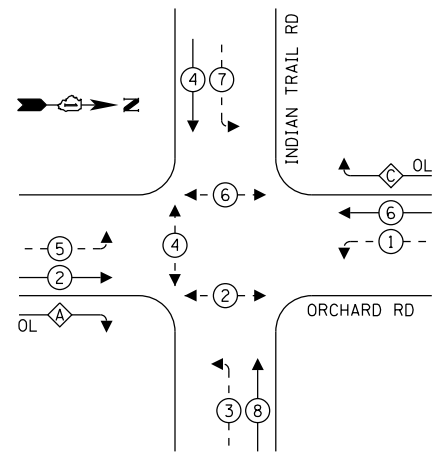


PROFILE SURVEYED GRADES CHECKED
 NOTE BOOK BLM, NOTED
 NO. STRUCTURE NOTATIONS OKWD
 TS SHT NO. 60
 BY: CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 SURVEYED ALIGNMENT CHECKED
 RT. OF WAY CHECKED
 DATE: _____
 BY: _____
 PLAN NOTE BOOK NO. _____

EXISTING CONTROLLER SEQUENCE



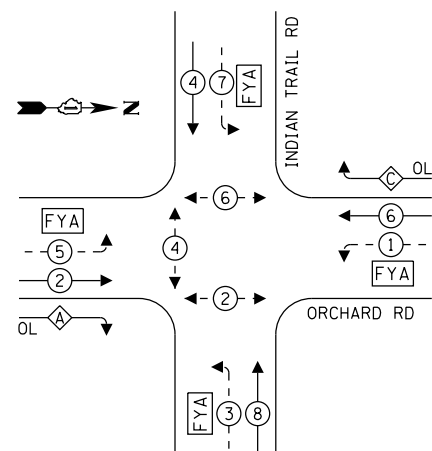
LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7

PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ - - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP
- [FYA] FLASHING YELLOW ARROW

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
SOLID ARROW (RED)	8	10	50	40.0
(GREEN & YELLOW)	24	10	10	24.0
FLASHING ARROW	8	10	5	4.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	190	50	380.0
TOTAL =				1009.6

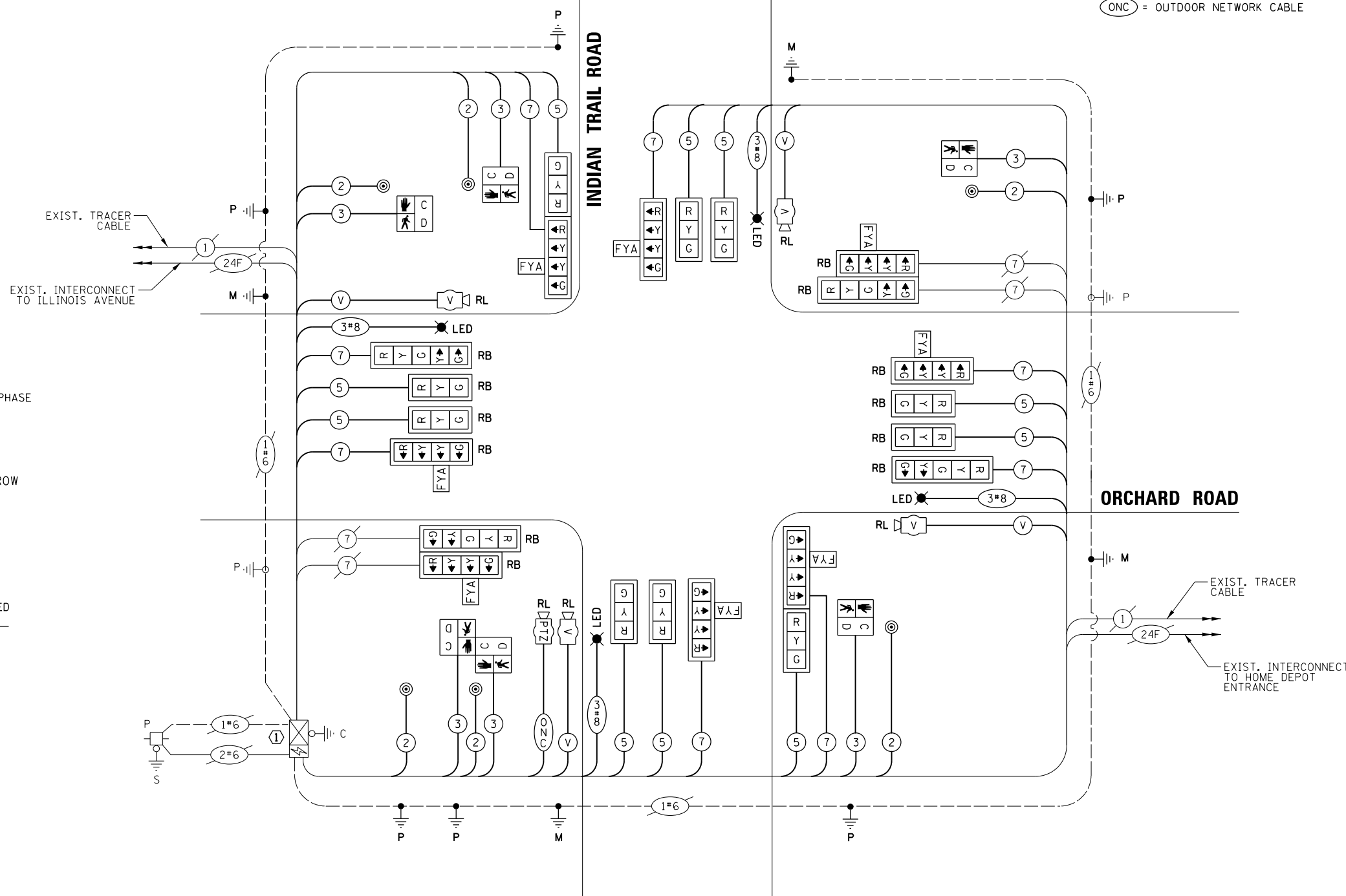
ENERGY COSTS TO:

CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505

ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTES:

- ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.



LEGEND:

- [FYA] = FLASHING YELLOW ARROW
- (ONC) = OUTDOOR NETWORK CABLE

CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 ORCHARD ROAD AND INDIAN TRAIL ROAD

FILE NAME
 016_Orchard-Indian Trail 03.CAB

USER NAME = fbariso
 DESIGNED - TFS
 DRAWN - FPB
 CHECKED - GMZ
 PLOT SCALE = 48"
 PLOT DATE = 11/16/2018

REVISOR
 REVISION
 DATE - 11/16/2018

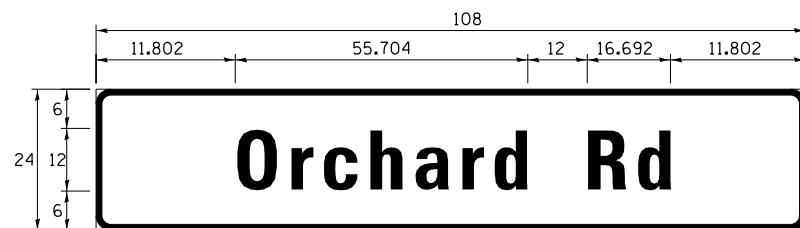
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	101
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

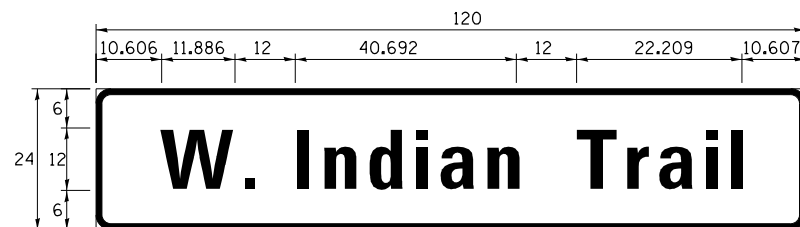
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	20.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	78.8
SIGN PANEL - TYPE 2	SQ FT	76.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	233.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	384.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	2,985.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	808.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	850.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,857.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,069.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	618.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	2.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 66 FT.	EACH	2.0
CONCRETE FOUNDATION, TYPE A	FOOT	20.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30.0
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	50.0
DRILL EXISTING HANDHOLE	EACH	16.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2.0
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6.0
TRAFFIC SIGNAL BACKPLATE	EACH	10.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12.0
PEDESTRIAN PUSH-BUTTON	EACH	6.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8,204.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6.0
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
OUTDOOR RATED NETWORK CABLE	FOOT	97.5
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
LUMINAIRE, LED, HORIZONTAL MOUNT, 190 WATT (SPECIAL)	EACH	4.0
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
RELOCATE EXISTING PTZ CAMERA	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

DATE	BY	SURVEYED	ALIGNED	CHECKED	RT. OF WAY CHECKED	ADD. FILE NAME
DATE	BY	PLAN	NOTE BOOK	NO.		
DATE	BY	PROFILE	NOTE BOOK	NO.		

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5939

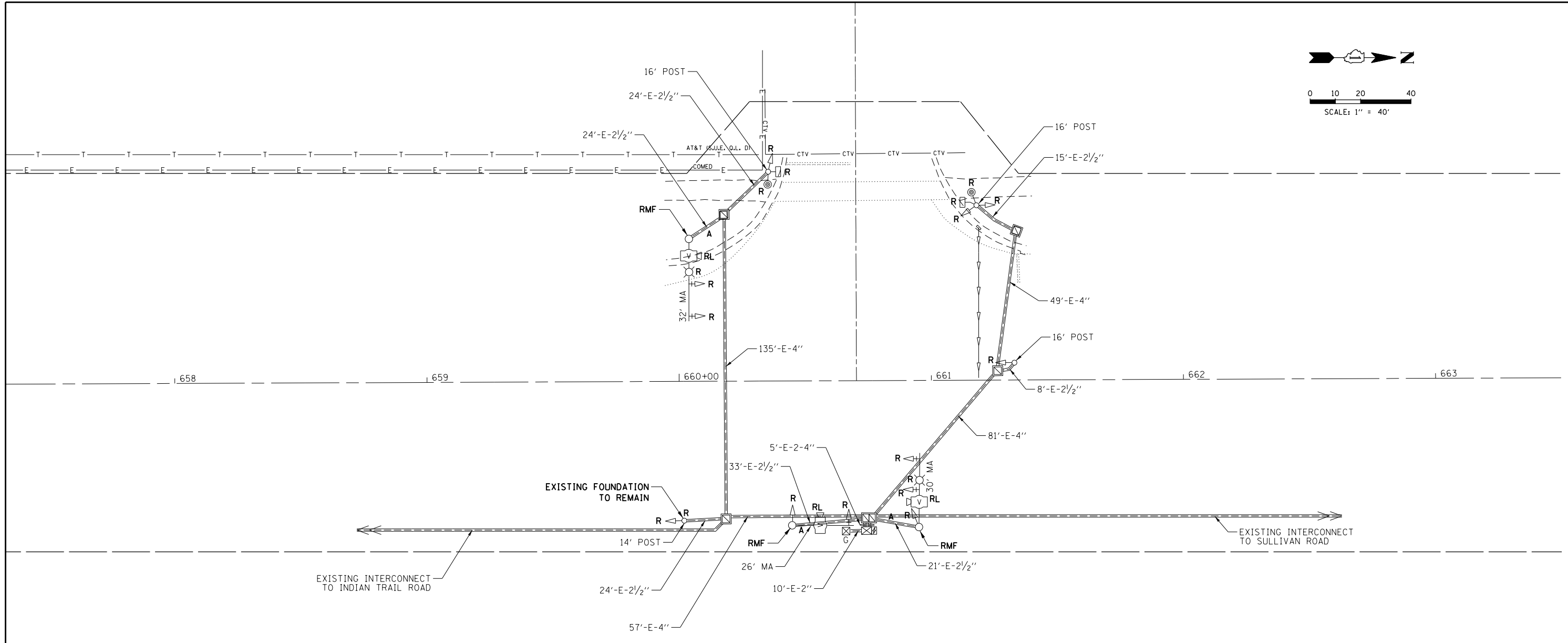


TS SHT NO. 61

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND INDIAN TRAIL ROAD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
016_Orchard-Indian Trail 03.CAB-2	DRAWN - FPB	REVISIED -	VAR.			12-00424-00-SP	KANE	171	102	
PLOT SCALE = 48'	CHECKED - GMZ	REVISIED -	CONTRACT NO. 61E74							
PLOT DATE = 11/16/2018	DATE - 11/16/2018	REVISIED -	SCALE:			SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSJIP-W3HX(781)	

DATE	BY	SURVEYED	PLAN
		ALIGNED	NOTE BOOK
		RT. OF WAY CHECKED	No.
		ADD. FILE NAME	
DATE	BY	SURVEYED	ENGINEERING LTD.
		GRADES CHECKED	CHRISTOPHER B. BURKE
		STRUCTURE NOTATIONS CHECKED	3575 West Higgins Road, Suite 600
			Rosemont, Illinois 60018
			(617) 923-5500
DATE	BY	SURVEYED	
		GRADES CHECKED	
		STRUCTURE NOTATIONS CHECKED	

TS SHT NO. 62



REMOVAL AND RELOCATION NOTES:

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

- 3 EACH STEEL MAST ARM ASSEMBLY AND POST
- 1 EACH TRAFFIC SIGNAL POST
- 4 EACH 3-SECTION SIGNAL HEAD
- 8 EACH 5-SECTION SIGNAL HEAD
- 5 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PUSH-BUTTON
- 2 EACH LUMINAIRE

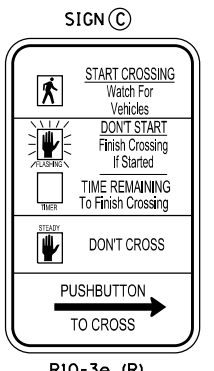
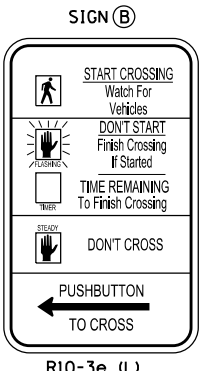
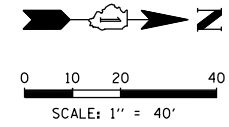
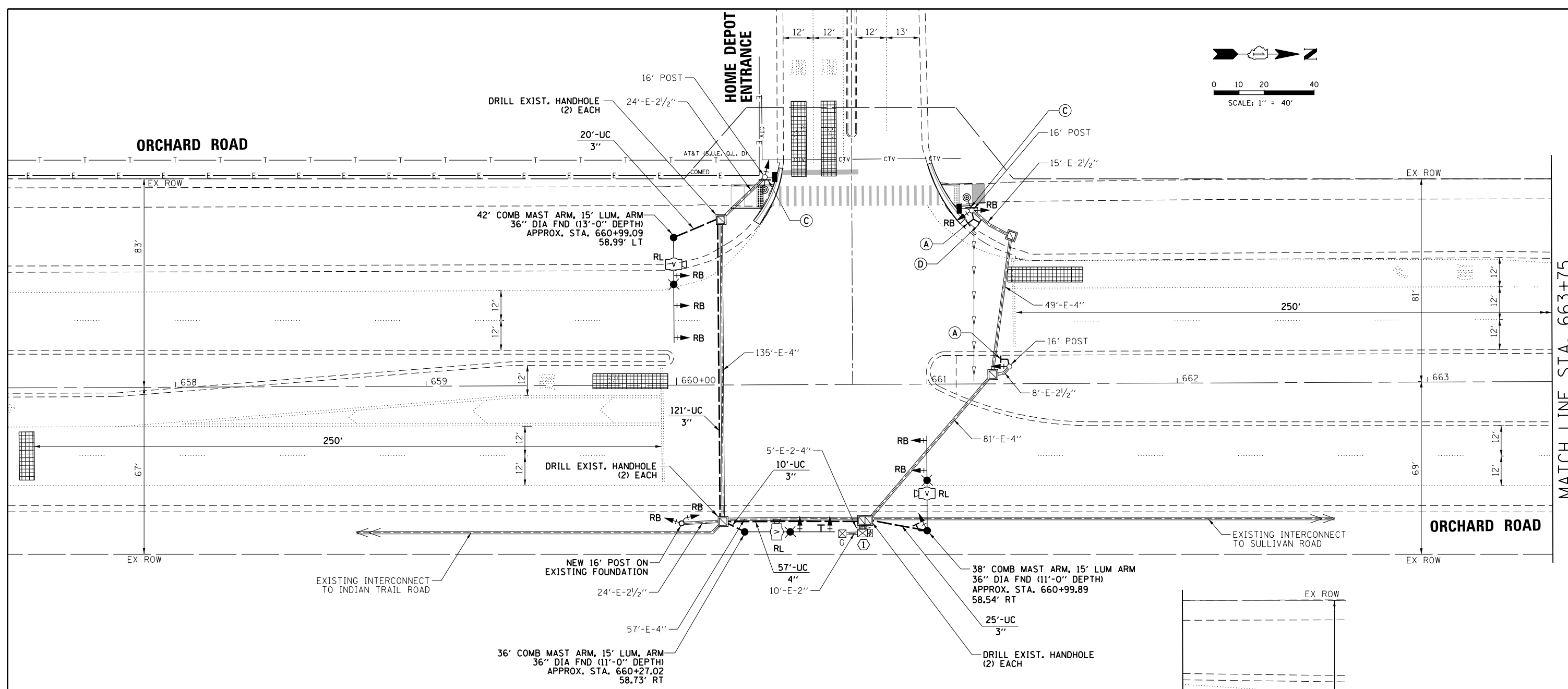
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 3 EACH VIDEO CAMERA

FILE NAME 017_Orchard-HomeDepot 01.REM	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN ORCHARD ROAD AND HOME DEPOT ENTRANCE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	103
		CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74				
		PLOT DATE = 11/16/2018	DATE - 11/16/2018			REVISED -	SCALE:	SHEET NO.	OF SHEETS	STA.
						FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HS1P-W3HX(781)		

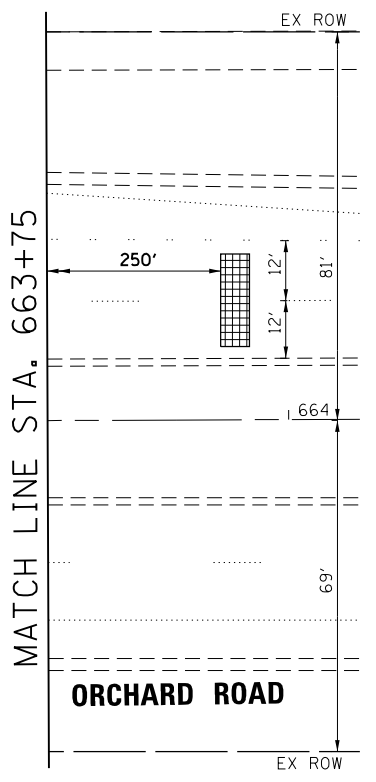
DATE: _____ BY: _____
 SURVEYED: _____
 ALIGNED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 CADD FILE NAME: _____
 PLAN NO.: _____
 NOTE BOOK NO.: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 583-5500
 DATE: _____ BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 ELEM. NOTED: _____
 STRUCTURE NOTATIONS: OK/NO
 PROFILE NO.: _____
 NOTE BOOK NO.: _____

TS SHT NO. 63



CONSTRUCTION NOTES:

(1) THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.

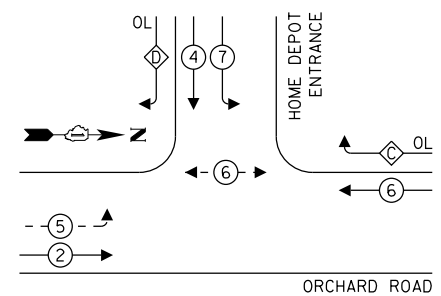


MATCH LINE STA. 663+75

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN ORCHARD ROAD AND HOME DEPOT ENTRANCE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
017_Orchard-HomeDepot_02.MOD		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	104
		CHECKED - GMZ	REVISED -							CONTRACT NO. 61E74
		DATE - 11/16/2018	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO.: _____ CAD FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 PROFILE: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 ELEM. NOTED: _____
 STRUCTURE NOTATIONS: OK/NO

EXISTING CONTROLLER SEQUENCE

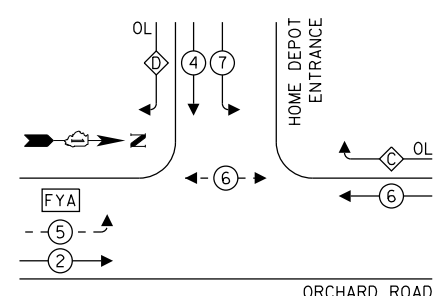


- LEGEND:**
- ← ⊙ → PROTECTED PHASE
 - ← ⊙ ⊖ → PROTECTED/PERMITTED PHASE
 - ← ⊙ ⊕ → PEDESTRIAN PHASE
 - ← ⊙ ⊖ ⊕ → OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED CONTROLLER SEQUENCE



- LEGEND:**
- ← ⊙ → PROTECTED PHASE
 - ← ⊙ ⊖ → PROTECTED/PERMITTED PHASE
 - ← ⊙ ⊕ → PEDESTRIAN PHASE
 - ← ⊙ ⊖ ⊕ → OVERLAP
 - [FYA] FLASHING YELLOW ARROW

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6 + 7	
D	= 4 (Y+R) + 5	

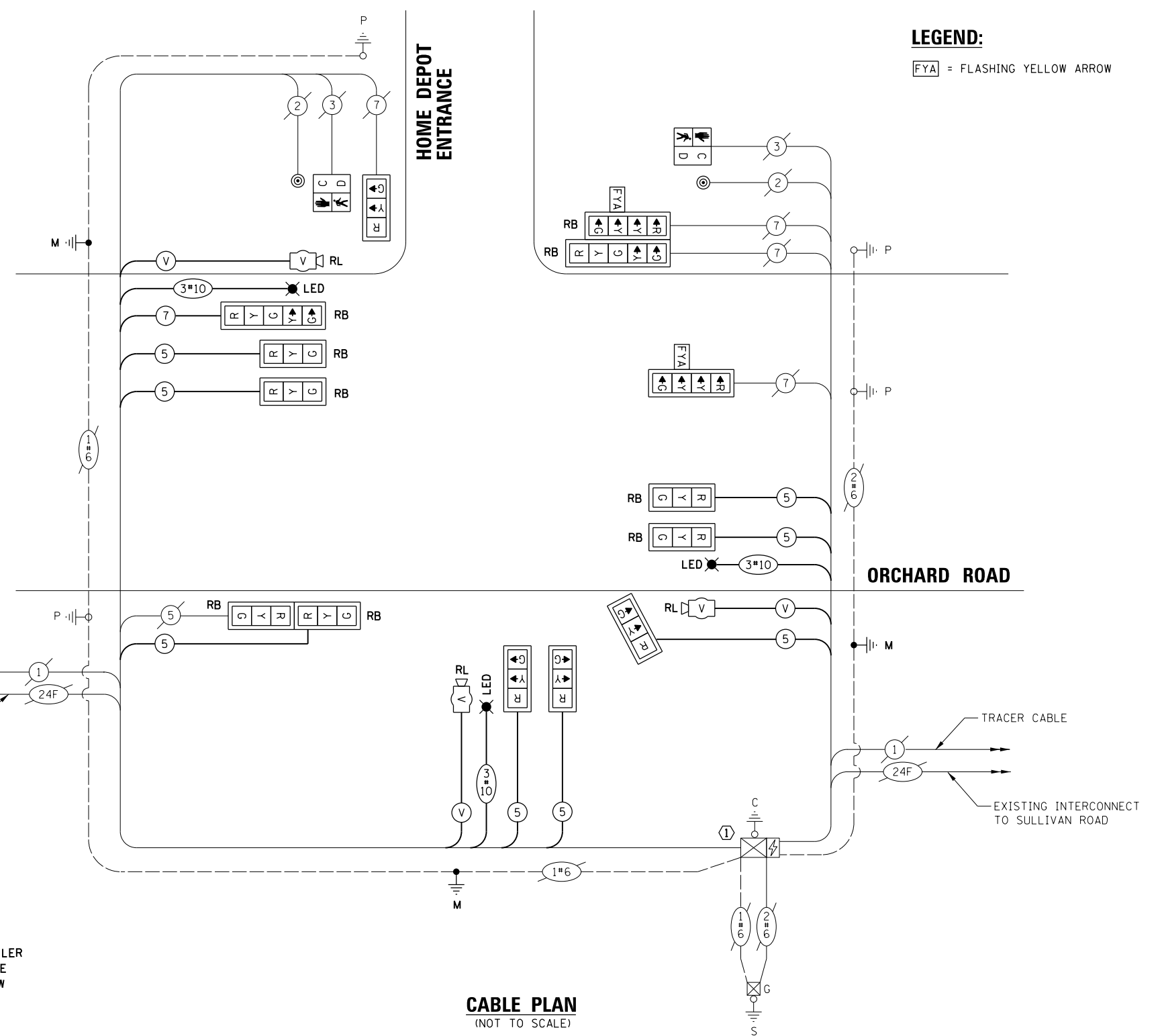
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	8	20	5	8.0
(GREEN)	8	12	45	43.2
SOLID ARROW (RED)	2	10	50	10.0
(GREEN & YELLOW)	16	10	10	16.0
FLASHING ARROW	2	10	5	1.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	3	190	50	285.0
TOTAL =				744.2

ENERGY COSTS TO:
 CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

TS SHT NO.64

CONSTRUCTION NOTES:
 ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.



CABLE PLAN
(NOT TO SCALE)

FILE NAME 017_Orchard-HomeDepot_03.CAB	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

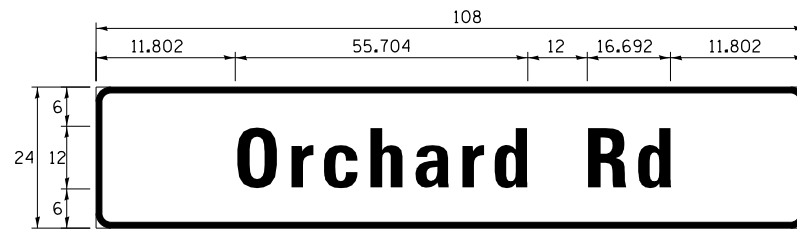
**CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 ORCHARD ROAD AND HOME DEPOT ENTRANCE**

SCALE: _____ SHEET NO. _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	105
CONTRACT NO. 61E74				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSJIP-W3HX(781)		

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	21.3
SIGN PANEL - TYPE 2	SQ FT	18.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	102.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	121.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	1,668.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	5.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,153.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	274.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	553.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35.0
DRILL EXISTING HANDHOLE	EACH	5.0
DRILL EXISTING HEAVY DUTY HANDHOLE	EACH	6.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1.0
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2.0
TRAFFIC SIGNAL BACKPLATE	EACH	4.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10.0
PEDESTRIAN PUSH-BUTTON	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,266.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3.0
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	375.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
LUMINAIRE, LED, HORIZONTAL MOUNT, 190 WATT (SPECIAL)	EACH	3.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
	BLM. NOTED	
	STRUCTURE NOTATIONS	
PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	ADD. FILE NAME	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 922-5500

BY	DATE
BY	DATE

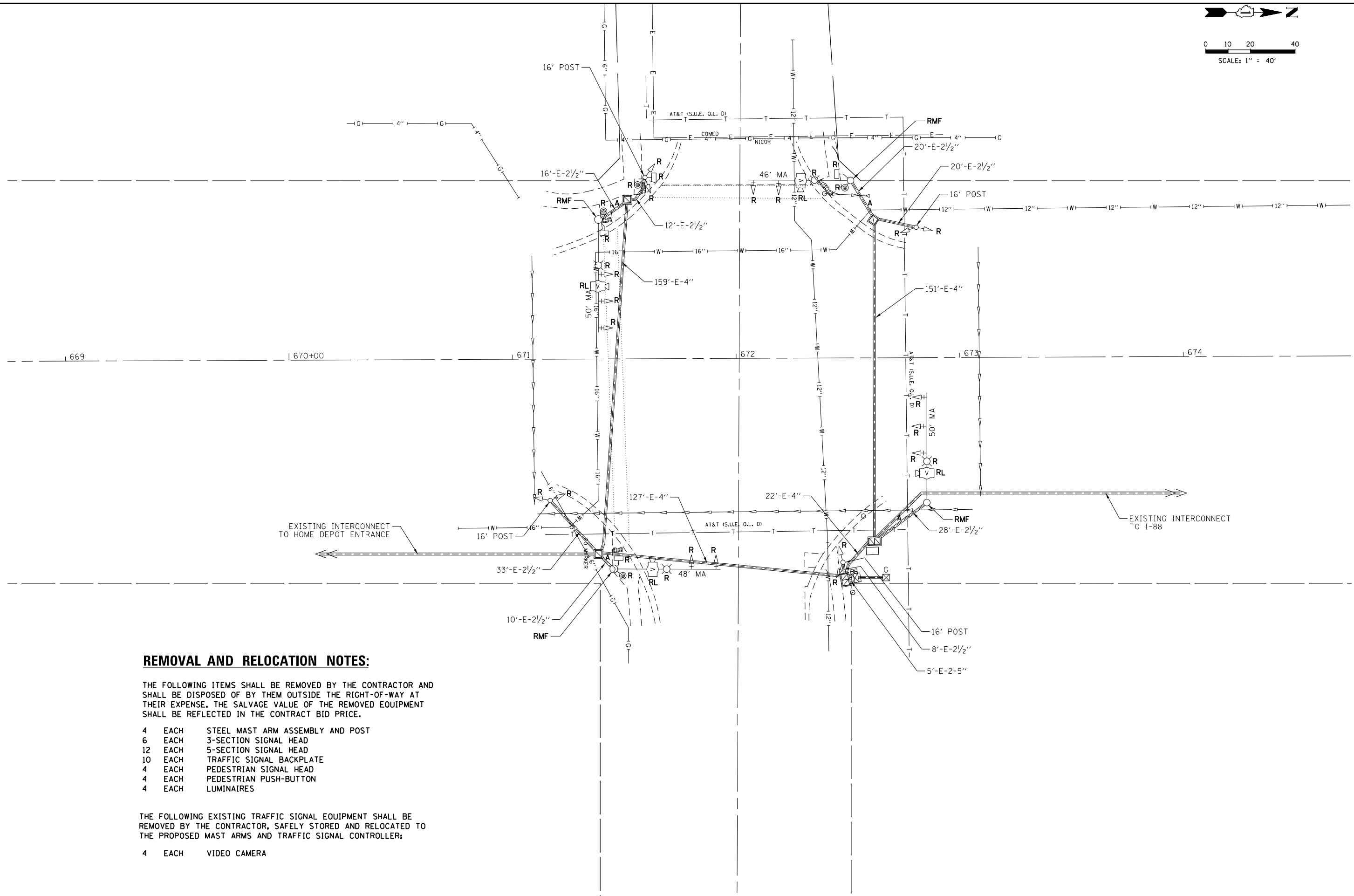
TS SHT NO. 65

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND HOME DEPOT ENTRANCE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
017_Orchard-HomeDepot 03.CAB-2		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	106
		CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74				
		DATE - 11/16/2018	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



0 10 20 40

SCALE: 1" = 40'



REMOVAL AND RELOCATION NOTES:

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

- 4 EACH STEEL MAST ARM ASSEMBLY AND POST
- 6 EACH 3-SECTION SIGNAL HEAD
- 12 EACH 5-SECTION SIGNAL HEAD
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH LUMINAIRES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 4 EACH VIDEO CAMERA

DATE	
BY	
PLAN	
NO.	

ENGINEERING LTD.
 BURKE
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5930



DATE	
BY	
PROFILE	
NO.	

TS SHT NO. 66

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -
018_Orchard-Sullivan 01.REM		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL REMOVAL PLAN
ORCHARD ROAD AND SULLIVAN ROAD

SCALE: SHEET NO. OF SHEETS STA. TO STA.

