6-12-09 Letting, Item 047

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 63128		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED TRAFFIC SIGNAL INTERCONNECT

DISTRICT 1

CONGESTION MITIGATION AIR QUALITY
RANDALL ROAD F.A.P. 336 INTERCONNECT
SECTION: 07–00366–00–TL
PROJECT: CMM–9003(030)
KANE COUNTY
JOB NO: C–91–409–08

INDEX OF SHEETS

LIST OF STATE STANDARDS

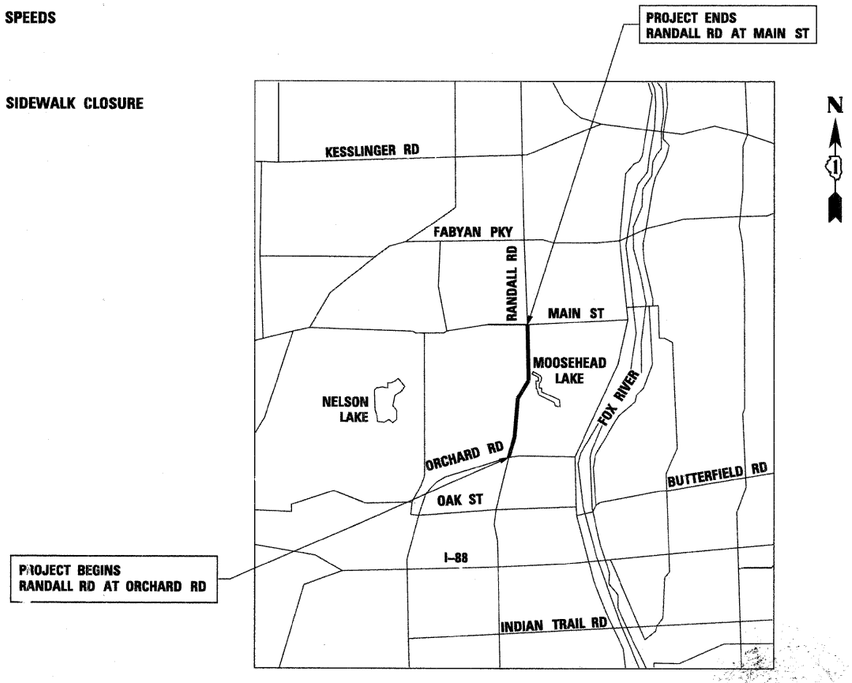
STANDARD NO.	DESCRIPTION
701101–02	OFF–RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701421–02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH TO 55 MPH
701701–06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801–04	LANE CLOSURE MULTILANE 1W OR 2W CROSWALK OR SIDEWALK CLOSURE
701901–01	TRAFFIC CONTROL DEVICES
814001–02	HANDHOLES

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

CONTRACT NO. 63128



LOCATION MAP
LENGTH OF IMPROVEMENT = 2.0 MILES

LOCATION OF SECTION INDICATED THUS: –

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED FEBRUARY 18 20 09
COUNTY ENGINEER
LOCAL AGENCY, POSITION

PASSED FEBRUARY 19 20 09
CHRISTOPHER HOLT
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED REVIEW FEBRUARY 19, 20 09
DIANE M. O'KEEFE
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

HNTB

YOUNGJAE JU 062-054024 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

ENGINEER — 2/17/2009 DATE

YOUNGJAE JU
ILLINOIS REGISTRATION No. 062-054024
EXPIRATION DATE: 11/30/2009
PROFESSIONAL DESIGN FIRM No. 184-000680
EXPIRATION DATE: 4/30/2009

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	ORCHARD ROAD / TOLLWAY RAMPS A & B	ORCHARD ROAD / ORCHARD GATEWAY ROAD	ORCHARD ROAD / OAK STREET	ORCHARD ROAD / WHITE OAK DRIVE	ORCHARD ROAD / COMISKEY AVENUE	ORCHARD ROAD / RANDALL ROAD	RANDALL ROAD / DOGWOOD DRIVE	RANDALL ROAD / MAIN STREET	RANDALL ROAD / WILSON STREET	RANDALL ROAD / McKEE STREET	RANDALL ROAD / MILL STREET	RANDALL ROAD / FABYAN PARKWAY	INTERCONNECT	TOTAL QUANTITY
67100100	MOBILIZATION	L SUM													1	1
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM													1	1
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT													10349	10349
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT													2102	2102
81400100	HANDHOLE	EACH													18	18
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT													9349	9349
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	1	1	1	1	1	1	1	1	1	1		12
87900200	DRILL EXISTING HANDHOLE	EACH													2	2
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT													11018	11018
X0323898	CLOSED CIRCUIT TELEVISION DOME CAMERA	EACH								1						1
X0324243	CLOSED CIRCUIT TELEVISION VIDEO CODEC	EACH						1		1						2
X0325462	MEDIA CONVERTER	EACH	2				1							2		5
X8710071	FIBER OPTIC FUSION SPLICE	EACH	18	12	18	18	18	24	6	18				22		154
XX006654	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT													18447	18447
XX006655	LAYER II (DATALINK) SWITCH	EACH	1					1		1				1		4
XX007948	FIBER OPTIC INTERCONNECT CENTER	EACH	1	1	1	1	1	1	1	1				1		9
XX007949	UNMANAGED SWITCH	EACH					1		1							2
XX007950	FIBER OPTIC PIGTAIL	EACH	18	6	12	12	12	24	6	18				20		128
XX007951	FIBER OPTIC JUMPER	EACH	8	2	4	4	4	8	2	6				8		46
XX007952	TERMINAL SERVER	EACH	1				1							1		3
XX007953	NETWORK CONFIGURATION	L SUM													1	1

HNTB CORPORATION
111 E. KILBOURN AVENUE
SUITE 1250
MILWAUKEE, WI 53202
(312) 930-9119

PLAN — SURVEYED ____ PLOTTED ____ NOTE BOOK ____ NO. ____ — BY ____ DATE ____
ALIGNMENT CHECKED ____ RT. OF WAY CHECKED ____ CAD FILE NAME ____

PROFILE — SURVEYED ____ PLOTTED ____ NOTE BOOK ____ NO. ____ — BY ____ DATE ____
GRADES CHECKED ____ B.M. NOTED ____ STRUCTURE NO(S).&/OR CHKD ____

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -	

SUMMARY OF QUANTITIES
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	2
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2000-087 TS	COOK	20	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1	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.

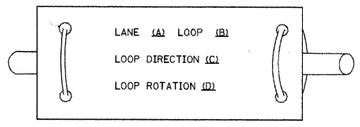
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

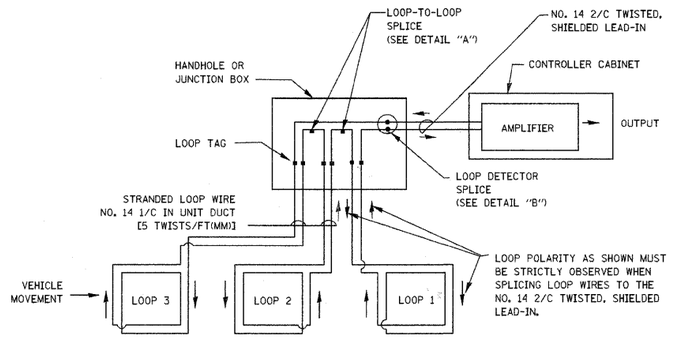


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

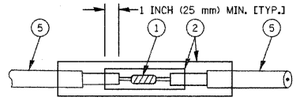
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

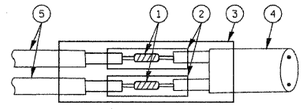


DETECTOR LOOP WIRING SCHEMATIC

- 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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1-01-02

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

#FILE#
DATE-TIME
DGN-SPEC

PROFILE — SURVEYED / PLOTTED / CROSS CHECKED / BKM. NOTED / STRUCTURE NOTATNS CHKD — NOTE BOOK NO. ____

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / ADD'I FILE NAME — NOTE BOOK NO. ____

BY | DATE

HNTB CORPORATION
111 E. KILBOURN AVENUE
SUITE 1250
MILWAUKEE, WI 53606
(312) 930-8119

HNTB

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -	

IDOT DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (1 OF 4)

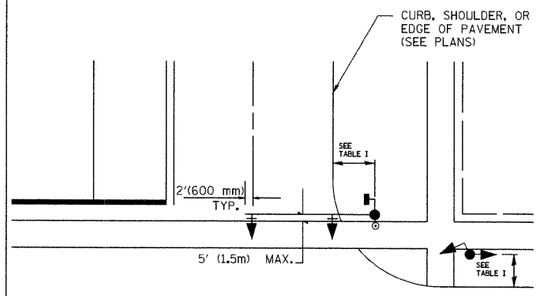
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	3
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

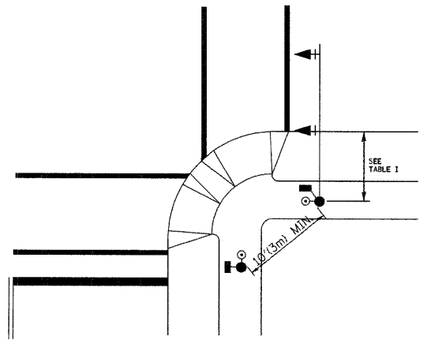
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2000-087 TS	COOK	20	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

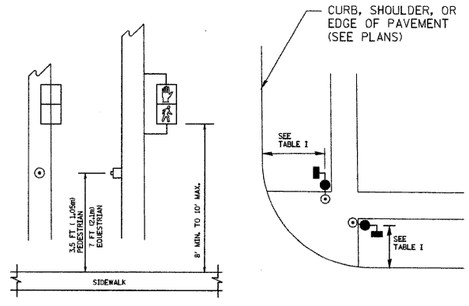


TABLE I

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. NONE
DATE 1-01-02

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

TS05

#FILE$
DATE-TIME
DGN-SPEC

PLAN — NOTE BOOK NO. ____ — SURVEYED ____ PLOTTED ____ ALIGNMENT CHECKED ____ RT. OF WAY CHECKED ____ A360 FILE NAME ____ — BY ____ DATE ____

PROFILE — NOTE BOOK NO. ____ — SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ REAL NOTED ____ STRUCTURE NOTATIONS CHKD ____ — BY ____ DATE ____

HNTB CORPORATION
111 E. WACKER DRIVE
SUITE 1250
CHICAGO, IL 60606
(312) 930-9119

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -

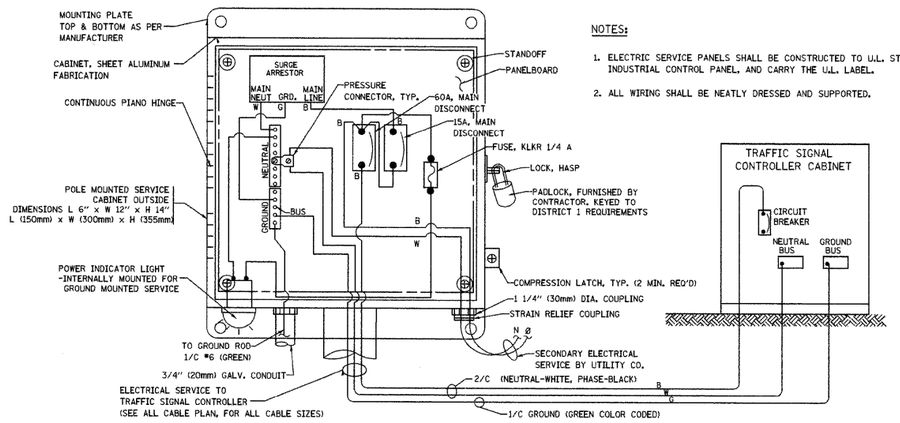
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (2 OF 4)

SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	4
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

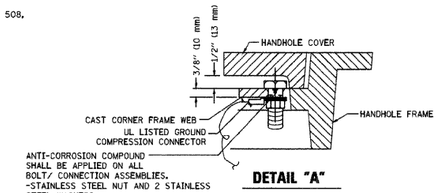
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2000-087 TS	COOK	20	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



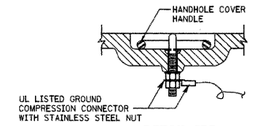
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

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.



DETAIL "A"

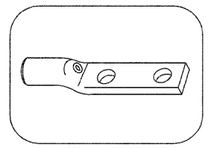


DETAIL "B"

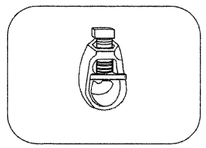
NOTES:

GROUNDING SYSTEM

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



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

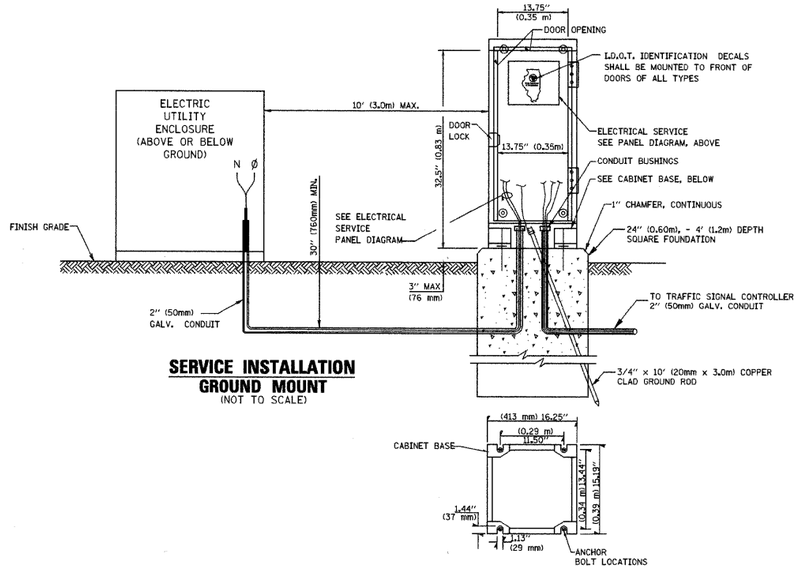


3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

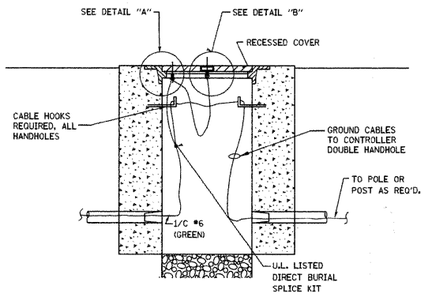
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)

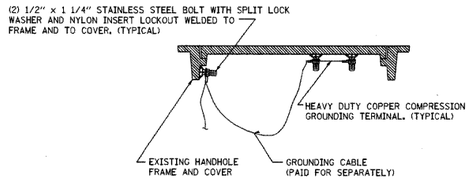


SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)

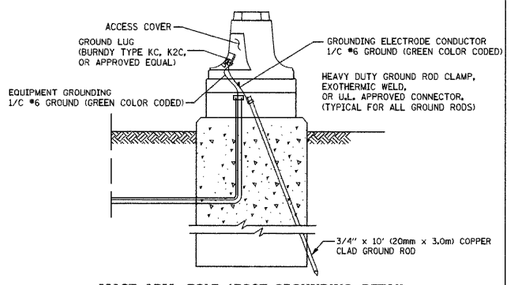
CABINET – BASE BOLT PATTERN
(NOT TO SCALE)



HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL
(NOT TO SCALE)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.
DATE 1-01-02
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

TS05

HNTB CORPORATION
ILLINOIS, CHICAGO
SUITE 1250
(312) 930-4519

PLAN — NOTE BOOK ____ NO. ____
SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / MAI FILE NAME

PROFILE — NOTE BOOK ____ NO. ____
SURVEYED / PLOTTED / GRADES CHECKED / R.M. NOTED / STRUCTURE NOTATIONS CHKD

BY / DATE

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -

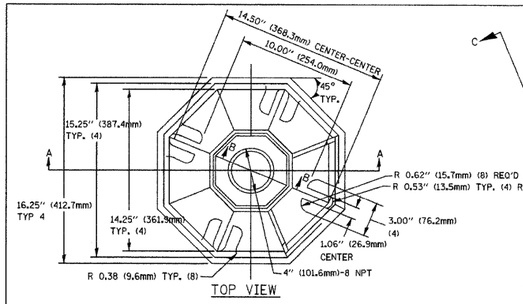
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (3 OF 4)

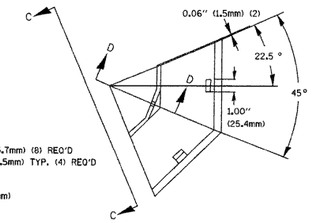
SCALE:

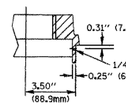
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	5
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

#FILE#
+DATE-TIME+
+DGN-SPEC+

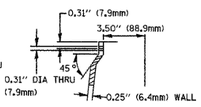


TOP VIEW

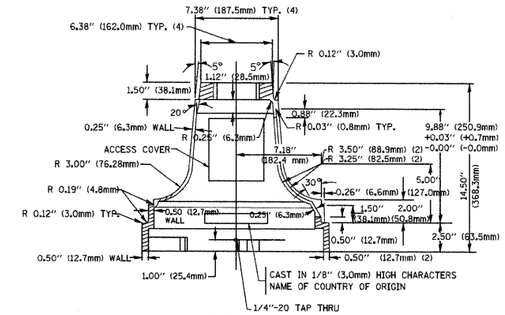




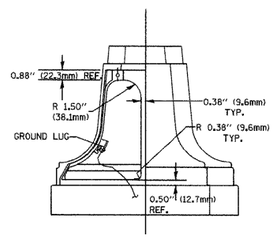
SECTION B-B



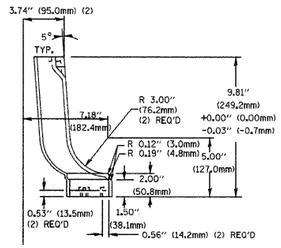
SECTION D-D



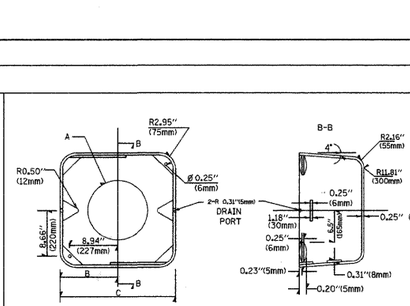
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



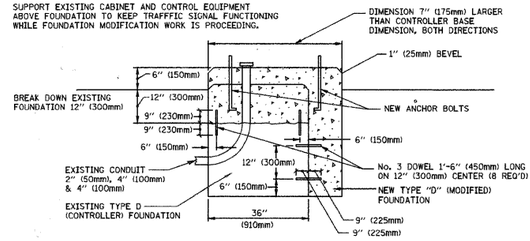
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3512	2000-087 TS	COOK	20	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

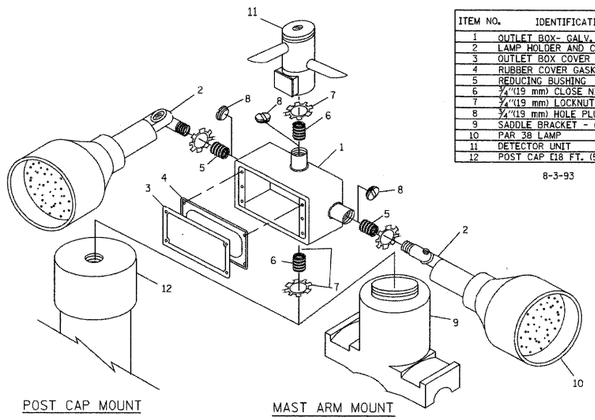
SHROUD DETAIL

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)



POST CAP MOUNT

MAST ARM MOUNT

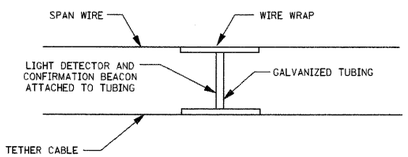
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

8-3-93

NOTES:

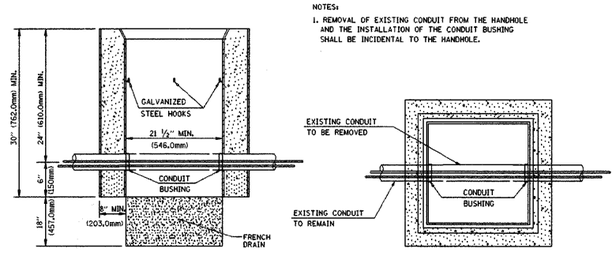
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED.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



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

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



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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.
DATE 1-01-02

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

TS05

#FILE#
DATE-TIME
DGN-SPEC

INTB CORPORATION
1111 LAKE COOK ROAD
SUITE 1250
BUFFALO GROVE, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO. — SURVEYED — DRAWN — ALIGNMENT CHECKED — P.I., P.C., P.T. CHECKED — PLAN FILE NAME — BY — DATE

PROFILE — NOTE BOOK — NO. — SURVEYED — DRAWN — GRADES CHECKED — E.M. NOTED — STRUCTURE NO. — BY — DATE — NOTATING CHKD

FILE NAME =	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
DGNSPEC		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (4 OF 4)

SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	6
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY

NOTE: PROPOSED INTERCONNECT CABLE NOT SHOWN ON SCHEMATIC.

SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
73	SQ FT	SIGN PANEL - TYPE 1
25	SQ FT	SIGN PANEL - TYPE 2
1	EACH	SERVICE INSTALLATION, POLE MOUNTED
24	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
33	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
105	FOOT	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL
1	EACH	HANDHOLE TO BE ADJUSTED
24	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCEIVER - FIBER OPTIC
867	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
288	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1696	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
1499	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1207	FOOT	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18-6 PAIR
546	FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.
4	FOOT	CONCRETE FOUNDATION, TYPE A
15	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
4	EACH	DRILL EXISTING HANDHOLE
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1767	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
2	EACH	REMOVE EXISTING HANDHOLE
4	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	VIDEO VEHICLE DETECTION SYSTEM
179	FOOT	ELECTRIC CABLE IN CONDUIT, COAXIAL
1	EACH	TRAFFIC SIGNAL BATTERY BACKUP
1	EACH	REMOTE-CONTROLLED VIDEO SYSTEM
1	EACH	VIDEO TRANSMISSION SYSTEM

THE LIGHT DETECTORS AND LIGHT DETECTOR AMPLIFIER FOR THIS PROJECT SHALL BE "TOMAR OR OPTICOM" TO MEET LOCAL FIRE DEPARTMENT REQUIREMENTS .

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. OF LAMPS	WATTAGE %INCAND	WATTAGE LED X%	OPERATIONS	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	28	135	12	0.10	33.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
				TOTAL =	392.6

ENERGY COSTS TO:

VILLAGE OF NORTH AURORA

, ILLINOIS 60133

ENERGY SUPPLY - CONTACT: _____
PHONE: _____
COMPANY: COMED

ALL INDICATIONS SHALL BE LED

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 ROADWAYS SURFACES SUCH AS SHOULDERS, MEDIAN, 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.

