

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P856	04-00128-00-TL	DUPAGE	21	1
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 83793				

INDEX OF SHEETS
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN CITY OF NAPERVILLE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
LOCAL AGENCY IMPROVEMENT**

DESIGN DESIGNATION
NAPER BOULEVARD:

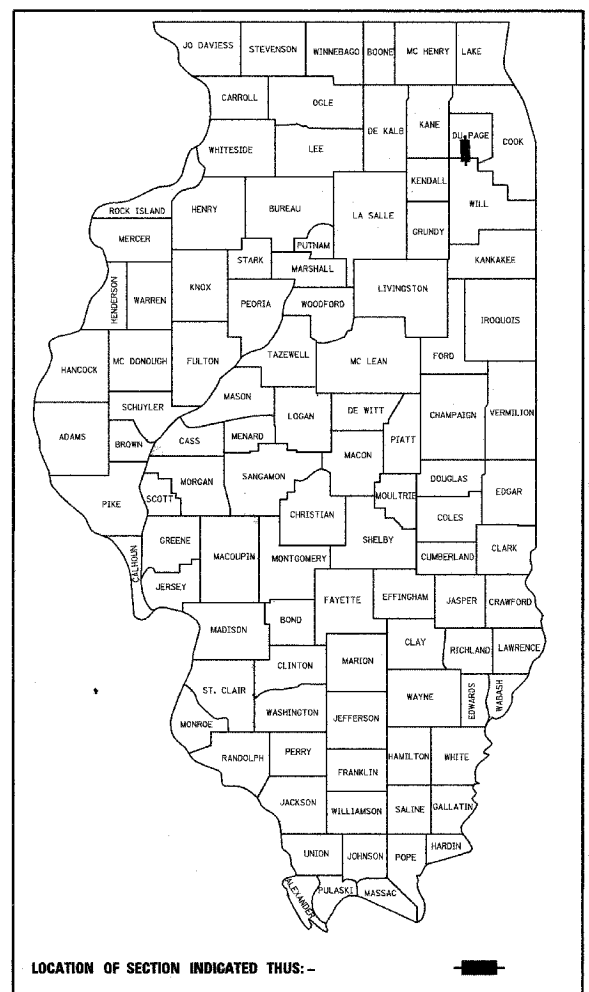
	ADT (2022)	DESIGN SPEED	POSTED SPEED
NAPER BOULEVARD	28,600	35 MPH	35 MPH

FAP 856 NAPER BOULEVARD
SECTION 04-00128-00-TL
PROJECT NO.: F-0856(020)

HOBSON ROAD TO DUNROBIN ROAD
TRAFFIC SIGNAL INTERCONNECT
CITY OF NAPERVILLE
DUPAGE COUNTY
JOB NO. C-91-261-04

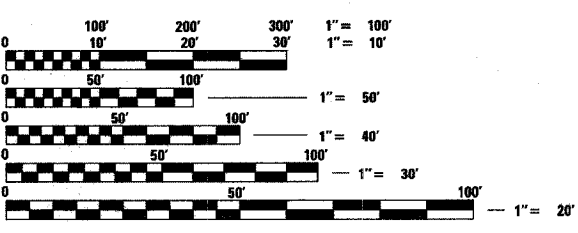
PROPOSED IMPROVEMENT

**INTERCONNECT THE TRAFFIC SIGNALS ON NAPER AT
DUNROBIN, GREEN TRAILS, CULPEPPER, AND HOBSON.
CONNECT TO EXISTING 75TH STREET SYSTEM**



INDEX OF STATE STANDARDS

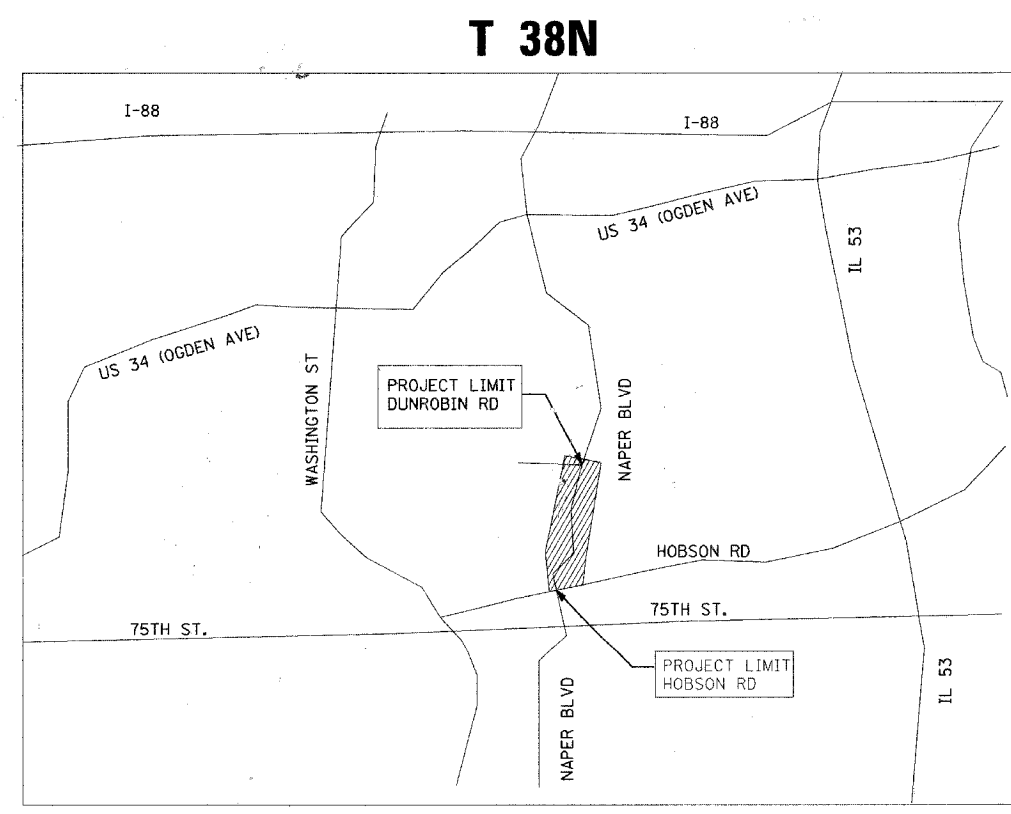
STD. NO.	TITLE
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
4240001-03	CURB RAMPS FOR SIDEWALKS
701001-01	OFF-ROAD OPERATIONS, 2L 2W, MORE THAN 15 FT AWAY
701301-02	LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS
701501-03	URBAN LANE CLOSURE, 2L 2W, UNDIVIDED
701601-04	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-04	URBAN LANE-CLOSURE, MULTILANE INTERSECTION
702001-05	TRAFFIC CONTROL DEVICES
814001	CONCRETE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCE



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. 83793



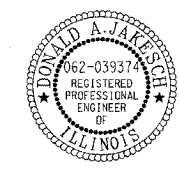
NOT TO SCALE
NAPER TOWNSHIP
GROSS LENGTH OF PROJECT = 6,470 FT. = 1.23 MI.
NET LENGTH OF PROJECT = 6,470 FT. = 1.23 MI.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED *April 8, 2005*
Robert Ryan, P.E.
CITY OF NAPERVILLE

APPROVED *4-13 2005*
CHT
BUREAU CHIEF OF LOCAL ROADS AND STREETS

APPROVED *April 14, 2005*
Diana O'Keefe, PE
DISTRICT ENGINEER



Signed *Donald A. Jakesch*
Donald A. Jakesch, P.E. II, Lic. No. 062-039374
Expires 11-30-2005
Date *April 6, 2005*

PREPARED BY T Y LIN INTERNATIONAL, INC.
FEDERAL AID DESIGN ENGINEER: PHILLIP MARCYN (847)705-4189
PLOT DATE = 04/06/05
FILE NAME = 0856-01
PLOT SCALE = 1"=30'
REFERENCE = REF

P:\0856\0856-01\0856-01-01.dwg 34/07/2005 10:53:30 AM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P856	04-00128-00-TL	DUPAGE	21	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83793				

GENERAL NOTES:

- THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC STANDARDS.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, CABLE, AND GAS FACILITIES (48 HOURS NOTIFICATION IS REQUIRED). CONTACT MR. PAT EYRE, DEPARTMENT OF PUBLIC UTILITIES, CITY OF NAPERVILLE AT (630) 420-4122. FOR WATER, SEWER AND STORM SEWER LOCATIONS CONTACT MR. RON RITTER, CITY OF NAPERVILLE AT (630) 420-4183 FOR CITY OWNED ELECTRIC LOCATIONS.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO ERECT A YARD OR FIELD OFFICE ON CITY RIGHT-OF-WAY OR PROPERTY WITHOUT WRITTEN PERMISSION FROM THE CITY.
- ALL OPEN EXCAVATIONS MUST BE ADEQUATELY COVERED (STEEL PLATED) OR FILLED IN AT THE END OF EACH DAY. NO OPEN EXCAVATIONS ARE ALLOWED OVERNIGHT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE ITEM REQUIRING EXCAVATION.
- RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL 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.
- THE PROJECT INVOLVES WORK ON OR ADJACENT TO ARTERIAL ROADWAYS CARRYING HIGH TRAFFIC VOLUMES. WEEKDAY CONSTRUCTION ACTIVITY MUST BE LIMITED TO ONLY THE HOURS BETWEEN 8:30 AM AND 4:30 PM. TEMPORARY LANE CLOSURES SHOULD BE REMOVED BY 4:00PM.
- THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES THAT ARE SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THESE LOCATIONS OR THE COMPLETENESS OF THE UTILITY INFORMATION. THE CONTRACTOR WILL BE REQUIRED TO VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF EACH FACILITY WITH THE UTILITY COMPANY AND SHALL TAKE DUE CARE IN ALL PHASES OF CONSTRUCTION TO PROTECT ANY SUCH FACILITIES THAT MAY BE AFFECTED BY THE WORK BY CALLING J. U. L. I. E. AT (800) 892-0123. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL UNDERGROUND UTILITY CONSTRUCTION AND SHALL SUBMIT "RECORD DRAWINGS" TO THE ENGINEER.
- ANY PULLING AND REINSTALLING OF EXISTING CABLE SHALL BE INCIDENTAL TO THE NEW CABLE.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF NAPERVILLE 48 HOURS PRIOR TO ANY NEW CONSTRUCTION REQUIRING INSPECTION.
- THE CITY OF NAPERVILLE WILL NOT PROVIDE ANY OFF SITE AREAS FOR THE STORAGE OF MATERIALS OR EQUIPMENT.
- WATER FOR CONSTRUCTION PURPOSES:
CITY WATER FOR CONSTRUCTION PURPOSES WILL BE AVAILABLE TO THE CONTRACTOR AT HIS COST, ACCORDING TO THE RATES IN EFFECT AT THE TIME OF USAGE. THE CONTRACTOR WILL USE WATER ONLY FROM A LOCATION APPROVED BY THE WATER AND WASTE WATER DEPARTMENT. IF APPROVED, THE PROCEDURE FOR SECURING THE CITY METER IS AS FOLLOWS:

THE CONTRACTOR SHALL GO TO:
WATER AND WASTE WATER DEPARTMENT
NORTH OPERATING CENTER
(N.O.C.) 630-420-6137
1200 W. OGDEN AVE.
NAPERVILLE, IL 60566-7020

THE CONTRACTOR SHALL APPLY TO THE W & WW DEPARTMENT FOR USAGE OF A METER IN ACCORDANCE WITH DEPARTMENT REGULATIONS. THE CONTRACTOR SHALL PAY ALL REQUIRED DEPOSITS, FEES, AND RENTALS AS DETERMINED BY THE WATER DEPARTMENT.

THE CONTRACTOR SHALL GO TO:
WATER AND WASTE WATER DEPARTMENT
NORTH OPERATING CENTER
(N.O.C.) 630-420-6137
1200 W. OGDEN AVE.
NAPERVILLE, IL 60566-7020

THE CONTRACTOR SHALL APPLY TO THE W & WW DEPARTMENT FOR USAGE OF A METER IN ACCORDANCE WITH DEPARTMENT REGULATIONS. THE CONTRACTOR SHALL PAY ALL REQUIRED DEPOSITS, FEES, AND RENTALS AS DETERMINED BY THE WATER DEPARTMENT.

- IN CASES WHERE SIDEWALK REPLACES AN EXISTING RAMP THE PROPOSED RAMP SHALL CONFORM TO IDOT BDE STANDARD FOR ADA ACCESSIBLE RAMP. THE CONFORMANCE TO ADA ACCESSIBLE RAMP SHALL BE INCIDENTAL TO THE PAY ITEM PORTLAND CEMENT SIDEWALK 5 INCH.

INDEX OF SHEETS

SHEET NO.	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES, STATE STANDARDS INDEX OF SHEETS AND SUMMARY OF QUANTITIES
3-6	DISTRICT ONE STANDARD TRAFFIC SIGNAL DETAILS
7	HOBSON RD SIGNAL PLAN
8	HOBSON RD CABLE PLAN
9	CULPEPPER DR SIGNAL PLAN
10	CULPEPPER DR CABLE PLAN
11	GREEN TRAILS SIGNAL PLAN
12	GREEN TRAILS CABLE PLAN
13	DUNROBIN RD SIGNAL PLAN
14	DUNROBIN RD CABLE PLAN
15-17	INTERCONNECT PLAN
18-20	INTERCONNECT SCHEMATIC
21	DISTRICT ONE STANDARD TC-10

SUMMARY OF QUANTITIES:

CODE NO.	PAY ITEM	UNIT	TOTAL	YO3-IF
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	350	350
44000600	SIDEWALK REMOVAL	SQ FT	350	350
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	LSUM	1	1
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	50	50
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	5574	5574
81400100	HANDHOLE	EACH	9	9
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 IC	FOOT	6883	6883
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM12F	FOOT	7356	7356
87900200	DRILL EXISTING HANDHOLE	EACH	6	6
86400100	TRANSCEIVER - FIBER OPTIC	EACH	3	3
81500200	TRENCH AND BACKFILL FOR ELECTRIC WORK	FOOT	50	50
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4	4
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1	1
XX002856	REOPTIMIZE TRAFFIC SIGNAL SYSTEM	LSUM	1	1
XX006210	HAND DIGGING UP TO 5 FT. DEPTH IN UNPAVED AREAS	FOOT	26	26

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION NAPER BOULEVARD INTERCONNECT GENERAL NOTES, STATE STANDARDS INDEX OF SHEETS AND SUMMARY OF QUANTITIES SCALE: NTS DATE	DRAWN BY JS CHECKED BY DJ
NAME	DATE		