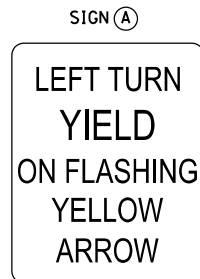
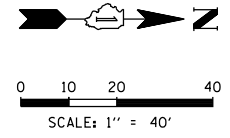
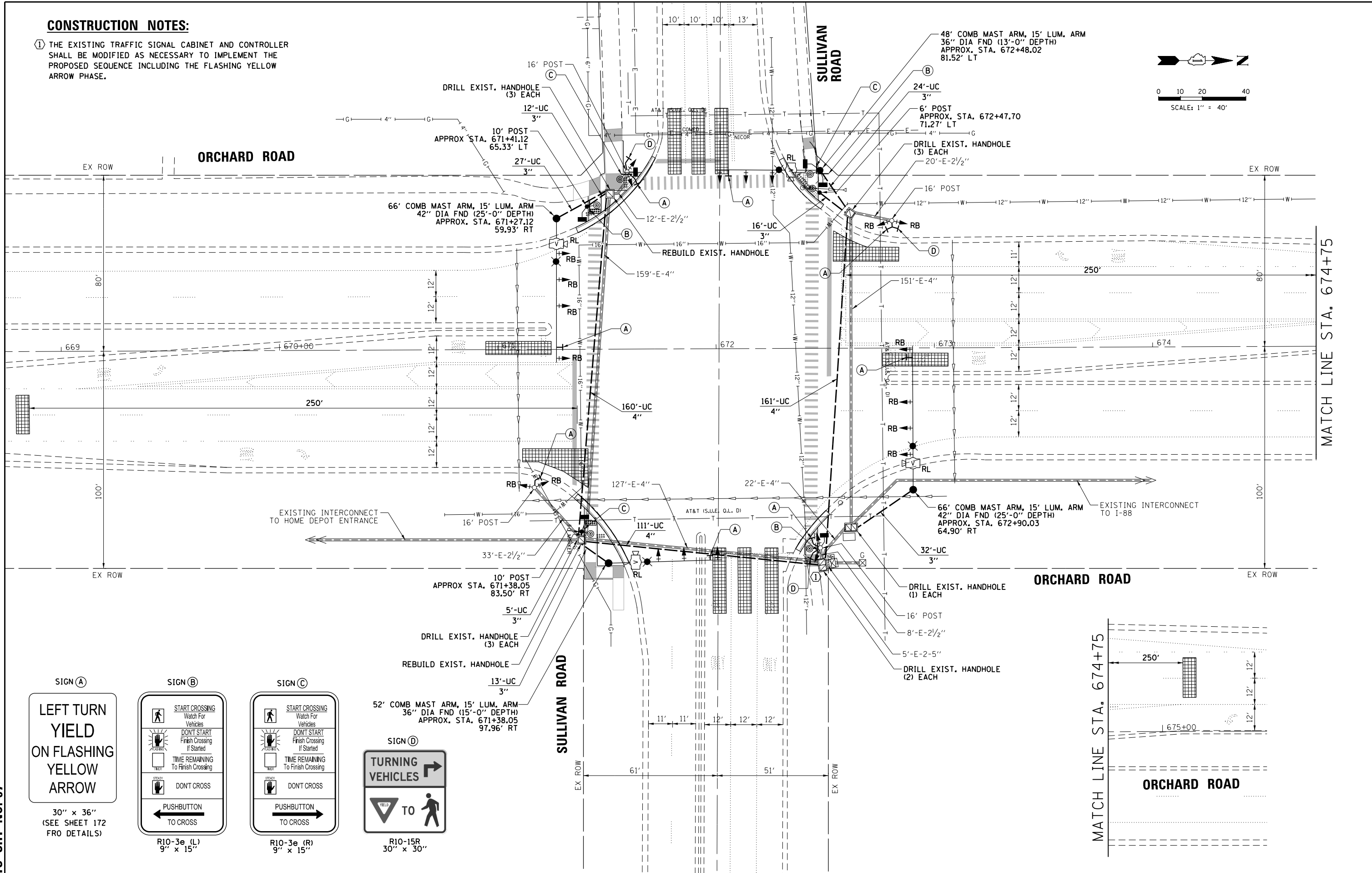
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	107
CONTRACT NO. 61E74			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT HSIP-W3HX(781)	

CONSTRUCTION NOTES:

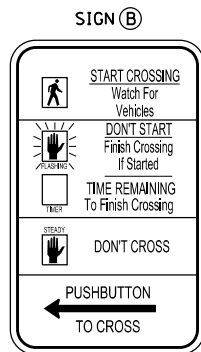
- ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.

DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY

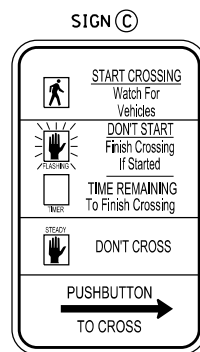
TS SHT NO. 67



30" x 36"
(SEE SHEET 172
FRO DETAILS)



R10-3e (L)
9" x 15"



R10-3e (R)
9" x 15"



R10-15R
30" x 30"

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -
018_Orchard-Sullivan 02.MXD		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

DESIGNED - TFS	REVISED -
DRAWN - FPB	REVISED -
CHECKED - GMZ	REVISED -
DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

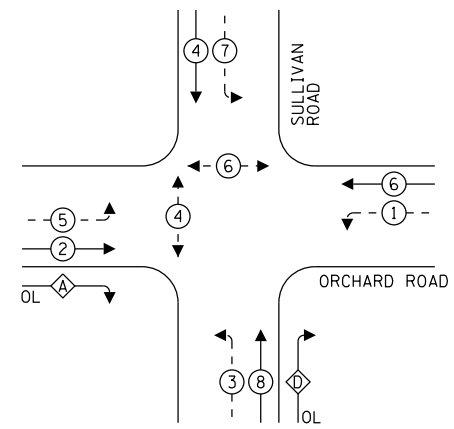
TRAFFIC SIGNAL MODIFICATION PLAN
ORCHARD ROAD AND SULLIVAN ROAD

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
--------	-----------	----	--------	------	----	------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	108
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ BLM. NOTED: _____
 NOTE BOOK: _____ STRUCTURE NOTATIONS: _____

EXISTING CONTROLLER SEQUENCE



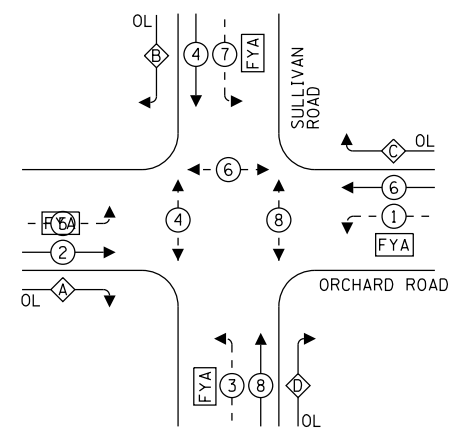
LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A =	2 +	3
D =	8 +	1

PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP
- FYA FLASHING YELLOW ARROW

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A =	2 +	3
B =	4 +	5
C =	6 +	7
D =	8 +	1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

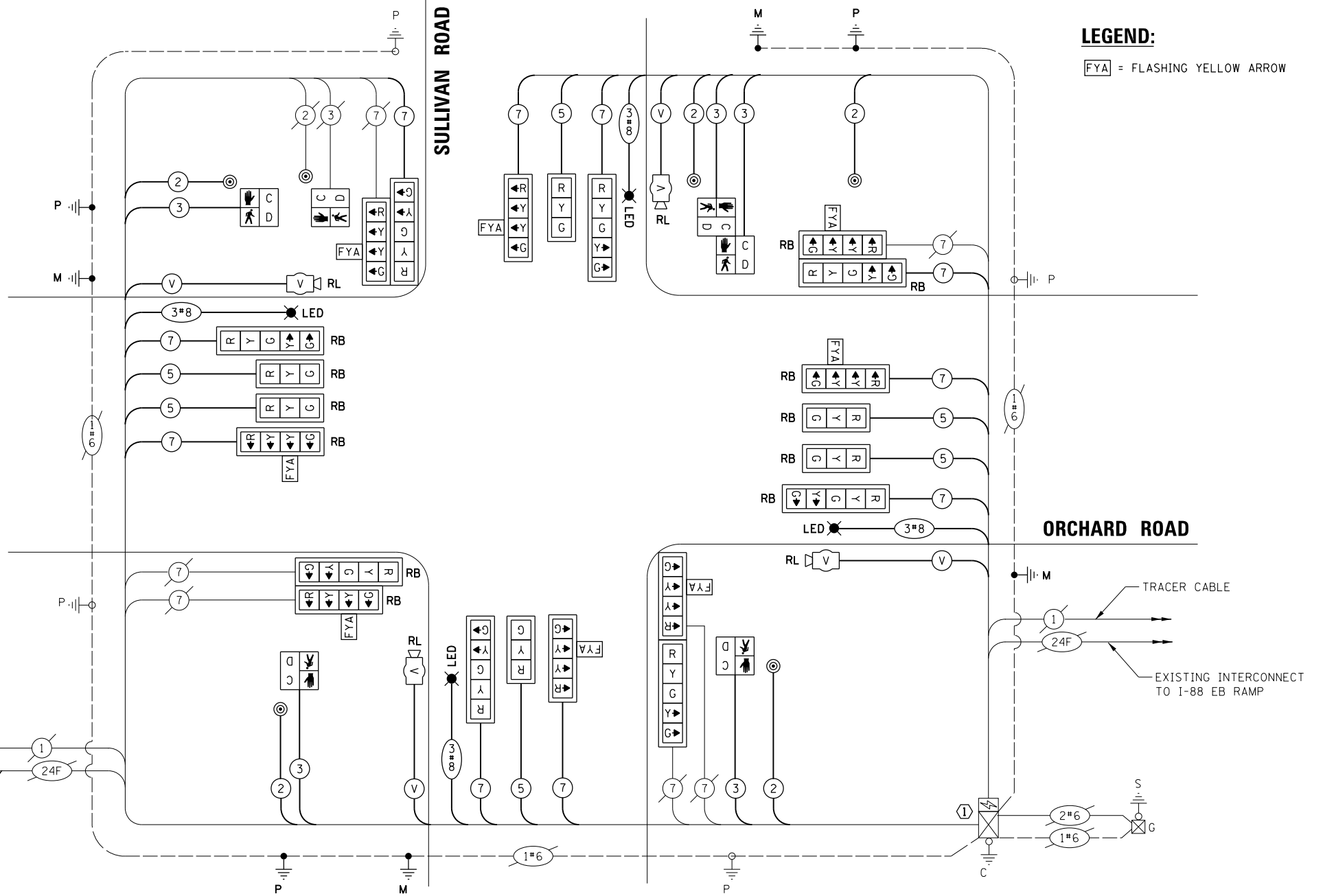
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.5
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
SOLID ARROW (RED)	8	10	50	40.0
(GREEN & YELLOW)	24	10	10	32.0
FLASHING ARROW	8	10	5	4.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	190	50	380.0
TOTAL =				1017.6

ENERGY COSTS TO:
 CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505

ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTES:

- ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.



LEGEND:

FYA = FLASHING YELLOW ARROW

CABLE PLAN
 (NOT TO SCALE)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 ORCHARD ROAD AND SULLIVAN ROAD

FILE NAME: 018_Orchard-Sullivan_03.CAB

USER NAME = fbariso
 DESIGNED - TFS
 DRAWN - FPB
 CHECKED - GMZ
 PLOT SCALE = 48"
 PLOT DATE = 11/16/2018

REVISED -
 REVISED -
 REVISED -
 REVISED -

DATE = 11/16/2018

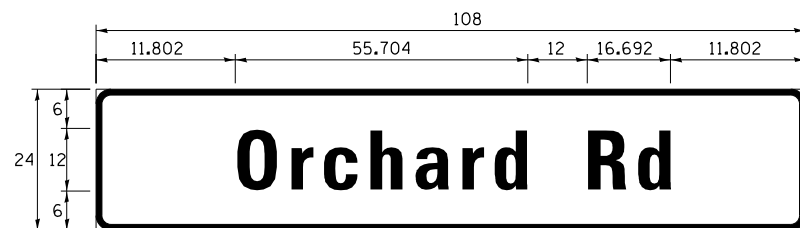
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	109
CONTRACT NO. 61E74			HSJP-W3HX(781)	

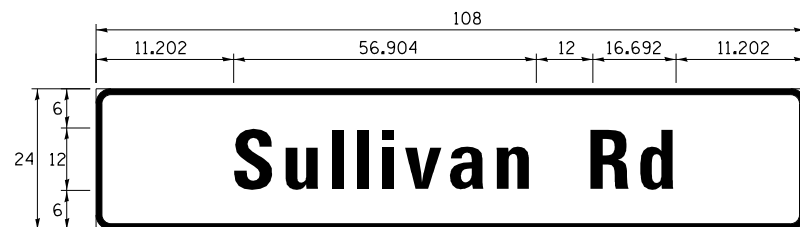
TS SHT NO. 68

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	78.8
SIGN PANEL - TYPE 2	SQ FT	72.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	129.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	432.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	2,471.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	5.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	954.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,098.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,149.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,506.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	724.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 66 FT.	EACH	2.0
CONCRETE FOUNDATION, TYPE A	FOOT	12.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28.0
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	50.0
DRILL EXISTING HANDHOLE	EACH	12.0
DRILL EXISTING HEAVY DUTY HANDHOLE	EACH	15.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4.0
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6.0
TRAFFIC SIGNAL BACKPLATE	EACH	10.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12.0
PEDESTRIAN PUSH-BUTTON	EACH	6.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	8,161.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REBUILD EXISTING HANDHOLE	EACH	2.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
LUMINAIRE, LED, HORIZONTAL MOUNT, 190 WATT (SPECIAL)	EACH	1.0
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	BY
	BLM. NOTED	
	STRUCTURE NOTATIONS	
PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNMENT CHECKED	BY
	RT. OF WAY CHECKED	
	PAID FILE NAME	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-9900



TS SHT NO.69

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND SULLIVAN ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
018_Orchard-Sullivan 03.CAB-2		DRAWN - FPB	REVISED -		VAR.	12-00424-00-SP	KANE	171	110			
		CHECKED - GMZ	REVISED -		CONTRACT NO. 61E74							
		PLOT DATE = 11/16/2018	DATE - 11/16/2018		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSIP-W3HX(781)

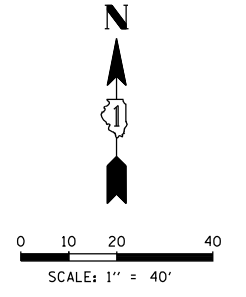
REMOVAL AND RELOCATION NOTES:

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

- 1 EACH STEEL MAST ARM ASSEMBLY AND POST
- 3 EACH TRAFFIC SIGNAL POST
- 10 EACH 3-SECTION SIGNAL HEAD
- 2 EACH 5-SECTION SIGNAL HEAD
- 4 EACH TRAFFIC SIGNAL BACKPLATE

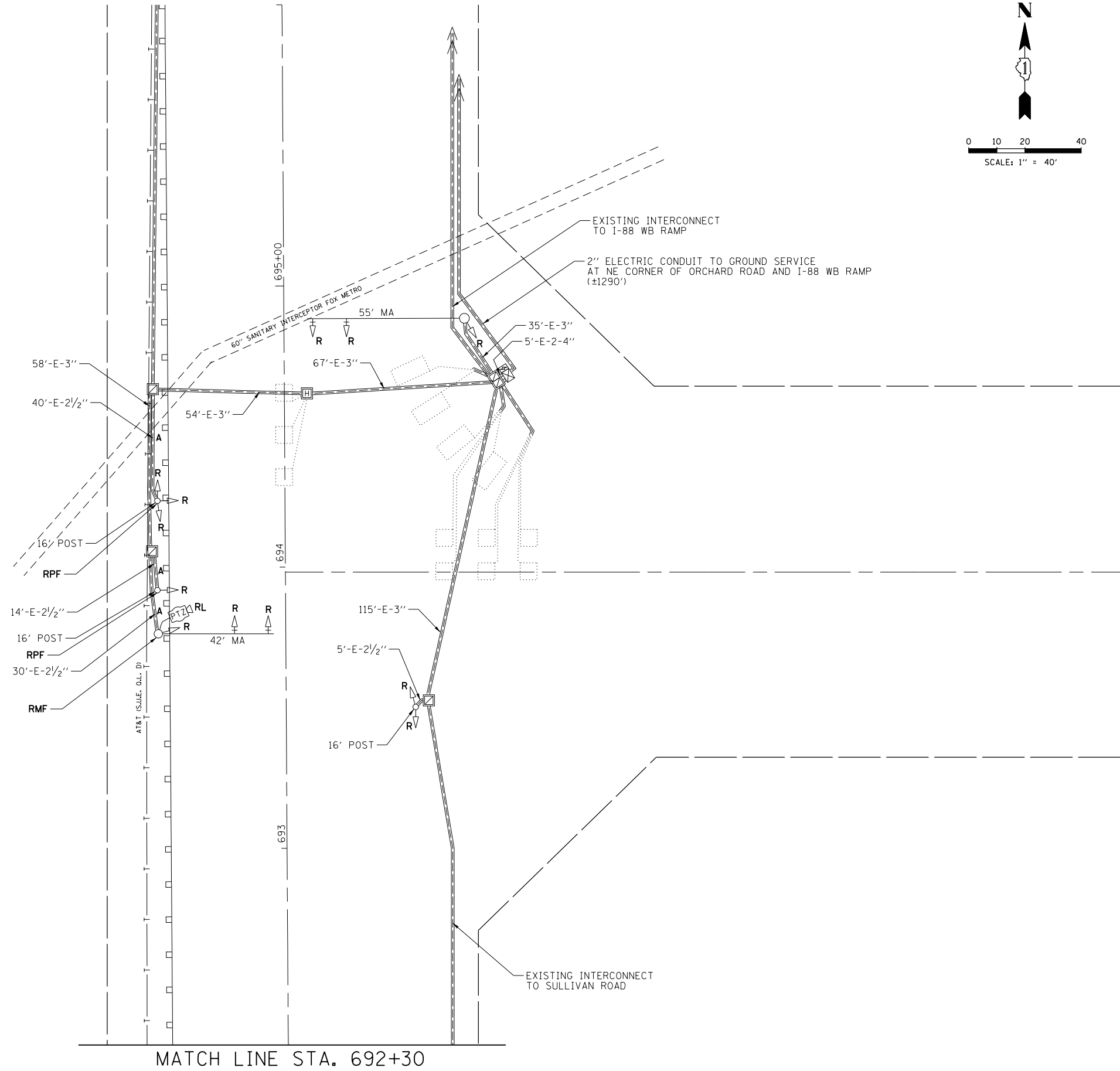
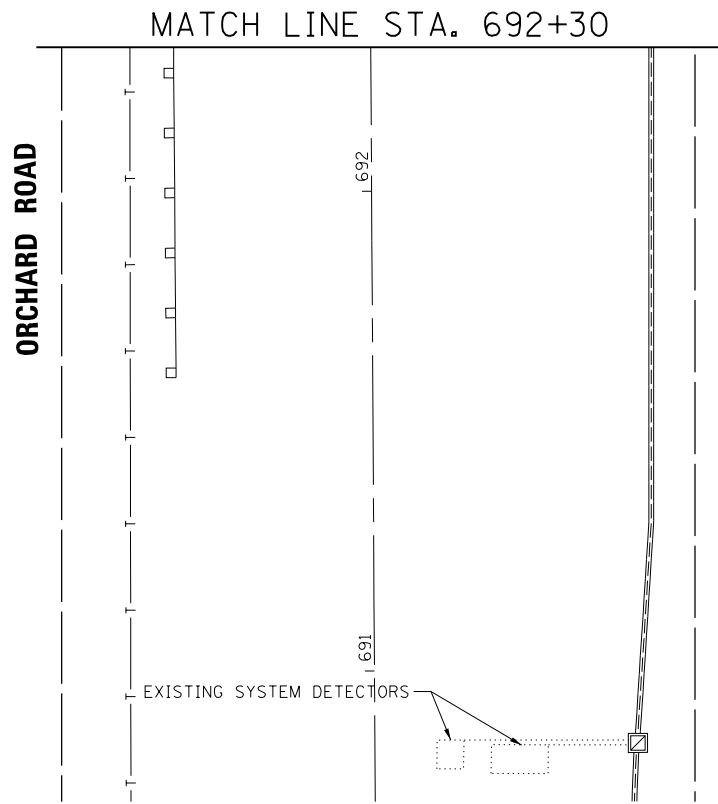
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 1 EACH PAN TILT ZOOM CAMERA



DATE	BY	SURVEYED	ALIGNED	CHECKED
DATE	BY	GRADES	CHECKED	
DATE	BY	BLM. NOTED		
DATE	BY	STRUCTURE	NOTATIONS	CHK'D
DATE	BY	PLAN	NOTE BOOK	
DATE	BY	NO.	NO.	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 922-5500

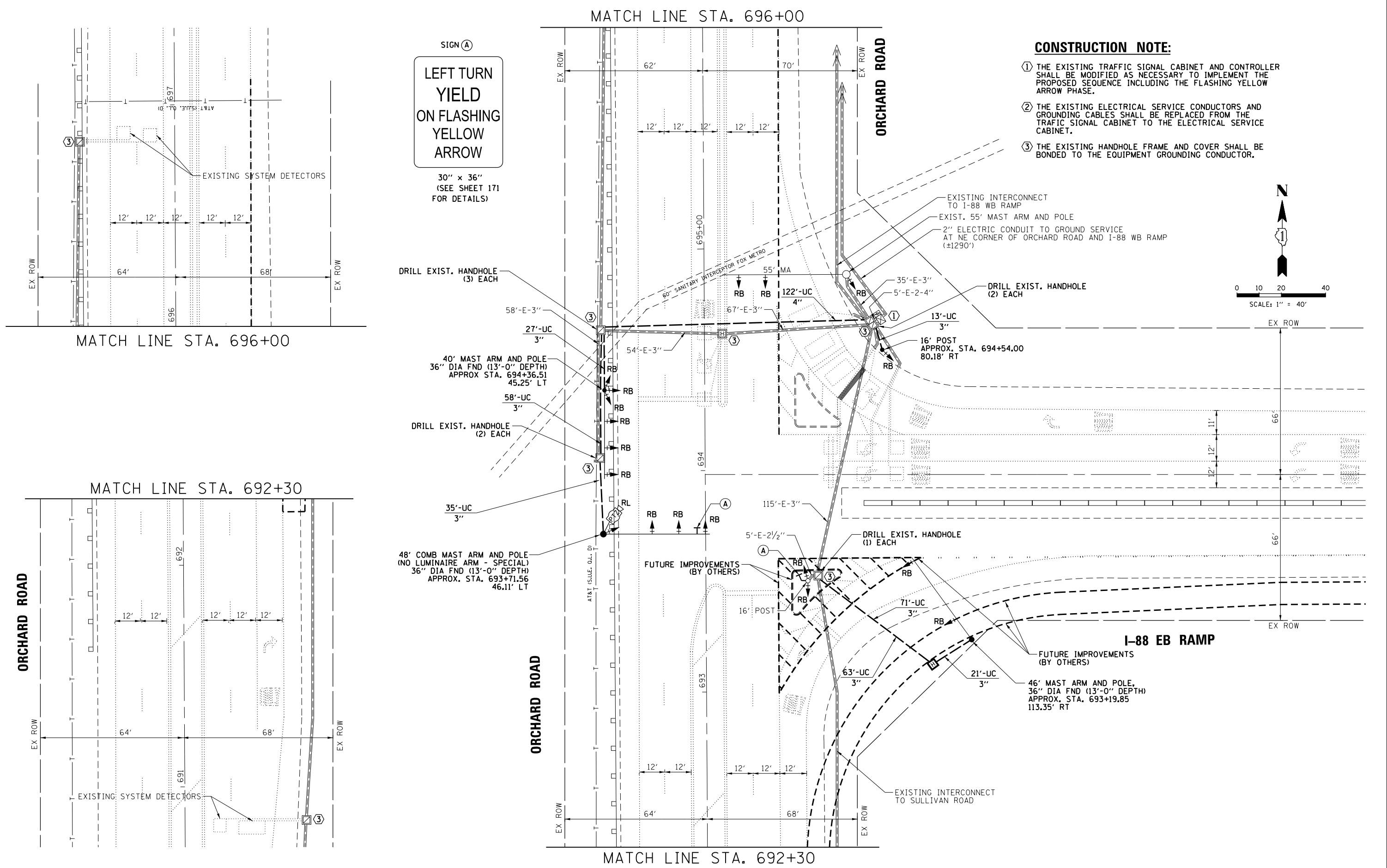


TS SHT NO. 70

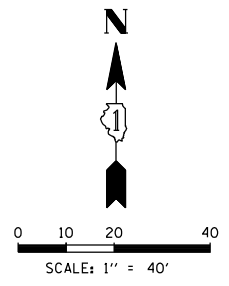
FILE NAME 019_Orchard-I-88 EB Ramp 01.REM	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN ORCHARD ROAD AND I-88 EB RAMP	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	111	
		CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74					
		DATE - 11/16/2018	REVISED -			SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.

PROFILE SURVEYED GRADES CHECKED ELEM. NOTED STRUCTURE NOTATIONS OK/NO
 NOTE BOOK NO. _____
 DATE _____
 BY _____
 TS SHT NO. 71

PLAN SURVEYED ALIGNMENT CHECKED RT. OF WAY CHECKED ADD. FILE NAME
 NOTE BOOK NO. _____
 DATE _____
 BY _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 623-5930



- CONSTRUCTION NOTE:**
- THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.
 - THE EXISTING ELECTRICAL SERVICE CONDUCTORS AND GROUNDING CABLES SHALL BE REPLACED FROM THE TRAFFIC SIGNAL CABINET TO THE ELECTRICAL SERVICE CABINET.
 - THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.



FILE NAME 019_Orchard-1-88 EB Ramp_02_M00	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

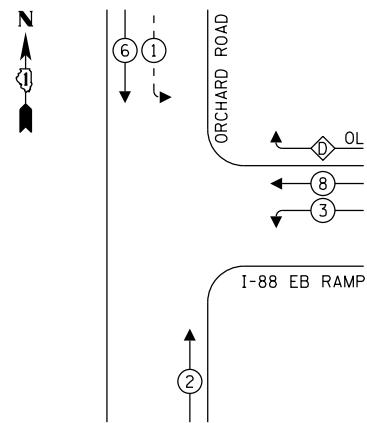
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	112
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

BY: DATE: SURVEYED: ALIGNED: CHECKED: RT. OF WAY CHECKED: SADDY FILE NAME: PLAN: NOTE BOOK NO.: ENGINEERING LTD. 8575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (647) 923-5500

EXISTING CONTROLLER SEQUENCE



LEGEND:

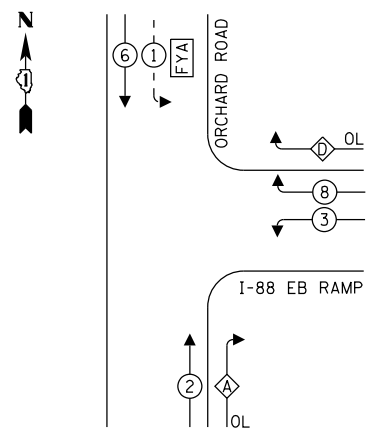
- ← * → PROTECTED PHASE
- ← * - PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	= 8	+ 1

PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← * - PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP
- FYA = FLASHING YELLOW ARROW

RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= CONTINUOUS OVERLAP (FREE FLOW)	
D	= 8+Y+R	+ 1

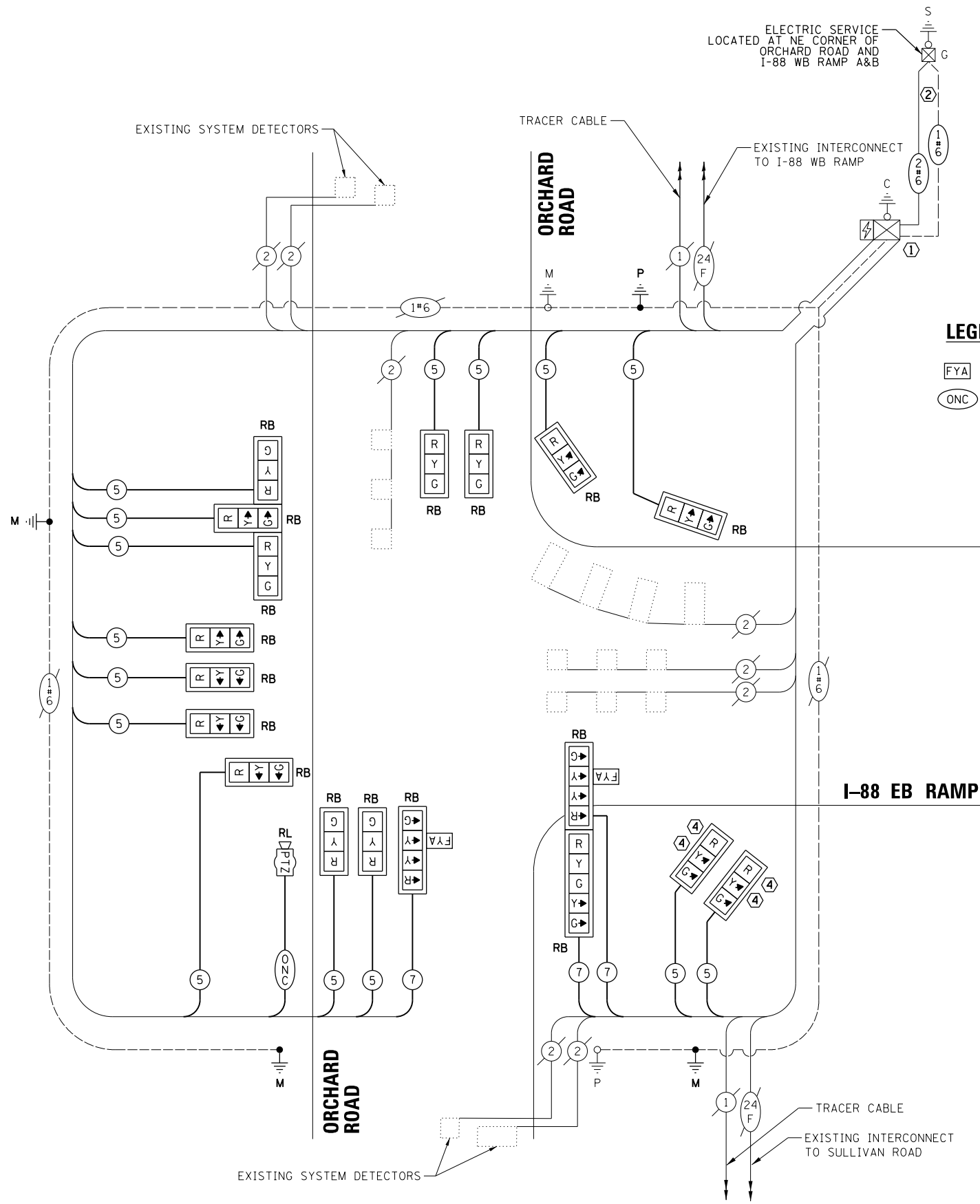
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	9	20	5	9.0
(GREEN)	9	12	45	48.6
SOLID ARROW (RED)	2	10	50	10.0
(GREEN & YELLOW)	22	10	10	22.0
FLASHING ARROW	2	10	5	1.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	190	50	-
TOTAL =				303.6

ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, IL 60175
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTE:

- 1 THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.
- 2 THE EXISTING ELECTRICAL SERVICE CONDUCTORS AND GROUNDING CABLES SHALL BE REPLACED FROM THE TRAFFIC SIGNAL CABINET TO THE ELECTRICAL SERVICE CABINET.
- 3 THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
- 4 RED CIRCULAR AND YELLOW ARROW INDICATIONS SHALL BE DISABLED.



