE No. 1

SITE CONTROL POINT
IRON PIPE- BENT (FOUND)
N 9900.92
E 10034.44
ELEV 760.68(AT BASE)
Sta 98+44.01
Off 27.33 FT

ILLINOIS ROUTE 31 (STATE STREET)

CENTERLINE P.T.
N 9621.34
E 10034.83
Sta 95+68.56

CENTERLINE P.O.T.
N 8975.94
E 10200.30
Sta 89+00.00

CENTERLINE P.C.
N 9187.06
E 10127.13
Sta 91+23.44

SITE CONTROL
"+" CUT IN S/W (SET)
N 9563.05
E 10059.71
ELEV 753.33
Sta 95+07.72
Off 18.80 FT

GRAPHIC SCALE
METERS
20 0 20 40 60 80 100
50 0 50 100 150 200 250
FEET

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2/12/2008

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

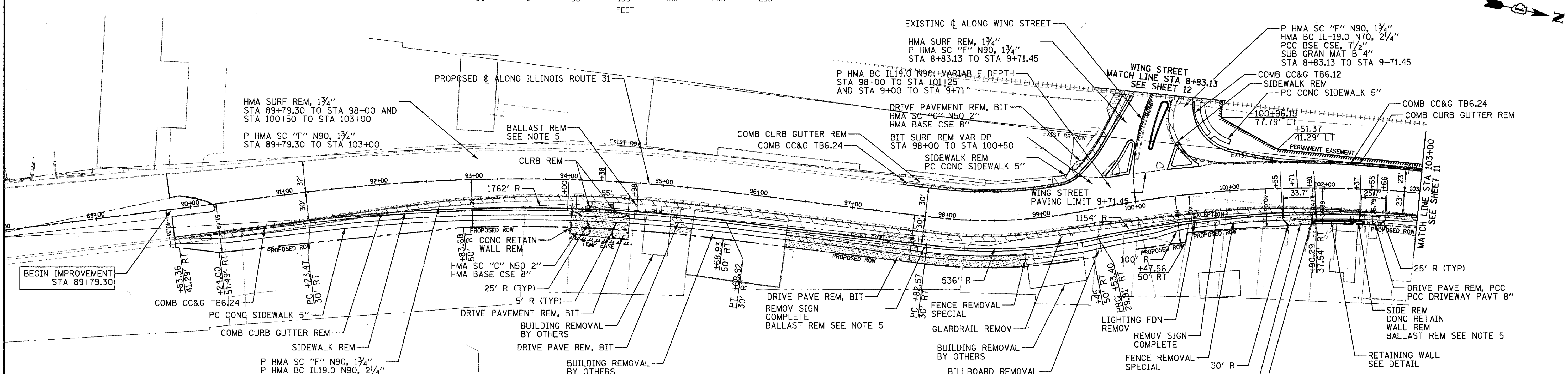
ALIGNMENT, TIES, AND BENCHMARK PLAN

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: AWH
DESIGN BY: AWH
CHECKED BY: KMA

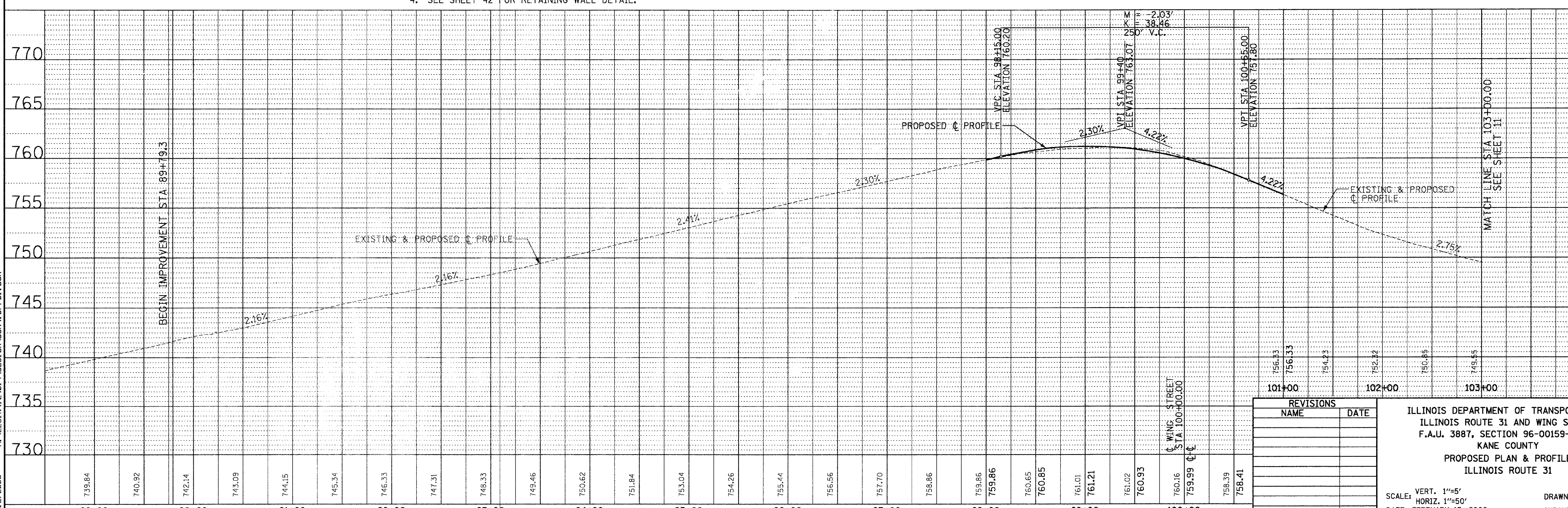
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	10
STA. 89+79.30	TO STA.103+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943



NOTES:

1. CONCRETE CURB, TYPE B WILL BE INSTALLED AT DRIVEWAY APPROACHES.
2. SEE SHEET 25 FOR INTERSECTION DETAIL.
3. AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS, 8" WILL BE INSTALLED AT DRIVEWAY APPROACHES.
4. SEE SHEET 42 FOR RETAINING WALL DETAIL.
5. BALLLAST REMOVAL SHALL BE CONSIDERED INCLUDED IN THE COST OF SIDEWALK REMOVAL.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY
PROPOSED PLAN & PROFILE
ILLINOIS ROUTE 31

SCALE: VERT. 1"=5' HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008
DRAWN BY: TC
CHECKED BY: KMA

PLAN: NOTE BOOK, NO., SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME; BY; DATE

PROFILE: NOTE BOOK, NO., SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CH'KD; BY; DATE

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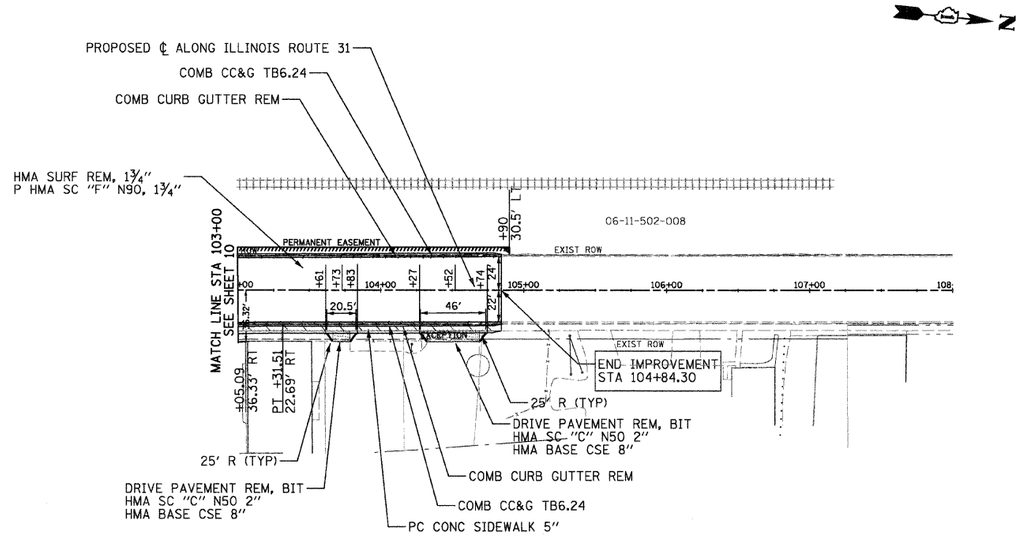
2/12/2008



GRAPHIC SCALE

METERS

20 0 20 40 60 80 100

50 0 50 100 150 200 250

FEET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	11
STA. 103+00.00	TO STA.104+84.30			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

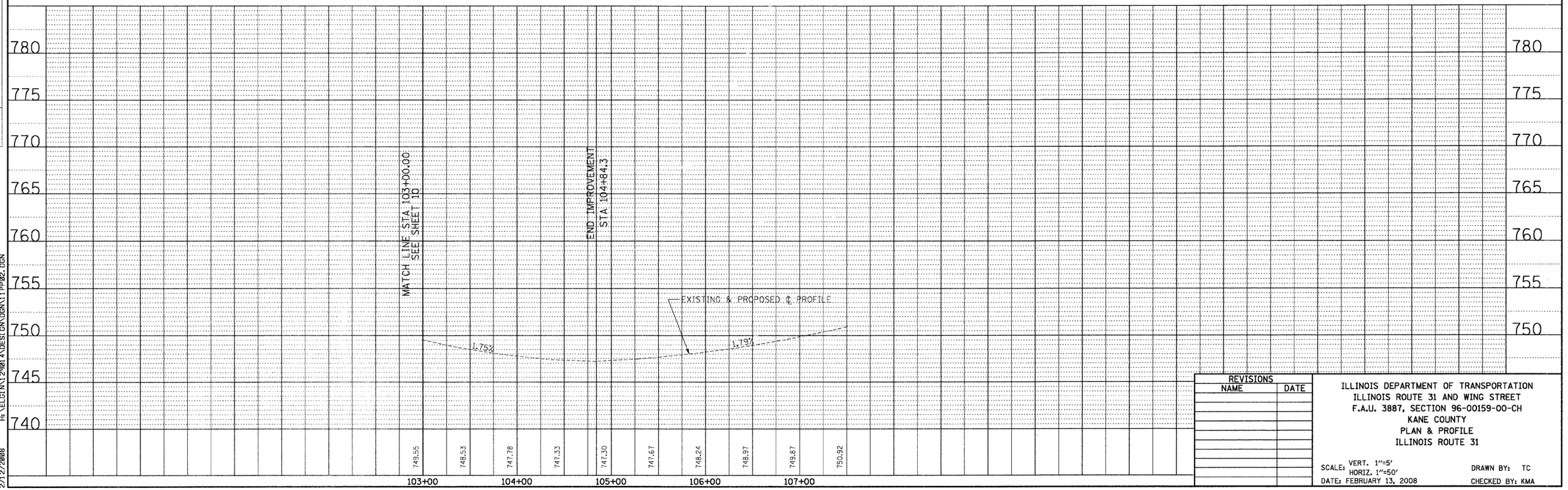
CONTRACT NO.: 83943

NOTES:

1. CONCRETE CURB, TYPE B WILL BE INSTALLED AT DRIVEWAY APPROACHES.
2. AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS, 8" WILL BE INSTALLED AT DRIVEWAY APPROACHES.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
GRADES CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT CHECKED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY
PLAN & PROFILE
ILLINOIS ROUTE 31

SCALE: VERT. 1"=5'
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
CHECKED BY: KMA

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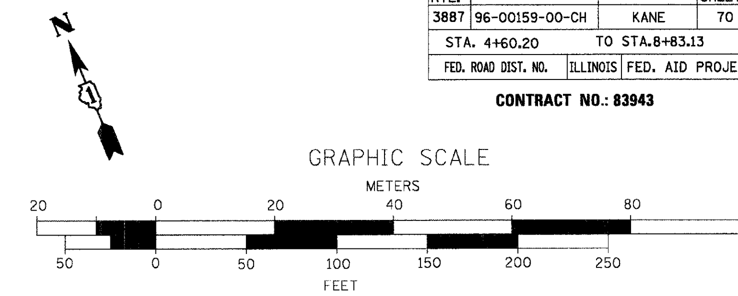
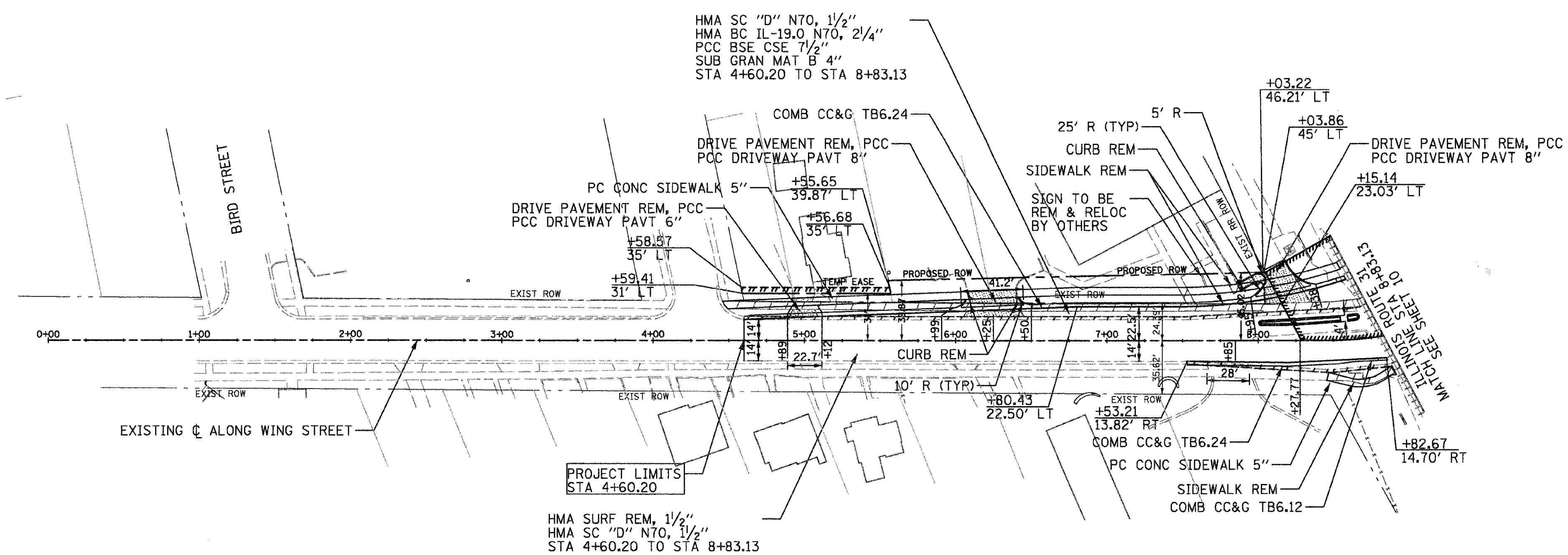
2/12/2008

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	12
STA. 4+60.20	TO STA.8+83.13			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

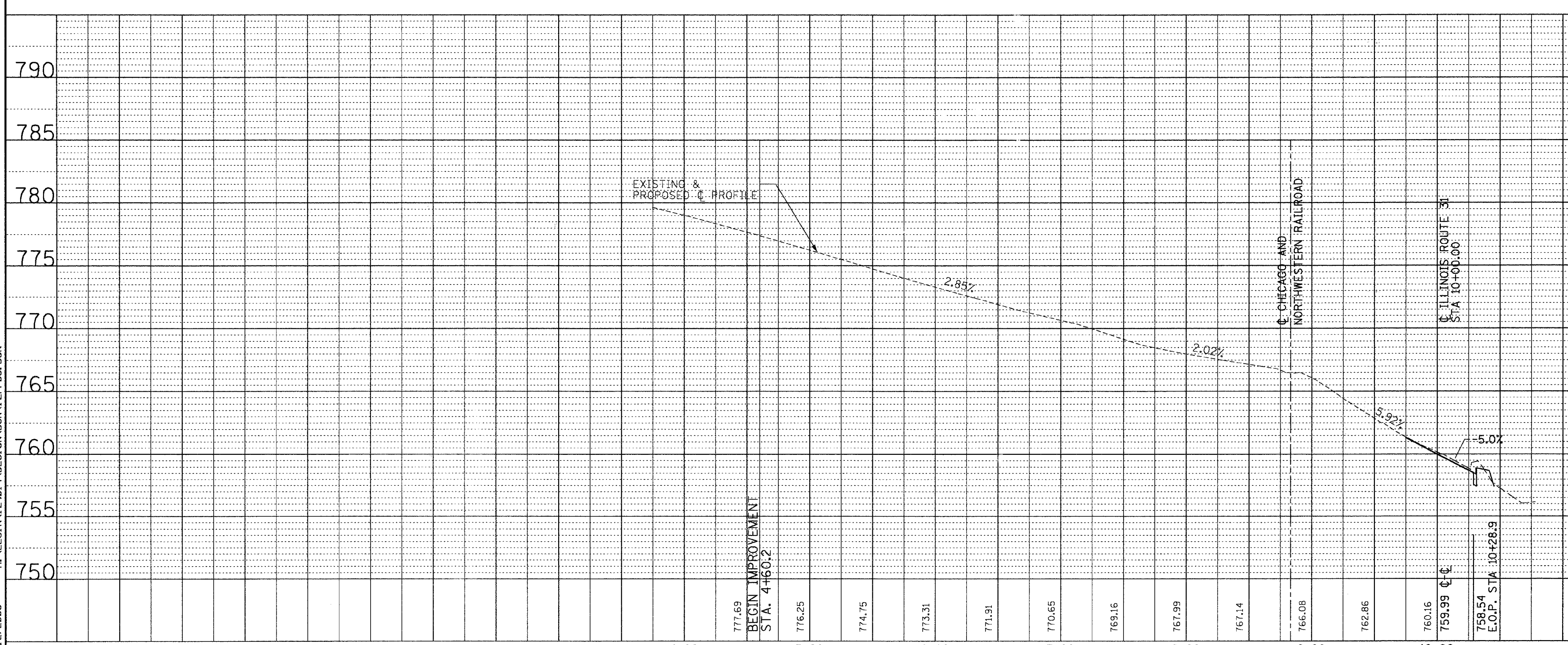
CONTRACT NO.: 83943





NOTES:

1. CONCRETE CURB, TYPE B WILL BE INSTALLED AT COMMERCIAL DRIVEWAY APPROACHES.
2. SEE SHEET 25 FOR INTERSECTION DETAILS.
3. AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS, 8" WILL BE INSTALLED AT DRIVEWAY APPROACHES.



PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME

BY	DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'NS CH'KD

BY	DATE

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2/12/2008

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY
PLAN & PROFILE
WING STREET

SCALE: VERT. 1"=5' HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008
DRAWN BY: TC
CHECKED BY: KMA

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	13
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

RECOMMENDED MAINTENANCE OF TRAFFIC

NOTE: TRAFFIC CONTROL FOR STAGES 1-3, AND DURING THEIR CORRESPONDING SUBSTAGES, WILL BE PAID AS A LUMP SUM, "TRAFFIC CONTROL AND PROTECTION".

STAGE 1: TRAFFIC ON IL ROUTE 31 WILL BE REDUCED FROM FOUR LANES TO TWO LANES TO ALLOW THE REMOVAL AND REPLACEMENT OF THE STORM SEWER FROM STA 100+65 TO STA 104+79. TRAFFIC WILL BE SHIFTED TO THE CURB LANES.

STAGE 2: THE FOUR LANES OF TRAFFIC ON IL ROUTE 31 WILL BE SHIFTED APPROXIMATELY 2-4' WEST TO ALLOW THE WIDENING ON THE EAST SIDE OF IL ROUTE 31.

STAGE 3: SOUTHBOUND TRAFFIC ON IL ROUTE 31 FROM THE WING STREET INTERSECTION TO STA 104+84 WILL BE SHIFTED 2-3' EAST TO ALLOW THE WIDENING OF THE INTERSECTION. IN ADDITION, THE TRAFFIC ON WING STREET WILL BE SHIFTED APPROXIMATELY 5' SOUTH TO ALLOW THE WIDENING OF THE NORTH SIDE OF WING STREET.

STAGE 4: THE SURFACE COURSE FOR BOTH ROADS WILL BE PLACED AFTER THE WIDENING IS COMPLETED. MAINTAINING TRAFFIC AT ALL LOCATIONS DURING THIS PHASE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF "TRAFFIC CONTROL AND PROTECTION, STANDARD 701606".

SCHEDULE OF TEMPORARY SIGNING

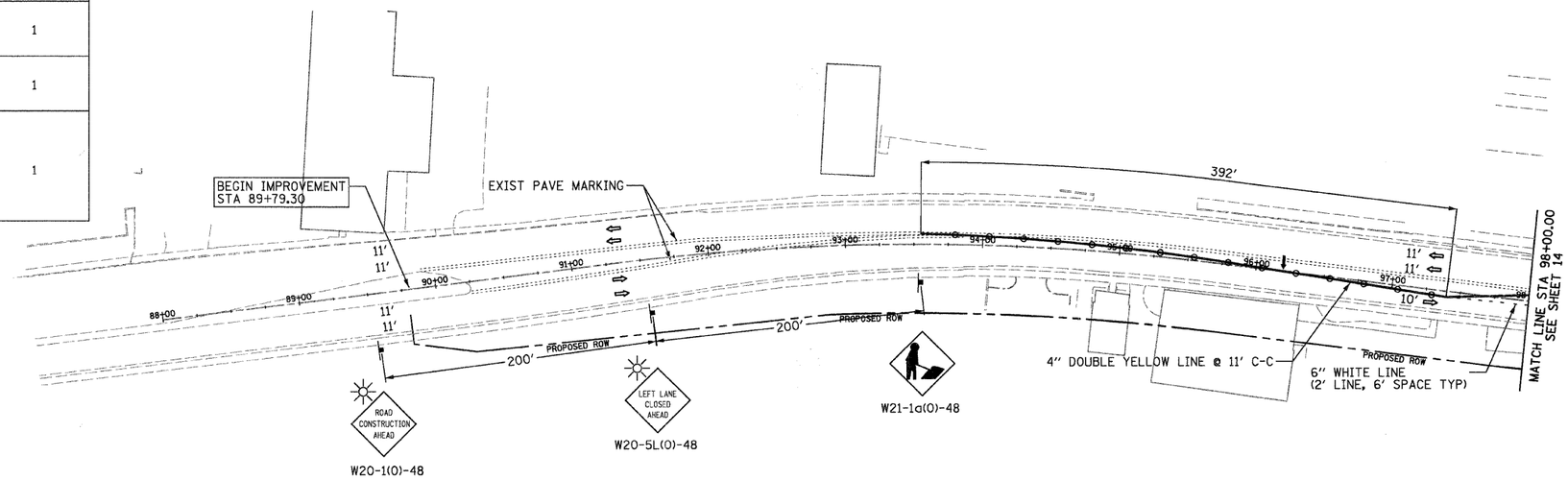
SIGN	CODE AND SIZE	STATION	OFFSET	DIRECTION	QUANTITY
DO NOT STOP ON TRACKS	R8-8 24" X 30"	9+08	L	WB	2
		8+57	L	EB	1
		8+57	R	EB	1
STOP HERE ON RED	R10-6 24" X 36"	8+57	L	EB	1
		8+57	R	EB	1
NO TURN ON RED	R10-11a 24" X 30"	8+57	R	EB	1

ALL TEMPORARY SIGNS WILL BE IN ACCORDANCE WITH ARTICLE 701.14 AND 701.15. ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO INSTALL TEMPORARY SIGNS WILL BE INCLUDED IN THE UNIT PRICE FOR TEMPORARY SIGNS. TEMPORARY SIGN INSTALLATION WILL BE BE MEASURED ONCE. ANY RELOCATING OF TEMPORARY SIGNS DUE TO CONTRACTOR PHASING WILL BE CONSIDERED INCIDENTAL TO THE COST OF TRAFFIC CONTROL AND PROTECTION.

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



SYMBOLS

- TYPE I OR TYPE II BARRICADES AT 50' C-C TANGENTS, 25' C-C TAPERS (TYP)
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- MONO-DIRECTIONAL FLASHING BEACON
- ARROW BOARD

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 1
STA 89+79.30 TO STA 98+00.00

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\29014\DESIGN\DGN\29MAIN01.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	14
STA. 98+00.00	TO STA.104+84.30			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS

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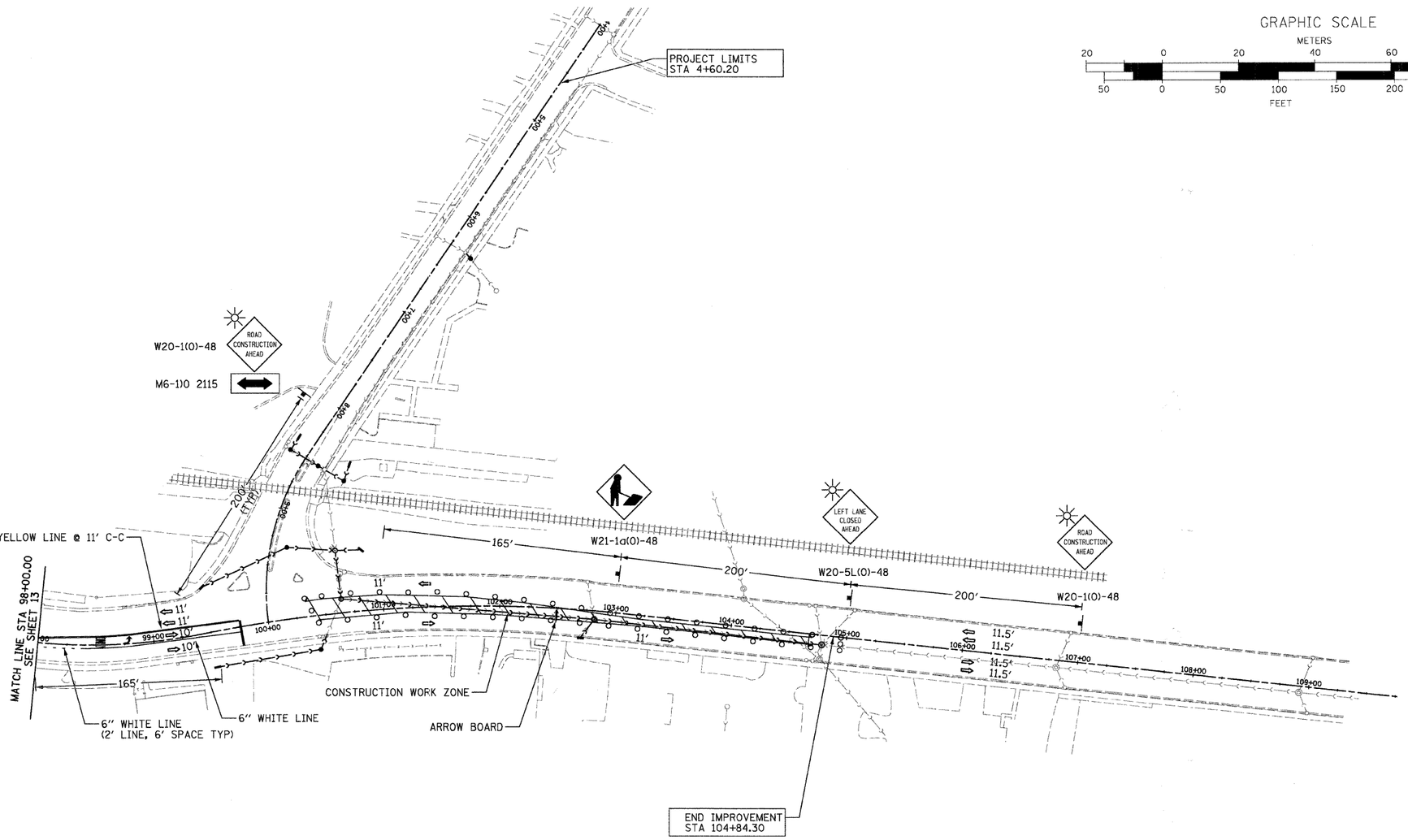
50 0 50 100 150 200 250

FEET

N



SYMBOLS

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- SIGN ON PORTABLE OR PERMANENT SUPPORT
- MONO-DIRECTIONAL FLASHING BEACON
- ARROW BOARD
- WORK ZONE

NOTES:

1. ALL TEMPORARY PAVEMENT MARKINGS WILL BE PAINT.
2. LETTERS AND SYMBOLS WILL BE LARGE SIZE.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 1
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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2/12/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	15
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS

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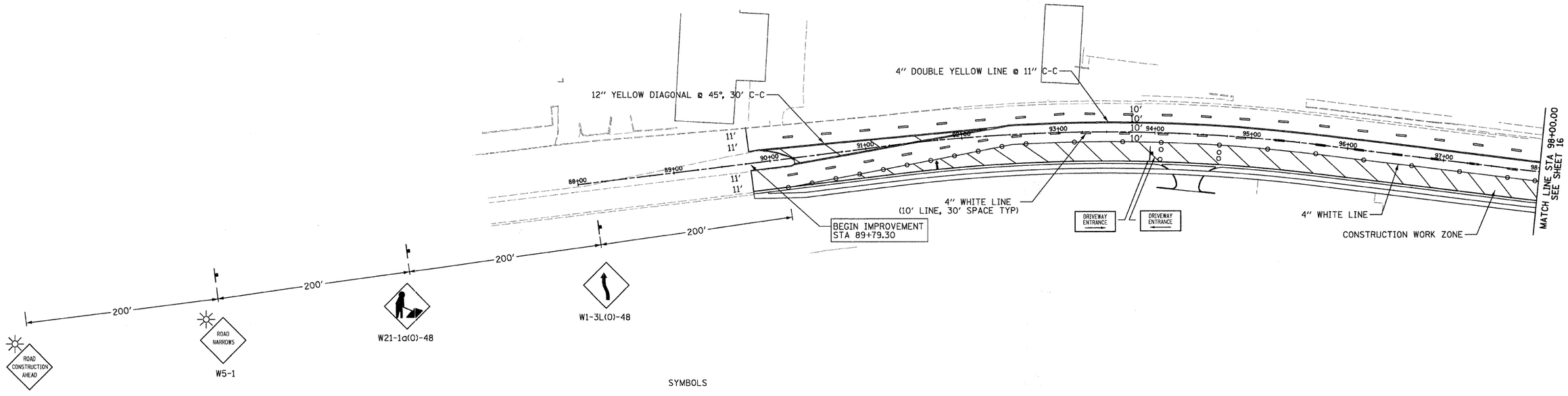
50 0 50 100 150 200 250

FEET

N



SYMBOLS

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- SIGN ON PORTABLE OR PERMANENT SUPPORT
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- ARROW BOARD
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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 2
STA 89+79.30 TO STA 98+00.00

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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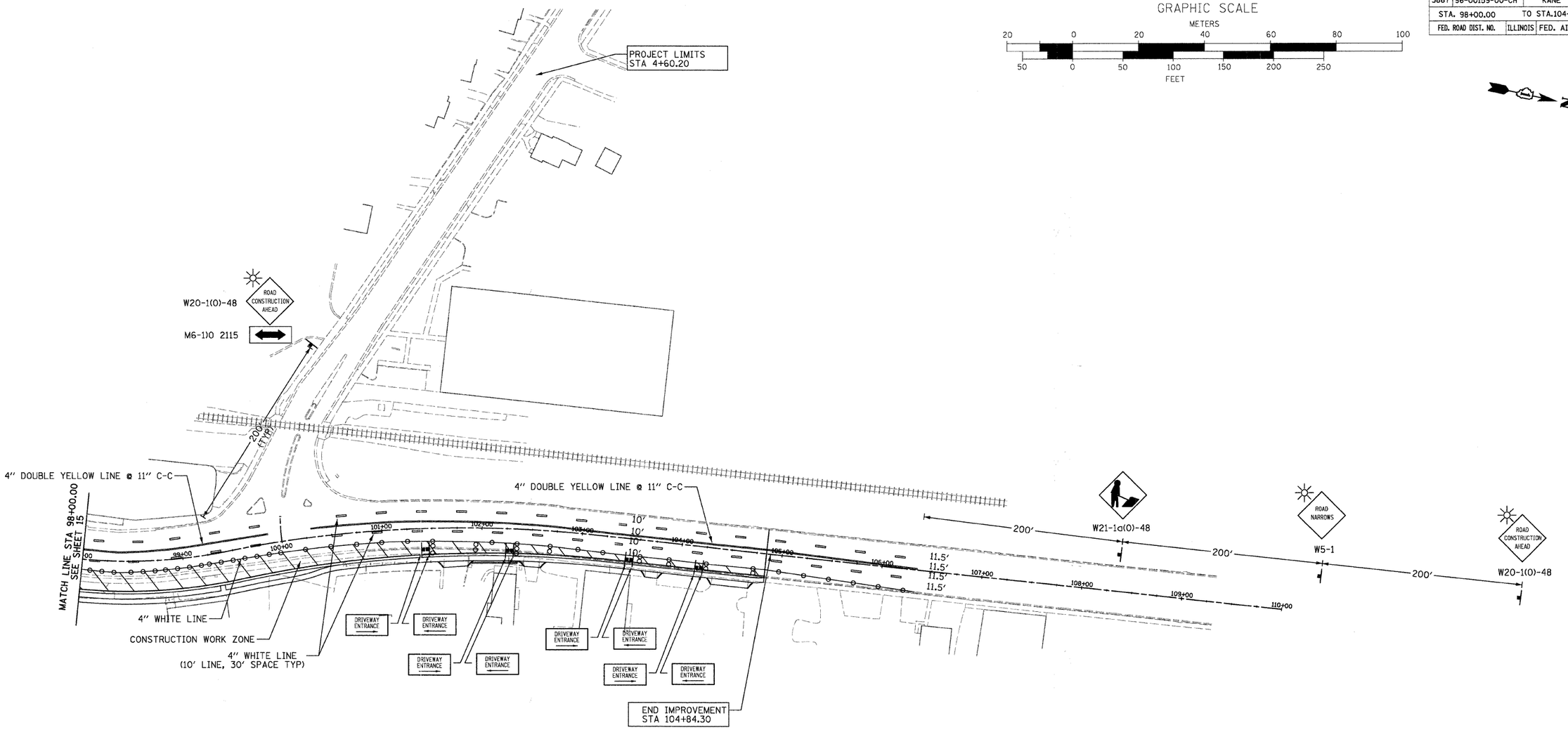
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	16
STA. 98+00.00		TO STA.104+84.30		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



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- WORK ZONE

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 2
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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CONTRACT NO.: 83943

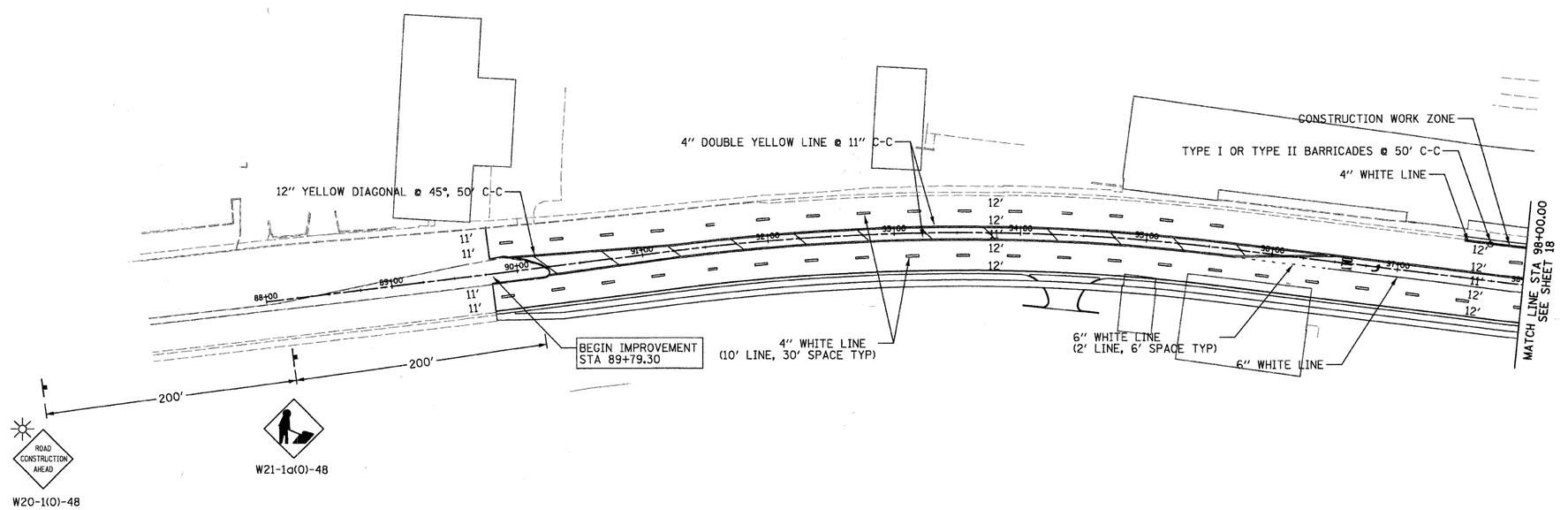
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	17
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