PLT DATE = DATE
FILE NAME = FILE#
PLOT SCALE = ASCALE
REFERENCE = #REF

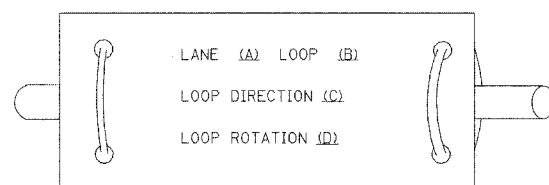
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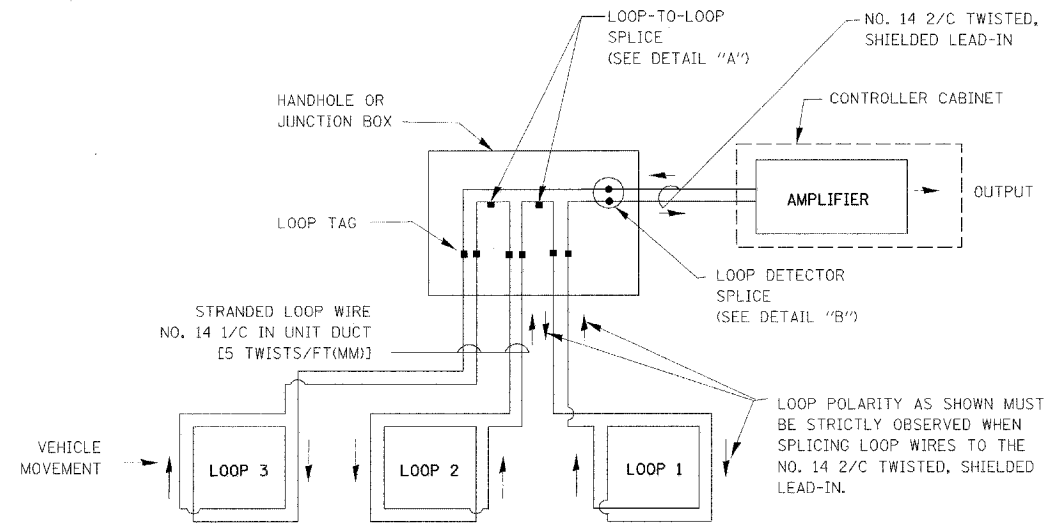
LOOP DETECTOR NOTES

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

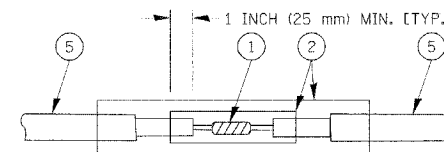


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

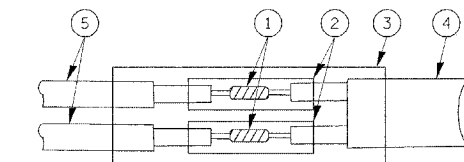


DETECTOR LOOP WIRING SCHEMATIC

- 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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 10/18/2002

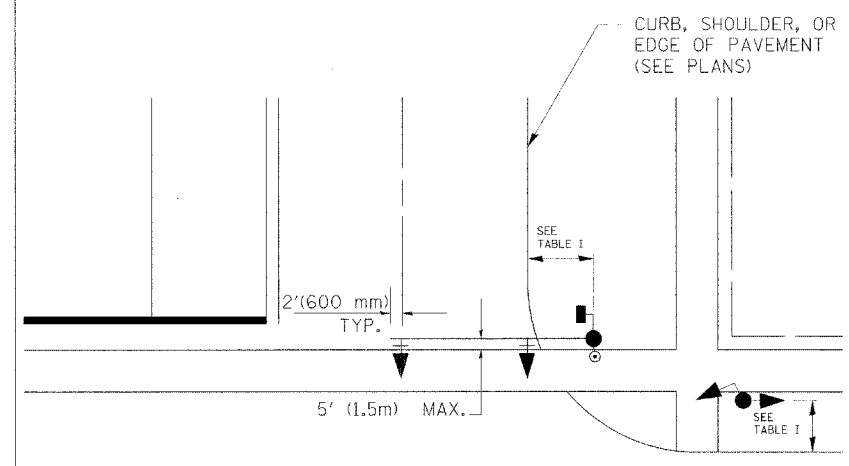
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DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
04-0028-00-7L	DUPAGE		21	4
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

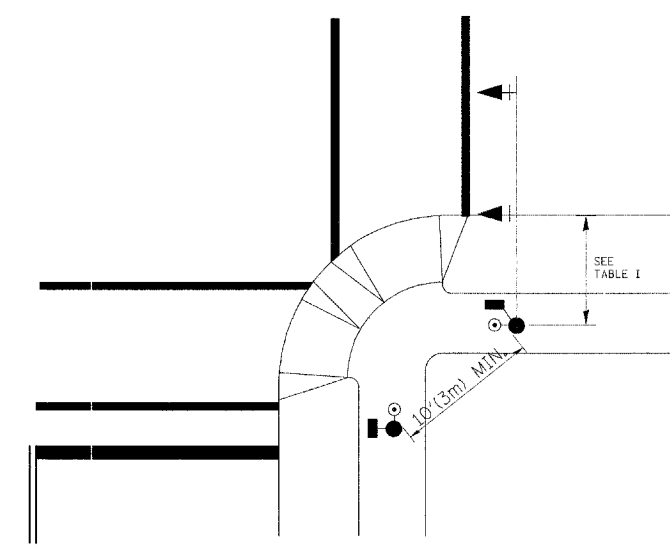
83793

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

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

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

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

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

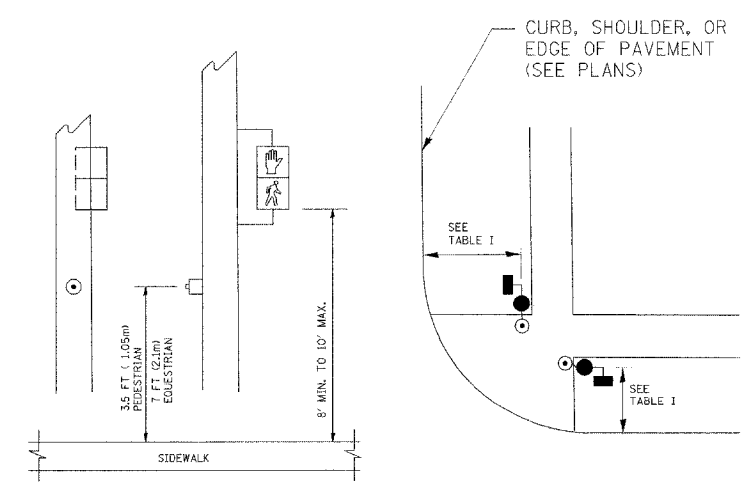


TABLE I

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

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

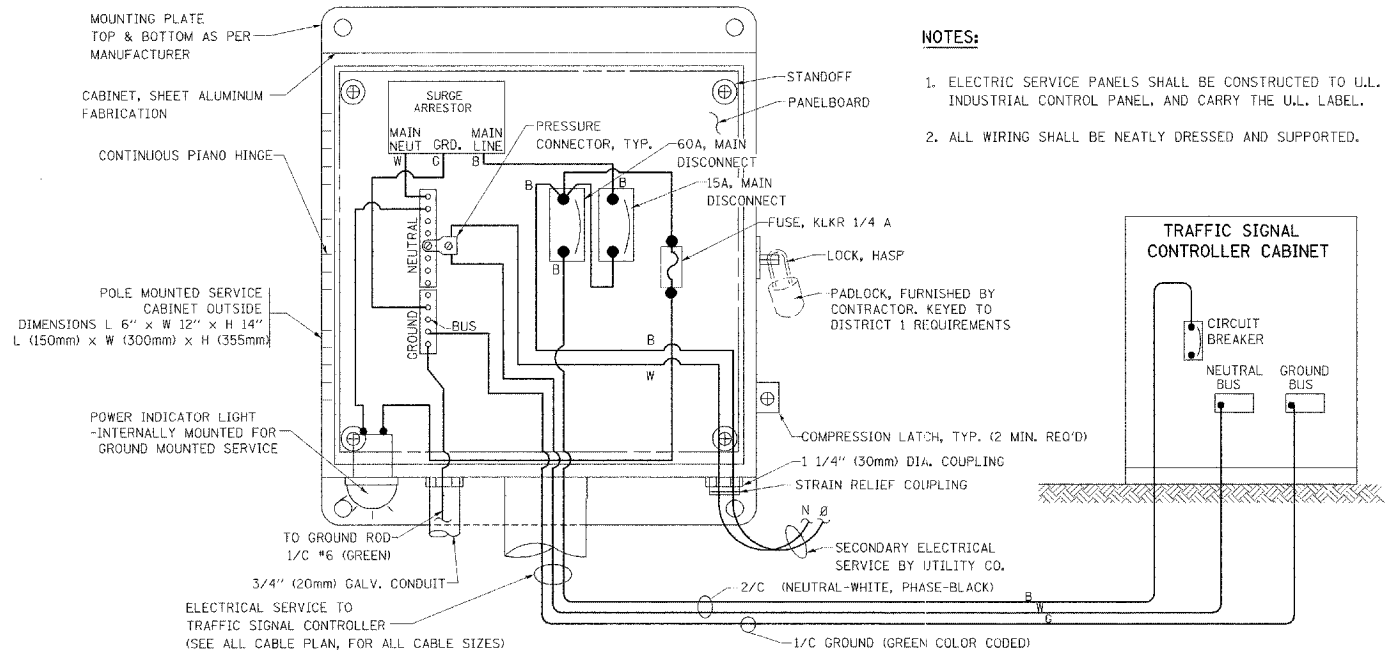
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 10/18/2002

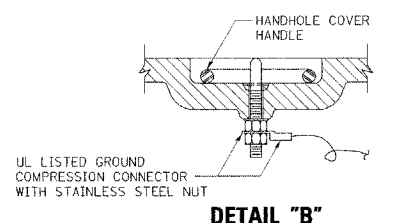
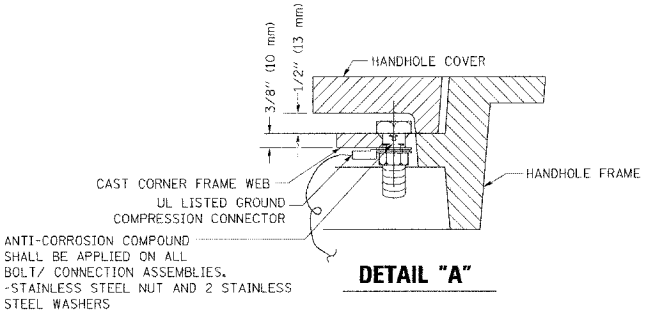
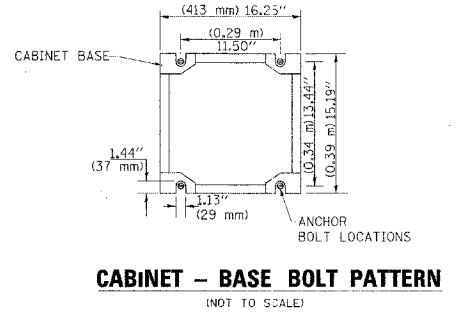
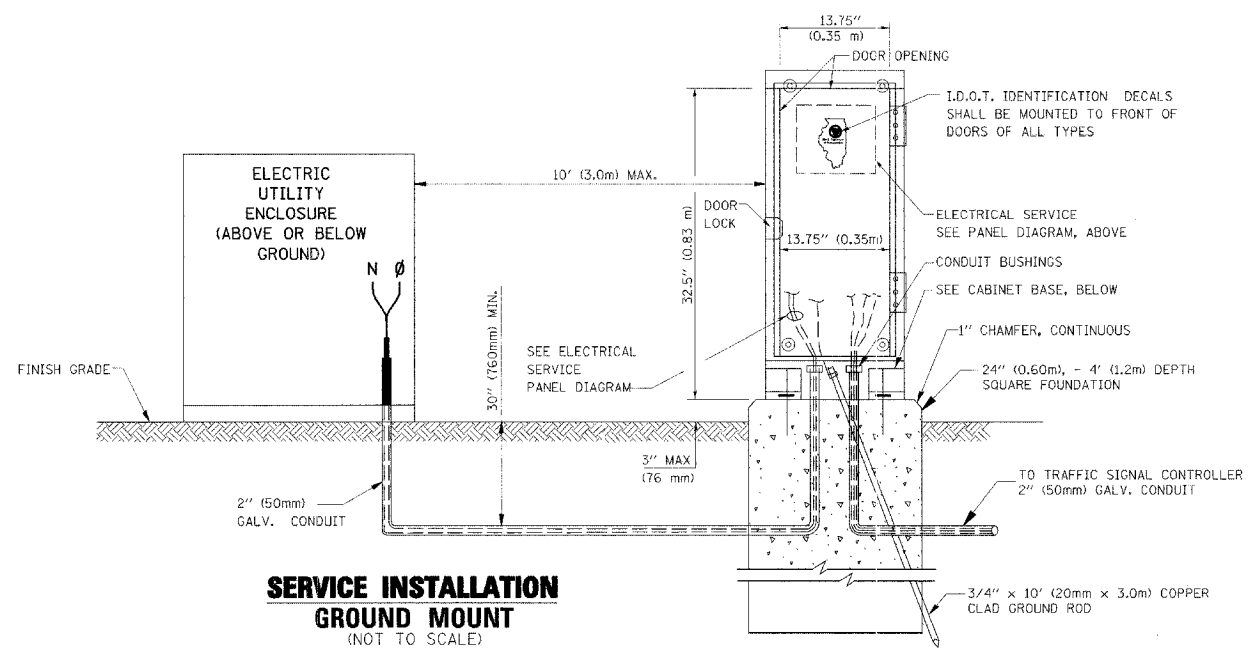
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DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00128-00-7L	DU PAGE	21	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

83793



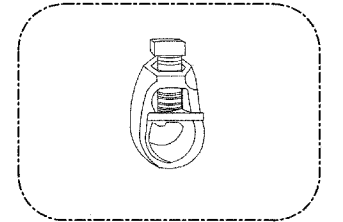
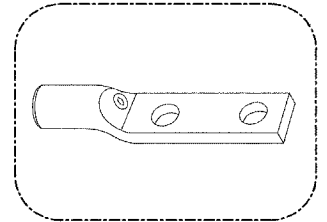
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



NOTES:

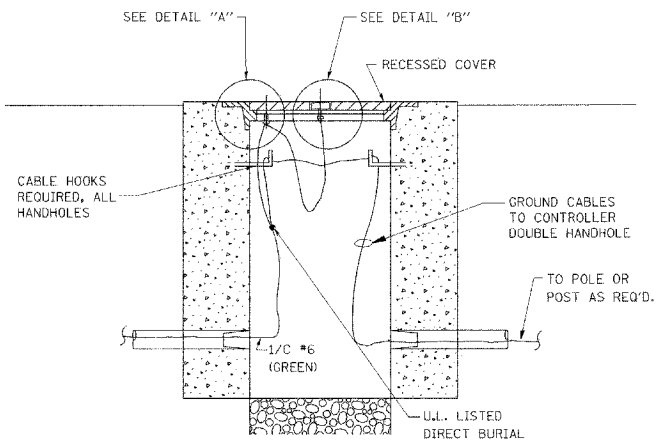
GROUNDING SYSTEM

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

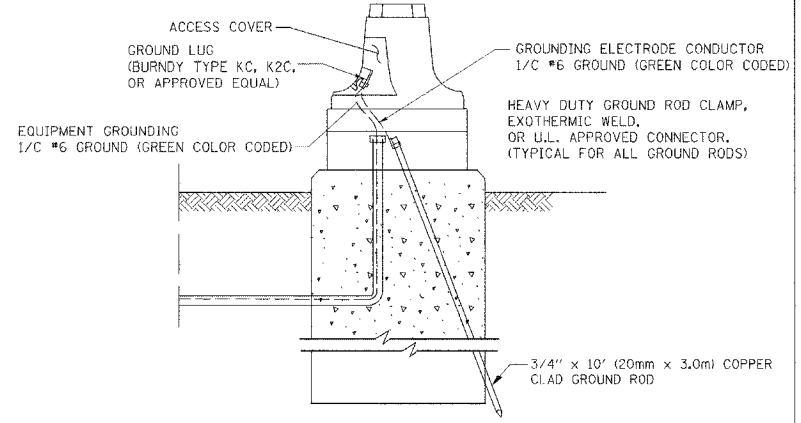
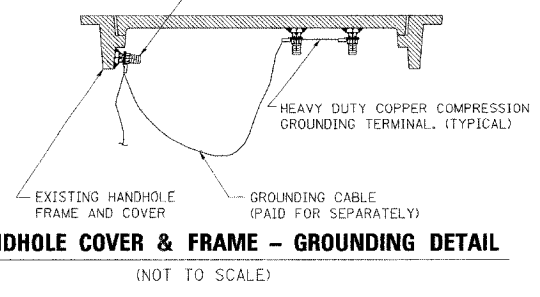