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 (1.1)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2 = (6.1+L-1.0)=
E - M ARM POLE		SIGNAL POST	2 (1.0)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

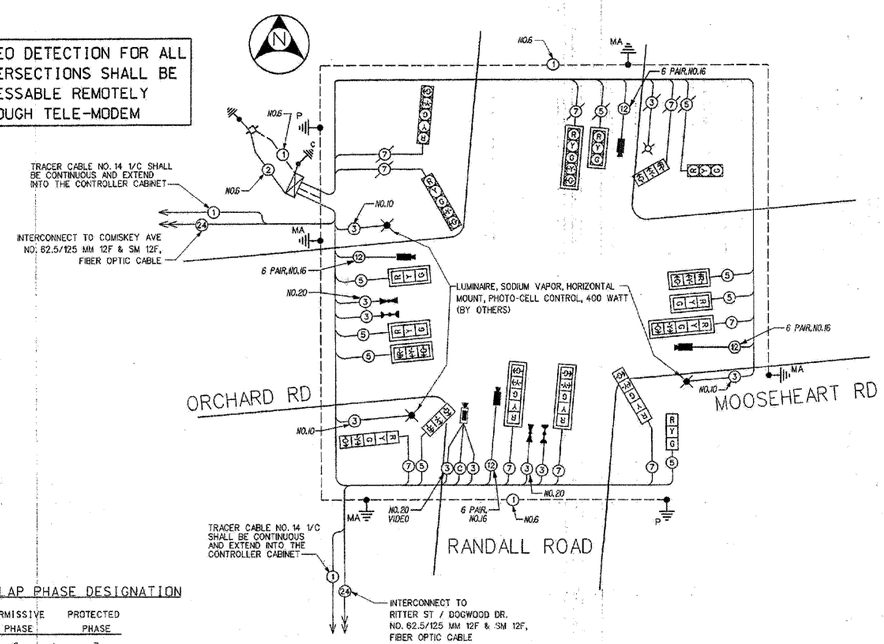
CABLE PLAN LEGEND

EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12"(300mm) TRAFFIC SIGNAL SECTION
		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
		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
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
C	C	GROUND ROD AT HANDHOLE 99, 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
		GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
		NO. 62.5/125 MM 12F & SM 12F, FIBER OPTIC CABLE
		NO. 8281 COAXIAL CABLE
		VIDEO DETECTION CAMERA
		DOME P.T.Z. CAMERA
		LUMINAIRE, SODIUM VAPOR, HORIZ. MOUNT PHOTO CELL CONT., 310 W, 120 V BALLAST

NOTE: ALL NEW GROUND RODS SHALL BE 3/4"X 10'-0" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

VIDEO DETECTION FOR ALL INTERSECTIONS SHALL BE ACCESSABLE REMOTELY THROUGH TELE-MODEM

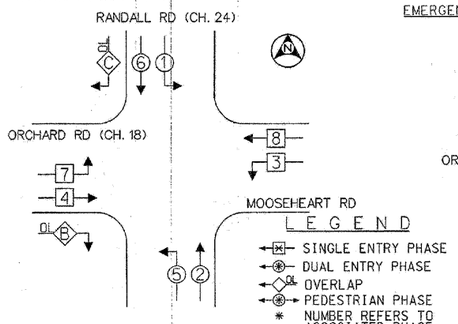
PROPOSED CABLE PLAN



RIGHT TURN OVERLAP PHASE DESIGNATION

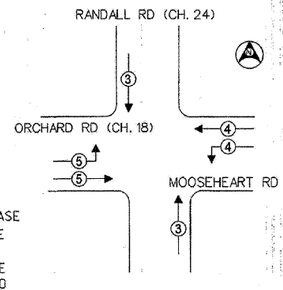
OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
C	=	6	+	7
B	=	4	+	5

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↓↑	←→	→←

METRO TRANSPORTATION GROUP, INC.
TRAFFIC ENGINEERING, TRANSPORTATION PLANNING AND SIGNAL SYSTEMS/DESIGN
3100 W. HIGGINS ROAD, HOFFMAN ESTATES, IL 60195 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES

RANDALL ROAD @ ORCHARD ROAD (CH.18) AND MOOSEHEART ROAD
NORTH AURORA, ILLINOIS

FILE NAME: 14_cp.dgn
DATE: OCTOBER 31, 2006
PROJECT NO.: H0510-03
SHEET NO.: 14 OF 22

PROFILE — SURVEYED — DRAWN — ALIGNMENTS CHECKED — GRADES CHECKED — FINAL NOTED — NOTE BOOK — NO. — STRUCTURE NO(S).
PLAN — SURVEYED — DRAWN — ALIGNMENT CHECKED — RT. OF WAY CHECKED — CAD FILE NAME — NOTE BOOK — NO.
HNTB CORPORATION — 10 SOUTH WACKER DRIVE — SUITE 1250 — CHICAGO, IL 60606 — (312) 930-9119
BY — DATE

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -	
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

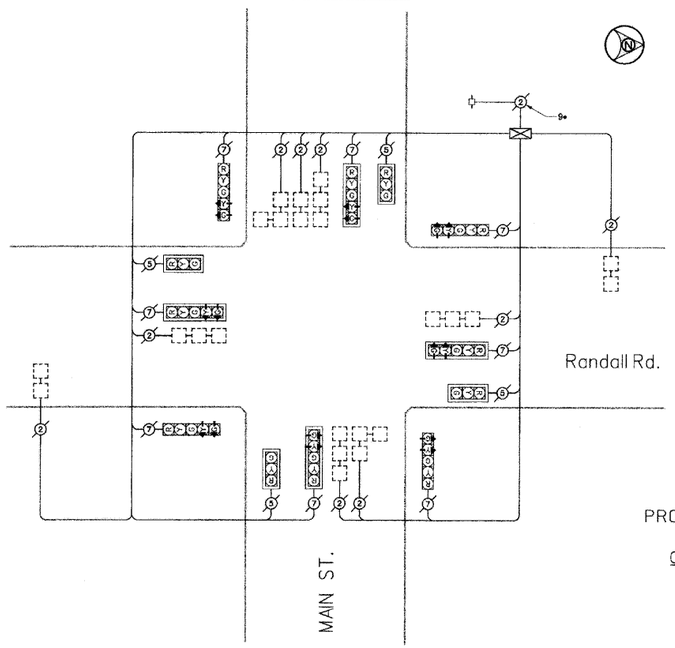
CABLE PLAN
RANDALL ROAD AT ORCHARD ROAD
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	7
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY

NOTE: PROPOSED INTERCONNECT CABLE, CCTV CABLE, AND EXISTING EVP NOT SHOWN ON SCHEMATIC.

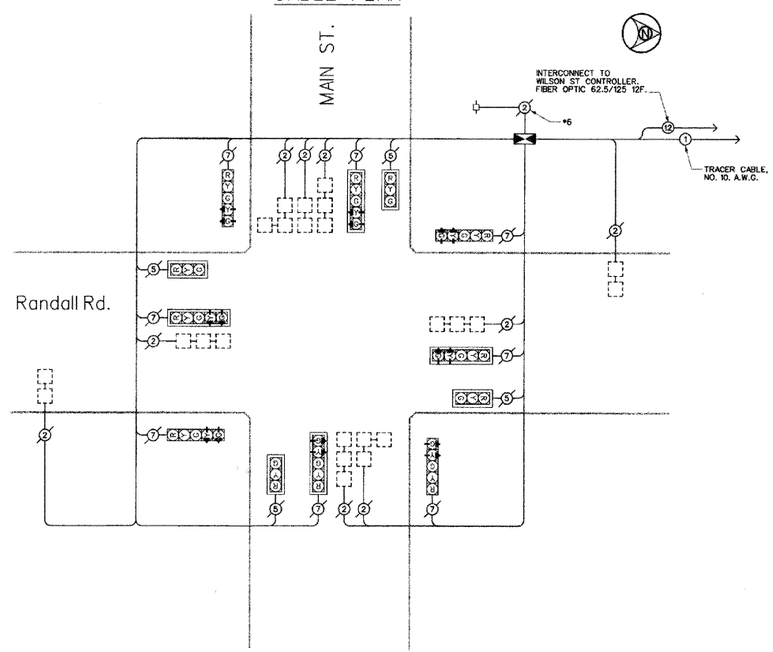
EXISTING CABLE PLAN



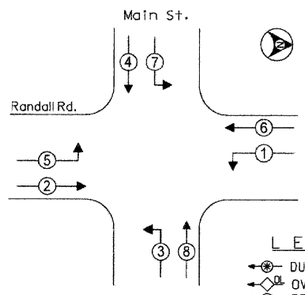
CABLE PLAN LEGEND

EXISTING	PROPOSED	
		8" (200MM) TRAFFIC SIGNAL SECTION
		12"(300MM) TRAFFIC SIGNAL SECTION
		12"(300MM) PEDESTRIAN SIGNAL SECTION
		12"(300MM) 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

PROPOSED CABLE PLAN



PROPOSED AND EXISTING CONTROLLER SEQUENCE



L E G E N D

- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM

NOTES:

1. THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF KANE COUNTY, AND SHALL BE STORED AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS FOR PICK UP BY KANE COUNTY FORCES AS DESIGNATED BY THE ENGINEER.

1	Each	CONTROLLER AND CABINET, TYPE IV MULTISONICS 820A
1	Each	CONFLICT MONITOR, EDINSM 12L
5	Each	LOOP DETECTOR AMPLIFIER, I.C.C. R23T, 2 CHANNEL

SCHEDULE OF QUANTITIES

9 EACH	INDUCTIVE LOOP DETECTOR
1 EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
1 EACH	TRANSCEIVER-FIBER OPTIC
1 EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1 EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

NOTE: EQUIPMENT SUBSTITUTION WILL NOT BE ALLOWED

COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION
1	04/15/99	ADD INTERCONNECT

CABLE PLAN, PHASE DESIGNATION DIAGRAM and SCHEDULE OF QUANTITIES
RANDALL RD. @ MAIN ST
BATAVIA, ILLINOIS

FILE NAME: main _cp.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00

SHEET NO.: 3 OF 24

HNTB CORPORATION
111 E. WACKER DRIVE
SUITE 1250
CHICAGO, IL 60606
(312) 930-9119

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, X-SEC FILE NAME, NOTE BOOK, NO.

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ELEV. NOTED, NOTE BOOK, NO.

BY | DATE

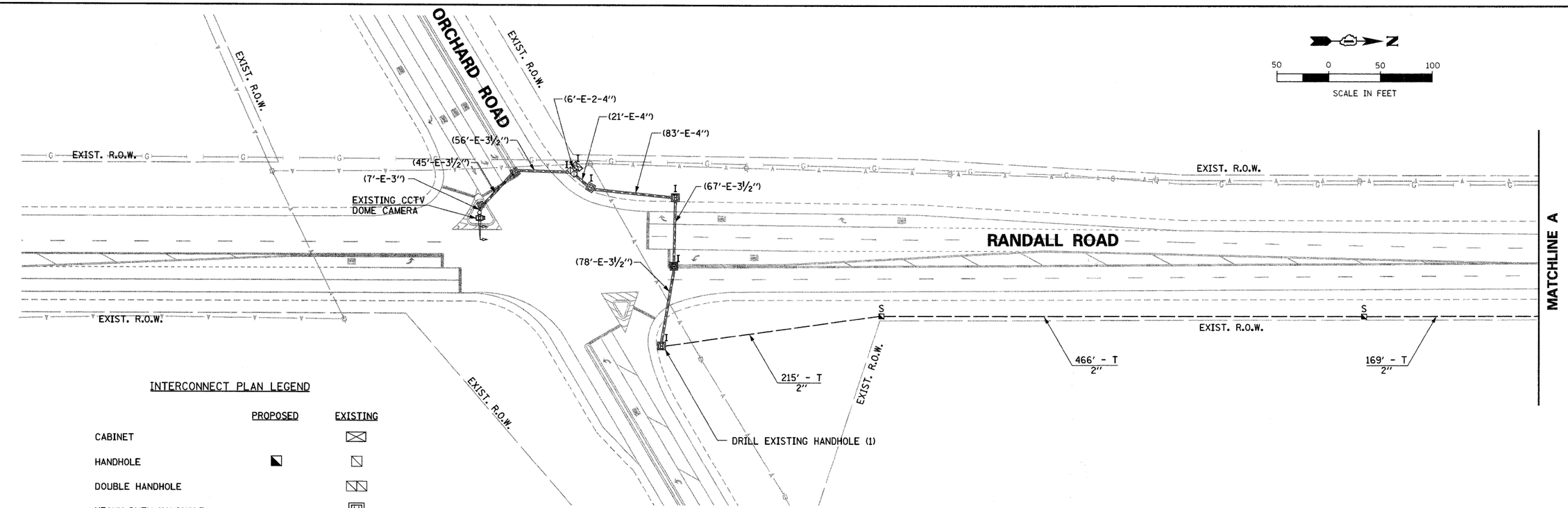
STRUCTURE NOTATIONS CHKD

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED	-
		CHECKED	YOUNGJAE JU	REVISED	-
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED	-
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

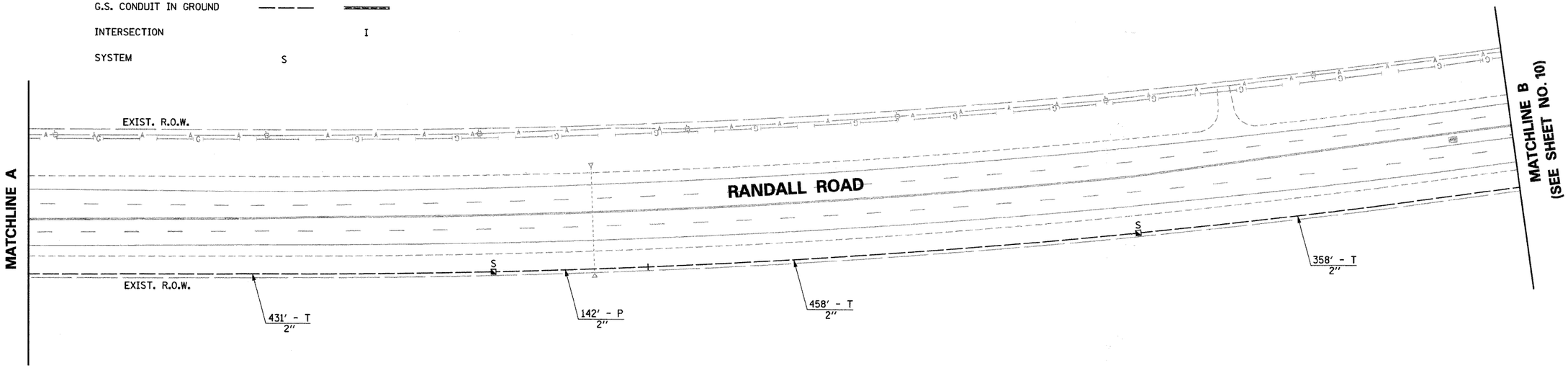
CABLE PLAN
RANDALL ROAD AT MAIN STREET
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	8
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CABINET		⊠
HANDHOLE	◪	◪
DOUBLE HANDHOLE		◪◪
HEAVY-DUTY HANDHOLE		[H]
CCTV DOME CAMERA	[C]	[C]
G.S. CONDUIT IN GROUND	— — —	———
INTERSECTION		I
SYSTEM	S	



NOTE: SYSTEM HANDHOLES SHALL BE PLACED AS CLOSE TO THE R.O.W. AS POSSIBLE.

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.

PLAN — SURVEYED — BY — DATE; ALIGNMENT CHECKED; RT. OF WAY CHECKED; CAD FILE NAME; NOTE BOOK; NO.

PROFILE — SURVEYED; PLOTTED; GRADES CHECKED; B.M. NOTED; STRUCTURE NOTATING CHKD; NOTE BOOK; NO.

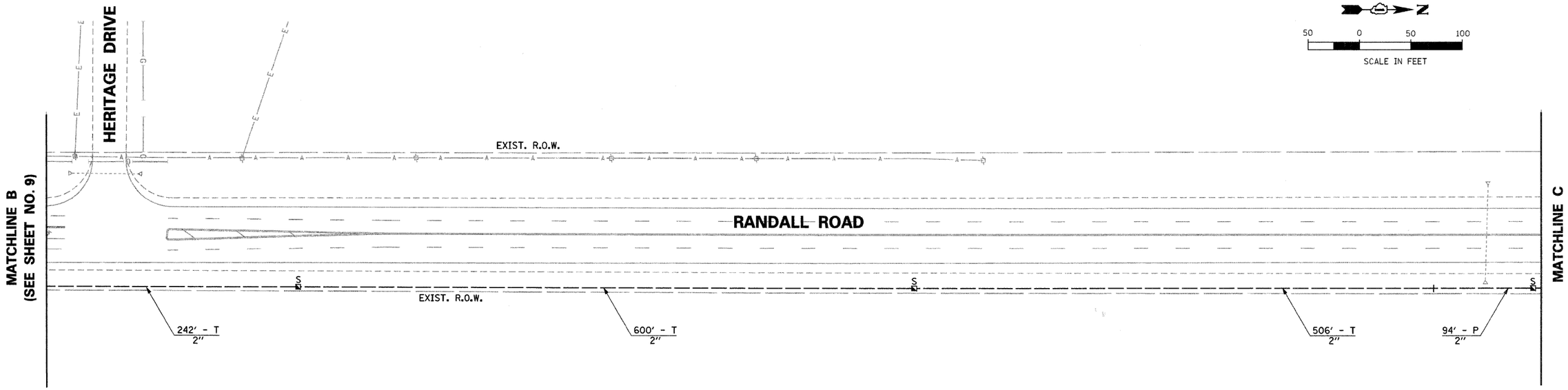
INTB CORPORATION
111 E. KILBOURN AVENUE
SUITE 1250
MILWAUKEE, WI 53202
(262) 930-5818

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

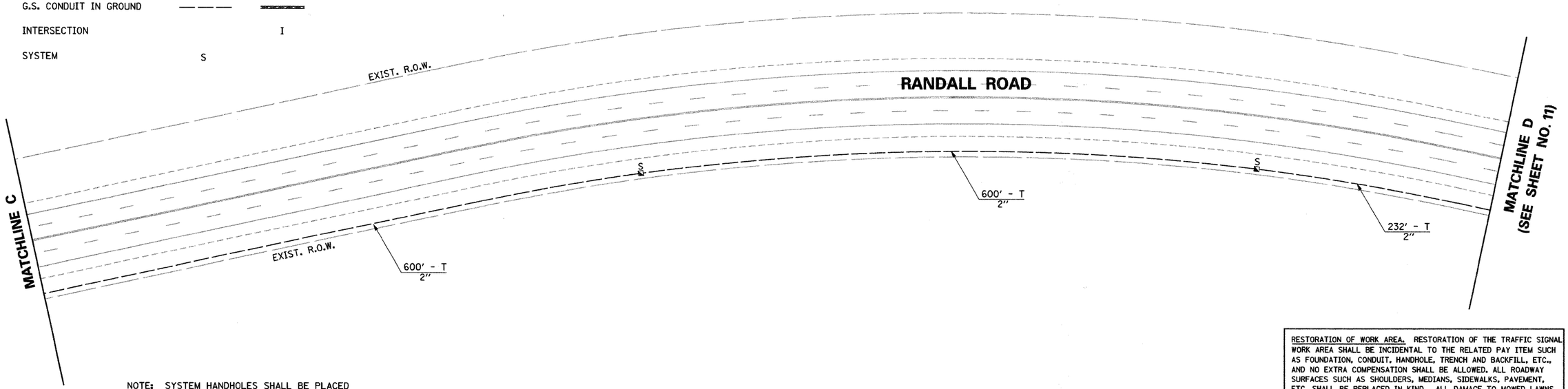
INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE: 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	9
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CABINET		⊠
HANDHOLE	◪	⧄
DOUBLE HANDHOLE		⧅
HEAVY-DUTY HANDHOLE		Ⓗ
CCTV DOME CAMERA	Ⓒ◥	Ⓒ◥
G.S. CONDUIT IN GROUND	— — —	▬▬▬
INTERSECTION		I
SYSTEM	S	



NOTE: SYSTEM HANDHOLES SHALL BE PLACED AS CLOSE TO THE R.O.W. AS POSSIBLE.

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.

HNTB CORPORATION
ONE LINCOLN CENTRE
SUITE 1250
OAKBROOK TERRACE, IL 60606
(312) 930-4919

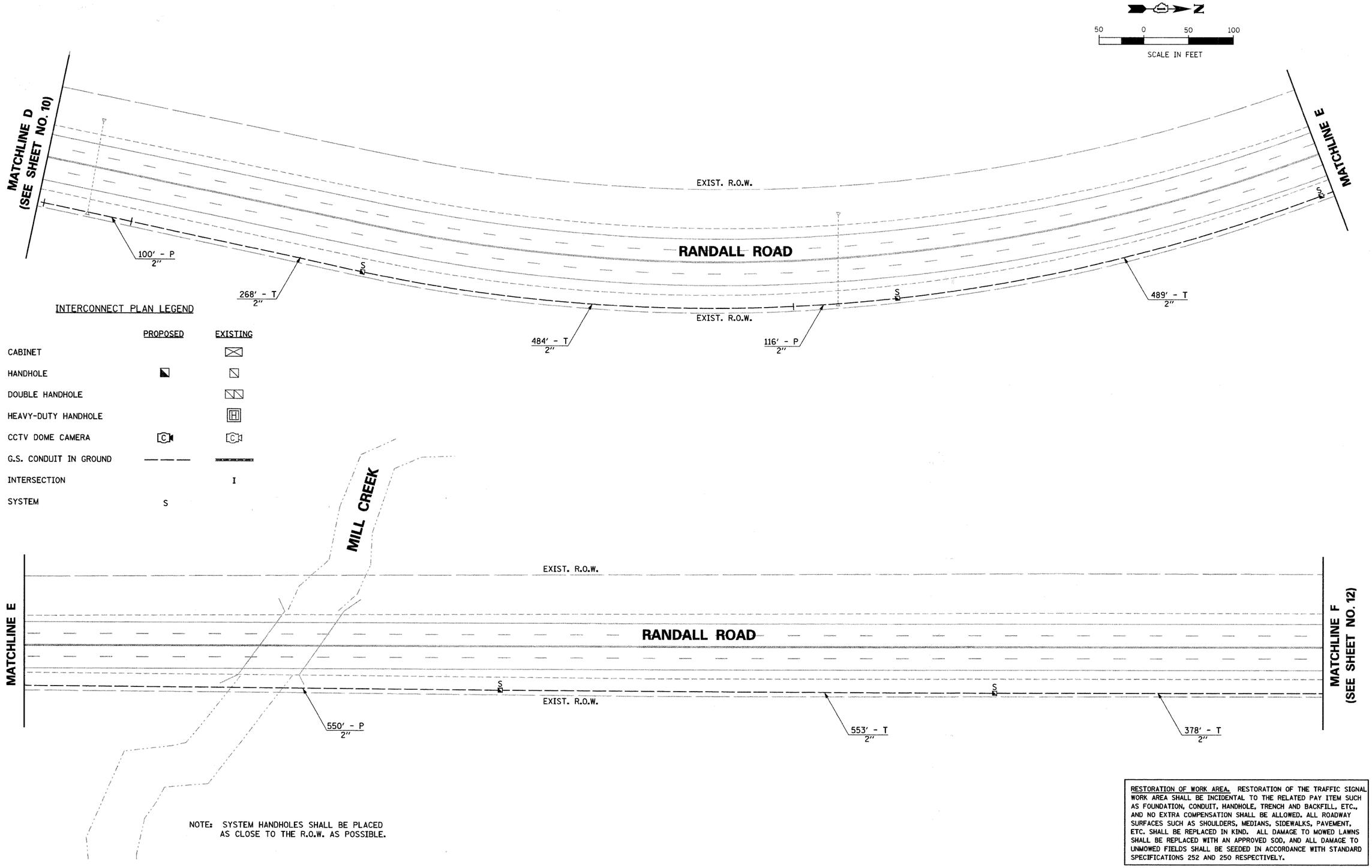
PLAN — SURVEYED — BY — DATE
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
CAD FILE NAME

PROFILE — SURVEYED — BY — DATE
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.