N



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- SIGN ON PORTABLE OR PERMANENT SUPPORT
- MONO-DIRECTIONAL FLASHING BEACON
- ARROW BOARD
- WORK ZONE

NOTES:

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2. LETTERS AND SYMBOLS WILL BE LARGE SIZE.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 3
STA 89+79.30 TO STA 98+00.00

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901.4\DESIGN\DGN\17MAINT05.DGN

CONTRACT NO.: 83943

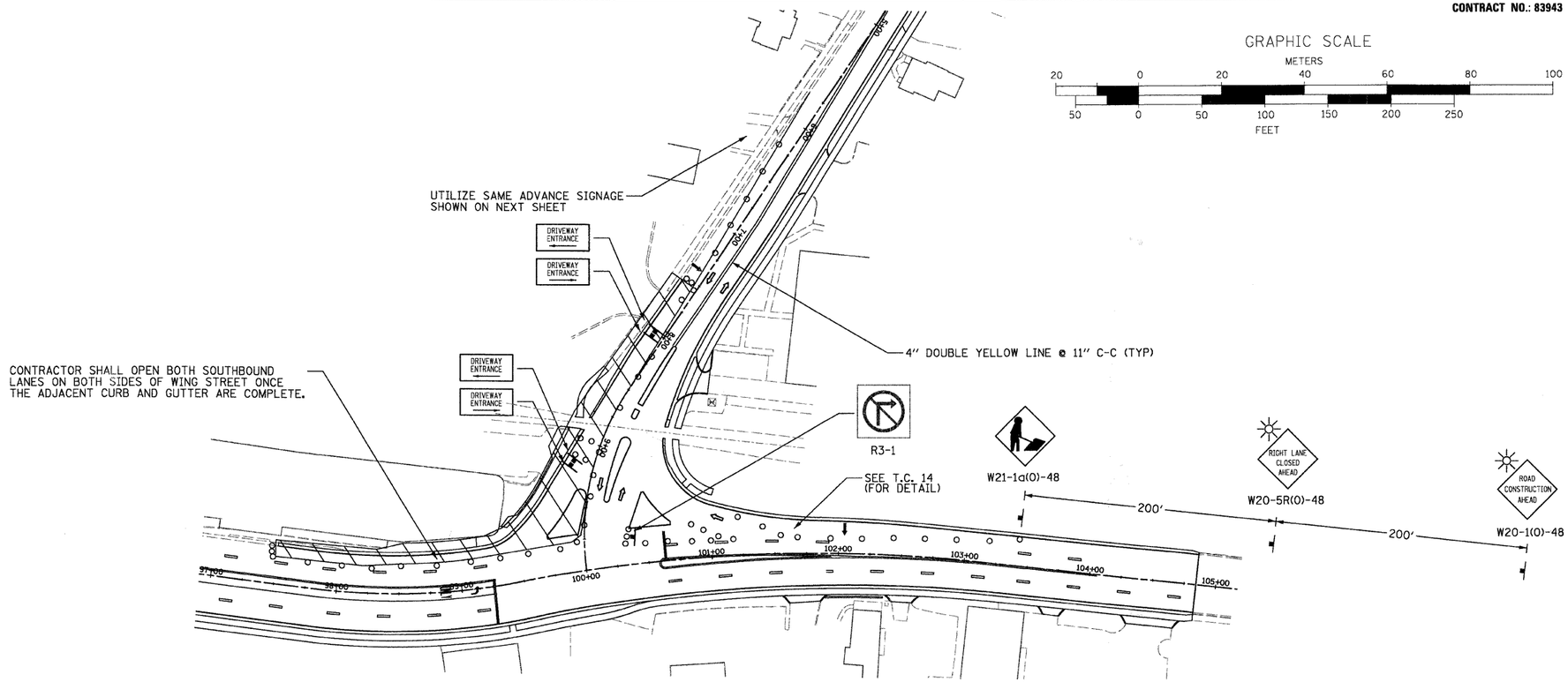
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	18
STA. 98+00.00		TO STA.104+84.30		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

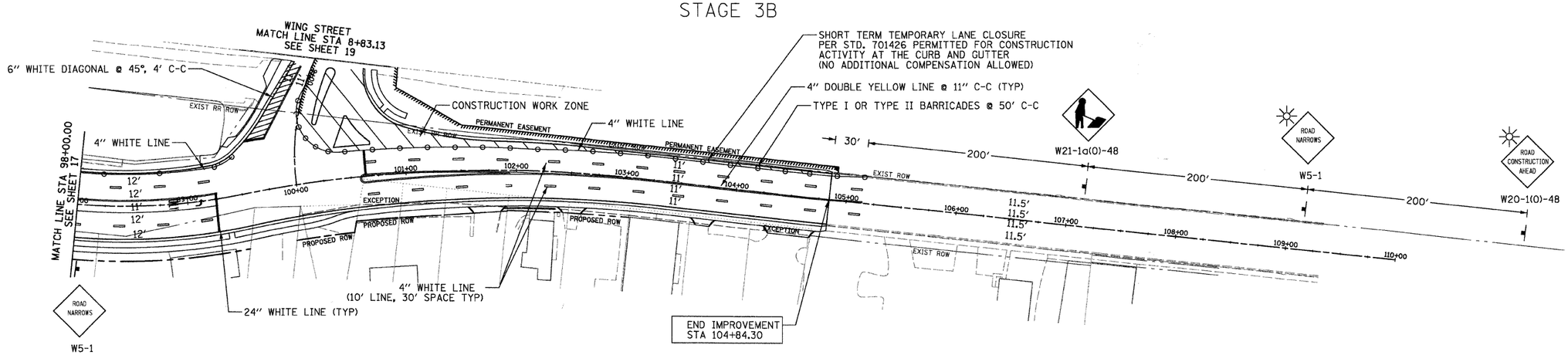
METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

N



STAGE 3B



SYMBOLS

- TYPE I OR TYPE II BARRICADES AT 50' C-C TANGENTS; 25' C-C TAPERS; 12' C-C RADII (TYP)
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- MONO-DIRECTIONAL FLASHING BEACON
- ARROW BOARD
- WORK ZONE

NOTES:

1. ALL TEMPORARY PAVEMENT MARKINGS WILL BE PAINT.
2. EXISTING MEDIANS AND ISLANDS SHALL BE REMOVED PRIOR TO STAGE 3.
3. SOUTHWEST ISLAND TO BE CONSTRUCTED AFTER WIDENING IS COMPLETED AND PRIOR TO RESURFACING.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 3
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	19
STA. 4+60.20		TO STA.8+83.13		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

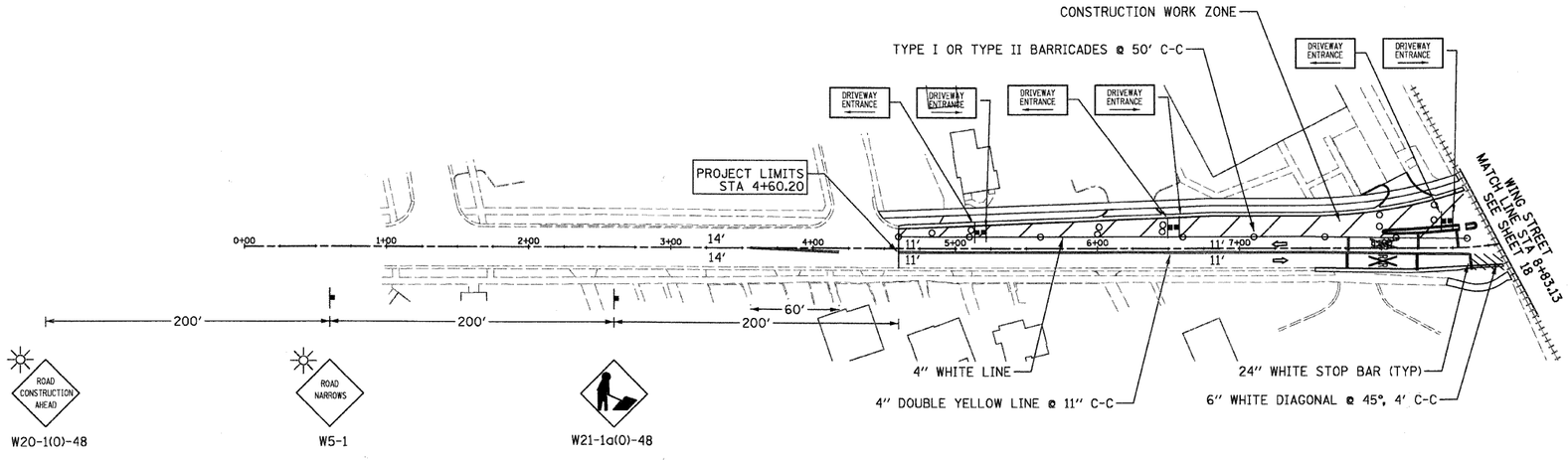
METERS

20 0 20 40 60 80 100

50 0 50 100 150 200 250

FEET

N



SYMBOLS

- TYPE I OR TYPE II BARRICADES AT 50' C-C TANGENTS; 25' C-C TAPERS; 12' C-C RADII (TYP)
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- MONO-DIRECTIONAL FLASHING BEACON
- ARROW BOARD
- WORK ZONE

NOTES:

1. ALL TEMPORARY PAVEMENT MARKINGS WILL BE PAINT.
2. EXISTING MEDIANS AND ISLANDS SHALL BE REMOVED PRIOR TO STAGE 3.
3. SOUTH CURBLINE AND SIDEWALK TO BE CONSTRUCTED AFTER WIDENING IS COMPLETED AND PRIOR TO RESURFACING.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

MAINTENANCE OF TRAFFIC
STAGE 3
STA 4+60.20 TO STA 8+83.13

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	20
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS

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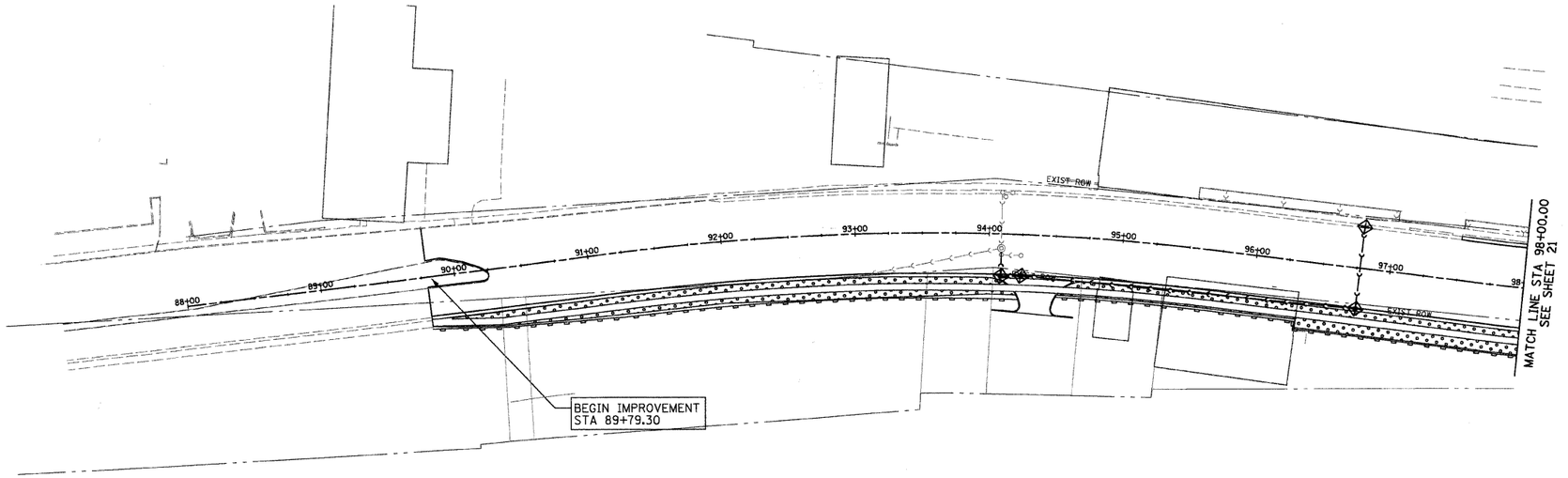
50 0 50 100 150 200 250

FEET

N



EROSION CONTROL LEGEND

PERIMETER EROSION BARRIER

TEMPORARY EROSION CONTROL SEEDING

INLET FILTERS

2/12/2008 H:\ELGIN\12901\DESIGN\DGN\20ERS01.DGN

RHA&A

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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

EROSION AND SEDIMENT CONTROL PLAN
STA 89+79.30 TO STA 98+00.00

SCALE: VERT.
HORIZ. 1"=50'

DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

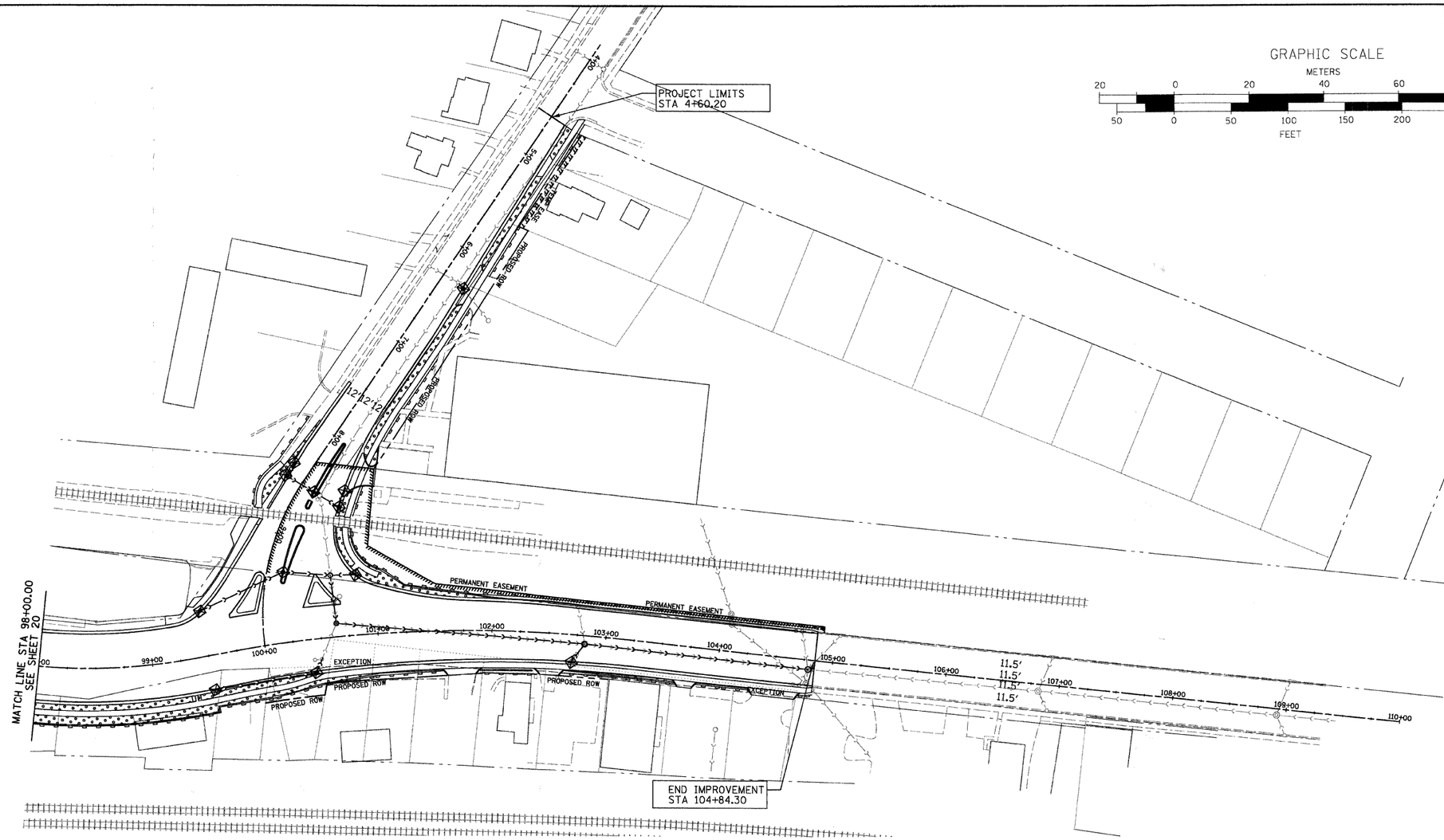
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	21
STA. 98+00.00		TO STA.104+84.30		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



EROSION CONTROL LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY EROSION CONTROL SEEDING
- INLET FILTERS

RHA&A

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

EROSION AND SEDIMENT CONTROL PLAN
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\21ERS02.DGN

NOTES:

1. RIM ELEVATIONS EQUAL FLOWLINE ELEVATIONS.
2. STRUCTURES THAT WILL BE IMPACTED BY THE PROPOSED IMPROVEMENTS WILL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE UTILITIES.
3. PIPE UNDERDRAINS 4" WILL BE INSTALLED AT LOW POINTS WHERE POROUS GRANULAR EMBANKMENT SUBGRADE WILL BE INSTALLED. THE UNDERDRAINS WILL BE CONNECTED TO NEAREST DRAINAGE STRUCTURE TO CREATE POSITIVE DRAINAGE.
4. SEE SHEET 45 DETAIL BD07 FOR CONNECTION OF PROPOSED STORM SEWER TO EXISTING SEWER.

CLASS D PATCHES

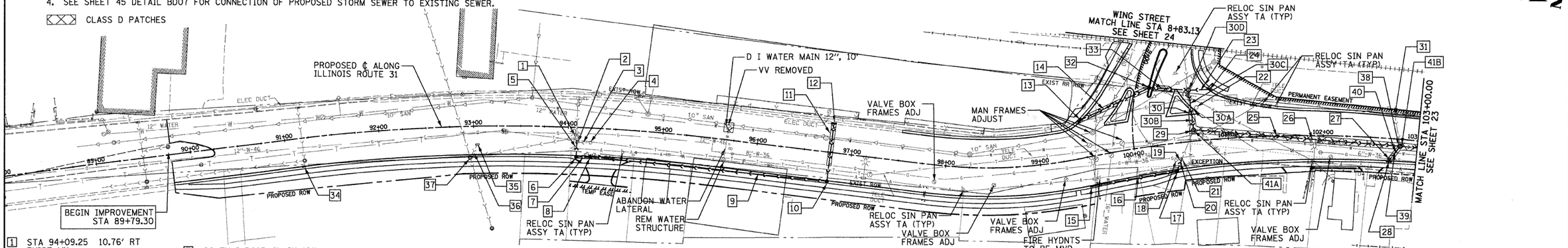
GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	22
STA. 89+79.30		TO STA.103+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO.: 83943



1 STA 94+09.25 10.76' RT
EXIST MH
RIM = 750.60
EXIST INV = 744.20 W 18"
EXIST INV = 743.18 S 18"
INV = 746.35 E 12"

2 STA 94+09.43 15.33' RT
REMOVING CATCH BASINS

3 ABANDON EXIST SS

4 STA 94+23.89 15.63' RT
REMOVING CATCH BASINS

5 SS TY I RCCP CL IV 12"
19' @ 0.87%

6 STA 94+09.15 31.29' RT
CB TY A TY 24 4' DIA FL TOP
INLET & PIPE PROTECTION
RIM = 750.11
INV = 746.48 W & N 12"

7 SS TY I RCCP CL IV 12"
15' @ 1.18%

8 STA 94+24.15 31.29' RT
CB TY A TY 24 4' DIA FLAT TOP
INLET & PIPE PROTECTION
RIM = 750.45
INV = 746.61 N S 12"

9 SS TY II RCCP CL III 12"
250' @ 1.28%

10 STA 96+77.50 31.29' RT
CB TY A TY 24 4' DIA FL TOP
INLET & PIPE PROTECTION
RIM = 756.46
INV = 749.75 S W 12"

11 SS TY 1 RCCP CL IV 12"
63' @ 8.0%

12 STA 96+77.50 31.48' LT
INL TY A TY 24 2' DIA
INLET & PIPE PROTECTION
RIM = 756.74
INV = 754.55 E 12"

13 STA 99+47.00 40.00' LT
INL TY A TY 24 2' DIA
INLET & PIPE PROTECTION
RIM = 761.78
INV = 758.35 NW 12"

14 SS TY II RCCP CL III 12"
81' @ 0.50%

15 STA 99+51.13 31.27' RT
INL TY A TY 24 2' DIA
INLET & PIPE PROTECTION
RIM = 760.06
INV = 755.84 N 12"

16 SS TY I RCCP CL IV 12"
90' @ 2.50%

17 STA 100+41.41 29.29' RT
CB TY A TY 24 4' DIA FL TOP
INLET & PIPE PROTECTION
RIM = 757.13
INV = 753.64 NW S 12"

18 STA 100+41.73 18.03' RT
REMOVING CATCH BASINS

19 ABANDON EXIST SS

20 SS TY I RCCP CL IV 12"
14' @ 0.74%

21 STA 100+47.75 18.07' RT
REMOVING CATCH BASINS

22 STA 100+71.34 35.13' LT
REMOVING CATCH BASINS

23 SS TY I RCCP CL IV 12"
20' @ 0.50%

24 STA 100+84.11 53.25' LT
INL TY A TY 24 2' DIA
INLET & PIPE PROTECTION
RIM = 760.79
INV = 757.00 S 12"

25 REMOVE EXIST SS, 15", 218'

26 SS TY II RCCP CL III 18"
219' @ 3.50%

27 STA 102+70.40 22.56' RT
REMOVING CATCH BASINS

28 STA 102+68.91 24.88' RT
INL TY A TY 24 2' DIA
INLET & PIPE PROTECTION
RIM = 749.49
INV = 746.26 NW 12"

29 STA 100+65 11.91' LT
MH TY A TY 1 F CL 5' DIA FL TOP
RIM = 758.45
INV = 753.22 N 18"
INV = 754.57 W 15"
EXIST INV = 753.77 SE 12"

30 STA 100+65.53 29.29' LT
REMOVING MANHOLES

30A REMOVE EXIST SS, 12", 6'

30B REMOVE EXIST SS, 15", 42'

30C SS TY I RCCP CL IV 15"
42' @ 5.05%

30D STA 100+63.53 45.14' LT
MH TY A TY 1 F CL 5' DIA FL TOP
RIM = 760.95
INV = 756.90 N 12"
INV = 756.73 S 12"
INV = 756.69 E 15"
EXIST INV = 756.69 W 15"

31 STA 102+76.18 24.54' RT
EXIST CB TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 750.18
EXST INV = 745.60 E 10"

32 STA 9+30.37 13.60' LT
CB TY A TYPE 11V F&G 4' DIA
INLET & PIPE PROTECTION
RIM = 763.46
INV = 757.96 N SE 12"

33 SS TY I RCCP CL IV 12"
41' @ 3.00%

34 STA 91+17.46 29.96' RT
EXIST INL TO BE ADJUSTED
RIM = 744.01

35 STA 93+04.09 19.28' RT
REMOVING INLETS

36 ABANDON EXIST SS

37 STA 92+96.65 33.06' RT
EXIST MH TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 747.54

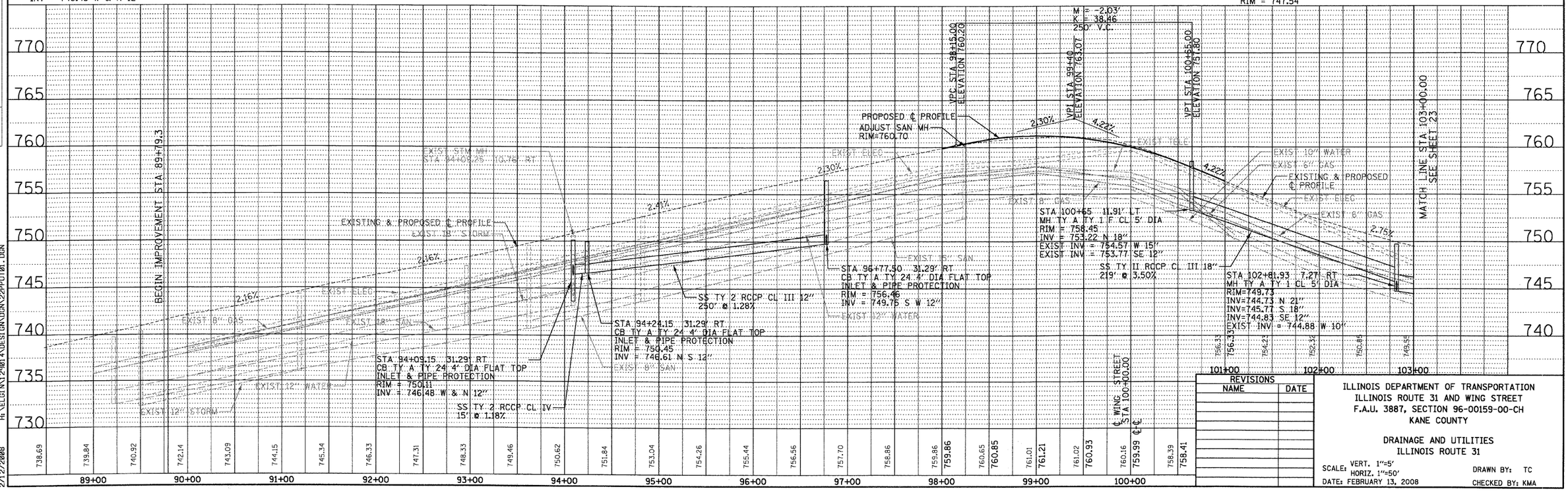
38 STA 102+81.93 7.27' RT
MH TY A TY 1 CL 5' DIA FL TOP
RIM=749.73
INV=744.73 N 21"
INV=745.77 S 18"
INV=744.83 SE 12"
EXIST INV = 744.88 W 10"

39 SS TY I RCCP CL IV 12"
20' @ 8.42%

40 REMOVE EXIST SS, 10", 18'

41A STA 100+65 11.91' LT
REMOVING MANHOLES

41B STA 102+81.93 7.27' RT
REMOVING MANHOLES



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY

DRAINAGE AND UTILITIES
ILLINOIS ROUTE 31

SCALE: VERT. 1"=5'
HORIZ. 1"=50'
DRAWN BY: TC
DATE: FEBRUARY 13, 2008
CHECKED BY: KMA

PLAN: SURVEYED, PLOTTED, CROSS SECTIONED, B.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK NO., RT. OF WAY CHECKED, CADD FILE NAME, BY, DATE

PROFILE: SURVEYED, PLOTTED, CROSS SECTIONED, B.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK NO., BY, DATE

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2/12/2008

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	23
STA. 103+00		TO STA.104+84.30		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO.: 83943

NOTES:

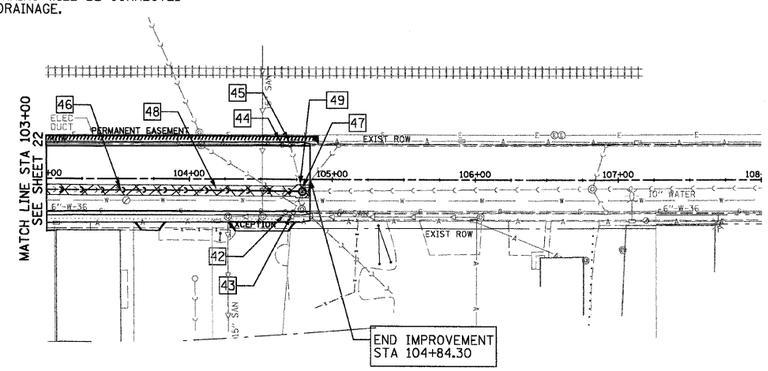
1. RIM ELEVATIONS EQUAL FLOWLINE ELEVATIONS.
2. STRUCTURES THAT WILL BE IMPACTED BY THE PROPOSED IMPROVEMENTS WILL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE UTILITIES.
3. PIPE UNDERDRAINS 4" WILL BE INSTALLED AT LOW POINTS WHERE POROUS GRANULAR EMBANKMENT SUBGRADE WILL BE INSTALLED. THE UNDERDRAINS WILL BE CONNECTED TO NEAREST DRAINAGE STRUCTURE TO CREATE POSITIVE DRAINAGE.

CLASS D PATCHES

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



42 STA 104+67.31 22.80' RT
EXIST CB TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 746.73
EXIST INV = 742.92 N 10"

43 STA 104+72.82 22.93' RT
EXIST CB TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 746.74
EXIST INV = 742.29 NW 10"
EXIST INV = 742.91 S 10"

44 STA 104+65.05 24.30' LT
EXIST CB TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 746.85
EXIST INV = 743.68 N 10"

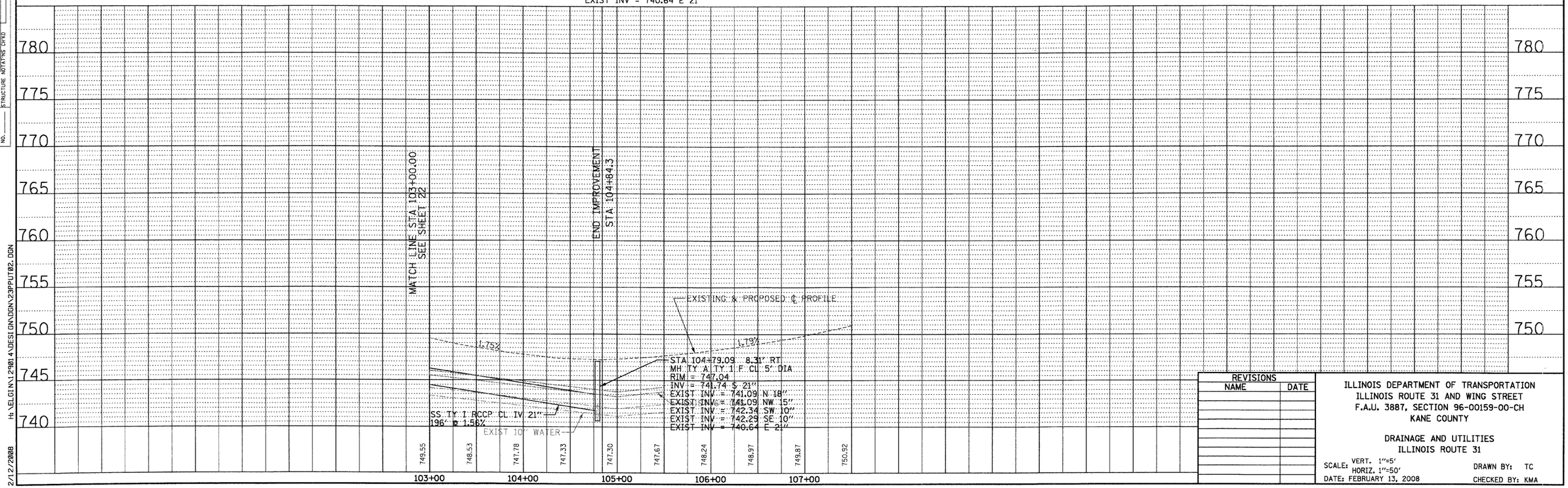
45 STA 104+70.59 24.32' LT
EXIST CB TO BE ADJUSTED
WITH NEW TYPE 24 F&G
RIM = 747.84
EXIST INV = 743.72 E 10"
EXIST INV = 743.64 S 10"

46 SS TY I RCCP CL IV 21"
196' @ 1.56%

47 STA 104+79.09 8.31' RT
MH TY A TY 1 F CL 5' DIA
RIM = 747.04
INV = 741.74 S 21"
EXIST INV = 741.09 N 18"
EXIST INV = 741.09 NW 15"
EXIST INV = 742.34 SW 10"
EXIST INV = 742.29 SE 10"
EXIST INV = 740.64 E 21"

48 REMOVE EXIST SS, 18", 196'

49 STA 104+79.09 8.31' RT
REMOVING MANHOLES



PLAN
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PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
DATE
BY

PROFILE
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PLOTTED
CROSS SECT. CHECKED
B.M. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
DATE
BY

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2/12/2008

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY

DRAINAGE AND UTILITIES
ILLINOIS ROUTE 31

SCALE: VERT. 1"=5'
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
CHECKED BY: KMA

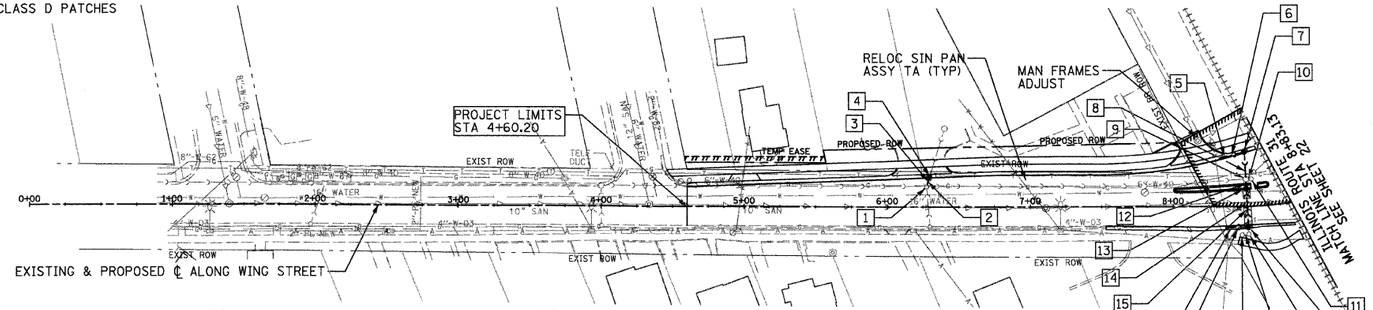
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	24
STA. 4+60.20		TO STA.8+83.13		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943

NOTES:

1. RIM ELEVATIONS EQUAL FLOWLINE ELEVATIONS.
2. CONCRETE CURB, TYPE B WILL BE INSTALLED AT DRIVEWAY APPROACHES.
3. STRUCTURES THAT WILL BE IMPACTED BY THE PROPOSED IMPROVEMENTS WILL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE UTILITIES.
3. SEE DETAIL BD07 FOR CONNECTION OF PROPOSED STORM SEWER TO EXISTING SEWER.