NOTES:

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



(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL)

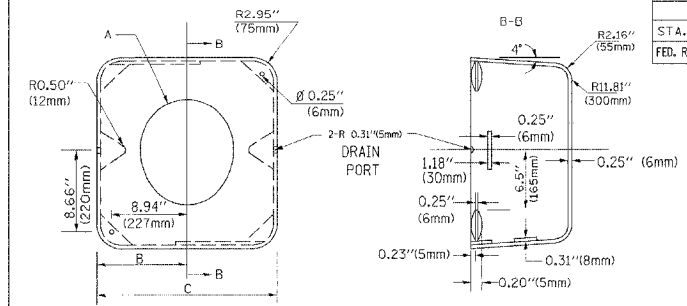


REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 10/18/2002
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

83793

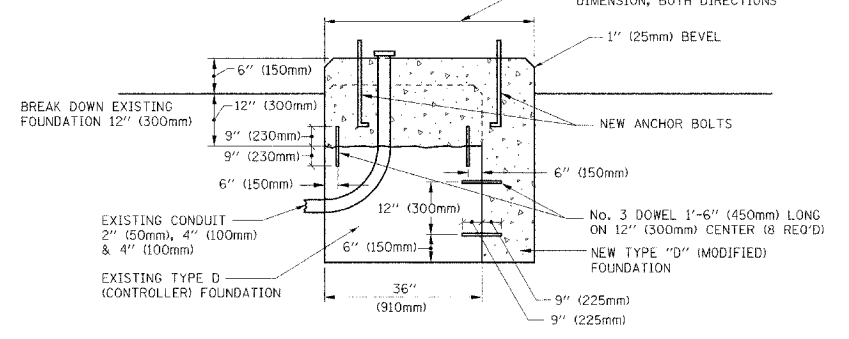
MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED



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

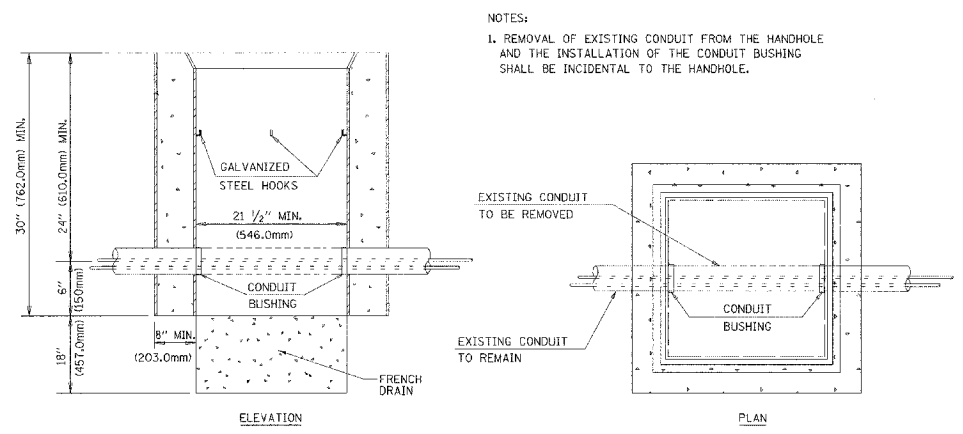
SHROUD DETAIL

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



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)



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

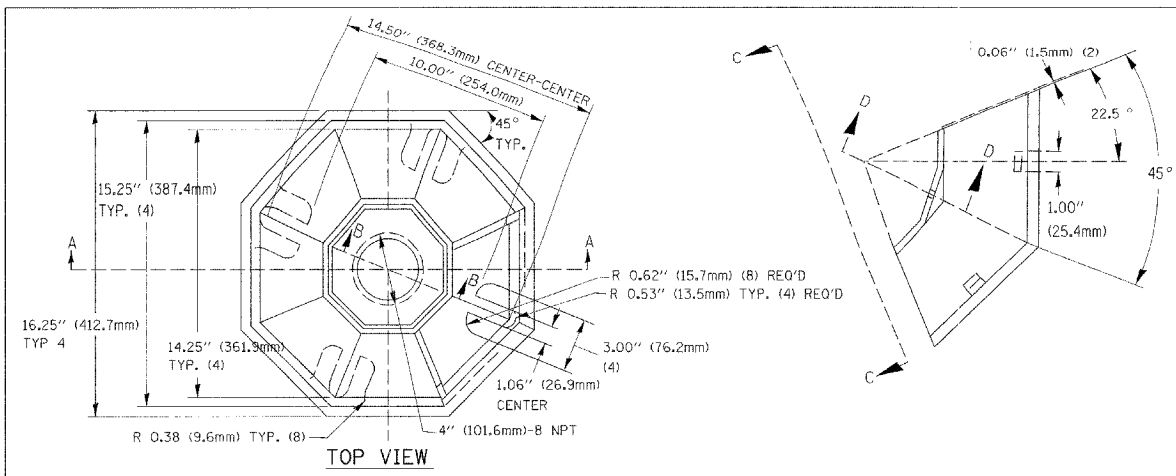
REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 10/18/2002
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 4 OF 4

TS05

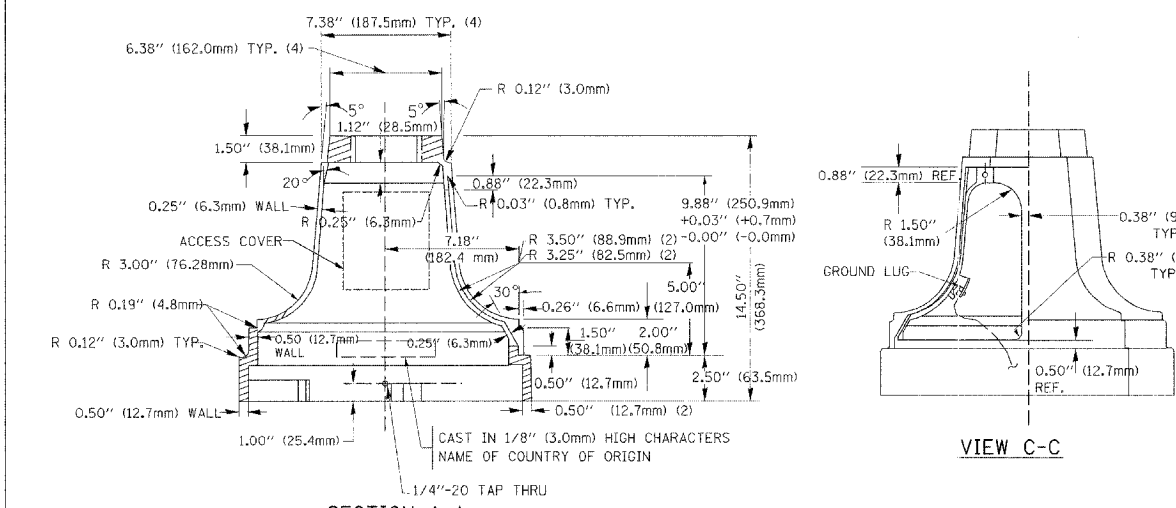
REVISION DATE: 01/01/02



TOP VIEW

SECTION B-B

SECTION D-D

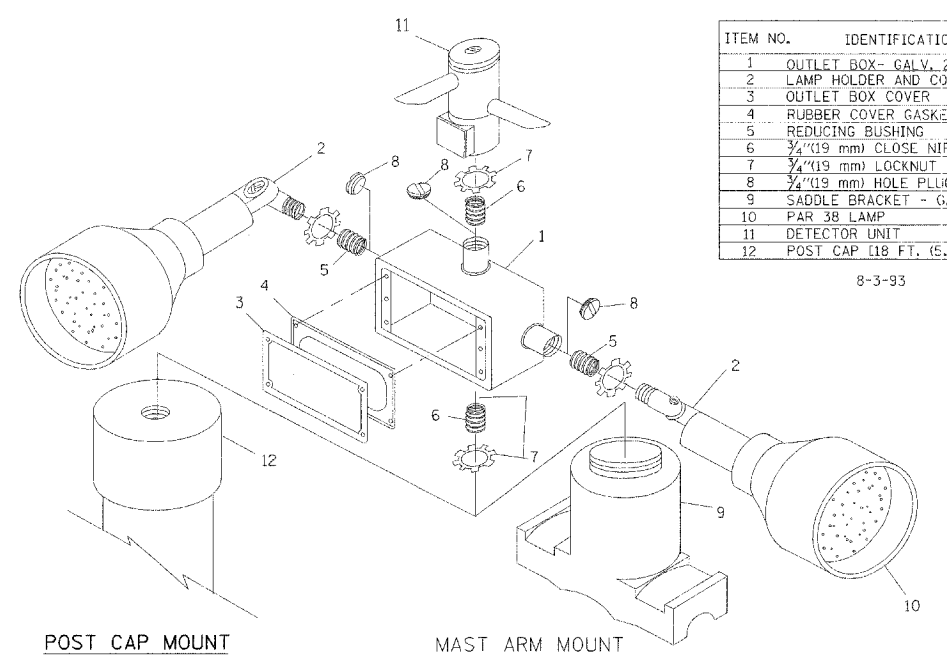


SECTION A-A

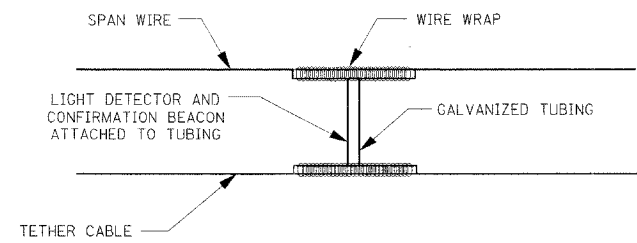
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTES:

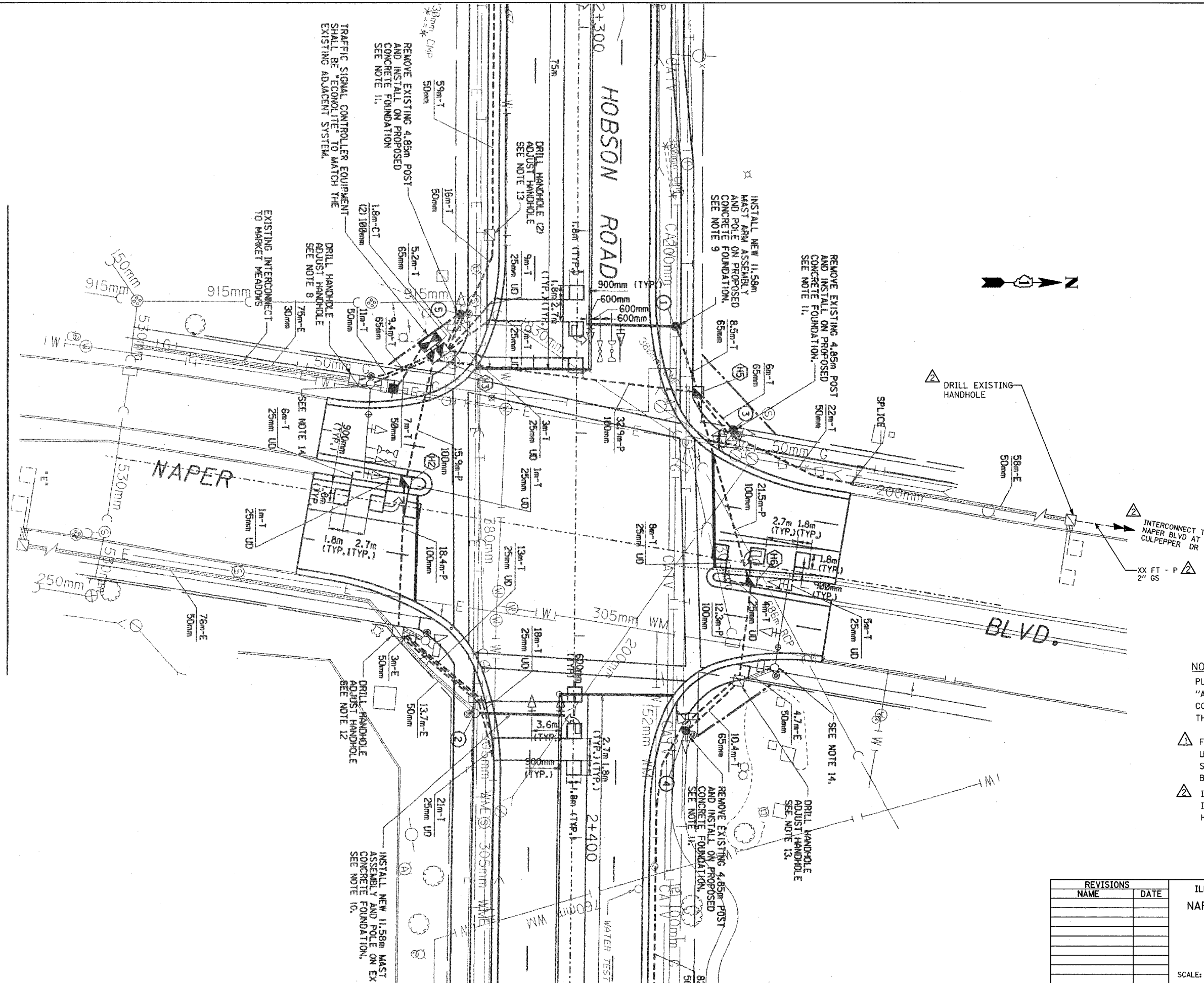
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- 0Z/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



POST CAP MOUNT
 MAST ARM MOUNT
 EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



LIGHT DETECTOR AND
 CONFIRMATION BEACON MOUNTING
 FOR TEMPORARY TRAFFIC SIGNALS
 (NOT TO SCALE)



NOTE:
 PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

▲ FIBER OPTIC INTERCONNECT UPGRADE 4-5-02
 SEE REVISED PLANS PREPARED BY DUPAGE COUNTY

▲ INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT

**HOBSON ROAD
 SIGNAL PLAN**

SCALE: NTS
 DATE: _____ DRAWN BY: JS
 CHECKED BY: DJ

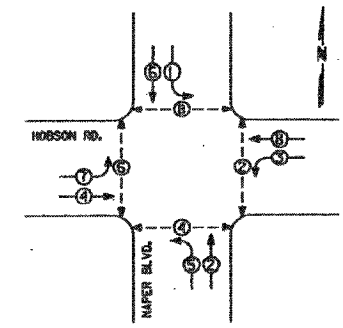
DATE: _____
 FILE NAME: _____
 PLOT SCALE: _____
 REFERENCE: _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P856	04-00128-00-TL	DUPAGE	21	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83793				

EARTH TECH
A TYLINT INTERNATIONAL LTD. COMPANY

COUNTY HIGHWAY	FISCAL YEAR	TOTAL SHEETS	SHEET NO.
2	2002	21	T9
SECTION 95-0046-00-FP		DUPAGE COUNTY	
CABLE PLAN HOBSON ROAD & NAPER BLVD.			