FILE NAME = **DGNSPEC**	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -	

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE: 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	10
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CABINET		⊠
HANDHOLE	◪	◪
DOUBLE HANDHOLE		◪◪
HEAVY-DUTY HANDHOLE		H
CCTV DOME CAMERA	C	C
G.S. CONDUIT IN GROUND	— — —	———
INTERSECTION		I
SYSTEM	S	

NOTE: SYSTEM HANDHOLES SHALL BE PLACED AS CLOSE TO THE R.O.W. AS POSSIBLE.

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.

HNTB CORPORATION
111 E. CHICAGO AVE.
SUITE 1250
NAPERVILLE, IL 60606
(312) 930-3519

PLAN — NOTE BOOK NO. ____ — SURVEYED — PLOTTED — ALIGNMENT CHECKED — PT. OF WAY CHECKED — ADD'D FILE NAME — BY — DATE

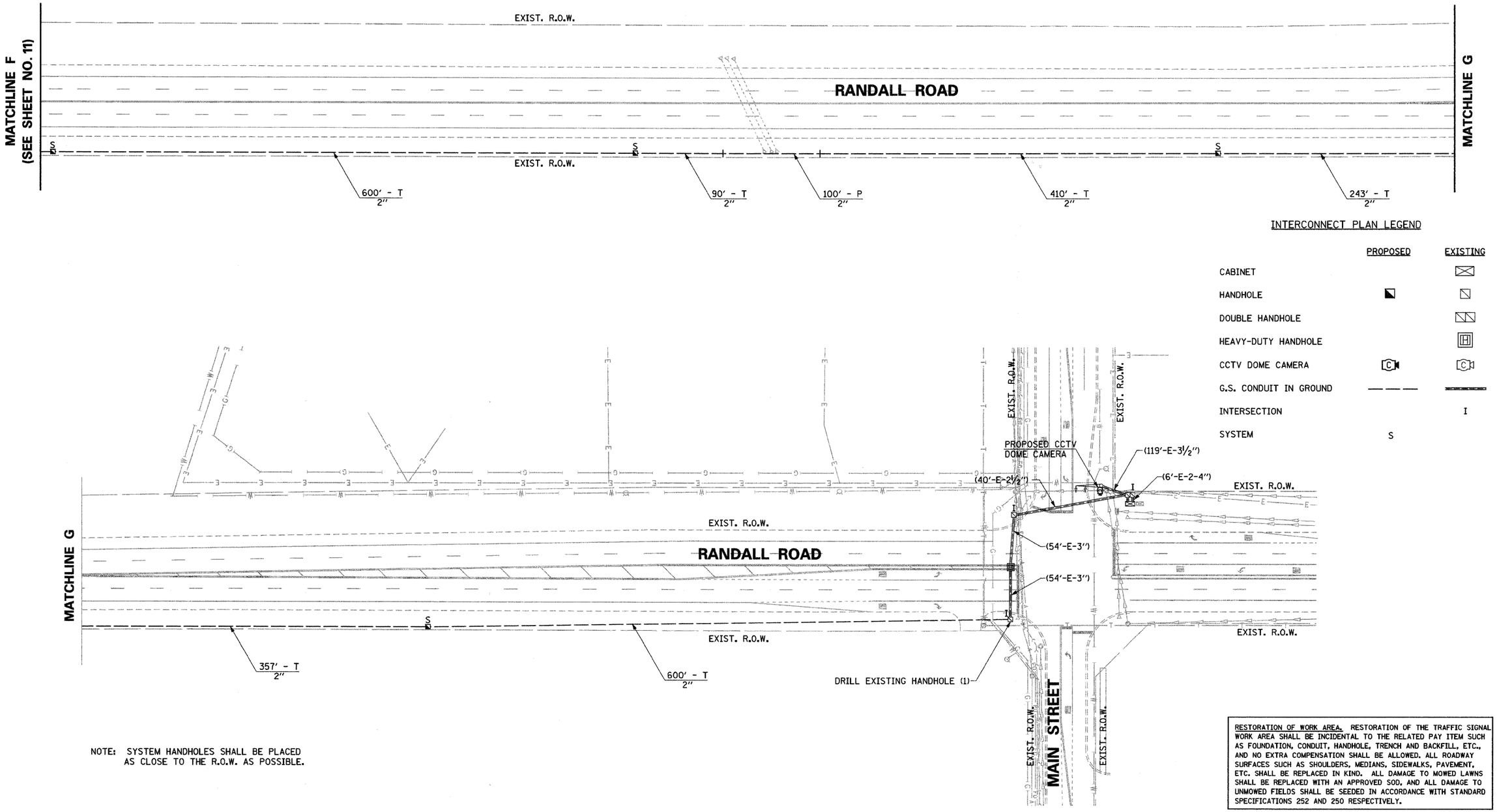
PROFILE — NOTE BOOK NO. ____ — SURVEYED — PLOTTED — GRADES CHECKED — B.M. NOTED — STRUCTURE NOTATNS CHKD — BY — DATE

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -	
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE: 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	11
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE: SYSTEM HANDHOLES SHALL BE PLACED AS CLOSE TO THE R.O.W. AS POSSIBLE.

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.

HNTB CORPORATION
111 E. CHAMBERS STREET
SUITE 1250
CHICAGO, IL 60606
(312) 930-3119

PLAN — NOTE BOOK — NO. ____
SURVEYED — BY — DATE
PLOTTED — BY — DATE
ALIGNMENT CHECKED — BY — DATE
PT. OF WAY CHECKED — BY — DATE
CADD FILE NAME

PROFILE — NOTE BOOK — NO. ____
SURVEYED — BY — DATE
PLOTTED — BY — DATE
GRADES CHECKED — BY — DATE
B.M. NOTED — BY — DATE
STRUCTURE NO/EXTNS CHKD — BY — DATE

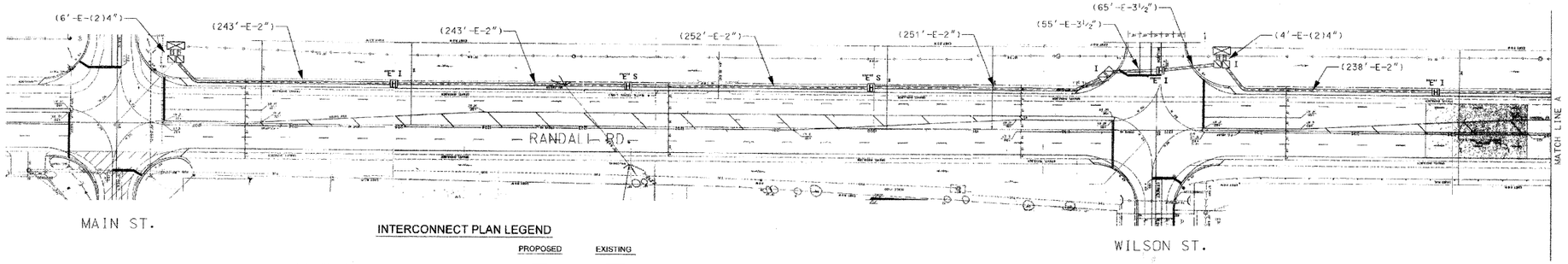
FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE: 1" = 50'

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	12
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

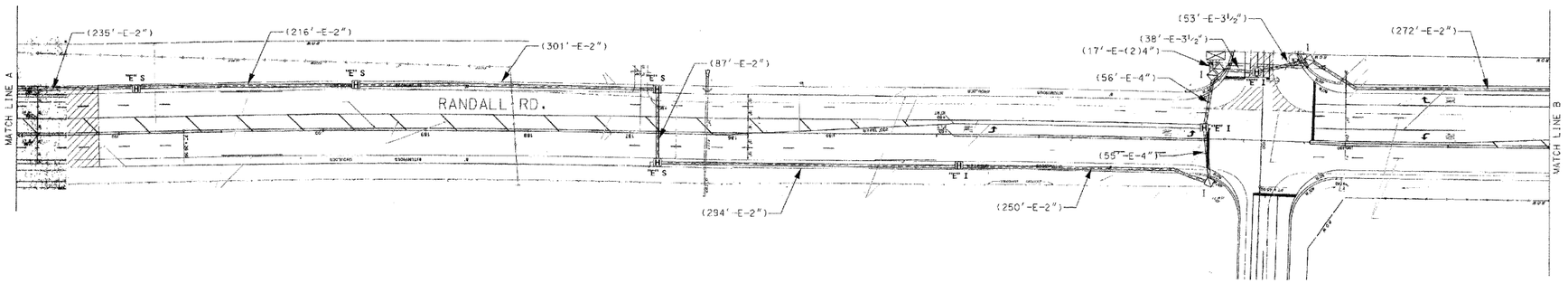
FOR INFORMATION ONLY



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE	H	H "E"
G.S. CONDUIT IN TRENCH OR PUSHED		
DECTECTOR LOOP		
COMMON TRENCH	CT	
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

SCALE: 1"=50'



COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

INTERCONNECT PLAN
RANDALL RD. (MAIN ST. TO KESLINGER RD.)
GENEVA / BATAVIA, ILLINOIS

FILE NAME: ic_1.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00
SHEET NO.: 15 OF 24

NOTE: RANDALL ROAD INTERCONNECT PLAN FROM MAIN STREET TO KESLINGER ROAD PROVIDED TO SHOW EXISTING CONDUIT ROUTING. PROPOSED WORK INCLUDES FIBER OPTIC CABLE INSTALLATION PER INTERCONNECT SCHEMATIC SHOWN ON SHEET NO. 18.

HNTB CORPORATION
111 E. WACKER DRIVE
SUITE: 1250
CHICAGO, IL 60606
(312) 930-9319

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / A&D FILE NAME / NOTE BOOK / NO.

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / ELEV. NOTED / STRUCTURE NO'S AVAILABLE / NOTE BOOK / NO.

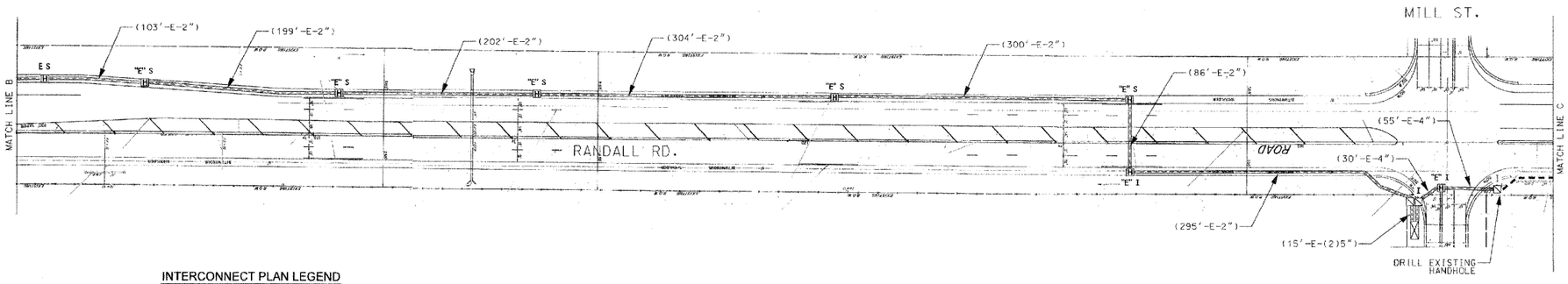
BY | DATE

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

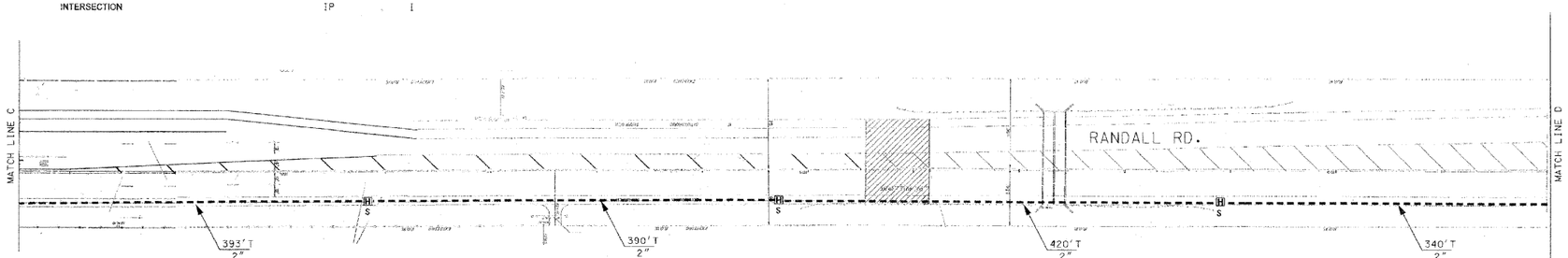
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	13
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY-DUTY HANDHOLE	H	H"E"
G.S. CONDUIT IN TRENCH OR PUSHED		
DECTECTOR LOOP		
COMMON TRENCH	CT	
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

SCALE: 1"=50'



FOR INFORMATION ONLY

COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

INTERCONNECT PLAN
RANDALL RD. (MAIN ST. TO KESLINGER RD.)
GENEVA / BATAVIA, ILLINOIS

FILE NAME: ic 2 _ic.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00
SHEET NO.: 16 OF 24

NOTE: RANDALL ROAD INTERCONNECT PLAN FROM MAIN STREET TO KESLINGER ROAD PROVIDED TO SHOW EXISTING CONDUIT ROUTING. PROPOSED WORK INCLUDES FIBER OPTIC CABLE INSTALLATION PER INTERCONNECT SCHEMATIC SHOWN ON SHEET NO. 18.

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

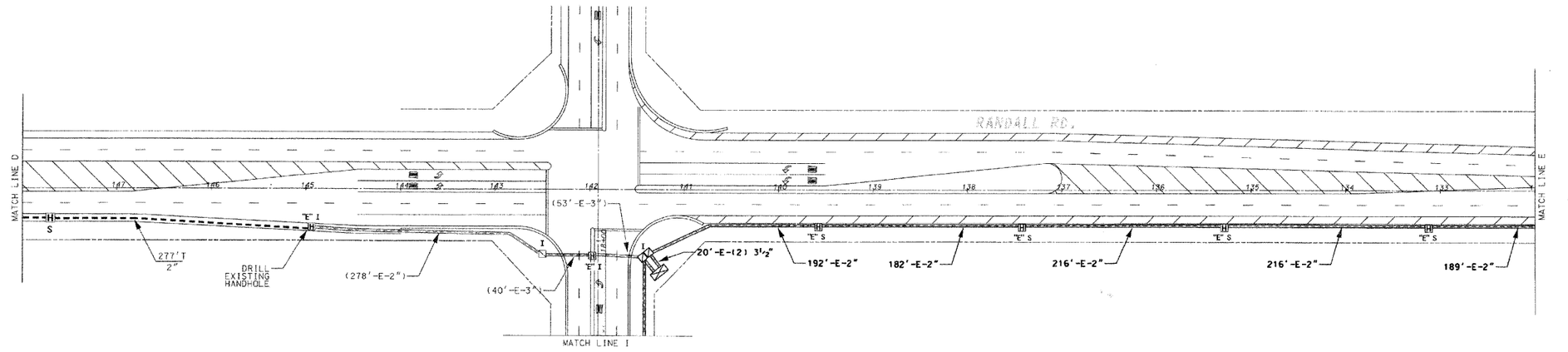
INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	14
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HNTB CORPORATION
111 E. WACKER DRIVE
SUITE 1250
CHICAGO, IL 60606
(312) 930-9318

PLAN — SURVEYED / PLOTTED / NOTE BOOK / NO. ____ — ALIGNMENT CHECKED / RT. OF WAY CHECKED / P&D FILE NAME — BY / DATE

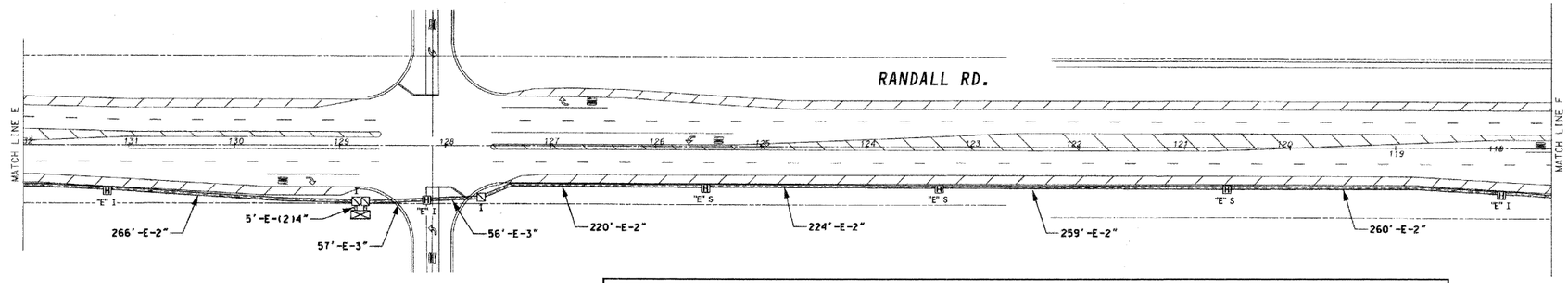
PROFILE — SURVEYED / PLOTTED / NOTE BOOK / NO. ____ — GRADES CHECKED / B.M. NOTED / STRUCTURE NO(S) — BY / DATE



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	⊠
HANDHOLE	◪	◰
DOUBLE HANDHOLE	◪◪	◰◰
HEAVY-DUTY HANDHOLE	⊞	⊞"E"
G.S. CONDUIT IN TRENCH OR PUSHED	----------	----------
DECTECTOR LOOP	▢	⌐¬
COMMON TRENCH	CT	
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

SCALE: 1"=50'



GLENEAGLE DR.

FOR INFORMATION ONLY

COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

INTERCONNECT PLAN

RANDALL RD. (MAIN ST. TO KESLINGER RD.)
GENEVA / BATAVIA, ILLINOIS

FILE NAME: ic_3.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00

SHEET NO.: 17 OF 24

NOTE: RANDALL ROAD INTERCONNECT PLAN FROM MAIN STREET TO KESLINGER ROAD PROVIDED TO SHOW EXISTING CONDUIT ROUTING. PROPOSED WORK INCLUDES FIBER OPTIC CABLE INSTALLATION PER INTERCONNECT SCHEMATIC SHOWN ON SHEET NO. 18.

HNTB CORPORATION
111 E. CHAMBERS STREET
SUITE 1250
CHICAGO, IL 60606
(312) 930-9119

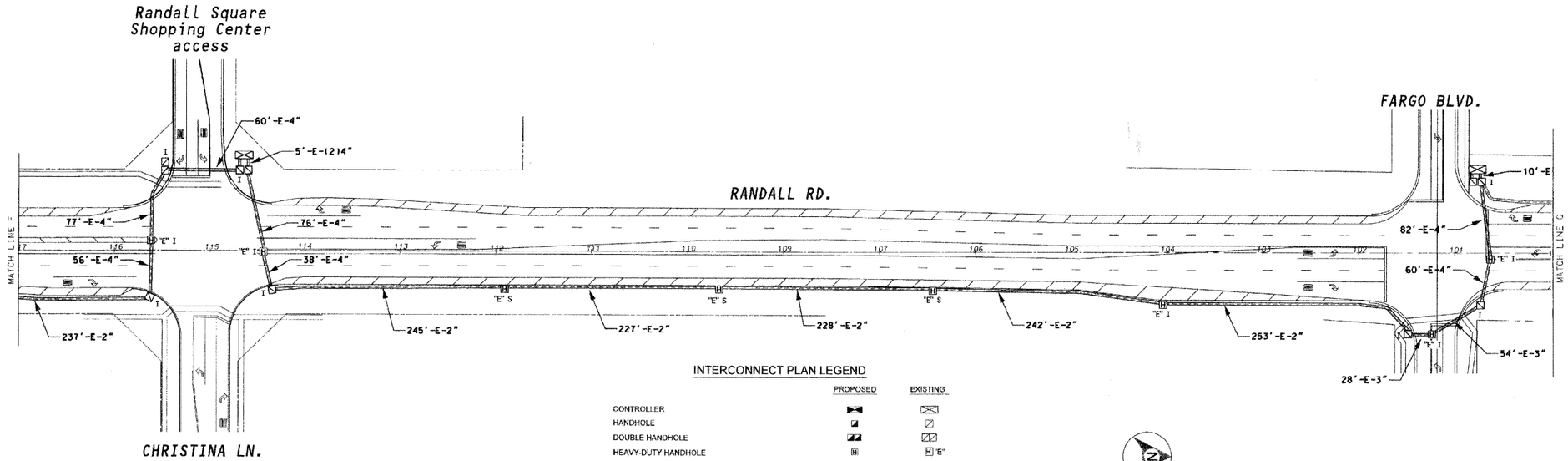
PLAN — NOTE BOOK NO. ____ — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CAD FILE NAME — BY / DATE

PROFILE — NOTE BOOK NO. ____ — SURVEYED / PLOTTED / GRADES CHECKED / BAL NOTED / STRUCTURE NOTATIONS CHKD — BY / DATE

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -	

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

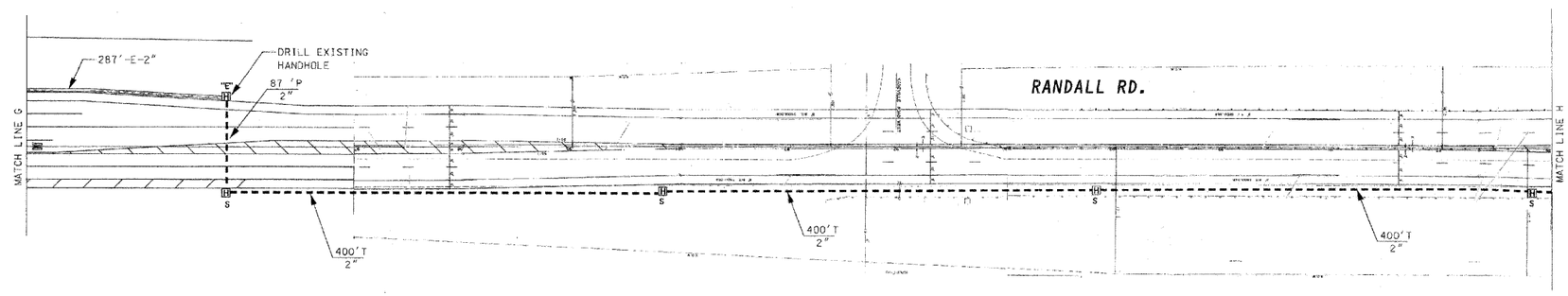
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	15
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	▪	▫
HANDHOLE	◪	◫
DOUBLE HANDHOLE	◪◪	◫◫
HEAVY-DUTY HANDHOLE	H	H "E"
G.S. CONDUIT IN TRENCH OR PUSHED	----------	==========
DECTECTOR LOOP	□	□
COMMON TRENCH	CT	
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	P	I

SCALE: 1"=50'



FOR INFORMATION ONLY

COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

INTERCONNECT PLAN

RANDALL RD. (MAIN ST. TO KESLINGER RD.)
GENEVA / BATAVIA, ILLINOIS

FILE NAME: ic_4.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00
SHEET NO.: 18 OF 24

NOTE: RANDALL ROAD INTERCONNECT PLAN FROM MAIN STREET TO KESLINGER ROAD PROVIDED TO SHOW EXISTING CONDUIT ROUTING. PROPOSED WORK INCLUDES FIBER OPTIC CABLE INSTALLATION PER INTERCONNECT SCHEMATIC SHOWN ON SHEET NO. 18.