▨ CLASS D PATCHES



1 STA 6+27.62 14.36' LT
CB TO BE ADJUSTED WITH
NEW TYPE 1 FRAME, CLOSED LID
RIM = 771.62
INV = 769.02 N 12"
EXIST INV = 767.72 S 10"
EXIST INV = 766.92 W 15"
EXIST INV = 766.87 E 15"

2 SS TY I RCCP CL IV 12"
7' @ 0.50%

3 REMOVE EXIST SS, 4", 6'

4 STA 6+29.45 20.50' LT
CB TY A TY 24 F&G 4' DIA FLAT TOP
INLET & PIPE PROTECTION
RIM = 771.84
INV= 769.04 S 12"
EXIST INV = 769.04 N 4"

5 STA 8+35.03 34.61' LT
INL TY A TY 24 F&G 2' DIA
INLET & PIPE PROTECTION
RIM = 766.49
INV = 762.32 E 12"

6 SS TY I RCCP CL IV 12"
16' @ 2.00%

7 STA 8+49.56 38.33' LT
CB TY A TY 24 F&G 4' DIA FLAT TOP
INLET & PIPE PROTECTION
RIM = 766.42
INV = 762.08 S W 12"

8 SS TY I RCCP CL IV 12"
20' @ 0.50%

9 STA 8+50.89 19.13' LT
CB TO BE ADJUSTED WITH
NEW TYPE 1 FRAME, CLOSED LID
RIM = 766.82
INV = 762.00 N 12"
INV = 762.00 S 15"
EXIST INV = 761.81 W 15"
EXIST INV = 761.76 NE 15"

10 ABANDON EXIST SS

11 STA 8+54.91 19.22' LT
REMOVING CATCH BASINS

12 SS TY I RCCP CL IV 15"
6' @ 0.50%

13 STA 8+51.29 12.02' LT
CB TY A TY 11V F&G 4' DIA FLAT TOP
INLET & PIPE PROTECTION
RIM = 766.79
INV = 762.08 N S 15"

14 SS TY I RCCP CL IV 15"
28' @ 0.50%

15 REMOVE EXIST SS, 15", 39'

16 STA 8+39.82 13.81' RT
INL TY A TY 24 F&G 2' DIA
INLET & PIPE PROTECTION
RIM = 766.79
INV = 763.70 E 12"

17 SS TY I RCCP CL IV 12"
13' @ 7.00%

18 STA 8+52.84 14.84' RT
CB TY A TY 24 F&G 4' DIA FLAT TOP
INLET & PIPE PROTECTION
RIM = 766.70
INV = 762.29 N 15"
INV = 763.00 W 12"

19 STA 8+48.40 20.02' RT
REMOVING CATCH BASINS

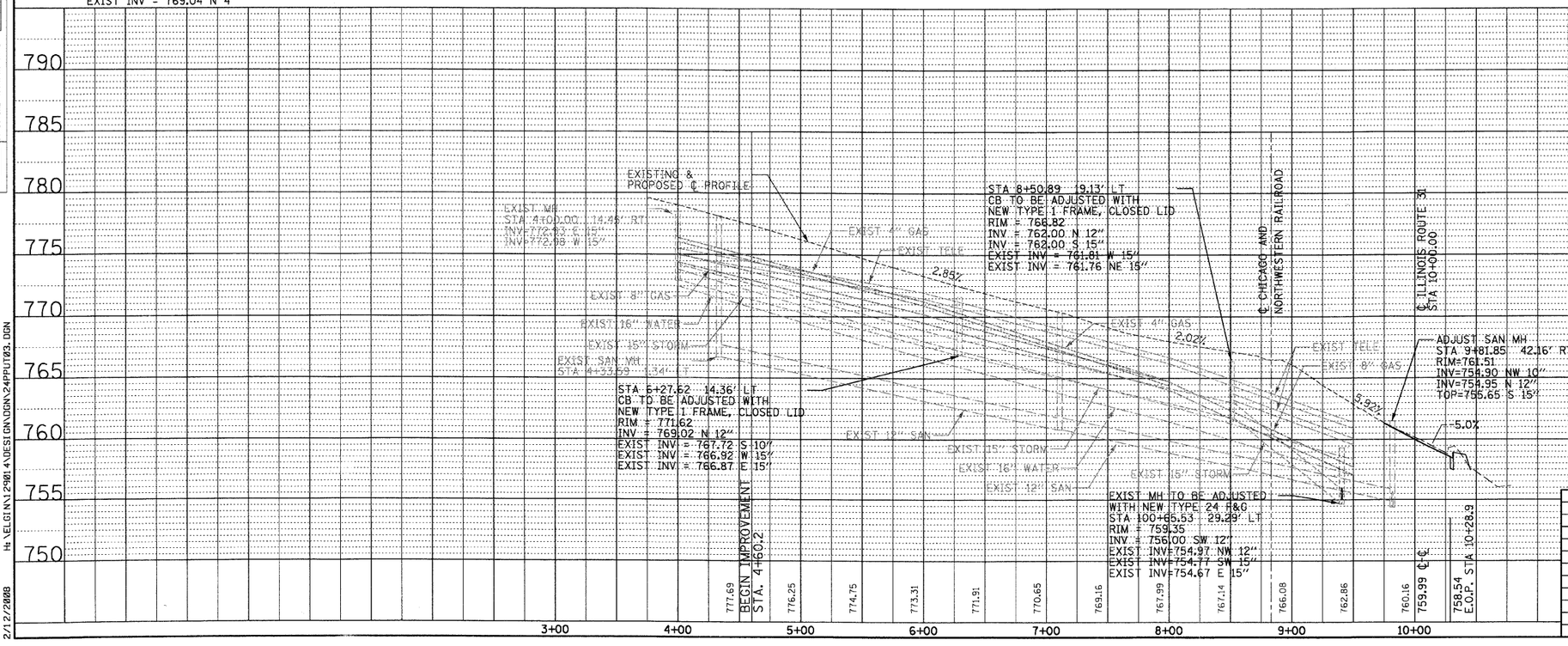
20 ABANDON EXIST SS

21 STA 8+53.08 19.55' RT
REMOVING CATCH BASINS

GRAPHIC SCALE
METERS
20 0 20 40 60 80 100
50 0 50 100 150 200 250
FEET

PLAN
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
NO.
BY DATE

PROFILE
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
NO.
BY DATE



REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
F.A.U. 3887, SECTION 96-00159-00-CH
KANE COUNTY

DRAINAGE AND UTILITIES
WING STREET

SCALE: VERT. 1"=5'
HORIZ. 1"=50'
DRAWN BY: TC
DATE: FEBRUARY 13, 2008
CHECKED BY: KMA

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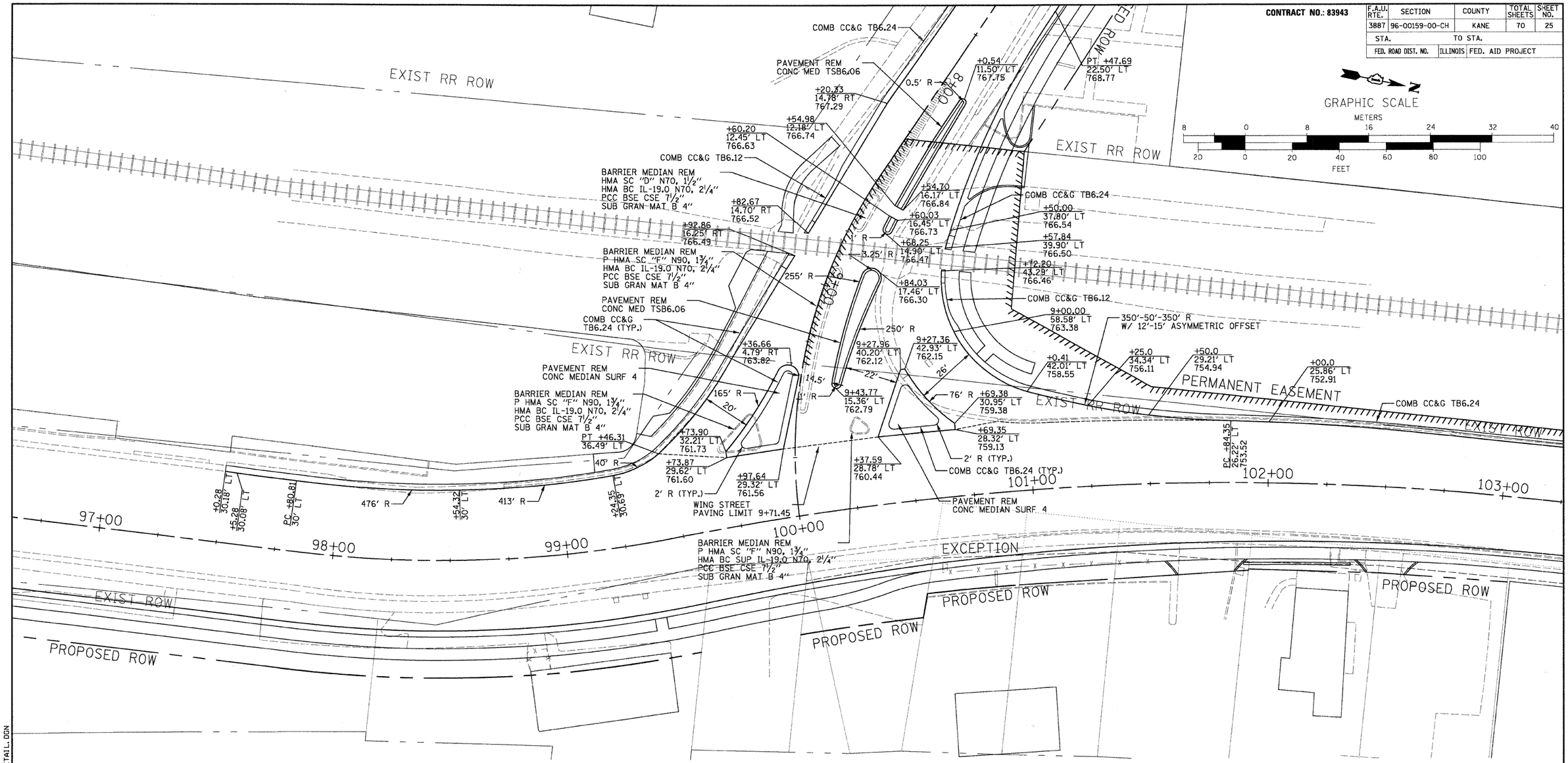
2/12/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE
METERS
8 0 8 16 24 32 40
20 0 20 40 60 80 100
FEET



NOTES:

1. AGGREGATE FILL OF GRADATION CA 7, CA 6, CA 11, CA 13, CA 14, CA 15, OR CA 16 WILL BE PLACED UNDER THE PAVED MEDIAN.
2. ALL SIDEWALKS AND CURBS AT CROSSWALKS SHOULD MEET ADA REQUIREMENTS AND CONFORM TO STANDARD 424001.
3. TRANSITIONING FROM COMB CC&G TB6.24 TO COMB CC&G TB6.12 SHALL BE INCLUDED IN THE COST OF COMB CC&G TB6.12.

RHA&A
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Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

INTERSECTION DETAIL

SCALE: VERT.
HORIZ. 1"=20'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

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2/12/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	26
STA. 89+79.30	TO STA.98+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

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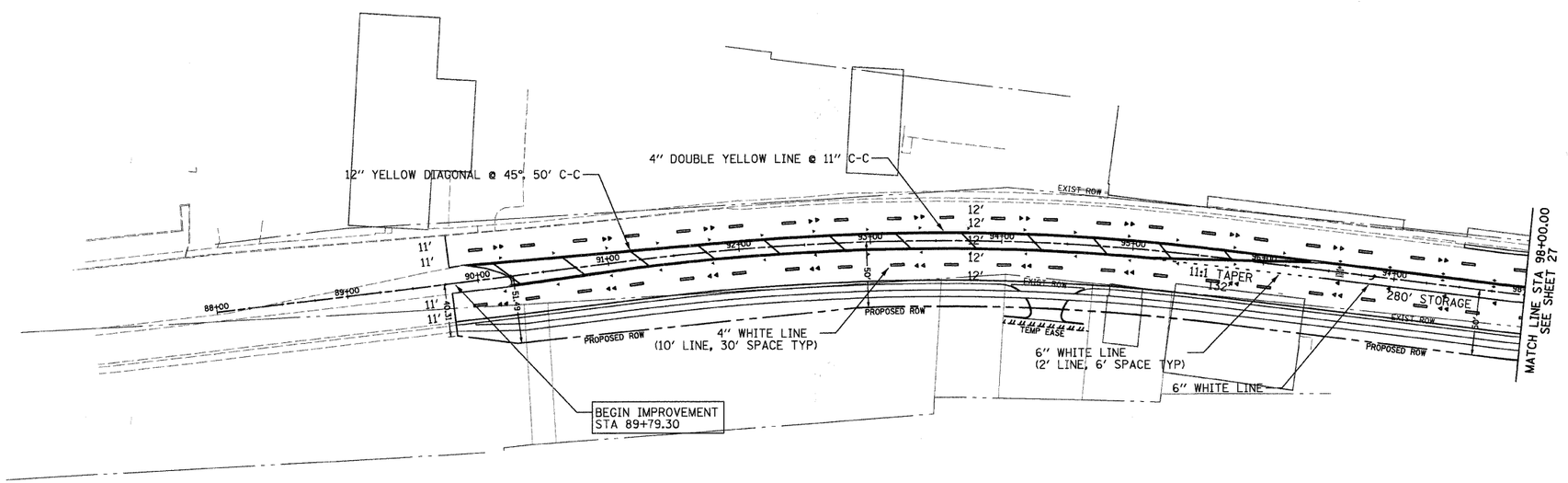

PAVEMENT MARKERS LEGEND

- ◁ ONE-WAY CRYSTAL MARKER
- ◂ ONE-WAY AMBER MARKER
- ◆ TWO-WAY AMBER MARKER

NOTES:

1. ALL PAVEMENT MARKINGS WILL BE THERMOPLASTIC.
2. FOR DETAILS OF RAISED PAVEMENT MARKERS SEE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS STANDARD.
3. LETTERS AND SYMBOLS WILL BE LARGE SIZE.

RHA&A

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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

STRIPING PLAN
STA 89+79.30 TO STA 98+00.00

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901\DESIGN\DGN\26PM01.DGN

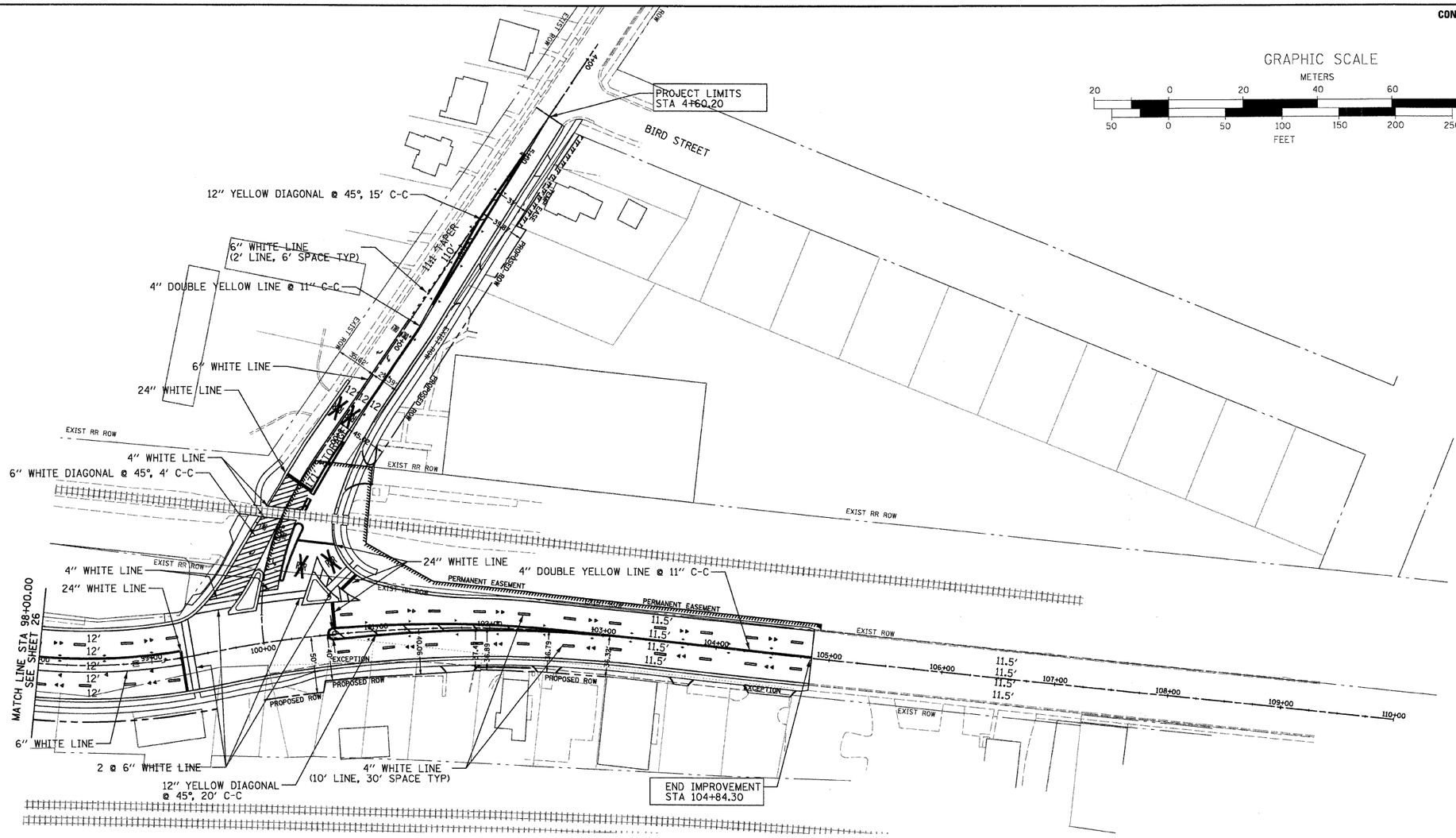
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	27
STA. 98+00.00	TO STA.104+84.30			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



PAVEMENT MARKERS LEGEND

- ◁ ONE-WAY CRYSTAL MARKER
- ◂ ONE-WAY AMBER MARKER
- ◆ TWO-WAY AMBER MARKER

NOTES:

1. ALL PAVEMENT MARKINGS WILL BE THERMOPLASTIC.
2. FOR DETAILS OF RAISED PAVEMENT MARKERS SEE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS STANDARD.
3. LETTERS AND SYMBOLS WILL BE LARGE SIZE.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

STRIPING PLAN
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\27PM02.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	28
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GRAPHIC SCALE

METERS

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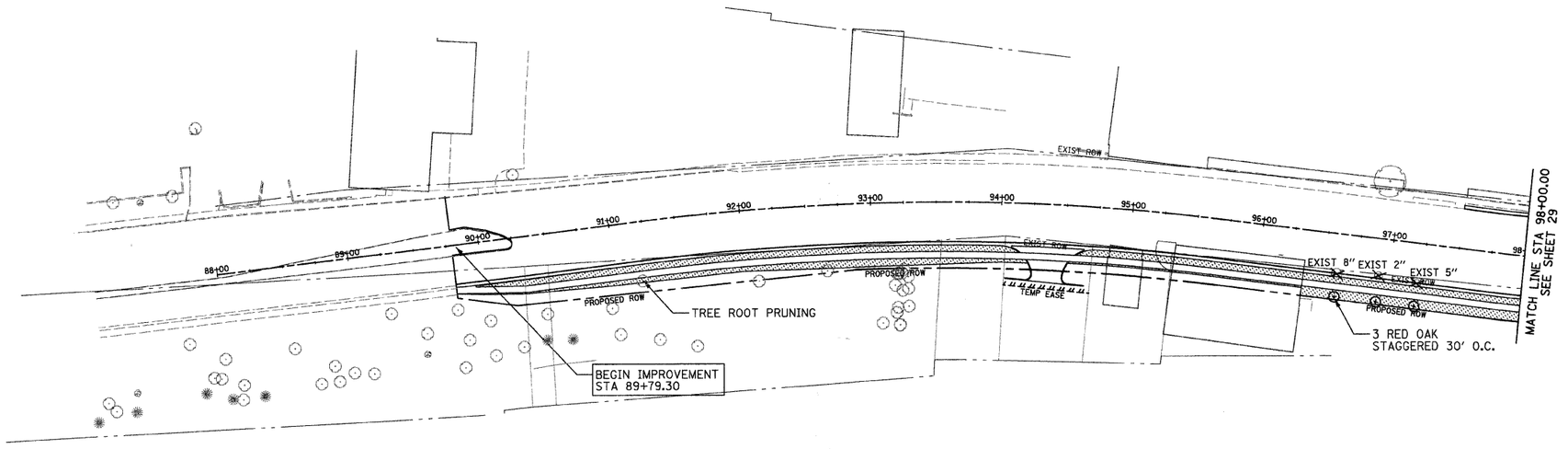
50 0 50 100 150 200 250

FEET



LANDSCAPING LEGEND

- 4" TOPSOIL & SODDING
- TREE REMOVAL
- TREE

SCHEDULE OF TREES			
ITEM	COMMON NAME	UNIT	TOTAL
QUERCUS RUBRA	RED OAK	EACH	3

RHA&A

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

LANDSCAPING PLAN
STA 89+79.30 TO STA 98+00.00

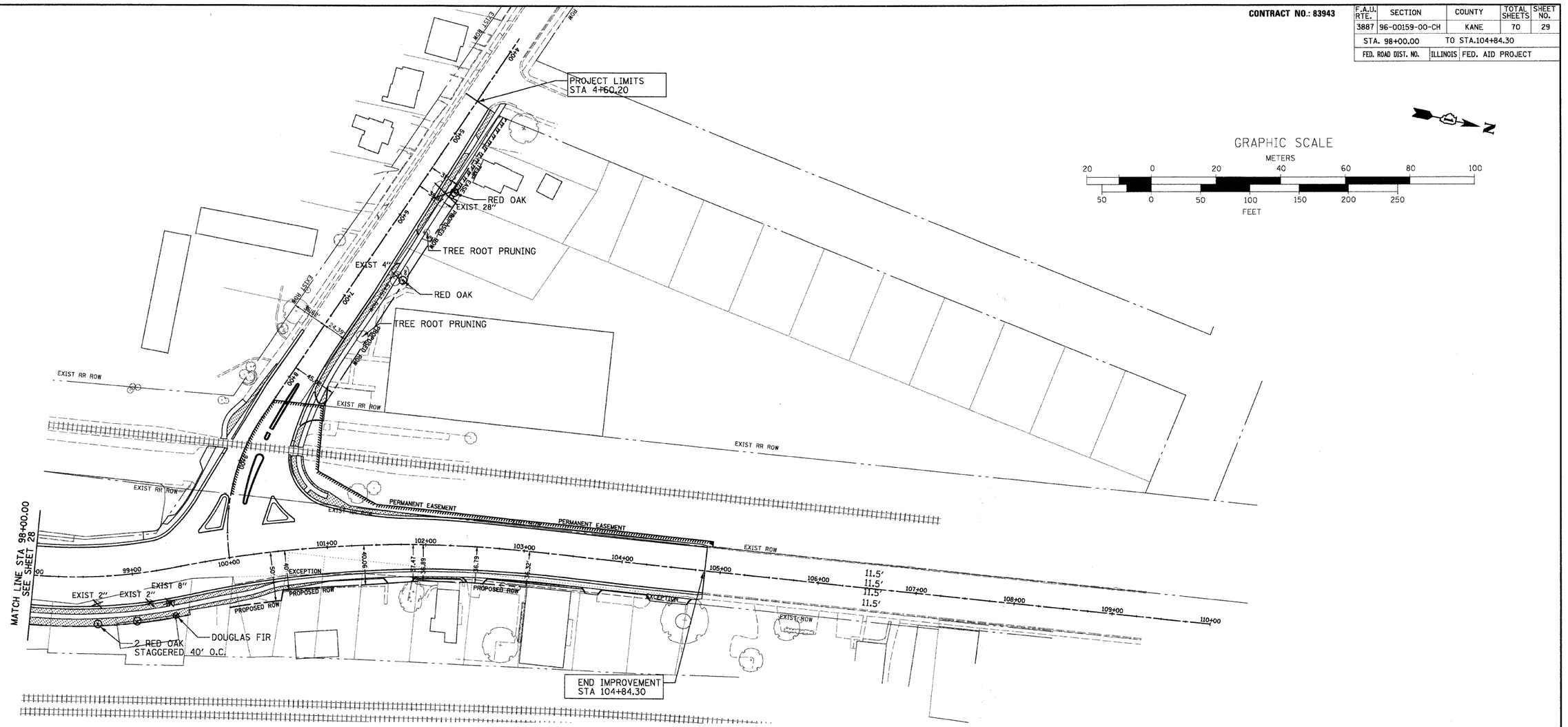
SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\28LAND01.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	29
STA. 98+00.00		TO STA.104+84.30		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250

N

LANDSCAPING LEGEND

- 4" TOPSOIL & SODDING
- TREE REMOVAL
- TREE

SCHEDULE OF TREES			
ITEM	COMMON NAME	UNIT	TOTAL
QUERCUS RUBRA	RED OAK	EACH	4
PSUEDOTSUGA MENZIESII	DOUGLAS FIR	EACH	1

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

LANDSCAPING PLAN
STA 98+00.00 TO STA 104+84.30

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: KMA

2/12/2008 H:\ELGIN\12901.4\DESIGN\DGN\29LAND02.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	30
STA. 97+00	TO STA.103+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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 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"
- 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 TELEPHONE SERVICE TO BE REMOVED "E"

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1.0 EACH CONTROLLER AND CABINET, COMPLETE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE CITY OF ELGIN AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE CITY'S DEPARMENT OF PUBLIC WORKS AS PER THE TRAFFIC SIGNAL SPECIFICATIONS. SEE NOTE AT BOTTOM OF SHEET.

4 EACH SIGNAL HEAD, LED, BRACKET MOUNTED
1 EACH SIGNAL HEAD, LED, MAST-ARM MOUNTED

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

3 EACH SIGNAL HEAD, BRACKET MOUNTED
1 EACH SIGNAL HEAD, MAST-ARM MOUNTED
2 EACH ALUMINUM MAST ARM AND POLE
2 EACH SIGNAL POST
1 EACH SERVICE INSTALLATION

TEMPORARY TRAFFIC SIGNAL LEGEND

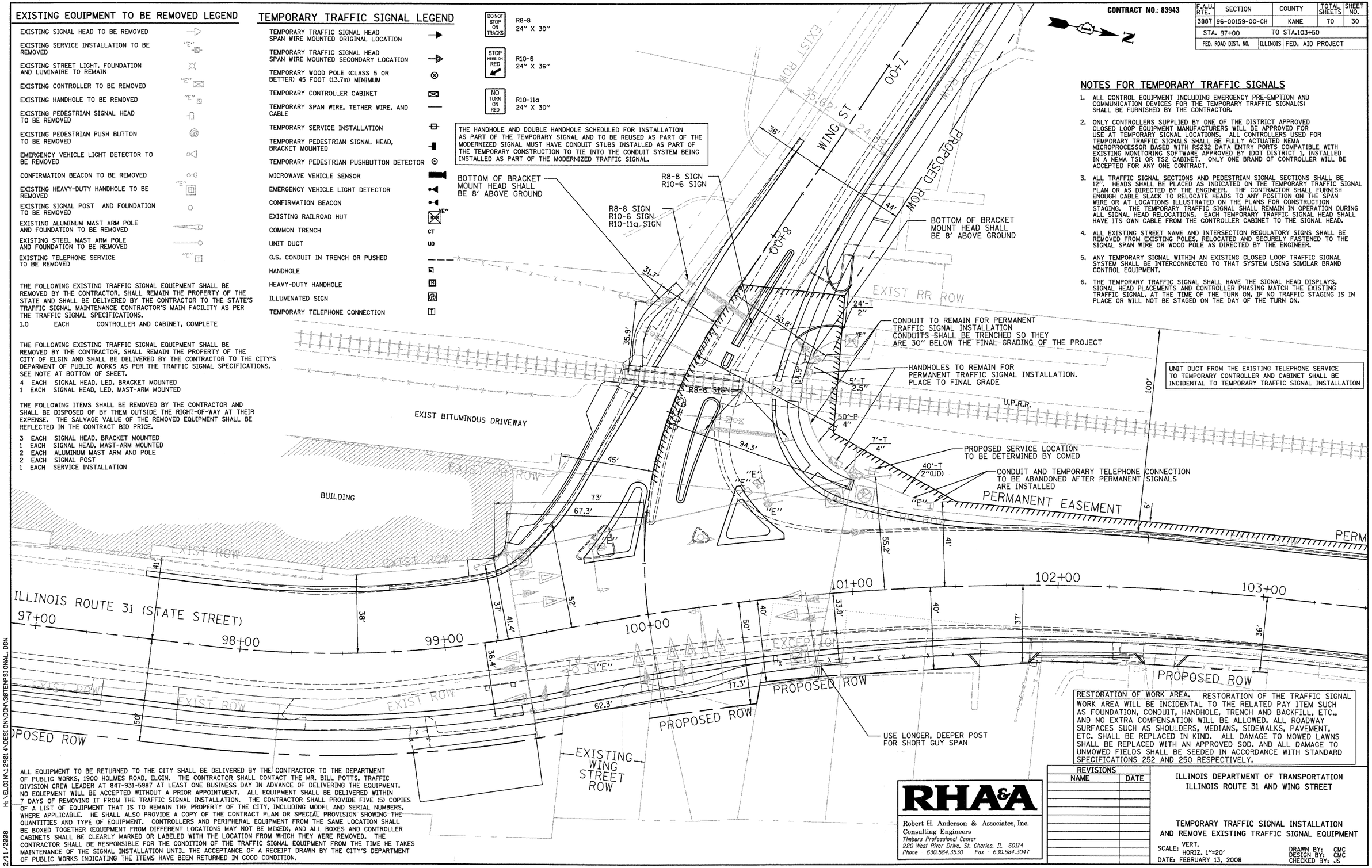
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR
- MICROWAVE VEHICLE SENSOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- EXISTING RAILROAD HUT "E"
- COMMON TRENCH CT
- UNIT DUCT UD
- G.S. CONDUIT IN TRENCH OR PUSHED
- HANDHOLE
- HEAVY-DUTY HANDHOLE HH
- ILLUMINATED SIGN
- TEMPORARY TELEPHONE CONNECTION T

DO NOT STOP ON TRACKS — R8-8, 24" X 30"

STOP HERE ON RED — R10-6, 24" X 36"

NO TURN ON RED — R10-11a, 24" X 30"

THE HANDHOLE AND DOUBLE HANDHOLE SCHEDULED FOR INSTALLATION AS PART OF THE TEMPORARY SIGNAL AND TO BE REUSED AS PART OF THE MODERNIZED SIGNAL MUST HAVE CONDUIT STUBS INSTALLED AS PART OF THE TEMPORARY CONSTRUCTION TO TIE INTO THE CONDUIT SYSTEM BEING INSTALLED AS PART OF THE MODERNIZED TRAFFIC SIGNAL.



UNIT DUCT FROM THE EXISTING TELEPHONE SERVICE TO TEMPORARY CONTROLLER AND CABINET SHALL BE INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL INSTALLATION

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. 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.
4. 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.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

ALL EQUIPMENT TO BE RETURNED TO THE CITY SHALL BE DELIVERED BY THE CONTRACTOR TO THE DEPARTMENT OF PUBLIC WORKS, 1900 HOLMES ROAD, ELGIN. THE CONTRACTOR SHALL CONTACT THE MR. BILL POTTS, TRAFFIC DIVISION CREW LEADER AT 847-931-5987 AT LEAST ONE BUSINESS DAY IN ADVANCE OF DELIVERING THE EQUIPMENT. NO EQUIPMENT WILL BE ACCEPTED WITHOUT A PRIOR APPOINTMENT. ALL EQUIPMENT SHALL BE DELIVERED WITHIN 7 DAYS OF REMOVING IT FROM THE TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL PROVIDE FIVE (5) COPIES OF A LIST OF EQUIPMENT THAT IS TO REMAIN THE PROPERTY OF THE CITY, INCLUDING MODEL AND SERIAL NUMBERS, WHERE APPLICABLE. HE SHALL ALSO PROVIDE A COPY OF THE CONTRACT PLAN OR SPECIAL PROVISION SHOWING THE QUANTITIES AND TYPE OF EQUIPMENT. CONTROLLERS AND PERIPHERAL EQUIPMENT FROM THE SAME LOCATION SHALL BE BOXED TOGETHER (EQUIPMENT FROM DIFFERENT LOCATIONS MAY NOT BE MIXED), AND ALL BOXES AND CONTROLLER CABINETS SHALL BE CLEARLY MARKED OR LABELED WITH THE LOCATION FROM WHICH THEY WERE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF THE TRAFFIC SIGNAL EQUIPMENT FROM THE TIME HE TAKES MAINTENANCE OF THE SIGNAL INSTALLATION UNTIL THE ACCEPTANCE OF A RECEIPT DRAWN BY THE CITY'S DEPARTMENT OF PUBLIC WORKS INDICATING THE ITEMS HAVE BEEN RETURNED IN GOOD CONDITION.