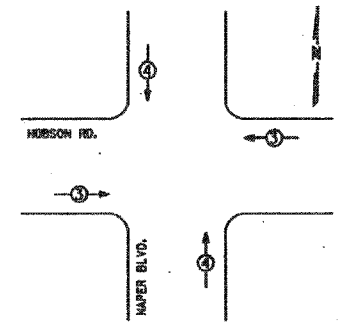
CONTROLLER SEQUENCE



LEGEND
 ← ○ → VEHICULAR MOVEMENT
 ← ○ → PEDESTRIAN MOVEMENT
 * NUMBER REFERS TO ASSOCIATED PHASE

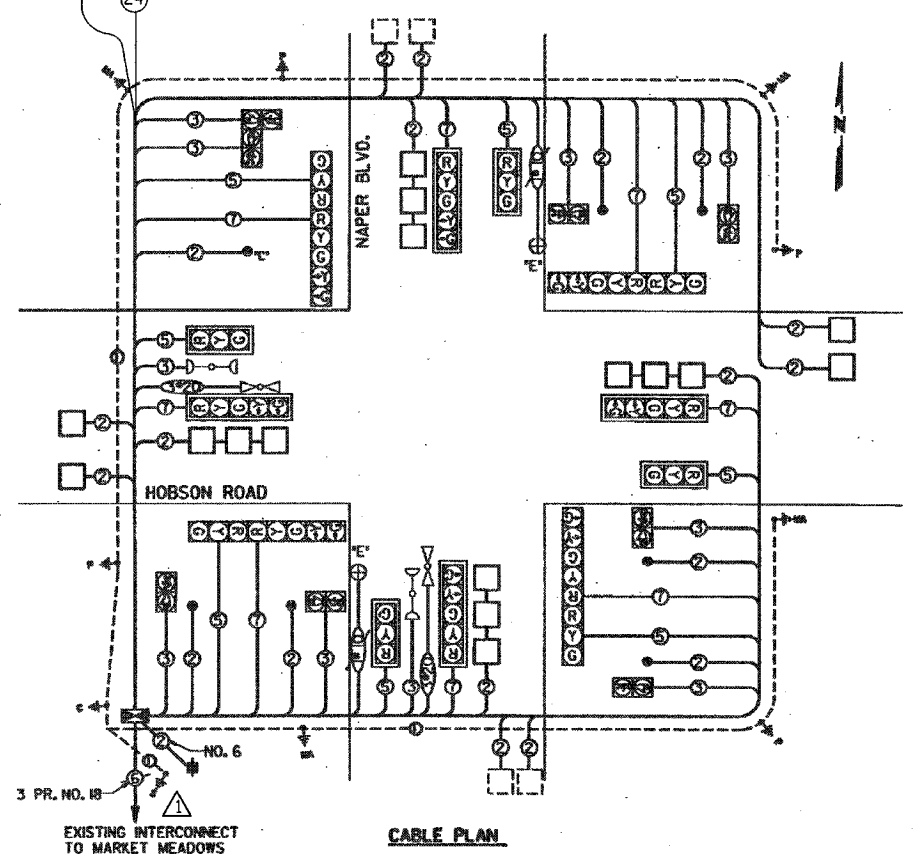
PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

INTERCONNECT TO CULPEPPER DR (SEE INTERCONNECT SHEET XX)



CABLE PLAN LEGEND

- | | | |
|--|--|---|
| | | 12" TRAFFIC SIGNAL SECTION |
| | | 12" PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | SIGNAL FACE WITH BACKPLATE *P* INDICATES PROGRAMMED HEAD. |
| | | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE OR CONTROLLER |
| | | GROUND ROD AT POST OR MAST ARM POLE |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) EXCEPT AS INDICATED |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM2F & SM2F |
| | | STREET LIGHTING |

LEGEND

- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)

NOTE:
PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

MODIFIED BY OTHERS IN 2002 INTERCONNECT CHANGED TO 62.5/125 MM 12F & SM 12F WITH TRACER CABLE

INSTALLATION OF FIBER OPTIC INTERCONNECT TO NORTH ON NAPER BLVD. HOBSON TO DUNROBIN

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL RATING
TYPE	NO. LAMPS	BATTERY	% OPERATION	
SIGNAL (RED)	15	125	0.50	1875.00
(YELLOW)	15	125	0.25	540.00
GREEN	15	125	0.25	540.00
ARROW	15	125	0.10	225.00
TRAFFIC SIGNAL CONTROLLER	8	80	1.00	120.00
BLANK SIGN	1	100	0.05	100.00
FLASHER			0.50	
TOTAL *				3195.00

FOUNDATION DEPTH	METERS	CABLE SLACK	METERS	VERTICAL	METERS
TYPE A - HIGH	1.0	2.0	2.0	ALL UTILIZATION	5.0
B - CONTROLLED	1.0	2.0	2.0	POST ARM MAST POLE	5.0
C - MAST ARM	1.0	2.0	2.0	POST ARM MAST POLE	5.0
	1.0	2.0	2.0	POST ARM MAST POLE	5.0
	1.0	2.0	2.0	POST ARM MAST POLE	5.0
	1.0	2.0	2.0	POST ARM MAST POLE	5.0
	1.0	2.0	2.0	POST ARM MAST POLE	5.0

CABLE PLAN
PUSHBUTTON "C" PLACES A CALL IN PEDESTRIAN MOVEMENT 6 AND 8.

CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE DEVIATIONS

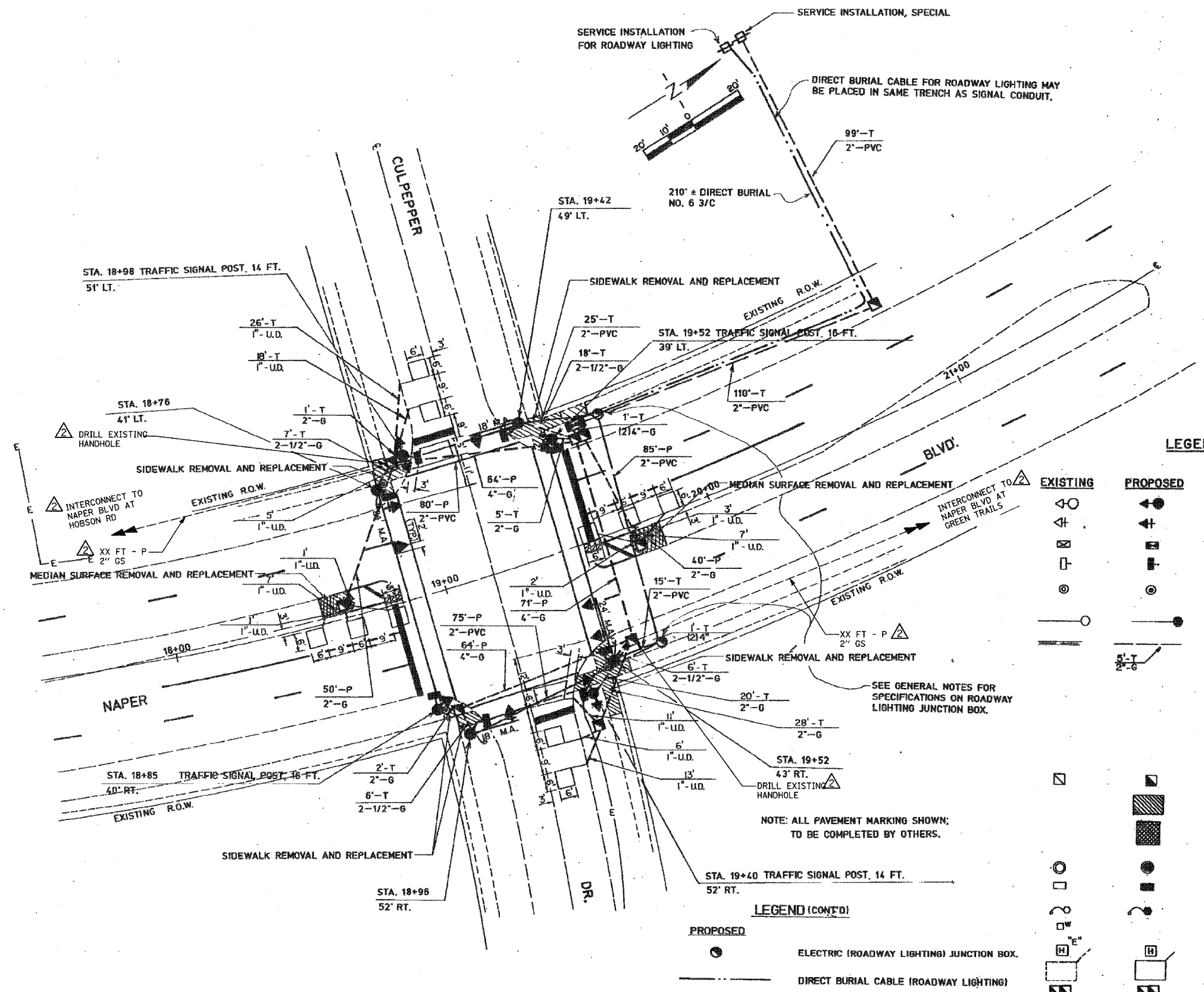
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
HOBSON ROAD CABLE PLAN

SCALE: NTS
DATE
DRAWN BY JS
CHECKED BY DJ

PLOT DATE = #DATE#
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
REFERENCE = #REF#

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P856	04-00128-00-TL	DUPAGE	21	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83793				



LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊙	⊙	SIGNAL HEAD AND POST
⊕	⊕	SIGNAL HEAD AND BACKPLATE
⊞	⊞	CONTROLLER
⊟	⊟	PEDESTRIAN SIGNAL HEAD
⊠	⊠	PEDESTRIAN PUSH BUTTON DETECTOR
⊡	⊡	MAST ARM ASSEMBLY AND POLE
○	○	CONDUIT
○	○	UPPER NUMERAL INDICATES LENGTH
○	○	"T" INDICATES CONDUIT IN TRENCH
○	○	"P" INDICATES CONDUIT PUSHED
○	○	"C.T." INDICATES COMMON TRENCH
○	○	LOWER NUMERAL INDICATES SIZE
○	○	"G" DENOTES GALVANIZED STEEL CONDUIT
○	○	"U.D." DENOTES UNIT DUCT
⊞	⊞	CONCRETE HANDHOLE
⊟	⊟	SIDWALK REMOVAL AND REPLACEMENT
⊠	⊠	PAVEMENT REMOVAL AND REPLACEMENT
⊡	⊡	MANHOLE
○	○	INLET
○	○	STREET LIGHT
○	○	SHUT OFF VALVE (TYPE)
⊞	⊞	HEAVY DUTY HANDHOLE
⊟	⊟	DETECTOR LOOP
⊠	⊠	DOUBLE HANDHOLE

LEGEND (CONT'D)

PROPOSED	DESCRIPTION
⊞	ELECTRIC (ROADWAY LIGHTING) JUNCTION BOX.
—	DIRECT BURIAL CABLE (ROADWAY LIGHTING)

NOTE:
 PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

⊞ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02
 SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.

⊞ INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN

VASCONCELLES ENGINEERING CORP.



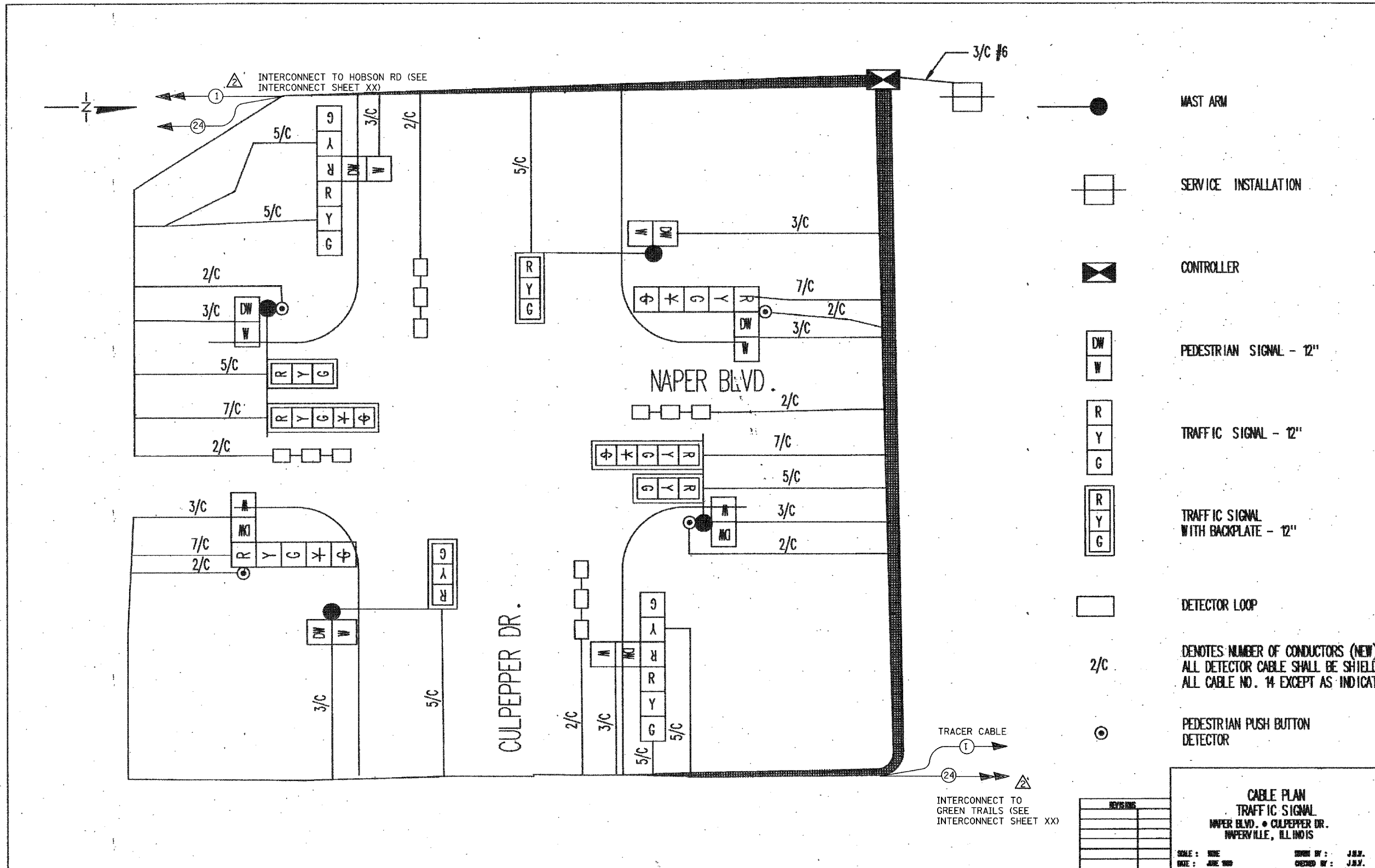
PLANS PREPARED FOR:
CITY OF NAPERVILLE

SIGNAL PLAN
CULPEPPER DRIVE AT NAPER BOULEVARD

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
 CULPEPPER DRIVE
 SIGNAL PLAN

SCALE: NTS
 DATE: _____
 DRAWN BY: JS
 CHECKED BY: DJ



MAST ARM

SERVICE INSTALLATION

CONTROLLER

PEDESTRIAN SIGNAL - 12"

TRAFFIC SIGNAL - 12"

TRAFFIC SIGNAL WITH BACKPLATE - 12"

DETECTOR LOOP

2/C
DENOTES NUMBER OF CONDUCTORS (NEW)
ALL DETECTOR CABLE SHALL BE SHIELDED
ALL CABLE NO. 14 EXCEPT AS INDICATED

PEDESTRIAN PUSH BUTTON DETECTOR

LEGEND

PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM1 2F SM1 2F
 PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)

NOTE:
PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02
SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.

INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN

NO.	DATE	DESCRIPTION

CABLE PLAN
TRAFFIC SIGNAL
NAPER BLVD. • CULPEPPER DR.
NAPERVILLE, ILLINOIS

SCALE: NTS
DATE: JUNE 2002

DRAWN BY: J.S.
CHECKED BY: J.S.

SHEET 4 OF 5

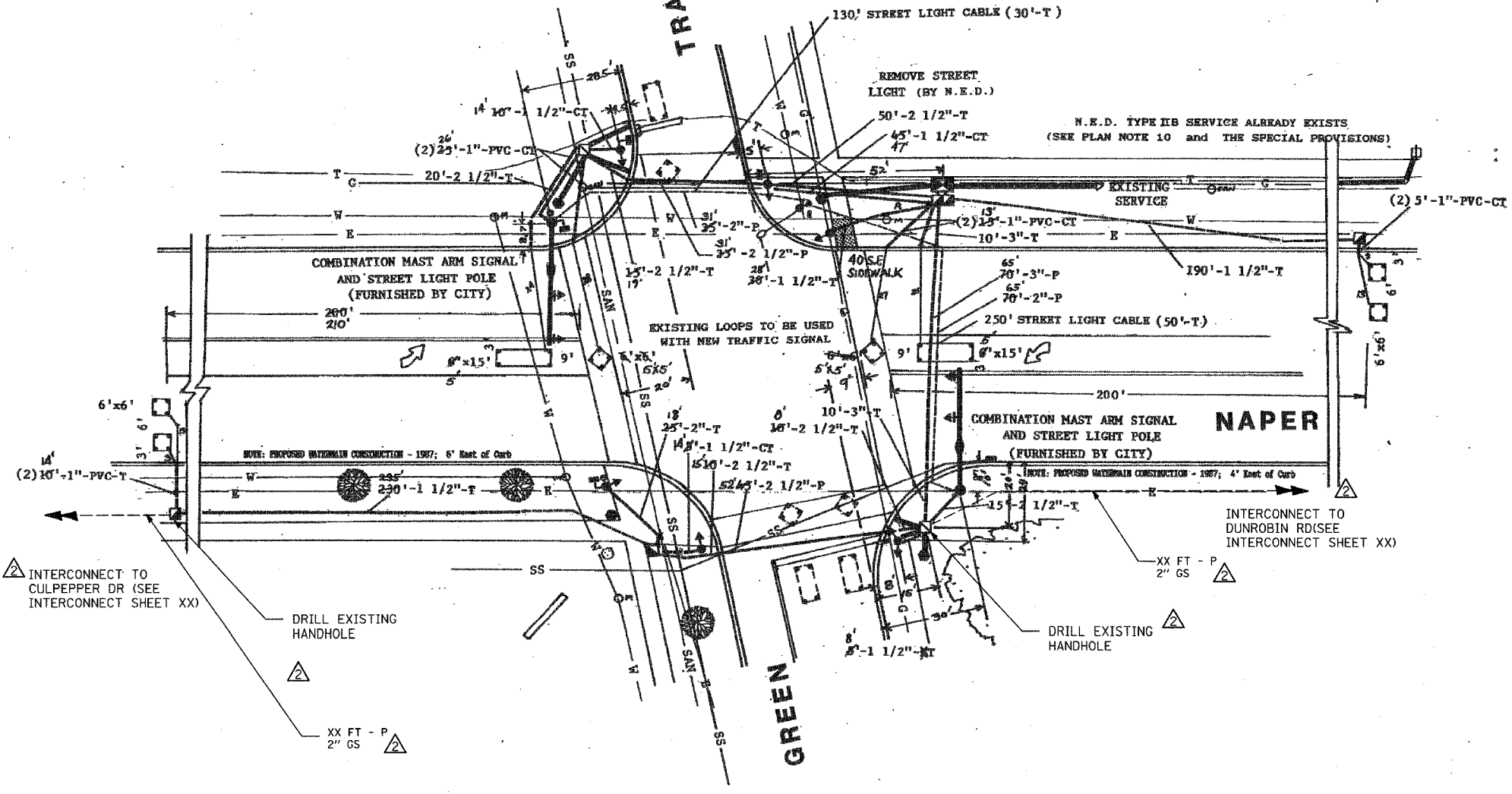
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
CULPEPPER DRIVE
CABLE PLAN

SCALE: NTS
DATE:

DRAWN BY: JS
CHECKED BY: DJ

DATE: 05/10/2005 12:02:55 PM
FILE: P85604012800TL.dwg
SCALE: NTS
REFERENCE: REF



TRAFFIC SIGNAL LEGEND

EXISTING	PROPOSED
CURB	---
RIGHT-OF-WAY LINE	---
CONTROLLER	☒
SIGNAL POST WITH HEAD	☒
PEDESTRIAN SIGNAL HEAD	☒
COMBINATION MAST ARM/STREET LIGHT	☒
HANDLE	☒
DOUBLE HANDLE	☒
ELECTRIC CABLE IN G.S. CONDUIT	---
ELECTRIC CABLE IN PLASTIC CONDUIT	---
CONDUIT (T-BUNCH, CI-COMMON TRUNK, P-PUSH)	---
LOOP DETECTOR	☐
SERVICE INSTALLATION	☐
STREET LIGHT	☐
WOOD POLE	☐
STONE SIGNAL TRAY	☐
WATER	W
STONE SEWER	SS
SANITARY SEWER	SAN
ELECTRIC	E
GAS	G
TELEPHONE	T
REMOVE (BY N.E.D.)	⊖
TEMP. WOOD SIGNAL POLE	☐
STREET LIGHT CABLE	---
STREET LIGHT HANDLE	☐

NOTE:
PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

△ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02
SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.

△ INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN

AS BUILT PLANS



TURN ON 9 SIDE 27 TIME: 10:45

TRAFFIC SIGNAL			
NAPER BLVD/GREEN TRAILS			
NAPERVILLE, IL.			
DRAWN BY: PCS	DATE: 5 DECEMBER 1986	SCALE: 1"=20'	
PAUL C. BOX & ASSOCIATES		JOB NUMBER: 86-129	
8833 LAWLER, SKOKIE, ILLINOIS 60077		DRAWING NUMBER: 48	
TELEPHONE (312) 973-9890			

SHEET 6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
GREEN TRAILS DRIVE
SIGNAL PLAN

SCALE: NTS
DATE
DRAWN BY JS
CHECKED BY DJ

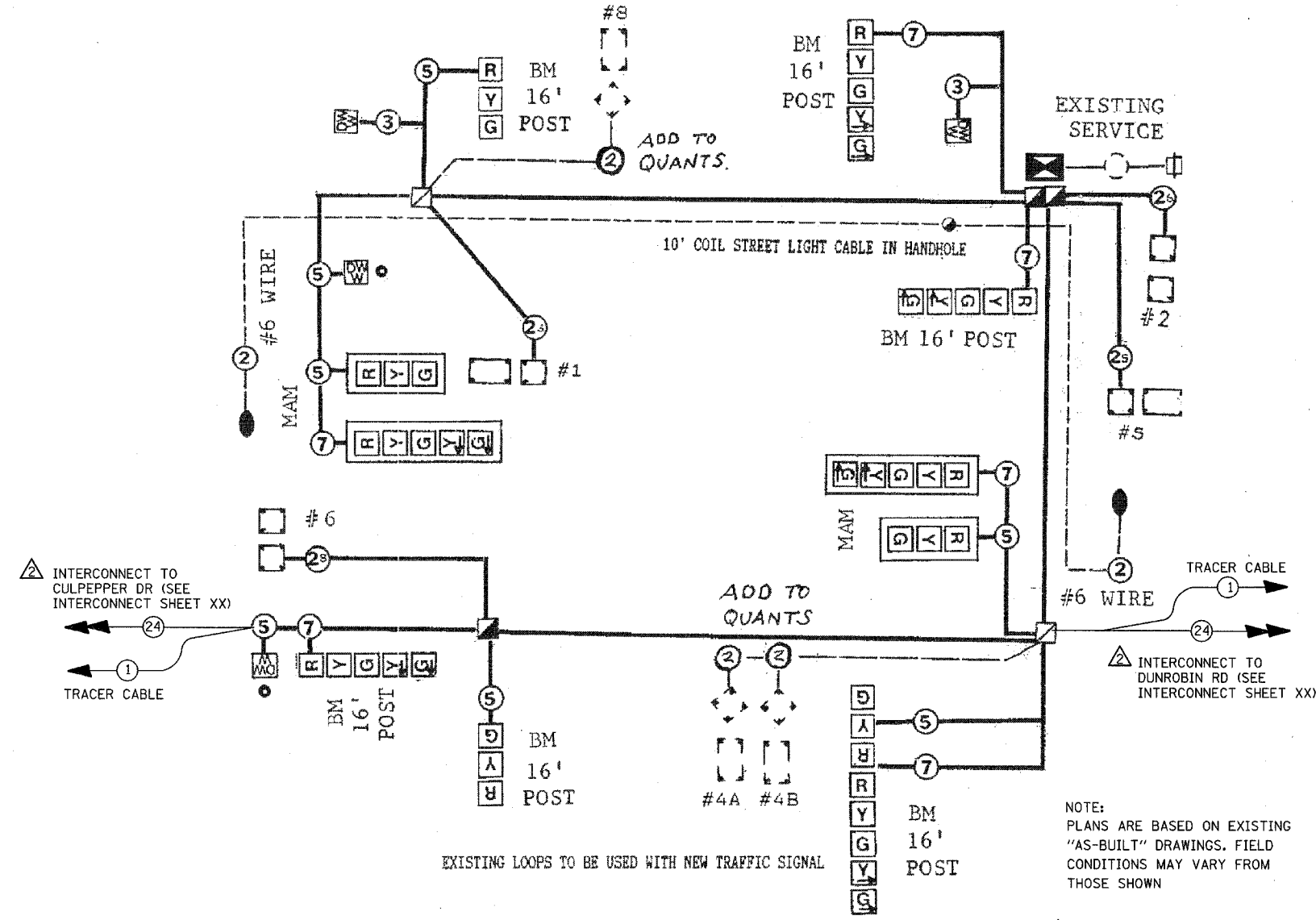
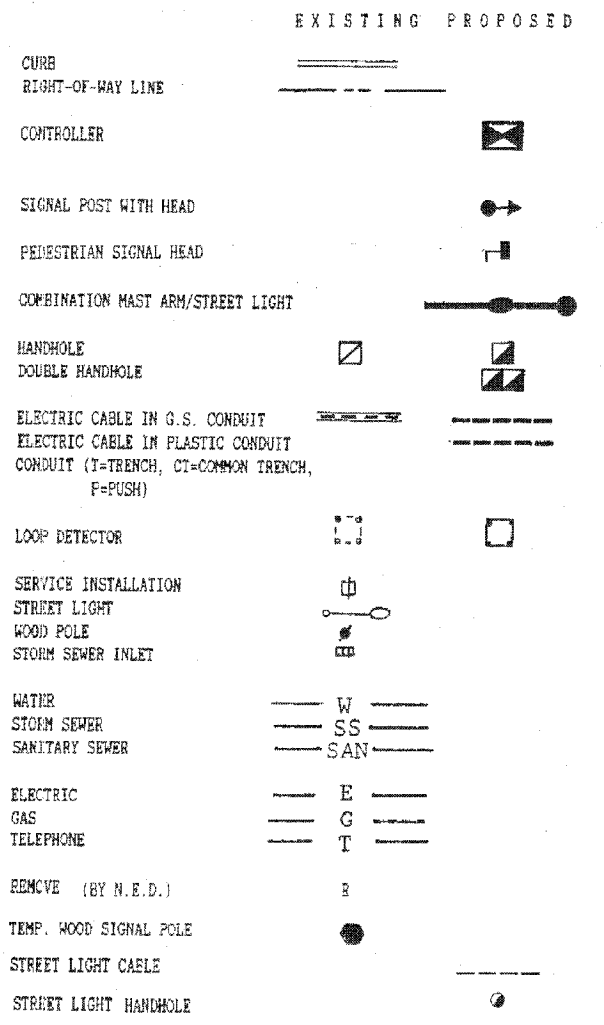
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FILE NAME = #FILE#
PLOT SCALE = #SCALE#
REFERENCE = #REF#



PROPOSED SEQUENCE OF OPERATION																	
PHASE	1+5			1+6			2+5			2+6			4+8			FLASH	
MOVEMENT																	
CHANGE TO:	1+6	2+5	2+6	2+6	2+6	2+6	2+6	2+6	4+8	4+8	4+8	1+5	1+6	1+6			
INTERVAL	1	2A	2B	2C	3	4	5	6	7	8	9	10	11	12	13A	13B	14B
NAPER BLVD NB	R	R	R	R	G	G	R	R	G	G	Y	R	R	R	R	R	R
NAPER BLVD SB	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R
GREEN TRAILS EB	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R
GREEN TRAILS WB	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	Y
WEST CROSSWALK GREEN TRAILS	DW	DW	DW	DW	DW	DW	W	W	W	FL	DW	DW	DW	DW	DW	DW	D
SOUTH CROSSWALK NAPER BLVD	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FL	DW	DW	DW	R

- NOTE:
- 1) AN 8 PHASE CONTROLLER SHALL BE INSTALLED, AS SPECIFIED.
 - 2) PHASES 1+6, 2+5, AND 2+6 SHALL NOT CLEAR TO PHASE 1+5.
 - 3) PHASE 2+6 SHALL BE SET TO MIN RECALL
 - 4) SET WALK TO "REST" FOR PED CROSSING GREEN TRAILS (WEST SIDE OF NAPER BLVD)

TRAFFIC SIGNAL LEGEND



NOTE:
PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

- INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02 SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.
- INSTALLATION OF FIBER OPTIC INTERCONNECT TO NORTH ON NAPER BLVD, HOBSON TO DUNROBIN

LEGEND

PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MMI 2F SMI 2F

PROPOSED ELECTRIC CABLE, 17C (AS SPECIFIED)