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -	

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	16
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HNTB CORPORATION
111 E. KILBURN AVENUE
SUITE 1250
MILWAUKEE, WI 53206
(262) 930-5115

PLAN NOTE BOOK NO. ____ SURVEYED ____ ALIGNMENT CHECKED ____ RT. OF WAY CHECKED ____ A&D FILE NAME ____

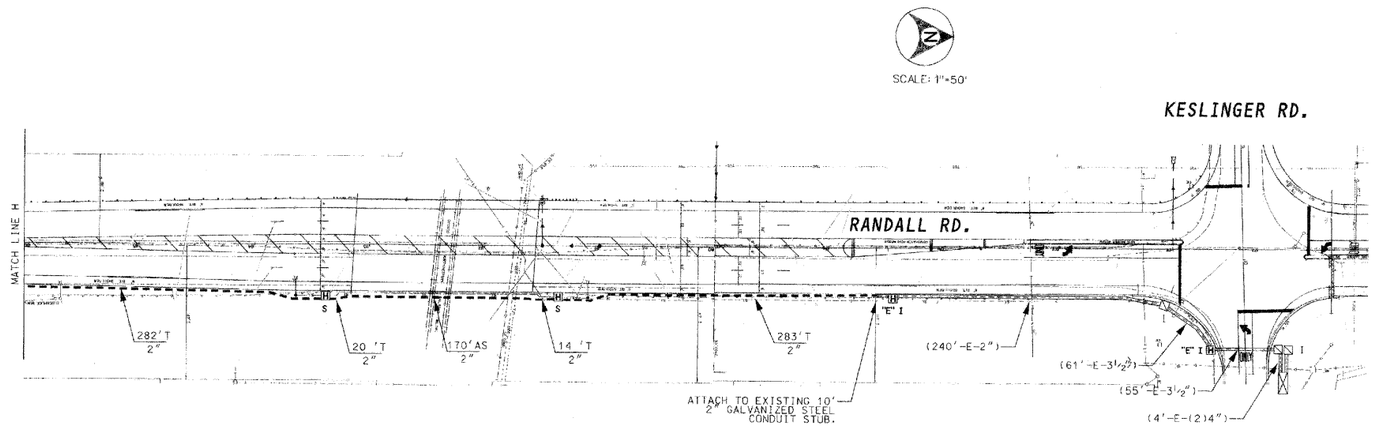
PROFILE NOTE BK. NO. ____ SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ R&M. NOTED ____ STRUCTURE &/OR ATHS. CHKD ____

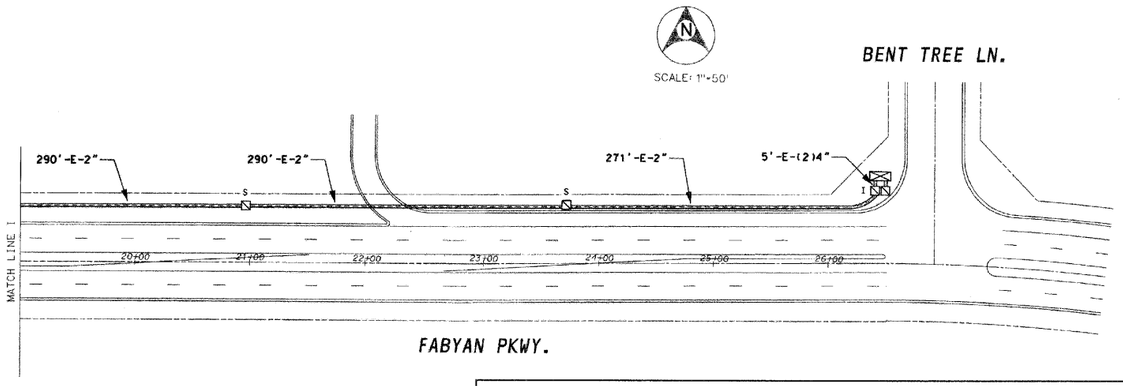
DATE | BY

HNTB CORPORATION
ILLINOIS CHAMBER STREET
SUITE 1250
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK NO. ____ — SURVEYED ____ PLOTTED ____ ALIGNMENT CHECKED ____ PT. OF WAY CHECKED ____ CAD FILE NAME ____ — BY ____ DATE ____

PROFILE — NOTE BOOK NO. ____ — SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ B.M. NOTED ____ STRUCTURE NO'S/STA'NS CHKD ____ — BY ____ DATE ____





INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	■	⊠
HANDHOLE	◪	◪
DOUBLE HANDHOLE	◪◪	◪◪
HEAVY-DUTY HANDHOLE	⊞	⊞ "E"
G.S. CONDUIT IN TRENCH OR PUSHED	----------	----------
DECTECTOR LOOP	□	□
COMMON TRENCH	CT	
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I

FOR INFORMATION ONLY

COUNTY SECTION 99-00237-00-TL

METRO TRANSPORTATION GROUP, INC.
TRANSPORTATION PLANNING, ENGINEERING AND DESIGN
1300 GREENBROOK, HANOVER PARK, IL 60103 PH# 630 213-1000

REVISIONS		
NO.	DATE	DESCRIPTION

INTERCONNECT PLAN
RANDALL RD. (MAIN ST. TO KESLINGER RD.)
GENEVA / BATAVIA, ILLINOIS

FILE NAME: ic_5.dgn
DATE: April 15,1999
PROJECT NO.: 3857-00
SHEET NO.: 19 OF 24

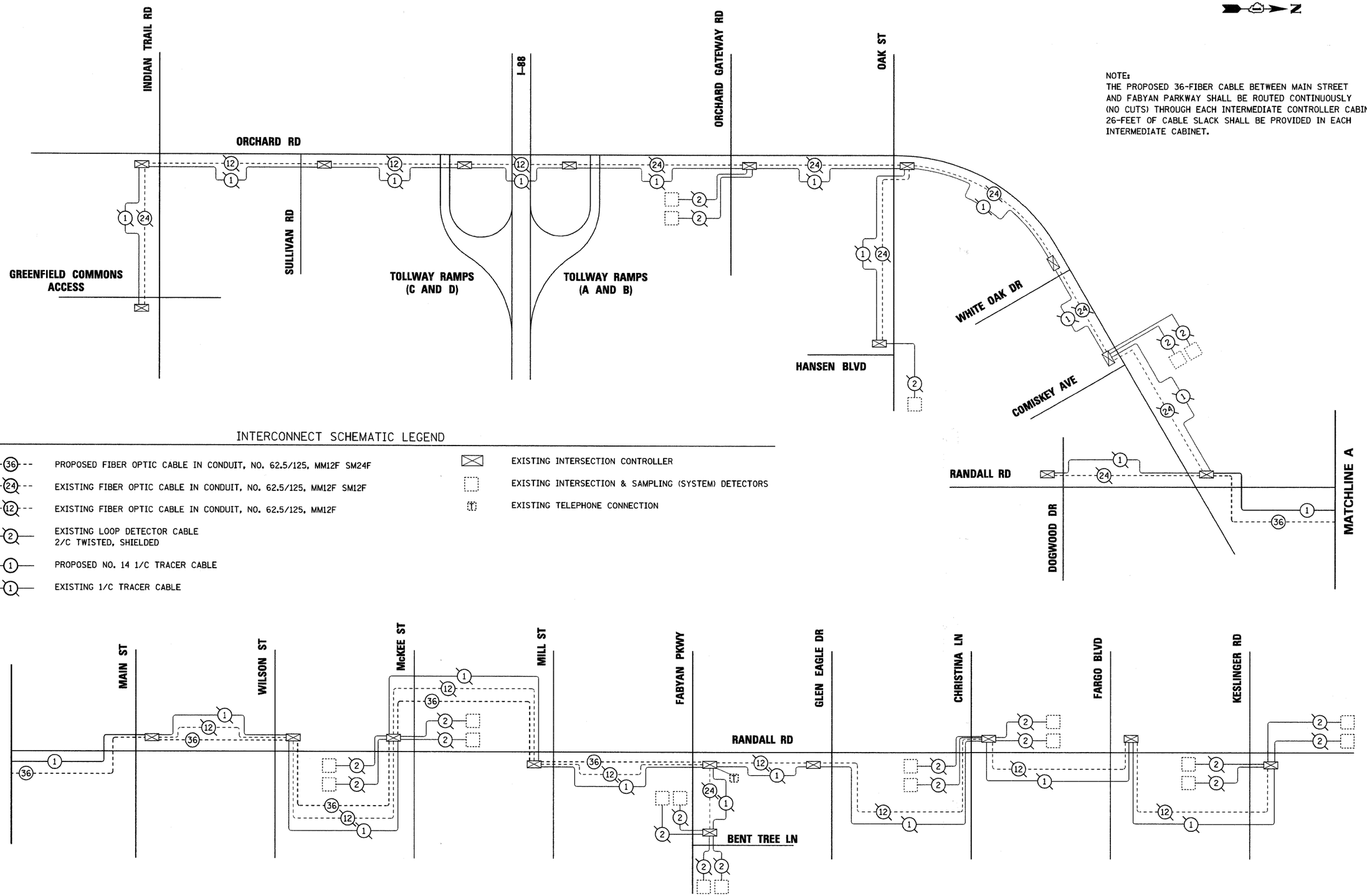
NOTE: RANDALL ROAD INTERCONNECT PLAN FROM MAIN STREET TO KESLINGER ROAD PROVIDED TO SHOW EXISTING CONDUIT ROUTING. PROPOSED WORK INCLUDES FIBER OPTIC CABLE INSTALLATION PER INTERCONNECT SCHEMATIC SHOWN ON SHEET NO. 18.

FILE NAME = ##DGNSPEC##	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	17
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE:
THE PROPOSED 36-FIBER CABLE BETWEEN MAIN STREET AND FABYAN PARKWAY SHALL BE ROUTED CONTINUOUSLY (NO CUTS) THROUGH EACH INTERMEDIATE CONTROLLER CABINET. 26-FEET OF CABLE SLACK SHALL BE PROVIDED IN EACH INTERMEDIATE CABINET.

INTERCONNECT SCHEMATIC LEGEND

- (36) PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F
- (24) EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
- (12) EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F
- (2) EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED
- (1) PROPOSED NO. 14 1/C TRACER CABLE
- (1) EXISTING 1/C TRACER CABLE
- EXISTING INTERSECTION CONTROLLER
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING TELEPHONE CONNECTION

HNTB CORPORATION
JUNIPER CANAL STREET
SUITE 1250
CHICAGO, IL 60606
(312) 930-3131

PLAN — NOTE BOOK — NO. ____
SURVEYED — PLOTTED — CHECKED — R.R. OF WAY CHECKED — CAD FILE NAME — BY — DATE

PROFILE — NOTE BOOK — NO. ____
SURVEYED — PLOTTED — CHECKED — QUANTITIES CHECKED — B.M. NOTED — STRUCTURE NOTATING CHKD — BY — DATE

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE = 11-FEB-2009	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

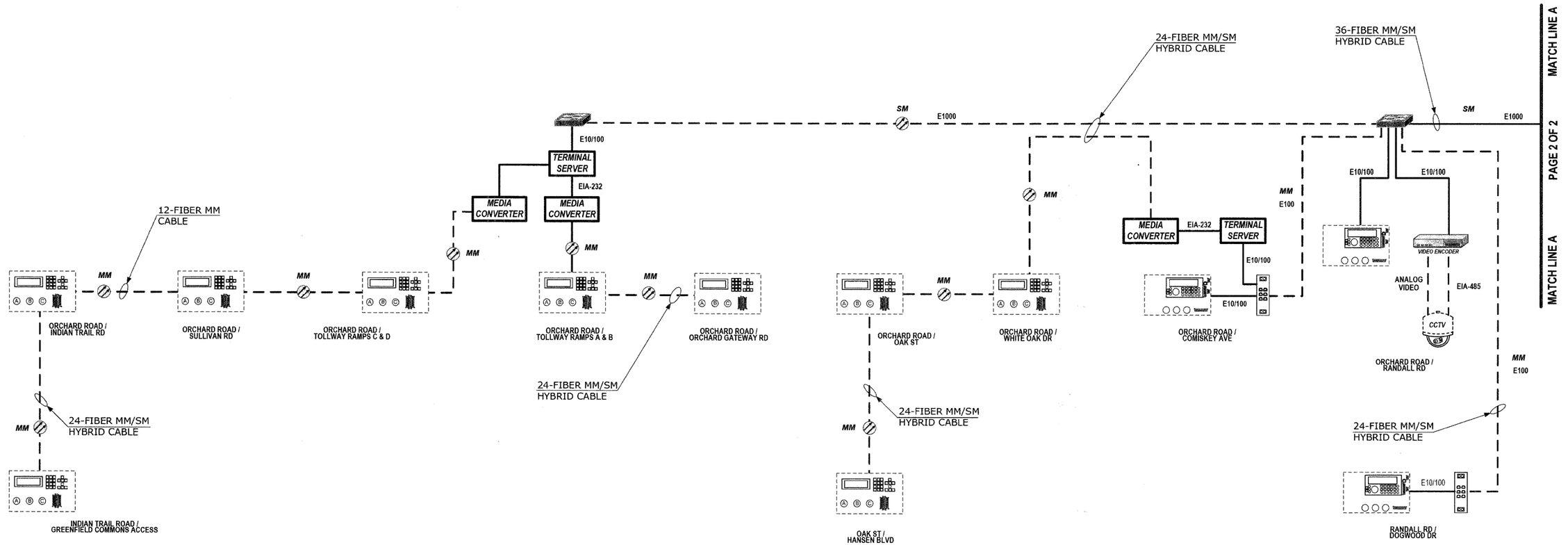
INTERCONNECT SCHEMATIC
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	18
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- PROPOSED LAYER II (DATALINK) SWITCH
- EXISTING M-40/M-42 CONTROLLER
- UNMANAGED SWITCH
- PROPOSED VIDEO ENCODER
- EXISTING/PROPOSED CABLE
- FIBER OPTIC CABLE
- MM SM — MULTIMODE / SINGLE MODE
- E10/100/1000 — ETHERNET DATA RATE (MBPS)
- EXISTING M-52 CONTROLLER

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.



HNTB CORPORATION
111 N. CANAL STREET
SUITE 1000
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO.
SURVEYED — PLOTTED — ALIGNMENT CHECKED — RIGHT-OF-WAY MONUMENTS — CADD FILE NAME — BY — DATE

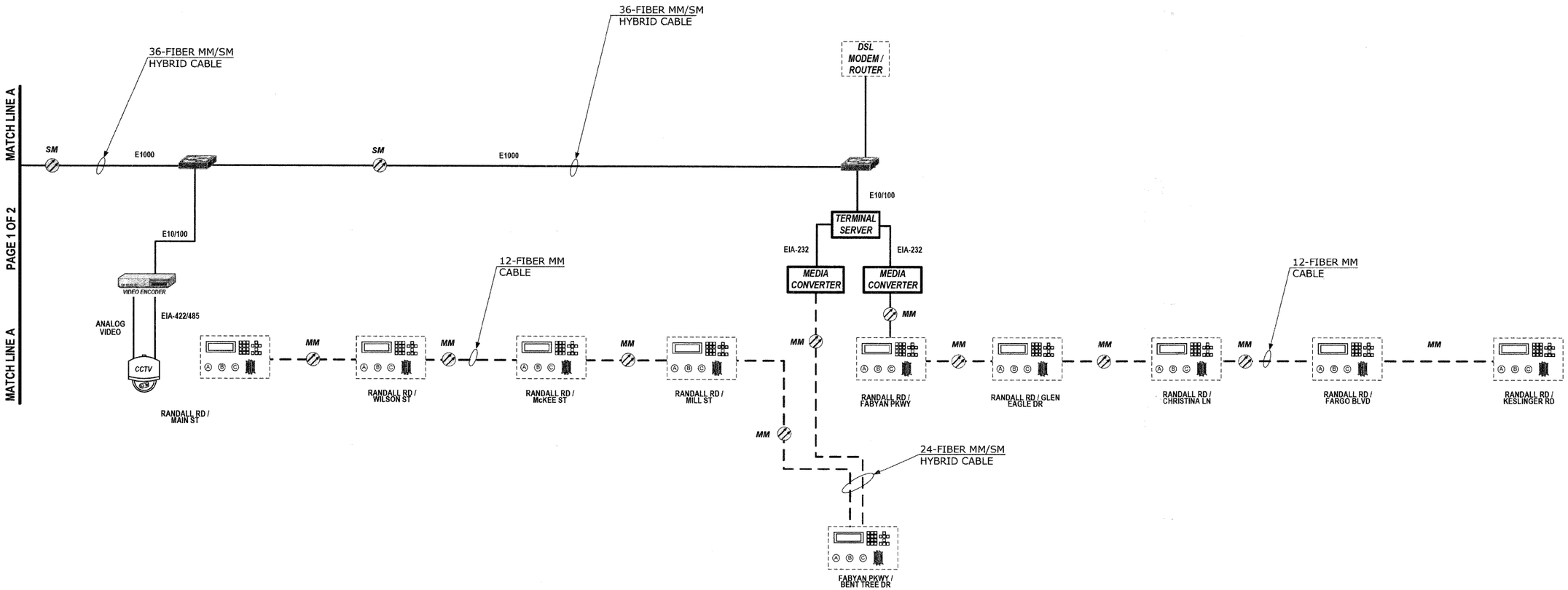
PROFILE — NOTE BOOK — NO.
SURVEYED — PLOTTED — GRADES CHECKED — R.R.X. POSTED — STRUCTURE NO(S)/TN'S CHKD — BY — DATE

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMUNICATIONS PLAN (PAGE 1 OF 2) RANDALL ROAD ORCHARD ROAD TO FABYAN PARKWAY
		CHECKED YOUNGJAE JU	REVISED -		
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -		SCALE: NTS
	PLOT DATE =	DATE 2/20/2009	REVISED -		

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	19
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

KEY

PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA	PROPOSED VIDEO ENCODER
EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA	EXISTING/PROPOSED CABLE
	FIBER OPTIC CABLE
PROPOSED LAYER II (DATALINK) SWITCH	MM SM — MULTIMODE / SINGLE MODE
	E10/100/1000 — ETHERNET DATA RATE (MBPS)
EXISTING M-40/M-42 CONTROLLER	EXISTING M-52 CONTROLLER
UNMANAGED SWITCH	NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.



HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-0919

PLAN — NOTE BOOK — NO.
PROFILE — NOTE BOOK — NO.