LEGEND:

- FYA = FLASHING YELLOW ARROW
- ONC = OUTDOOR NETWORK CABLE

CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD ROAD AND I-88 EB RAMP

FILE NAME: 019_Orchard-I-88 EB Ramp_03.CAB
 USER NAME: fbariso
 DESIGNED: TFS
 DRAWN: FPB
 CHECKED: GMZ
 PLOT DATE: 11/16/2018

DESIGNED: TFS
 DRAWN: FPB
 CHECKED: GMZ
 DATE: 11/16/2018

REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -

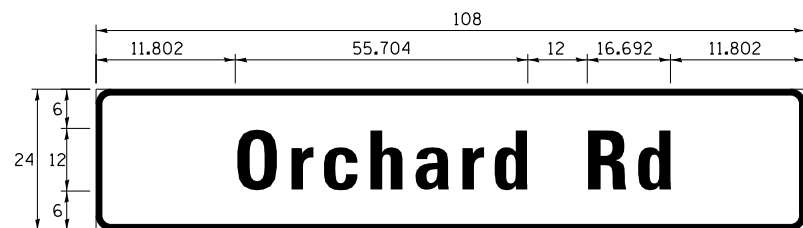
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	113
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

TS SHT NO.72

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15.0
SIGN PANEL - TYPE 2	SQ FT	18.0
MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	50.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	220.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	122.0
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3,158.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	667.0
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	1,360.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,812.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37.0
DRILL EXISTING HANDHOLE	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	18
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,048.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
* ROD AND CLEAN EXISTING CONDUIT	FOOT	375.0
OUTDOOR RATED NETWORK CABLE	FOOT	310.5
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT. (SPECIAL)	EACH	1
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1
RELOCATE EXISTING PTZ CAMERA	EACH	1

*Nominal Quantity to be Used as Directed by the Engineer

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	
BY	BY	
	DATE	
STRUCTURE NOTATIONS	BY	
	DATE	
TS SHT NO. 73	BY	
	DATE	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 922-9500



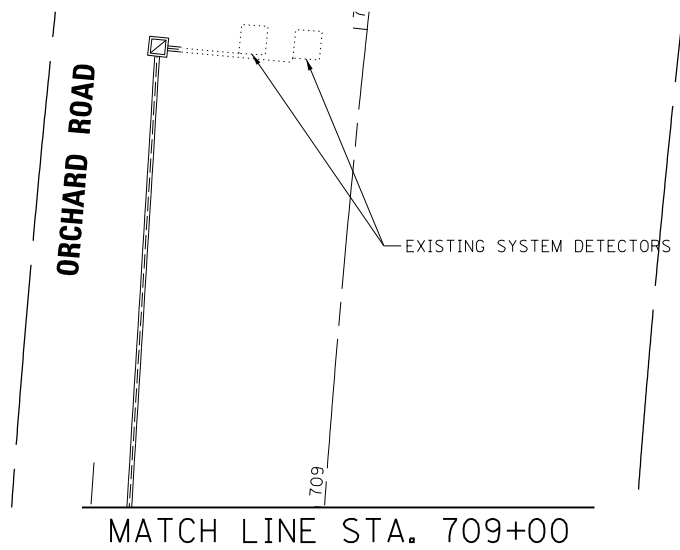
TS SHT NO. 73

FILE NAME 019_Orchard-1-88 EB Ramp 03_CAB-2	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND I-88 EB RAMP			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -		VAR.	12-00424-00-SP	KANE	171	114			
		CHECKED - GMZ	REVISED -		CONTRACT NO. 61E74							
		DATE - 11/16/2018	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HS1P-W3HX(781)		

PROFILE	SURVEYED	DATE	BY
NOTE BOOK	GRADES CHECKED		
	BLM. NOTED		
	STRUCTURE NOTATIONS OK'NO		
PLAN	SURVEYED	DATE	BY
NOTE BOOK	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	ADD. FILE NAME		

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 822-5500

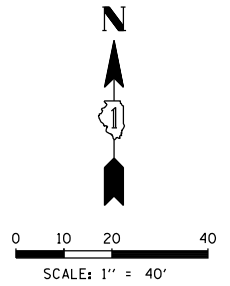
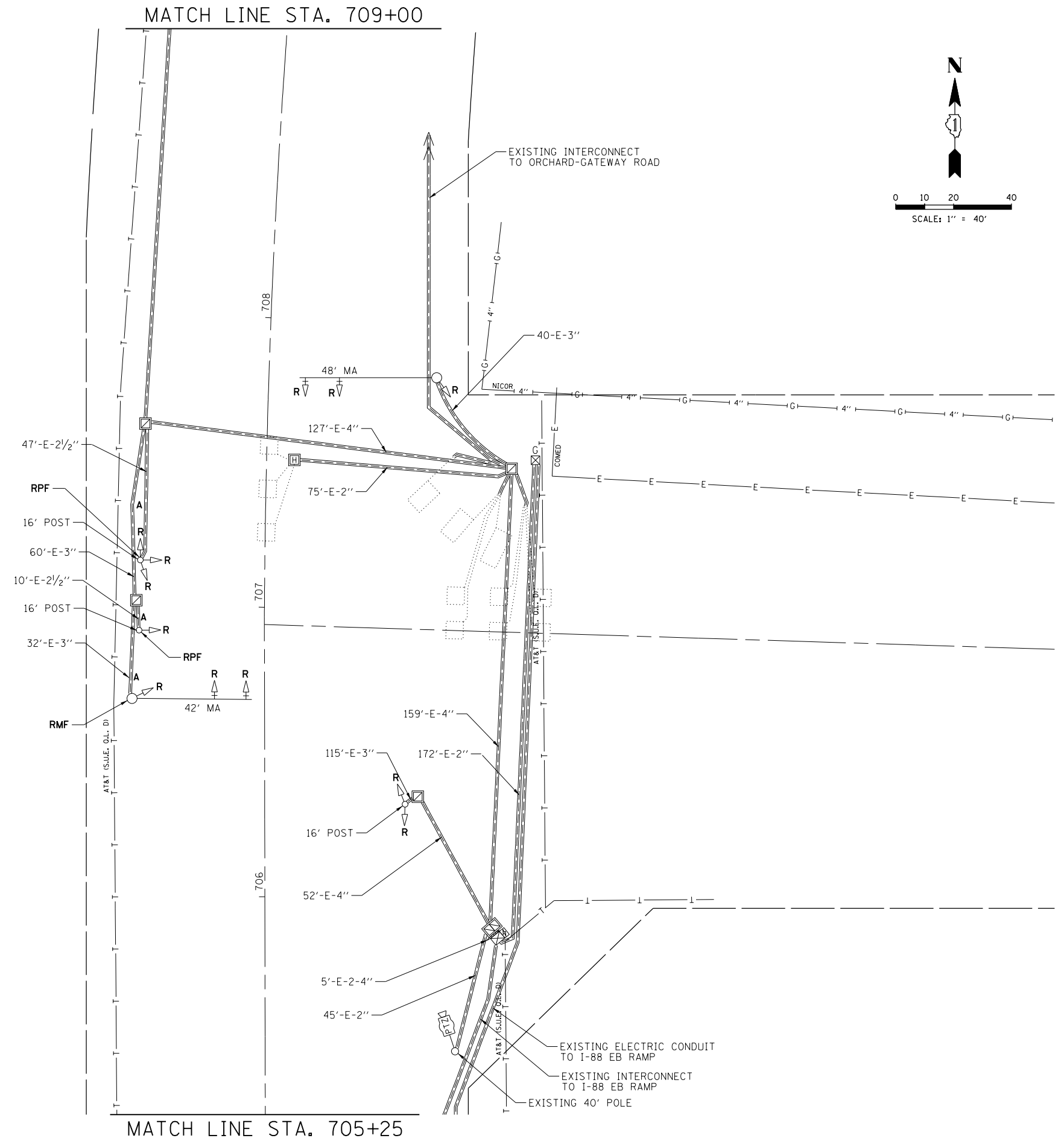
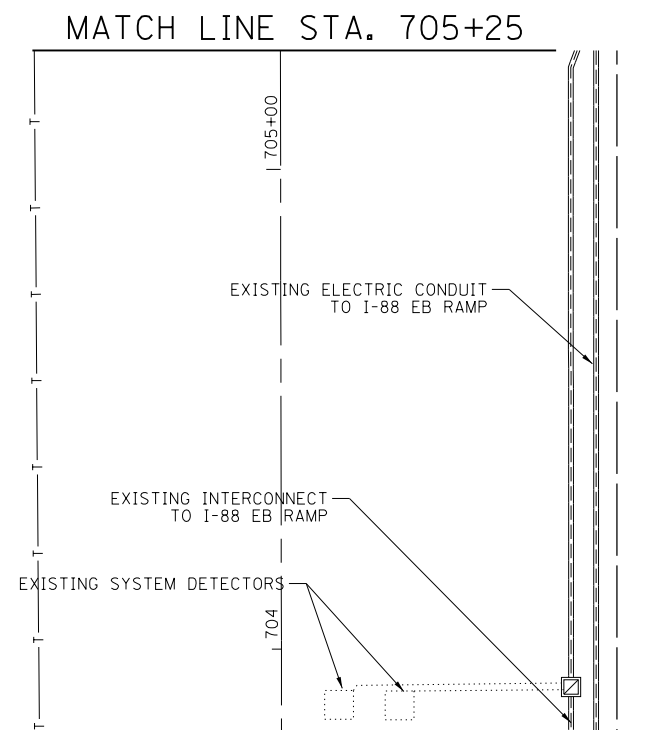
TS SHT NO. 74



REMOVAL AND RELOCATION NOTES:

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

1	EACH	STEEL MAST ARM ASSEMBLY AND POST
2	EACH	TRAFFIC SIGNAL POST
8	EACH	3-SECTION SIGNAL HEAD
4	EACH	5-SECTION SIGNAL HEAD
4	EACH	TRAFFIC SIGNAL BACKPLATE



FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -
020_Orchard-I-88 WB Ramp 01_REM		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

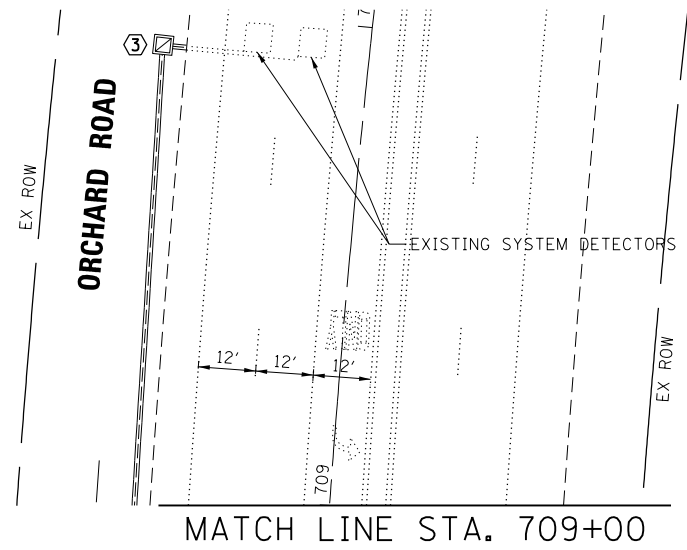
TRAFFIC SIGNAL REMOVAL PLAN			
ORCHARD ROAD AND I-88 WB RAMP			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	115
CONTRACT NO. 61E74				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HS1P-W3HX(781)		

DATE	BY	DATE	BY
PROF. FILE	SURVEYED	GRADES CHECKED	BLM. NOTED
NOTE BOOK NO.	STRUCTURE NOTATIONS OKWD		
PLAN	SURVEYED	ALIGNED	CHECKED
NOTE BOOK NO.	RT. OF WAY CHECKED	ADJ. FILE NAME	

CHRISTOPHER B. BURKE
ENGINEERING LTD.
3575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(630) 923-5500

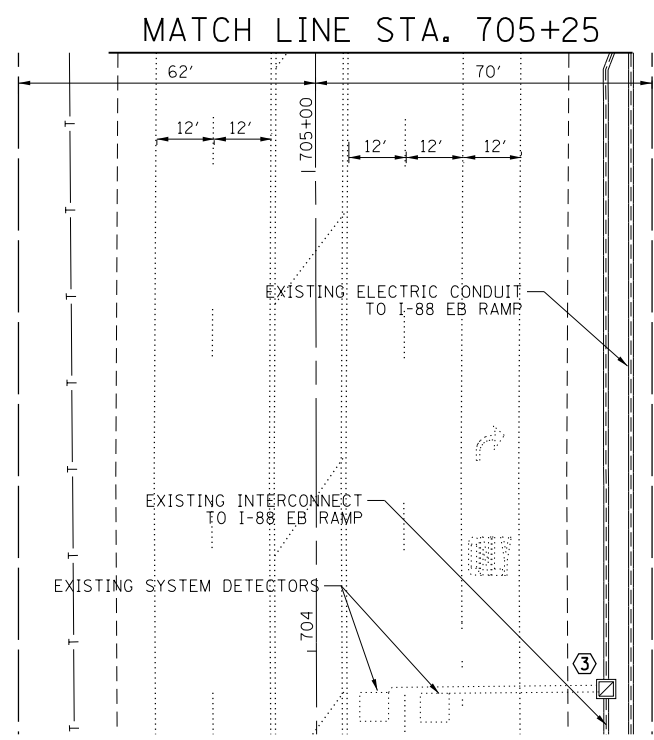
TS SHT NO. 75



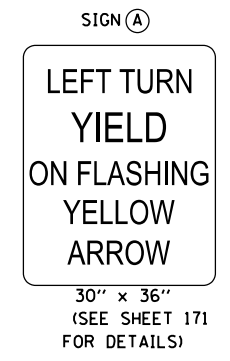
MATCH LINE STA. 709+00

CONSTRUCTION NOTE:

- 1 THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.
- 2 THE EXISTING ELECTRICAL SERVICE CONDUCTORS AND GROUNDING CABLES SHALL BE REPLACED FROM THE TRAFFIC SIGNAL CABINET TO THE ELECTRICAL SERVICE CABINET.
- 3 THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.



MATCH LINE STA. 705+25



DRILL EXIST. HANDHOLE (3) EACH
28'-UC 3"
42' MAST ARM AND POLE 36" DIA FND (13'-0" DEPTH) APPROX. STA. 707+35.12 43.65' LT

DRILL EXIST. HANDHOLE (2) EACH
60'-E-3"
39'-UC 3"

48' MAST ARM AND POLE 36" DIA FND (13'-0" DEPTH) APPROX. STA. 706+63.59 45.79' LT

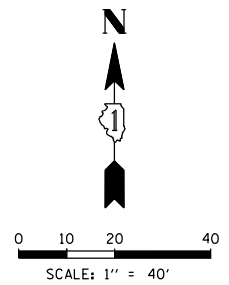
EXISTING INTERCONNECT TO ORCHARD-GATEWAY ROAD

ORCHARD ROAD

EXIST. 48' MAST ARM AND POLE

16' POST APPROX. STA. 707+42.55 78.42' RT

DRILL EXIST. HANDHOLE (3) EACH



ORCHARD ROAD

I-88 WB RAMP

MATCH LINE STA. 705+25

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -
020_Orchard-I-88 WB Ramp 02.MXD		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

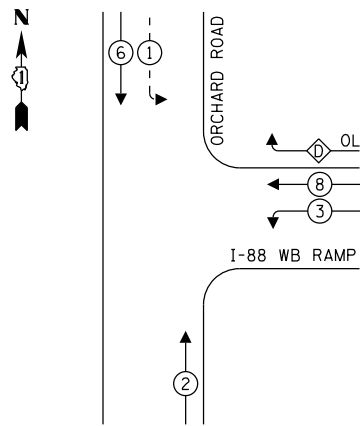
TRAFFIC SIGNAL MODIFICATION PLAN
ORCHARD ROAD AND I-88 WB RAMP

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
--------	-----------	-----------	------	---------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	116
CONTRACT NO. 61E74			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT HSJIP-W3HX(781)	

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____ CAD FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5500
 PROFILE SURVEYED: _____
 GRADES CHECKED: _____
 ELEM. NOTED: _____
 STRUCTURE NOTATIONS: OK/NO

EXISTING CONTROLLER SEQUENCE



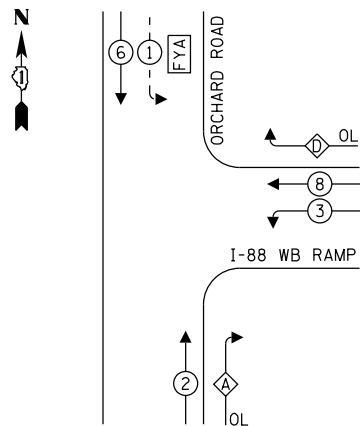
LEGEND:

- ← (⊙) ← PROTECTED PHASE
- ← (⊙) ← PROTECTED/PERMITTED PHASE
- ← (⊙) ← PEDESTRIAN PHASE
- ← (⊙) ← OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE
 D = 8 + 1

PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← (⊙) ← PROTECTED PHASE
- ← (⊙) ← PROTECTED/PERMITTED PHASE
- ← (⊙) ← PEDESTRIAN PHASE
- ← (⊙) ← OVERLAP
- (FYA) FLASHING YELLOW ARROW

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER = PERMISSIVE PHASE + PROTECTED PHASE
 A = 2 + 3
 D = 8+Y+R + 1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

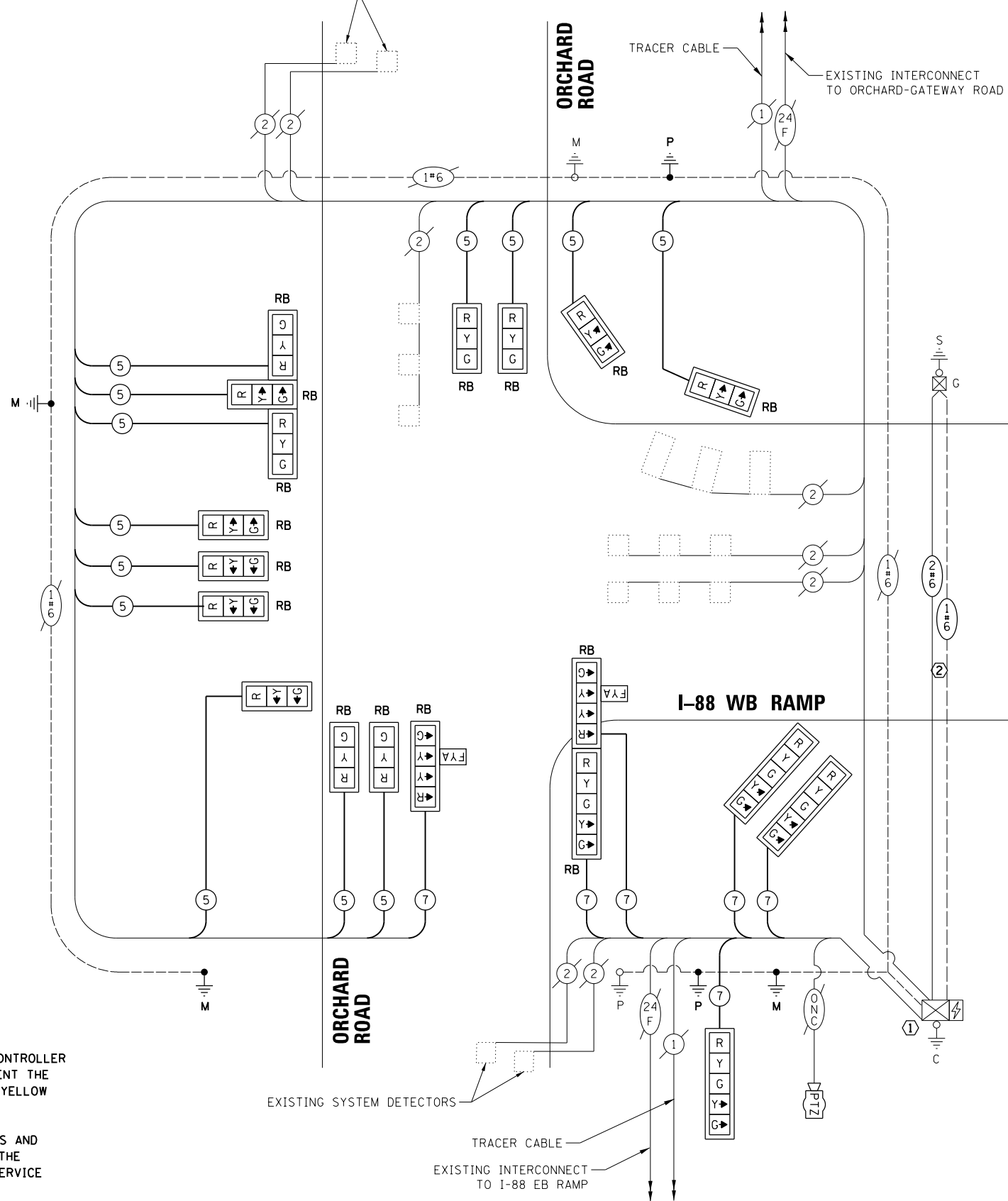
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	11	50	93.5
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
SOLID ARROW (RED)	2	10	50	10.0
(GREEN & YELLOW)	13	10	10	13.0
FLASHING ARROW	2	10	5	1.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	-	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	190	50	-
TOTAL =				306.5

ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, IL 60175
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTE:

- ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.
- ② THE EXISTING ELECTRICAL SERVICE CONDUCTORS AND GROUNDING CABLES SHALL BE REPLACED FROM THE TRAFFIC SIGNAL CABINET TO THE ELECTRICAL SERVICE CABINET.
- ③ THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

EXISTING SYSTEM DETECTORS



CABLE PLAN
(NOT TO SCALE)

LEGEND:

- (FYA) = FLASHING YELLOW ARROW
- (ONC) = OUTDOOR NETWORK CABLE

TS SHT NO. 76

FILE NAME 020_Orchard-I-88 WB Ramp 03.CAB	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**CABLE PLAN AND PHASE DESIGNATION DIAGRAM
ORCHARD ROAD AND I-88 WB RAMP**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	117
CONTRACT NO. 61E74				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HS1P-W3HX(781)		

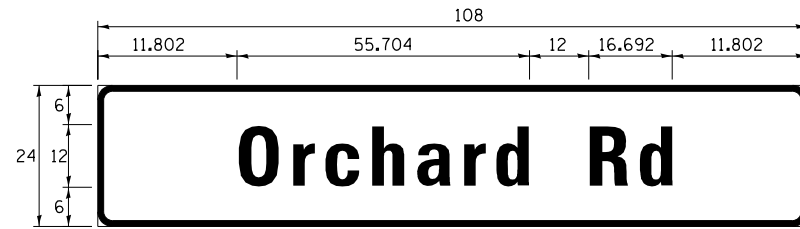
PROFILE	SURVEYED	BY	DATE
NOTE BOOK	GRADES CHECKED		
	BLM. NOTED		
	STRUCTURE NOTATIONS		
PLAN	SURVEYED	BY	DATE
NOTE BOOK	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	ADD. FILE NAME		

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5938

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	GRADES CHECKED		
	BLM. NOTED		
	STRUCTURE NOTATIONS		

TS SHT NO. 77

SIGN PANEL - TYPE 1
 ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

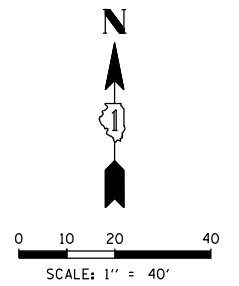
ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15.0
SIGN PANEL - TYPE 2	SQ FT	18.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	209.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	285.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	8.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3,465.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	589.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	1,370.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,950.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1.0
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1.0
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1.0
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	4.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37.0
DRILL EXISTING HANDHOLE	EACH	11.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2.0
TRAFFIC SIGNAL BACKPLATE	EACH	19.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	6.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3,988.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	375.0
OUTDOOR RATED NETWORK CABLE	FOOT	120.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND I-88 WB RAMP			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
020_Orchard-1-88 WB Ramp 03_CAB-2		DRAWN - FPB	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	VAR.	12-00424-00-SP	KANE	171	118	
		CHECKED - GMZ	REVISED -										
		DATE - 11/16/2018	REVISED -										
								FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 61E74			HSIP-W3HX(781)

CONSTRUCTION NOTES:

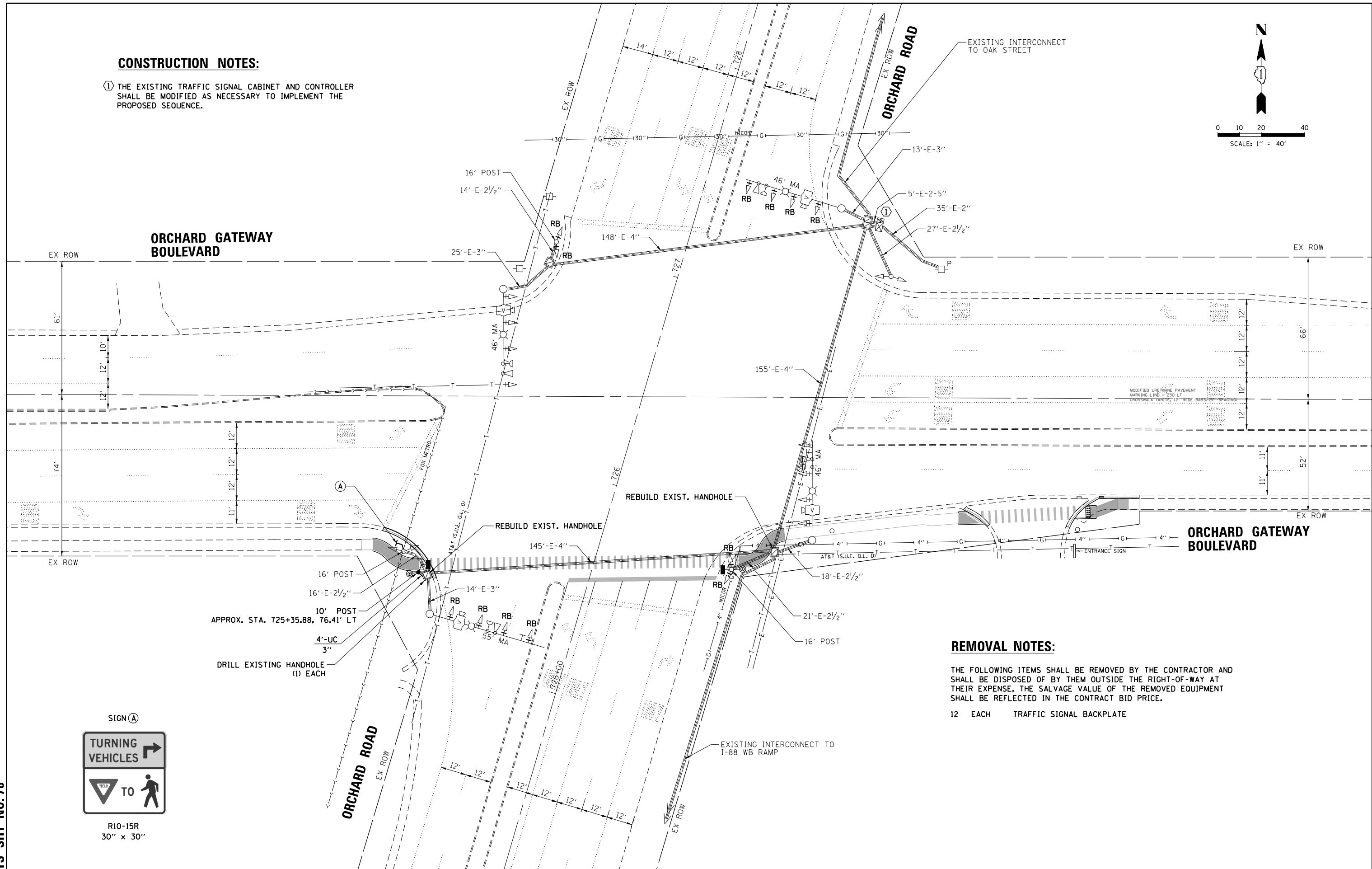
① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE.