AS BUILT PLANS



TURN ON 8 BUNE RT TIME: 10:45

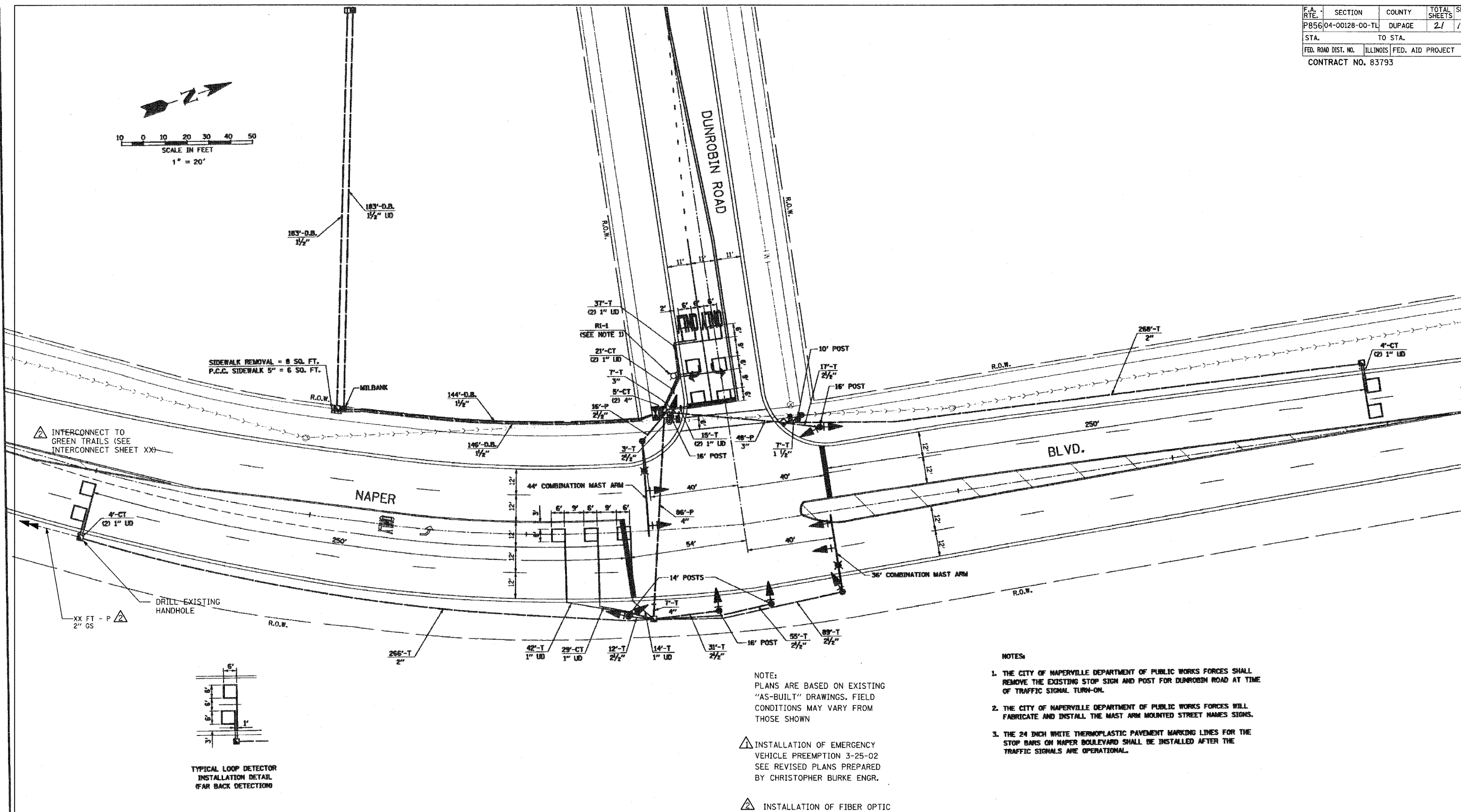
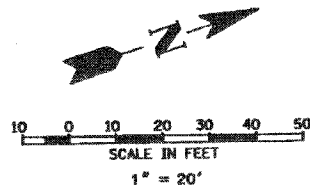
TRAFFIC SIGNAL NAPER BLVD/GREEN TRAILS NAPERVILLE, IL.	
DRAWN BY: FCS	DATE: 5 DECEMBER 1986
SCALE: 1"=20'	JOB NUMBER: AC-129
PAUL C. BOX & ASSOCIATES 9933 LAWLER, NAPERVILLE, ILLINOIS 60577	DRAWING NUMBER: 45
TELEPHONE (618) 375-0050	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
GREEN TRAILS DRIVE
CABLE PLAN

SCALE: NTS
DATE: _____
DRAWN BY: JS
CHECKED BY: DJ

DATE: 05/10/2005 12:01:00 PM
FILE NAME: P:\Road\GTC\31\11.dgn
PLOT SCALE: 1/2"=1'-0"
REFERENCE: REF

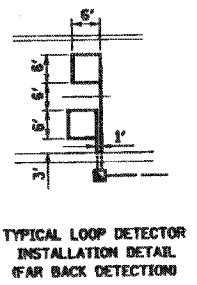


- NOTES:**
1. THE CITY OF NAPERVILLE DEPARTMENT OF PUBLIC WORKS FORCES SHALL REMOVE THE EXISTING STOP SIGN AND POST FOR DUNROBIN ROAD AT TIME OF TRAFFIC SIGNAL TURN-ON.
 2. THE CITY OF NAPERVILLE DEPARTMENT OF PUBLIC WORKS FORCES WILL FABRICATE AND INSTALL THE MAST ARM MOUNTED STREET NAMES SIGNS.
 3. THE 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKING LINES FOR THE STOP BARS ON NAPER BOULEVARD SHALL BE INSTALLED AFTER THE TRAFFIC SIGNALS ARE OPERATIONAL.

NOTE:
PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

△ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02 SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.

△ INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN



CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CLIENT:
 CITY OF NAPERVILLE
 400 S. EAGLE STREET
 NAPERVILLE, ILLINOIS

NO.	DATE	NATURE OF REVISION	CHKD.	FILE NAME:

REVISIONS	
NAME	DATE

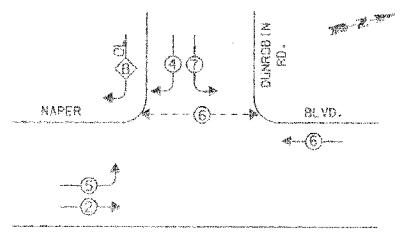
ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
 DUNROBIN ROAD
 SIGNAL PLAN

SCALE: NTS
 DATE: _____
 DRAWN BY: JS
 CHECKED BY: DJ

PLOT DATE = 04/05/05
 FILE NAME = TRAFSIG/96-213/H/TS-DNRBN.DGN
 PLOT SCALE = 1/4" = 20'
 REFERENCE = REF

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P85604-00128-00-TL	DUPAGE	ILLINOIS	21	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 83793				

CONTROLLER SEQUENCE



- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊕ PEDESTRIAN PHASE
 - ⊕ OVERLAP
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM
 DUAL ENTRY - ALL LEGS
 PROTECTED/PERMITTED LEFT TURN PHASING
 WITH RIGHT TURN OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
B	4	5	- 4

DISPLAY - THE YELLOW RIGHT ARROW OF THE OVERLAP SHALL BE INHIBITED DURING THE PERMISSIVE PHASE'S YELLOW INTERVAL. THE GREEN RIGHT ARROW OF THE OVERLAP SHALL BE INHIBITED DURING THE PERMISSIVE PHASE'S GREEN INTERVAL.

CLEARANCE NOTES FOR RIGHT TURN OVERLAPS WITH 5-SECTION RIGHT TURN SIGNAL HEAD DISPLAYS

- CONTINUATION OF AN OVERLAP DURING ITS PERMISSIVE PHASE SHALL BE WITH A CIRCULAR YELLOW DISPLAYED TOGETHER WITH A GREEN RIGHT ARROW WHEN FOLLOWED BY THAT OVERLAP'S PROTECTED PHASE.
- TERMINATION OF AN OVERLAP DURING ITS PERMISSIVE PHASE SHALL BE WITH A CIRCULAR YELLOW WHEN NOT FOLLOWED BY THAT OVERLAP'S PROTECTED PHASE.
- CONTINUATION OF AN OVERLAP DURING ITS PROTECTED PHASE SHALL BE WITH A CIRCULAR RED DISPLAYED TOGETHER WITH A GREEN RIGHT ARROW WHEN FOLLOWED BY THAT OVERLAP'S PERMISSIVE PHASE.
- TERMINATION OF AN OVERLAP DURING ITS PROTECTED PHASE SHALL BE WITH A CIRCULAR RED DISPLAYED TOGETHER WITH A YELLOW RIGHT ARROW WHEN NOT FOLLOWED BY THAT OVERLAP'S PERMISSIVE PHASE.

⚠ INTERCONNECT TO GREEN TRAILS (SEE INTERCONNECT SHEET XX)
 24
 1
 TRACER CABLE

NOTES:

- THE CONTROLLER SHALL BE AN ECONOLITE ASC/2-2100.
- THE INTERSECTION MONITOR SHALL BE THE MANUFACTURE OF THE ECONOLITE CONTROL PRODUCTS, INC.
- COMBINATION MAST ARM ASSEMBLY AND POLES SHALL HAVE 18" BOLT CIRCLES, 40" LUMINAIRE MOUNTING HEIGHT AND GE LIGHTING MPS LUMINAIRES OF 400 WATTS.
- DETECTOR AMPLIFIERS SHALL BE RENO A & E MODEL C, RACK MOUNTED.
- PERMANENTLY INSTALLED LIGHT RECEPTACLES SHALL BE PROVIDED ON THE BOTTOM LEFT AND RIGHT SIDES OF THE CABINET BACK PANEL (INCIDENTAL TO COST.)
- THE TRAFFIC SIGNAL CABINET SHALL BE EQUIPPED WITH 2 SINGLE POLE 20 AMP CIRCUIT BREAKERS FOR THE COMBINATION STREET LIGHT SERVICE.

CABLE PLAN LEGEND

- | | |
|--|---|
| | 8" (200 mm) TRAFFIC SIGNAL SECTION |
| | 12" (300 mm) TRAFFIC SIGNAL SECTION |
| | 12" (300 mm) PEDESTRIAN SIGNAL SECTION |
| | 12" (300 mm) PEDESTRIAN SIGNAL SECTION |
| | CONTROLLER CABINET |
| | SERVICE INSTALLATION |
| | VEHICLE DETECTOR, INDUCTION LOOP |
| | MAGNETIC DETECTOR |
| | EMERGENCY VEHICLE LIGHT DETECTOR |
| | CONFIRMATION BEACON |
| | PUSHBUTTON DETECTOR |
| | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD. |
| | LUMINAIRE |
| | TELEPHONE DROP |

LEGEND

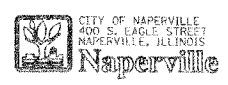
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MMI 2F SMI 2F
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)

NOTE:
 PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

⚠ INSTALLATION OF EMERGENCY VEHICLE PREEMPTION 3-25-02 SEE REVISED PLANS PREPARED BY CHRISTOPHER BURKE ENGR.

⚠ INSTALLATION OF FIBER OPTIC INTERCONNECT ON NAPER BLVD HOBSON TO DUNROBIN

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



DESIGN	TCM	FILED
DRAWN	FCP	
CHECKED	GMZ	
SCALE	NOT TO SCALE	
NO. DATE	NATURE OF REVISION	CHKD. FILE NAME
		CADDMBH/DON

SUMMARY OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 NAPER BOULEVARD AND DUNROBIN ROAD
 NAPERVILLE, ILLINOIS

PROJECT NO.	96-213H
DATE	8-22-97
SHEET	3 OF 5
DRAWING NO.	96-213H-3

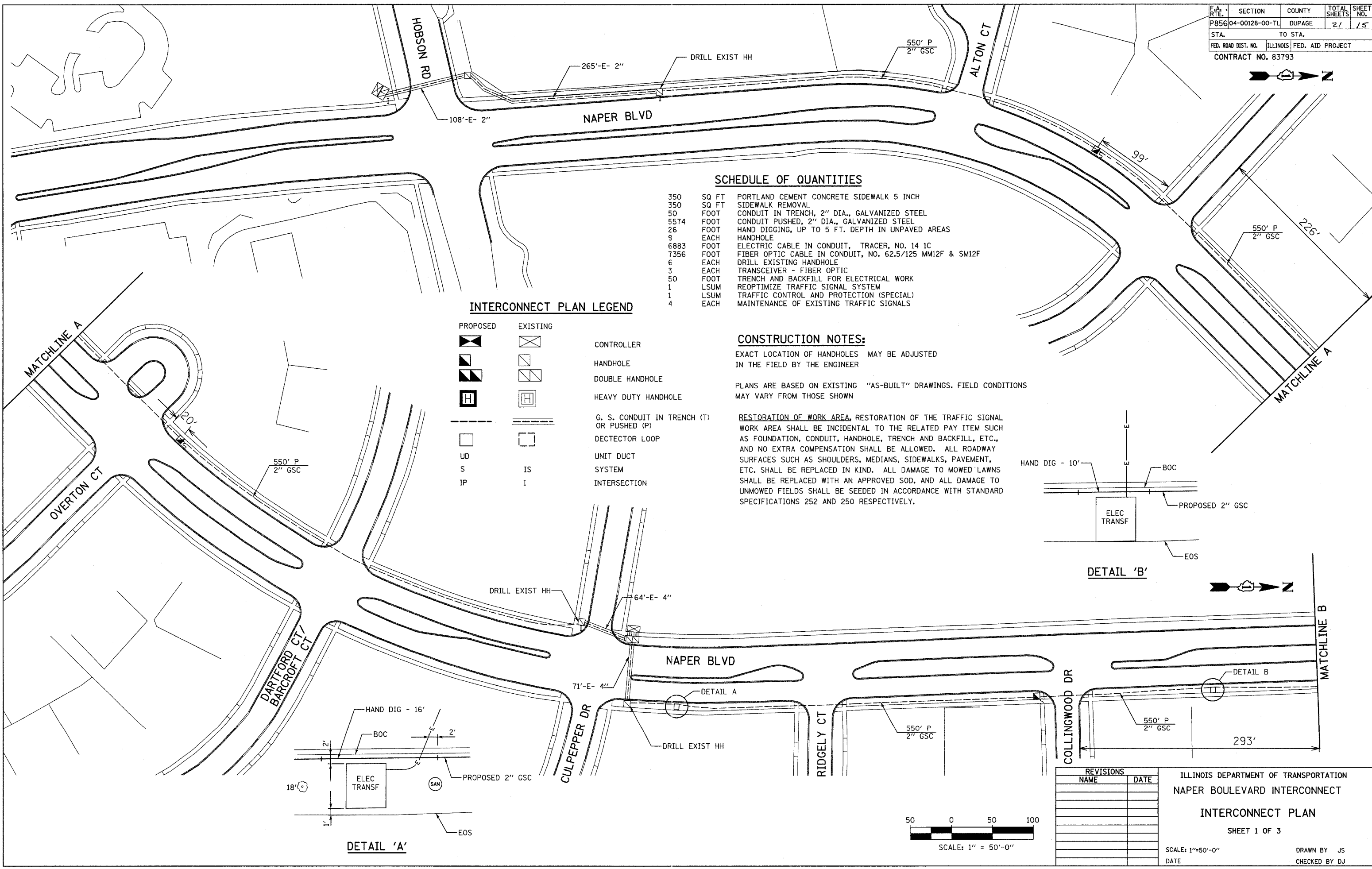
2628-3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
 DUNROBIN ROAD
 CABLE PLAN

SCALE: NTS
 DATE
 DRAWN BY: JS
 CHECKED BY: DJ

PLOT DATE = #DATE#
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 PLOT SCALE = #SCALE#
 REFERENCE = #REF#



SCHEDULE OF QUANTITIES

350	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
350	SQ FT	SIDEWALK REMOVAL
50	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
5574	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
26	FOOT	HAND DIGGING, UP TO 5 FT. DEPTH IN UNPAVED AREAS
9	EACH	HANDHOLE
6883	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
7356	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM12F
6	EACH	DRILL EXISTING HANDHOLE
3	EACH	TRANSCEIVER - FIBER OPTIC
50	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	LSUM	REOPTIMIZE TRAFFIC SIGNAL SYSTEM
1	LSUM	TRAFFIC CONTROL AND PROTECTION (SPECIAL)
4	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNALS

INTERCONNECT PLAN LEGEND

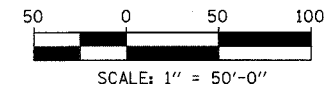
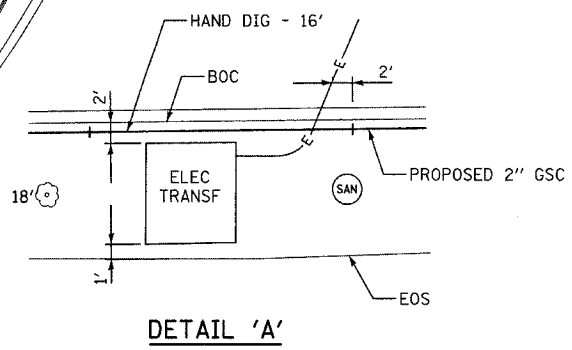
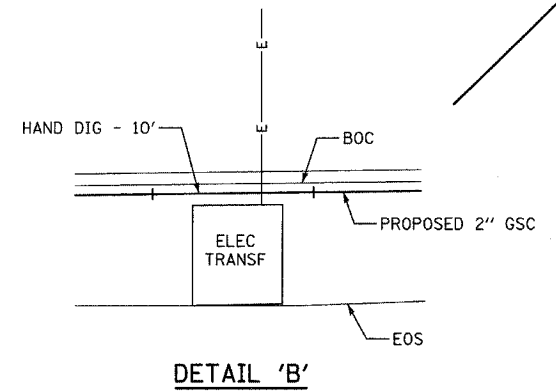
PROPOSED	EXISTING	
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		HEAVY DUTY HANDHOLE
		G. S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		DETECTOR LOOP
		UNIT DUCT
		SYSTEM
		INTERSECTION

CONSTRUCTION NOTES:

EXACT LOCATION OF HANDHOLES MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER

PLANS ARE BASED ON EXISTING "AS-BUILT" DRAWINGS. FIELD CONDITIONS MAY VARY FROM THOSE SHOWN

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL 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.