RHA&A
Robert H. Anderson & Associates, Inc.
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220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

SCALE: VERT.
HORIZ. 1"=20'
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

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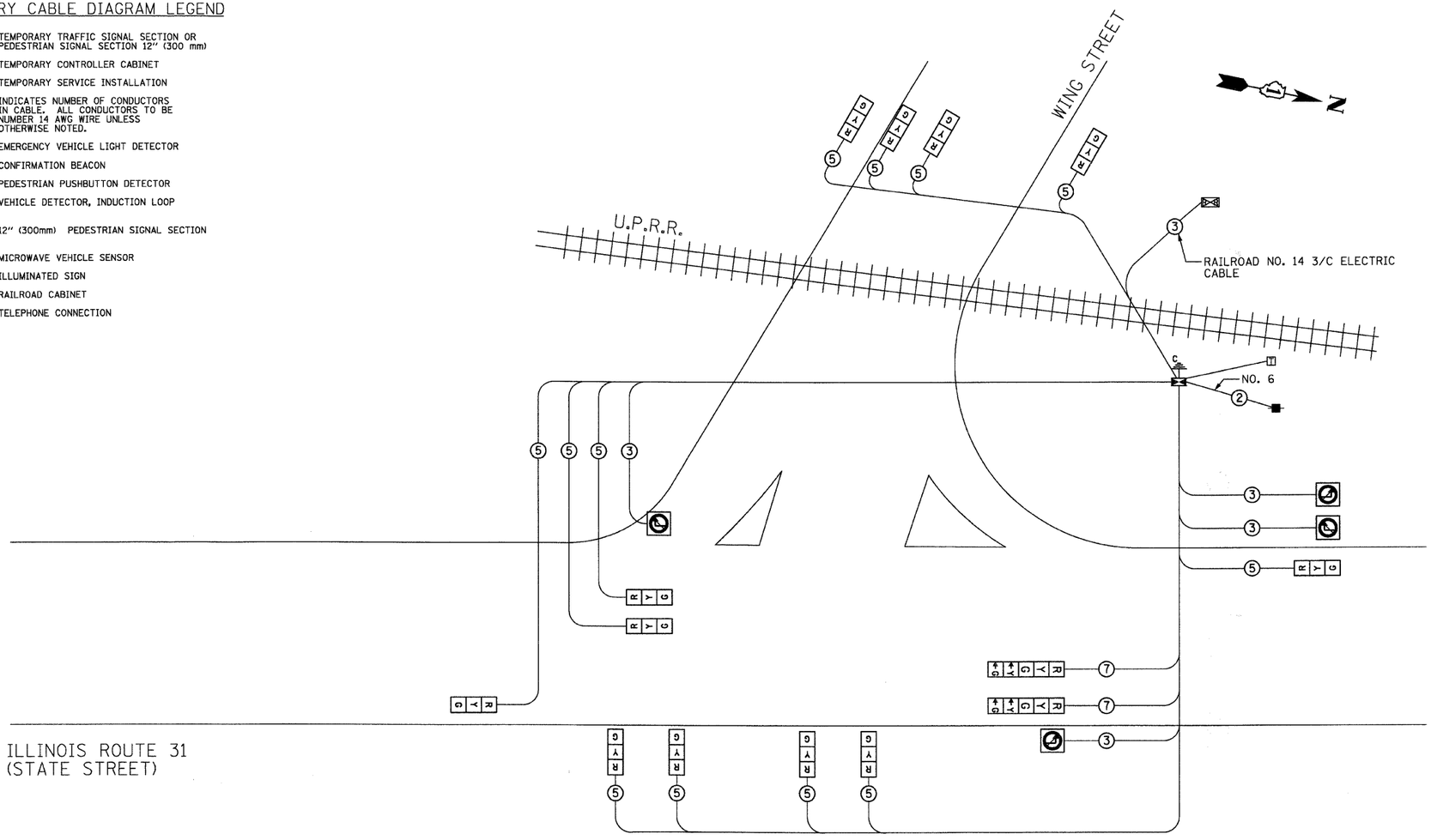
2/11/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	31
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSHBUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- MICROWAVE VEHICLE SENSOR
- ILLUMINATED SIGN
- RAILROAD CABINET
- TELEPHONE CONNECTION



TEMPORARY CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	24
CONDUIT IN TRENCH, 2 1/2 " DIA., GALVANIZED STEEL	FOOT	5
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	7
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	50
HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	76
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	X %OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	945.00
(YELLOW)	14	135	25	0.25	472.50
(GREEN)	14	135	15	0.25	472.50
ARROW	4	135	12	0.10	54.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	4		25	0.05	5.00

ENERGY COSTS TO: TOTAL = 2049.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: KATHY NYSTROM
PHONE: (847) 816-5489
COMPANY: COM. ED.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RHA&A
Robert H. Anderson & Associates, Inc.
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220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

TEMPORARY CABLE PLAN

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

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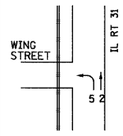
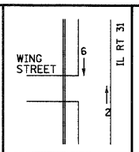
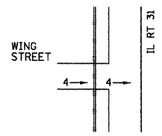
2/11/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	32
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TEMPORARY SEQUENCE OF OPERATION

MOVEMENT (N ↑ ①)												FLASH
PHASE		2+5		2+6			4					
INTERVAL		1	2	3	4A	4B	5	6A	6B	6C	6D	
CHANGE TO			2+6		4			2+5				
ILL. RTE. 31 (STATE STREET) FAR SIGNALS	N/B	G (arrow) G	G (arrow) Y	G	Y	R	R	R	R	R	R	R
ILL. RTE. 31 (STATE STREET) NEAR SIGNAL	N/B	G	G	G	Y	R	R	R	R	R	R	R
ILL. RTE. 31 (STATE STREET) ALL SIGNALS	S/B	R	R	G	Y	R	R	R	R	R	R	R
WING STREET (EAST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	G	G	G	Y	R	R
WING STREET (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	G	Y	R	R	R	R

TEMPORARY RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		3		5		PREEMPTOR NUMBER 2				
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1B	2	1D	2	1F	2	3	4	5		
ILL. RTE. 31 (STATE STREET) FAR SIGNALS	N/B	Y	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 31 (STATE STREET) NEAR SIGNAL	N/B	Y	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 31 (STATE STREET) ALL SIGNALS	S/B	R	R	Y	R	R	R	R	R	R	G	△
WING STREET (EAST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	G	G	G	Y	R	R	△
WING STREET (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	Y	R	R	R	R	R	△
ILL. RTE. 31 INTERNALLY ILLUMINATED NO LEFT TURN SIGNS	N/B	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△
ILL. RTE. 31 INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS	S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△
											HOLD	

NRT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

△ = RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD INTERVAL 5 IS TERMINATED.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

TEMPORARY SEQUENCE OF OPERATION
TEMPORARY RAILROAD PREEMPTION SEQUENCE OF OPERATION

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

2/11/2008 H:\ELGIN\1290141\DESIGN\DGN\32TEMPSEQOP.DGN

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	⊠	⊠
SERVICE INSTALLATION	■	□
SIGNAL HEAD	→	▷
SIGNAL HEAD WITH BACKPLATE	→	▷
SIGNAL HEAD PEDESTRIAN	■	□
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●—	○—
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●—	○—
HANDHOLE	▧	▧
HEAVY DUTY HANDHOLE	▥	▥
DOUBLE HANDHOLE	▨	▨
G.S. CONDUIT IN TRENCH OR PUSHED	———	———
PEDESTRIAN PUSHBUTTON DETECTOR	◉	◉
DETECTOR LOOP	□	⬚
CAST IRON JUNCTION BOX	Ⓘ	Ⓘ "E"
COMMON TRENCH	CT	
UNIT DUCT	UD	
EMERGENCY VEHICLE SYSTEM DETECTOR	◀	◁
CONFIRMATION BEACON	◀	◁
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	→ "P"
MICROWAVE VEHICLE SENSOR	▬	▭
TELEPHONE CONNECTION	T	T
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
CONDUIT SPLICE	—●—	
WOOD POLE	⊗	⊗ "E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	▬	▭ "E"
RAILROAD CONTROL HUT		⊠
UNINTERRUPTABLE POWER SUPPLY (UPS) BATTERY BACK-UP SYSTEM	B	

DO NOT STOP ON TRACKS — R8-8, 24" X 30"

STOP HERE ON RED — R10-6, 24" X 36"

NO TURN ON RED — R10-11a, 24" X 30"

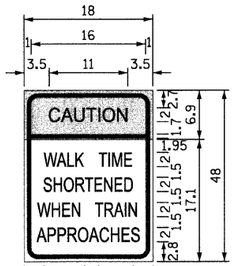
CAUTION / WALK TIME SHORTENED WHEN TRAIN APPROACHES — SPECIAL SIGN, SEE DETAIL ON THIS SHEET, 18" X 24"

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	33
STA. 96+50	TO STA.130+25			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1.5" Radius, 0.6" Border, 0.4" Indent, Black on Yellow; "CAUTION" D

1.5" Radius, 0.6" Border, 0.4" Indent, Black on White; "WALK TIME" C "SHORTENED" C "WHEN TRAIN" C "APPROACHES" C

SPECIAL SIGN LOCATIONS
MOUNTED ABOVE PED PUSH BUTTON

STATION	OFFSET	LOCATED ON
99+28	45' R	MAST ARM POLE
99+42	44' L	MAST ARM POLE
99+94.5	42.5' L	10' SIGNAL POST
100+52	42' L	18' SIGNAL POST
100+89	69' L	14' SIGNAL POST

H:\ELGIN\12901\DESIGN\DGN\33SIGNAL.DGN
2/11/2008

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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

TRAFFIC SIGNAL
MODERNIZATION PLAN

SCALE: VERT.
HORIZ. 1"=20'
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

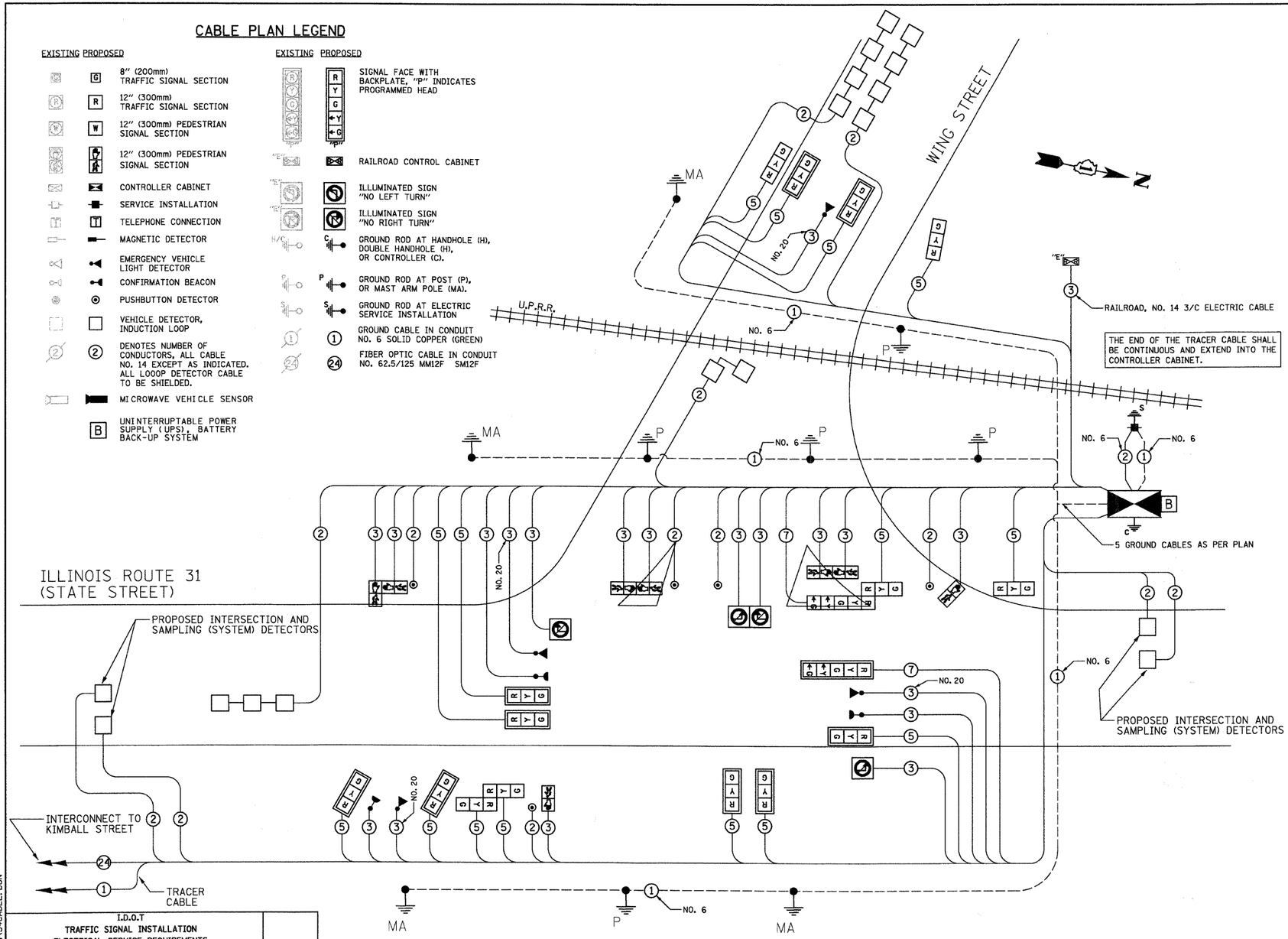
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CABLE PLAN LEGEND

EXISTING	PROPOSED	
	G	8" (200mm) TRAFFIC SIGNAL SECTION
	R	12" (300mm) TRAFFIC SIGNAL SECTION
	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
(2)	(2)	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOOP DETECTOR CABLE TO BE SHIELDED.
		MICROWAVE VEHICLE SENSOR
	B	UNINTERRUPTABLE POWER SUPPLY (UPS), BATTERY BACK-UP SYSTEM

EXISTING	PROPOSED	
	R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	64
SIGN PANEL - TYPE 2	SQ FT	25
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	576
CONDUIT IN TRENCH, 2 1/2 " DIA., GALVANIZED STEEL	FOOT	28
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	118
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	12
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	535
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	898
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	900
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3500
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3200
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	400
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2700
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	40
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 11 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	22
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	541
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
ILLUMINATED SIGN, LED	EACH	4
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1000
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	1100
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	120
UNINTERRUPTABLE POWER SUPPLY	EACH	1
RAILROAD LIABILITY INSURANCE	L SUM	1

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	135	17	0.50	144.50
(YELLOW)	17	135	25	0.25	106.25
(GREEN)	17	135	15	0.25	63.75
ARROW	4	135	12	0.10	4.80
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	4		25	0.05	5.00

ENERGY COSTS TO: TOTAL = 624.30

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: KATHY NYSTROM
PHONE: (847) 816-5489
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	10 (3.0)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	11 (3.3)	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)

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

CABLE PLAN AND SCHEDULE OF QUANTITIES

SCALE: VERT.
HORIZ. 1"=20'
DATE: FEBRUARY 13, 2008

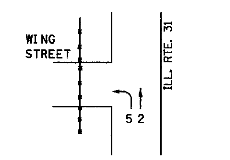
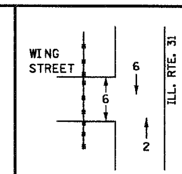
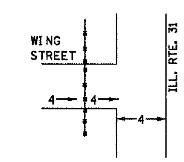
DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

H:\ELGIN\2901A\DESIGN\DGN\34CABLE.DGN
2/11/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	35
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PROPOSED SEQUENCE OF OPERATION

MOVEMENT (N)															FLASH
PHASE	2+5				2+6				4						
INTERVAL	1	2	3A	3B	4	5	6A	6B	7	8	9A	9B	9C	9D	
CHANGE TO		2+6	4		*	**	4		*	**	2+5, 2+6				
ILL. RTE. 31 (STATE STREET) FAR LEFT & END MAST ARM SIGNALS N/B	G G ←	G Y ←	Y	R	G	G	Y	R	R	R	R	R	R	R	R
ILL. RTE. 31 (STATE STREET) NEAR RIGHT & FAR RIGHT MAST ARM SIGNALS N/B	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R
ILL. RTE. 31 (STATE STREET) ALL SIGNALS S/B	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R
WING STREET (EAST OF TRACKS) ALL SIGNALS E/B	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R
WING STREET (WEST OF TRACKS) ALL SIGNALS E/B	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R
PED. SIGNALS X-ING ILL. RTE. 31 (STATE ST.) ON SOUTH SIDE OF WING STREET	H	H	H	H	H	H	H	H	P	FH	H	H	H	H	DARK
PED. SIGNALS X-ING WING STREET ON WEST SIDE OF ILL. RTE. 31 (STATE ST.)	H	H	H	H	P	FH	H	H	H	H	H	H	H	H	

PHASE 2+6 SHALL BE PLACED ON RECALL

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION

** FLASHING "✋" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RAILROAD PREEMPTION SEQUENCE OF OPERATION

							PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		4		7										
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER							2		3						
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	3	4	5		
ILL. RTE. 31 (STATE STREET) FAR LEFT & END MAST ARM SIGNALS N/B	Y	R	Y	R	R	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 31 (STATE STREET) NEAR RIGHT & RIGHT MAST ARM SIGNALS N/B	Y	R	Y	R	R	R	Y	R	R	R	R	R	R	G	△
ILL. RTE. 31 (STATE STREET) ALL SIGNALS S/B	R	R	Y	R	R	R	Y	R	R	R	R	R	R	G	△
WING STREET (EAST OF TRACKS) ALL SIGNALS E/B	R	R	R	R	G	G	R	R	G	G	G	Y	R	R	△
WING STREET (WEST OF TRACKS) ALL SIGNALS E/B	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	△
PED. SIGNALS X-ING ILL. RTE. 31 (STATE ST.) ON SOUTH SIDE OF WING STREET	H	H	H	H	FH	H	H	H	H	H	H	H	H	H	△
PED. SIGNALS X-ING WING STREET ON WEST SIDE OF ILL. RTE. 31 (STATE ST.)	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	△
ILL. RTE. 31 INTERNALLY ILLUMINATED NO LEFT TURN SIGNS N/B	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	NLT	△
ILL. RTE. 31 INTERNALLY ILLUMINATED NO RIGHT TURN SIGNS S/B	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	△
														HOLD	

NRT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

△ = RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD INTERVAL 5 IS TERMINATED.

RHA&A
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220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

PROPOSED SEQUENCE OF OPERATION
RAILROAD PREEMPTION SEQUENCE OF OPERATION

SCALE: VERT. HORIZ. NONE
DATE: FEBRUARY 13, 2008
DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

2/11/2008 H:\ELGIN\12901 4\DESIGN\DGN\35SEQOP.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	36
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

														PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	CLEAR TO NORMAL SEQUENCE
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	1		4	4			7				7			
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	2	3	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER		2	1C	3	2	1F	1G	3	1J	1K	1L	1M	2	3			◊
ILL. RTE. 31 (STATE STREET) FAR LEFT & END MAST ARM SIGNALS	N/B	G/Y	Y	R	G	G	Y	R	R	R	R	R	R	R	G	R	◊
ILL. RTE. 31 (STATE STREET) NEAR RIGHT & FAR RIGHT MAST ARM SIGNALS	N/B	G	Y	R	G	G	Y	R	R	R	R	R	R	R	G	R	◊
ILL. RTE. 31 (STATE STREET) ALL SIGNALS	S/B	R	R	R	G	G	Y	R	R	R	R	R	R	R	G	R	◊
WING STREET (EAST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	R	R	G	G	G	Y	R	G	R	G	◊
WING STREET (WEST OF TRACKS) ALL SIGNALS	E/B	R	R	R	R	R	R	R	G	Y	R	R	R	G	R	G	◊
PED. SIGNALS X-ING ILL. RTE. 31 (STATE ST.) ON SOUTH SIDE OF WING STREET		H	H	H	H	H	H	H	FH	H	H	H	H	FH	H	H	◊
PED. SIGNALS X-ING WING STREET ON WEST SIDE OF ILL. RTE. 31 (STATE ST.)		H	H	H	FH	FH	H	H	H	H	H	H	H	H	H	H	◊

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

◊ = EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2 OR 3 IS TERMINATED.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

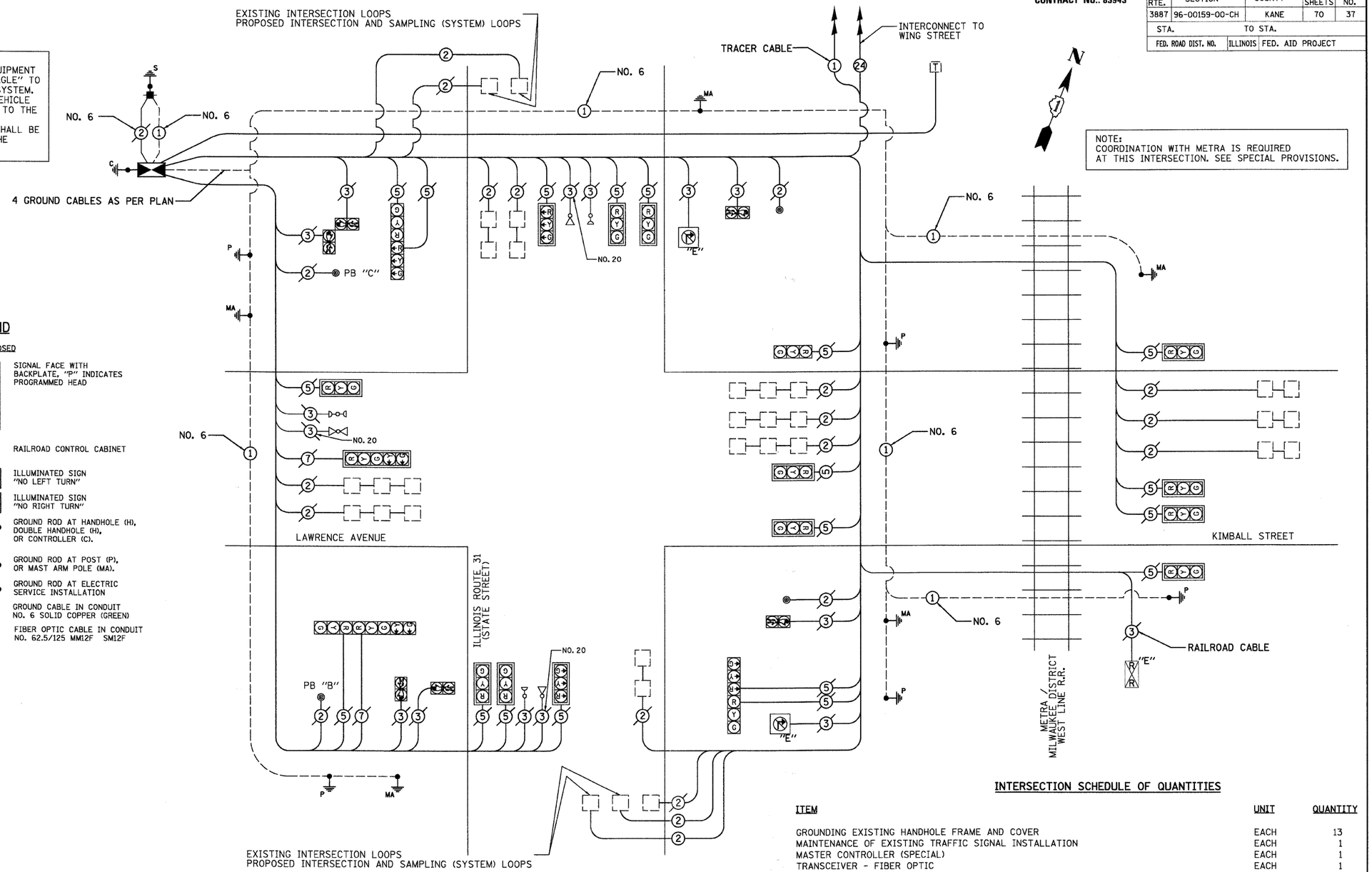
DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

2/11/2008 H:\ELGIN\12901A\DESIGN\DGN\36EVPSEQOP.DGN

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	37
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROLLER CABINET NOTES:
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.
2. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO THE NEW CONTROLLER CABINET.
3. THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



NOTE:
COORDINATION WITH METRA IS REQUIRED AT THIS INTERSECTION. SEE SPECIAL PROVISIONS.

CABLE PLAN LEGEND

EXISTING	PROPOSED	
	G	8" (200mm) TRAFFIC SIGNAL SECTION
	R	12" (300mm) TRAFFIC SIGNAL SECTION
	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOOP DETECTOR CABLE TO BE SHIELDED.
		MICROWAVE VEHICLE SENSOR

EXISTING	PROPOSED	
	R Y G Y G	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET, COMPLETE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY 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 SERVICE INSTALLATION

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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	21	135		0.50	1417.50
(YELLOW)	21	135		0.25	708.75
(GREEN)	21	135		0.25	708.75
ARROW (G, Y)	4	135		0.10	54.00
PED. SIGNAL	6	90		1.00	540.00
CONTROLLER	2	100		1.00	200.00
ILLUM. SIGN	2		25	0.05	2.50
				TOTAL =	3631.50

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: KATHY NYSTROM
PHONE: (847) 816-5489
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
		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)
36" (900mm)	15 (4.6)	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)

INTERSECTION SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	13
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1378
INDUCTIVE LOOP DETECTOR	EACH	16
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	794
RAILROAD LIABILITY INSURANCE	L SUM	1

CABLE PLAN

PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 6 AND 4
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

ILL. RTE. 31 AT KIMBALL STREET/LAWRENCE AVENUE
CABLE PLAN

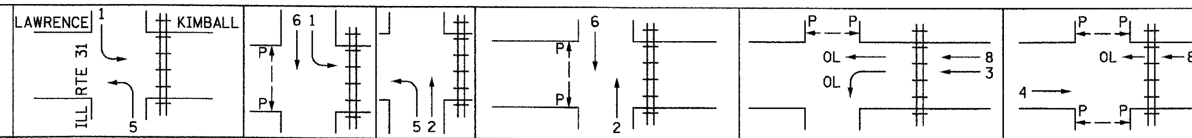
SCALE: VERT.
HORIZ.
DATE: FEBRUARY 13, 2008
DRAWN BY: KLJ
DESIGN BY: CMC
CHECKED BY: JS

H:\ELGIN\29014\DESIGN\DGN\37KIMBALLCABLE.DGN
2/11/2008

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	38
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SEQUENCE OF OPERATION

MOVEMENT																																					FLASH
PHASE	1 + 5							1 + 6				2 + 5			2 + 6								3 + 8								4 + 8						
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6	7A	7B	8	9A	9B	10	11	12A	12B	13A	13B	14A	14B	15	16	17A	17B	17C	17D	18A	18B	19	20	21A	21B	21C	21D	
CHANGE TO	/	1 + 6		2 + 5		2 + 6		⊖ /	⊖ /	2 + 6		/	2 + 6		/	/	1+5,3+8 4+8		1 + 6		2 + 5		/	/	1+5,1+6 2+5,2+6				4 + 8		/	/	1+5,1+6 2+5,2+6				
IL 31 NB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IL 31 NB END MAST ARM AND FAR LEFT SIGNALS	←G	←Y	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
IL 31 SB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	G	G	G	G	R	R	R	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IL 31 SB END MAST ARM AND FAR LEFT SIGNALS	←G	←G	←G	←Y	←R	←Y	←R	←G	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R
KIMBALL ST. AND WB NEAR SIDE SIGNALS ON CANTILEVER AND NEAR SIDE FAR LEFT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	G	G	G	G	Y	R	R	R	R
KIMBALL ST. WB FAR RIGHT MAST ARM	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	G	G	G	G	G	G	Y	R	R
KIMBALL ST. WB END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	G ←G	G ←G	G ←G	Y	R	G ←Y	G	G	G	G	G	Y	R	R
LAWRENCE AVE. EB CENTER AND END MAST ARM FAR LEFT AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R
PEDESTRIAN SIGNALS CROSSING NORTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	*P	** FH	H	H	H	H	H	H	*P	** FH	H	H	H	H	D
PEDESTRIAN SIGNALS CROSSING SOUTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	*P	** FH	H	H	H	H	A R
PEDESTRIAN SIGNALS CROSSING LAWRENCE AVENUE	H	H	H	H	H	H	H	*P	** FH	H	H	H	H	H	*P	** FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	K

* TO APPEAR ONLY UPON PUSHBUTTON ACTUATION

** FLASHING "✋" IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE

PHASES 2+6 SHALL BE PLACED ON RECALL

⊖ THIS "🚶" OR FLASHING "✋" INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "🚶" OR FLASHING "✋" INTERVALS. "🚶" AND FLASHING "✋" TIMINGS TO BE SET ONLY ON PHASES WHERE "🚶" AND FLASHING "✋" ARE INDICATED IN THE SEQUENCE OF OPERATION.

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

RAILROAD PREEMPTION SEQUENCE OF OPERATION

													PREEMPTOR NUMBER 3		PREEMPTOR NUMBER 4		PREEMPTOR NUMBER 5		PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		5		8		10		15		19												
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER													2		3		4						
RAILROAD PREEMPTION SEQUENCE OF OPERATION NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	1T	2	3	4	5		
IL 31 NB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	R	R	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	G	△
IL 31 NB END MAST ARM AND FAR LEFT SIGNALS	←Y	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	△
IL 31 SB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	△
IL 31 SB END MAST ARM AND FAR LEFT SIGNALS	←Y	←R	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←Y	←R	←R	←R	←R	←R	←R	←R	△
KIMBALL ST. AND WB NEAR SIDE SIGNALS ON CANTILEVER AND NEAR SIDE FAR LEFT SIGNAL	R	R	R	R	R	R	R	R	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	△
KIMBALL ST. WB FAR RIGHT MAST ARM	R	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	G	G	G	Y	R	R	△
KIMBALL ST. WB END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	G ←G	G ←G	G	G	R	R	R	R	G	G	G ←G	Y	R	R	△
LAWRENCE AVE. EB CENTER AND END MAST ARM FAR LEFT AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	Y	R	R	R	R	R	△
PEDESTRIAN SIGNALS CROSSING NORTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	FH	H	FH	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING SOUTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	△
PEDESTRIAN SIGNALS CROSSING LAWRENCE AVENUE	H	H	FH	H	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	△
IL RTE 31 NB INTERNALLY ILLUMINATED NRT SIGNS	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	NRT	
																						HOLD	

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

NRT = "NO RIGHT TURN" OR Ⓡ

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

																																			PREEMPTOR NUMBER 3	PREEMPTOR NUMBER 4	PREEMPTOR NUMBER 5	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	1		1		1		5			5	8	8		10			10			10			15					15		19					19				CLEAR TO NORMAL SEQUENCE
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	1CC	1DD	1EE	1FF	1GG	1HH	1JJ	1KK	1LL	2	3	4	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	3	1F	4	1H	1J	2 OR 4	3	2	1N	3 OR 4	1Q	1R	2	1T	1U	3	1W	1X	4	1Z	1AA	1BB	1CC	2 OR 3	1EE	4	1GG	1HH	1JJ	1KK	2 OR 3	4				◊
IL 31 NB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	G	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	R	◊
IL 31 NB END MAST ARM AND FAR LEFT SIGNALS	←G	←G	←Y	←R	←Y	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←R	←R	◊
IL 31 SB CENTER AND FAR RIGHT MAST ARM, NEAR RIGHT SIGNALS	R	R	R	R	R	R	G	Y	R	G	R	R	R	G	Y	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◊
IL 31 SB END MAST ARM AND FAR LEFT SIGNALS	←Y	←R	←G	←G	←Y	←R	←G	←Y	←R	←G	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←R	◊
KIMBALL ST. AND WB NEAR SIDE SIGNALS ON CANTILEVER AND NEAR SIDE FAR LEFT SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	G	G	G	Y	R	R	R	G	R	R	G	◊
KIMBALL ST. WB FAR RIGHT MAST ARM	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	G	G	G	G	G	Y	R	G	R	R	G	◊
KIMBALL ST. WB END MAST ARM AND FAR LEFT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G ←G	G ←G	G ←G	Y	R	G ←G	G ←Y	G	G	G	Y	R	G	R	R	G	◊
LAWRENCE AVE. EB CENTER AND END MAST ARM FAR LEFT AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	G	R	R	G	◊
PEDESTRIAN SIGNALS CROSSING NORTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	H	H	FH	H	FH	H	H	H	H	FH	H	H	H	◊
PEDESTRIAN SIGNALS CROSSING SOUTH LEG OF IL RTE 31	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	FH	H	H	H	H	FH	H	H	H	◊
PEDESTRIAN SIGNALS CROSSING LAWRENCE AVENUE	H	H	H	H	H	H	FH	H	H	FH	H	H	H	FH	H	H	FH	H	H	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	◊

◊ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3 OR 4 IS TERMINATED.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET
ILL. RTE. 31 AT KIMBALL STREET/LAWRENCE AVENUE
SEQUENCE OF OPERATIONS, EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS, RAILROAD PREEMPTION SEQUENCE OF OPERATIONS

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

H:\ELGIN\129014\DESIGN\DGN\38KIMBALLSEQOP.DGN
2/11/2008

CONTRACT NO.: 83943

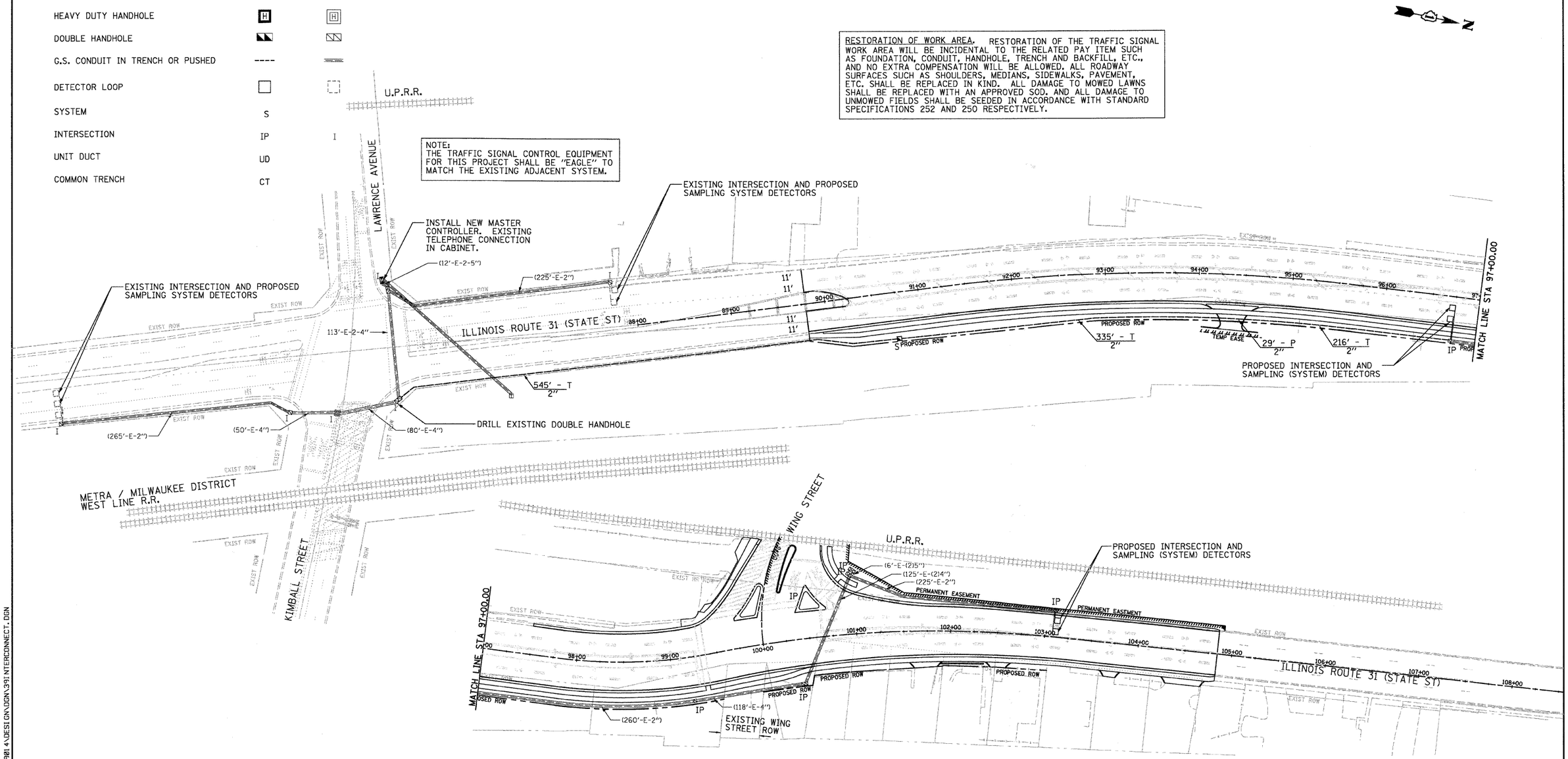
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	39
STA. 89+79.30		TO STA.98+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	▬	▭
HANDHOLE	◩	◪
HEAVY DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◩◪	◪◩
G.S. CONDUIT IN TRENCH OR PUSHED	----	----
DETECTOR LOOP	□	⬚
SYSTEM	S	
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



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Robert H. Anderson & Associates, Inc.
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Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

ILL. RTE. 31
KIMBALL ST. / LAWRENCE AVE TO WING ST.
INTERCONNECT PLAN

SCALE: VERT.
HORIZ. 1"=50'
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

2/11/2008 H:\ELGIN\12901.4\DESIGN\DGN\391INTERCONNECT.DGN

CONTRACT NO.: 83943

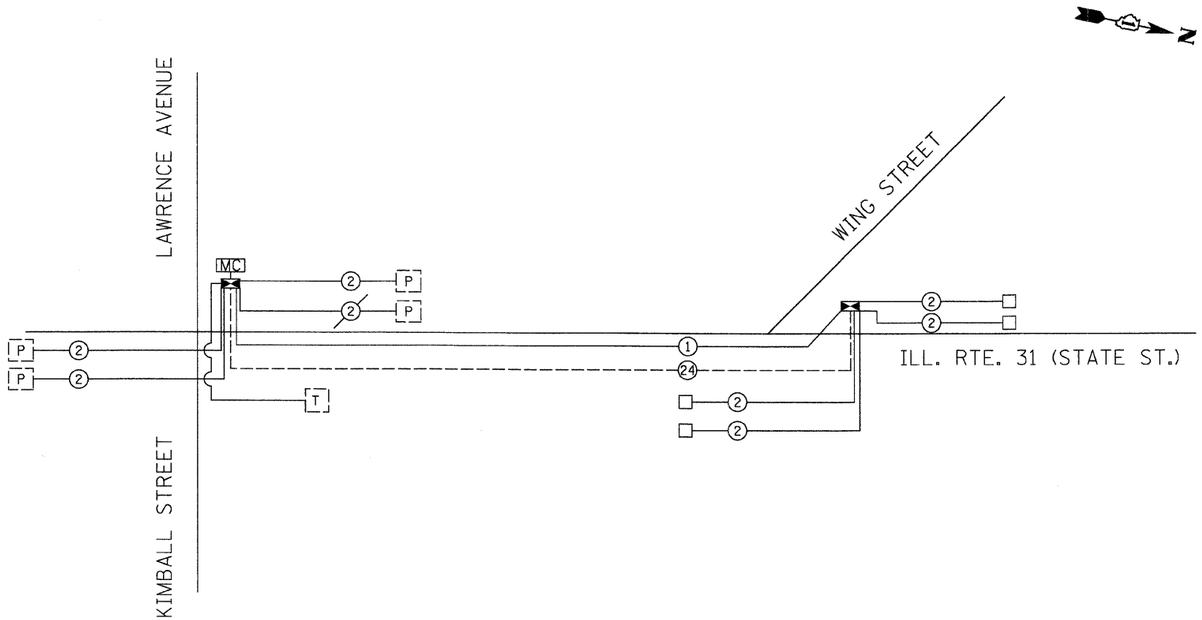
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INTERCONNECT SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1096
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	29
HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1096
DRILL EXISTING HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1840
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1866

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA WILL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



INTERCONNECT SCHEMATIC LEGEND

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

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Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

INTERCONNECT SCHEMATIC

ILLINOIS ROUTE 31 (STATE STREET)
KIMBALL STREET/LAWRENCE AVENUE TO WING STREET

SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: CMC
DESIGN BY: CMC
CHECKED BY: JS

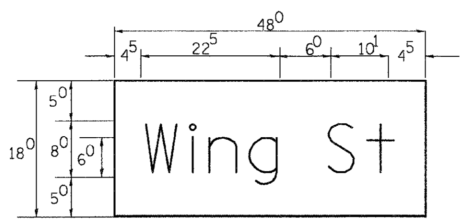
2/11/2008 H:\ELGIN\12901.4\DESIGN\DGN\401INTSCHEMATIC.DGN

*REF-
*REF-
*REF-

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	41
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



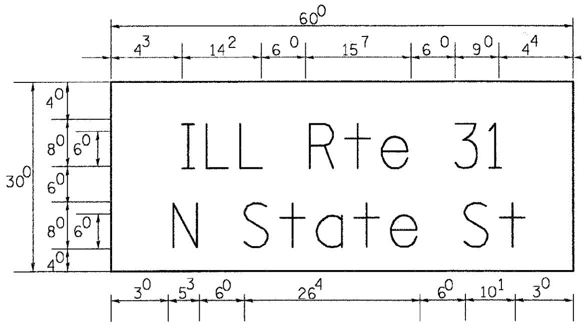
___Sq. M. each

6.0 Sq. Ft. each

2 Required

Design Series D

PANEL SIGN DESIGN TYPE 2



___Sq. M. each

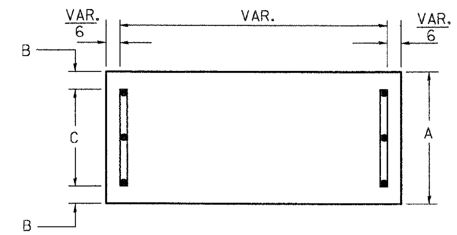
12.50 Sq. Ft. each

2 Required

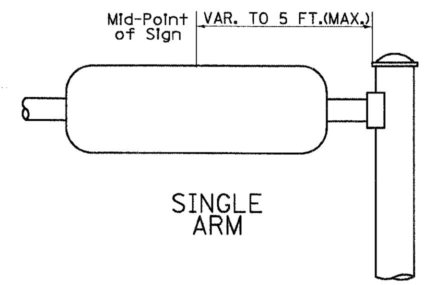
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

SUPPORTING CHANNELS

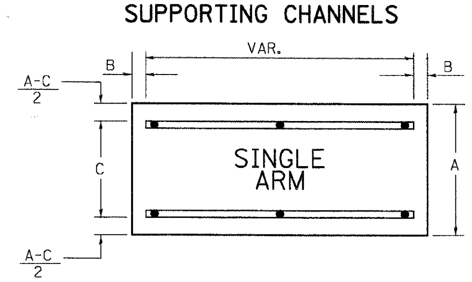


A	B	C
18″	2″	14″

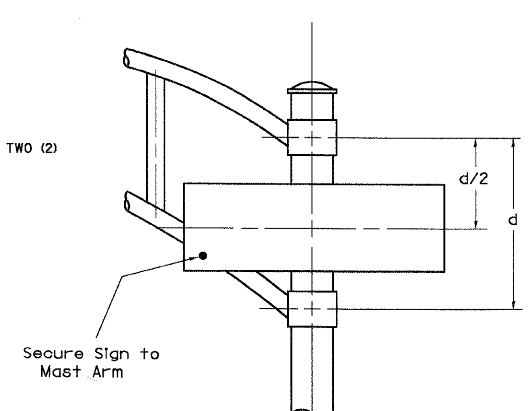


SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18″	2″	12″
30″	2″	22″



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM

Shall be used. See Note #5.