DATE	BY	
		SURVEYED
		PLOTTED
		ALIGNMENT CHECKED
		AS-BUILT REVISED
		CADD FILE NAME:
		GRADES CHECKED
		M.L. REVISED
		STRUCTURE NO'S/TN'S CHKD

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE 2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

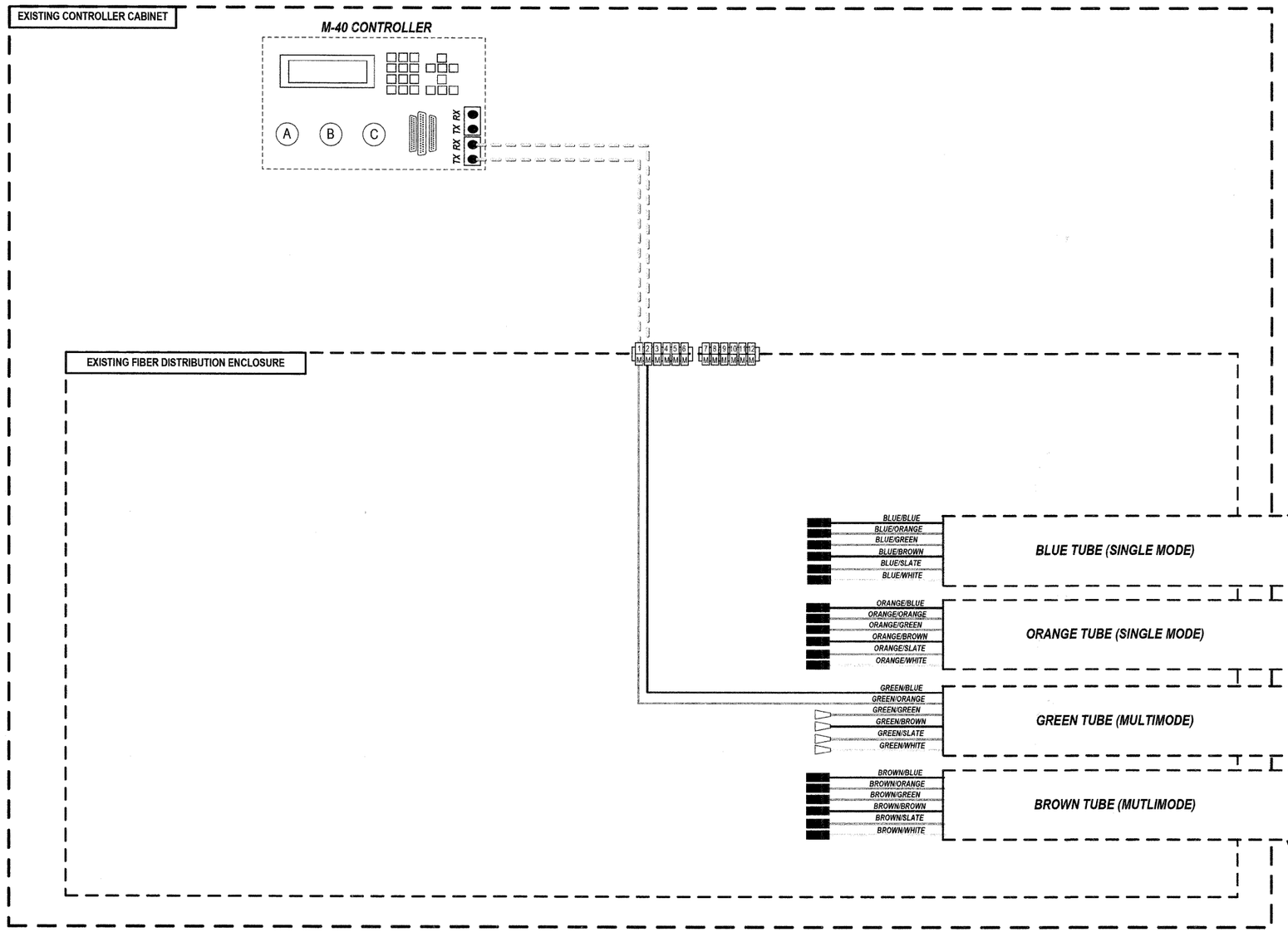
COMMUNICATIONS PLAN (PAGE 2 OF 2)
RANDALL ROAD
ORCHARD ROAD TO FABYAN PARKWAY
SCALE: NTS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	20
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1900
CHICAGO, IL 60606
(312) 930-9119

PLAN	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	ALIGNMENT CHECKED	
	RIGHT-OF-WAY CHECKED	
	CADD FILE NAME	

PROFILE	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NO(S)/ATN'S CHK'D	



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

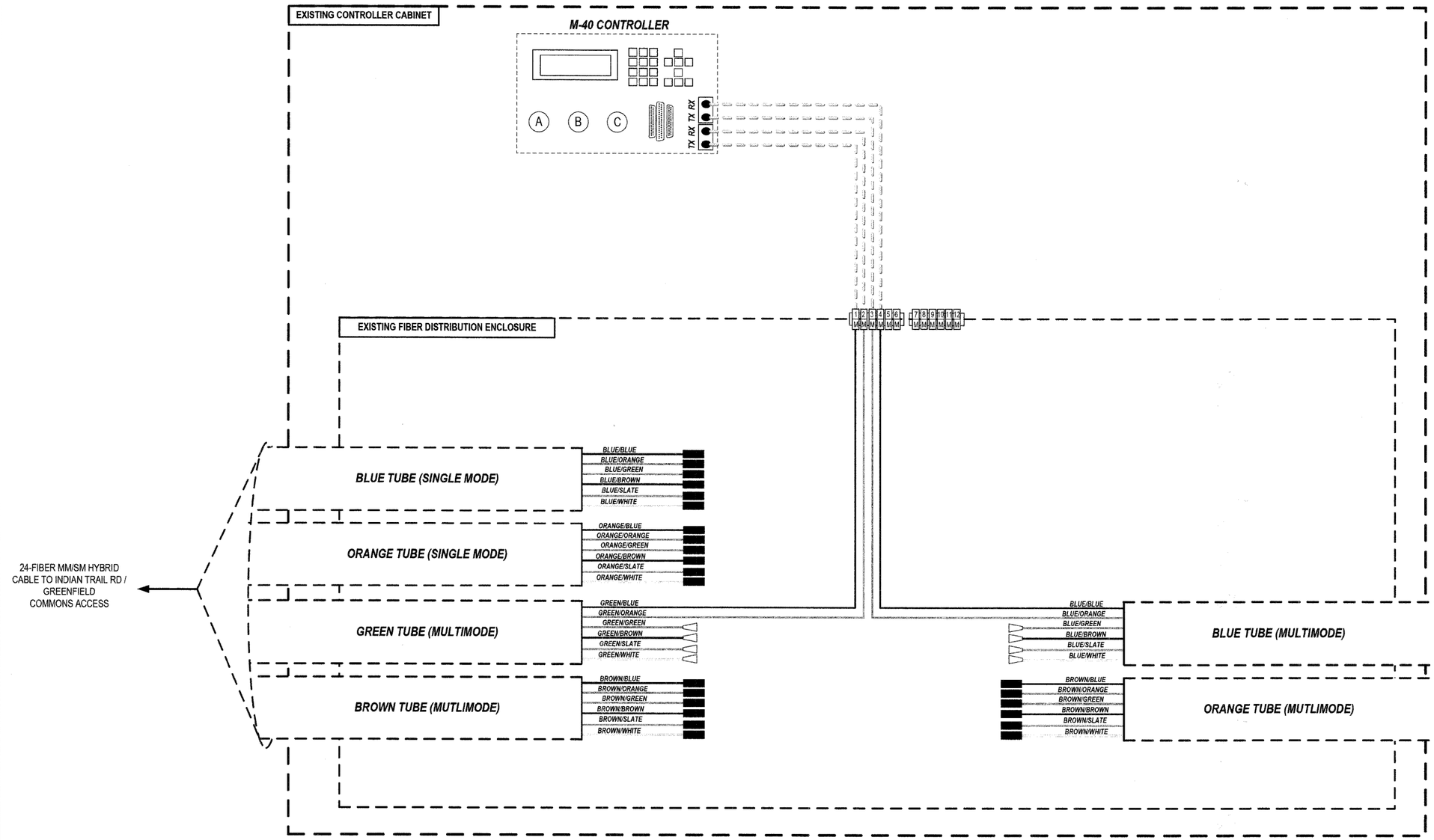
1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE 2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 1 OF 22)
INDIAN TRAIL ROAD / GREENFIELD COMMONS ACCESS
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	21
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

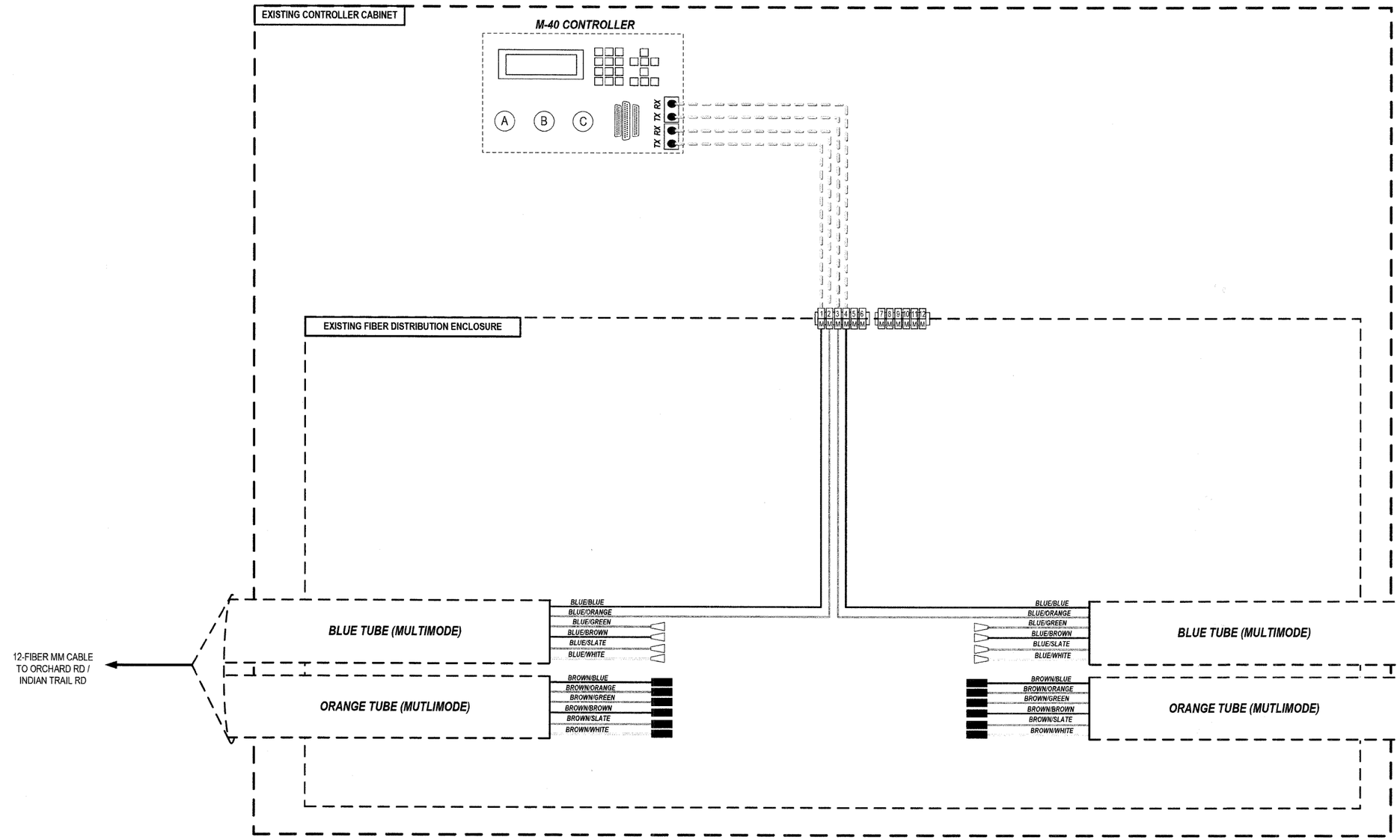
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO. ____
SURVEYED — PLOTTED — ALIGNMENT CHECKED — ALL UTILITIES PLOTTED — CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK — NO. ____
SURVEYED — PLOTTED — GRADES CHECKED — ALL UTILITIES PLOTTED — STRUCTURE NO(A)/(N)S CHKD — BY — DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPLICING AND CONNECTION DETAIL (PAGE 2 OF 22) ORCHARD ROAD / INDIAN TRAIL ROAD	
		CHECKED	YOUNGJAE JU	REVISED -			
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -		SCALE: _____	
	PLOT DATE =	DATE	2/20/2009	REVISED -			

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	22
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-9119

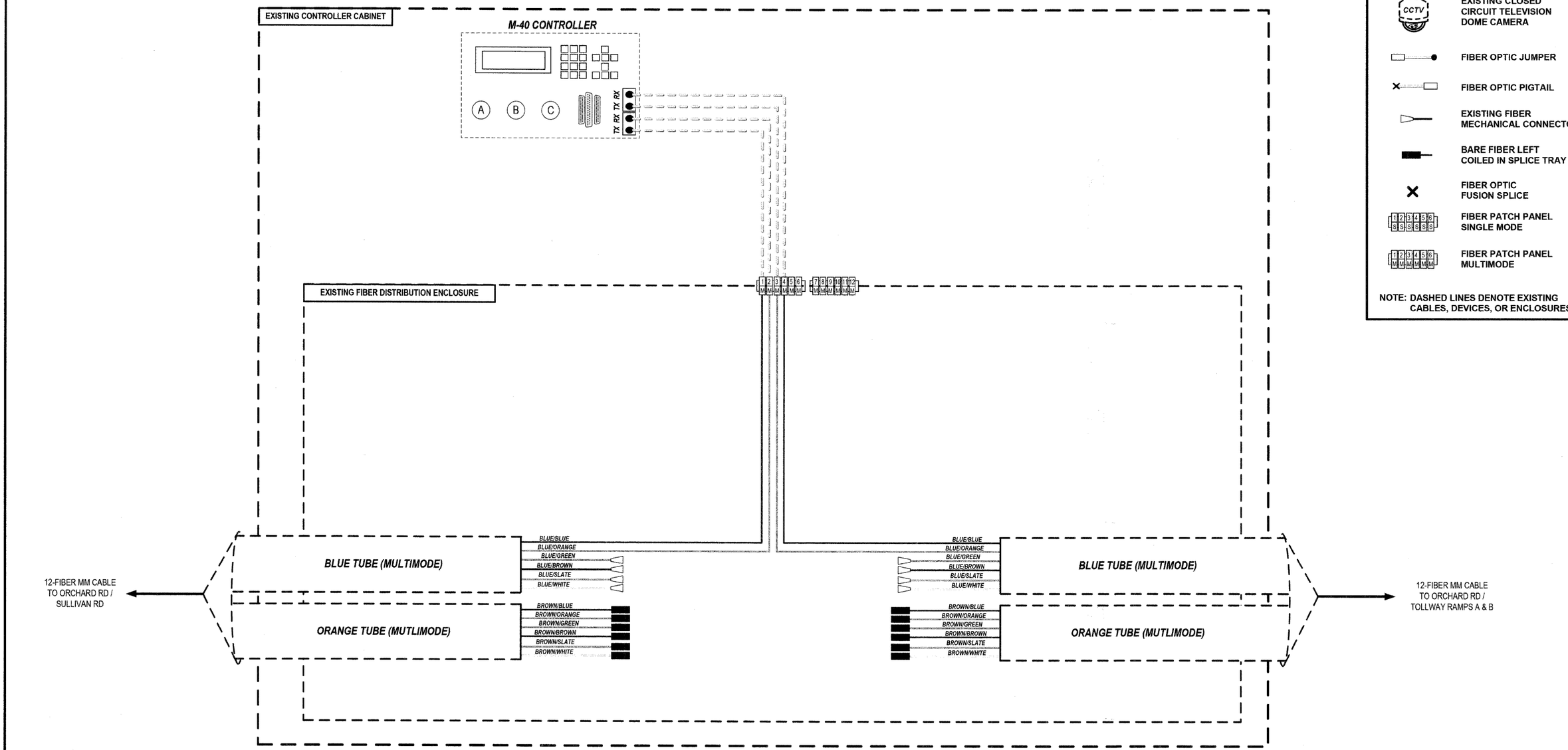
PLAN / PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT CHECKED
STRUCTURE NO(S).
NOTE BOOK
NO.
BY
DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED	-
		CHECKED	YOUNGJAE JU	REVISED	-
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED	-
	PLOT DATE =	DATE	2/20/2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 3 OF 22)
ORCHARD ROAD / SULLIVAN ROAD
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	23
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

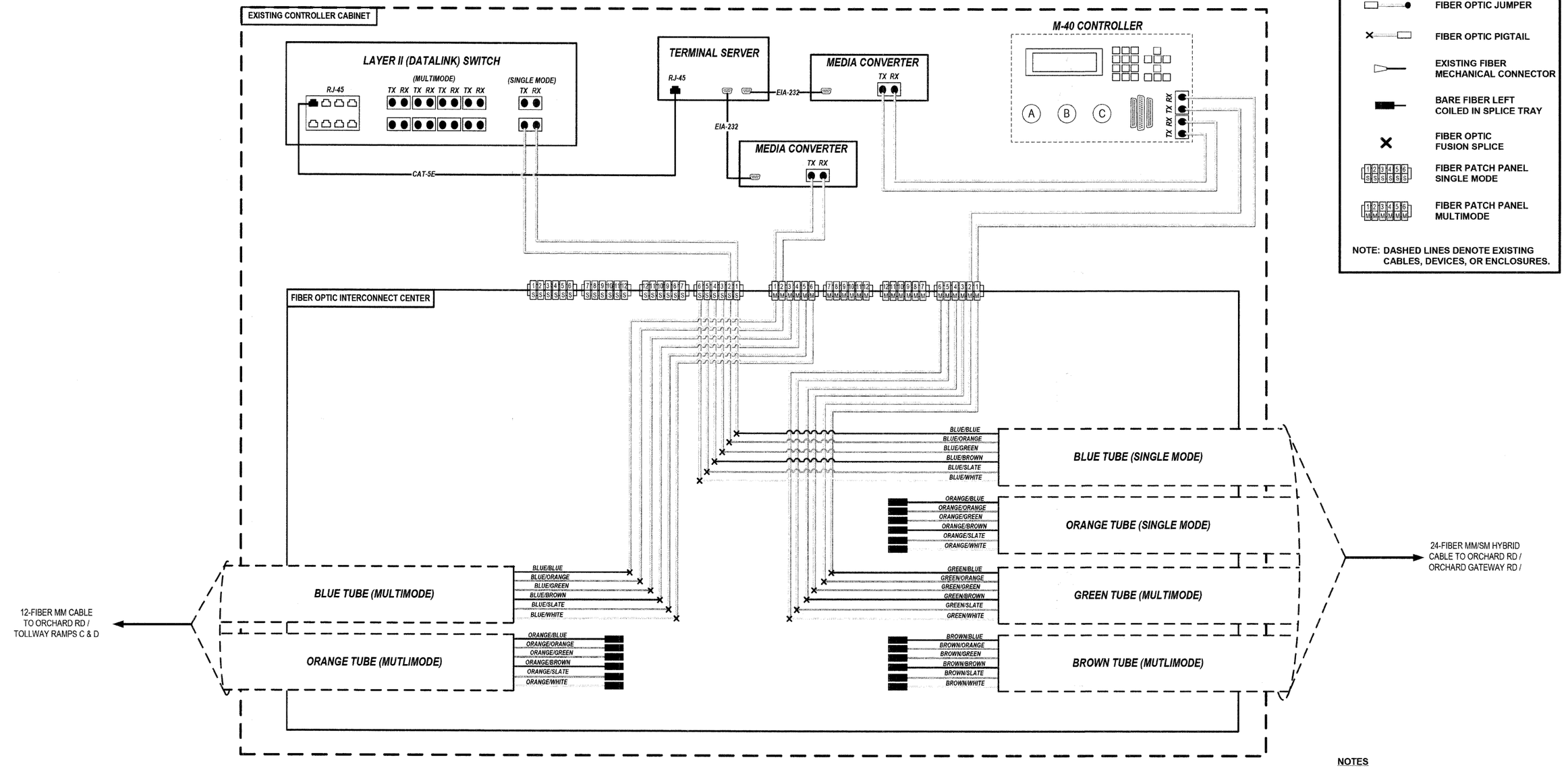
HNTB CORPORATION
111 N. CANAL STREET
SUITE 2000
CHICAGO, IL 60606
(312) 930-9119

PROFILE / PLAN — SURVEYED / PLOTTED / GRADES CHECKED / ALIGNMENT CHECKED / STRUCTURE NO(TA)TNS CHKD — NOTE BOOK — NO. — BY — DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 4 OF 22)
ORCHARD ROAD / TOLLWAY RAMPS C & D
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	24
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

NTB
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-9119

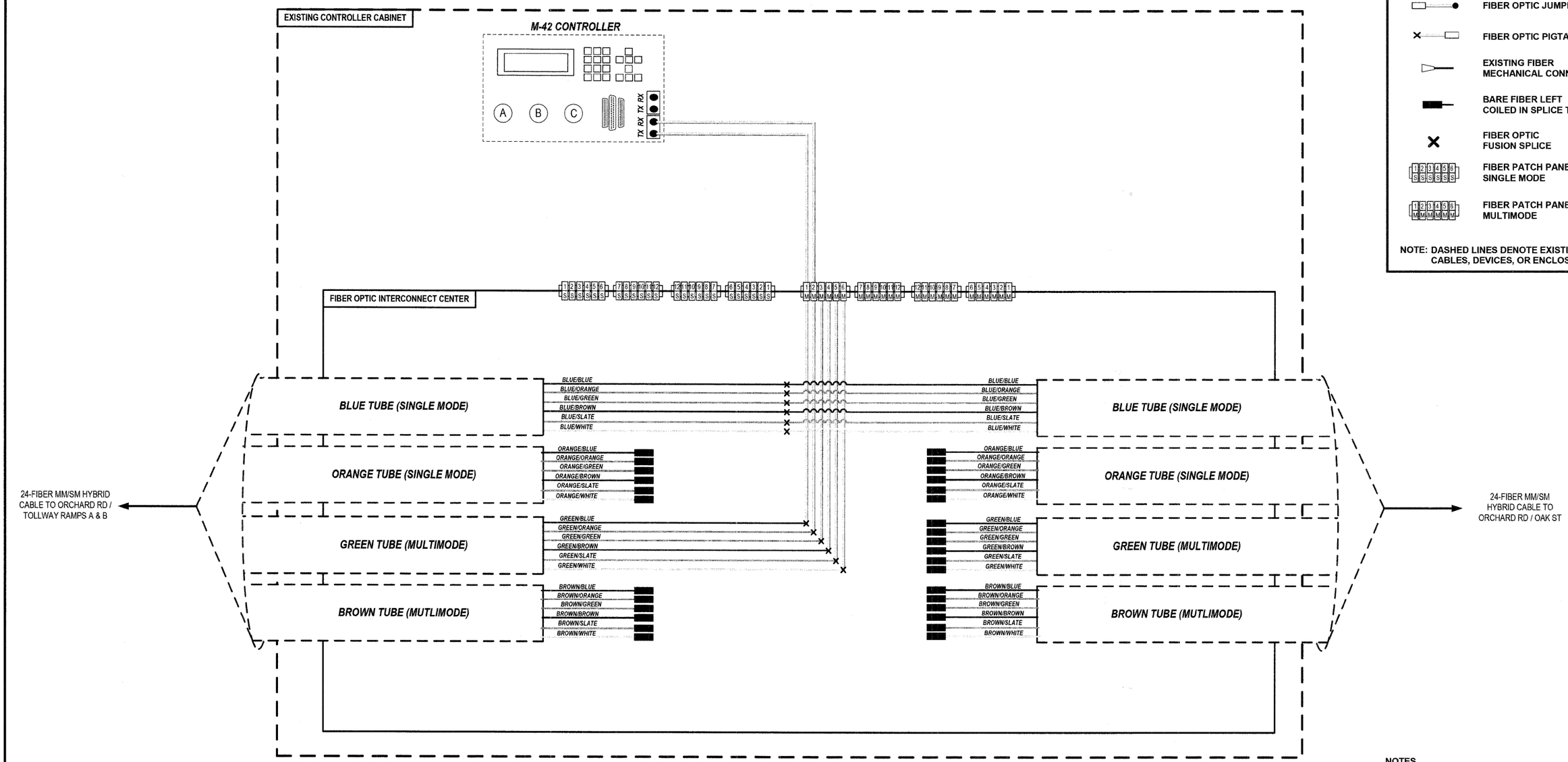
PLAN / PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, BY, DATE, NOTE BOOK, NO., CADD FILE NAME, STRUCTURE NO/ATHS CHKD