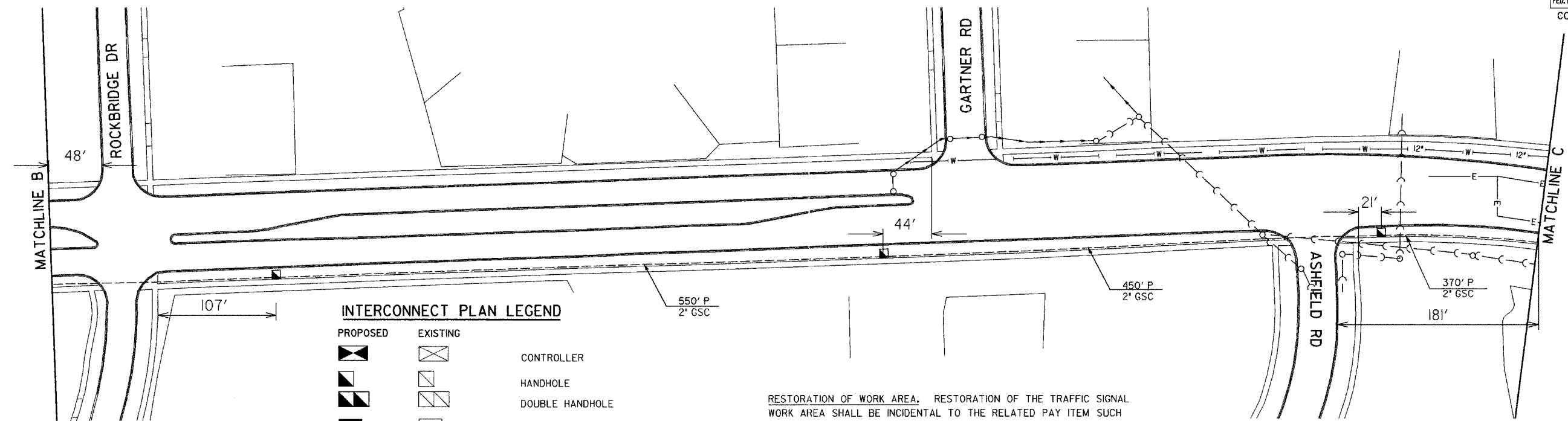
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
INTERCONNECT PLAN
 SHEET 1 OF 3

SCALE: 1"=50'-0"
 DATE: _____ DRAWN BY: JS
 CHECKED BY: DJ

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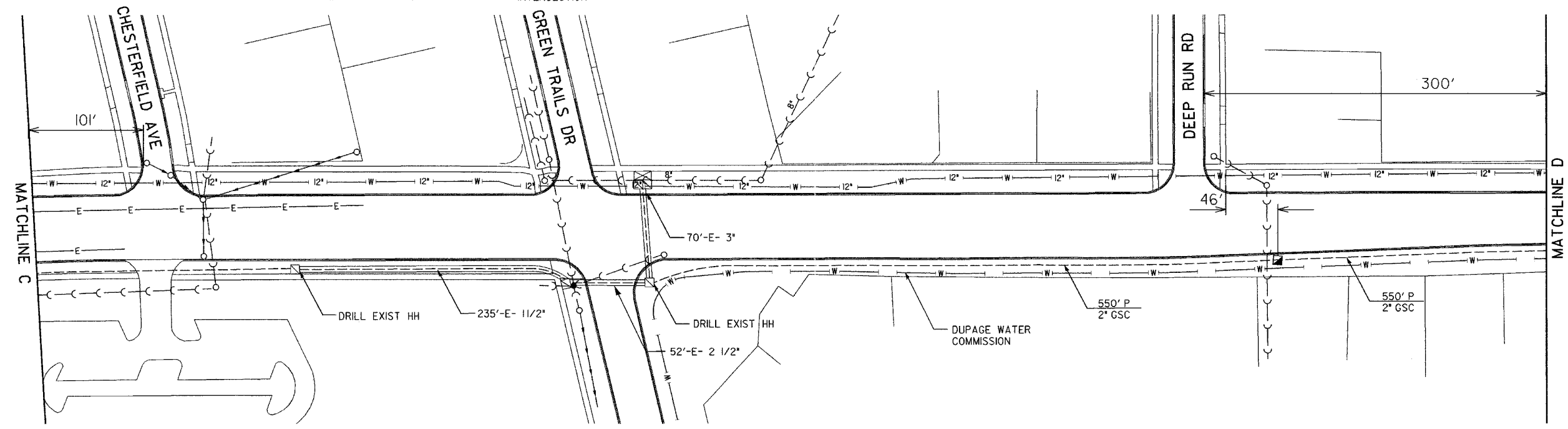
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FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83793				



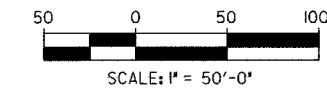
INTERCONNECT PLAN LEGEND

		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		HEAVY DUTY HANDHOLE
		G. S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		DETECTOR LOOP
		UNIT DUCT
		SYSTEM
		INTERSECTION

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL 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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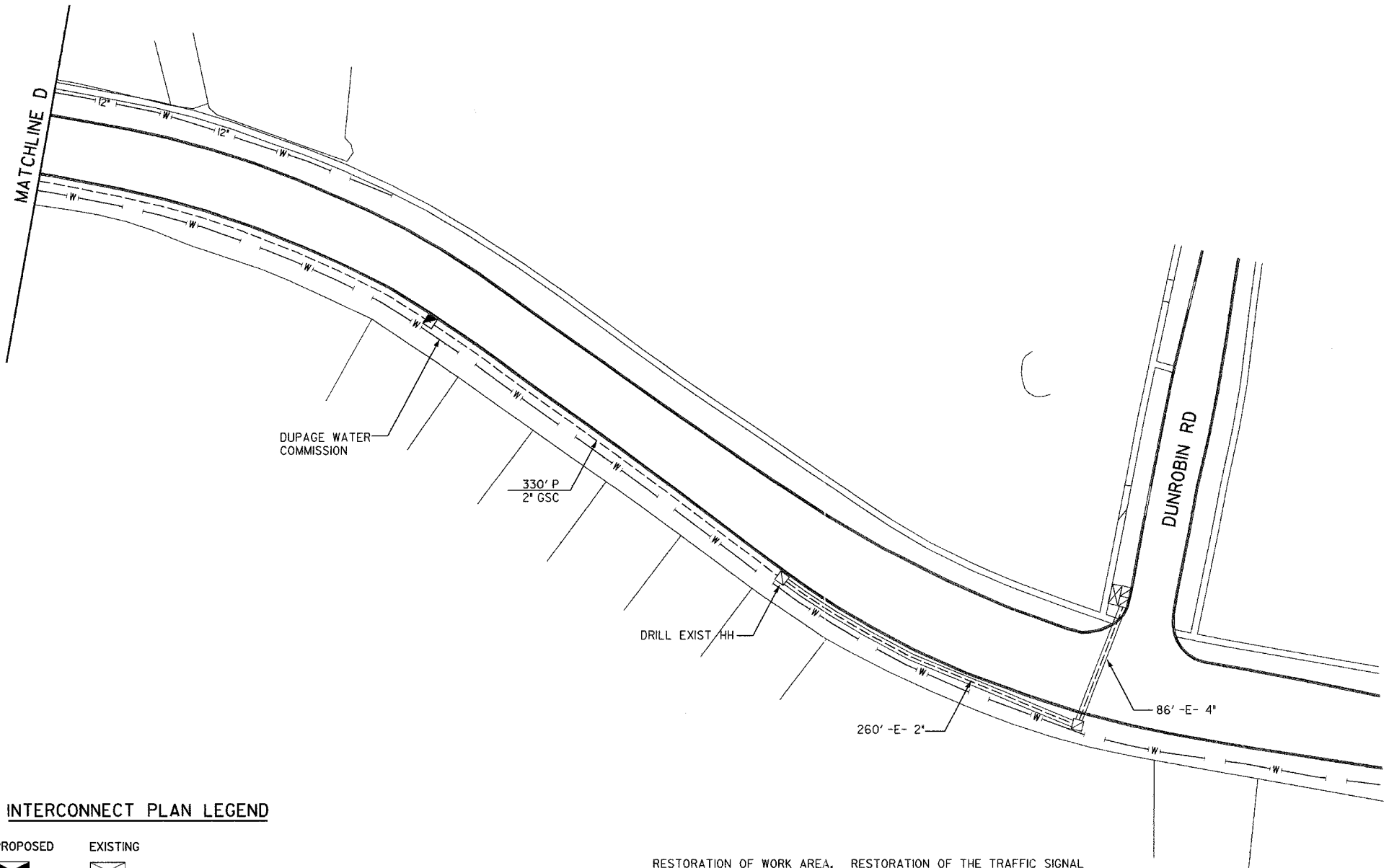


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
NAPER BOULEVARD INTERCONNECT
INTERCONNECT PLAN
SHEET 2 OF 3
SCALE: 1"=50'-0"
DATE _____ DRAWN BY JS
CHECKED BY DJ

TYLIN INTERNATIONAL

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P856	04-00128-00-TL	DUPAGE	21	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 83793				



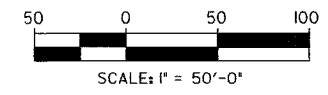
INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		HEAVY DUTY HANDHOLE
		G. S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		DETECTOR LOOP
UD		UNIT DUCT
S	IS	SYSTEM
IP	I	INTERSECTION

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL 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.

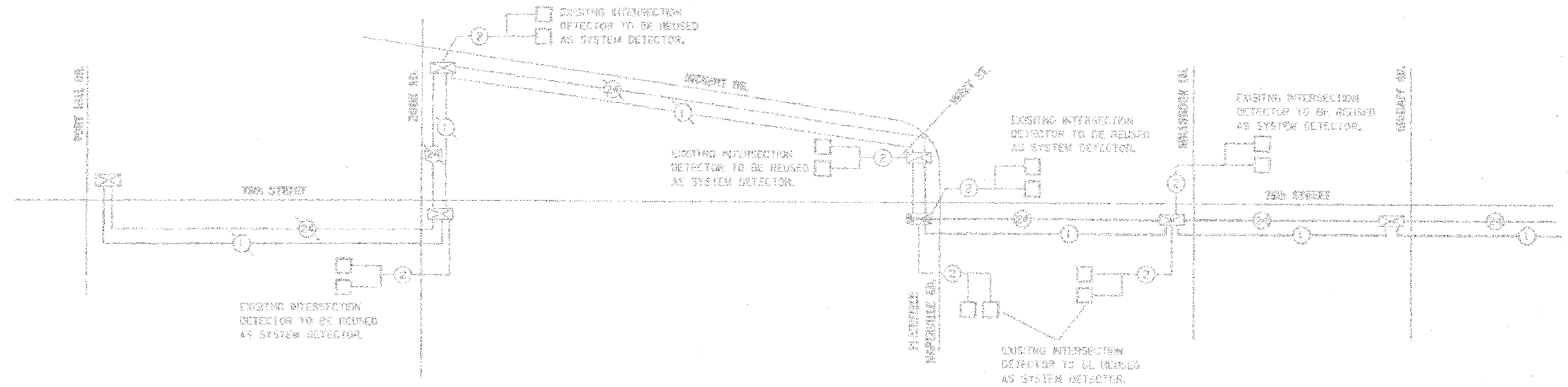
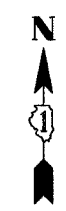
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
INTERCONNECT PLAN
 SHEET 3 OF 3
 SCALE: 1"=50'-0"
 DATE _____ DRAWN BY JS
 CHECKED BY DJ



PLOT DATE = #DATE#
 FILE NAME = #FILE#
 PLOT SCALE = #SCALE#
 REFERENCE = #REF#

FOR INFORMATION ONLY



INTERCONNECT SCHEMATIC PLAN

INTERCONNECT PLAN LEGEND

PROPOSED INTERSECTION CONTROLLER		LOOP DETECTOR CABLE 24" TWISTED, UNPLED (EXISTING)	
EXISTING INTERSECTION CONTROLLER		LOOP DETECTOR CABLE 24" TWISTED, SHIELDED INTERSECTION PROPOSED	
PROPOSED MASTER CONTROLLER		EXISTING FIBER OPTIC CABLE RECEIVED IN 1" x 1" x 1" (F)	
EXISTING SYSTEM DETECTOR		PROPOSED FIBER OPTIC CABLE RECEIVED IN 1" x 1" x 1" (F)	
PROPOSED SAMPLED SYSTEM DETECTORS		EXISTING TRACER CABLE NO. 14 L/C	
INTERSECTION AND SAMPLING (SYSTEM) DETECTORS PROPOSED		PROPOSED TRACER CABLE NO. 14 L/C	
EXISTING INTERCONNECT FIBER OPTIC CABLE (24" FIBER)		TELEPHONE CONNECTION	
PROPOSED INTERCONNECT FIBER OPTIC CABLE (24" FIBER)			

NOTE: CONTROLLER SOFTWARE AT ALL EXISTING CONTROLLERS TO BE UPDATED TO MOST CURRENT VERSION APPROVED BY PARTICIPATING AGENCIES. (6 CONTROLLERS THIS PAGE)

THE TRAFFIC SIGNAL EQUIPMENT FOR THIS PROJECT SHALL BE "EQUIVALENT" TO MATCH THE EXISTING ADJACENT EQUIPMENT.

PROPOSED FIBER TO REPLACE EXISTING CABLE, REMOVE EXISTING CABLE.