GENERAL NOTES

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

   PARTS LISTING:

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

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

EXAMPLE, 2③ — DENOTES $2\frac{3}{8}$″

Upper Case To Lower Case

Spacing Chart 8-6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^2	1^4	1^4	1^5	1^2	1^4	0^6	1^0	1^1	1^4	0^6	1^0	1^1	1^2	1^2	1^4
B	1^4	1^5	2^0	2^1	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4	1^2	1^4	1^6	1^7
C E G	1^4	1^5	2^0	2^1	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
D O Q R	1^4	1^5	2^0	2^1	1^4	1^5	0^6	1^0	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5
F	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^6	1^0	0^6	1^0	0^6	1^0	1^1	1^2
H I M N	2^0	2^1	2^2	2^4	2^0	2^1	1^4	1^5	1^6	1^7	1^6	1^7	2^0	2^1	2^0	2^1
J U	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1
K L	1^1	1^2	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
P	1^2	1^4	1^4	1^5	1^2	1^4	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
S	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
T	1^1	1^2	1^6	1^7	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
V	0^6	1^0	1^4	1^5	1^1	1^2	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
Y	0^5	0^6	1^4	1^5	0^6	1^0	0^5	0^6	0^5	0^7	0^5	0^6	0^6	1^0	1^1	1^2
Z	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7	1^6	1^7	2^0	2^1

Lower Case To Lower Case

Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER: a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^6	1^7	2^2	2^4	1^6	1^7	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^6	1^7
b f k o p s	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
c e	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^2	1^4	1^2	1^4	1^2	1^4	1^2	1^4
r	0^6	1^0	1^2	1^4	0^6	1^0	0^3	0^3	0^5	0^6	0^5	0^6	0^6	1^0	0^6	1^0
t z	1^2	1^4	1^6	1^7	1^2	1^4	0^6	1^0	1^1	1^2	1^1	1^2	1^2	1^4	1^2	1^4
v y	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	0^6	1^0	0^6	1^0	1^1	1^2	1^1	1^2
w	1^1	1^2	1^4	1^5	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4
x	1^2	1^4	1^6	1^7	1^1	1^2	0^5	0^6	1^1	1^2	1^1	1^2	1^1	1^2	1^2	1^4

Number To Number

Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER: 0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^6	1^7
1	2^0	2^1	2^0	2^1	2^0	2^1	1^6	1^7	1^4	1^5	2^0	2^1	2^0	2^1	1^4	1^5	2^0	2^1	2^0	2^1
2 3 4	1^4	1^5	1^4	1^5	1^4	1^5	1^2	1^4	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^6	1^7	1^4	1^5
5	1^4	1^5	1^4	1^5	1^4	1^5	1^1	1^2	1^1	1^2	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
6	1^6	1^7	1^4	1^5	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^4	1^5	1^1	1^2	1^4	1^5	1^4	1^5
7	1^2	1^4	1^2	1^4	1^4	1^5	1^2	1^5	0^5	0^6	1^2	1^4	1^4	1^5	1^1	1^2	1^4	1^5	1^2	1^4
8	1^6	1^7	1^6	1^7	1^4	1^5	1^2	1^5	1^2	1^4	1^4	1^5	1^6	1^7	1^2	1^4	1^6	1^7	1^4	1^5

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	6 INCH UPPER CASE LETTERS SERIES D	8 INCH UPPER CASE LETTERS SERIES C	8 INCH UPPER CASE LETTERS SERIES D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	6 INCH LOWER CASE LETTERS SERIES D
A	3^6	5^0	5^0	6^5	a	3^5	4^2
B	3^2	4^0	4^3	5^3	b	3^5	4^2
C	3^2	4^0	4^3	5^3	c	3^5	4^1
D	3^2	4^0	4^3	5^3	d	3^5	4^2
E	3^0	3^5	4^0	4^7	e	3^5	4^2
F	3^0	3^5	4^0	4^7	f	2^3	2^6
G	3^2	4^0	4^3	5^3	g	3^5	4^2
H	3^2	4^0	4^3	5^3	h	3^5	4^2
I	0^7	0^7	1^1	1^2	i	1^1	1^1
J	3^0	3^6	4^0	5^0	j	2^0	2^2
K	3^2	4^1	4^3	5^4	k	3^5	4^2
L	3^0	3^5	4^0	4^7	l	1^1	1^1
M	3^7	4^5	5^1	6^1	m	6^0	7^0
N	3^2	4^0	4^3	5^3	n	3^5	4^2
O	3^4	4^2	4^5	5^5	o	3^6	4^3
P	3^2	4^0	4^3	5^3	p	3^5	4^2
Q	3^4	4^2	4^5	5^5	q	3^5	4^2
R	3^2	4^0	4^3	5^3	r	2^6	3^2
S	3^2	4^0	4^3	5^3	s	3^6	4^2
T	3^0	3^5	4^0	4^7	t	2^7	3^2
U	3^2	4^0	4^3	5^3	u	3^5	4^2
V	3^5	4^4	4^7	6^0	v	4^2	4^7
W	4^4	5^2	6^0	7^0	w	5^5	6^4
X	3^4	4^0	4^5	5^3	x	4^4	5^1
Y	3^6	5^0	5^0	6^6	y	4^6	5^3
Z	3^2	4^0	4^3	5^3	z	3^6	4^3

NUMBER	6 INCH SERIES C	6 INCH SERIES D	8 INCH SERIES C	8 INCH SERIES D
1	1^2	1^4	1^5	2^0
2	3^2	4^0	4^3	5^3
3	3^2	4^0	4^3	5^3
4	3^5	4^3	4^7	5^7
5	3^2	4^0	4^3	5^3
6	3^2	4^0	4^3	5^3
7	3^2	4^0	4^3	5^3
8	3^2	4^0	4^3	5^3
9	3^2	4^0	4^3	5^3
0	3^4	4^2	4^5	5^5

REVISIONS

NAME	DATE
D.A.Z./D.A.G.	11/90
	6/98
CADD	10/00

Illinois Department of Transportation
DISTRICT 1

MAST ARM MOUNTED STREET NAME SIGNS

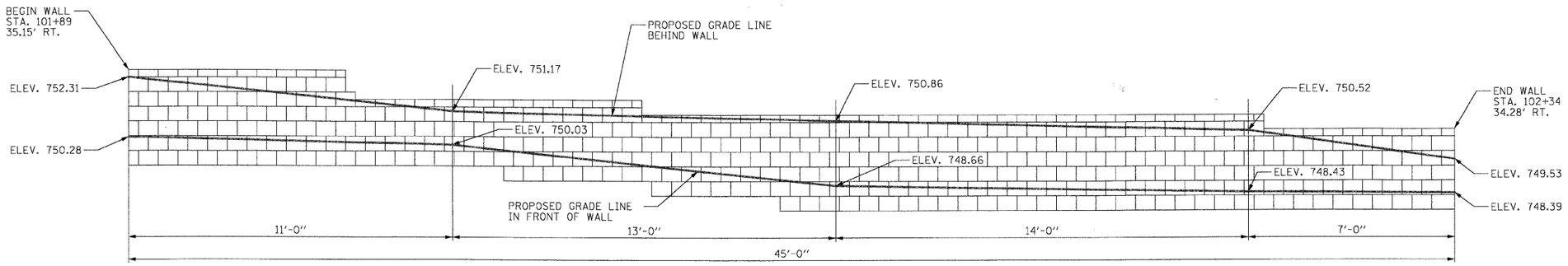
SCALE: NONE
DATE: $$DATE$$

DRAWN BY: RDB
DESIGNED BY: JHE
CHECKED BY: DAD

DATE-TIME
DGN-SPEC
USER

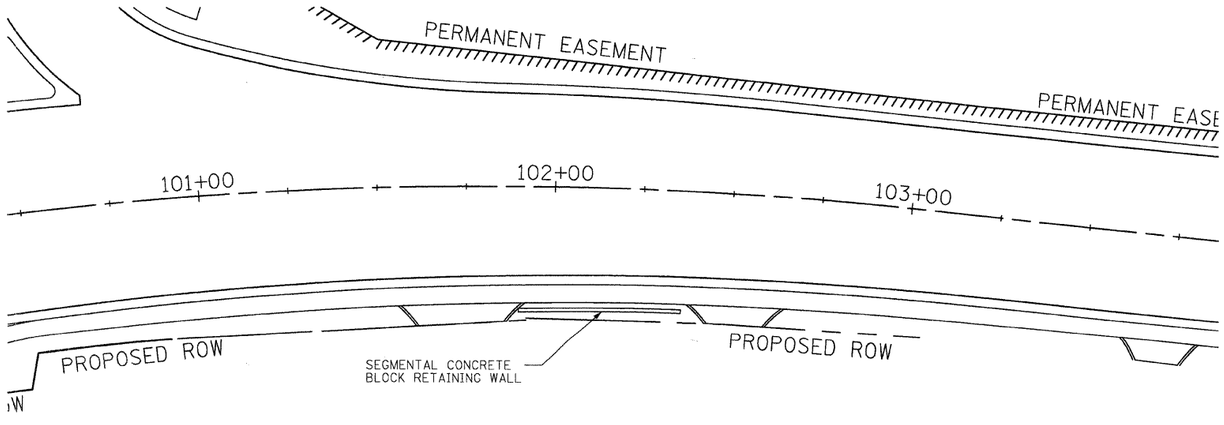
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	42
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

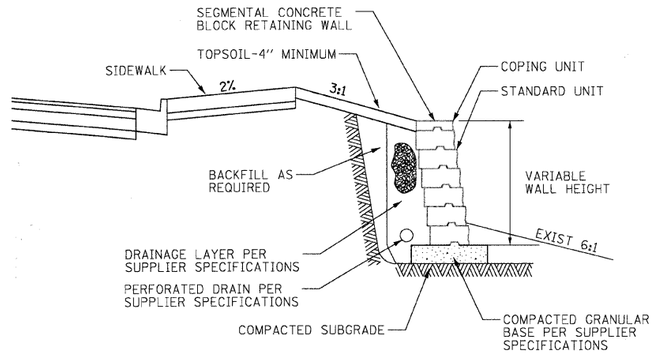


ELEVATION

NOTE: AREA OF SEGMENTAL CONCRETE BLOCK RETAINING WALL EQUAL TO 133 SQ. FT.



LOCATION PLAN



NOTE: THE DESIGN OF THE SEGMENTAL CONCRETE BLOCK RETAINING WALL SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FOR THE SPECIFIC REQUIREMENTS, REFER TO THE SEGMENTAL CONCRETE BLOCK RETAINING WALL SPECIAL PROVISION.

TYPICAL SECTION
SEGMENTAL CONCRETE BLOCK RETAINING WALL

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
Timbers Professional Center
220 West River Drive, St. Charles, IL 60174
Phone - 630.584.3530 Fax - 630.584.3047

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 AND WING STREET

RETAINING WALL DETAILS

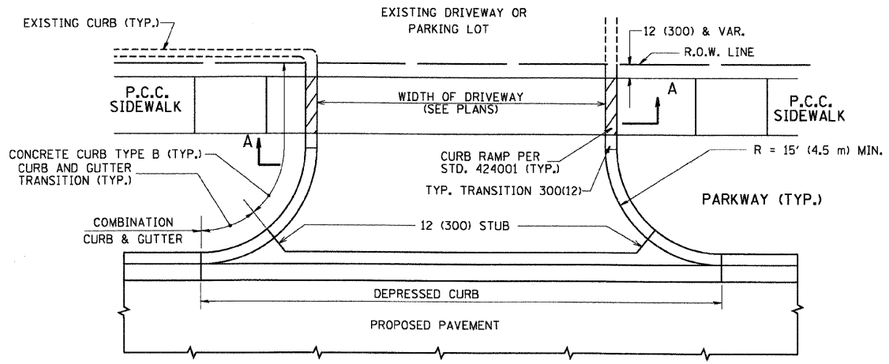
SCALE: VERT.
HORIZ. NONE
DATE: FEBRUARY 13, 2008

DRAWN BY: TC
DESIGN BY: TC
CHECKED BY: BPT

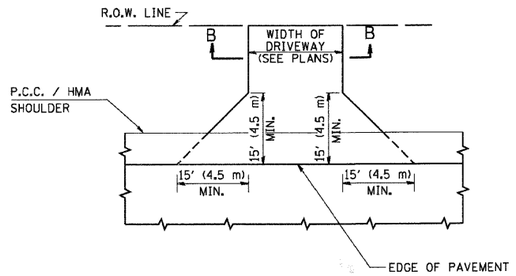
2/12/2008 H:\ELGIN\12901A\DESIGN\DGN\42RETWALL01.DGN

CONTRACT NO.: 83943

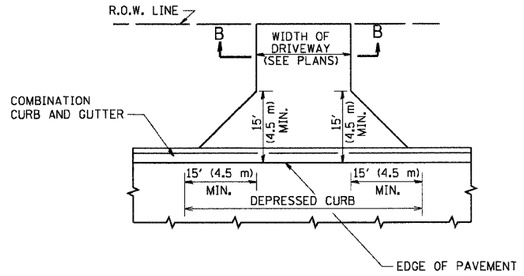
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	43
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



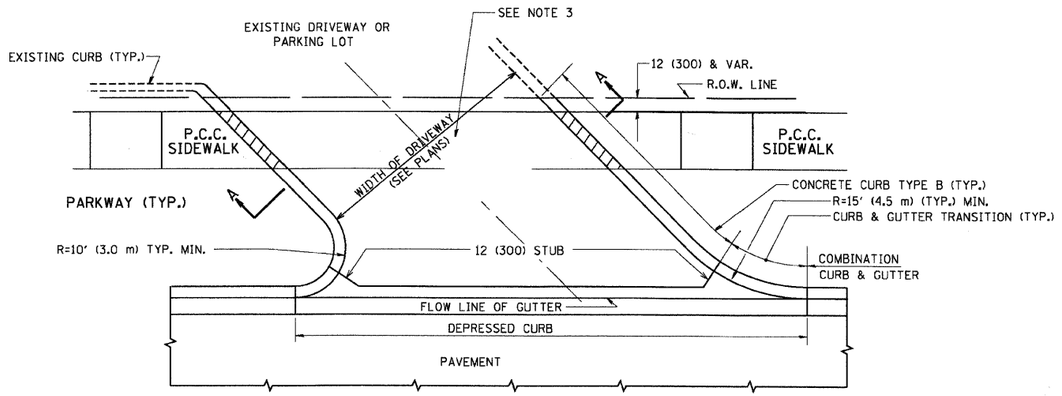
WITH CONCRETE CURB, TYPE B



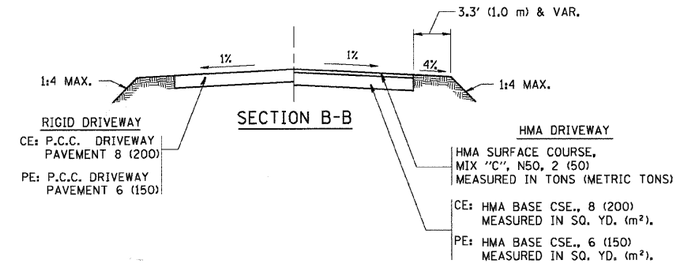
ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



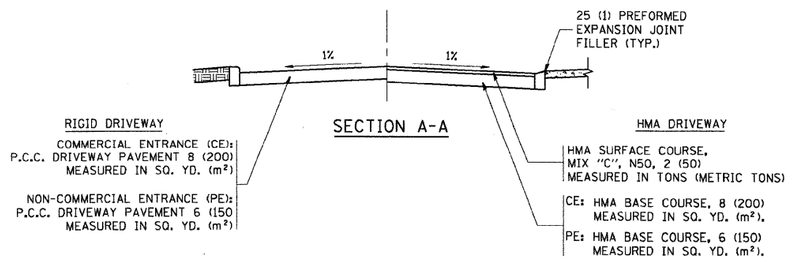
WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE,
MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE A 8 (200)
MEASURED IN SQ. YD. (m²).



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LaFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE HORIZ.

DRAWN BY

CHECKED BY

BD0156-07 (BD-01)

PLOT DATE = 4/11/2007
FILE NAME = c:\projects\dgnfiles\bd01.dgn
PLOT SCALE = 49.9999 '/ IN.
USER NAME = dr-ivakosgn

CONTRACT NO.: 83943

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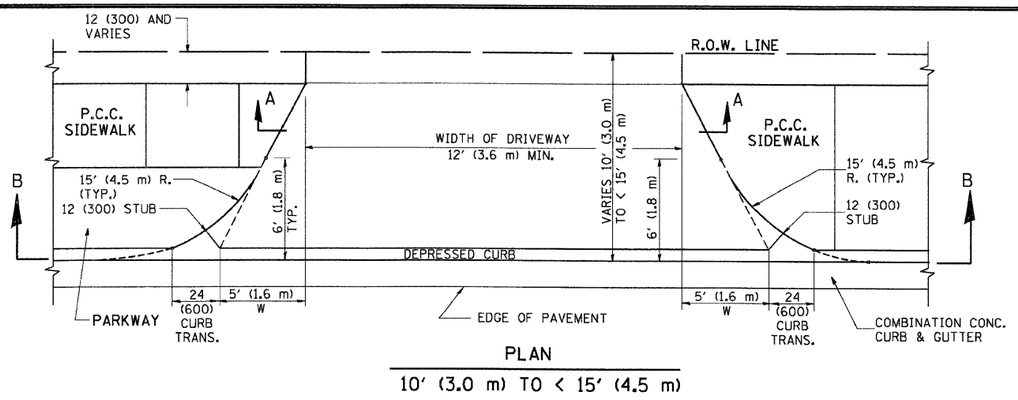
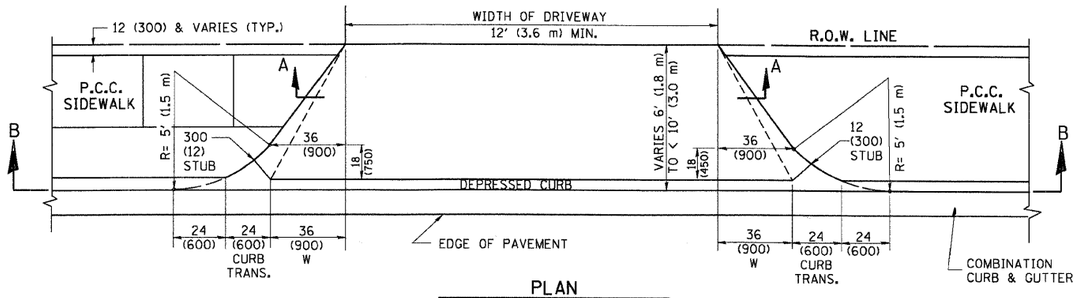
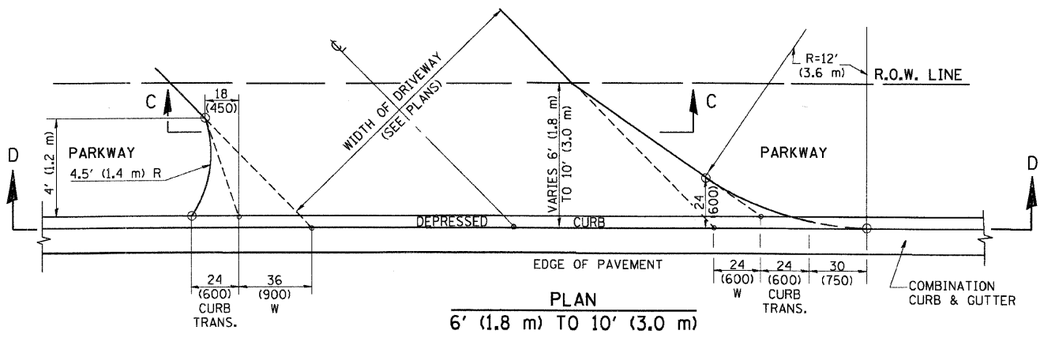
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



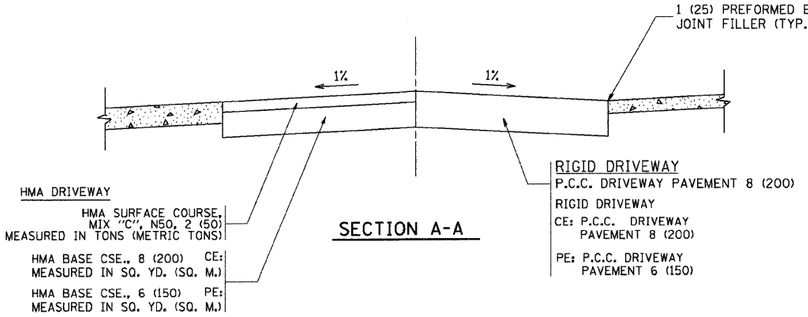
PLAN
10' (3.0 m) TO < 15' (4.5 m)



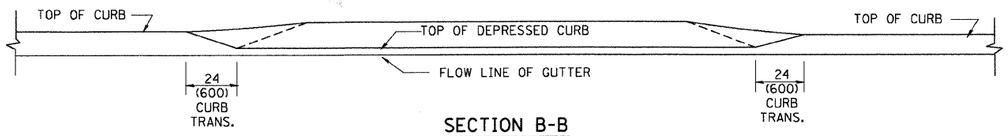
PLAN
6' (1.8 m) TO < 10' (3.0 m)



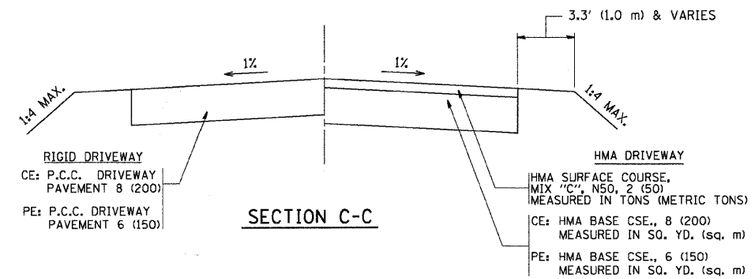
PLAN
6' (1.8 m) TO 10' (3.0 m)



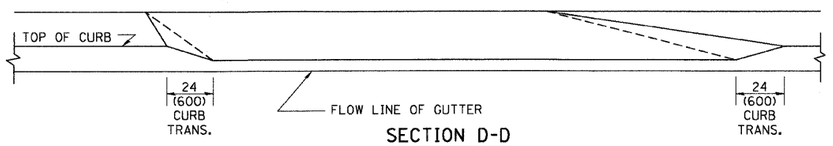
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

REVISIONS	
NAME	DATE
R. SHAH	11/06/95
J. POLLASTRINI	08/12/96
J. POLLASTRINI	12/14/96
A. ABBAS	03/21/97
T. HOLTZ	04/08/97
M. GOMEZ	04/06/01
P. LOFLEUR	04/15/03
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

SCALE: VERT. NONE HORIZ.

DRAWN BY

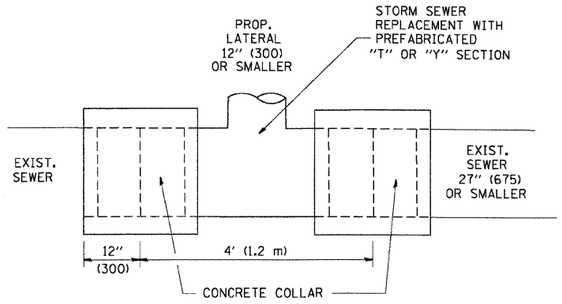
CHECKED BY

BD400-02 (BD-02)

PLOT DATE = 3/5/2007
FILE NAME = K:\dist6\bd\82.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauerdl

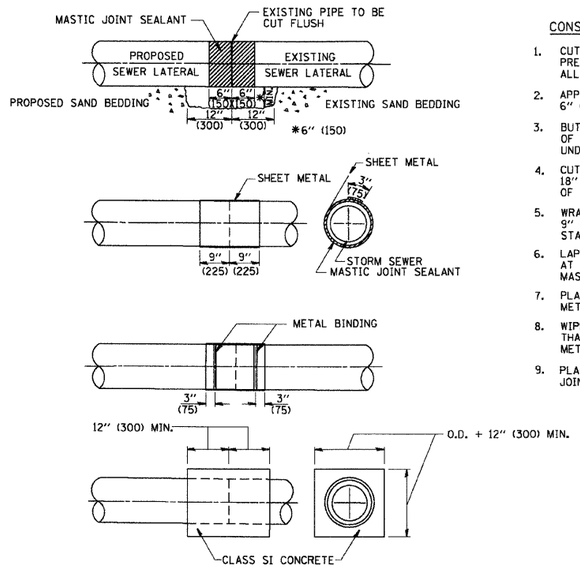
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	45
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



DETAIL "A"

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

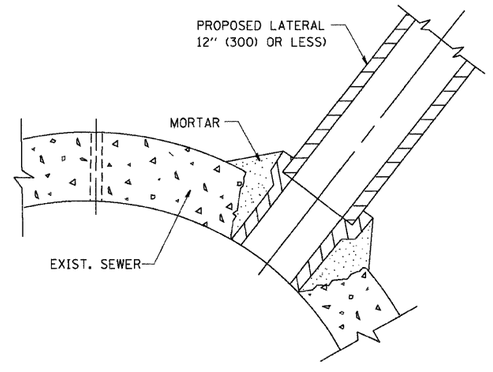


DETAIL "B"

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 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) 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 30" (750) 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 27" (675) OR SMALLER SEE DETAIL "A" AND "B".

B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) 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 INCHES (MILLIMETERS) 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. NONE HORIZ.

DRAWN BY

CHECKED BY

BD500-01 (BD-7)

PLOT DATE = 3/5/2007
FILE NAME = K:\district\bd07.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

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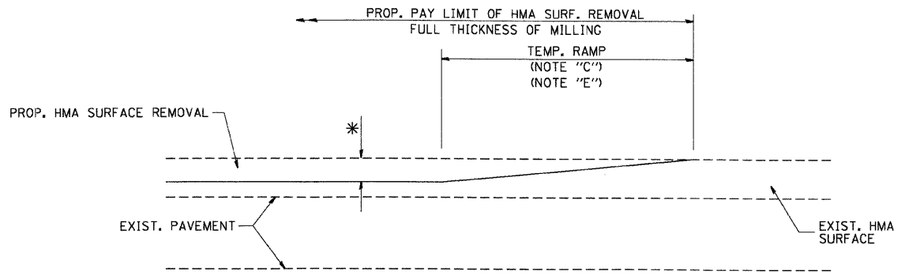
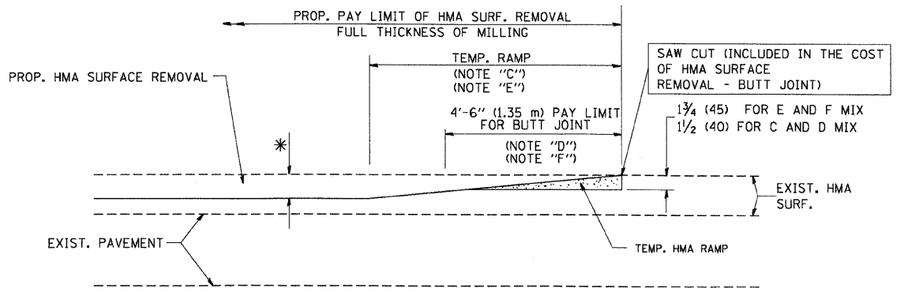
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

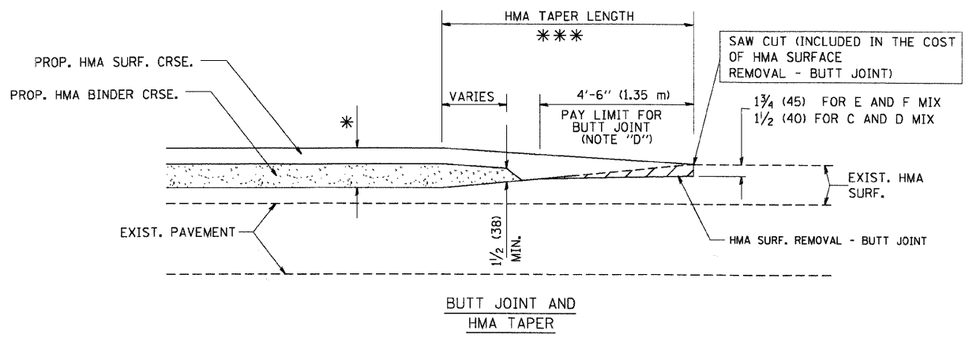


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

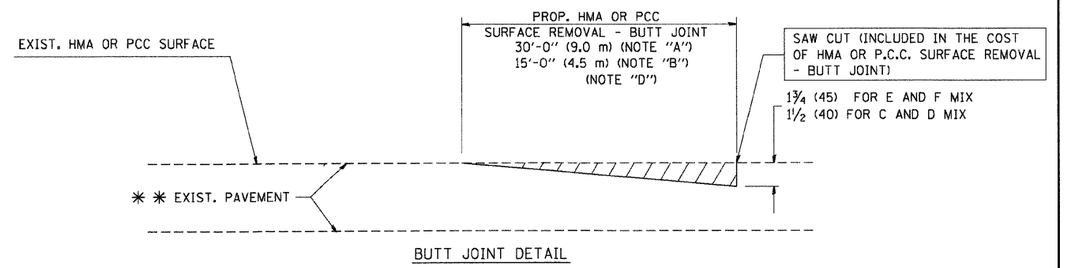
OPTION 2

TYPICAL TEMPORARY RAMP

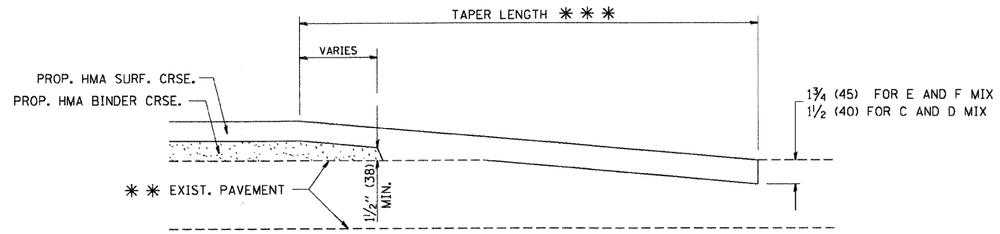


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

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

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

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

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

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

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

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

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

BASIS OF PAYMENT:

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

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. HORIZ. NONE

DRAWN BY

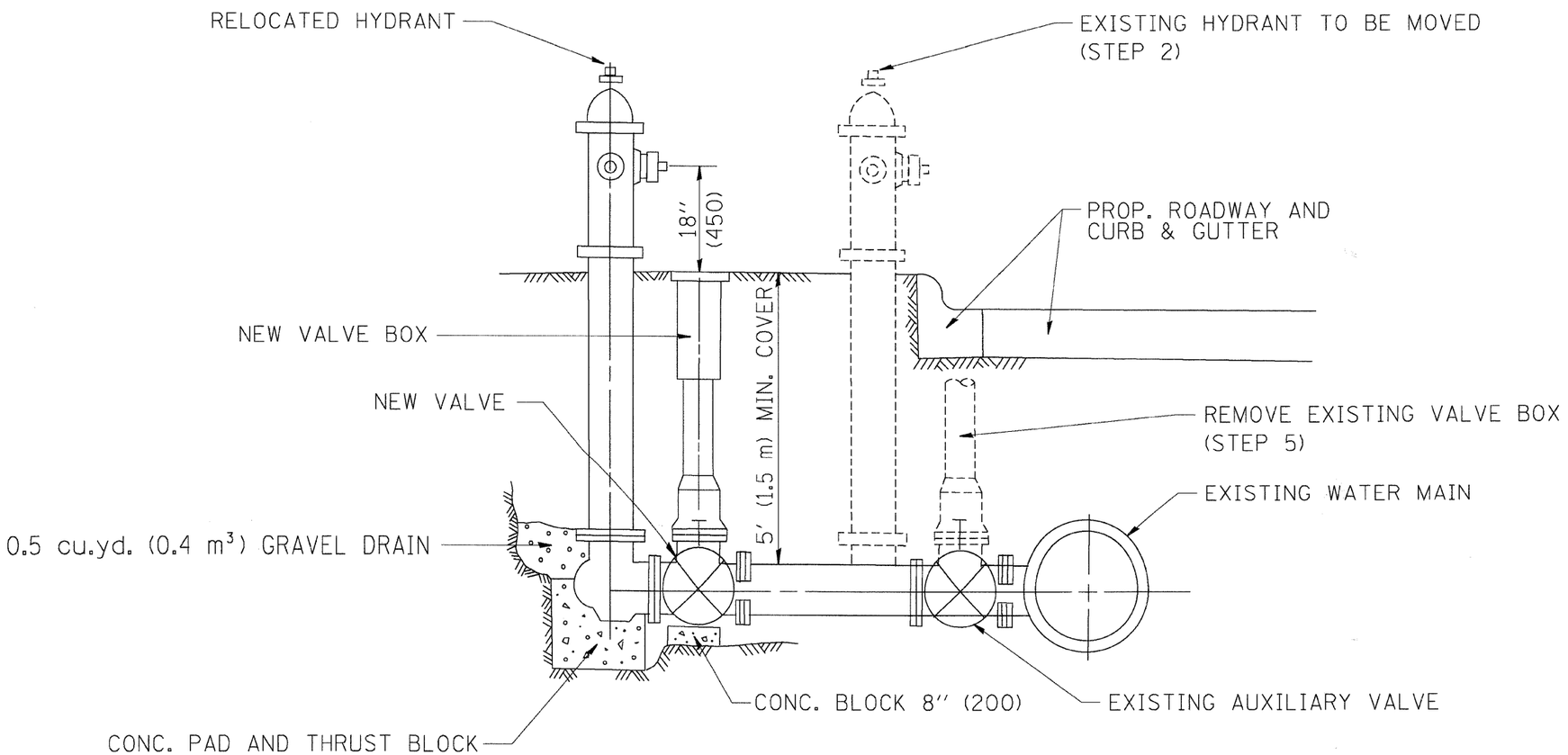
CHECKED BY

BD400-05 (VI=BD32)

PLOT DATE = 3/5/2007
FILE NAME = K:\status4\bd32.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	47
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

REVISIONS NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT
TO BE MOVED

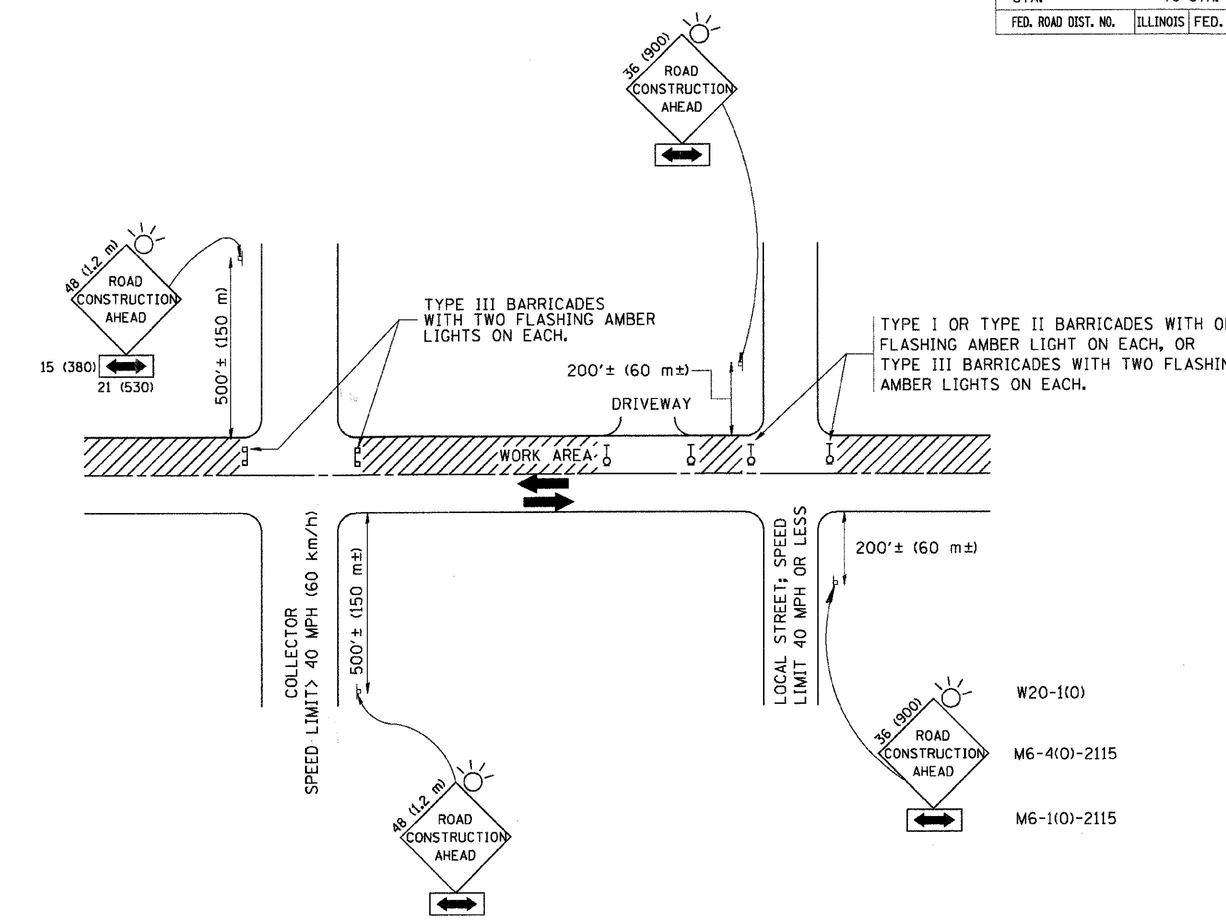
SCALE: VERT. NONE
HORIZ.

DRAWN BY

CHECKED BY

BD500-03 (BD-36)

PLOT DATE = 3/6/2007
FILE NAME = K:\dsksstd\bd36.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl



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

NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE

DRAWN BY

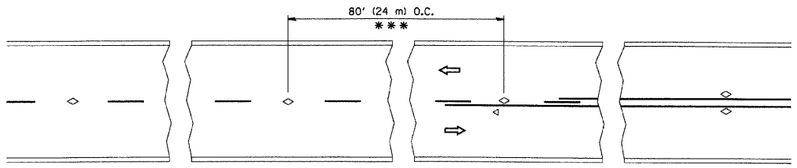
CHECKED BY

TC-10

PLOT DATE = 3/6/2007
FILE NAME = K:\diststd\tc10.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = bauerdl

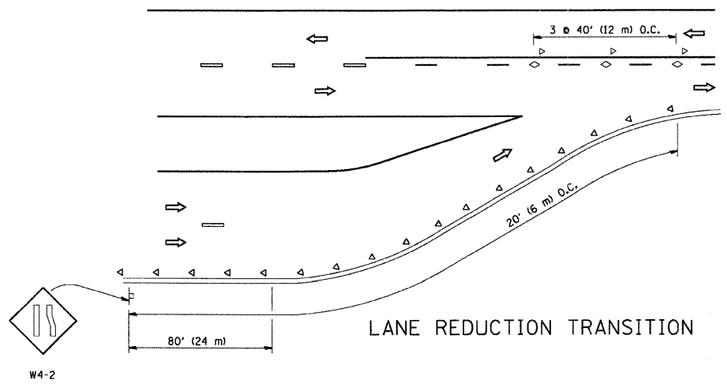
CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	49
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

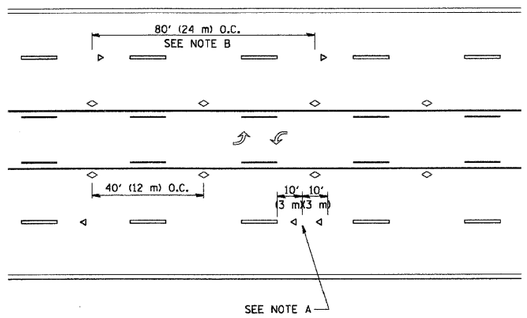


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

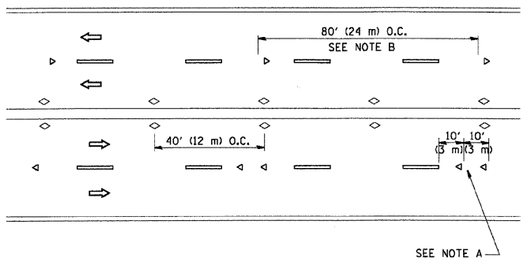
TWO-LANE/TWO-WAY



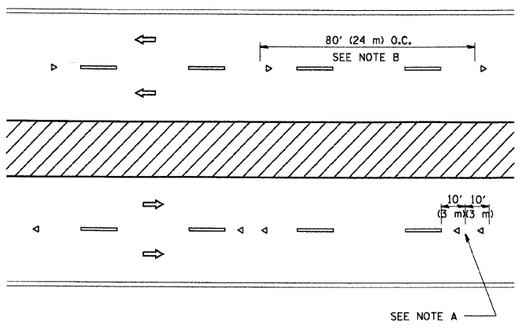
LANE REDUCTION TRANSITION



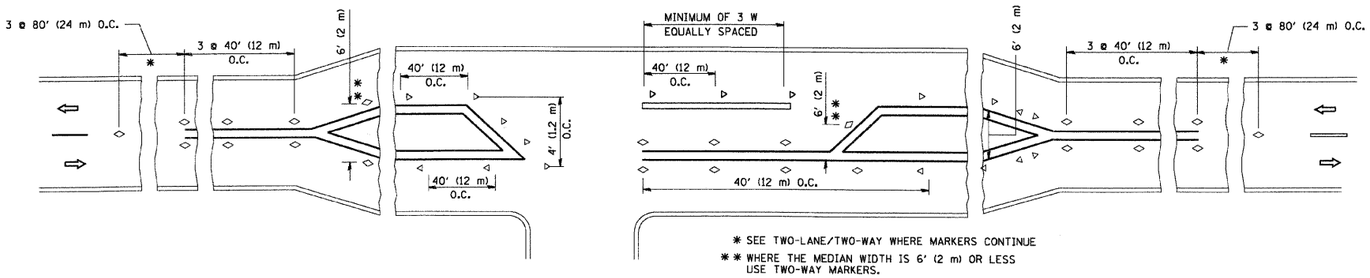
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



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

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

LEFT TURN

GENERAL NOTES

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

LANE MARKER NOTES

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

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

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

DESIGN NOTES

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE

DRAWN BY CADD

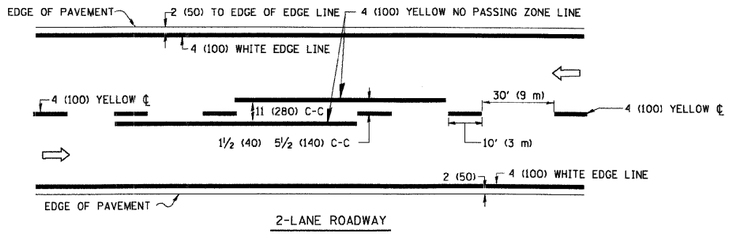
CHECKED BY

TC-11

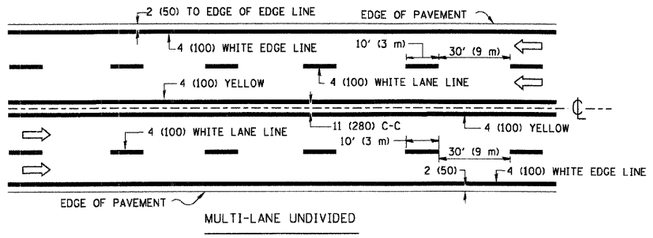
PLOT DATE = 3/6/2007
FILE NAME = K:\dsn\std\tc11.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

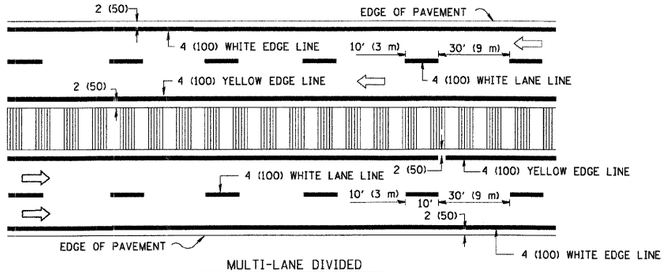
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	50
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



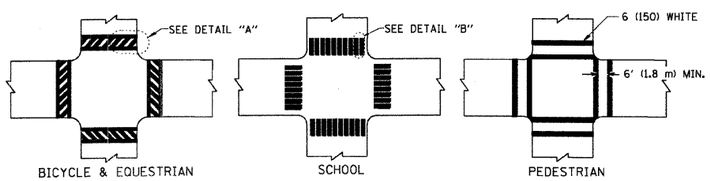
MULTI-LANE UNDIVIDED



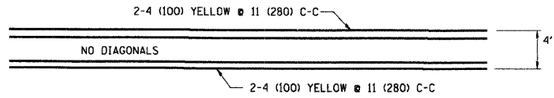
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

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

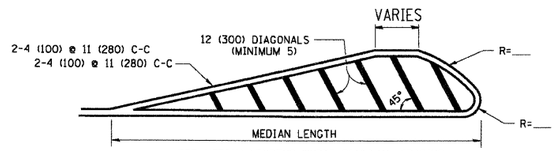
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



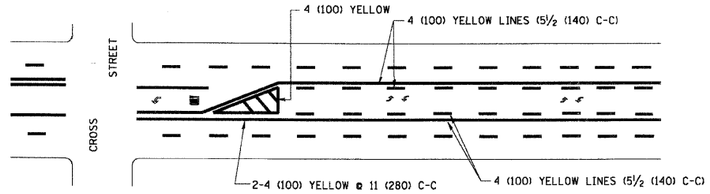
4' (1.2 m) WIDE MEDIANS ONLY



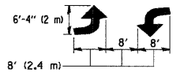
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

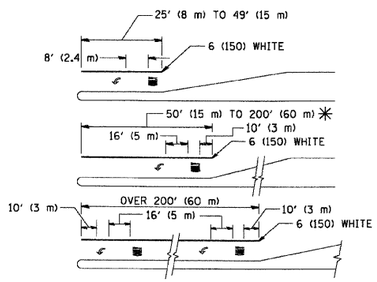


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

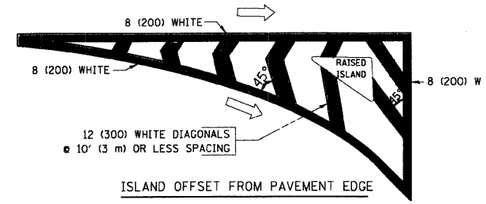


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

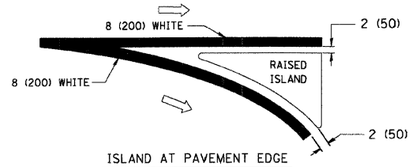
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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

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

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

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

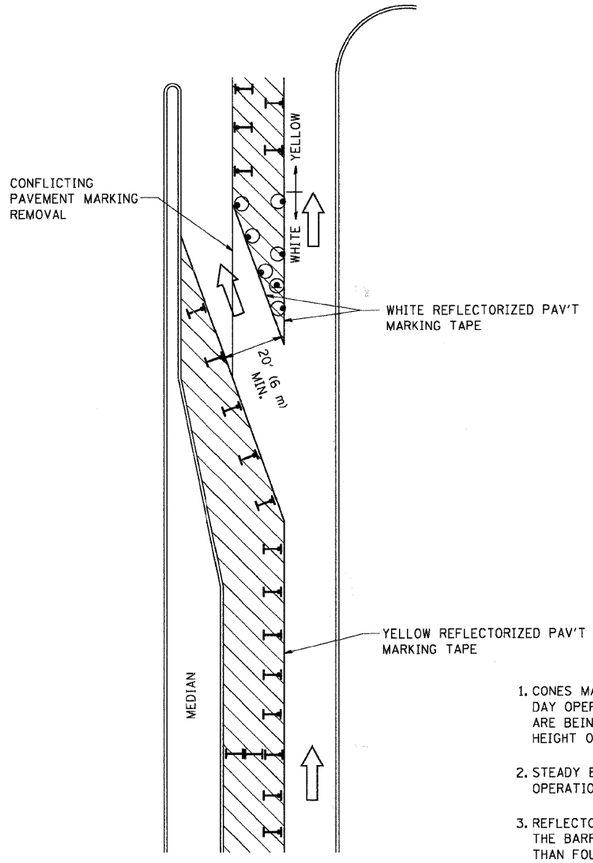
CHECKED BY

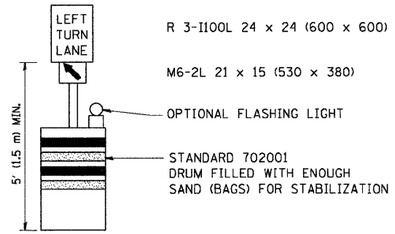
TC-13

PLOT DATE = 3/6/2007
FILE NAME = K:\dist\std\tc13.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	51
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





GENERAL NOTES

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

LEGEND

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE

DRAWN BY

CHECKED BY LHA

TC-14

PLOT DATE = 2/6/2007
FILE NAME = c:\projects\tc14.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauerdl

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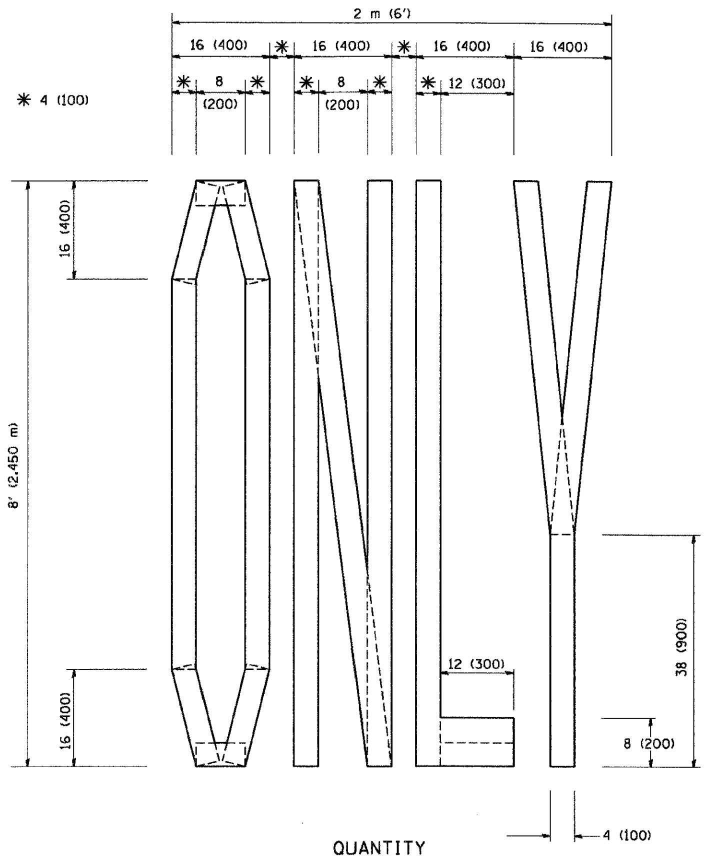
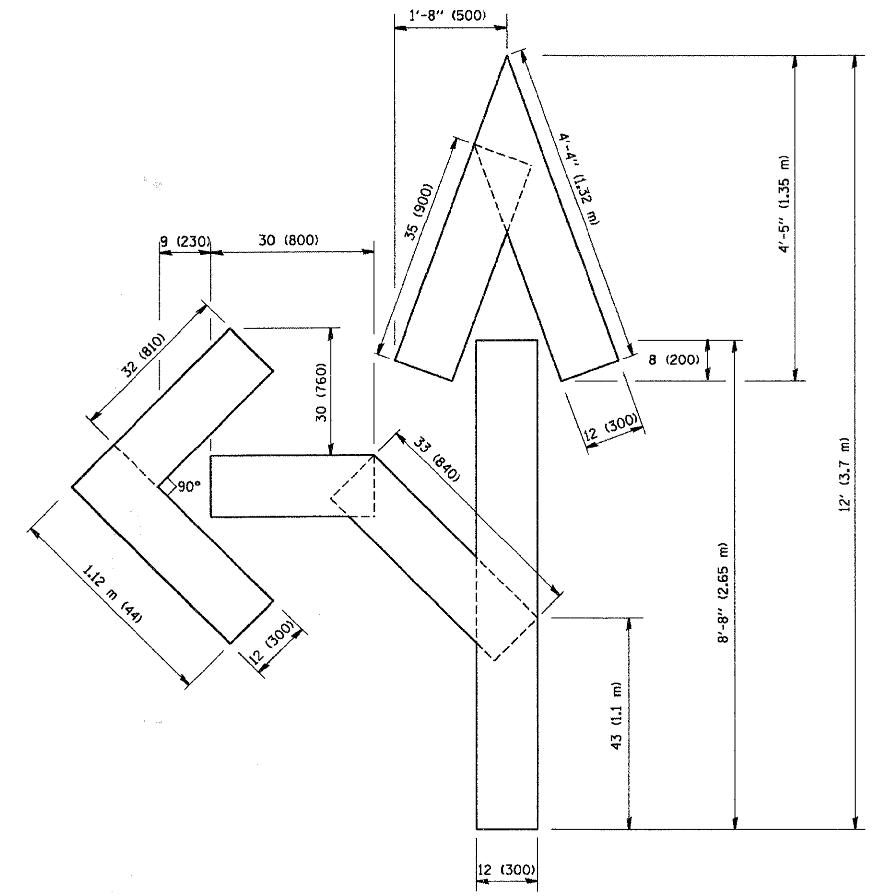
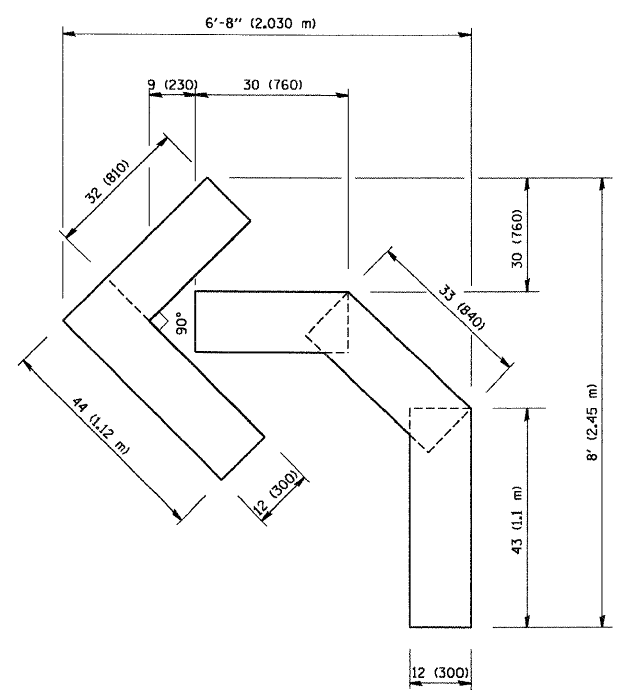
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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



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



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

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

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

DRAWN BY CADD
CHECKED BY
TC-16

PLOT DATE = 3/7/2007
FILE NAME = K:\diststd\tc16.dgn
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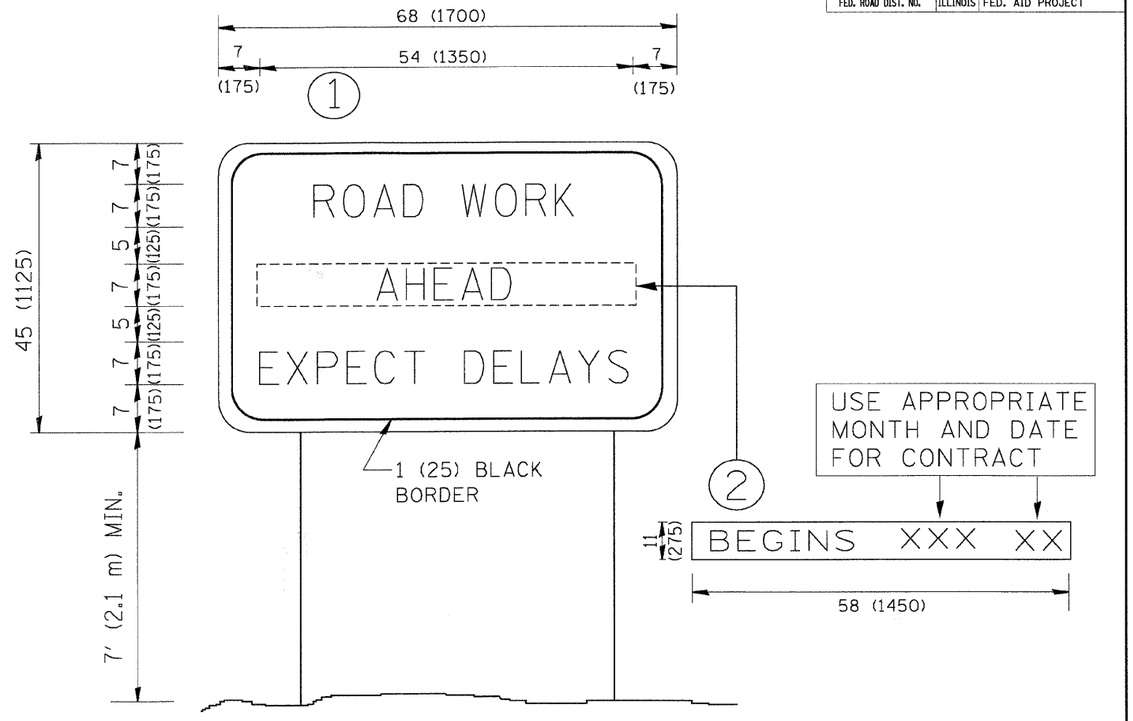
USER NAME = bauerdl

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	53
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN

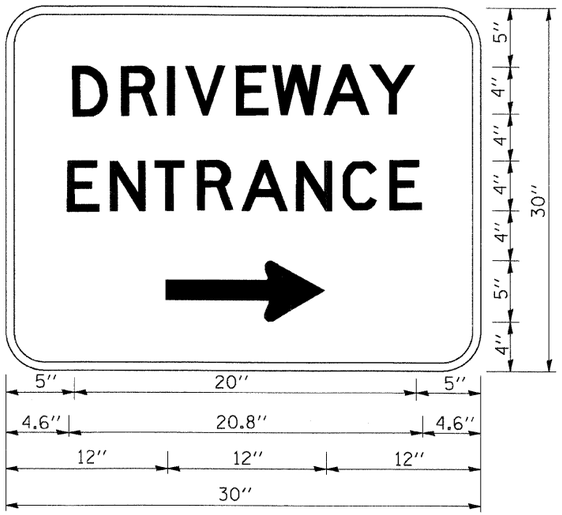
CHECKED BY

TC22

PLOT DATE = 2/9/2007
FILE NAME = K:\Standard\tc22.dgn
PLOT SCALE = 50.000 ' / IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	54
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



3.0'' RADIUS, 0.5'' BORDER, WHITE ON GREEN; REFLECTORIZED
''DRIVEWAY'' D; ''ENTRANCE'' D; STANDARD ARROW CUSTOM 12.0'' × 5.0''

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM ''TEMPORARY INFORMATION SIGNING''.

REVISIONS NAME	DATE
C. JUCIUS	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

SCALE: NONE — DRAWN BY R.H.

DATE — CHECKED BY

TC-26

PLOT DATE = 3/9/2007
FILE NAME = K:\district\tc26.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = bauerdl

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	55
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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.

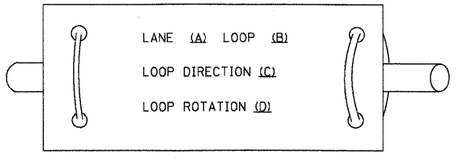
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

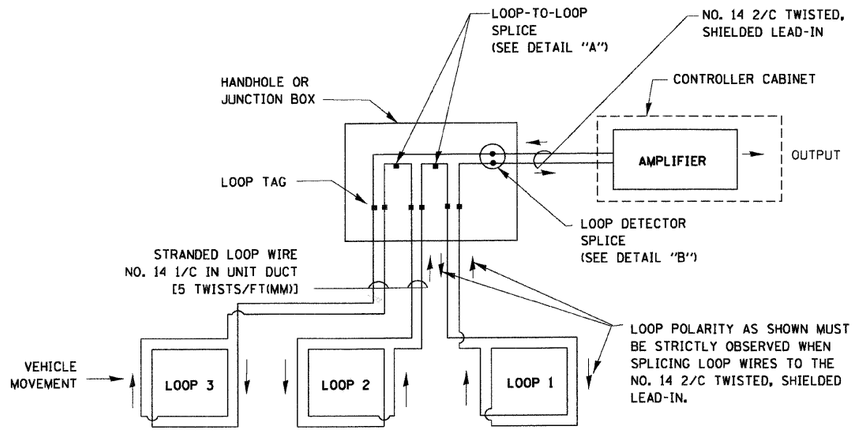


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

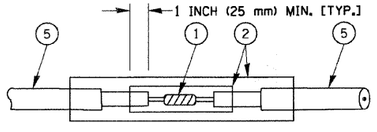
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

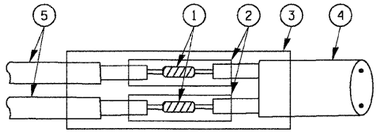


DETECTOR LOOP WIRING SCHEMATIC

- 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: NONE

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

TS05

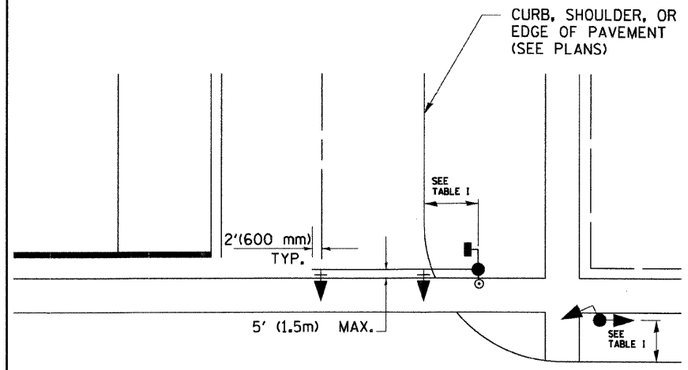
PLOT DATE = 3/7/2007
FILE NAME = K:\diastd\ts05.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauer-dl

CONTRACT NO.: 83943

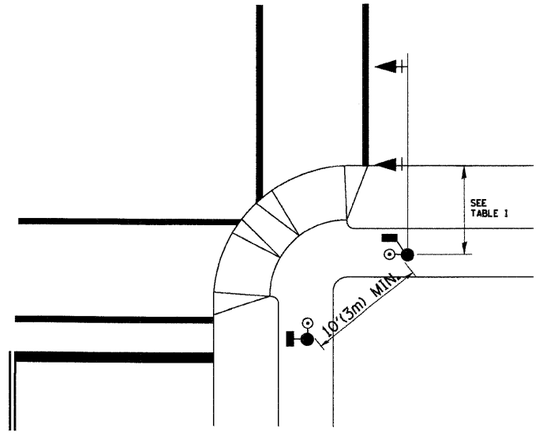
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	56
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

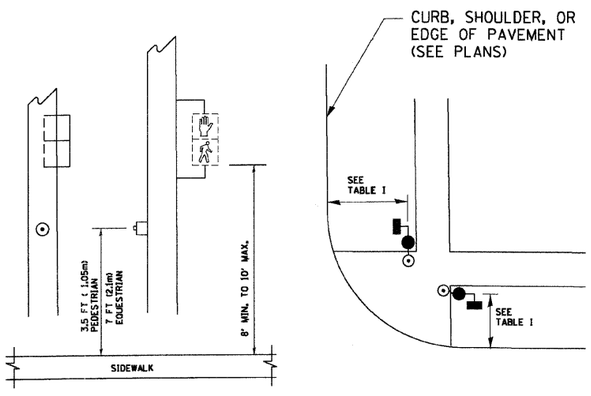


TABLE I

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: NONE

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

TS05

PLOT DATE = 3/7/2007
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USER NAME = bauerdl

CONTRACT NO.: 83943

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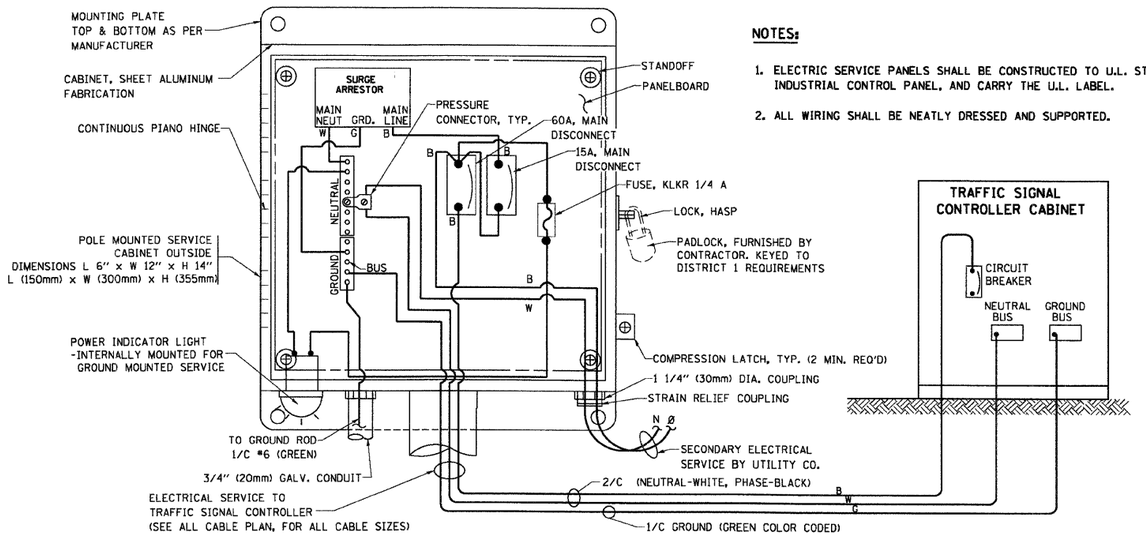
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



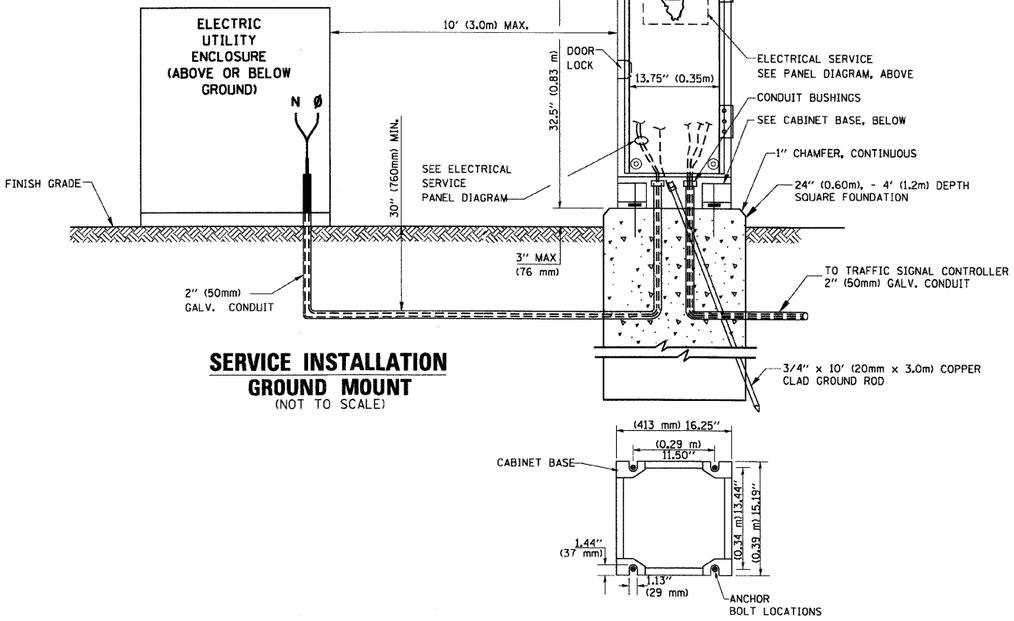
NOTES:

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

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

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

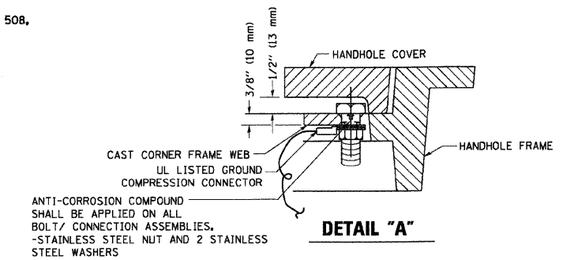


SERVICE INSTALLATION GROUND MOUNT

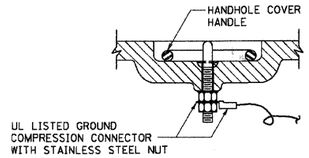
(NOT TO SCALE)

CABINET – BASE BOLT PATTERN

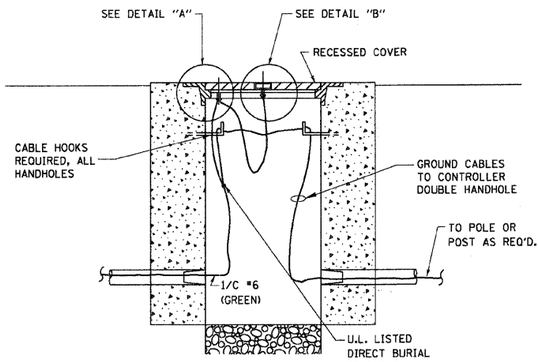
(NOT TO SCALE)



DETAIL "A"

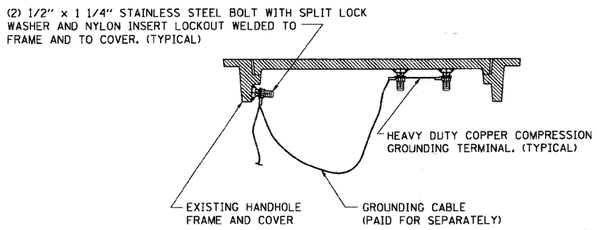


DETAIL "B"



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

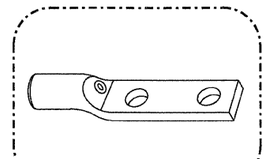


EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

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.