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE 2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 5 OF 22)
ORCHARD ROAD /TOLLWAY RAMPS A & B

SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	25
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1900
CHICAGO, IL 60606
(312) 930-0119

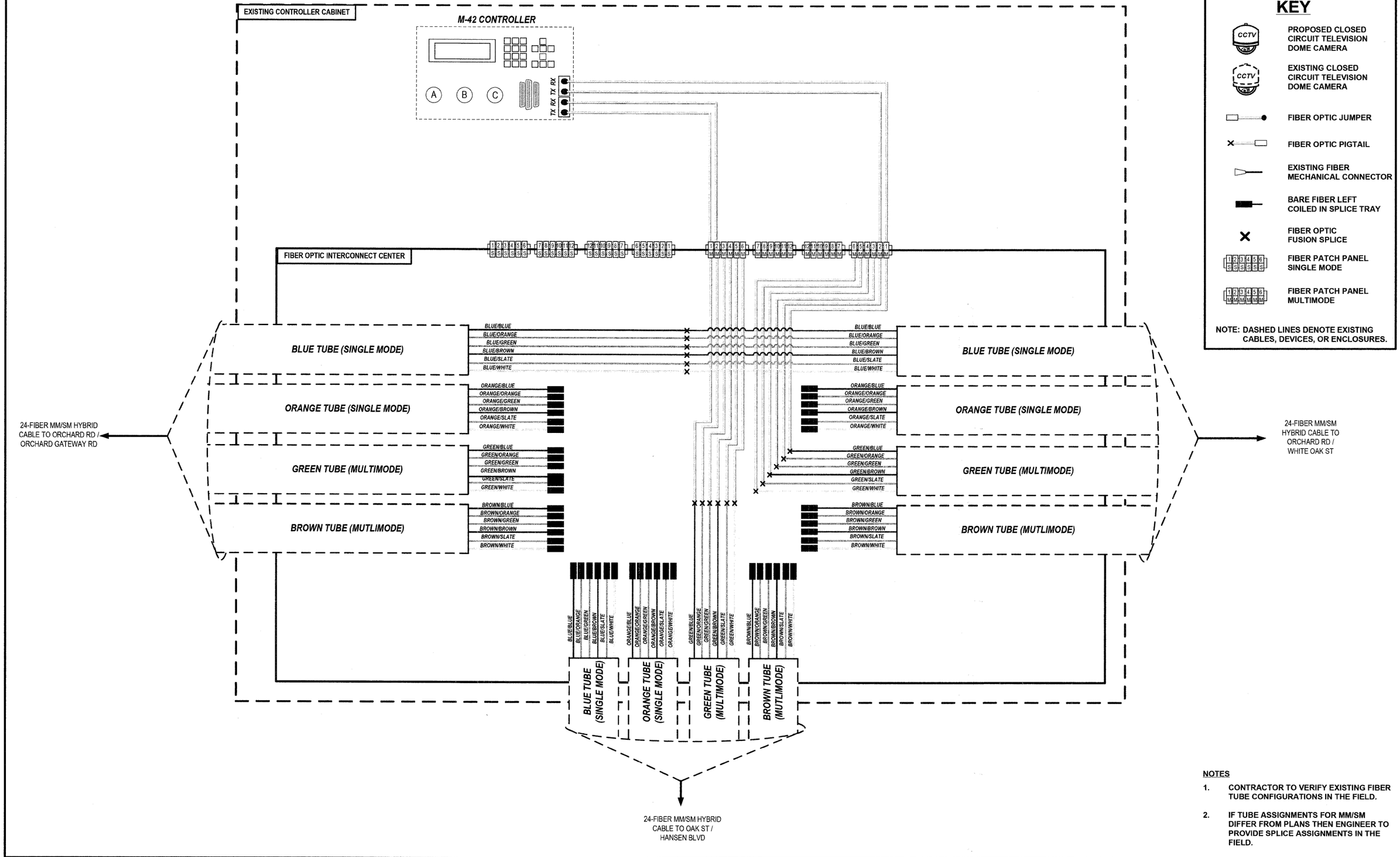
PLAN / PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, CADD FILE NAME, STRUCTURE NO(S), NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 6 OF 22)
ORCHARD ROAD /ORCHARD GATEWAY ROAD
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	26
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-9119

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, BM ASSIGNED, STRUCTURE NO/ATN'S CHKD, CADD FILE NAME, NOTE BOOK, NO. ____, BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, BM ASSIGNED, STRUCTURE NO/ATN'S CHKD, NOTE BOOK, NO. ____, BY, DATE

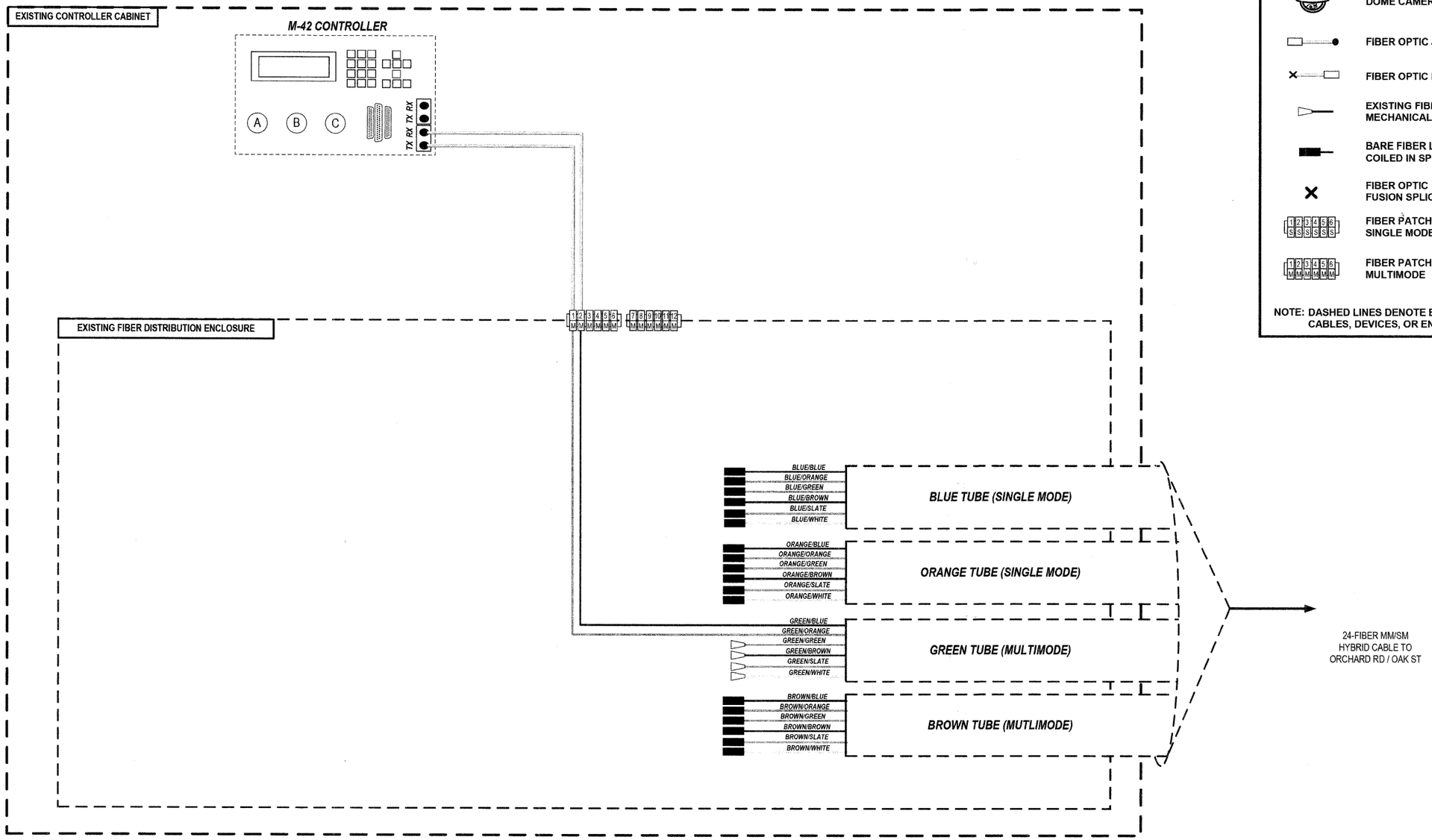
FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -
		CHECKED	YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE	2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 7 OF 22)
ORCHARD ROAD / OAK STREET

SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	27
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

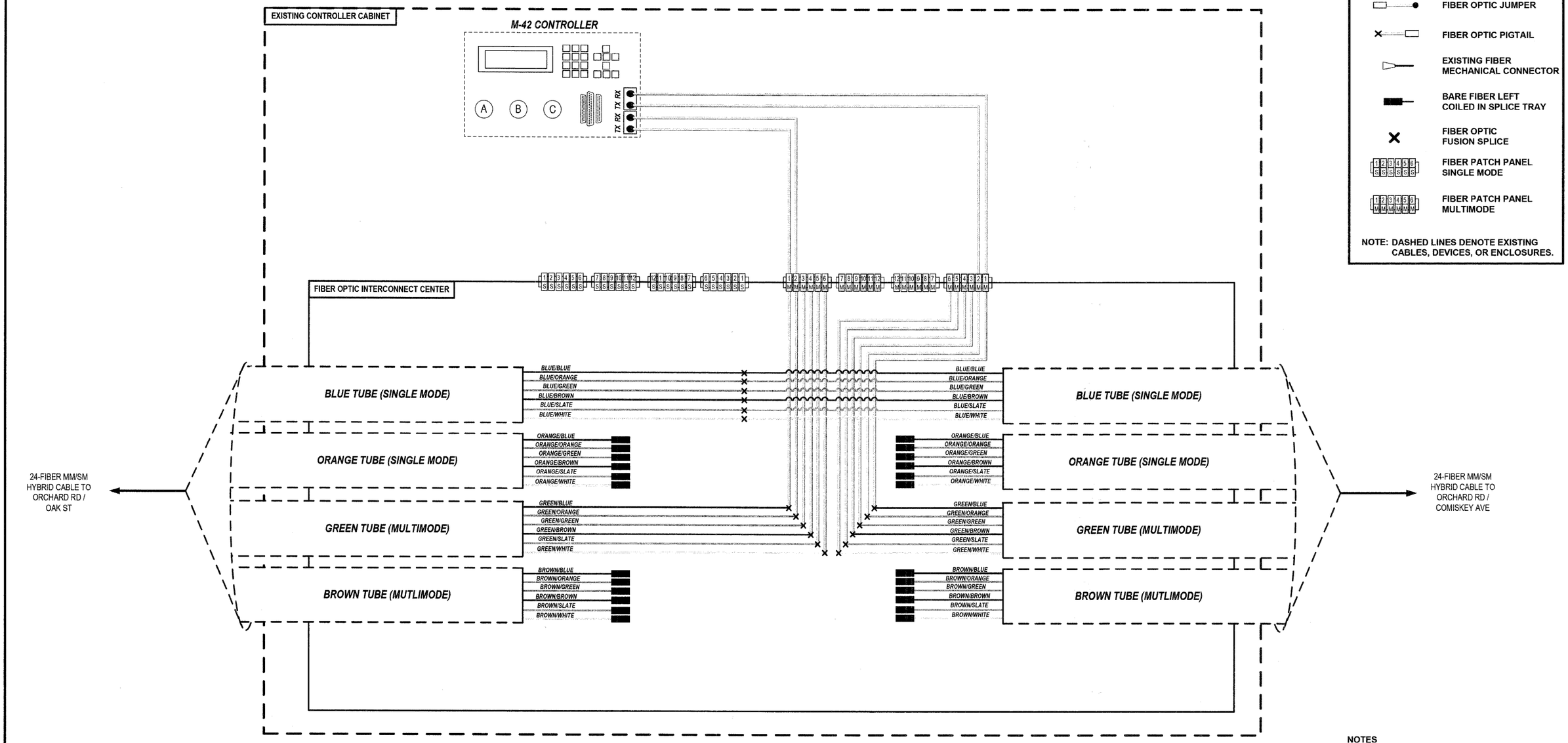
HNTB CORPORATION
111 N. CANAL STREET
SUITE 703
CHICAGO, IL 60606
(312) 565-4119

PLAN / PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — GRADES CHECKED — ALL NOTED — STRUCTURE NOTATNS CHKD — CADD FILE NAME — BY — DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 8 OF 22)
OAK STREET / HANSEN BOULEVARD
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	28
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

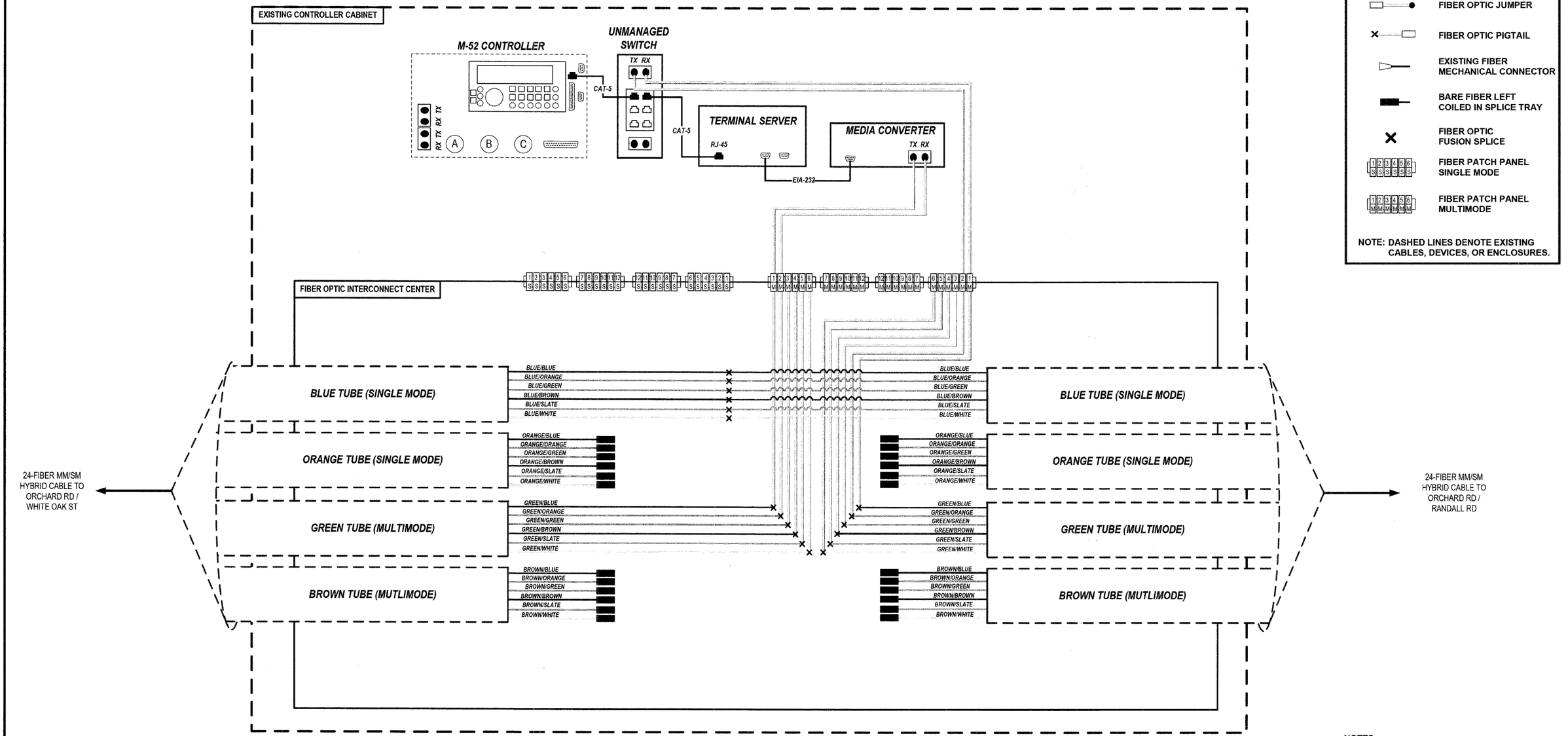
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-9119

PLAN / PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — GRADES CHECKED — BEARINGS CHECKED — CADD FILE NAME — STRUCTURE NO. — DATE — BY

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 9 OF 22)
ORCHARD ROAD / WHITE OAK DRIVE
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	29
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1600
CHICAGO, IL 60606
(312) 930-9419

PLAN / PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — GRADES CHECKED — BM NOTED — STRUCTURE NO — DATE — BY

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE 2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 10 OF 22)
ORCHARD ROAD / COMISKEY AVENUE
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	30
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER CABINET

M-52 CONTROLLER

RX TX RX TX

A B C

CAT-5E

LAYER II (DATALINK) SWITCH

RJ-45

(MULTIMODE) TX RX TX RX TX RX TX RX

(SINGLE MODE) TX RX

CAT-5E

VIDEO ENCODER

RJ-45 EIA-485 BNC

MULTI-CONDUCTOR TWISTED PAIR #22

MULTI-CONDUCTOR TWISTED PAIR #22

RG-59U

CCTV

EXISTING CCTV CABINET

INTERFACE PANEL

RJ-45 BNC BNC

RX- RX+ SHIELD TX+ TX-

RX- RX+ SHIELD TX+ TX-

RG-59U

FIBER OPTIC INTERCONNECT CENTER

BLUE TUBE (SINGLE MODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (SINGLE MODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

GREEN TUBE (MULTIMODE)

GREEN/BLUE
GREEN/ORANGE
GREEN/GREEN
GREEN/BROWN
GREEN/SLATE
GREEN/WHITE

BROWN TUBE (MUTLIMODE)

BROWN/BLUE
BROWN/ORANGE
BROWN/GREEN
BROWN/BROWN
BROWN/SLATE
BROWN/WHITE

24-FIBER MM/SM HYBRID CABLE TO ORCHARD RD / COMISKEY AVE

BLUE TUBE (SINGLE MODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (SINGLE MODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

GREEN TUBE (SINGLE MODE)

GREEN/BLUE
GREEN/ORANGE
GREEN/GREEN
GREEN/BROWN
GREEN/SLATE
GREEN/WHITE

BROWN TUBE (SINGLE MODE)

BROWN/BLUE
BROWN/ORANGE
BROWN/GREEN
BROWN/BROWN
BROWN/SLATE
BROWN/WHITE

SLATE TUBE (MULTIMODE)

SLATE/BLUE
SLATE/ORANGE
SLATE/GREEN
SLATE/BROWN
SLATE/SLATE
SLATE/WHITE

WHITE TUBE (MULTIMODE)

WHITE/BLUE
WHITE/ORANGE
WHITE/GREEN
WHITE/BROWN
WHITE/SLATE
WHITE/WHITE

36-FIBER MM/SM HYBRID CABLE TO RANDALL RD / MAIN ST

BLUE/BLUE BLUE/ORANGE BLUE/GREEN BLUE/BROWN BLUE/SLATE BLUE/WHITE

BLUE TUBE (SINGLE MODE)

ORANGE/BLUE ORANGE/ORANGE ORANGE/GREEN ORANGE/BROWN ORANGE/SLATE ORANGE/WHITE

ORANGE TUBE (SINGLE MODE)

GREEN/BLUE GREEN/ORANGE GREEN/GREEN GREEN/BROWN GREEN/SLATE GREEN/WHITE

GREEN TUBE (MULTIMODE)

BROWN/BLUE BROWN/ORANGE BROWN/GREEN BROWN/BROWN BROWN/SLATE BROWN/WHITE

BROWN TUBE (MUTLIMODE)

24-FIBER MM/SM HYRBID CABLE TO RANDALL RD / DOGWOOD DR

KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.
3. EXISTING CCTV CABINET IS MOUNTED ON THE SOUTHWEST CORNER ISLAND MAST ARM POLE.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 2000
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — BEAM FIELD CHECKED — CADD FILE NAME — BY — DATE

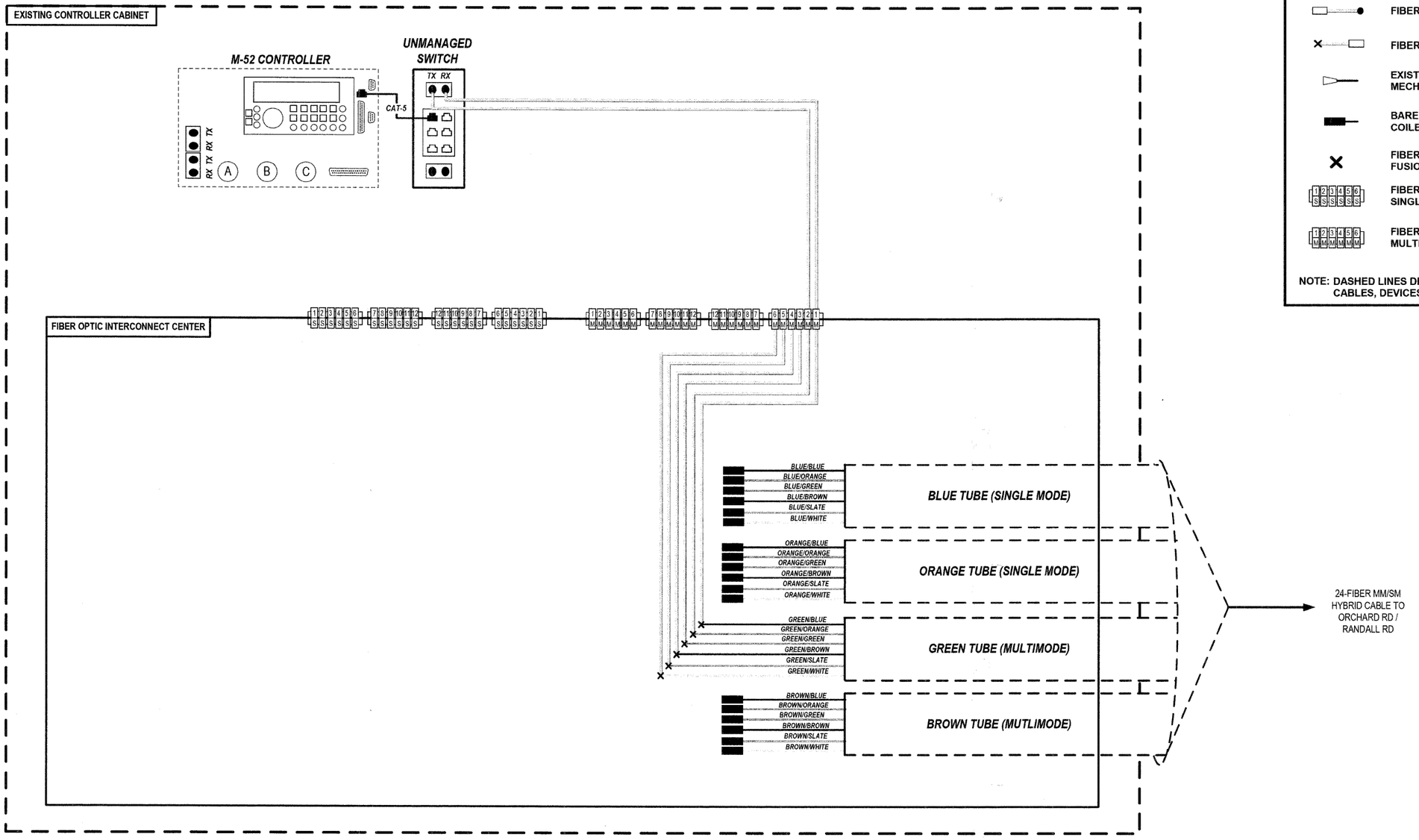
PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — GRADES CHECKED — BEAM FIELD CHECKED — STRUCTURE NOTATNS CHKD — BY — DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 11 OF 22)
ORCHARD ROAD / RANDALL ROAD

SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	31
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 2000
CHICAGO, IL 60606
(312) 930-5919

PLAN / PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, R.O.W. MARKED, STRUCTURE NO(TATN)S CHKD, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 12 OF 22)
RANDALL ROAD / DOGWOOD DRIVE
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	32
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER CABINET

M-40 CONTROLLER

LAYER II (DATALINK) SWITCH

RJ-45

(MULTIMODE) TX RX TX RX TX RX TX RX

(SINGLE MODE) TX RX

A B C

TX RX TX RX

CAT-5E

VIDEO ENCODER

RJ-45 EIA-422/485 BNC

MULTI-CONDUCTOR TWISTED PAIR

RG-59U

CCTV

FIBER OPTIC INTERCONNECT CENTER

BLUE TUBE (SINGLE MODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (SINGLE MODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

GREEN TUBE (SINGLE MODE)

GREEN/BLUE
GREEN/ORANGE
GREEN/GREEN
GREEN/BROWN
GREEN/SLATE
GREEN/WHITE

BROWN TUBE (SINGLE MODE)

BROWN/BLUE
BROWN/ORANGE
BROWN/GREEN
BROWN/BROWN
BROWN/SLATE
BROWN/WHITE

SLATE TUBE (MULTIMODE)

SLATE/BLUE
SLATE/ORANGE
SLATE/GREEN
SLATE/BROWN
SLATE/SLATE
SLATE/WHITE

WHITE TUBE (MULTIMODE)

WHITE/BLUE
WHITE/ORANGE
WHITE/GREEN
WHITE/BROWN
WHITE/SLATE
WHITE/WHITE

36-FIBER MM/SM HYBRID CABLE TO ORCHARD RD / RANDALL RD

BLUE TUBE (SINGLE MODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (SINGLE MODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

GREEN TUBE (SINGLE MODE)

GREEN/BLUE
GREEN/ORANGE
GREEN/GREEN
GREEN/BROWN
GREEN/SLATE
GREEN/WHITE

BROWN TUBE (SINGLE MODE)

BROWN/BLUE
BROWN/ORANGE
BROWN/GREEN
BROWN/BROWN
BROWN/SLATE
BROWN/WHITE

SLATE TUBE (MULTIMODE)

SLATE/BLUE
SLATE/ORANGE
SLATE/GREEN
SLATE/BROWN
SLATE/SLATE
SLATE/WHITE

WHITE TUBE (MULTIMODE)

WHITE/BLUE
WHITE/ORANGE
WHITE/GREEN
WHITE/BROWN
WHITE/SLATE
WHITE/WHITE

36-FIBER MM/SM HYBRID CABLE TO RANDALL RD / WILSON ST

BLUE TUBE (MULTIMODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (MUTLIMODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

12-FIBER MM CABLE TO RANDALL RD / WILSON ST

KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1600
CHICAGO, IL 60606
(312) 930-9119

PLAN / PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, STRUCTURE NO(S) CHKD, NOTE BOOK, NO., BY, DATE

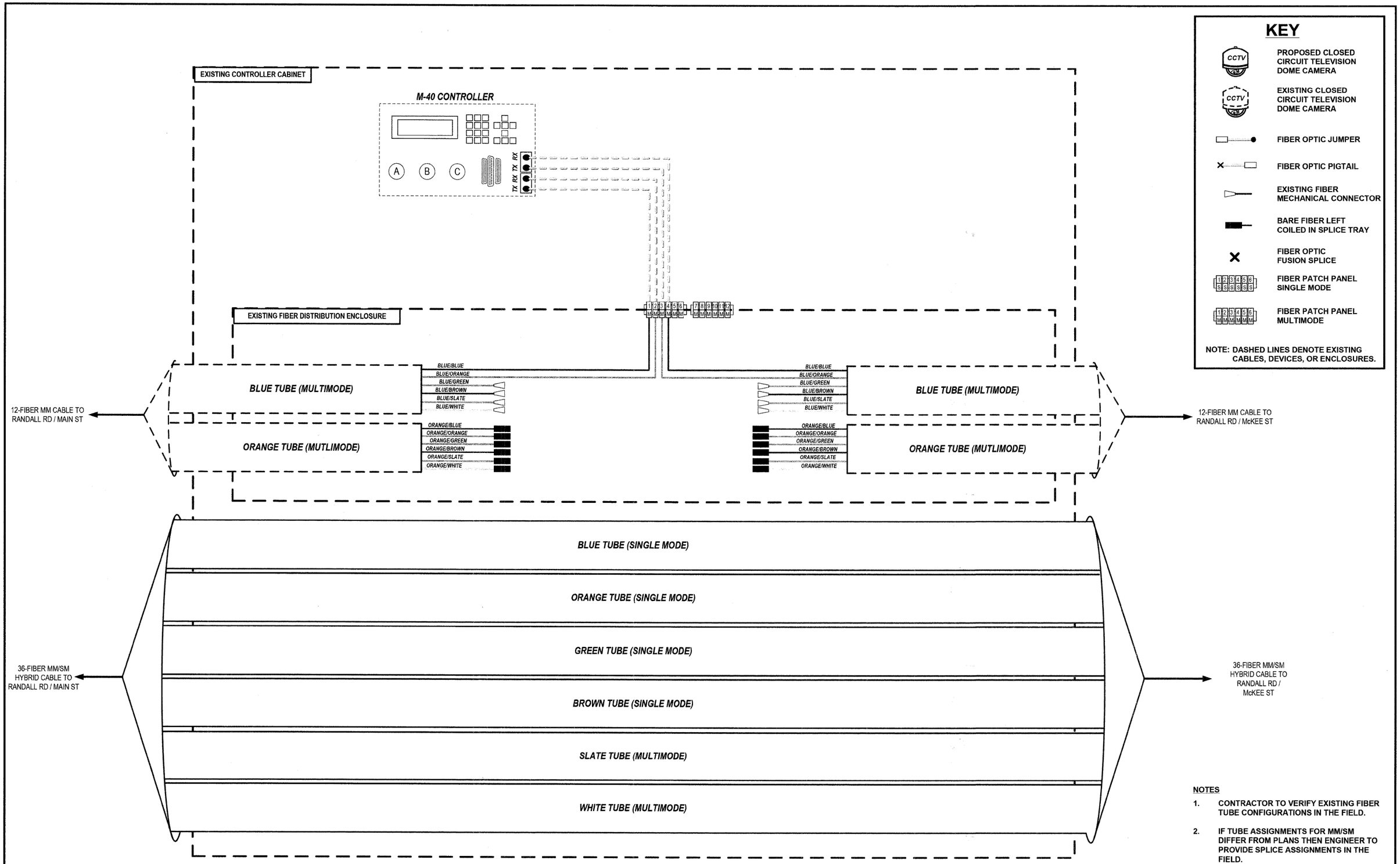
FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE 2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 13 OF 22)
RANDALL ROAD / MAIN STREET

SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	33
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _____	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
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NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

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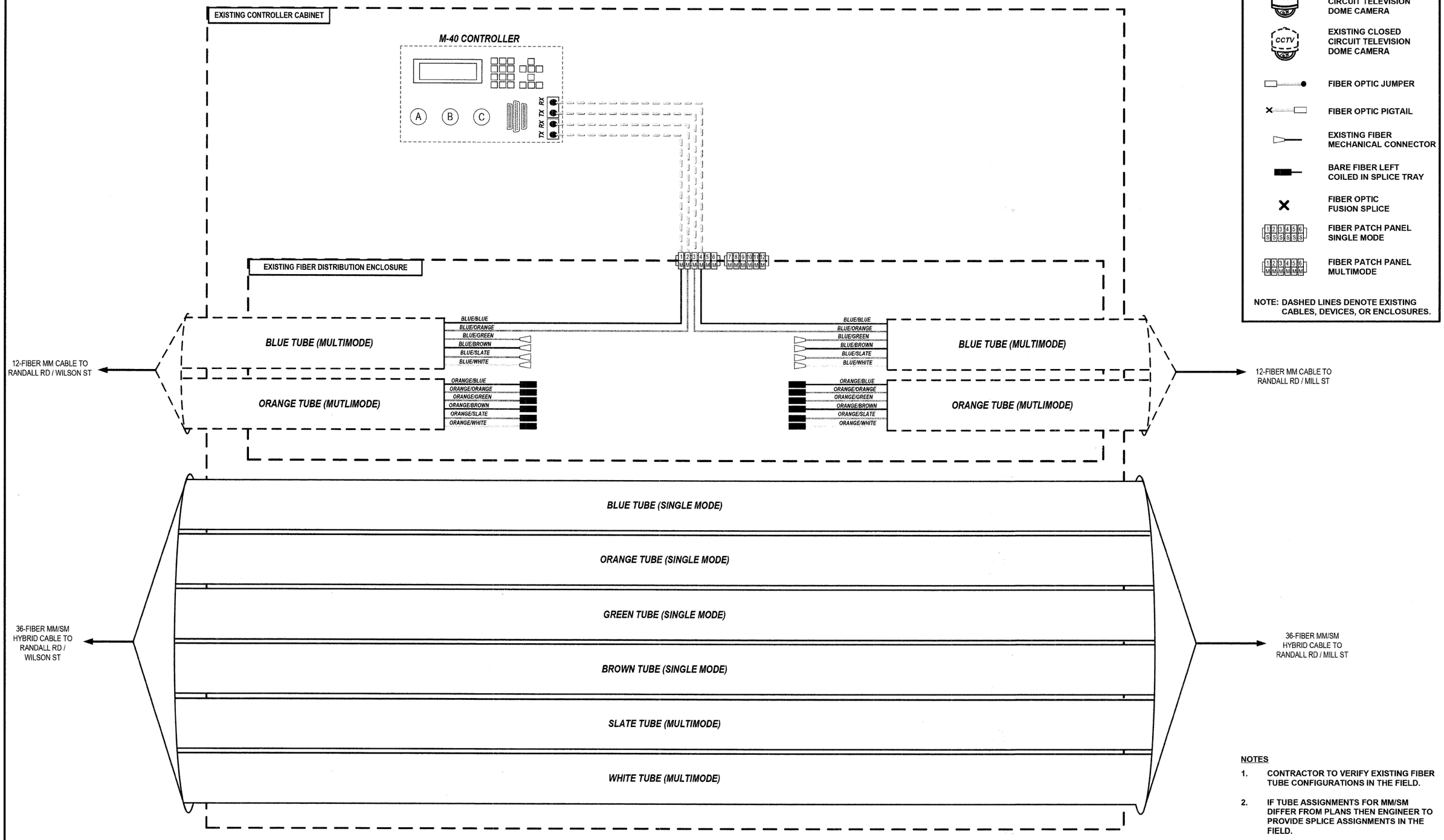
HNTB CORPORATION
111 N. CANAL STREET
SUITE 2500
CHICAGO, IL 60606
(312) 930-9119

PLAN / PROFILE — SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, ALL UTILITIES LOCATED, STRUCTURE NOTATNS CHKD, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 14 OF 22)
RANDALL ROAD / WILSON STREET
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	34
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
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- EXISTING FIBER MECHANICAL CONNECTOR
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NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

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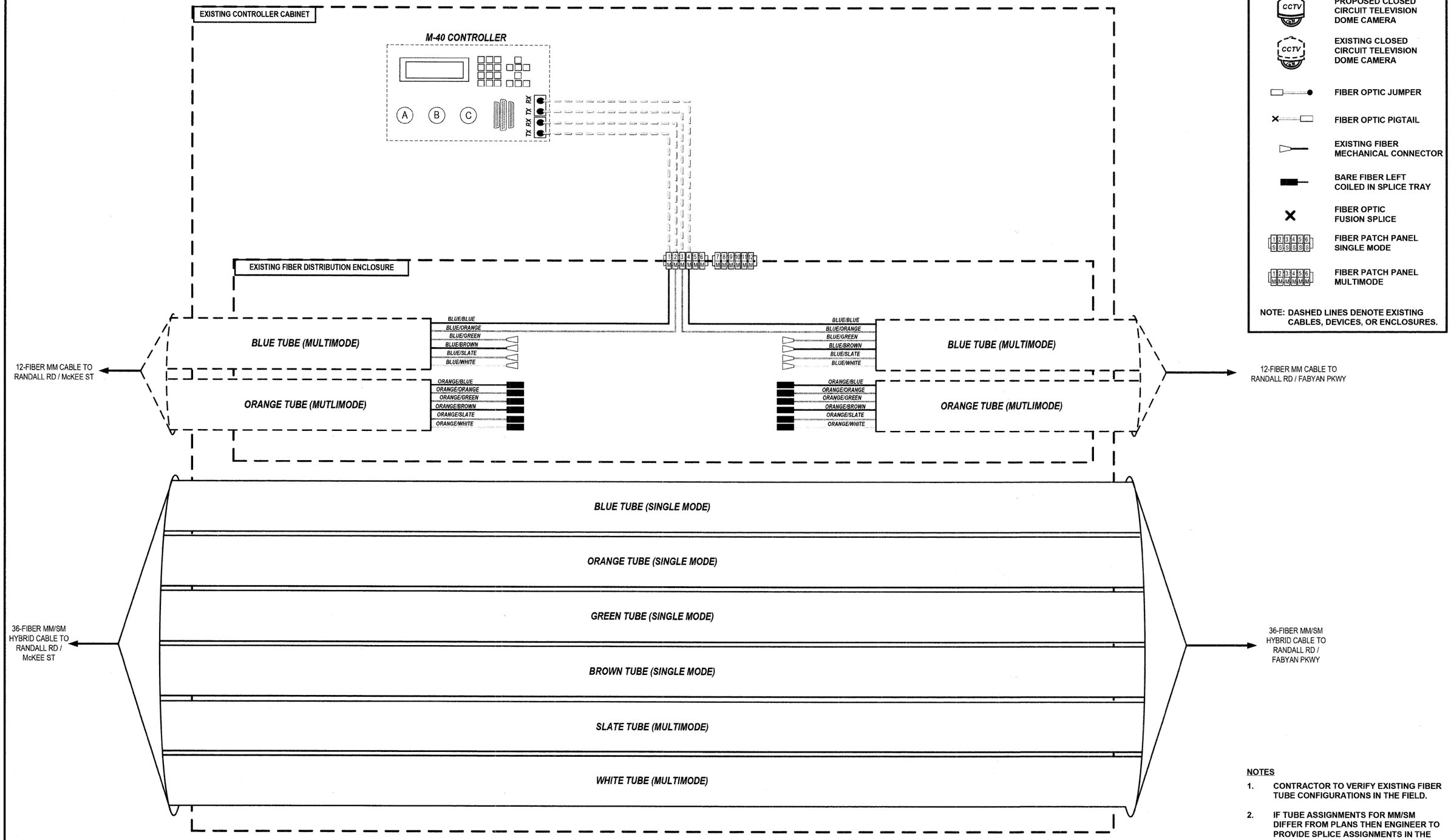
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1900
CHICAGO, IL 60606
(312) 930-9119

PLAN / PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, STRUCTURE NO(TAT)NS CHKD, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 15 OF 22)
RANDALL ROAD / McKEE STREET
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	35
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-9119

PLAN / PROFILE: SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, BM VERIFIED, CADD FILE NAME, STRUCTURE NO(TATN)S CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 16 OF 22)
RANDALL ROAD / MILL STREET
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	36
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

EXISTING CONTROLLER CABINET

M-42 CONTROLLER

A B C

TX RX TX RX

MEDIA CONVERTER

TX RX

MEDIA CONVERTER

TX RX

EIA-232

EIA-232

TERMINAL SERVER

RJ-45

CAT-5E

DSL MODEM / ROUTER

RJ-45

CAT-5E

LAYER II (DATALINK) SWITCH

RJ-45

(MULTIMODE) TX RX TX RX TX RX TX RX

(SINGLE MODE) TX RX

FIBER OPTIC INTERCONNECT CENTER

BLUE TUBE (SINGLE MODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (SINGLE MODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

GREEN TUBE (SINGLE MODE)

GREEN/BLUE
GREEN/ORANGE
GREEN/GREEN
GREEN/BROWN
GREEN/SLATE
GREEN/WHITE

BROWN TUBE (SINGLE MODE)

BROWN/BLUE
BROWN/ORANGE
BROWN/GREEN
BROWN/BROWN
BROWN/SLATE
BROWN/WHITE

SLATE TUBE (MULTIMODE)

SLATE/BLUE
SLATE/ORANGE
SLATE/GREEN
SLATE/BROWN
SLATE/SLATE
SLATE/WHITE

WHITE TUBE (MULTIMODE)

WHITE/BLUE
WHITE/ORANGE
WHITE/GREEN
WHITE/BROWN
WHITE/SLATE
WHITE/WHITE

36-FIBER MM/SM HYBRID CABLE TO RANDALL RD / MILL ST

BLUE TUBE (MULTIMODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (MUTLIMODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

12-FIBER MM CABLE TO RANDALL RD / MILL ST

BLUE TUBE (MULTIMODE)

BLUE/BLUE
BLUE/ORANGE
BLUE/GREEN
BLUE/BROWN
BLUE/SLATE
BLUE/WHITE

ORANGE TUBE (MUTLIMODE)

ORANGE/BLUE
ORANGE/ORANGE
ORANGE/GREEN
ORANGE/BROWN
ORANGE/SLATE
ORANGE/WHITE

BLUE TUBE (MULTIMODE)

ORANGE TUBE (MULTIMODE)

12-FIBER MM CABLE TO FABYAN PKWY / BENT TREE DR

12-FIBER MM CABLE TO RANDALL RD / GLEN EAGLE DR

KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO. —
SURVEYED — PLOTTED — ALIGNMENT CHECKED — GRADES CHECKED — BM ADDED — STRUCTURE NO(S) ATTN'S CHKD — CADD FILE NAME — BY — DATE

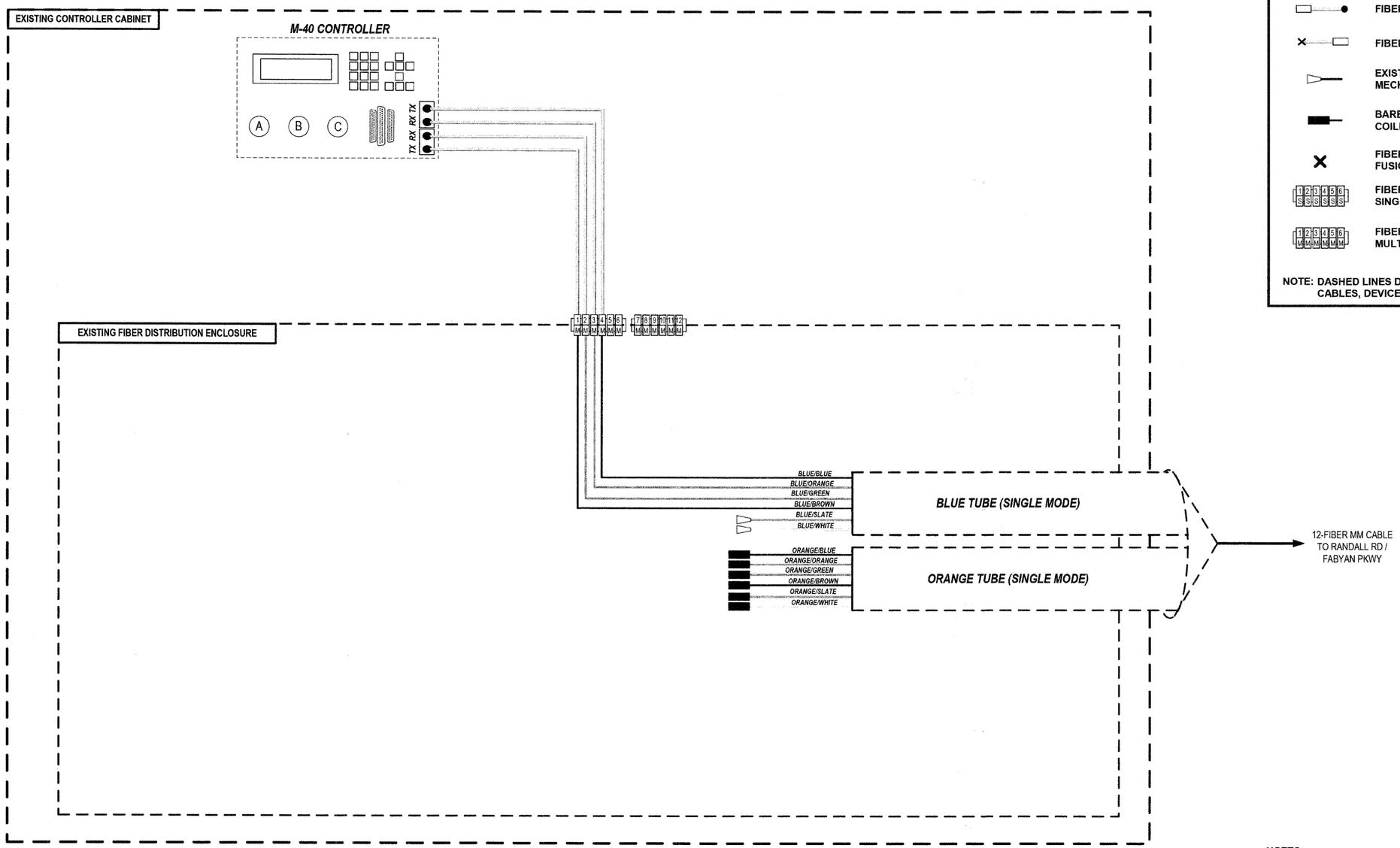
PROFILE — NOTE BOOK — NO. —
SURVEYED — PLOTTED — GRADES CHECKED — BM ADDED — STRUCTURE NO(S) ATTN'S CHKD — BY — DATE