DATE	BY	SURVEYED	PLAN
		ALIGNED	NOTE BOOK
		RT. OF WAY CHECKED	NO.
		ADD. FILE NAME	
DATE	BY	SURVEYED	PROFILE
		GRADES CHECKED	NOTE BOOK
		BLM. NOTED	NO.
		STRUCTURE NOTATIONS OK'D	

CHRISTOPHER B. BURKE
ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(617) 823-5930

TS SHT NO. 78



R10-15R
30" x 30"

REMOVAL NOTES:

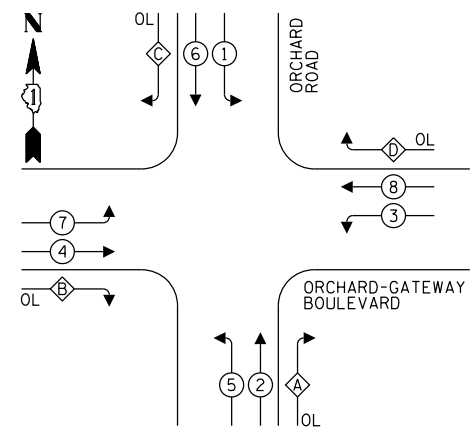
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 12 EACH TRAFFIC SIGNAL BACKPLATE

FILE NAME 026.Orchard-Gateway 01.MOD Rev	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN ORCHARD ROAD AND ORCHARD GATEWAY BOULEVARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 48'	DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	119	
	PLOT DATE = 11/16/2018	CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74					
		DATE - 11/16/2018	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSJP-W3HX(781)			

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 922-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ ELEM. NOTED: _____
 NO. _____ NO. _____
 STRUCTURE NOTATIONS: OKWD

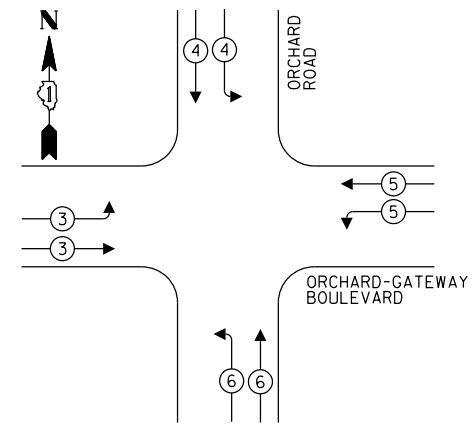
EXISTING CONTROLLER SEQUENCE



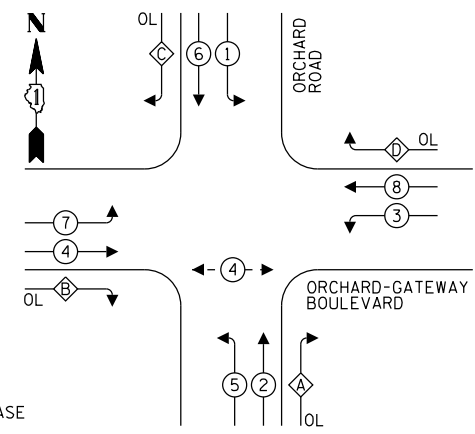
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	3
B	= 4 +	5
C	= 6 +	7
D	= 8 +	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	3
B	= 4 +	5
C	= 6 +	7
D	= 8 +	1

LEGEND:
 ← ⊙ → PROTECTED PHASE
 ← ⊙ - - PROTECTED/PERMITTED PHASE
 ← ⊙ ⊙ → PEDESTRIAN PHASE
 ⊙ OL OVERLAP

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
SOLID ARROW (RED)	8	10	50	40.0
(GREEN & YELLOW)	16	10	10	16.0
FLASHING ARROW	-	10	5	-
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	250	50	500.0
TOTAL =				1061.4

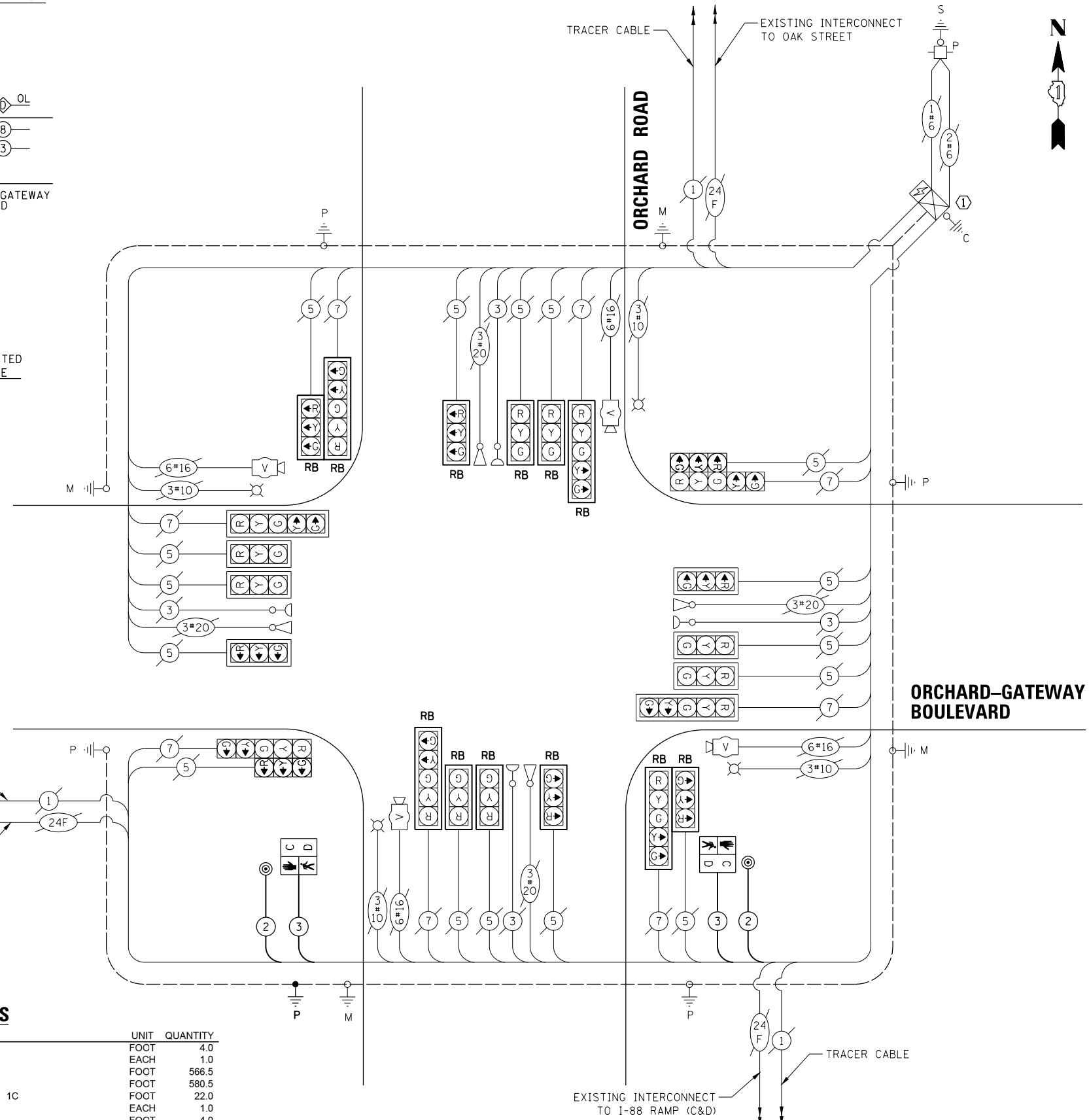
ENERGY COSTS TO:
 VILLAGE OF N. AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTES:

① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	4.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	566.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	580.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	22.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	4.0
DRILL EXISTING HANDHOLE	EACH	1.0
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12.0
PEDESTRIAN PUSH-BUTTON	EACH	2.0
REBUILD EXISTING HANDHOLE	EACH	2.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1.0



CABLE PLAN (NOT TO SCALE)

TS SHT NO. 79

FILE NAME: 026.Orchard-Gateway 02.CAB Rev	USER NAME: fbariso	DESIGNED: TFS	REVISED: -
PLOT SCALE: 48"	CHECKED: GMZ	DRAWN: FPB	REVISED: -
PLOT DATE: 11/16/2018	DATE: 11/16/2018		REVISED: -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

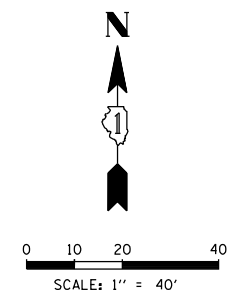
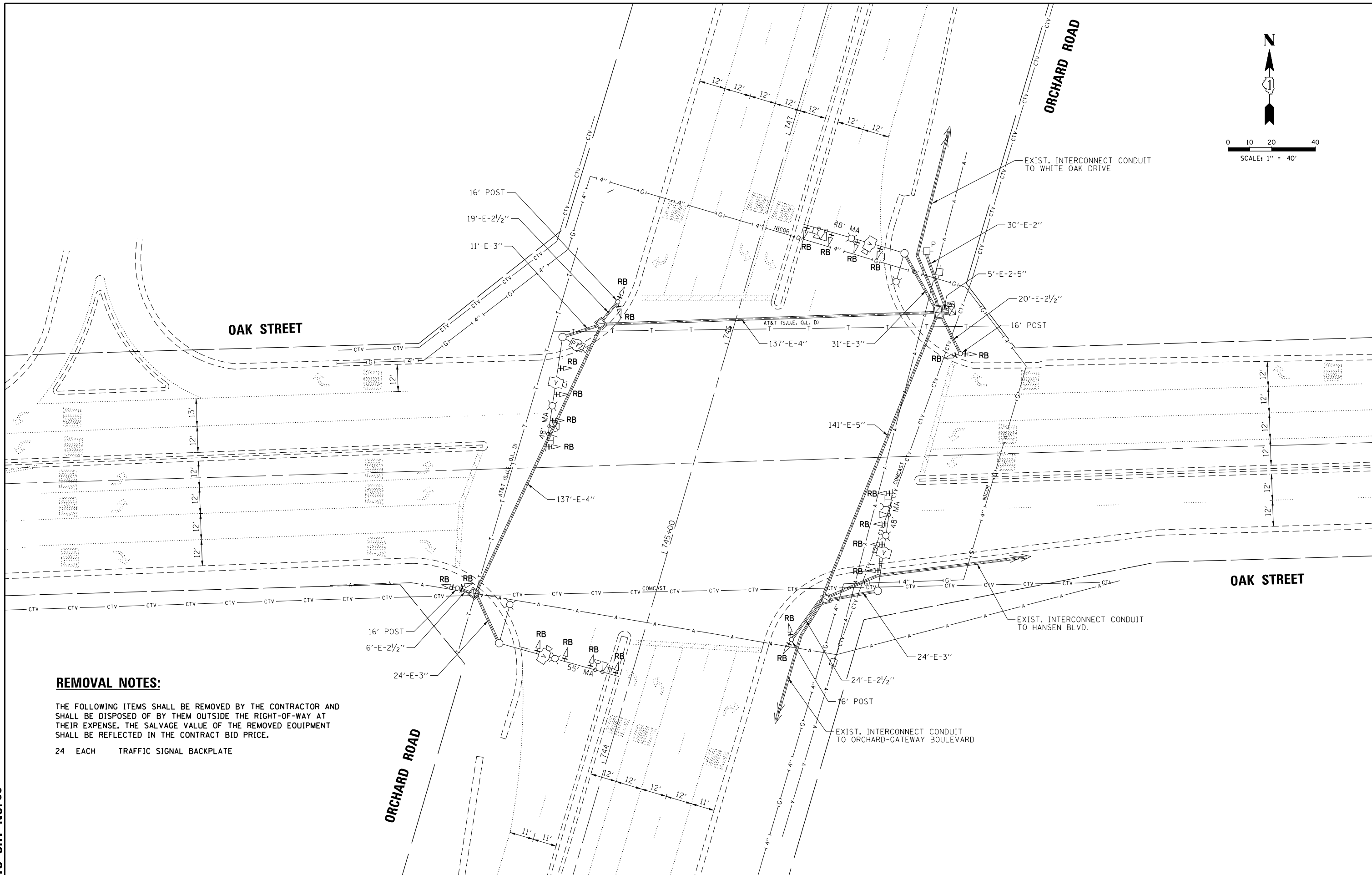
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ORCHARD ROAD AND ORCHARD-GATEWAY BOULEVARD

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	120
CONTRACT NO. 61E74			H51P-W3HX(781)	

DATE	BY	SURVEYED	ALIGNED	CHECKED	DATE
		RT. OF WAY	CHECKED	NO.	
		ADD. FILE NAME			
PLAN NOTE BOOK NO.					
ENGINEERING LTD. CHRISTOPHER B. BURKE 9575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (630) 923-5930					
DATE	BY	SURVEYED	GRADES	CHECKED	DATE
		BLM. NOTED	STRUCTURE	NOTATIONS	
		NO.			

TS SHT NO. 80



REMOVAL NOTES:

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

- 24 EACH TRAFFIC SIGNAL BACKPLATE

FILE NAME	USER NAME = fbariso
027_Orchard-Oak 01.MOD Rev	

DESIGNED - TFS	REVISOR -
DRAWN - FPB	REVISOR -
CHECKED - GMZ	REVISOR -
DATE - 11/16/2018	REVISOR -

DATE	BY	REVISION

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

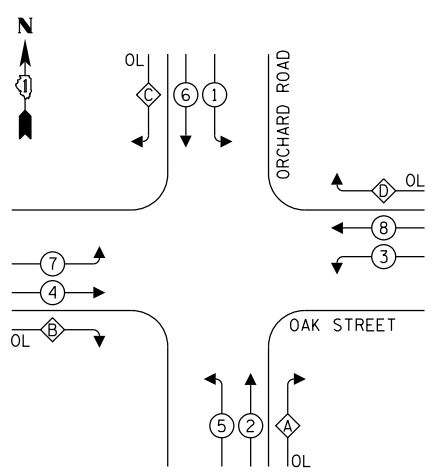
**TRAFFIC SIGNAL MODIFICATION PLAN
ORCHARD ROAD AND OAK STREET**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	121
CONTRACT NO. 61E74			HSIP-W3HX(781)	

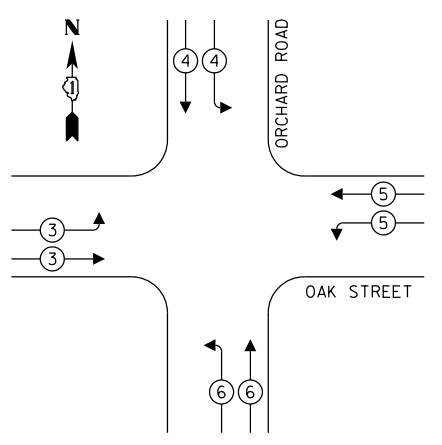
SCALE: SHEET NO. OF SHEETS STA. TO STA.

BY: _____ DATE: _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 ADD. FILE NAME _____
 PLAN NO. _____
 NOTE BOOK NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (617) 923-5500
 PROFILE SURVEYED _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD
 NOTE BOOK NO. _____

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:
 ← ⊙ → PROTECTED PHASE
 ← ⊙ - - ⊙ → PROTECTED/PERMITTED PHASE
 ← ⊙ → PEDESTRIAN PHASE
 ← ⊙ OL → OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

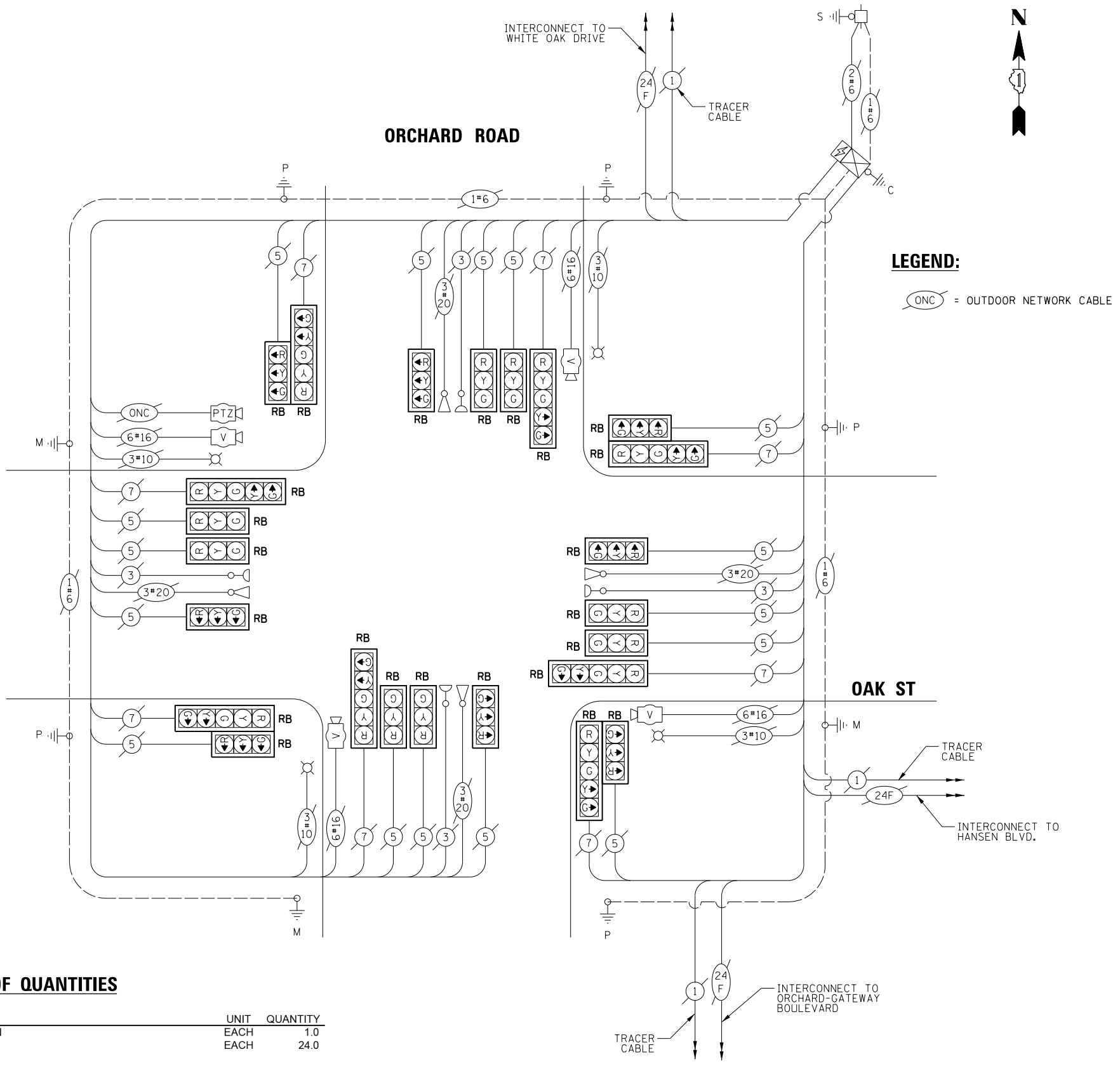
TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	14	12	45	75.6
SOLID ARROW (RED)	12	10	50	60.0
(GREEN & YELLOW)	40	10	10	40.0
FLASHING ARROW	-	10	5	-
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	6	250	50	750.0
TOTAL =				1291.6

ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, IL 60175
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	24.0

CABLE PLAN
(NOT TO SCALE)



TS SHT NO. 81

FILE NAME 027_Orchard-Oak_02.CAB Rev	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

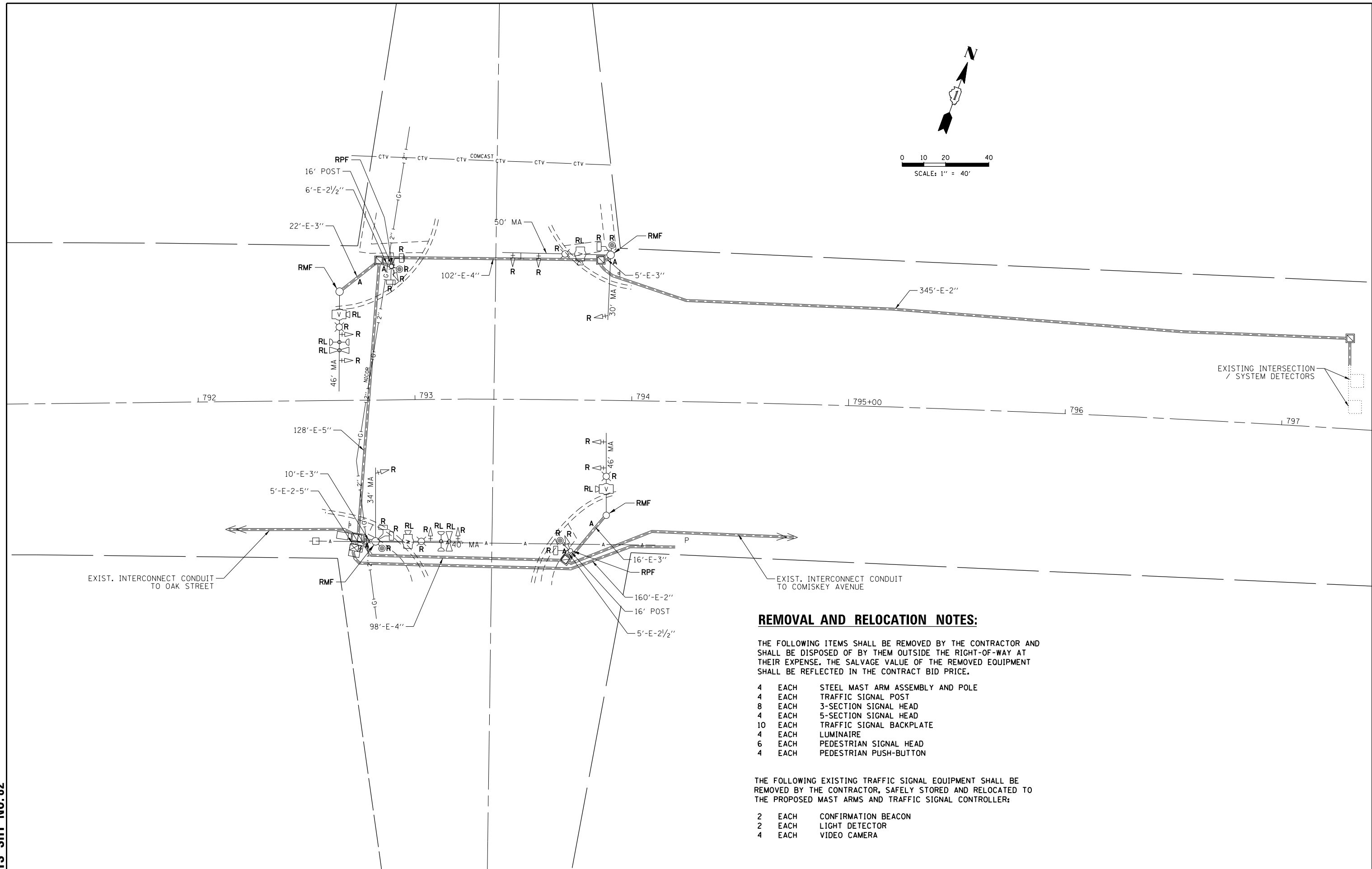
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ORCHARD ROAD AND OAK STREET

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	122
CONTRACT NO. 61E74			HSP- W3HX(781)	

DATE	BY	SURVEYED	PLAN
		ALIGNED	NOTE BOOK
		RT. OF WAY CHECKED	NO.
		ADD. FILE NAME	
CHRISTOPHER B. BURKE ENGINEERING LTD. 9575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (647) 923-5938			
DATE	BY	SURVEYED	PROFILE
		GRADES CHECKED	NOTE BOOK
		BLM. NOTED	NO.
		STRUCTURE NOTATIONS CHK'D	

TS SHT NO.82



REMOVAL AND RELOCATION NOTES:

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

- 4 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 8 EACH 3-SECTION SIGNAL HEAD
- 4 EACH 5-SECTION SIGNAL HEAD
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH LUMINAIRE
- 6 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR
- 4 EACH VIDEO CAMERA

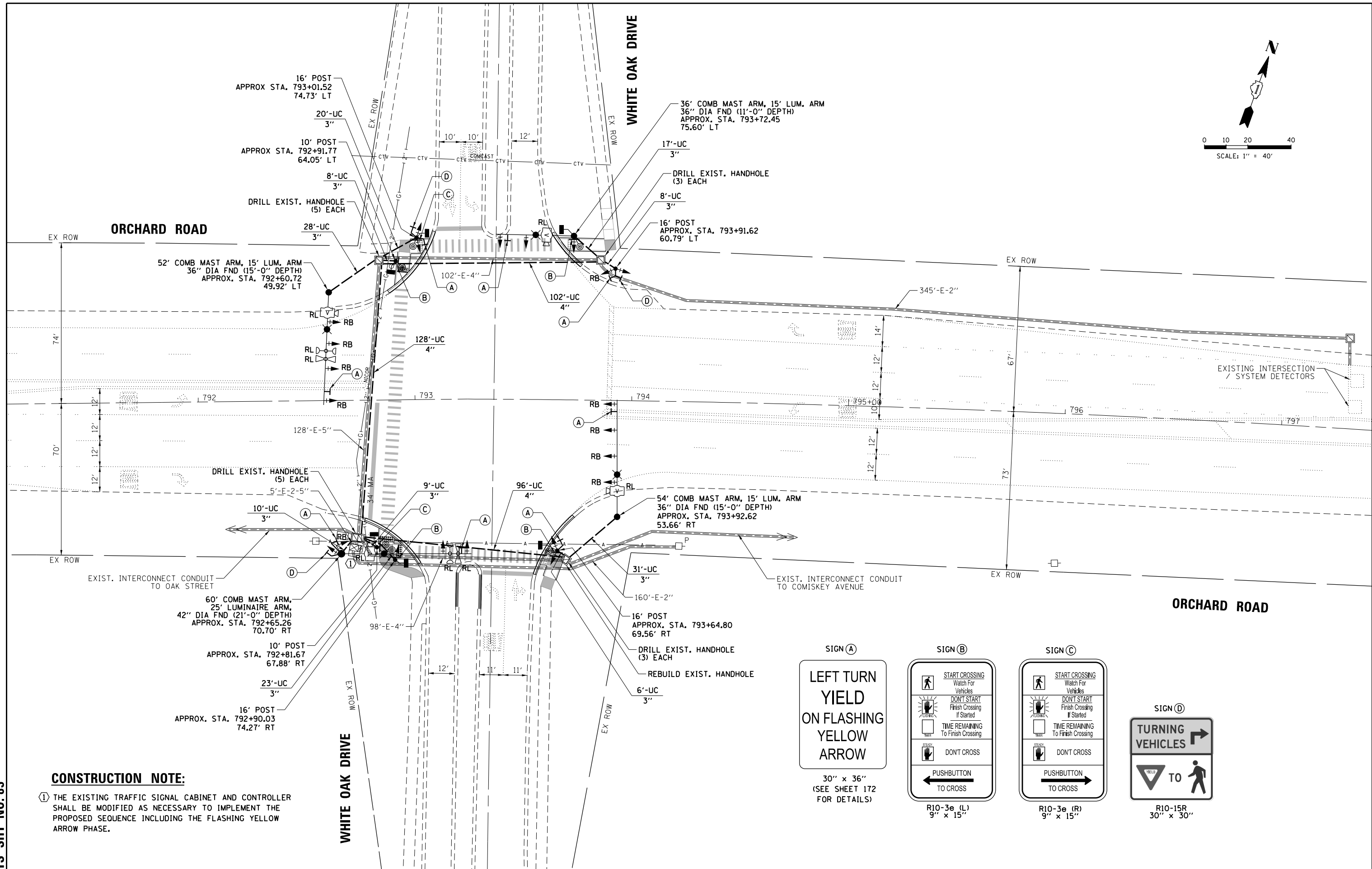
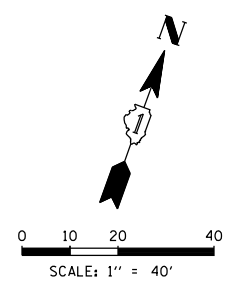
FILE NAME 028_Orchard-White Oak 01.REM	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN ORCHARD ROAD AND WHITE OAK DRIVE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	123	
		CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74					
		DATE - 11/16/2018	REVISED -			SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: OKWD

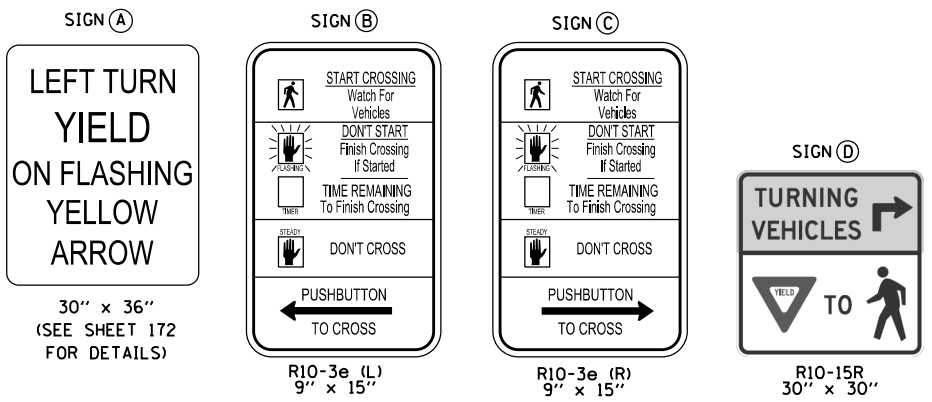
DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: OKWD

CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500

TS SHT NO. 83



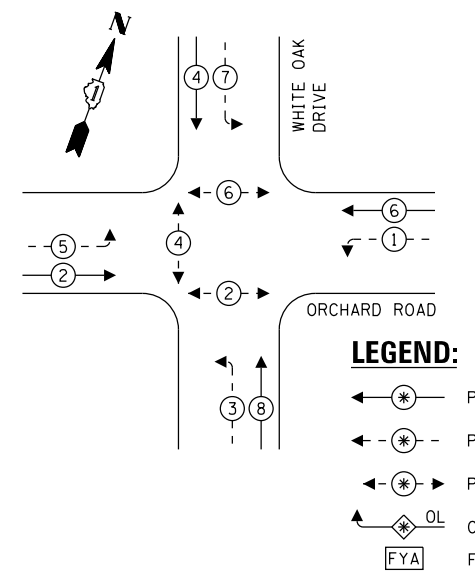
CONSTRUCTION NOTE:
 ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.



FILE NAME 028_Orchard-White Oak 02.MDD	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN ORCHARD ROAD AND WHITE OAK DRIVE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		DRAWN - FPB	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	VAR.	12-00424-00-SP	KANE	171	124
		CHECKED - GMZ	REVISED -											
		DATE - 11/16/2018	REVISED -											
										CONTRACT NO. 61E74		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT HSJP-W3HX(781)		

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 PLAN: _____ CHECKED: _____
 NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PROFILE: _____ BLK. NOTED: _____
 NOTE BOOK: _____ STRUCTURE NOTATIONS: CWK0

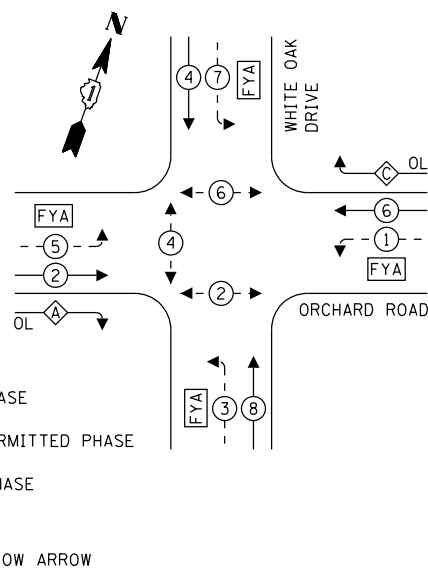
EXISTING CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← * - - → PROTECTED/PERMITTED PHASE
- ← * - P → PEDESTRIAN PHASE
- ← OL → OVERLAP
- [FYA] FLASHING YELLOW ARROW

PROPOSED CONTROLLER SEQUENCE

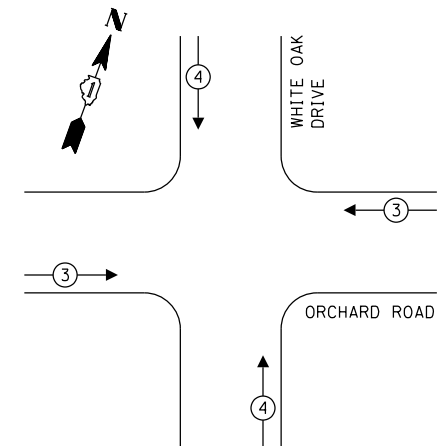


RIGHT TURN OVERLAP

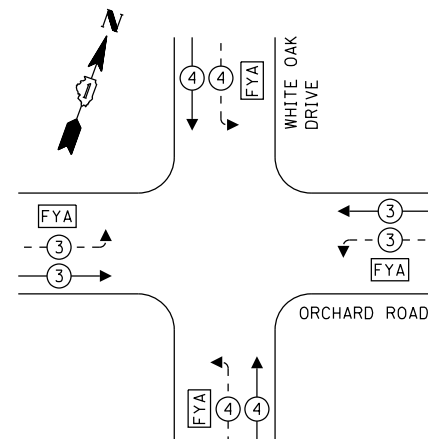
PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	11	50	71.5
(YELLOW)	13	20	5	13.0
(GREEN)	13	12	45	70.2
SOLID ARROW (RED)	8	10	50	22.0
(GREEN & YELLOW)	22	10	10	16.0
FLASHING ARROW	8	10	5	4.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	4	190	50	380.0
TOTAL =				995.7

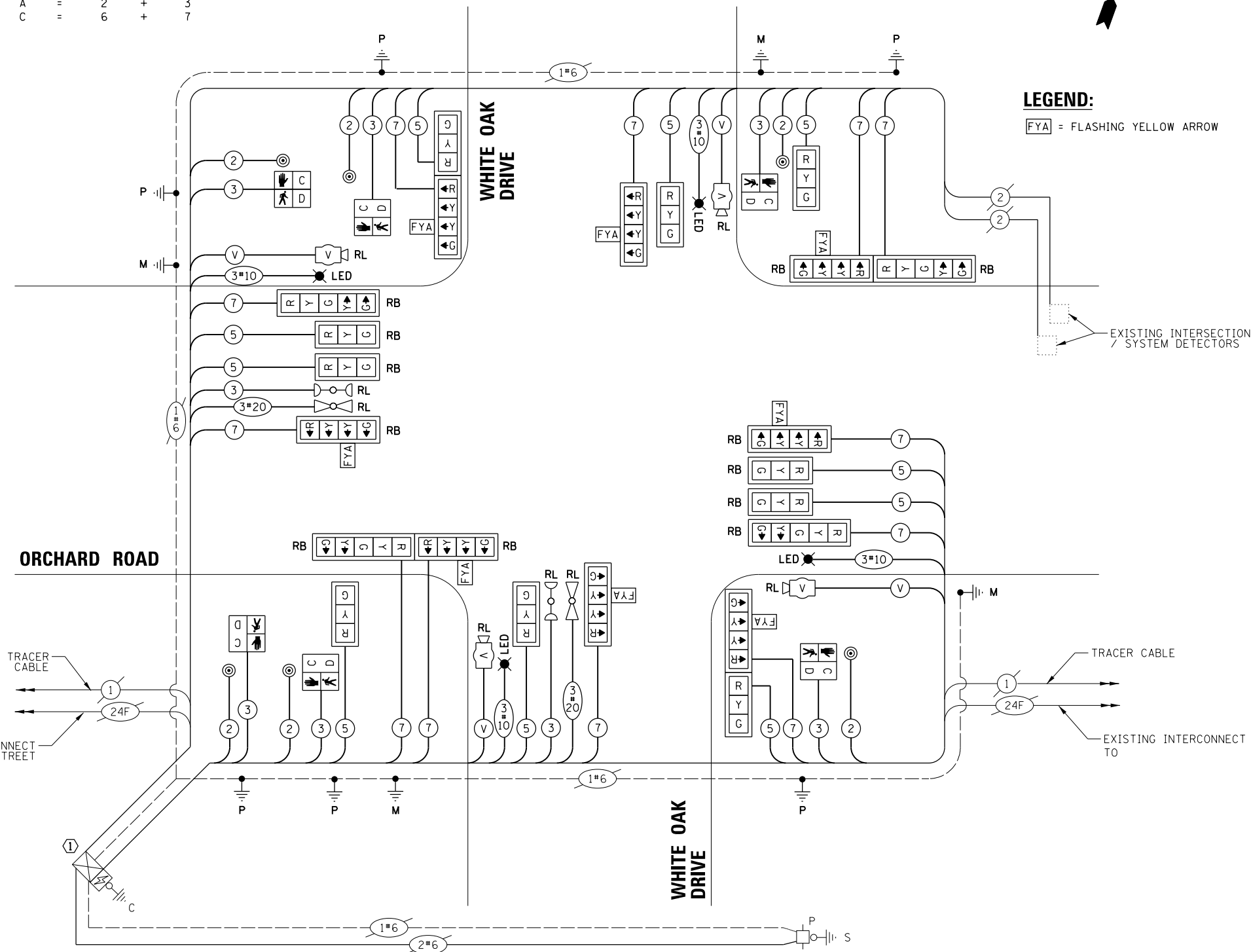
ENERGY COSTS TO:

VILLAGE OF N. AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505

ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTE:

- ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.