REVISION	DATE	BY	CHKD BY

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL INTERCONNECT SCHEMATIC PLAN
 ON 7TH STREET (1 of 3)
 DRAWN BY: JS
 CHECKED BY: DJ
 DATE: 02/25/05

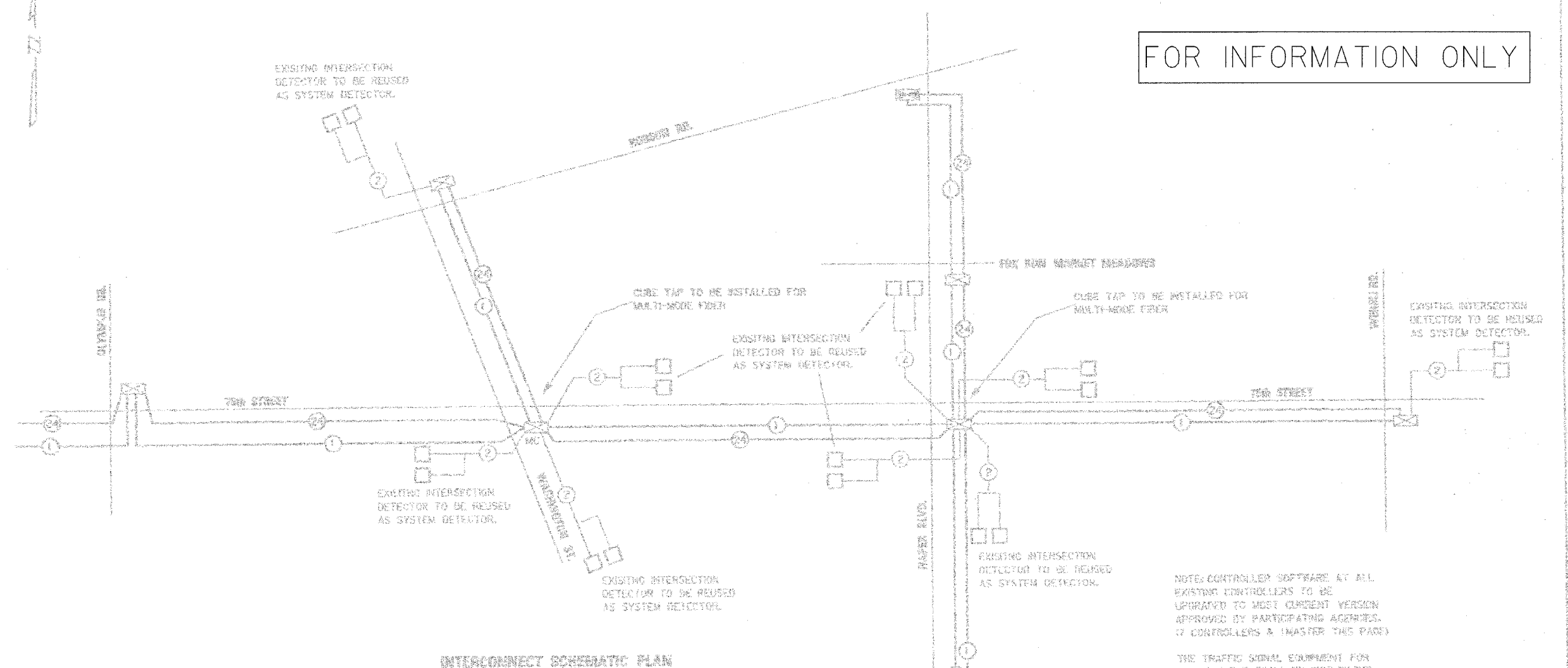
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REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
INTERCONNECT SCHEMATIC
 SHEET 1 OF 3

SCALE: NTS
 DATE: _____
 DRAWN BY: JS
 CHECKED BY: DJ

FOR INFORMATION ONLY



INTERCONNECT SCHEMATIC PLAN

INTERCONNECT PLAN LEGEND

PROPOSED INTERSECTION CONTROLLER		LOOP DETECTOR CABLE 240 TRISTED, SHIELDED BENTONITE	
EXISTING INTERSECTION CONTROLLER		LOOP DETECTOR CABLE 240 TRISTED, SHIELDED INTERSECTION PROPOSED	
PROPOSED MASTER CONTROLLER		EXISTING FIBER OPTIC CABLE (62.5/125 MM 97 & 98 OPT)	
EXISTING SYSTEM DETECTOR		PROPOSED FIBER OPTIC CABLE (62.5/125 MM 97 & 98 OPT)	
PROPOSED SCRAMBLING (SYSTEM DETECTOR)		EXISTING TRACER CABLE NO. 14 I/C	
INTERSECTION AND SAMPLE (SYSTEM DETECTOR) PROPOSED		PROPOSED TRAILER CABLE NO. 14 I/C	
EXISTING INTERCONNECT FIBER OPTIC CABLE (25M FIBER)		TELEPHONE CONNECTION	
PROPOSED INTERCONNECT FIBER OPTIC CABLE (25M FIBER)			

NOTE: CONTROLLER SOFTWARE AT ALL EXISTING CONTROLLERS TO BE UPGRADED TO MOST CURRENT VERSION APPROVED BY PARTICIPATING AGENCIES. (7 CONTROLLERS & 1 MASTER THIS PAGE)

THE TRAFFIC SIGNAL EQUIPMENT FOR THIS PROJECT SHALL BE "ISOMULTI" TO MATCH THE EXISTING ADJACENT EQUIPMENT.

PROPOSED FIBER TO REPLACE EXISTING CABLE ABOVE EXISTING CABLE.

REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL INTERCONNECT SCHEMATIC PLAN
 ON 75th STREET (2 of 2)

DATE: 11/25/02
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 CHECKED BY: DJ

PLOT DATE = 02/05/03
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
























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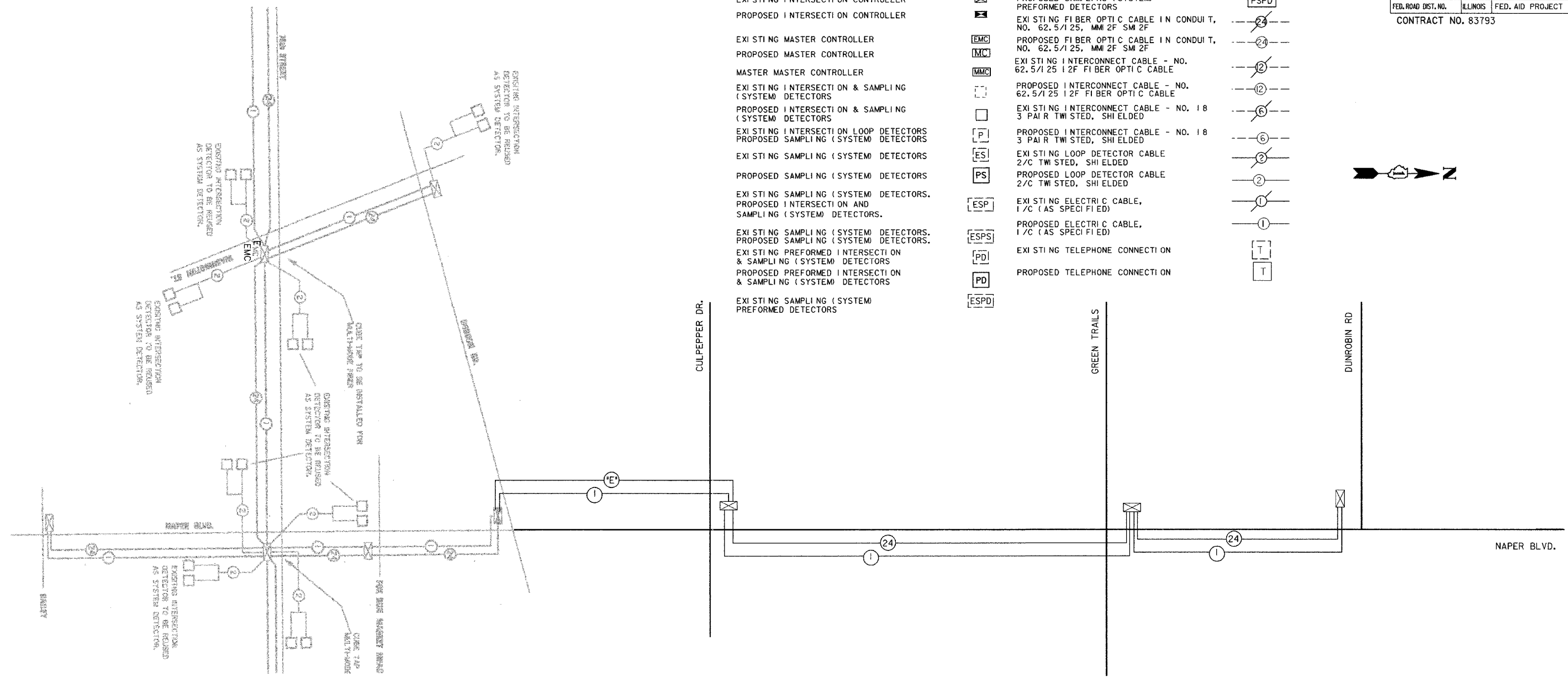
ILLINOIS DEPARTMENT OF TRANSPORTATION
 NAPER BOULEVARD INTERCONNECT
INTERCONNECT SCHEMATIC
 SHEET 2 OF 3

SCALE: NTS
 DATE:

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 CHECKED BY DJ
















INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER 
- PROPOSED INTERSECTION CONTROLLER 
- EXISTING MASTER CONTROLLER 
- PROPOSED MASTER CONTROLLER 
- MASTER MASTER CONTROLLER 
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) DETECTORS 
- PROPOSED SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. 
- EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS. 
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS 
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS 
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM 2F SM 2F 
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM 2F SM 2F 
- EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE 
- PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE 
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED 
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED 
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED 
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED 
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) 
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) 
- EXISTING TELEPHONE CONNECTION 
- PROPOSED TELEPHONE CONNECTION 



INTERCONNECT SCHEMATIC PLAN

INTERCONNECT PLAN LEGEND

- PROPOSED INTERSECTION CONTROLLER 
- EXISTING INTERSECTION CONTROLLER 
- PROPOSED MASTER CONTROLLER 
- EXISTING SYSTEM DETECTOR 
- PROPOSED SAMPLING (SYSTEM) DETECTORS 
- INTERSECTION AND SAMPLING (SYSTEM) DETECTORS (PROPOSED) 
- EXISTING INTERCONNECT FIBER OPTIC CABLE (25M FIBER) 
- PROPOSED INTERCONNECT FIBER OPTIC CABLE (25M FIBER) 
- LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED (EXISTING) 
- LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED (PROPOSED) 
- EXISTING FIBER OPTIC CABLE (62.5/125 MM 2F & SM 2F) 
- PROPOSED FIBER OPTIC CABLE (62.5/125 MM 2F & SM 2F) 
- EXISTING TRACER CABLE NO. 14 1/C 
- PROPOSED TRACER CABLE NO. 14 1/C 
- TELEPHONE CONNECTION 

NOTE: CONTROLLER SOFTWARE AT ALL EXISTING CONTROLLERS TO BE UPGRADED TO MOST CURRENT VERSION APPROVED BY PARTICIPATING AGENCIES. (7 CONTROLLERS & 1 MASTER THIS PAGE)

THE TRAFFIC SIGNAL EQUIPMENT FOR THIS PROJECT SHALL BE "CONSULTE" TO MATCH THE EXISTING ADJACENT EQUIPMENT.

PROPOSED FIBER TO REPLACE EXISTING CABLE, REMOVE EXISTING CABLE.

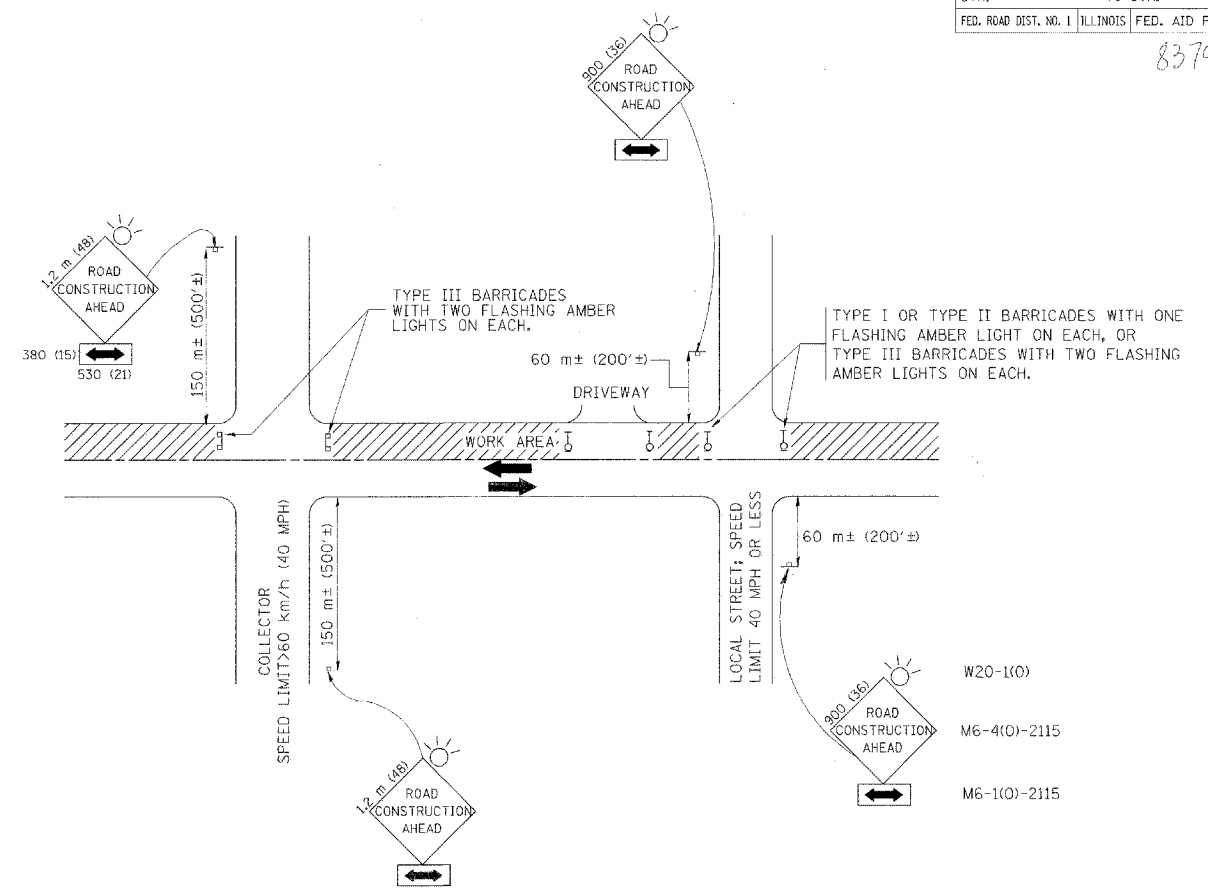
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
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INTERCONNECT SCHEMATIC
 SHEET 3 OF 3

SCALE: NTS
 DATE
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 PLOT SCALE = #SCALE#
 REFERENCE = #REF#

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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE **ROAD CONSTRUCTION AHEAD** SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. T01501, STD. T01606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
NAME	DATE	
LHA	6/89	SCALE: VERT. HORIZ. DATE 10/18/2002
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	

DRAWN BY
CHECKED BY

TC-10
REVISION DATE: 01/06/00