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -
		CHECKED YOUNGJAE JU	REVISED -
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -
	PLOT DATE =	DATE 2/20/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 17 OF 22)
RANDALL ROAD / FABYAN PARKWAY
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	37
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

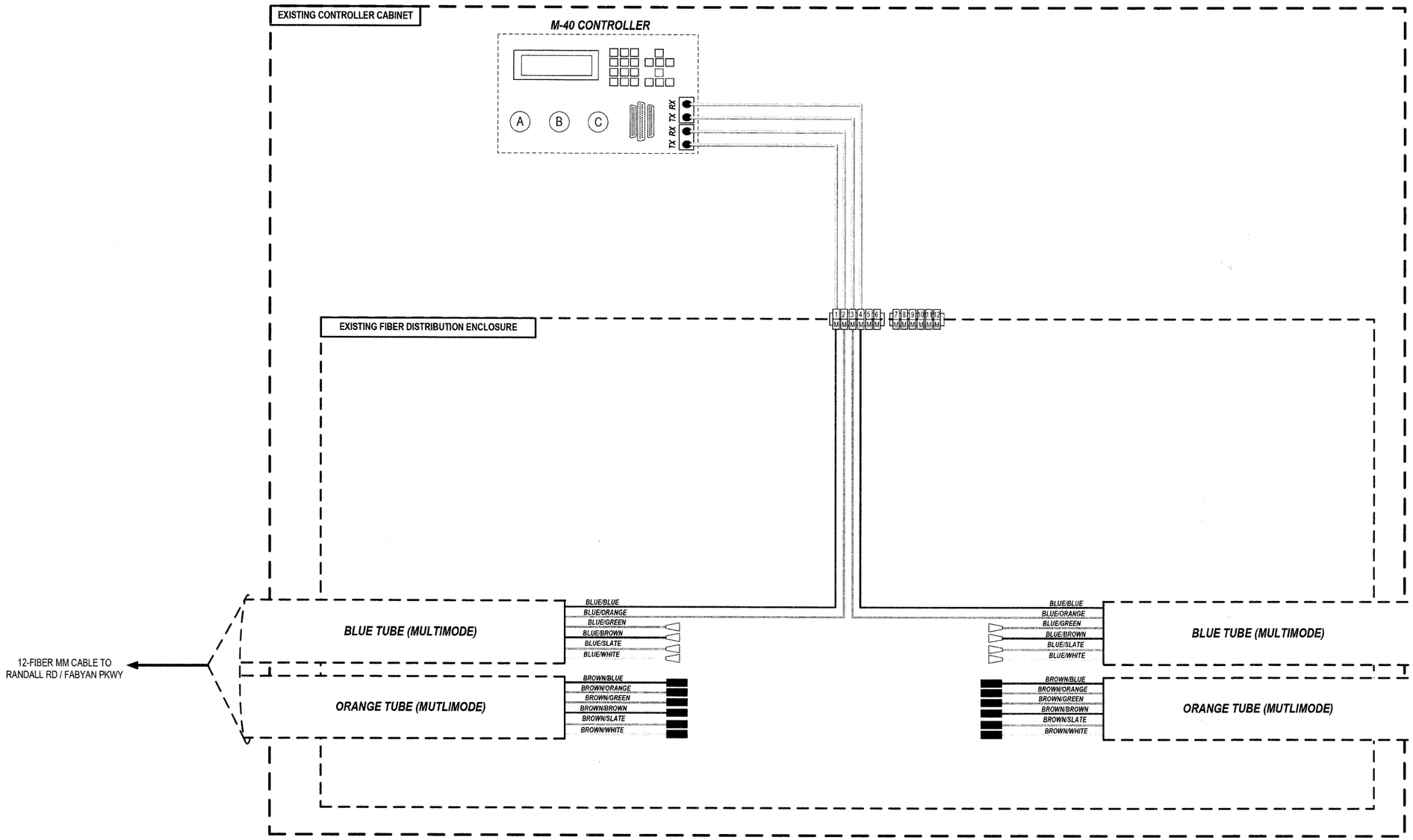
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-9119

PLAN — NOTE BOOK — NO. ____ — SURVEYED — PLOTTED — ALIGNMENT CHECKED — R.L.'s NOTED — CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK — NO. ____ — SURVEYED — PLOTTED — GRADES CHECKED — R.L.'s NOTED — STRUCTURE NO(ATING CHKD — BY — DATE

FILE NAME =	USER NAME =	DESIGNED JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPLICING AND CONNECTION DETAIL (PAGE 18 OF 22) FABYAN PARKWAY / BENT TREE DRIVE
		CHECKED YOUNGJAE JU	REVISED -		
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -		
	PLOT DATE =	DATE 2/20/2009	REVISED -		SCALE: ____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	38
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
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- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

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NO WORK PERFORMED AT THIS INTERSECTION. FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

NTB
HNTB CORPORATION
111 N. CANAL STREET
SUITE 1700
CHICAGO, IL 60606
(312) 930-9119

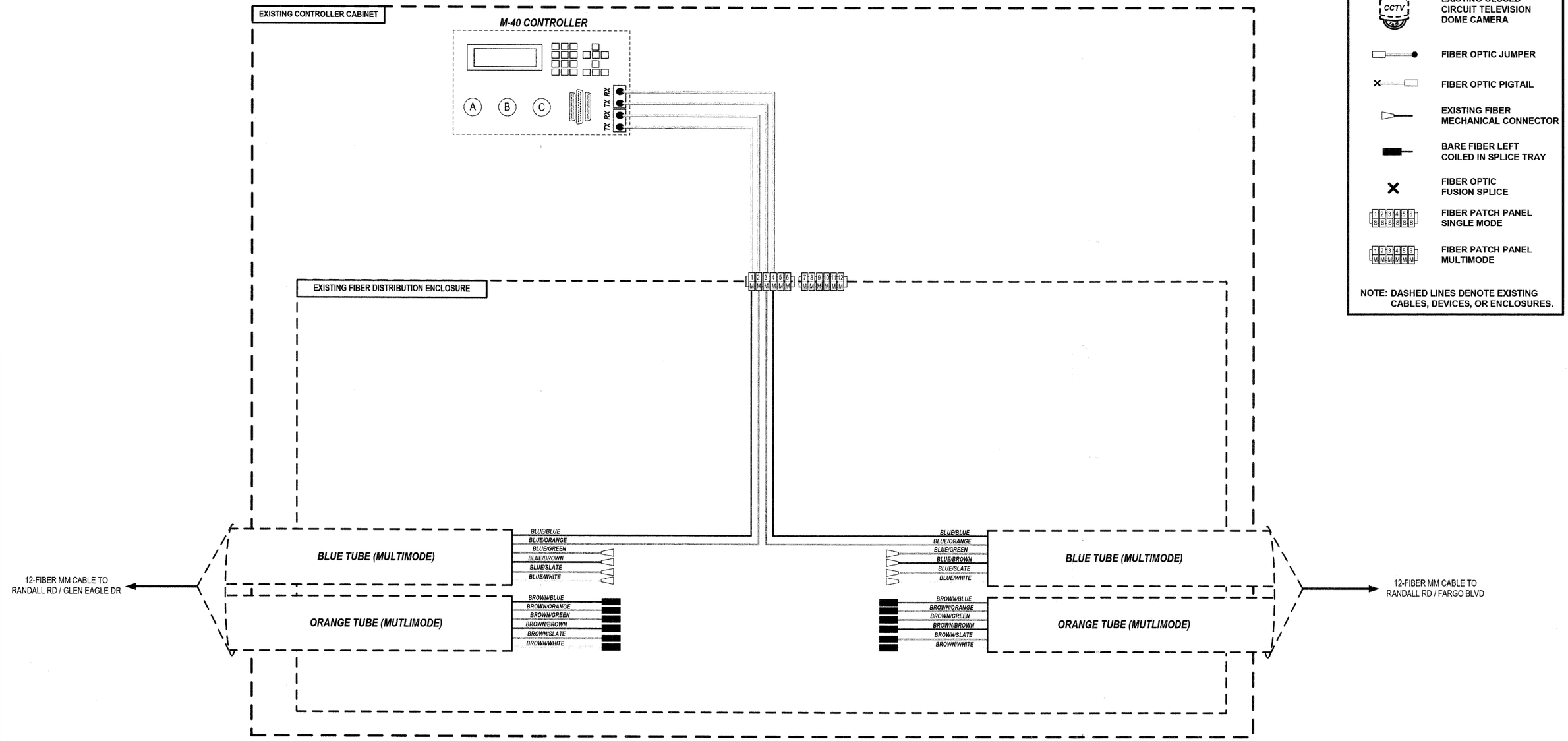
PLAN / PROFILE — SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, BASED ON, CADD FILE NAME, STRUCTURE NO(ATNS OHH), NOTE BOOK, NO., BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED	-
		CHECKED	YOUNGJAE JU	REVISED	-
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED	-
	PLOT DATE =	DATE	2/20/2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 19 OF 22)
RANDALL ROAD / GLEN EAGLE DRIVE
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	39
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

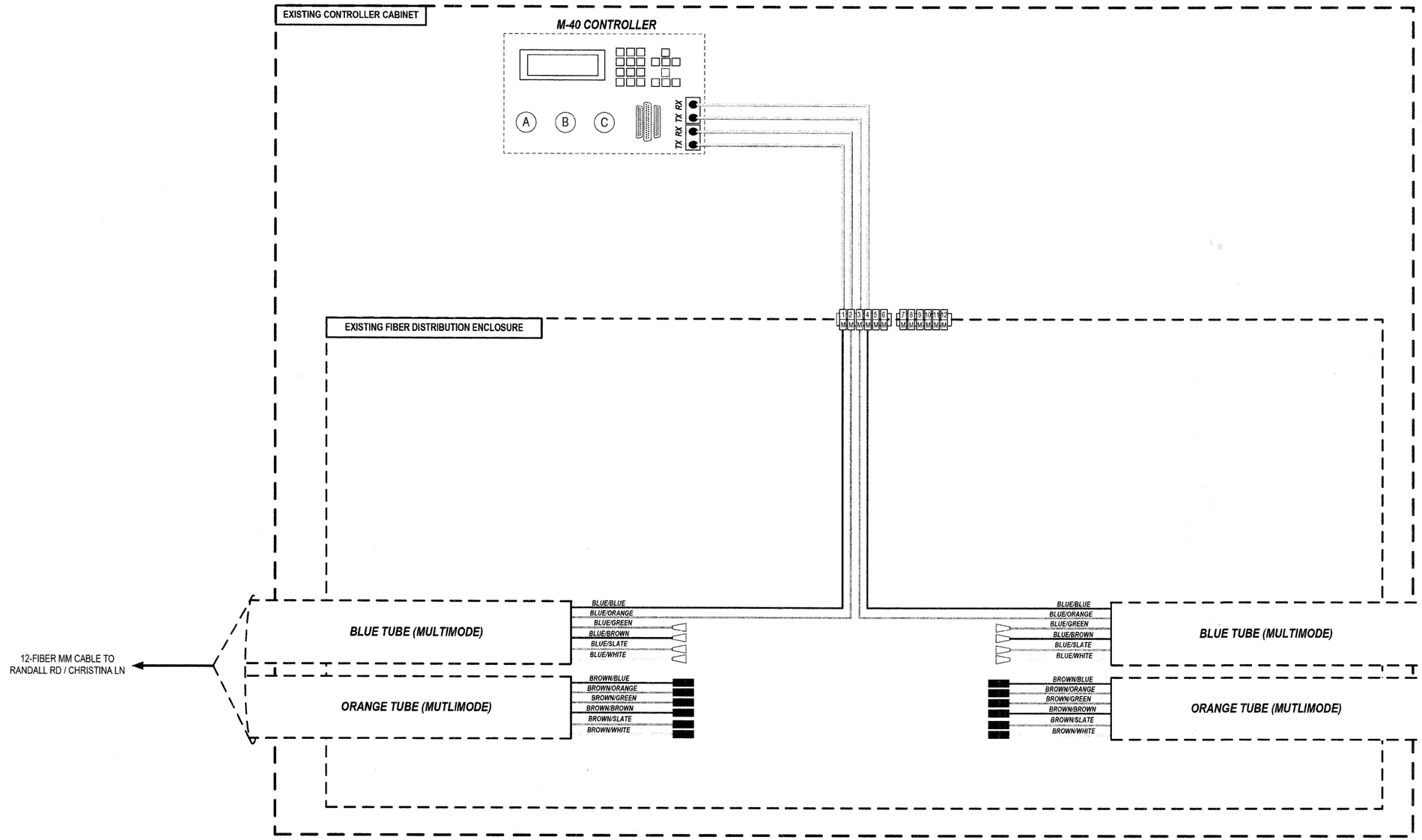
HNTB CORPORATION
111 N. CANAL STREET
SUITE 2000
CHICAGO, IL 60606
(312) 930-4419

PLAN / PROFILE — DATE, BY, NO., NOTE BOOK, SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, MASS HAUL CHECKED, STRUCTURE NO(S)/ITM'S CHKD, CADD FILE NAME

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 20 OF 22)
RANDALL ROAD / CHRISTINA LANE
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	40
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

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HNTB CORPORATION
111 N. CANAL STREET
SUITE 1910
CHICAGO, IL 60606
(312) 930-9419

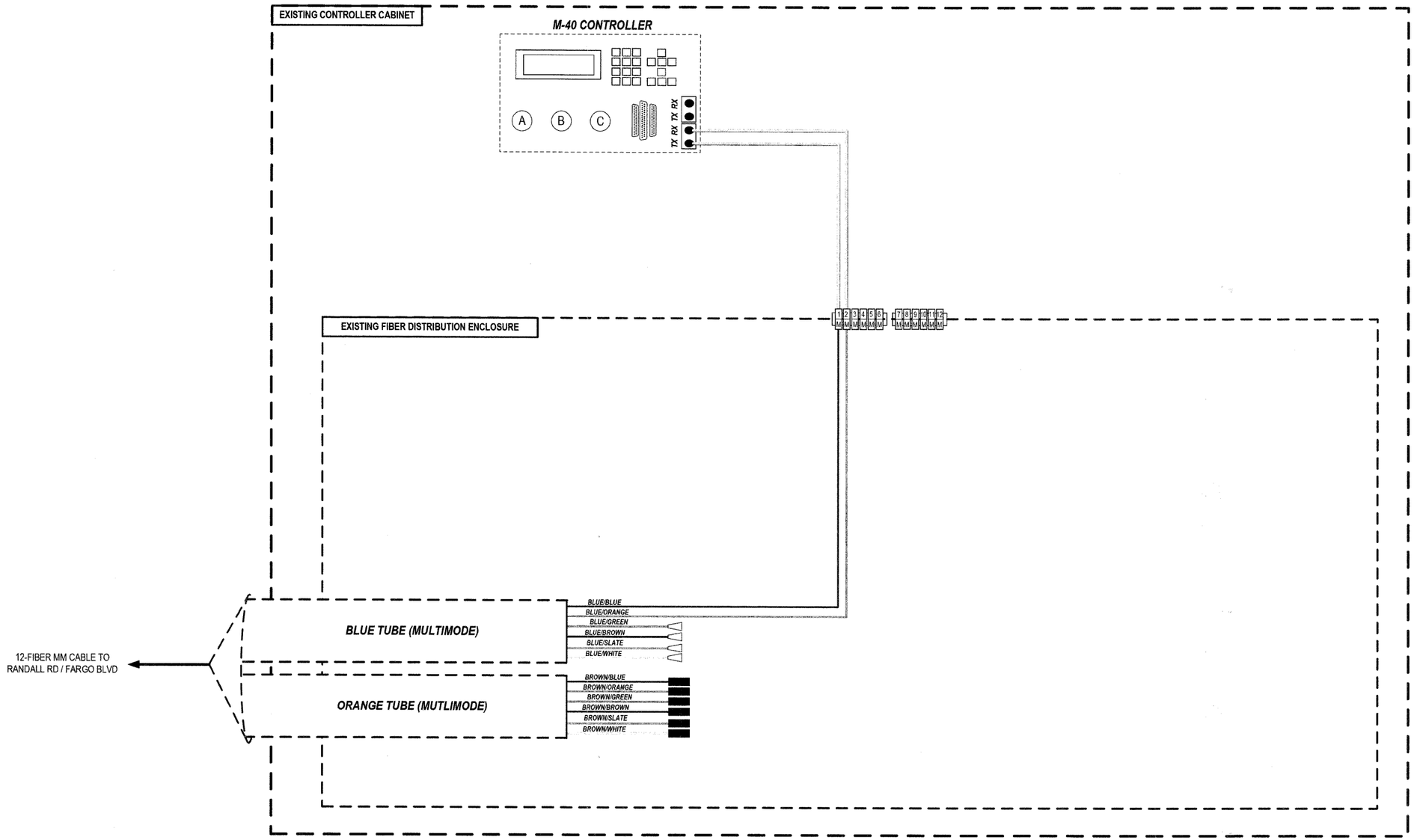
PLAN / PROFILE — DATE | BY | NO | NOTE BOOK | SURVEYED | PLOTTED | ALIGNMENT CHECKED | GRADES CHECKED | PLANS REVISED | STRUCTURE NO(S)ATN'S CHKD | CADD FILE NAME

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED	-
		CHECKED	YOUNGJAE JU	REVISED	-
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED	-
	PLOT DATE =	DATE	2/20/2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER SPLICING AND CONNECTION DETAIL (PAGE 21 OF 22)
RANDALL ROAD / FARGO BOULEVARD
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	41
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



KEY

- PROPOSED CLOSED CIRCUIT TELEVISION DOME CAMERA
- EXISTING CLOSED CIRCUIT TELEVISION DOME CAMERA
- FIBER OPTIC JUMPER
- FIBER OPTIC PIGTAIL
- EXISTING FIBER MECHANICAL CONNECTOR
- BARE FIBER LEFT COILED IN SPLICE TRAY
- FIBER OPTIC FUSION SPLICE
- FIBER PATCH PANEL SINGLE MODE
- FIBER PATCH PANEL MULTIMODE

NOTE: DASHED LINES DENOTE EXISTING CABLES, DEVICES, OR ENCLOSURES.

NO WORK PERFORMED AT THIS INTERSECTION.
FOR INFORMATION ONLY.

NOTES

1. CONTRACTOR TO VERIFY EXISTING FIBER TUBE CONFIGURATIONS IN THE FIELD.
2. IF TUBE ASSIGNMENTS FOR MM/SM DIFFER FROM PLANS THEN ENGINEER TO PROVIDE SPLICE ASSIGNMENTS IN THE FIELD.

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-0919

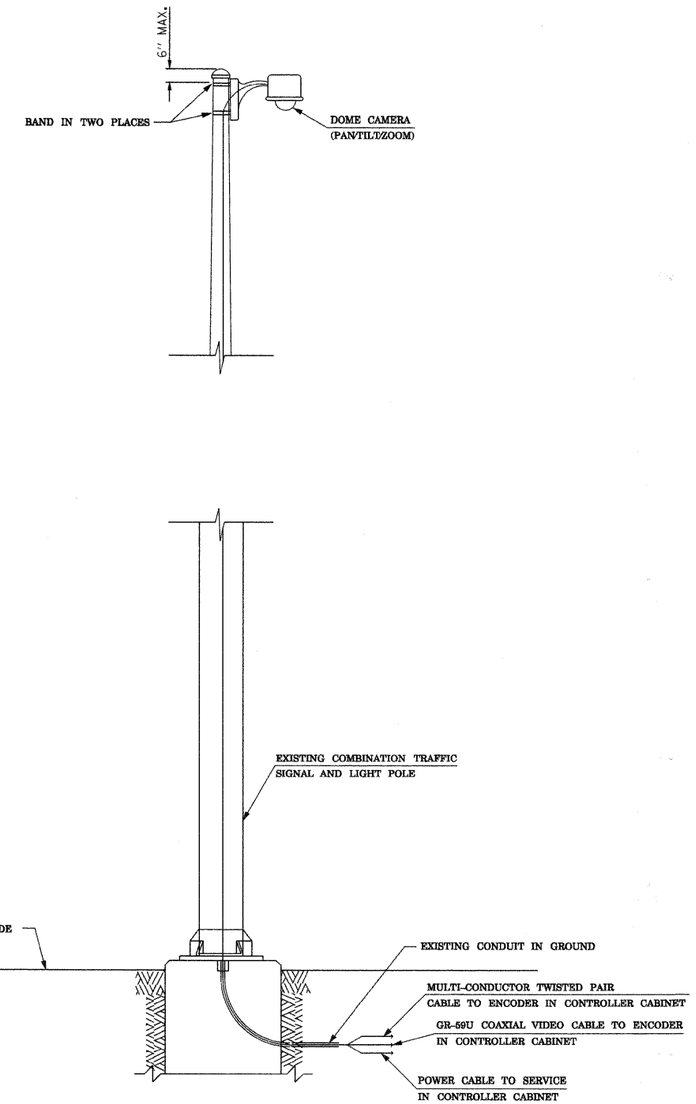
PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, GRADES CHECKED, MASS CHECKED, CADD FILE NAME, NOTE BOOK, NO. — BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, MASS CHECKED, STRUCTURE NO(S)/TNS CHKD, NOTE BOOK, NO. — BY, DATE

FILE NAME =	USER NAME =	DESIGNED	JOSH ZVOLANEK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED	YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN	JOSH ZVOLANEK	REVISED -	
	PLOT DATE =	DATE	2/20/2009	REVISED -	

FIBER SPLICING AND CONNECTION DETAIL (PAGE 22 OF 22)
RANDALL ROAD / KESLINGER ROAD
SCALE: _____

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	42
		CONTRACT NO. 63128		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



CCTV (PTZ) CAMERA WIRING AND MOUNTING DETAIL

(NOT TO SCALE)

HNTB CORPORATION
111 N. CANAL STREET
SUITE 1500
CHICAGO, IL 60606
(312) 930-1919

PLAN — NOTE BOOK NO. ____ — SURVEYED / PLOTTED / LIMITS CHECKED / R.O.W. CHECKED / PLAN NOTES — BY — DATE

PROFILE — NOTE BOOK NO. ____ — SURVEYED / PLOTTED / GRADES CHECKED / R.O.W. CHECKED / STRUCTURE NOTES — BY — DATE

FILE NAME = $$DGNSPEC$$	USER NAME = jzvolanek	DESIGNED JOSH ZVOLANEK	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		CHECKED YOUNGJAE JU	REVISED -	
	PLOT SCALE =	DRAWN JOSH ZVOLANEK	REVISED -	
	PLOT DATE = 11-FEB-2009	DATE 2/20/2009	REVISED -	

CCTV CAMERA INSTALLATION DETAILS

SCALE:

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	07-00366-00-TL	KANE	43	43
		CONTRACT NO. 63128		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		