LEGEND:

[FYA] = FLASHING YELLOW ARROW

EXISTING INTERSECTION / SYSTEM DETECTORS

TRACER CABLE

EXISTING INTERCONNECT TO

CABLE PLAN

(NOT TO SCALE)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ORCHARD ROAD AND WHITE OAK DRIVE

FILE NAME: 028_Orchard-White Oak 03.CAB

USER NAME = fbariso
 DESIGNED - TFS
 DRAWN - FPB
 CHECKED - GMZ
 PLOT SCALE = 48"
 PLOT DATE = 11/16/2018

REVISIONS:
 REVISED -
 REVISED -
 REVISED -
 REVISED -
 DATE - 11/16/2018

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	125
CONTRACT NO. 61E74			HS1P-W3HX(781)	

TS SHT NO.84

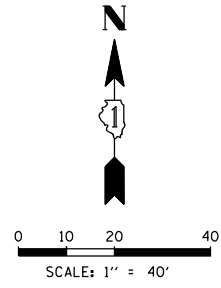
REMOVAL AND RELOCATION NOTES:

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

- 3 EACH STEEL MAST ARM ASSEMBLY AND POST
- 1 EACH TRAFFIC SIGNAL POST
- 6 EACH 3-SECTION SIGNAL HEAD
- 6 EACH 5-SECTION SIGNAL HEAD
- 9 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH LUMINAIRE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 3 EACH VIDEO CAMERA

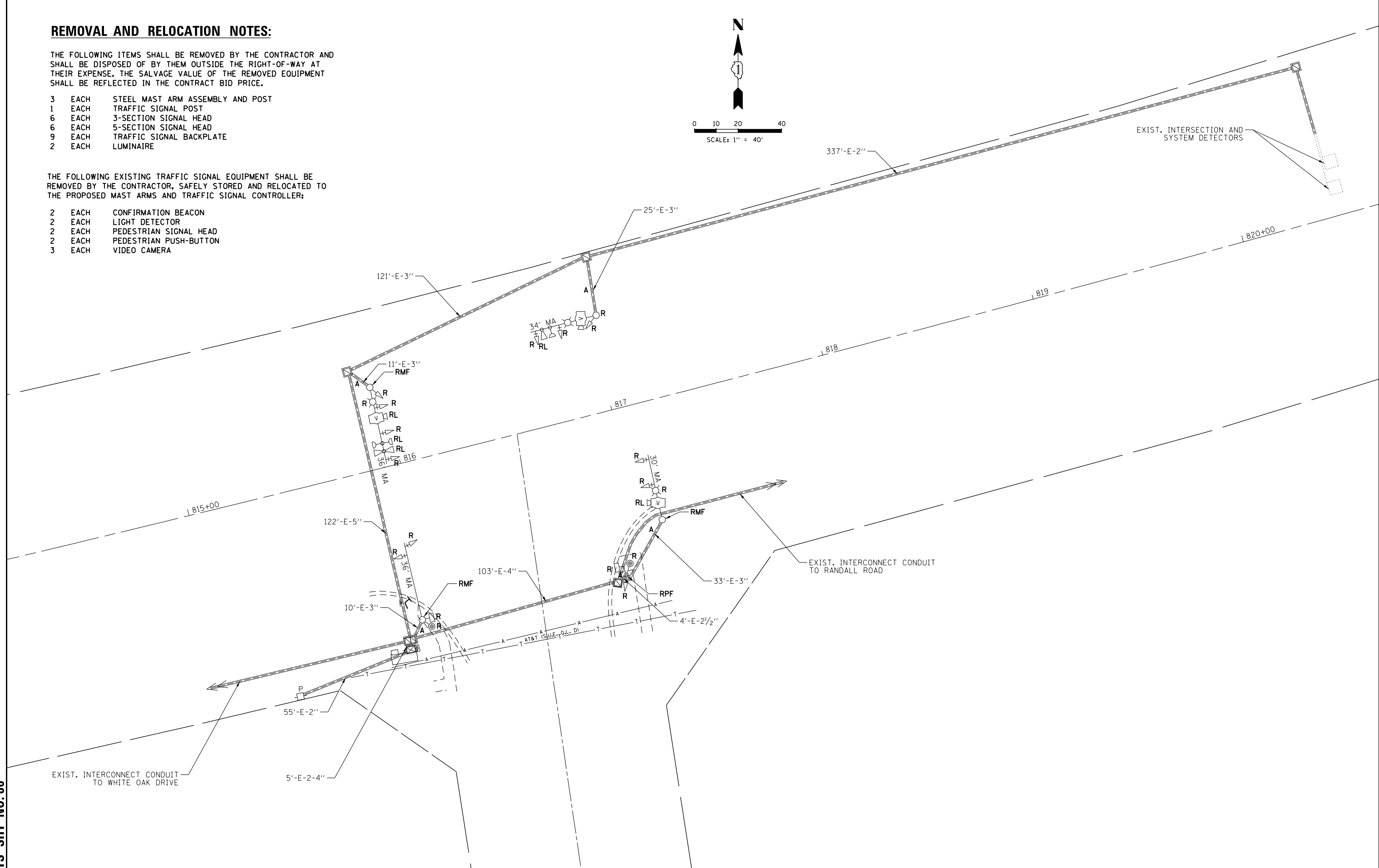


DATE	
BY	
SURVEYED	ALIGNED
RT. OF WAY CHECKED	ADJUSTED
PLAN	NO.
NOTE BOOK	
NO.	
DATE	
BY	
SURVEYED	ALIGNED
GRADES CHECKED	ADJUSTED
PLAN	NO.
NOTE BOOK	
NO.	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 822-5500

DATE	
BY	
SURVEYED	ALIGNED
GRADES CHECKED	ADJUSTED
PLAN	NO.
NOTE BOOK	
NO.	

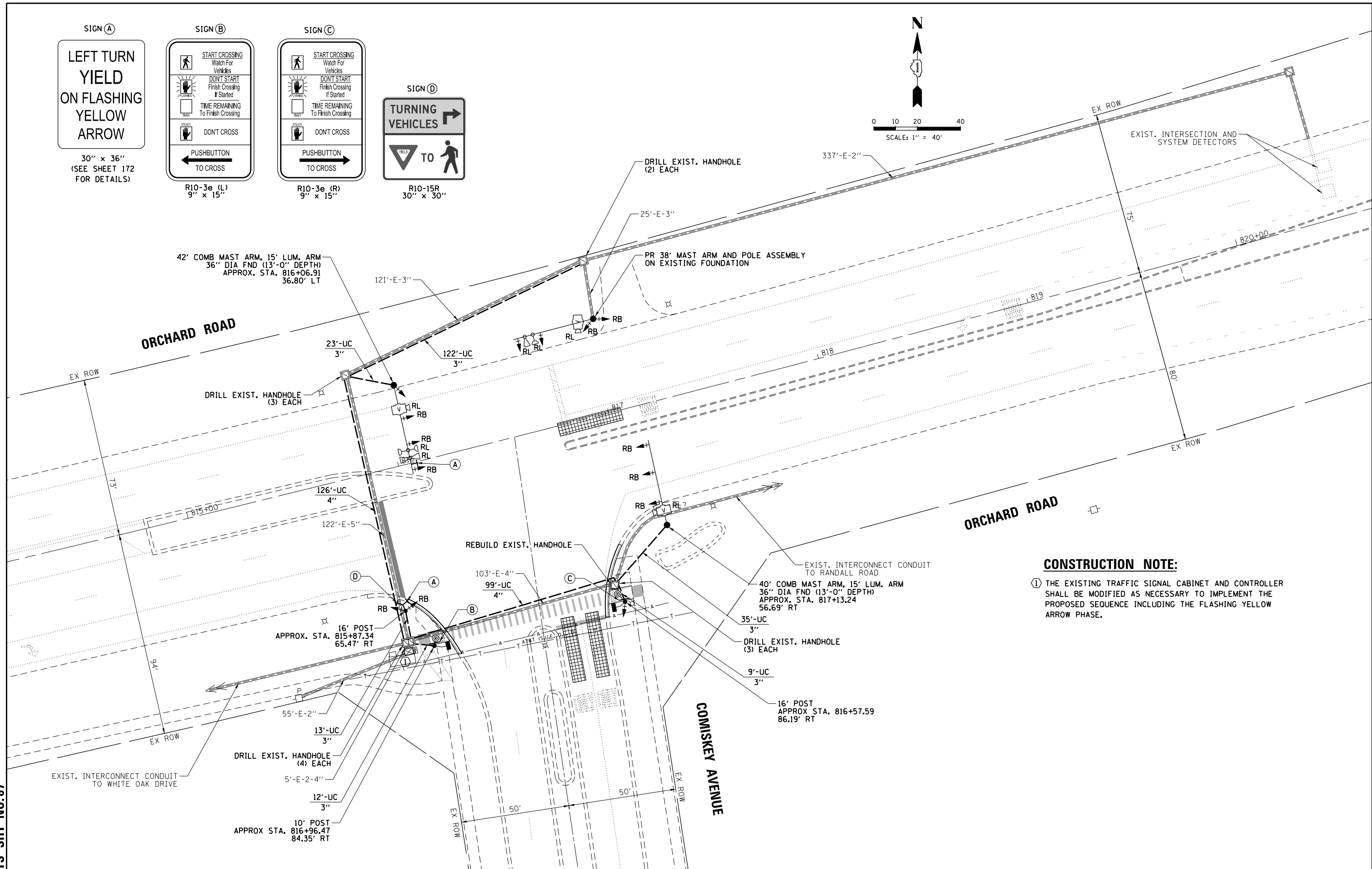
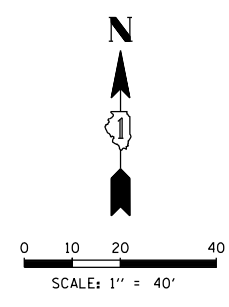
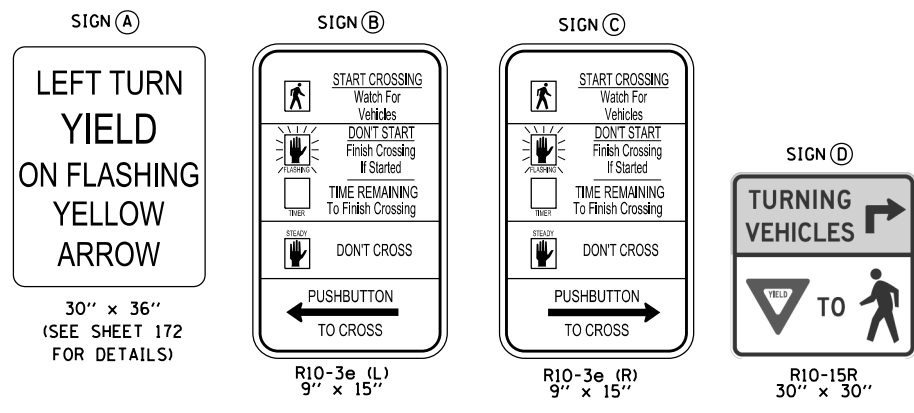
TS SHT NO. 86



FILE NAME 029_Orchard-Comiskey 01_REM	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN ORCHARD ROAD AND COMISKEY AVENUE				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - FPB	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	VAR.	12-00424-00-SP	KANE	171	127
		CHECKED - GMZ	REVISED -						CONTRACT NO. 61E74					
		DATE - 11/16/2018	REVISED -						FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		HSIP-W3HX(781)	

DATE _____ BY _____
 SURVEYED _____
 PLAN _____
 NOTE BOOK _____
 NO. _____
 SURVEYED _____
 PROFILE _____
 NOTE BOOK _____
 NO. _____
 GRADES CHECKED _____
 ELEM. NOTED _____
 STRUCTURE NOTATIONS OKWD

TS SHT NO.87



CONSTRUCTION NOTE:
 ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.

FILE NAME 029_Orchard-Comiskey 02.MXD	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

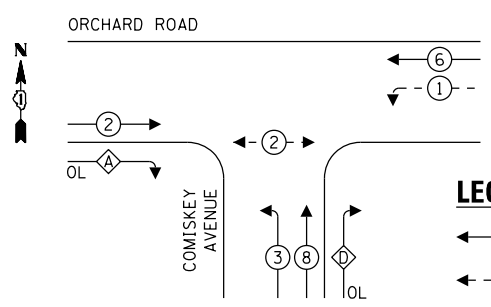
**TRAFFIC SIGNAL MODIFICATION PLAN
 ORCHARD STREET AND COMISKEY AVENUE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	128
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

DATE: _____ BY: _____
 SURVEYED: _____ ALIGNED: _____
 GRADES CHECKED: _____ RT. OF WAY CHECKED: _____
 PLAN NO. _____ NOTE BOOK NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5930
 DATE: _____ BY: _____
 SURVEYED: _____ GRADES CHECKED: _____
 PLAN NO. _____ NOTE BOOK NO. _____
 STRUCTURE NOTATIONS: CWK

TS SHT NO. 88

EXISTING CONTROLLER SEQUENCE

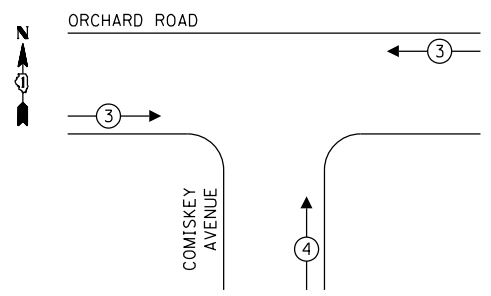


LEGEND:
 ← * → PROTECTED PHASE
 ← * - - PROTECTED/PERMITTED PHASE
 ← * → PEDESTRIAN PHASE
 ← * OL → OVERLAP
 FYA FLASHING YELLOW ARROW

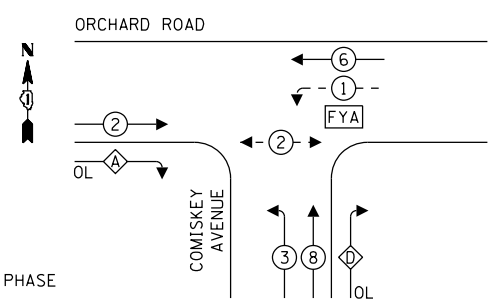
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8	+ 1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



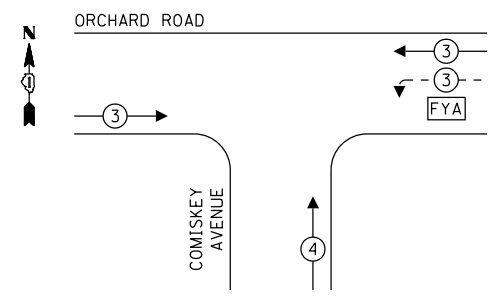
PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
D	= 8+Y+R	+ 1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



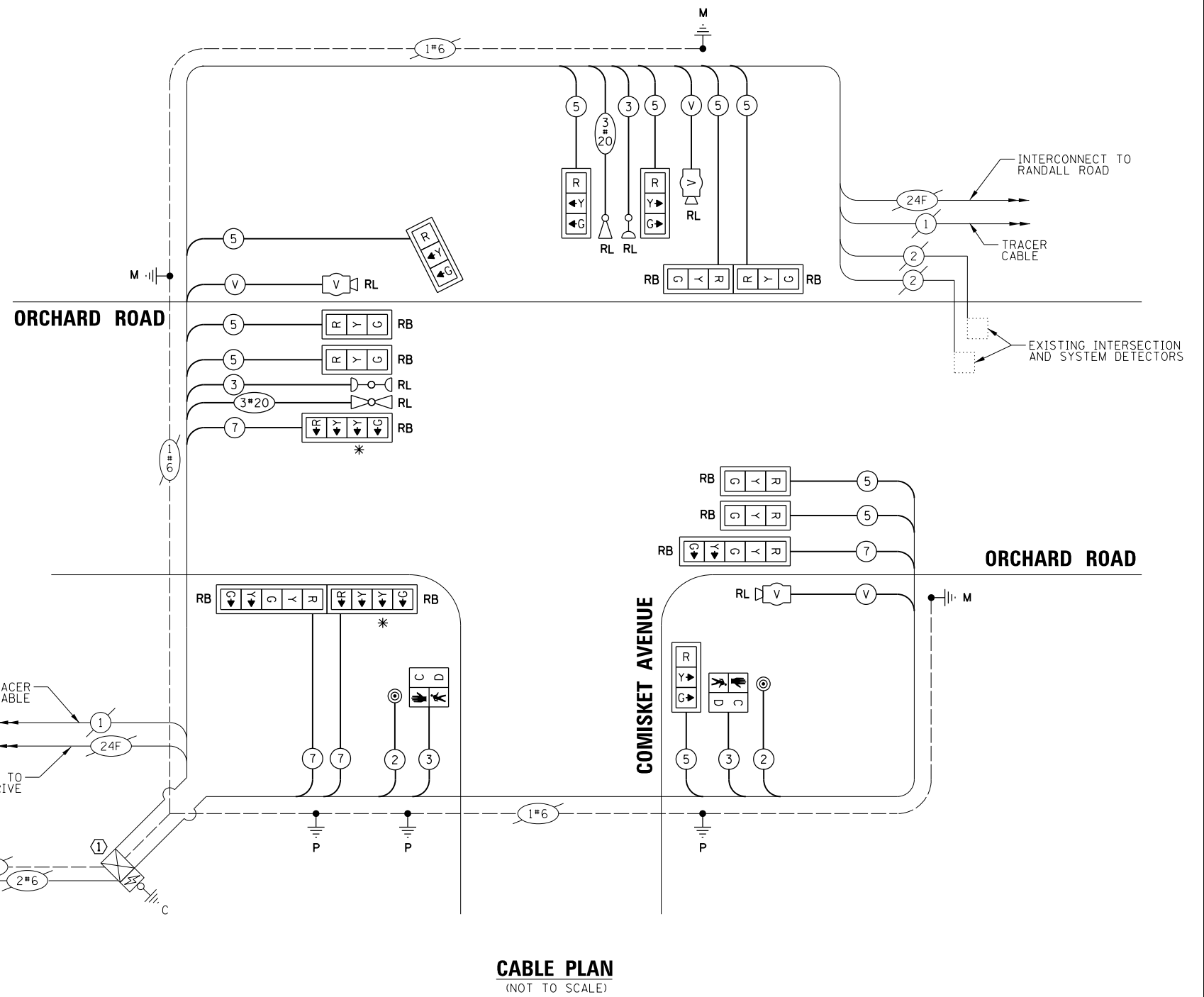
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	8	20	5	8.0
(GREEN)	8	12	45	43.2
SOLID ARROW (RED)	2	10	50	10.0
(GREEN & YELLOW)	16	10	10	16.0
FLASHING ARROW	2	10	5	1.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	190	50	-
TOTAL =				459.2

ENERGY COSTS TO:
 VILLAGE OF N. AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60505
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: (866) 639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: ---

CONSTRUCTION NOTE:
 ① THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE INCLUDING THE FLASHING YELLOW ARROW PHASE.

DESIGNED - TFS	REVISED -
DRAWN - FPB	REVISED -
CHECKED - GMZ	REVISED -
DATE - 11/16/2018	REVISED -



CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

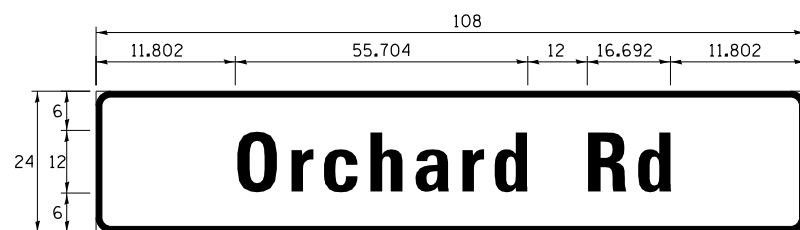
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE ORCHARD ROAD AND COMISKEY AVENUE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	129
CONTRACT NO. 61E74			HSJIP-W3HX(781)	

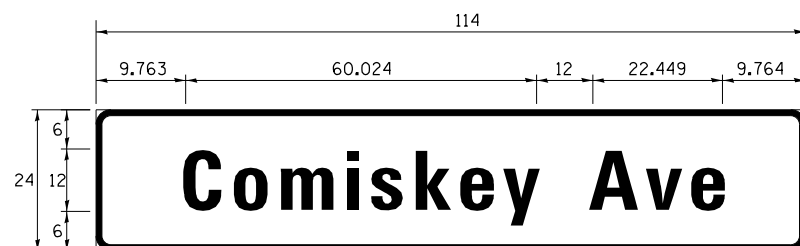
SCALE: SHEET NO. OF SHEETS STA. TO STA.

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	18.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	19.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	21.3
SIGN PANEL - TYPE 2	SQ FT	74.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	243.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	225.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,439.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	193.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	798.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,264.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	539.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	488.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	12.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26.0
DRILL EXISTING HANDHOLE	EACH	12.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1.0
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2.0
TRAFFIC SIGNAL BACKPLATE	EACH	4.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10.0
PEDESTRIAN PUSH-BUTTON	EACH	2.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6,335.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REBUILD EXISTING HANDHOLE	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5.0
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	590.5
ROD AND CLEAN EXISTING CONDUIT	FOOT	375.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

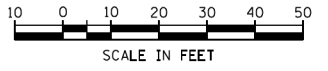
DATE	BY	DATE	BY
SURVEYED	ALIGNED	CHECKED	CHECKED
RT. OF WAY	CHECKED		
NO.			
NO.			

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5939

DATE	BY	DATE	BY
SURVEYED	GRADES	CHECKED	CHECKED
BLM. NOTED	STRUCTURE	NOTATIONS	CHKD
NO.			

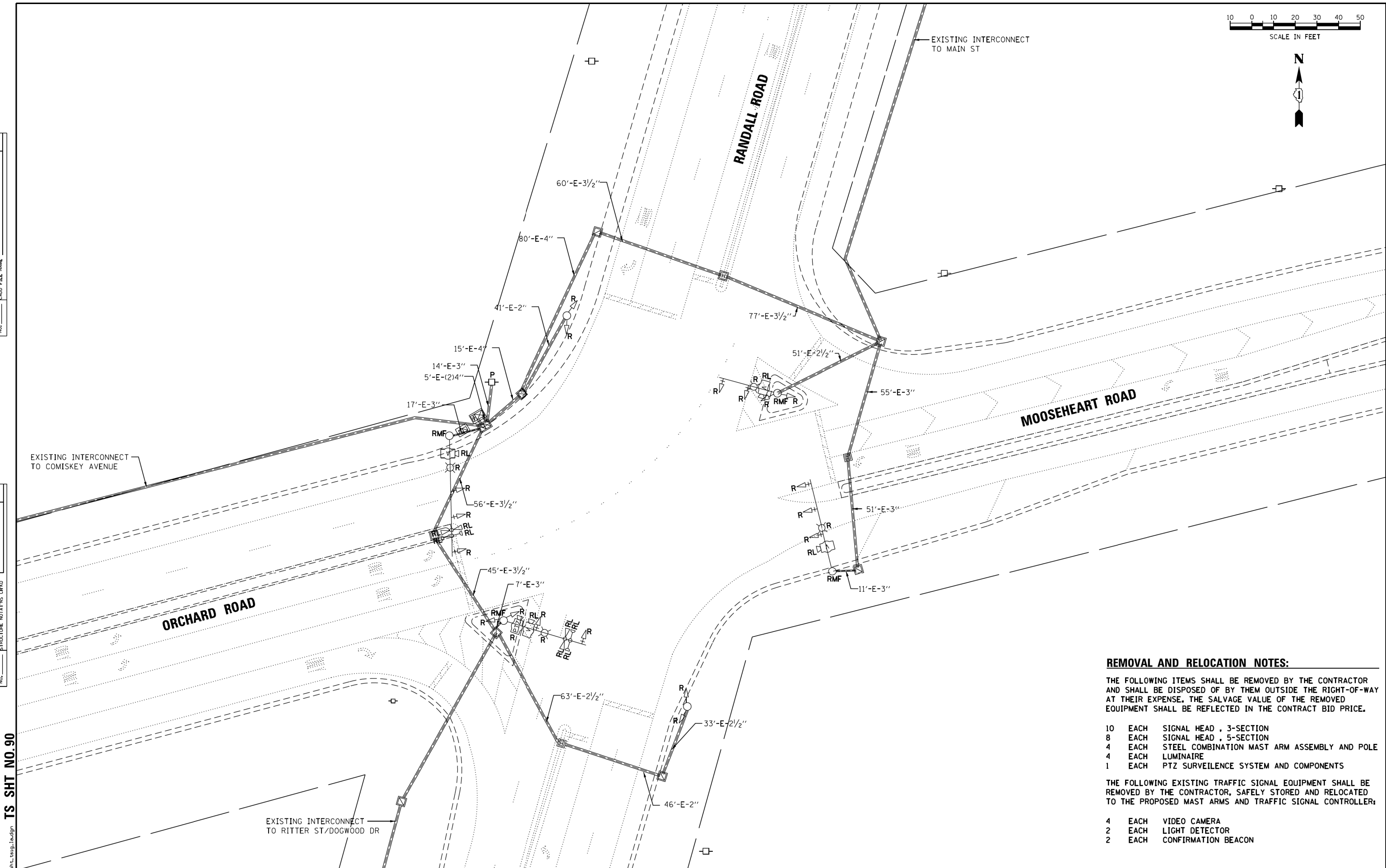
TS SHT NO. 89

FILE NAME 029_Orchard-Comiskey 03.CAB-2	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN ORCHARD ROAD AND COMISKEY AVENUE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
		DRAWN - FPB	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.	VAR.	12-00424-00-SP	KANE	171	130
		CHECKED - GMZ	REVISED -								CONTRACT NO. 61E74					
		DATE - 11/16/2018	REVISED -								FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT HSJIP-W3HX(781)					



DATE	
BY	
PLAN	
NO.	
NOTE BOOK	
CHECKED	
FILE NAME	

DATE	
BY	
PROFILE	
NO.	
NOTE BOOK	
CHECKED	
FILE NAME	



- REMOVAL AND RELOCATION NOTES:**
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
- 10 EACH SIGNAL HEAD, 3-SECTION
 - 8 EACH SIGNAL HEAD, 5-SECTION
 - 4 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
 - 4 EACH LUMINAIRE
 - 1 EACH PTZ SURVEILLANCE SYSTEM AND COMPONENTS
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:
- 4 EACH VIDEO CAMERA
 - 2 EACH LIGHT DETECTOR
 - 2 EACH CONFIRMATION BEACON

TS SHT NO.90

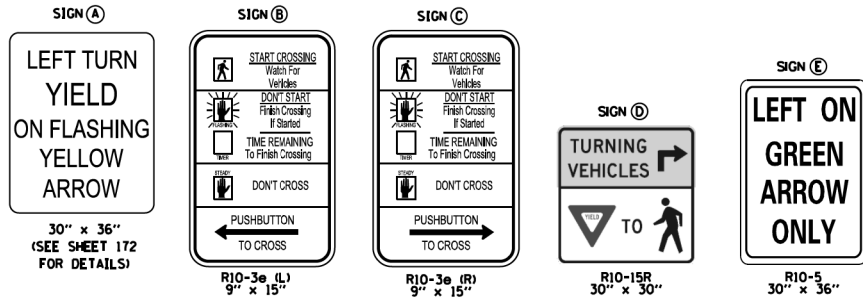
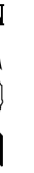
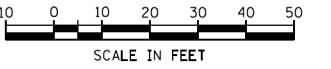


USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48,000/1" = 1/4"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

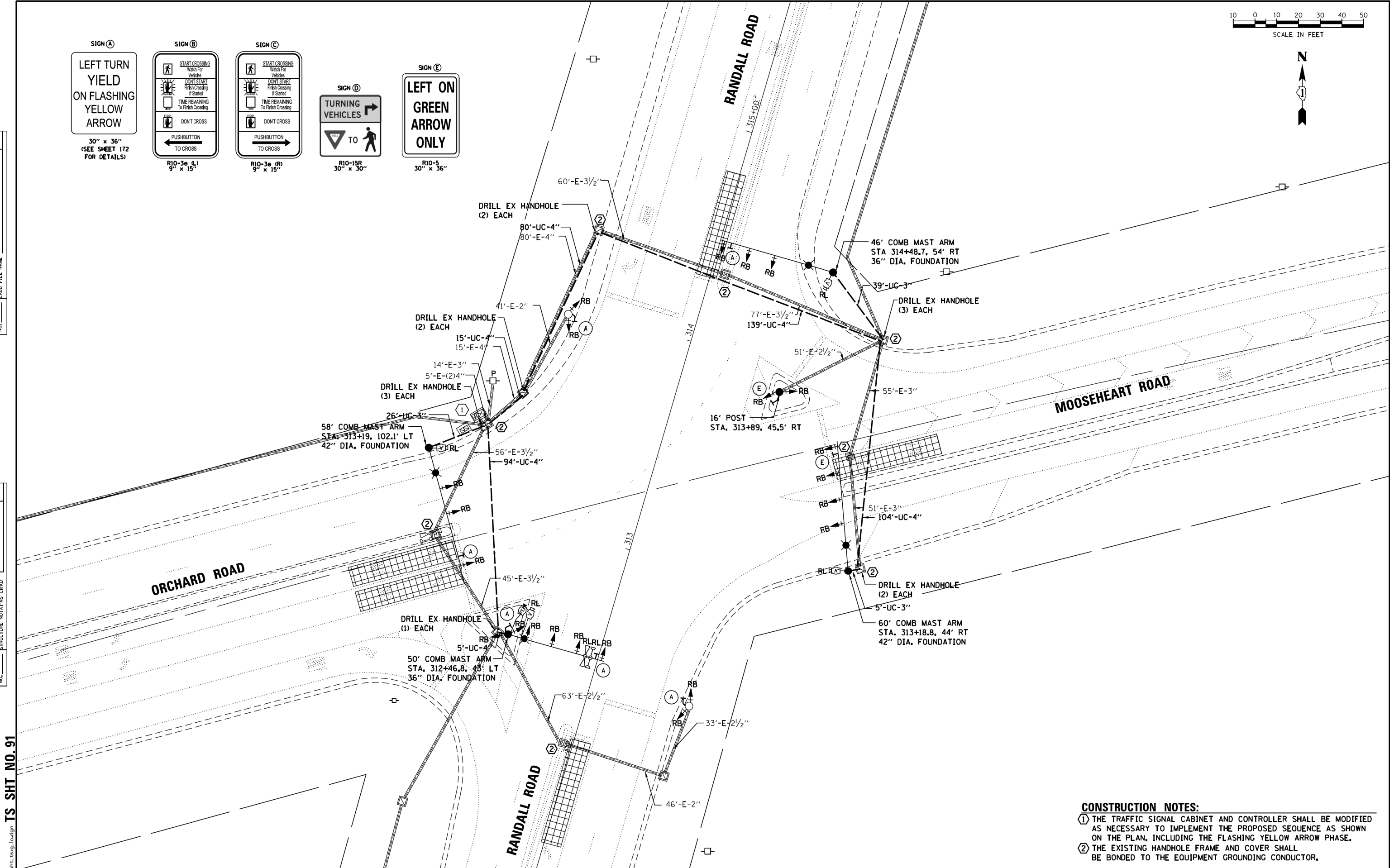
TRAFFIC SIGNAL REMOVAL PLAN RANDALL ROAD AND ORCHARD ROAD	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	131
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



DATE
BY
PLAN
NO. _____
NO. _____
NO. _____
NO. _____
NO. _____
NO. _____

DATE
BY
PROFILE
NO. _____
NO. _____
NO. _____
NO. _____
NO. _____
NO. _____



FILE NAME: KH_sht.tbl; tsig_1c.dgn
TS SHT NO. 91

- CONSTRUCTION NOTES:**
- ① THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
 - ② THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

ESI CONSULTANTS, LTD.
3718 N. WHEELER AVENUE, SUITE 100
MESAZOO, IL 60059-5803
www.esi.com

USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
	CHECKED	REVISED
	DATE	REVISED
PLOT SCALE = 48.0001 / 1"		
PLOT DATE = 11/15/2018		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL MODIFICATION PLAN RANDALL ROAD AND ORCHARD ROAD				
SCALE:	SHEET	OF	SHEETS	STA.
				TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	132
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

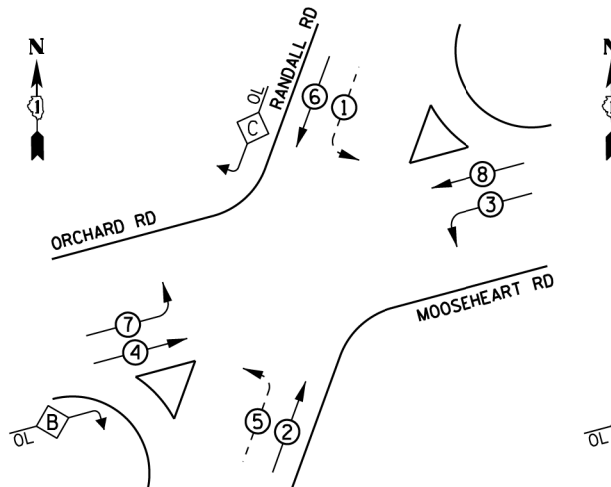
DATE	
BY	
SUBMITTED	
PLOTTED	
ALIGNMENT CHECKED	
FIELD FILE NAME	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SUBMITTED	
GRADES CHECKED	
STRUCTURE	
NOTARIS DRPD	
PROFILE	
NOTE BOOK	
NO.	