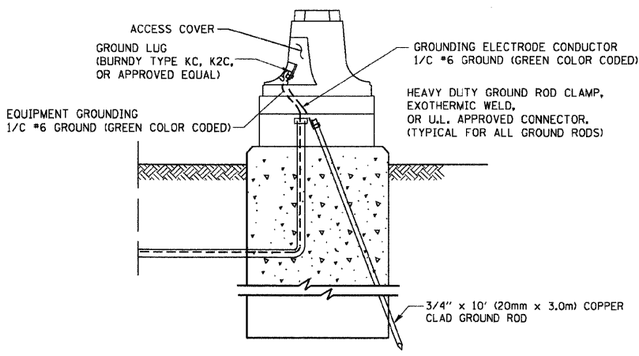


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

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

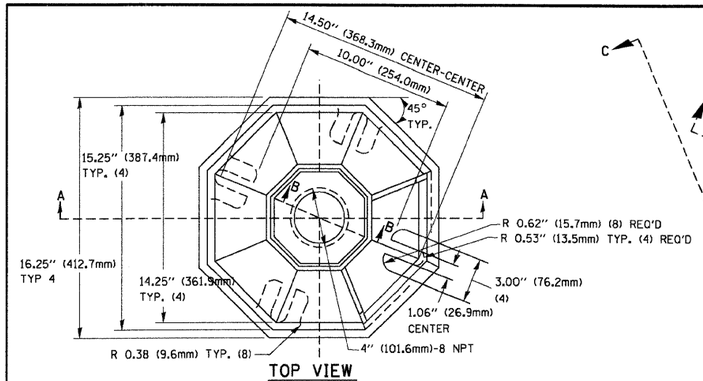
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

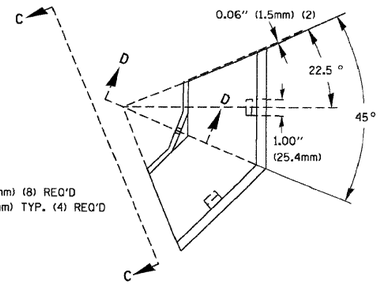
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

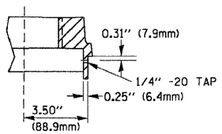
TS05

PLOT DATE = 3/7/2007
FILE NAME = K:\traffic\ts05.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauer-d1

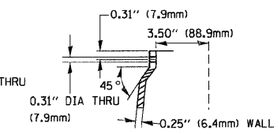


TOP VIEW

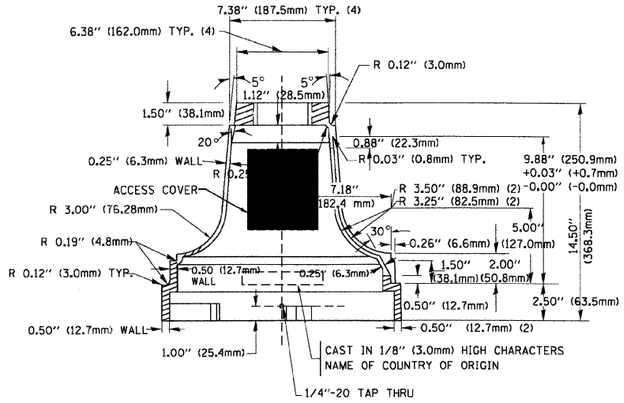




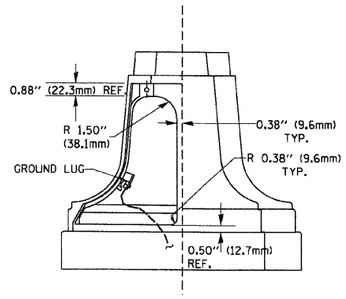
SECTION B-B



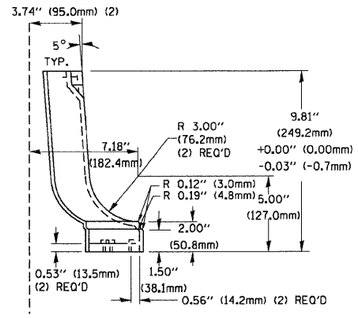
SECTION D-D



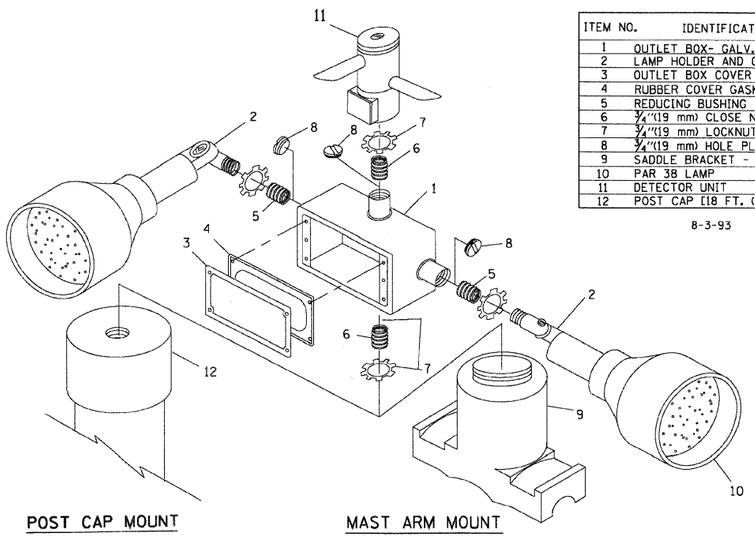
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT MAST ARM MOUNT

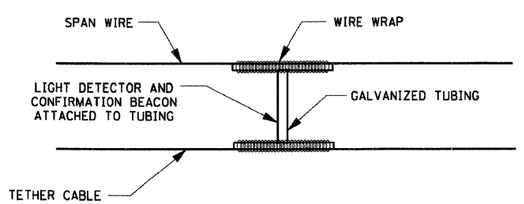
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

8-3-93

NOTES:

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

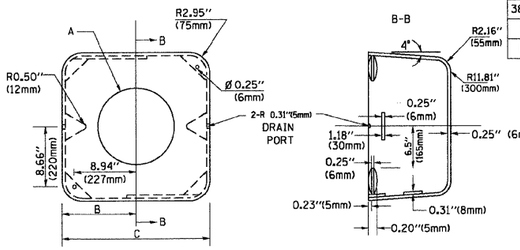


LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

CONTRACT NO.: 83943

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	58
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

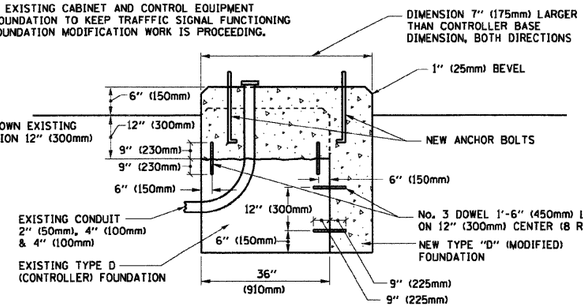


MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

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

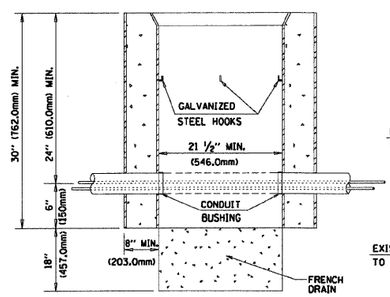
NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



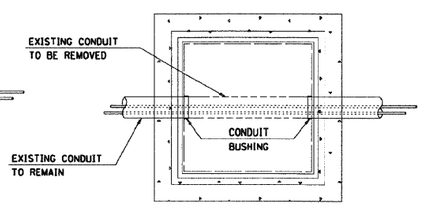
MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

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



ELEVATION



PLAN

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

REVISIONS	
NAME	DATE
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 ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

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

TS05

PLOT DATE = 3/7/2007
FILE NAME = c:\projects\ts05.dgn
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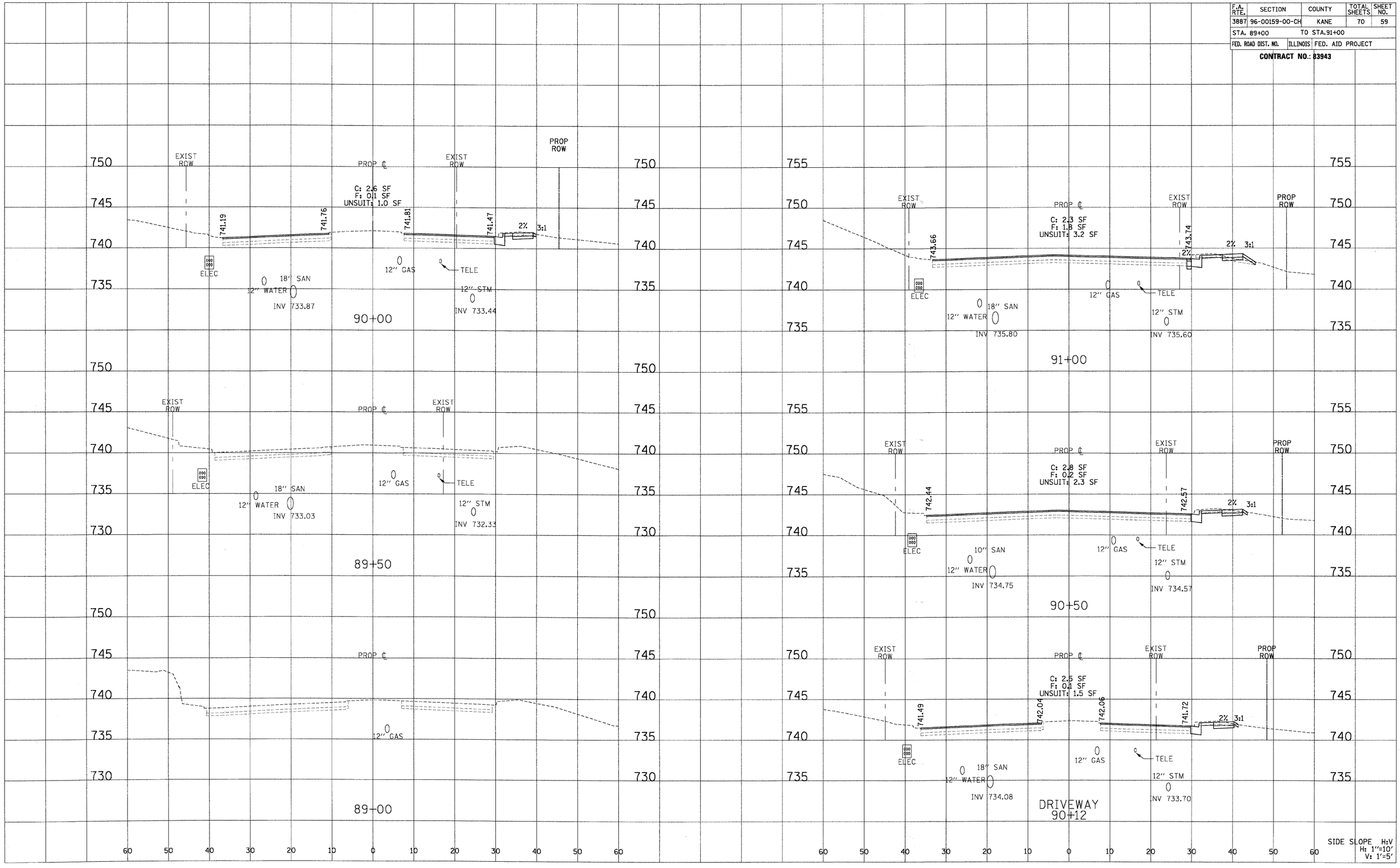
USER NAME = bauerdl

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	59
STA. 89+00		TO STA.91+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943



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2/12/2009

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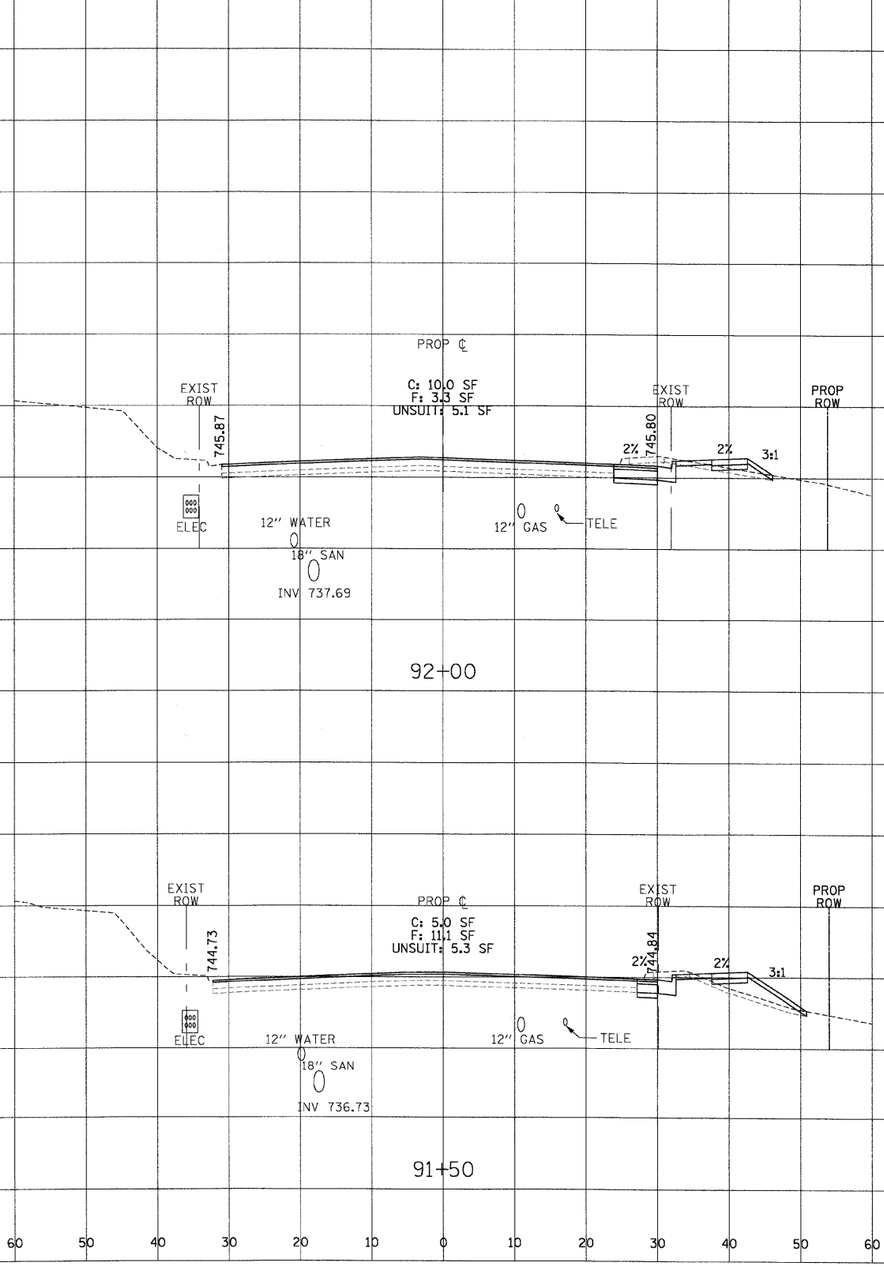
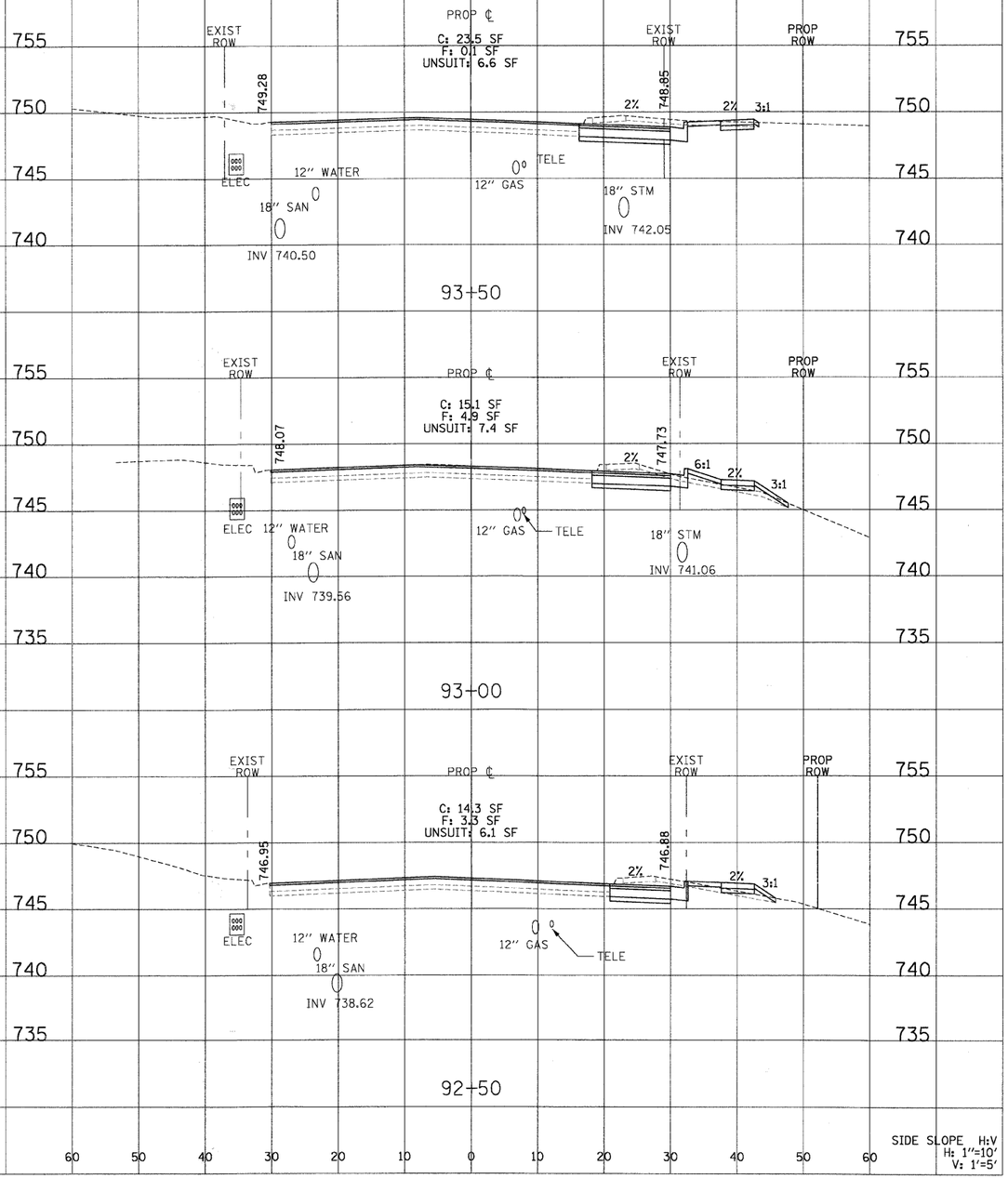
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943





SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

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2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	61
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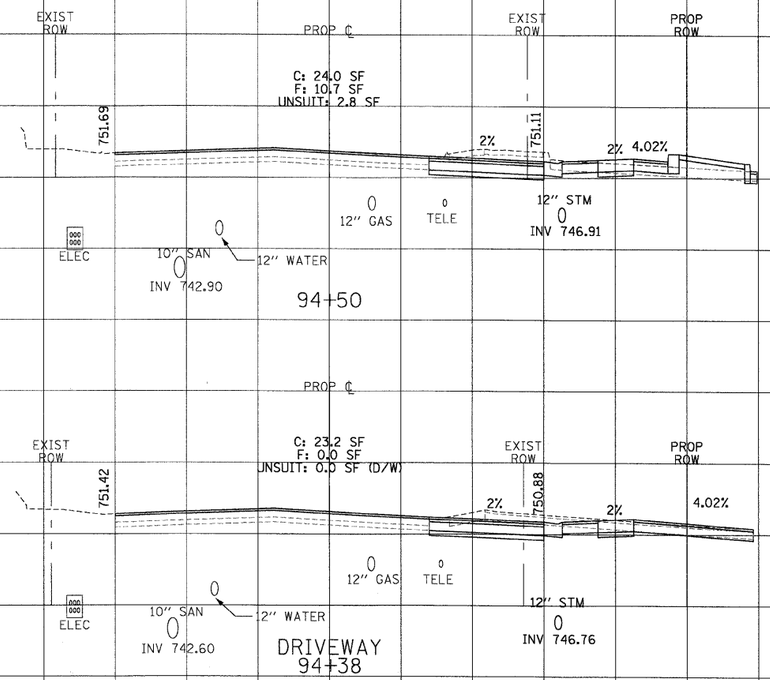
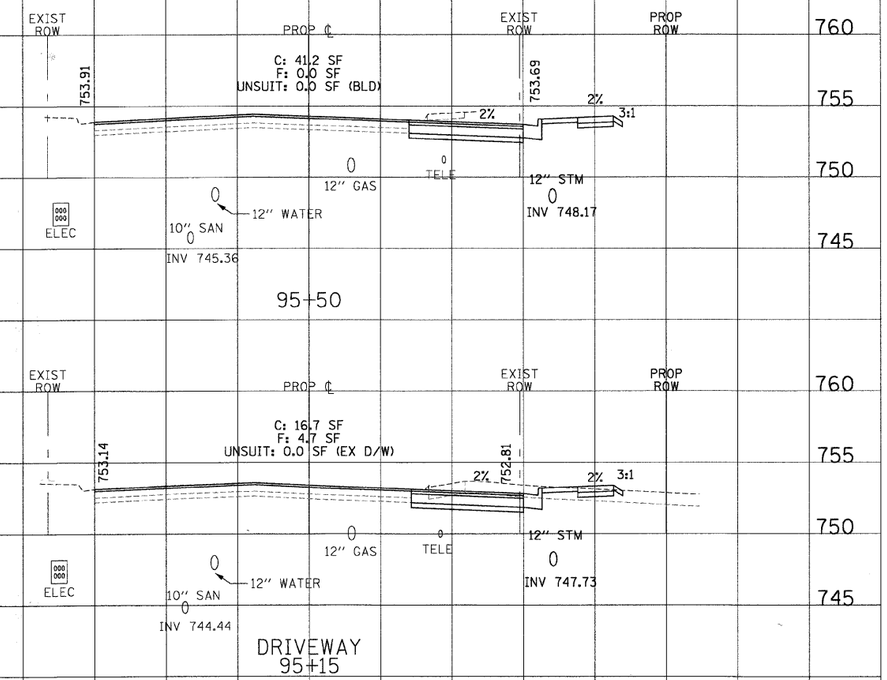
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943





60 50 40 30 20 10 0 10 20 30 40 50 60

SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

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2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	62
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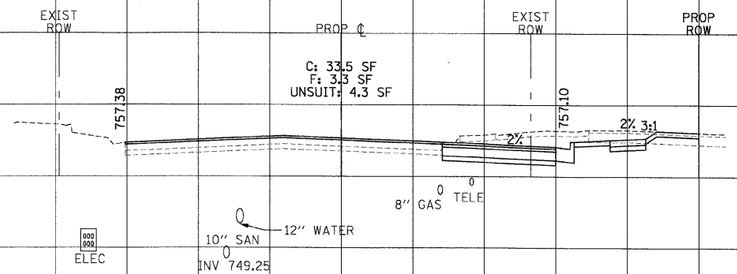
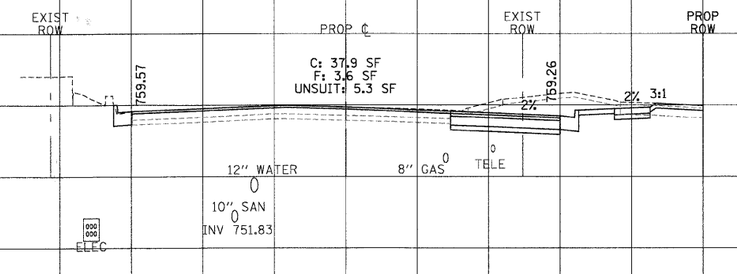
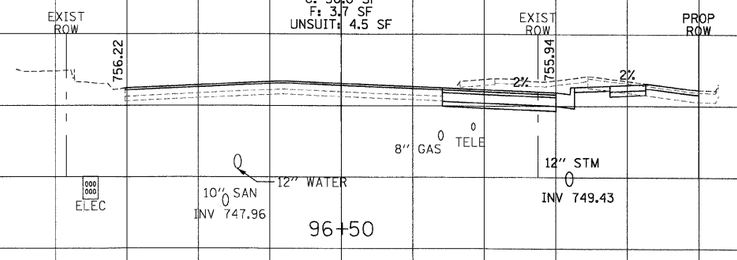
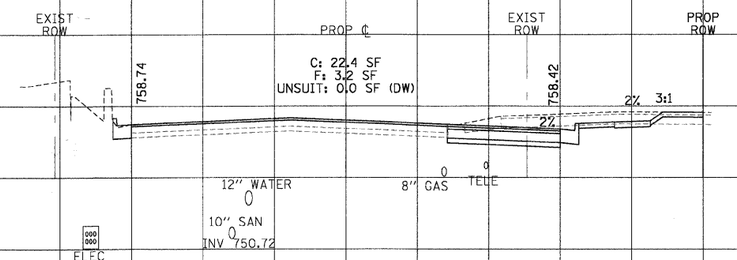
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

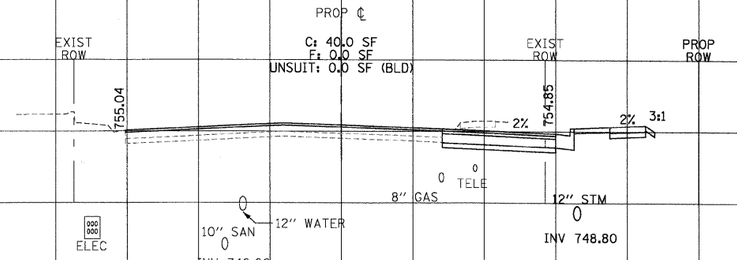
CONTRACT NO.: 83943

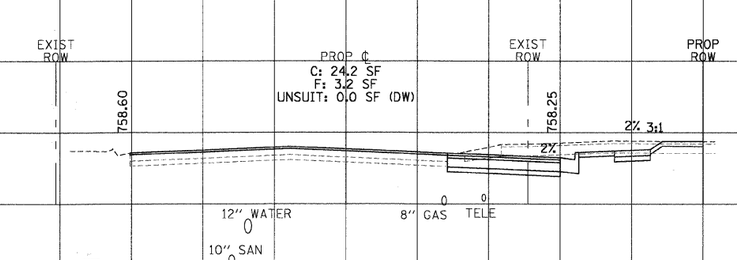












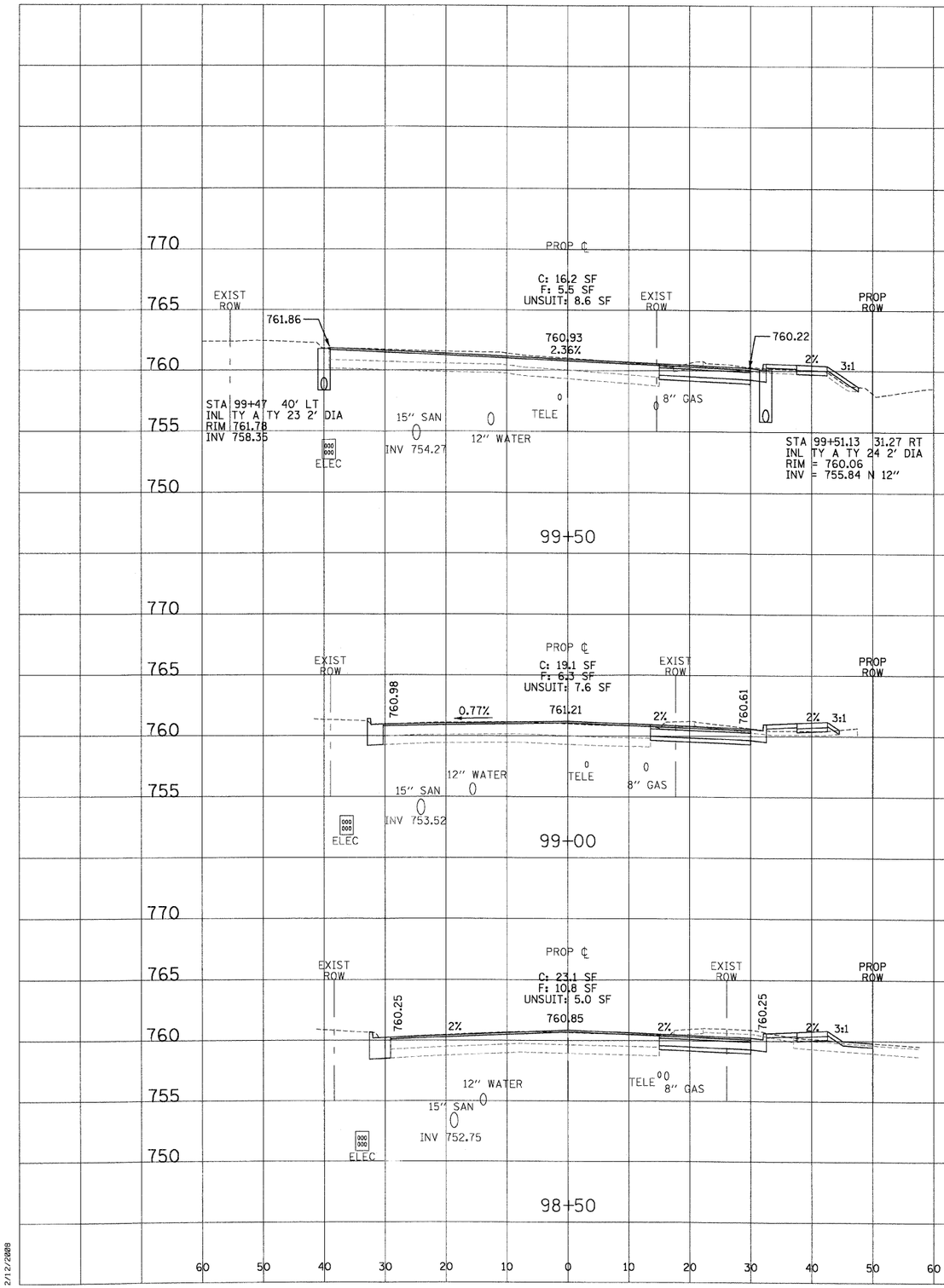
60 50 40 30 20 10 0 10 20 30 40 50 60

SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\2901A\DESIGN\DGN\XSEC.DGN
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	63
STA. 98+50		TO STA.100+72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943