TS SHT NO. 92

FILE NAME: KH_sht.ctb; tsig_id.dgn

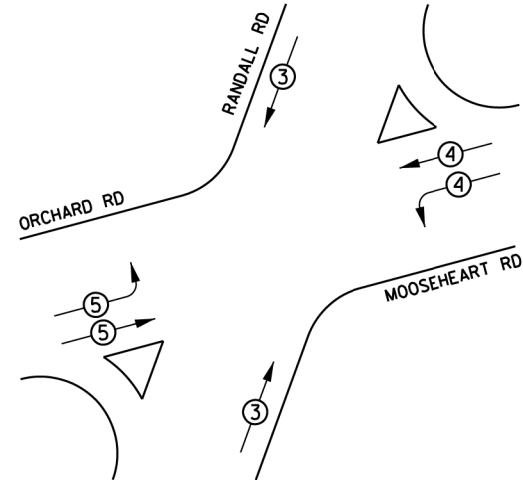
EXISTING CONTROLLER SEQUENCE



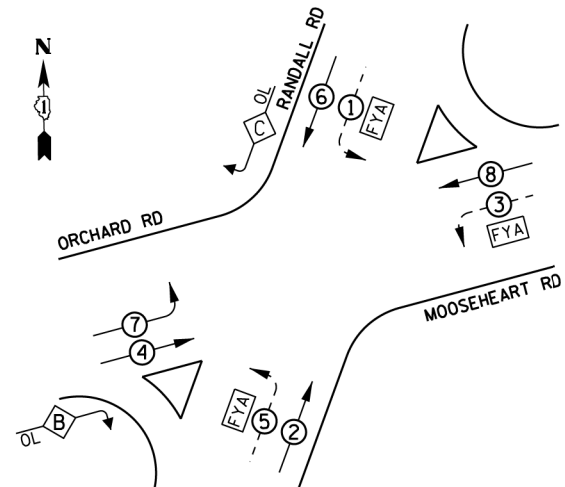
RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



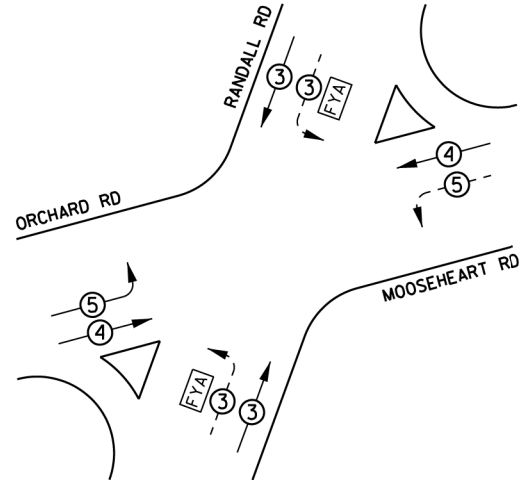
PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ → OVERLAP
- ⊙ FYA FLASHING YELLOW ARROW

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	13	11	0.50	71.5
(YELLOW)	13	20	0.05	13
(GREEN)	13	12	0.45	70.2
SOLID ARROW (RED)	9	10	0.50	45
(GREEN & YELLOW)	26	20	0.10	52
PED. SIGNAL	0	20	1.00	0
CONTROLLER	1	100	1.00	100
UPS	1	25	1.00	25
VIDEO SYSTEM	4	150	1.00	600
LUMINAIRE	4	250	0.50	500
FLASHER	4	10	0.50	20
FLASHING ARROW	6	12	0.05	3.6
TOTAL =				1500.3

ENERGY COSTS TO:

VILLAGE OF NORTH AURORA
25 EAST STATE STREET
NORTH AURORA, ILLINOIS 60542

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: 866-639-3532
COMPANY: COM ED

ACCOUNT NUMBER: _____



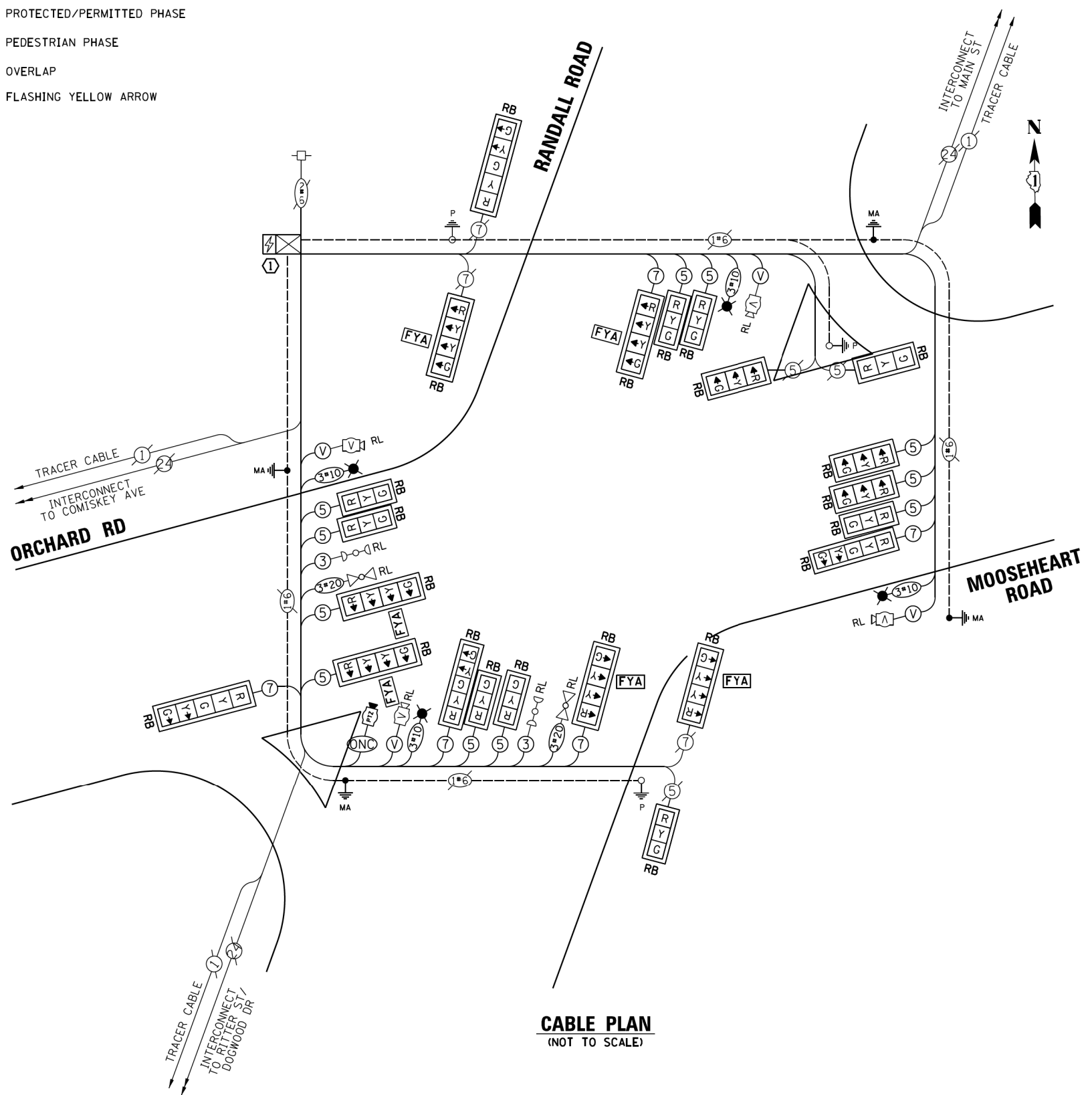
USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 2,000' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE RANDALL ROAD AND ORCHARD ROAD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	133
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				



CABLE PLAN
(NOT TO SCALE)

CONSTRUCTION NOTES:

- ① THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
- ② THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

LEGEND:

- ⊙ FYA = INDICATES FLASHING YELLOW ARROW
- ⊙ ONC = OUTDOOR NETWORK CABLE

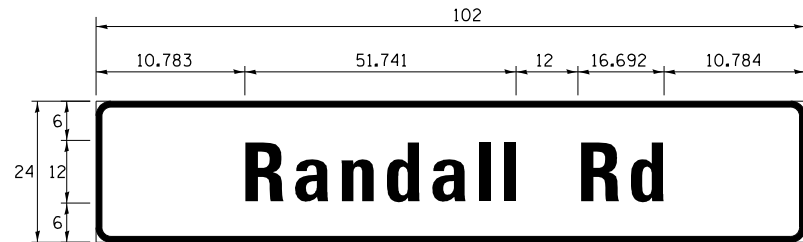
DATE	BY	SURVEYED	ALIGNED	CHECKED	DATE	BY	SURVEYED	ALIGNED	CHECKED
DATE	BY	GRADES CHECKED	BLM. NOTED	STRUCTURE NOTATIONS OK'D	DATE	BY	GRADES CHECKED	BLM. NOTED	STRUCTURE NOTATIONS OK'D

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-9500

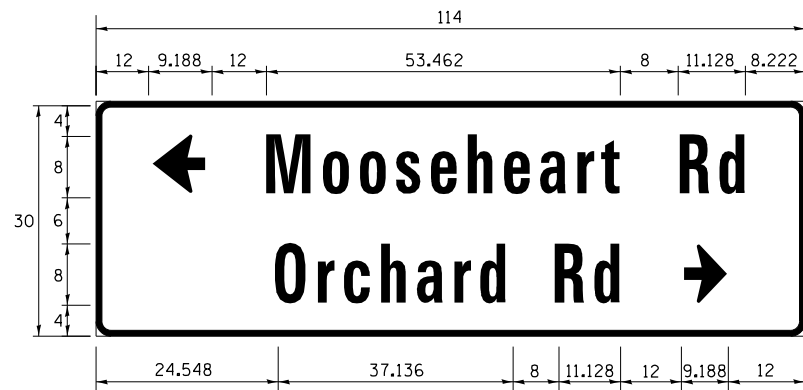


TS SHT NO. 93

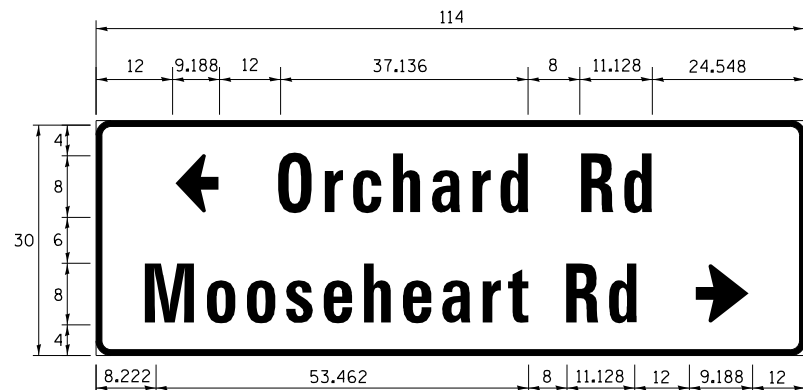
SIGN PANEL – TYPE 1 OR TYPE 2
 ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	23.75	3	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	23.75	3	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	60.0
SIGN PANEL - TYPE 2	SQ FT	81.5
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	65.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	432.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3,161.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	14.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	657.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3,453.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,974.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,249.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1.0
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 60 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	4.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28.0
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	42.0
DRILL EXISTING HANDHOLE	EACH	12.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	21.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	10,607.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3.0
RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	266.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
OUTDOOR RATED NETWORK CABLE	FOOT	185.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1.0

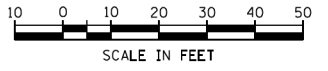
*Nominal Quantity to be Used as Directed by the Engineer

FILE NAME ESL_Sheet-04_QTY_Randall-Orchard	USER NAME = fbariso	DESIGNED - TFS	REVISED -
		DRAWN - FPB	REVISED -
		CHECKED - GMZ	REVISED -
		DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES			
AND MAST ARM MOUNTED STREET NAME SIGN			
RANDALL ROAD AND ORCHARD ROAD / MOOSEHEART ROAD			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

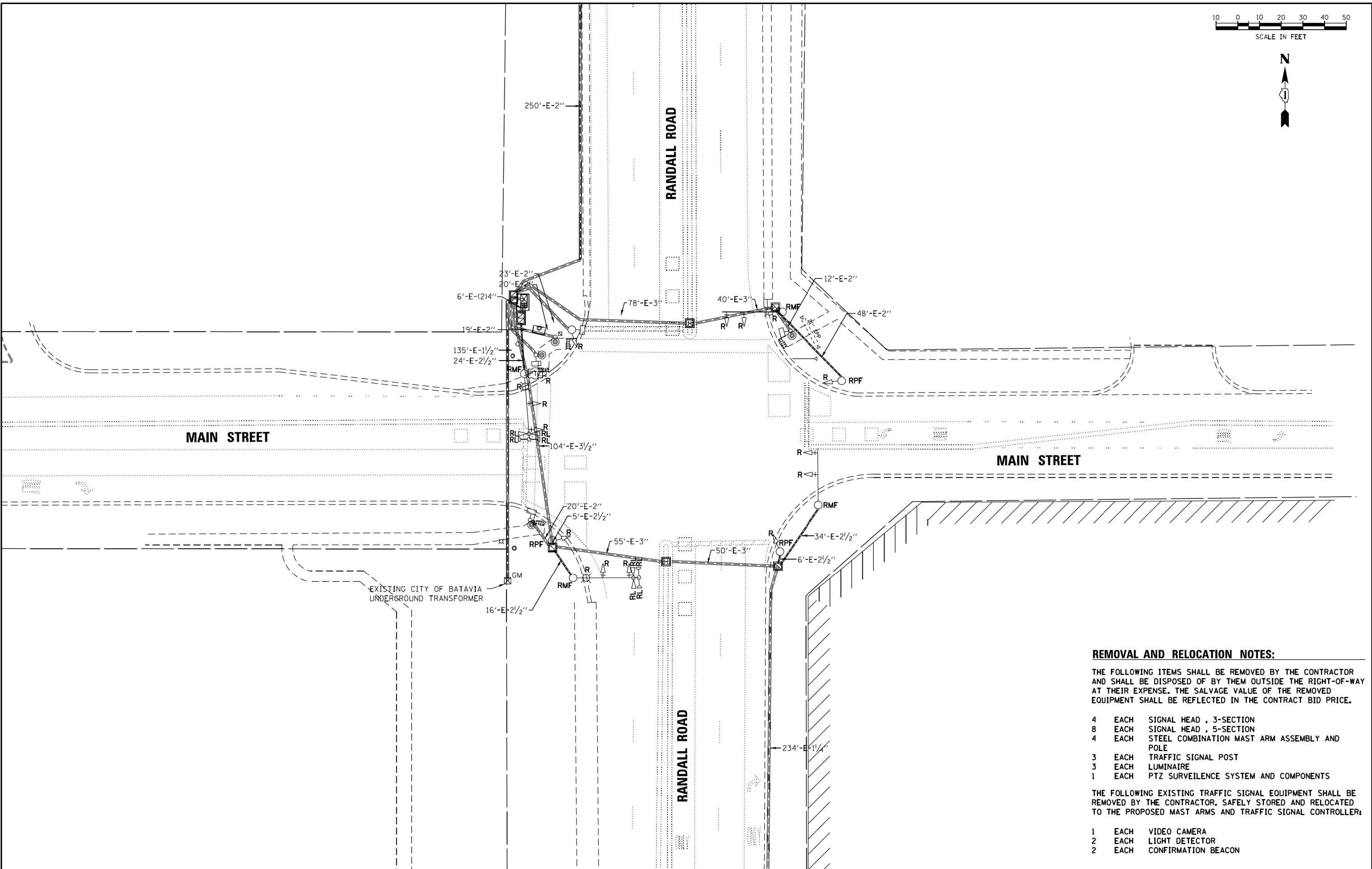
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	134
CONTRACT NO. 61E74				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HS1P-W3HX(781)		



DATE	
BY	
PLAN	SUBMITTED
	PLOTTED
	ALIGNMENT CHECKED
	NOTED FILE NAME
	NO.

DATE	
BY	
PROFILE	SUBMITTED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTATIONS OK'D
	NO.

FILE NAME: KH_111.ctb; 2a.dgn
TS SHT NO.94



- REMOVAL AND RELOCATION NOTES:**
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
- 4 EACH SIGNAL HEAD , 3-SECTION
 - 8 EACH SIGNAL HEAD , 5-SECTION
 - 4 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
 - 3 EACH TRAFFIC SIGNAL POST
 - 3 EACH LUMINAIRE
 - 1 EACH PTZ SURVEILLANCE SYSTEM AND COMPONENTS
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:
- 1 EACH VIDEO CAMERA
 - 2 EACH LIGHT DETECTOR
 - 2 EACH CONFIRMATION BEACON



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48,000/1" = 1/4"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL REMOVAL PLAN
RANDALL ROAD AND MAIN STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-5P	KANE	171	135
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

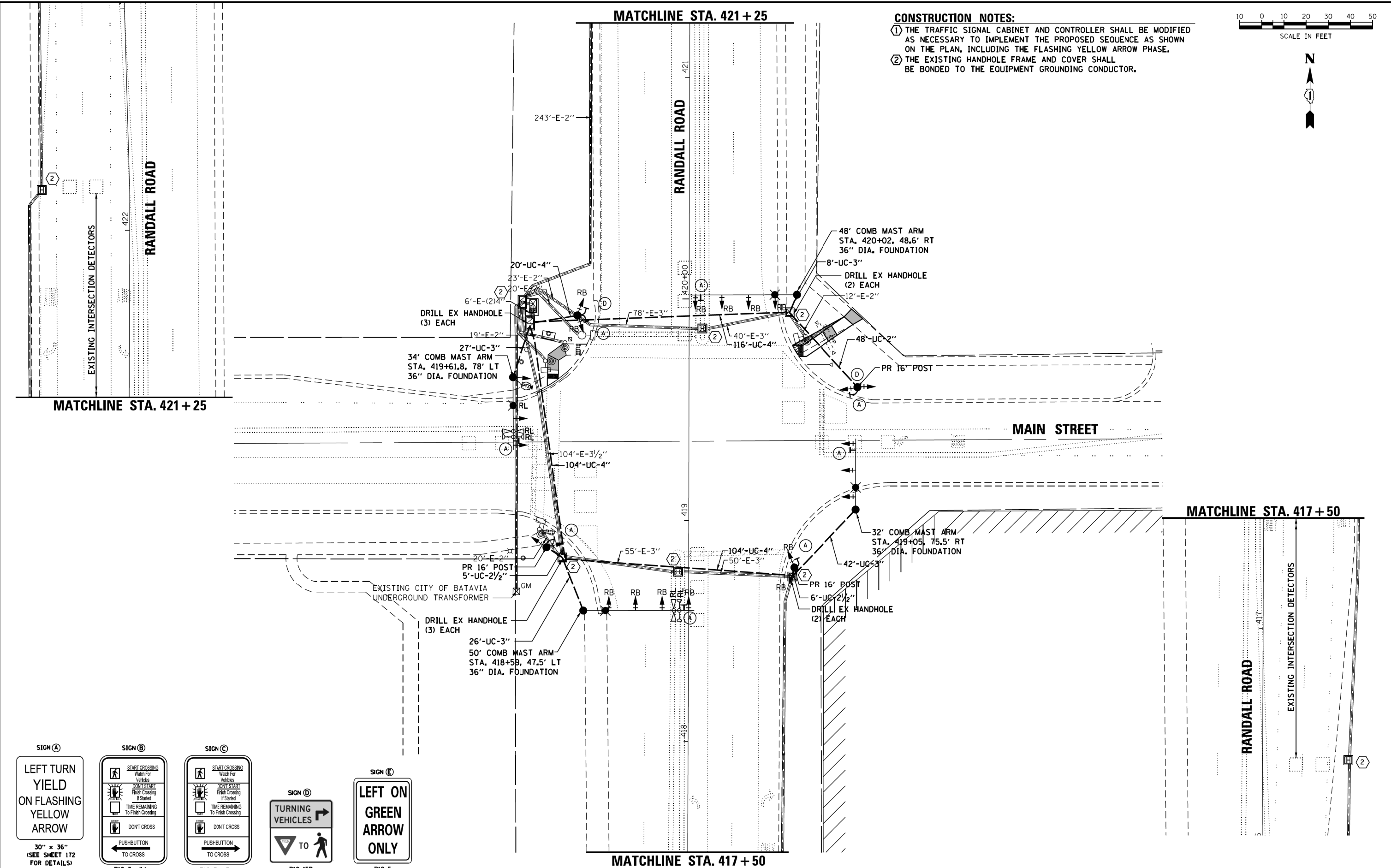
SCALE: SHEET OF SHEETS STA. TO STA.

PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATION DRWD	
	NOTE BOOK NO.	
	CADD FILE NAME	

TS SHT NO. 95

FILE NAME: K:\11\tsig_2a.dgn



ESI ESI CONSULTANTS, LTD.
1778 W. HILL STREET, SUITE 100
NAPERVILLE, IL 60563
www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48.0001' / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

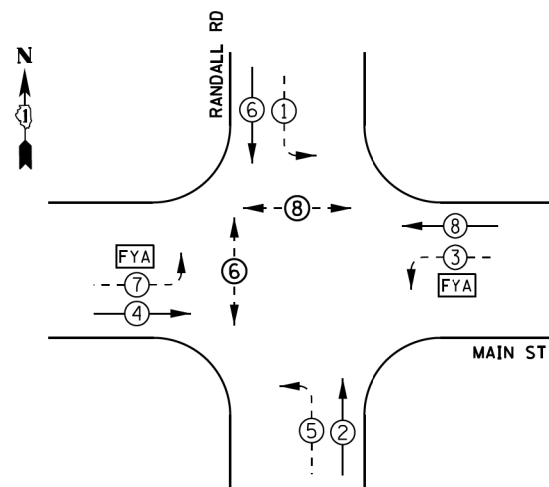
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-SP	KANE	171	136
				CONTRACT NO.
				-
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SUBMITTED	
PLOTTED	
ALIGNMENT CHECKED	
FILE NAME	
NO.	

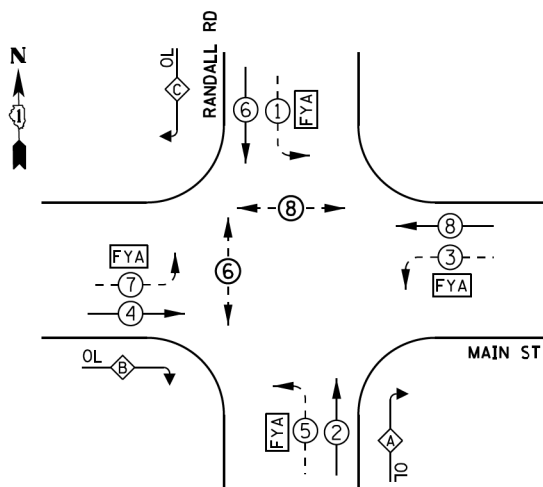
DATE	
BY	
PROFILE	
SUBMITTED	
PLOTTED	
GRADES CHECKED	
STRUCTURE	
NOTATIS	
NO.	

TS SHT NO. 96
FILE NAME: KH_11_15_2018.dwg

EXISTING CONTROLLER SEQUENCE



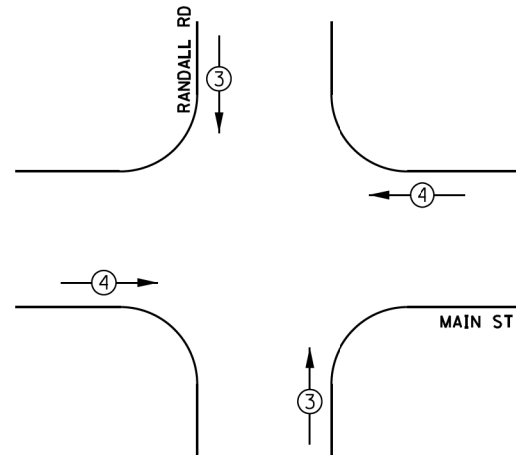
PROPOSED CONTROLLER SEQUENCE



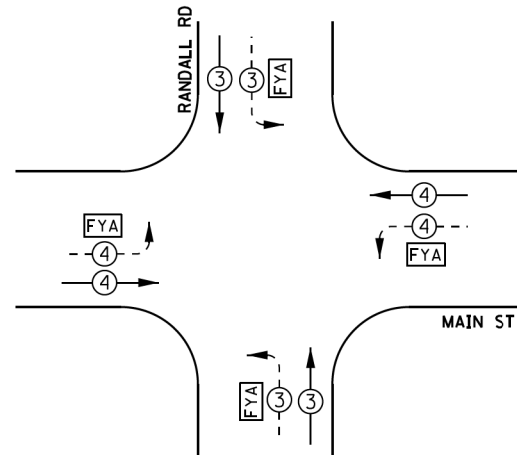
LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ ⊙ ⊙ → OVERLAP
- ⊙ FYA FLASHING YELLOW ARROW

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	14	11	0.50	77
(YELLOW)	14	20	0.05	14
(GREEN)	14	12	0.45	75.6
SOLID ARROW (RED)	8	10	0.50	40
(GREEN & YELLOW)	28	20	0.10	56
PED. SIGNAL	8	20	1.00	160
CONTROLLER	1	100	1.00	100
UPS	1	25	1.00	25
VIDEO SYSTEM	-	150	1.00	0
LUMINAIRE	4	250	0.50	500
FLASHER	4	10	0.50	20
FLASHING ARROW	8	12	0.05	4.8
TOTAL =				1072.4

ENERGY COSTS TO:

CITY OF BATAVIA
200 N RADDANT ROAD
BATAVIA, IL 60510

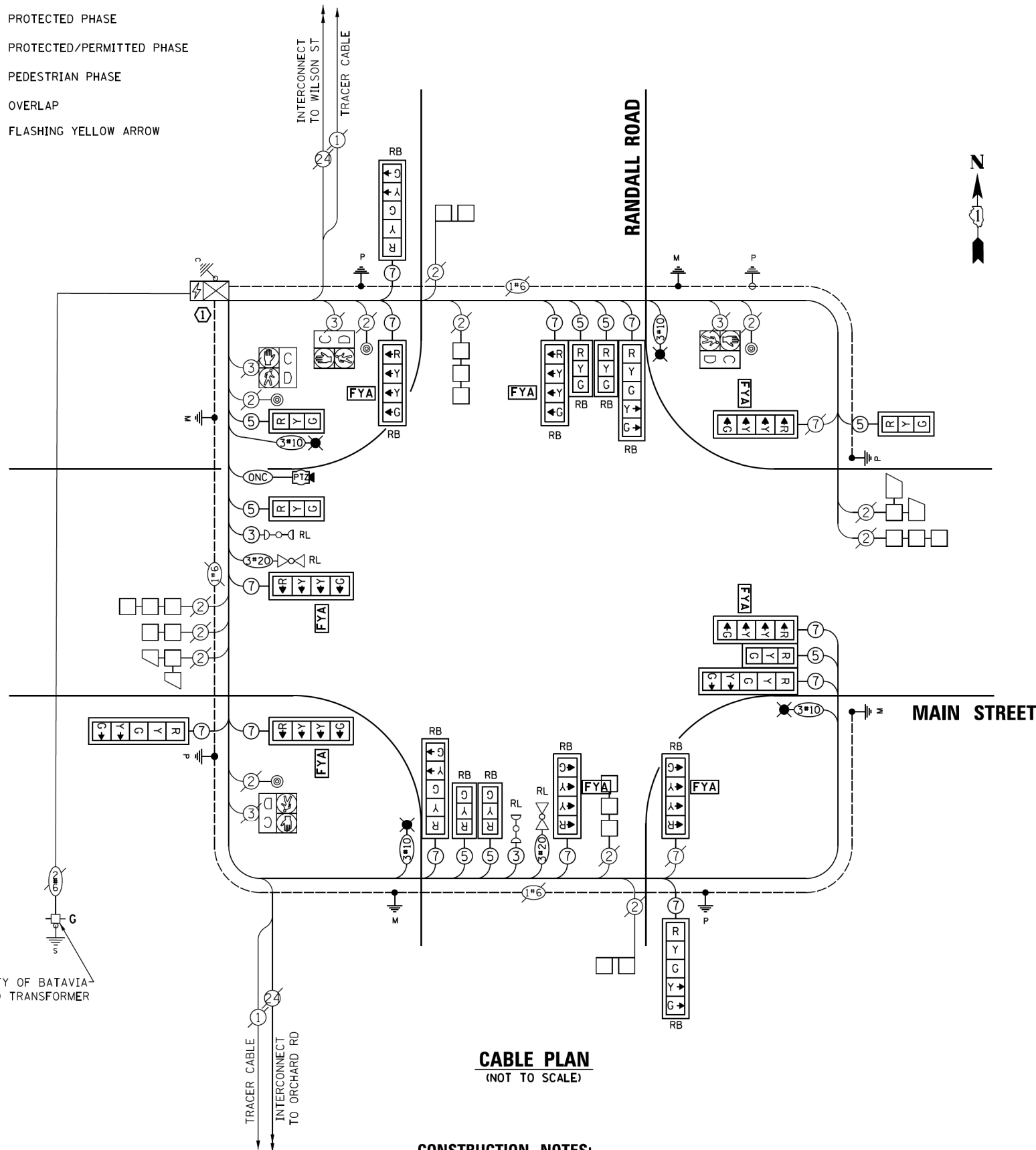
ENERGY SUPPLY: CONTACT: ELECTRIC UTILITY DIVISION
PHONE: 630-454-2350
COMPANY: CITY OF BATAVIA

ACCOUNT NUMBER:



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 2,000' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

EXISTING CITY OF BATAVIA UNDERGROUND TRANSFORMER



CABLE PLAN
(NOT TO SCALE)

CONSTRUCTION NOTES:

- ① THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
- ② THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

LEGEND:

- ⊙ FYA = INDICATES FLASHING YELLOW ARROW
- ⊙ GNC = OUTDOOR NETWORK CABLE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

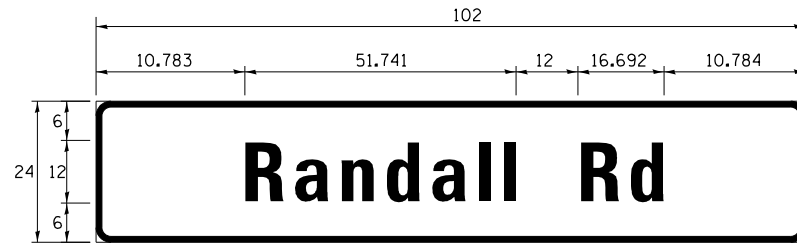
CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
RANDALL ROAD AND MAIN STREET

SCALE: SHEET OF SHEETS STA. TO STA.

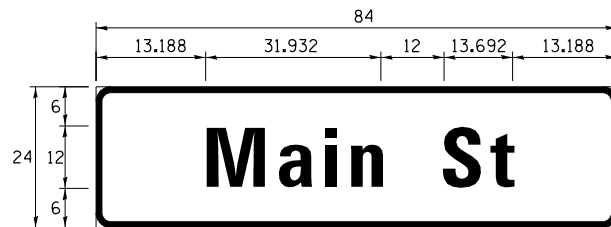
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	137
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	72.5
SIGN PANEL - TYPE 2	SQ FT	68.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	151.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	324.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,175.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	8.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	399.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,840.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,467.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,075.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3.0
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	12.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50.0
DRILL EXISTING HANDHOLE	EACH	10.0
SIGNAL HEAD LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9.0
SIGNAL HEAD LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
TRAFFIC SIGNAL BACKPLATE	EACH	8.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10.0
* DETECTOR LOOP, TYPE I	FOOT	300.0
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	4.0
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	4.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6,185.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	303.5
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
OUTDOOR RATED NETWORK CABLE	FOOT	96.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

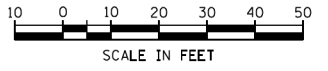
DATE	BY	SURVEYED	ALIGNED	CHECKED	RT. OF WAY CHECKED	PAID FILE NAME
DATE	BY	GRADES CHECKED	BLM. NOTED	STRUCTURE	NOTATIONS	CHKD
PROFILE	NOTE BOOK	NO.	PLAN	NOTE BOOK	NO.	

CHRISTOPHER B. BURKE
ENGINEERING LTD.
3575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(647) 922-5938



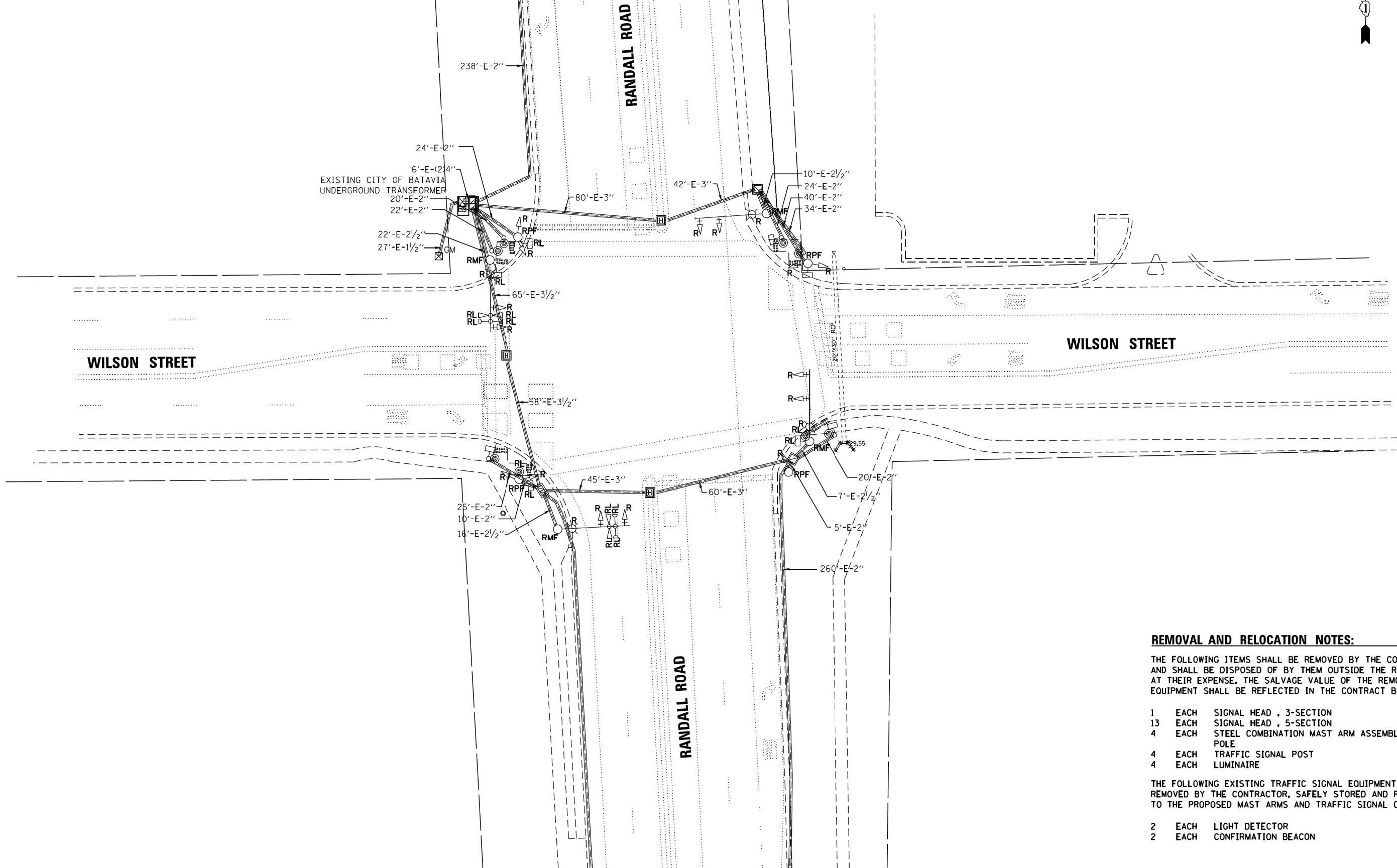
TS SHT NO. 97

FILE NAME ESL_Sheet-08_QTY_Randall-Main	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN RANDALL ROAD AND MAIN STREET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -			VAR.	12-00424-00-SP	KANE	171	138
		CHECKED - GMZ	REVISED -			CONTRACT NO. 61E74				
		PLOT DATE = 11/16/2018	DATE = 11/16/2018			REVISED -	SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____	FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT HSIP-W3HX(781)		



DATE	
BY	
SUBMITTED	
PLANNED	
ALIGNED	
CHECKED	
FILE NAME	
PLAN NO.	

DATE	
BY	
SUBMITTED	
GRADES	
CHECKED	
STRUCTURE	
NOTATION	
PROFILE NO.	



REMOVAL AND RELOCATION NOTES:

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

- 1 EACH SIGNAL HEAD , 3-SECTION
- 13 EACH SIGNAL HEAD , 5-SECTION
- 4 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 4 EACH LUMINAIRE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 2 EACH LIGHT DETECTOR
- 2 EACH CONFIRMATION BEACON

FILE NAME: KH_111.ctb; TS_SHT NO. 98



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48,000/1" = 1/4"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL REMOVAL PLAN
RANDALL ROAD AND WILSON STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	139
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

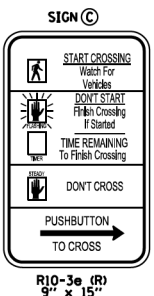
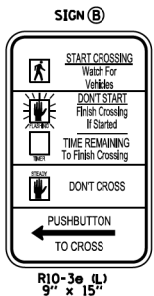
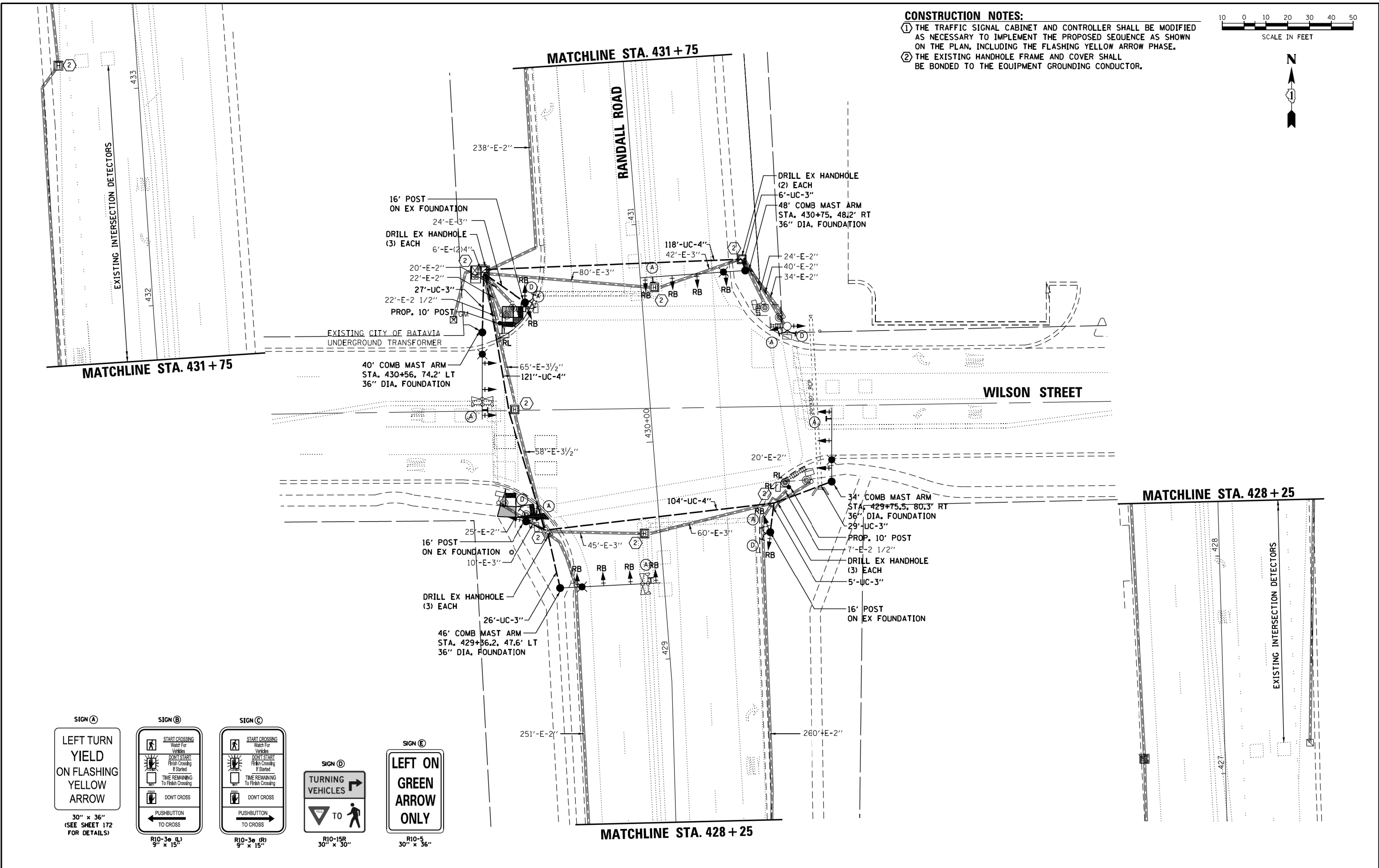
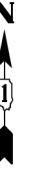
PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	
NO.	ALIGNMENT CHECKED	
	CARD FILE NAME	

PROFILE	SUBMITTED	DATE
NOTE BOOK	GRADES CHECKED	
NO.	STRUCTURE NOTATION DRWD	

FILE NAME: K:\11_11_11.ctb
 TS SHT NO. 99

CONSTRUCTION NOTES:

- THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
- THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
 RANDALL ROAD AND WILSON STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-SP	KANE	171	140
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



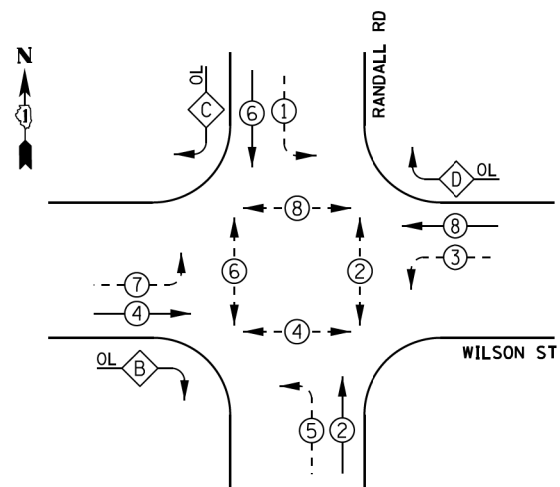
USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48.0001" / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

DATE	
BY	
PLAN	
NO.	
DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
TS SHT NO.	100

DATE	
BY	
PROFILE	
NO.	
DATE	
BY	
TS SHT NO.	100

FILE NAME: KH_101.ctb; 3d.dgn

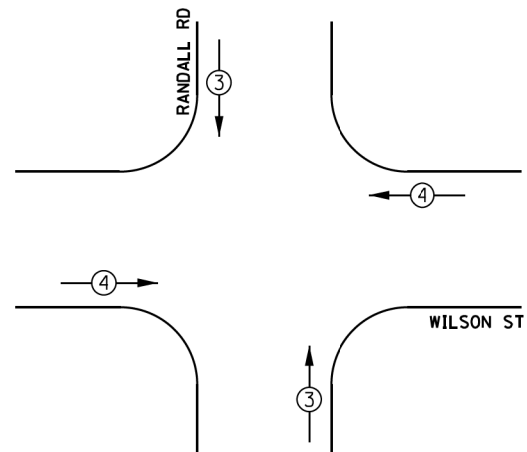
EXISTING CONTROLLER SEQUENCE



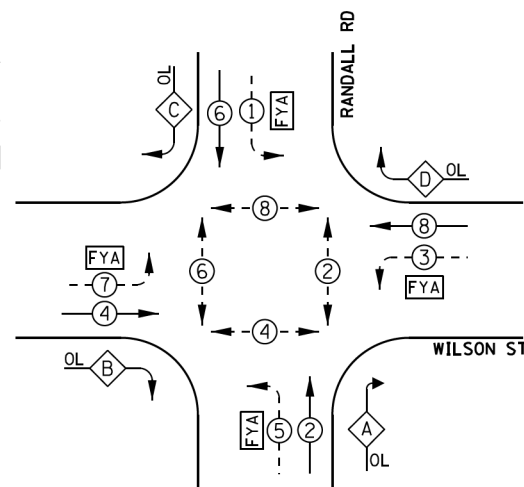
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5
C	6	7
D	8	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



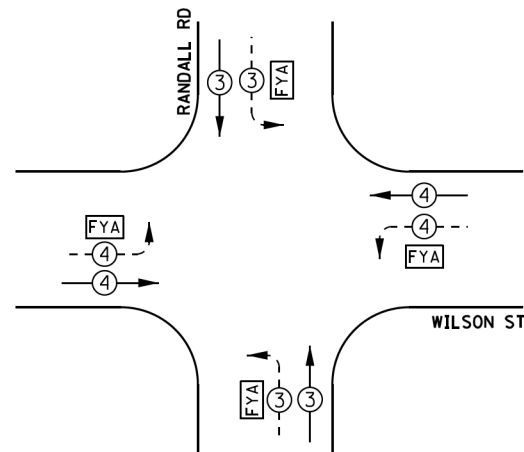
PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	2	3
B	4	5
C	6	7
D	8	1

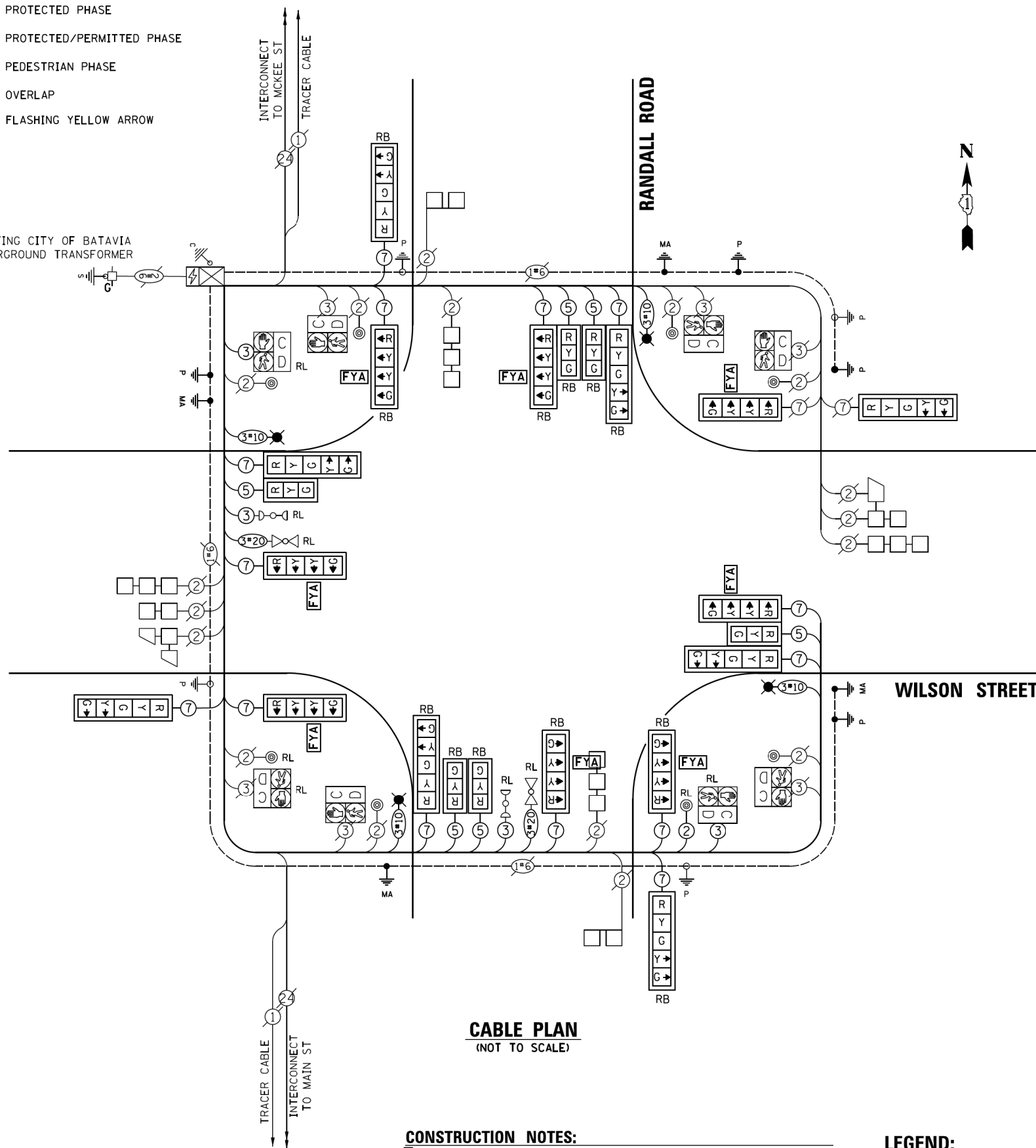
PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ⊙ - PROTECTED PHASE
- ⊙ - PROTECTED/PERMITTED PHASE
- ⊙ - PEDESTRIAN PHASE
- ⊙ - OVERLAP
- FYA - FLASHING YELLOW ARROW

EXISTING CITY OF BATAVIA UNDERGROUND TRANSFORMER



CABLE PLAN
(NOT TO SCALE)

CONSTRUCTION NOTES:

- 1 THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
- 2 THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

LEGEND:

- FYA = INDICATES FLASHING YELLOW ARROW
- ⊙ = OUTDOOR NETWORK CABLE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	14	11	0.50	77
(YELLOW)	14	20	0.05	14
(GREEN)	14	12	0.45	75.6
SOLID ARROW (RED)	8	10	0.50	40
(GREEN & YELLOW)	32	20	0.10	64.0
PED. SIGNAL	8	20	1.00	160
CONTROLLER	1	100	1.00	100
UPS	1	25	1.00	25
VIDEO SYSTEM	-	150	1.00	0
LUMINAIRE	4	250	0.50	500
FLASHER	4	10	0.50	20
FLASHING ARROW	8	12	0.05	4.8
TOTAL =				1080.4

ENERGY COSTS TO:

CITY OF BATAVIA
200 N RADDANT ROAD
BATAVIA, IL 60510

ENERGY SUPPLY: CONTACT: ELECTRIC UTILITY DIVISION
PHONE: 630-454-2350
COMPANY: CITY OF BATAVIA
ACCOUNT NUMBER:



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 2,0000' / in.	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

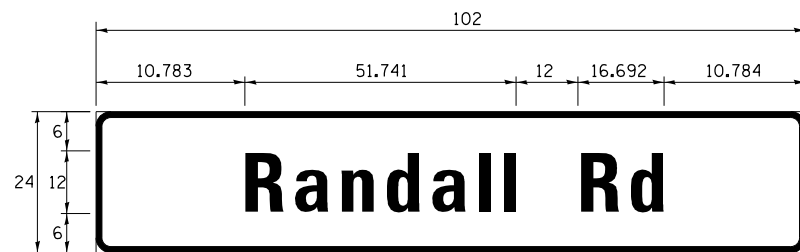
CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
RANDALL ROAD AND WILSON STREET

SCALE: SHEET OF SHEETS STA. TO STA.

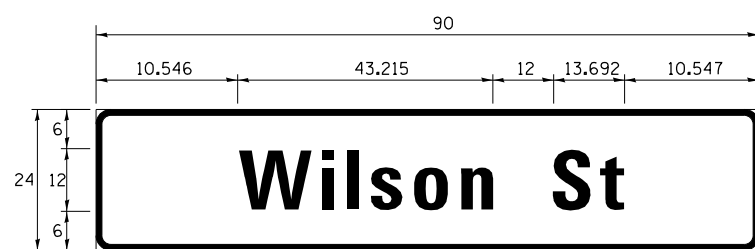
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	141
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	85.0
SIGN PANEL - TYPE 2	SQ FT	64.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	88.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	343.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/2 NO. 10	FOOT	2,565.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	9.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	343.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	801.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,800.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,078.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,121.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50.0
DRILL EXISTING HANDHOLE	EACH	10.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3.0
TRAFFIC SIGNAL BACKPLATE	EACH	9.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10.0
* DETECTOR LOOP, TYPE I	FOOT	400.0
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3.0
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	2.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7,940.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	352.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

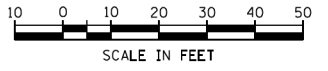
DATE	BY	DATE	BY
SURVEYED	ALIGNED	SURVEYED	ALIGNED
GRADES CHECKED	RT. OF WAY CHECKED	GRADES CHECKED	RT. OF WAY CHECKED
BLM. NOTED	STRUCTURE NOTATIONS OK'D	BLM. NOTED	STRUCTURE NOTATIONS OK'D
NO.		NO.	

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-9500

FILE	DATE
ESL_Sheet-12.0TY_Randall-Wilson	

TS SHT NO. 101

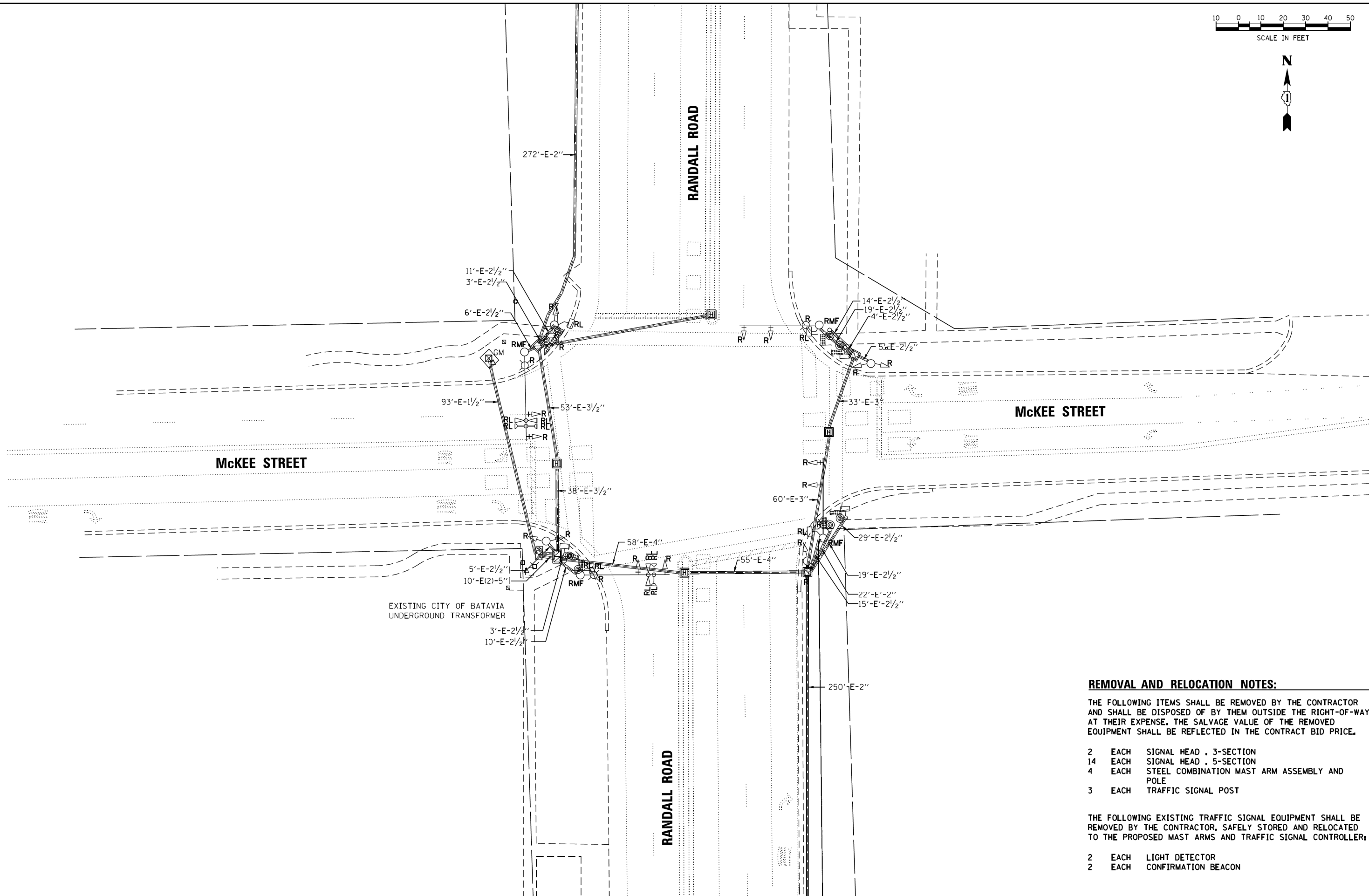
FILE NAME ESL_Sheet-12.0TY_Randall-Wilson	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN RANDALL ROAD AND WILSON STREET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -		VAR.	12-00424-00-SP	KANE	171	142			
		CHECKED - GMZ	REVISED -		CONTRACT NO. 61E74							
		PLOT DATE = 11/16/2018	DATE - 11/16/2018		REVISIED -	SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSIP-W3HX(781)	



PLAN	SUBMITTED	DATE
NOTE BOOK NO.	PLOTTED	
	ALIGNMENT CHECKED	
	FIELD FILE NAME	

PROFILE	SUBMITTED	DATE
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	

FILE NAME: K11_111.ctb; 4s.dgn TS SHT NO. 102



EXISTING CITY OF BATAVIA UNDERGROUND TRANSFORMER

- REMOVAL AND RELOCATION NOTES:**
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
- 2 EACH SIGNAL HEAD , 3-SECTION
 - 14 EACH SIGNAL HEAD , 5-SECTION
 - 4 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
 - 3 EACH TRAFFIC SIGNAL POST
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:
- 2 EACH LIGHT DETECTOR
 - 2 EACH CONFIRMATION BEACON



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 40,0001" / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

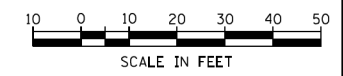
TRAFFIC SIGNAL REMOVAL PLAN	
RANDALL ROAD AND MCKEE STREET	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	143
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

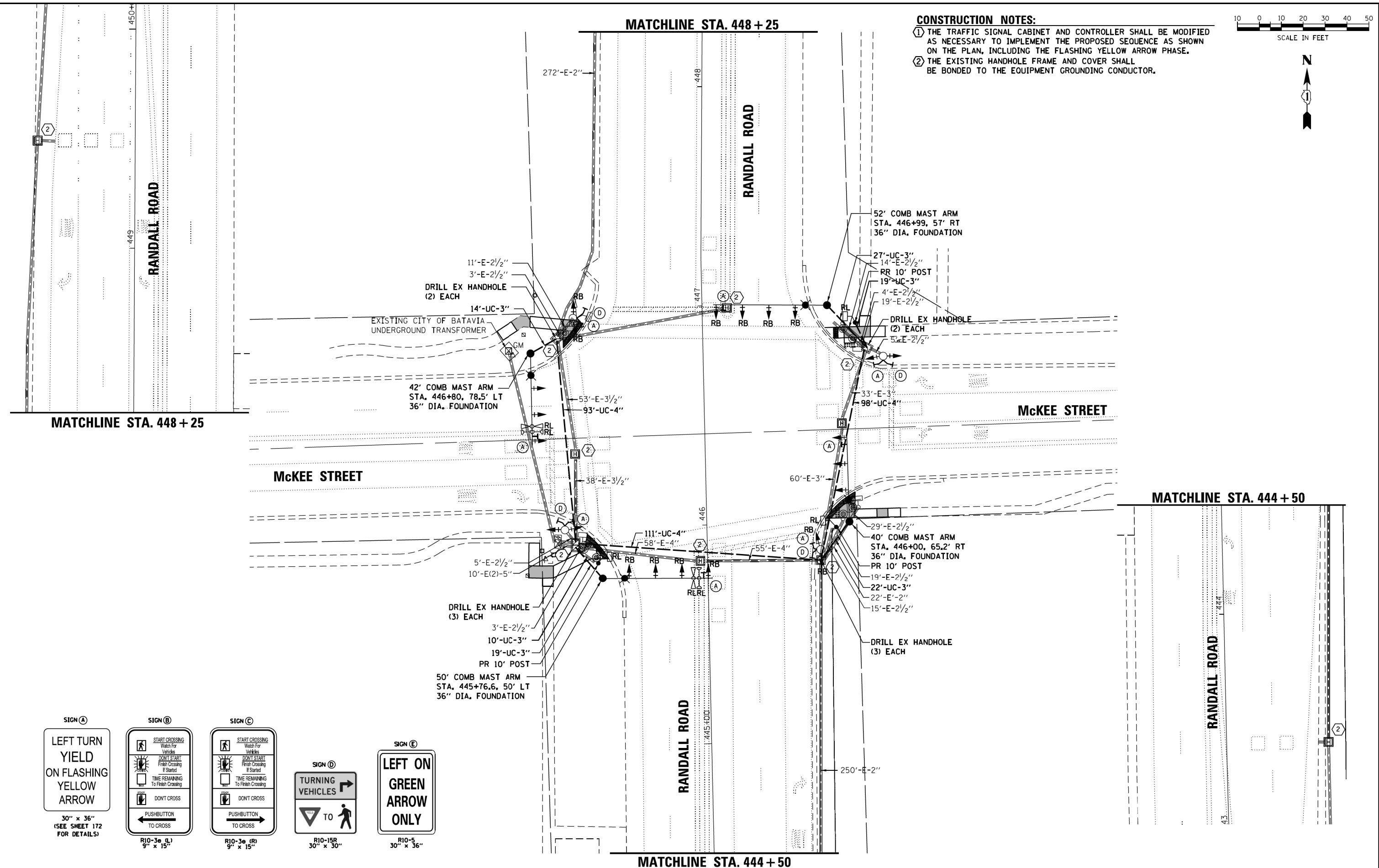
DATE	
BY	
SUBMITTED	
PLANNED	
ALIGNED	
CHECKED	
FILE NAME	
PLAN NO.	
NOTE BOOK NO.	