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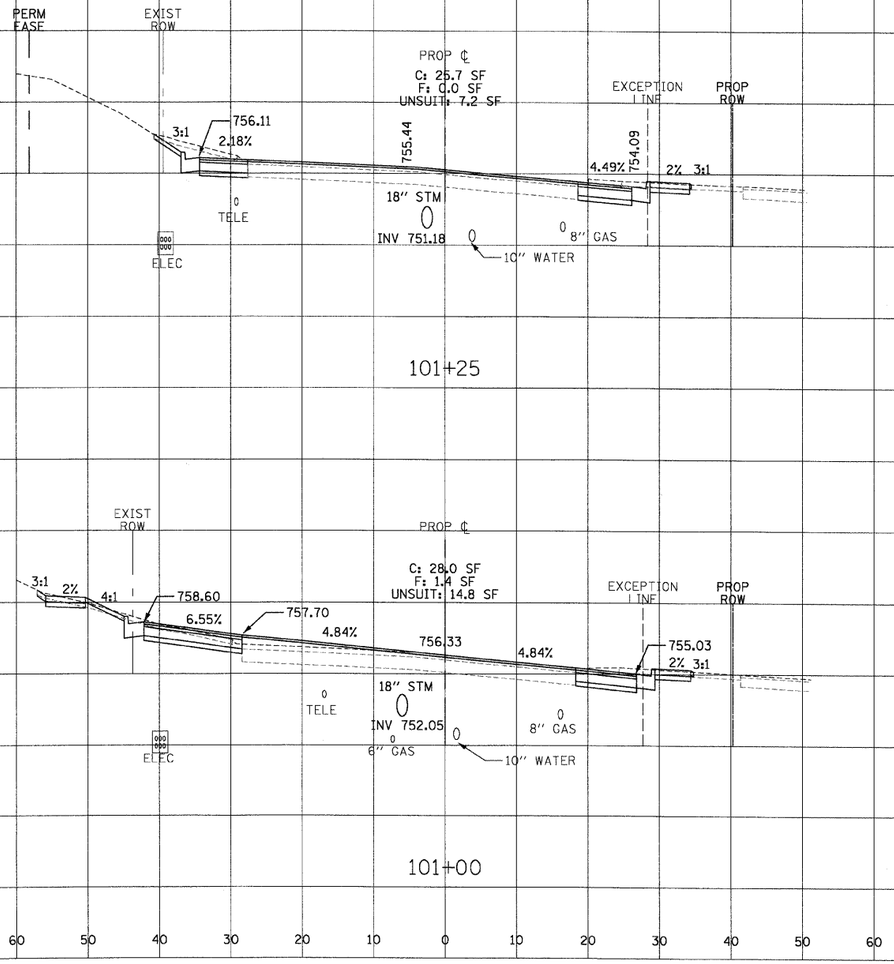
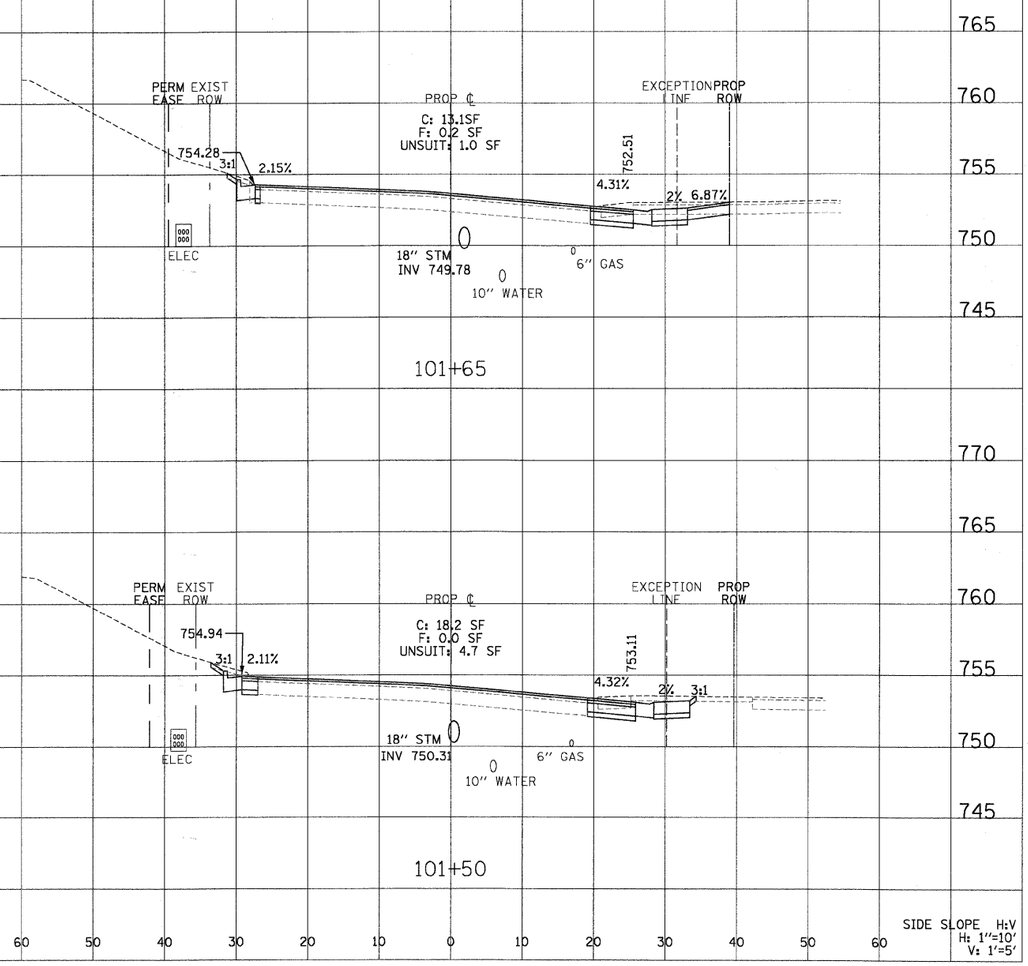
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	64
STA. 101+00		TO STA.101+65		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943



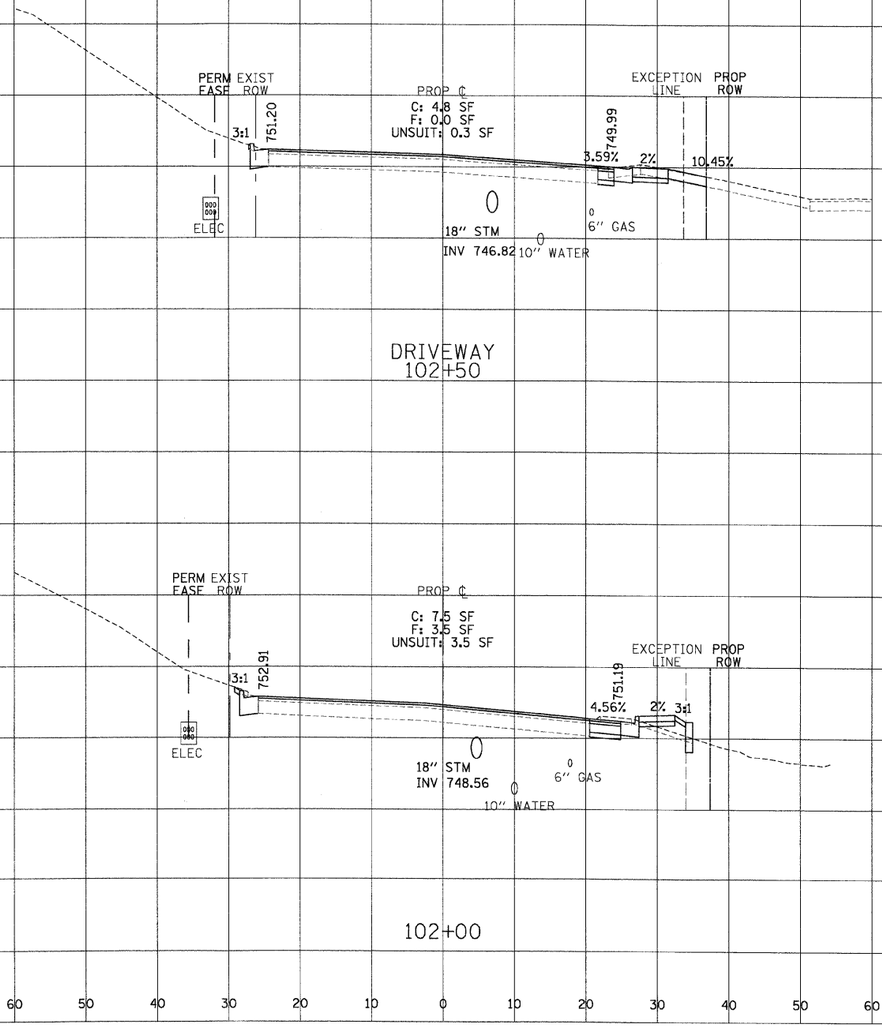


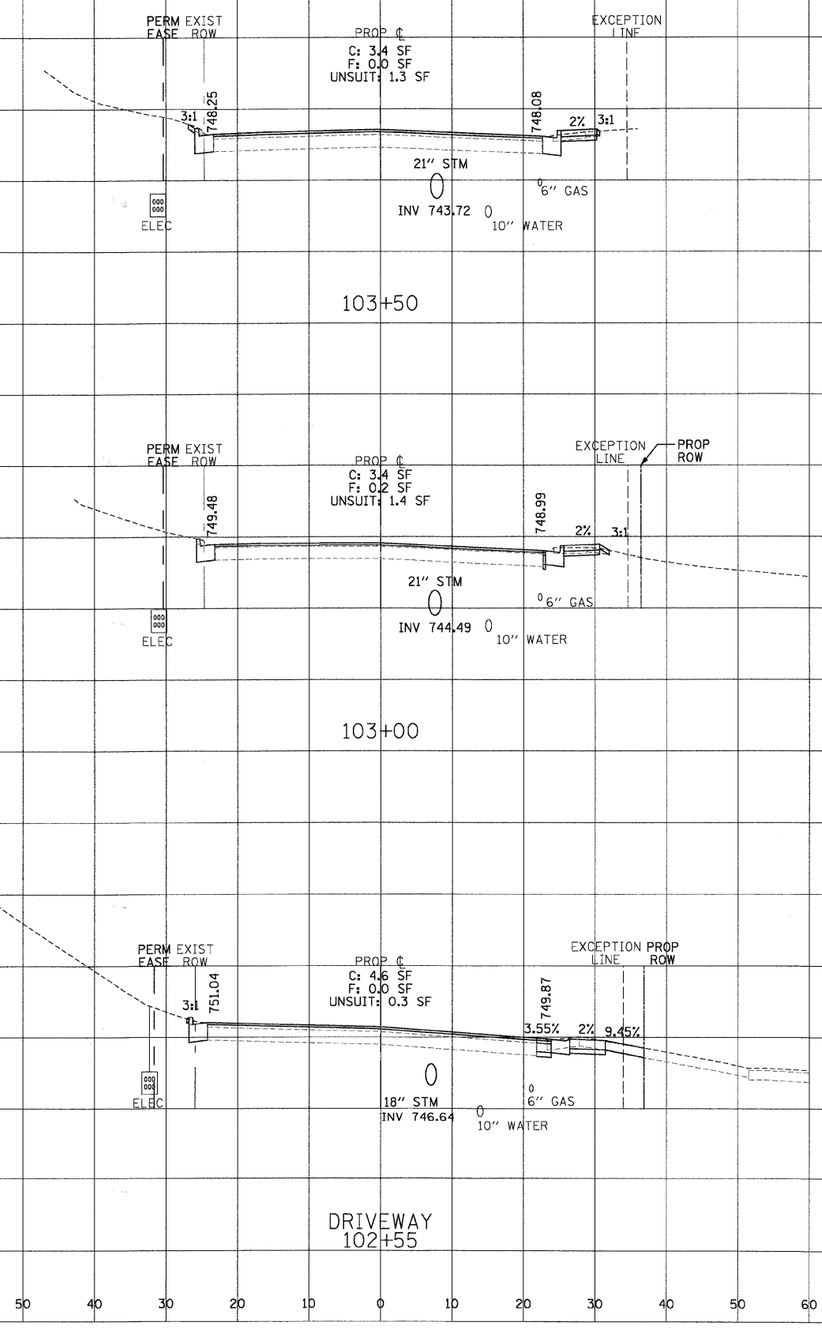
SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\129814\DESIGN\DGN\XSEC.DGN
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	65
STA. 102+00		TO STA.103+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943





SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

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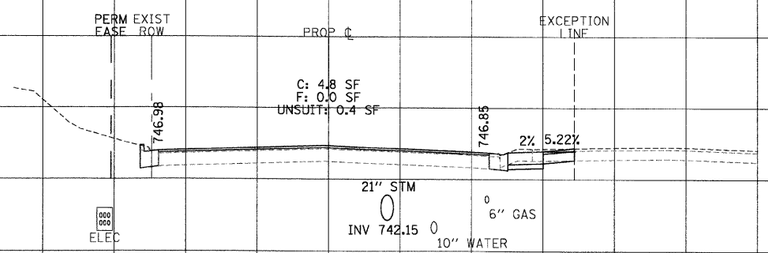
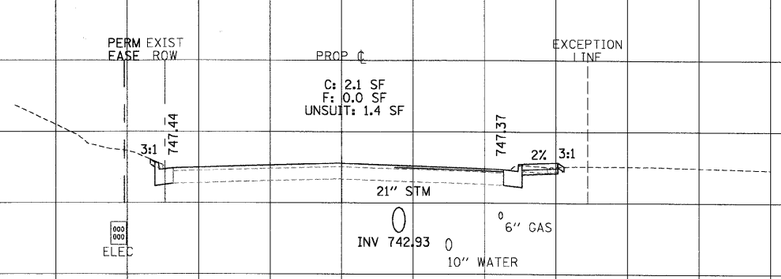
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	66
STA. 103+73		TO STA.105+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

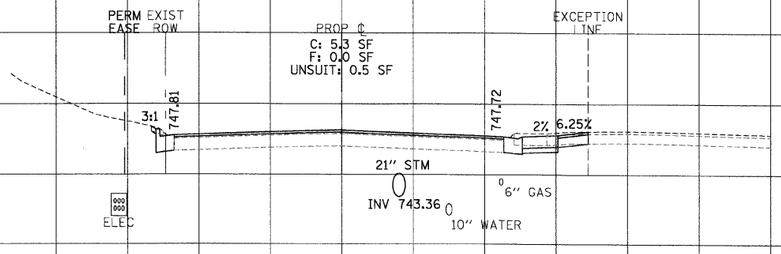
CONTRACT NO.: 83943



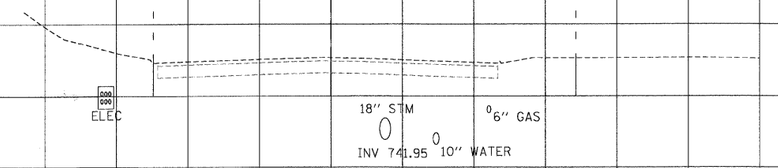
104+50



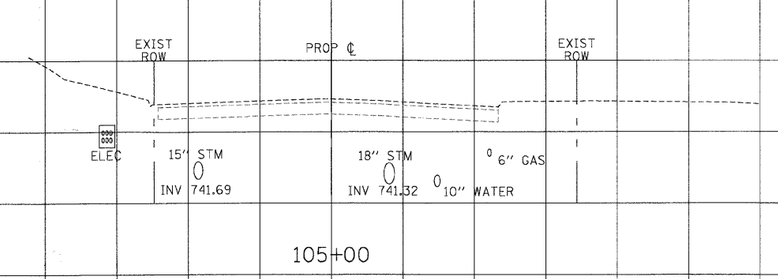
104+00



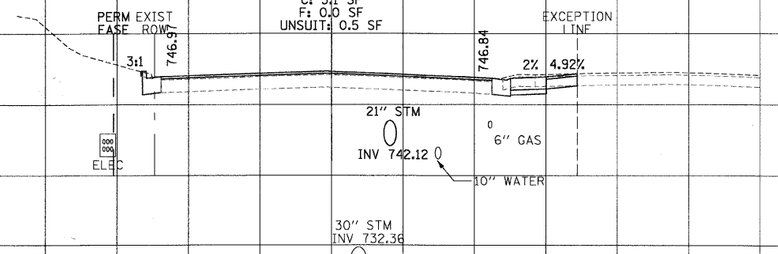
DRIVEWAY
103+73



105+50



105+00



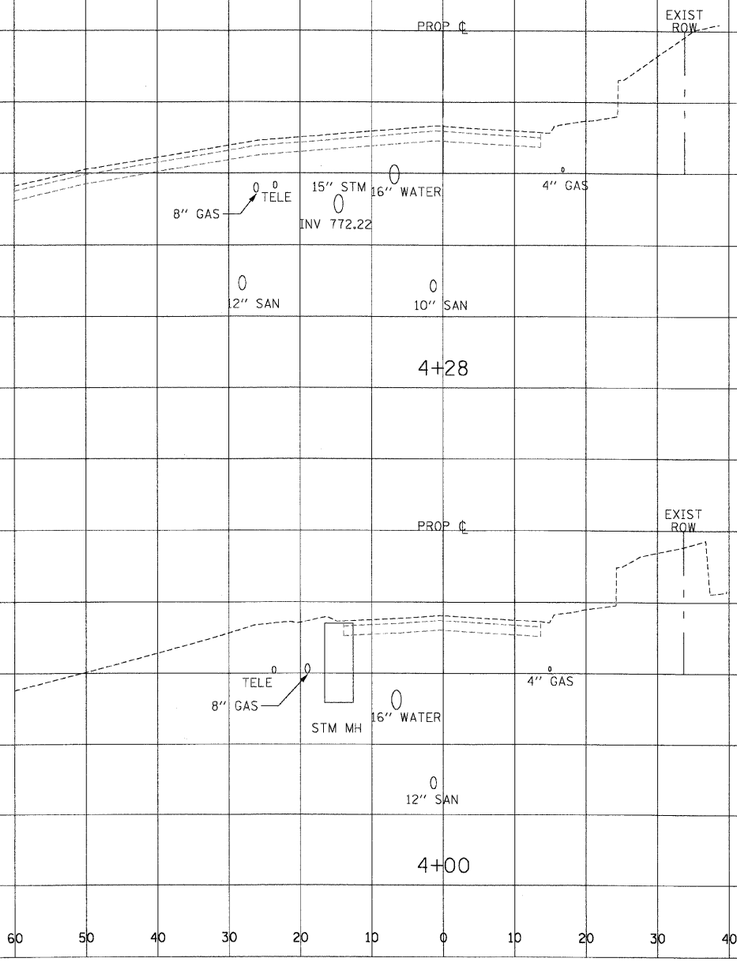
DRIVEWAY
104+52

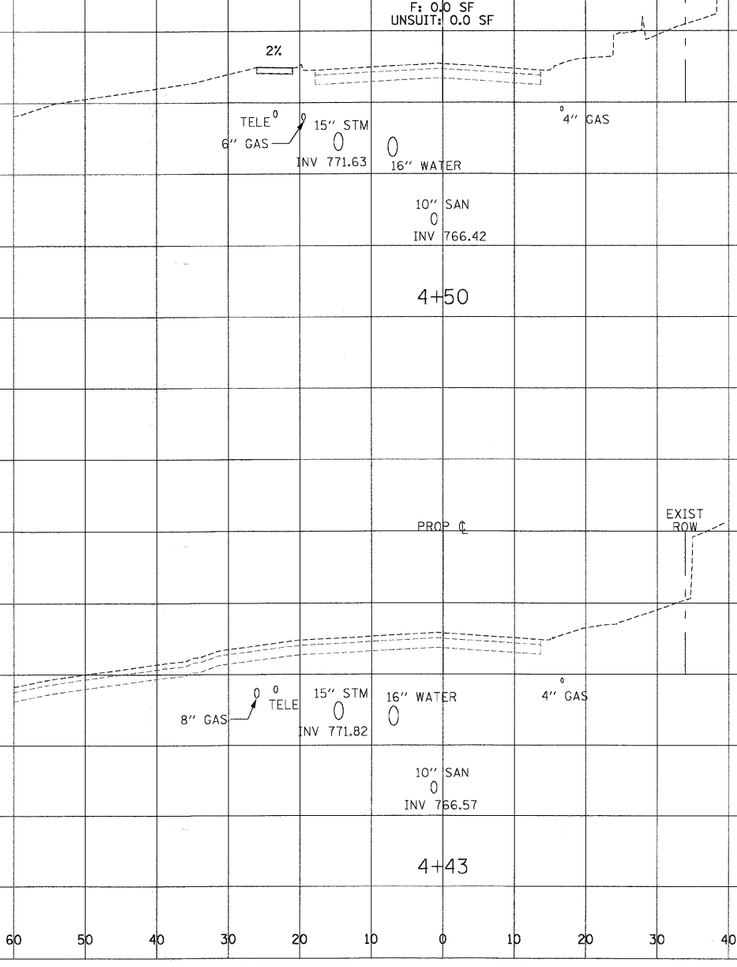
SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\12901\DESIGN\DGN\XSEC.DGN
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	67
STA. 4+00	TO STA. 4+50			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943





SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

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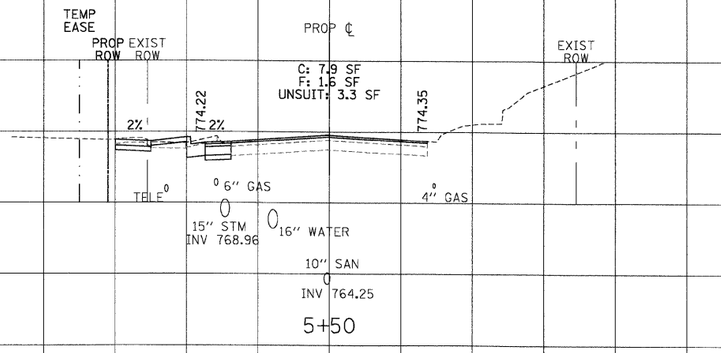
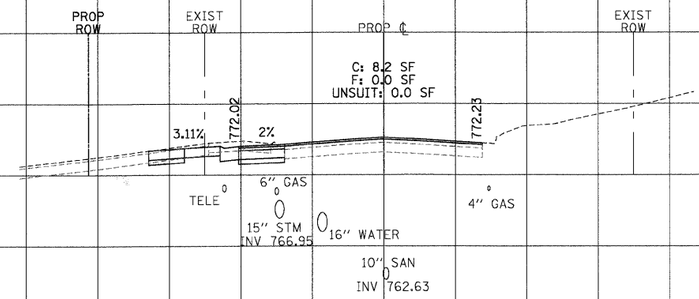
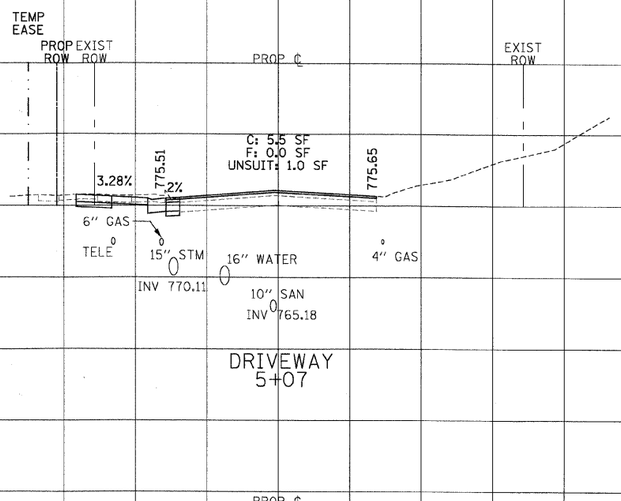
2/12/2008

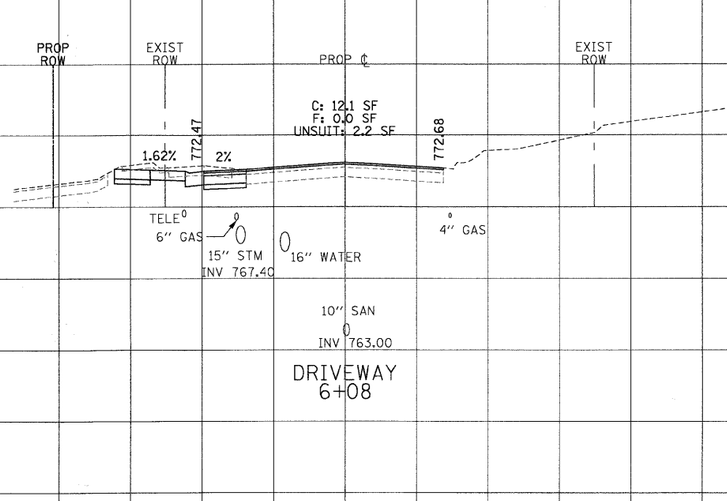
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	68
STA. 5+00	TO STA.6+25			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

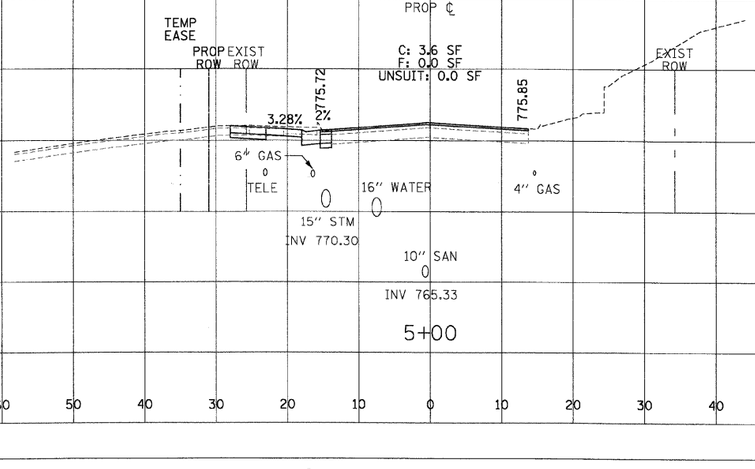
CONTRACT NO.: 83943

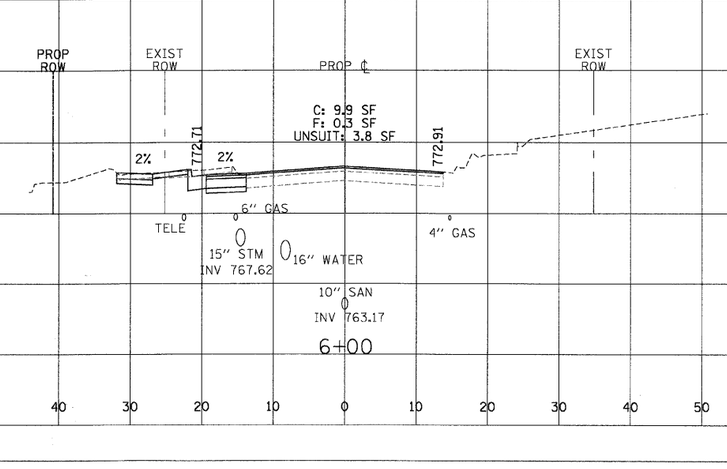












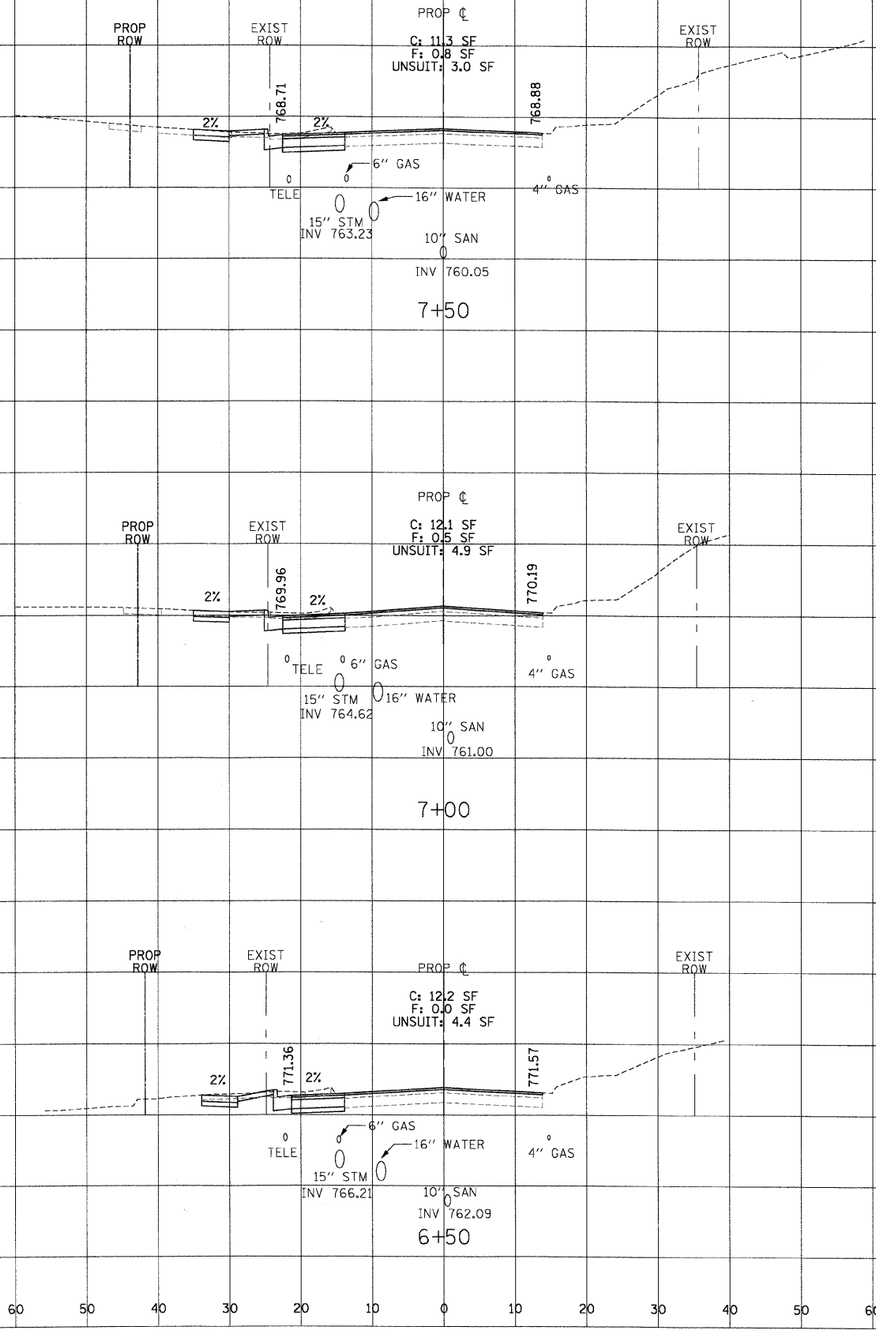
60 50 40 30 20 10 0 10 20 30 40 50 60

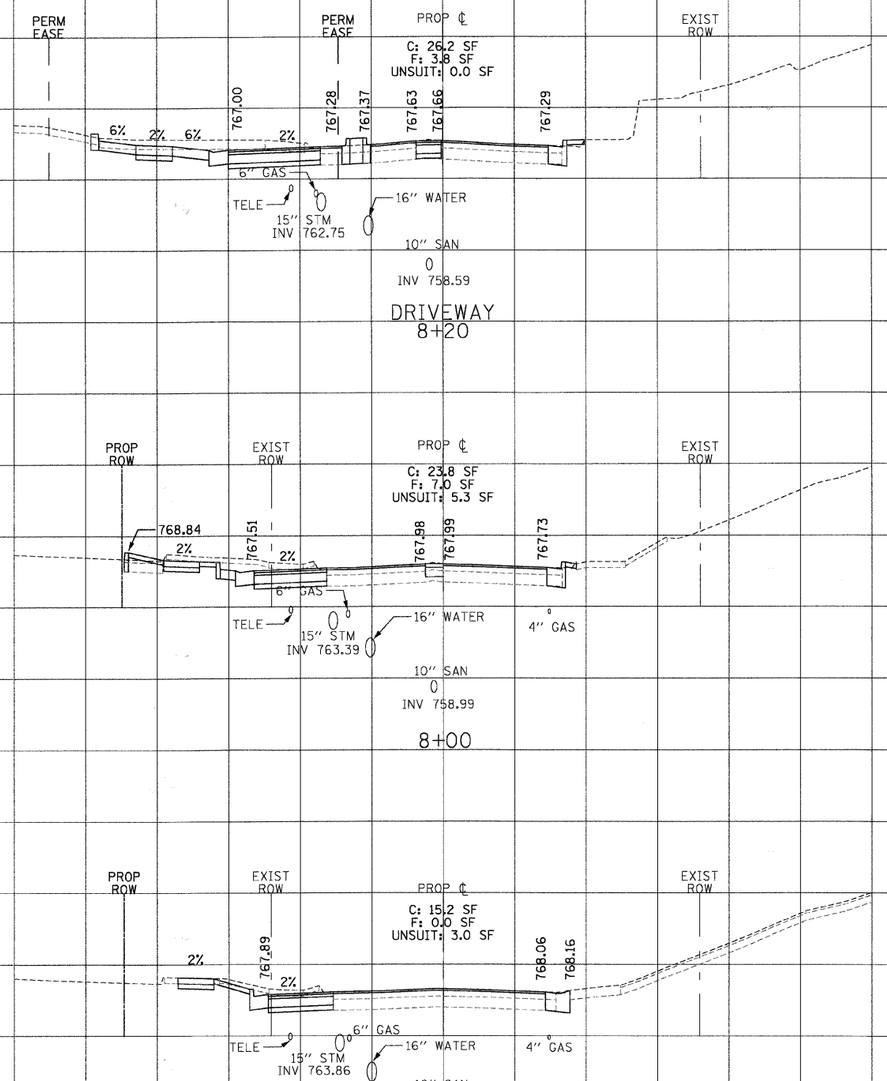
SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\12901\4\DESIGN\DGN\XSEC.DGN
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	69
STA. 6+50		TO STA.8+20		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943





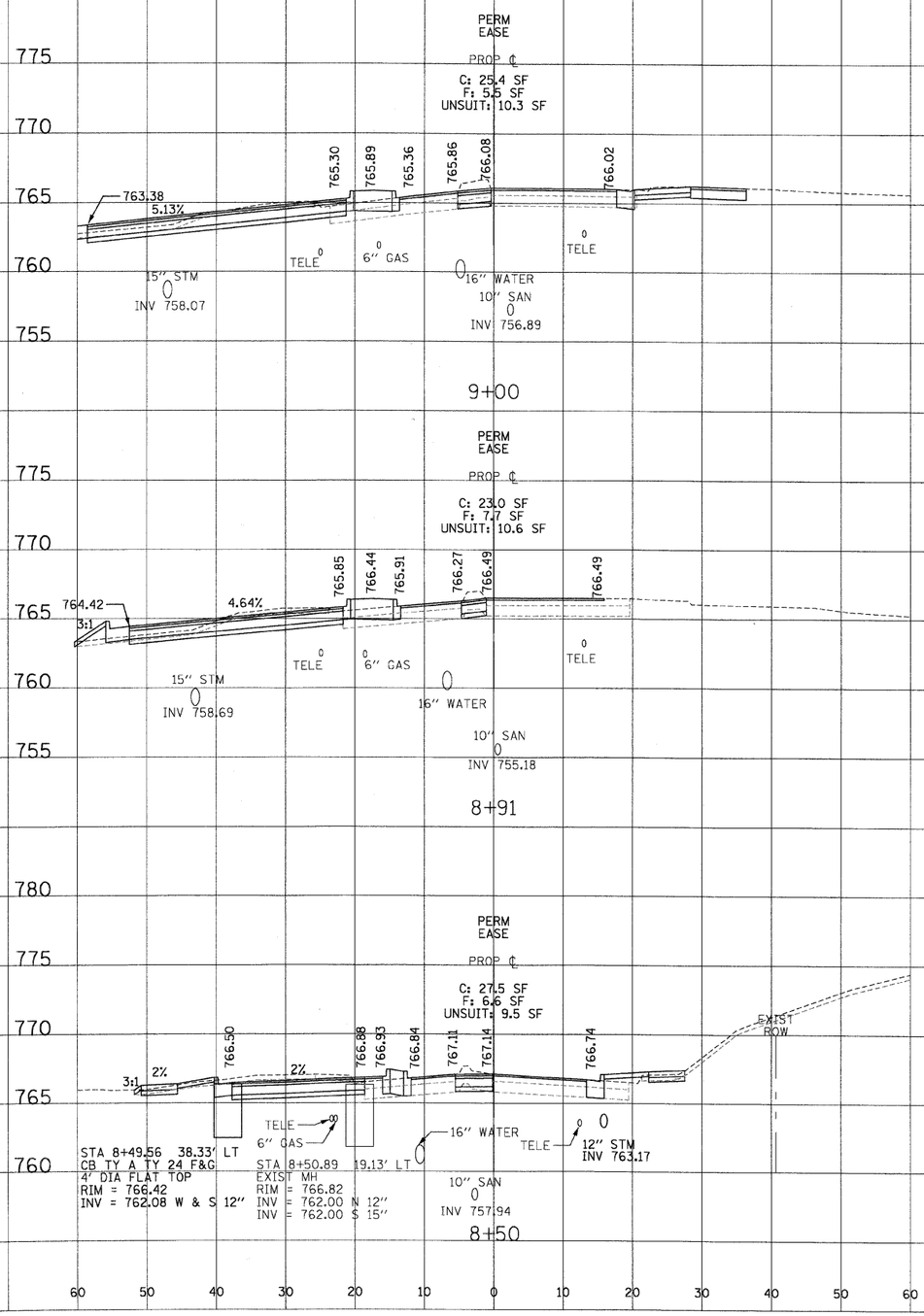
60 50 40 30 20 10 0 10 20 30 40 50 60

SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\129814\DESIGN\DGN\XSEC.DGN
2/12/2008

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	96-00159-00-CH	KANE	70	70
STA. 8+50		TO STA.9+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.: 83943



SIDE SLOPE H:V
H: 1"=10'
V: 1'=5'

H:\ELGIN\1298\4\DESIGN\DGN\XSEC.DGN
2/12/2008