DATE	
BY	
SUBMITTED	
PLANNED	
ALIGNED	
CHECKED	
FILE NAME	
PROFILE NO.	
NOTE BOOK NO.	

FILE NAME: K:\11111111\11111111.dwg
 TS SHT NO. 103



- CONSTRUCTION NOTES:**
- THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
 - THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.



SIGN (A)
 LEFT TURN YIELD ON FLASHING YELLOW ARROW
 30" x 36" (SEE SHEET 172 FOR DETAILS)

SIGN (B)
 START CROSSING Watch for Vehicles
 DONT START Finish Crossing If Started
 TIME REMAINING To Finish Crossing
 DONT CROSS
 PUSHBUTTON TO CROSS
 R10-3e (L) 9" x 15"

SIGN (C)
 START CROSSING Watch for Vehicles
 DONT START Finish Crossing If Started
 TIME REMAINING To Finish Crossing
 DONT CROSS
 PUSHBUTTON TO CROSS
 R10-3e (R) 9" x 15"

SIGN (D)
 TURNING VEHICLES TO
 R10-15R 30" x 30"

SIGN (E)
 LEFT ON GREEN ARROW ONLY
 R10-5 30" x 36"



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48.0001" / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
 RANDALL ROAD AND MCKEE STREET

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

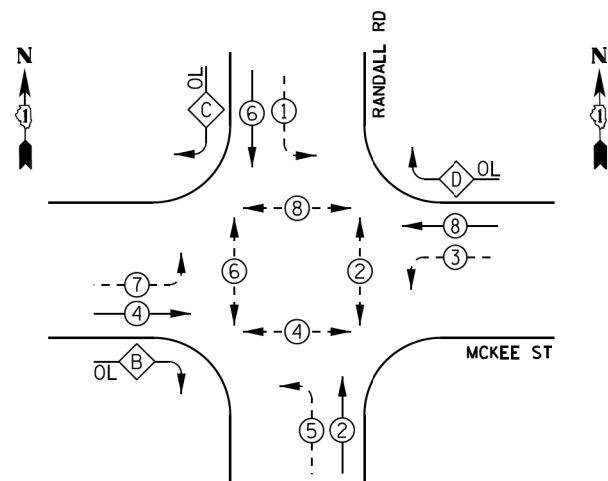
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	144
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SUBMITTED	
PLOTTED	
ALIGNMENT CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

DATE	
BY	
SUBMITTED	
GRADES CHECKED	
STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	
CADD FILE NAME	

TS SHT NO. 104
FILE NAME: KH_sht.ctb; 4d.dgn

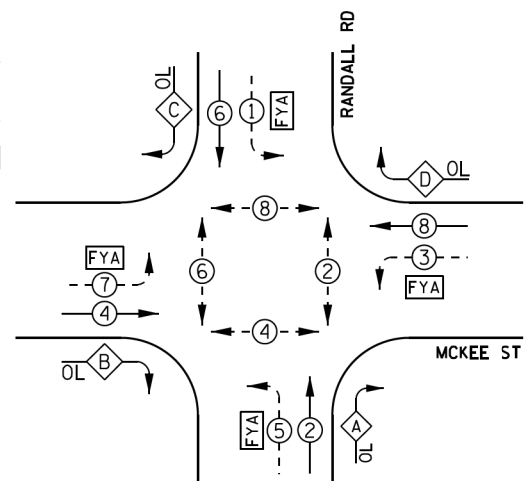
EXISTING CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	=	4
C	=	6
D	=	8
	+	5
	+	7
	+	1

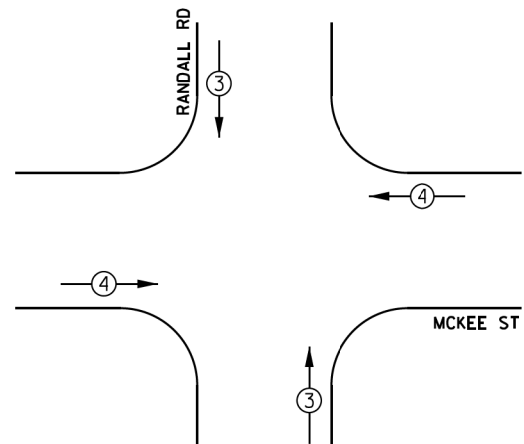
PROPOSED CONTROLLER SEQUENCE



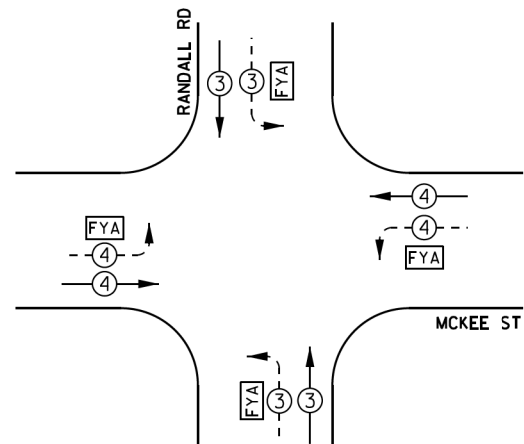
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	=	2
B	=	4
C	=	6
D	=	8
	+	3
	+	5
	+	7
	+	1

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

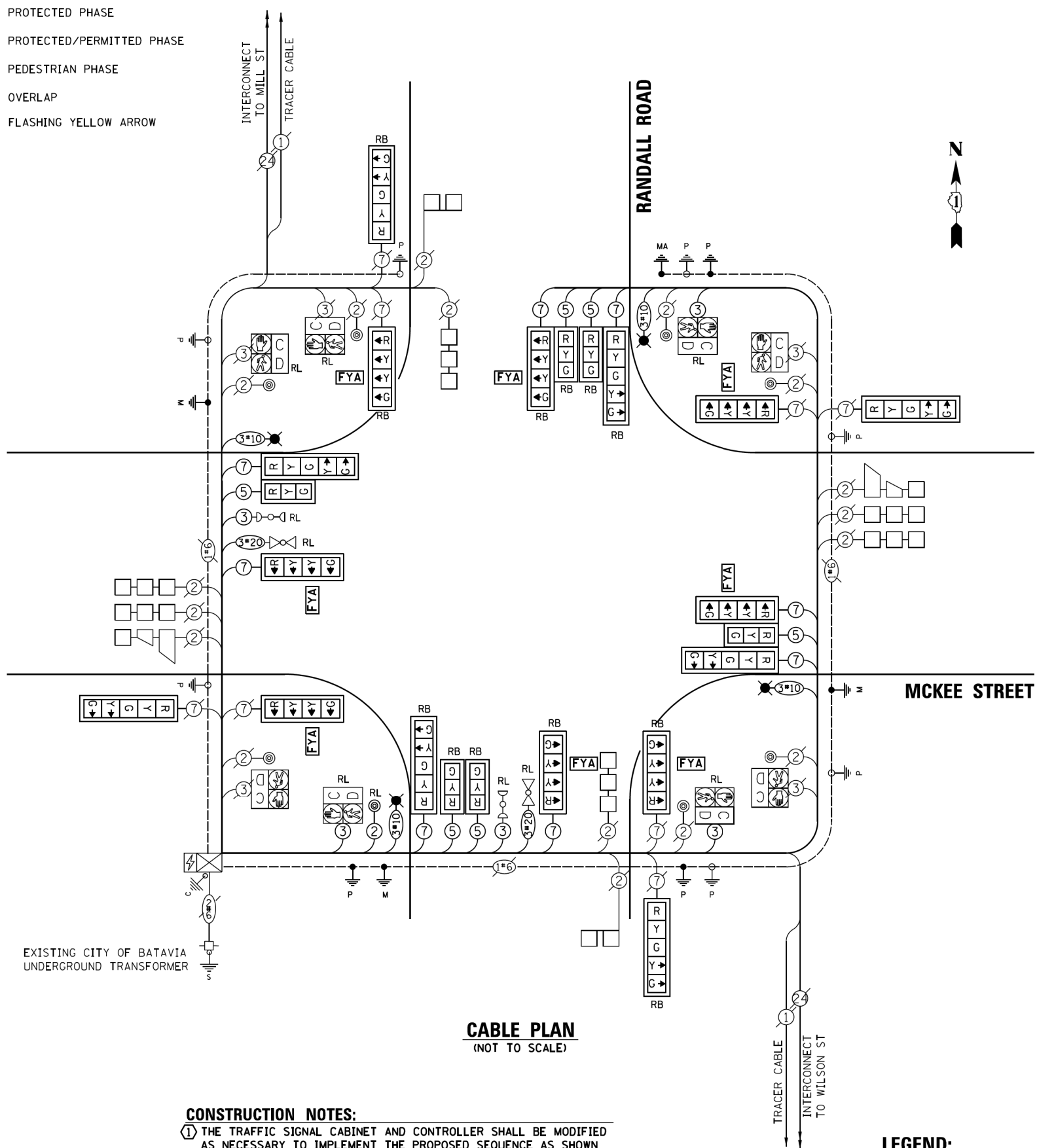


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	14	11	0.50	77
(YELLOW)	14	20	0.05	14
(GREEN)	14	12	0.45	75.6
SOLID ARROW (RED)	8	10	0.50	40
(GREEN & YELLOW)	30	20	0.10	60
PED. SIGNAL	8	20	1.00	160
CONTROLLER	1	100	1.00	100
UPS	1	25	1.00	25
VIDEO SYSTEM	-	150	1.00	0
LUMINAIRE	4	250	0.50	500
FLASHER	4	10	0.50	20
FLASHING ARROW	8	12	0.05	4.8
TOTAL =				1076.4

ENERGY COSTS TO:
CITY OF BATAVIA
 200 N RADDANT ROAD
 BATAVIA, IL 60510
 ENERGY SUPPLY: CONTACT: ELECTRIC UTILITY DIVISION
 PHONE: 630-454-2350
 COMPANY: CITY OF BATAVIA
 ACCOUNT NUMBER: _____

- LEGEND:**
- ← ⊙ → PROTECTED PHASE
 - ← ⊙ ⊙ → PROTECTED/PERMITTED PHASE
 - ← ⊙ ⊙ ⊙ → PEDESTRIAN PHASE
 - ← ⊙ ⊙ ⊙ ⊙ → OVERLAP
 - ⊙ FYA FLASHING YELLOW ARROW



CABLE PLAN
(NOT TO SCALE)

- CONSTRUCTION NOTES:**
- ① THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
 - ② THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

- LEGEND:**
- ⊙ FYA = INDICATES FLASHING YELLOW ARROW
 - ⊙ GNC = OUTDOOR NETWORK CABLE



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 2,0000' / in.	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

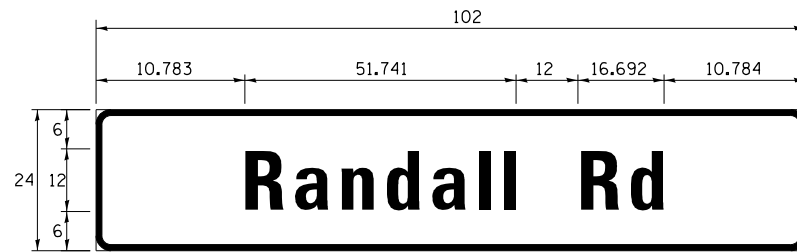
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE RANDALL ROAD AND MCKEE STREET
 SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

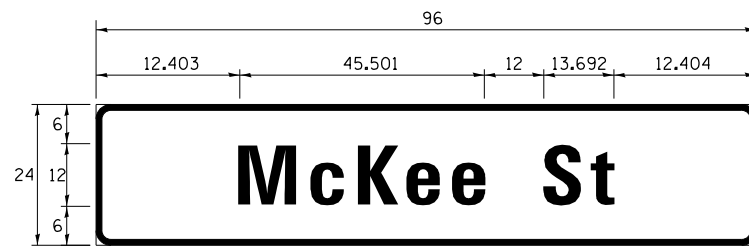
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	145
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	16.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	85.0
SIGN PANEL - TYPE 2	SQ FT	66.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	302.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,301.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	10.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	78.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	863.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,091.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,975.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,012.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	12.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	56.0
DRILL EXISTING HANDHOLE	EACH	9.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3.0
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3.0
TRAFFIC SIGNAL BACKPLATE	EACH	10.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	12.0
* DETECTOR LOOP, TYPE I	FOOT	800.0
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	5.0
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7,608.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	298.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

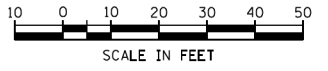
DATE	BY	DATE	BY
SURVEYED	ALIGNED	SURVEYED	ALIGNED
GRADES CHECKED	RT. OF WAY CHECKED	GRADES CHECKED	RT. OF WAY CHECKED
BLM. NOTED	STRUCTURE NOTATIONS	BLM. NOTED	STRUCTURE NOTATIONS
NO.	NO.	NO.	NO.

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-9300



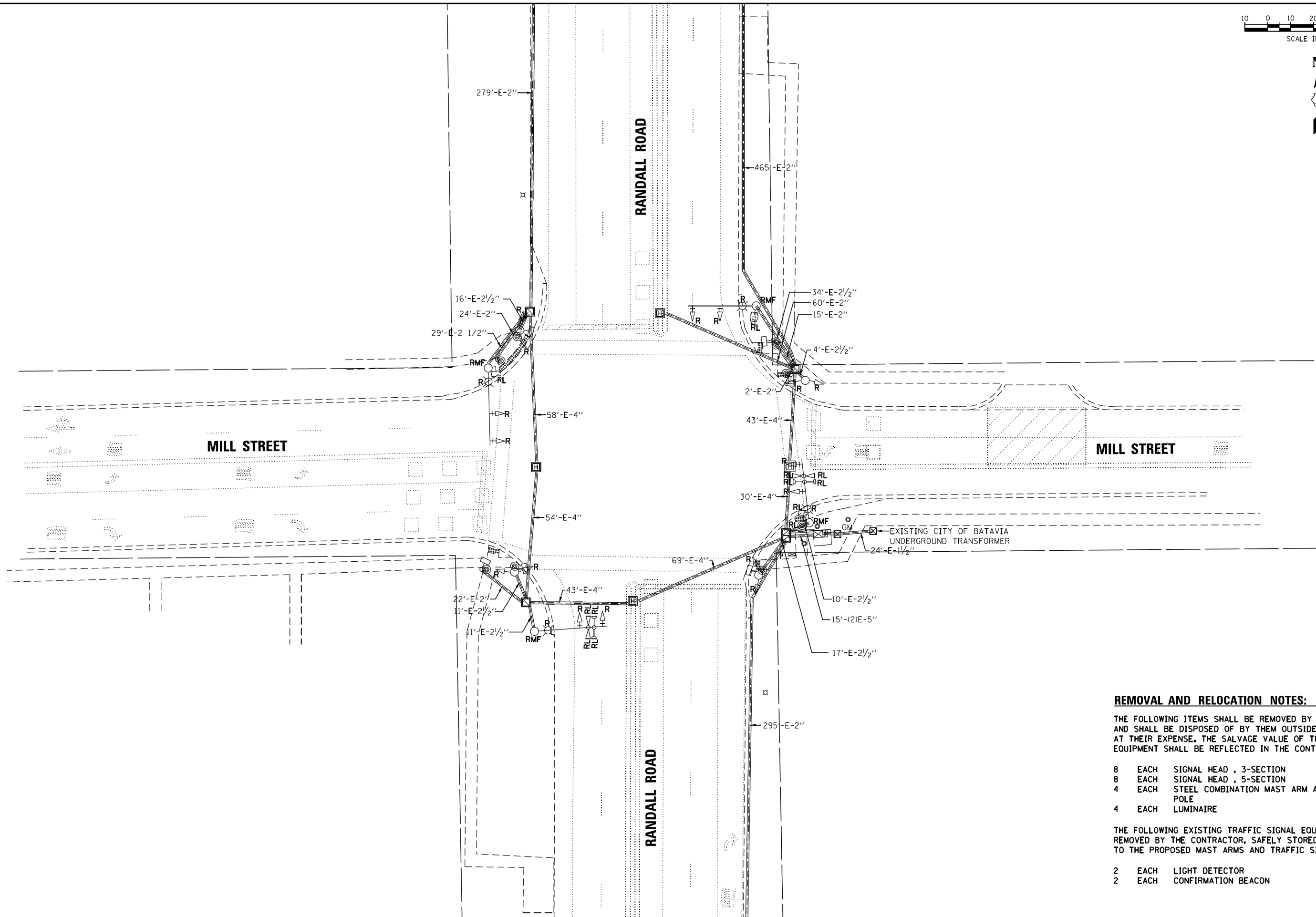
TS SHT NO.105

FILE NAME ESL_Sheet-16.DTY_Randall-McKee	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN RANDALL ROAD AND MCKEE STREET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -		VAR.	12-00424-00-SP	KANE	171	146			
		CHECKED - GMZ	REVISED -		CONTRACT NO. 61E74		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	HSJIP-W3HX(781)		
		PLOT DATE = 11/16/2018	DATE - 11/16/2018		REVISIED -	SCALE:	SHEET NO. OF SHEETS	STA. TO STA.				



PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	FILE NAME	
	NO.	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	



REMOVAL AND RELOCATION NOTES:

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

- 8 EACH SIGNAL HEAD , 3-SECTION
- 8 EACH SIGNAL HEAD , 5-SECTION
- 4 EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
- 4 EACH LUMINAIRE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 2 EACH LIGHT DETECTOR
- 2 EACH CONFIRMATION BEACON

FILE NAME: KH_111.ctb; 5a.dgn TS SHT NO. 106

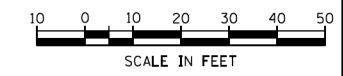


USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48,000/1" = 1/4"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL REMOVAL PLAN	
RANDALL ROAD AND MILL STREET	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-5P	KANE	171	147
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

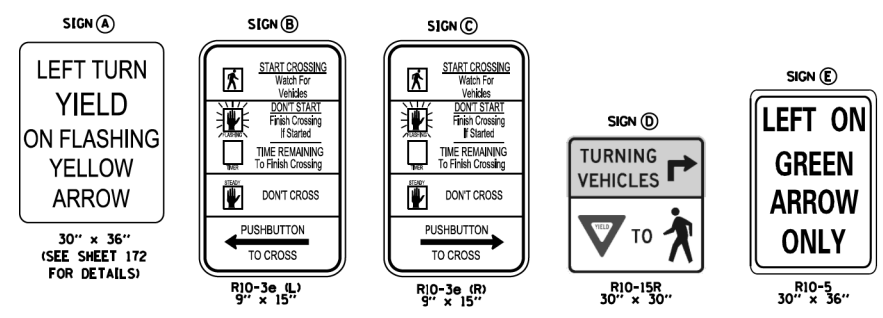
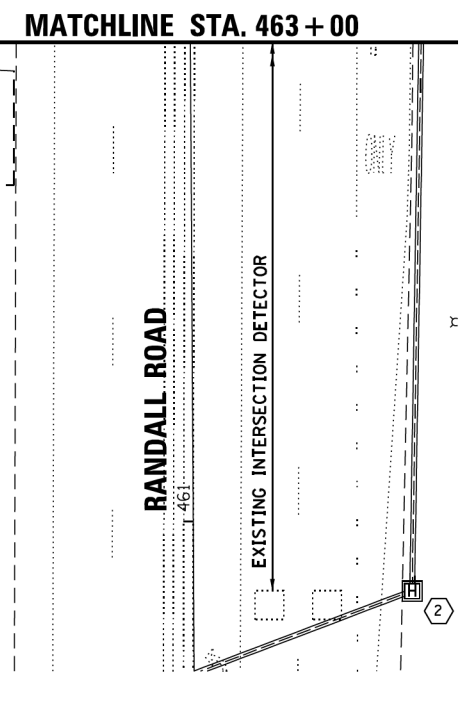
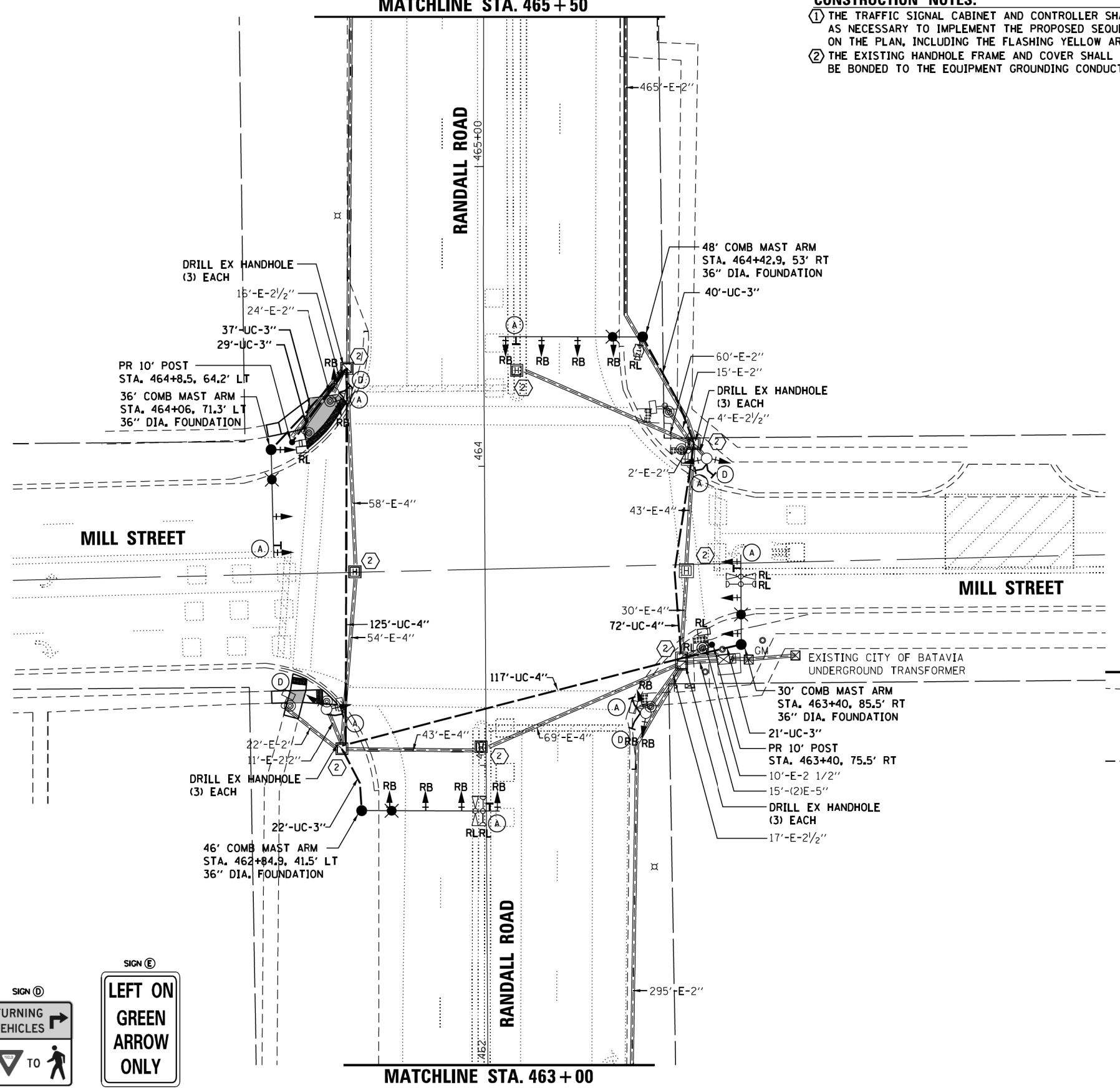
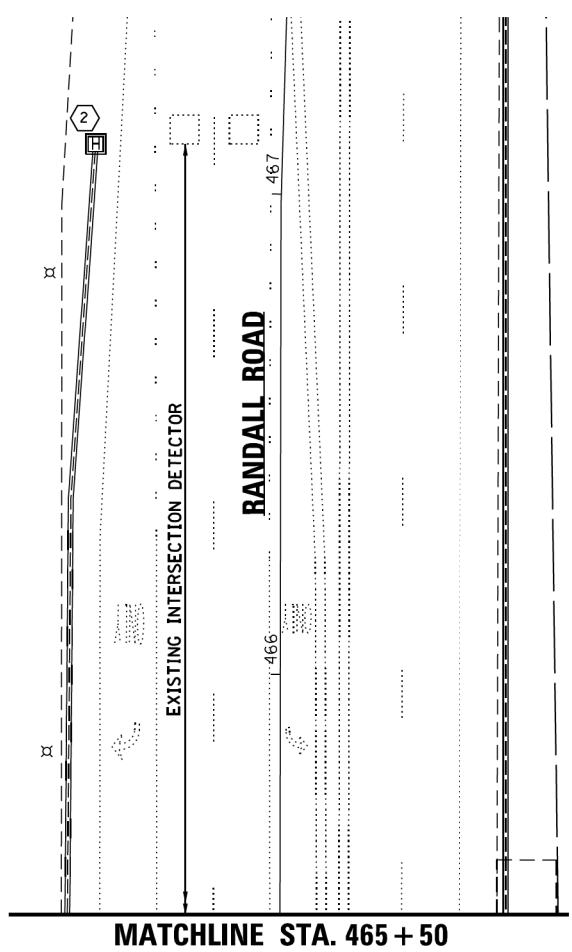


- CONSTRUCTION NOTES:**
- 1 THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
 - 2 THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	

PROFILE	SUBMITTED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	NO.	

TS SHT NO. 107



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 48.0001' / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
RANDALL ROAD AND MILL STREET

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

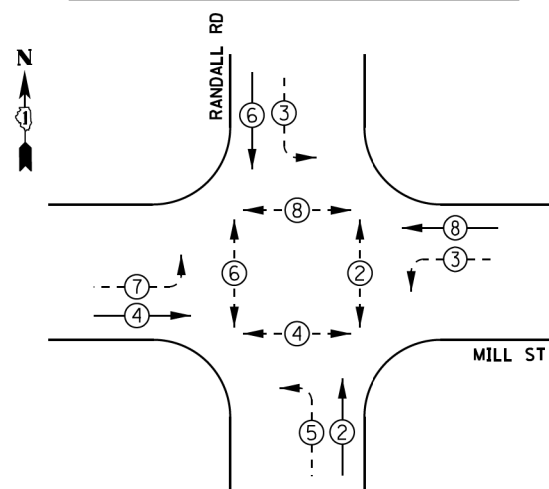
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-SP	KANE	171	148
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNMENT CHECKED	
	CAD FILE NAME	

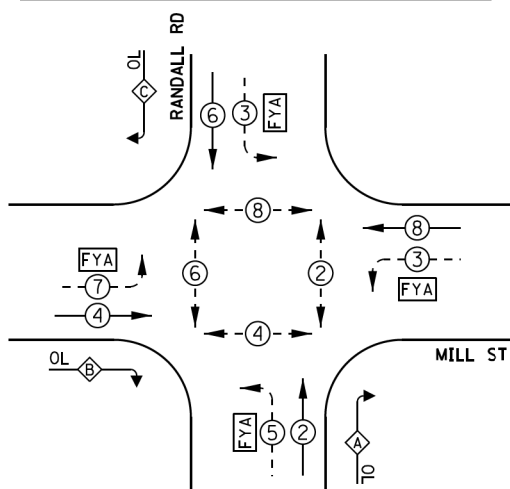
PROFILE	SUBMITTED	DATE
NOTE BOOK	GRADES CHECKED	BY
NO.	STRUCTURE	NOTATION DRWD

TS SHT NO. 108
FILE NAME: KH_101.ctb; 5/20/18

EXISTING CONTROLLER SEQUENCE



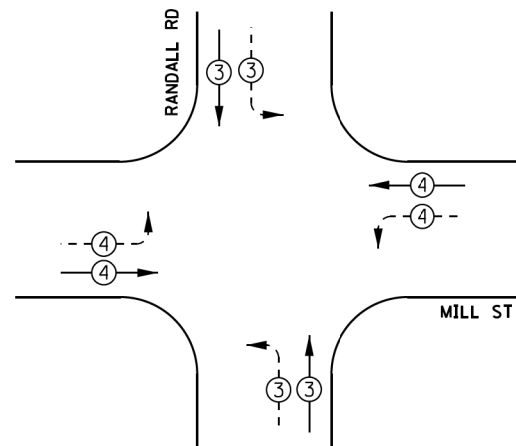
PROPOSED CONTROLLER SEQUENCE



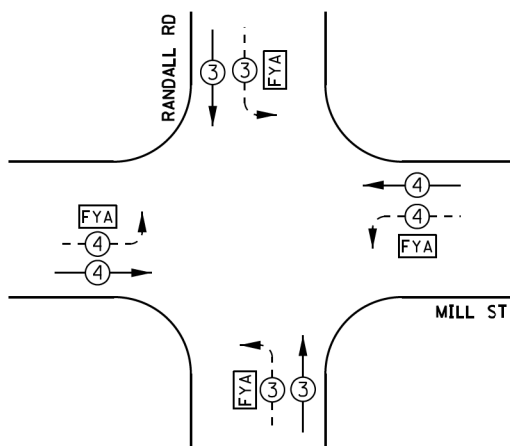
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE		TOTAL WATTAGE
		LED	% OPERATION	
SIGNAL (RED)	13	11	0.50	71.5
(YELLOW)	13	20	0.05	13
(GREEN)	13	12	0.45	70.2
SOLID ARROW (RED)	8	10	0.50	40
(GREEN & YELLOW)	30	20	0.10	60.0
PED. SIGNAL	8	20	1.00	160
CONTROLLER	1	100	1.00	100
UPS	1	25	1.00	25
VIDEO SYSTEM	-	150	1.00	0
LUMINAIRE	4	250	0.50	500
FLASHER	4	10	0.50	20
FLASHING ARROW	8	12	0.05	4.8
TOTAL =				1064.50

ENERGY COSTS TO:

CITY OF BATAVIA
200 N RADDANT ROAD
BATAVIA, IL 60510

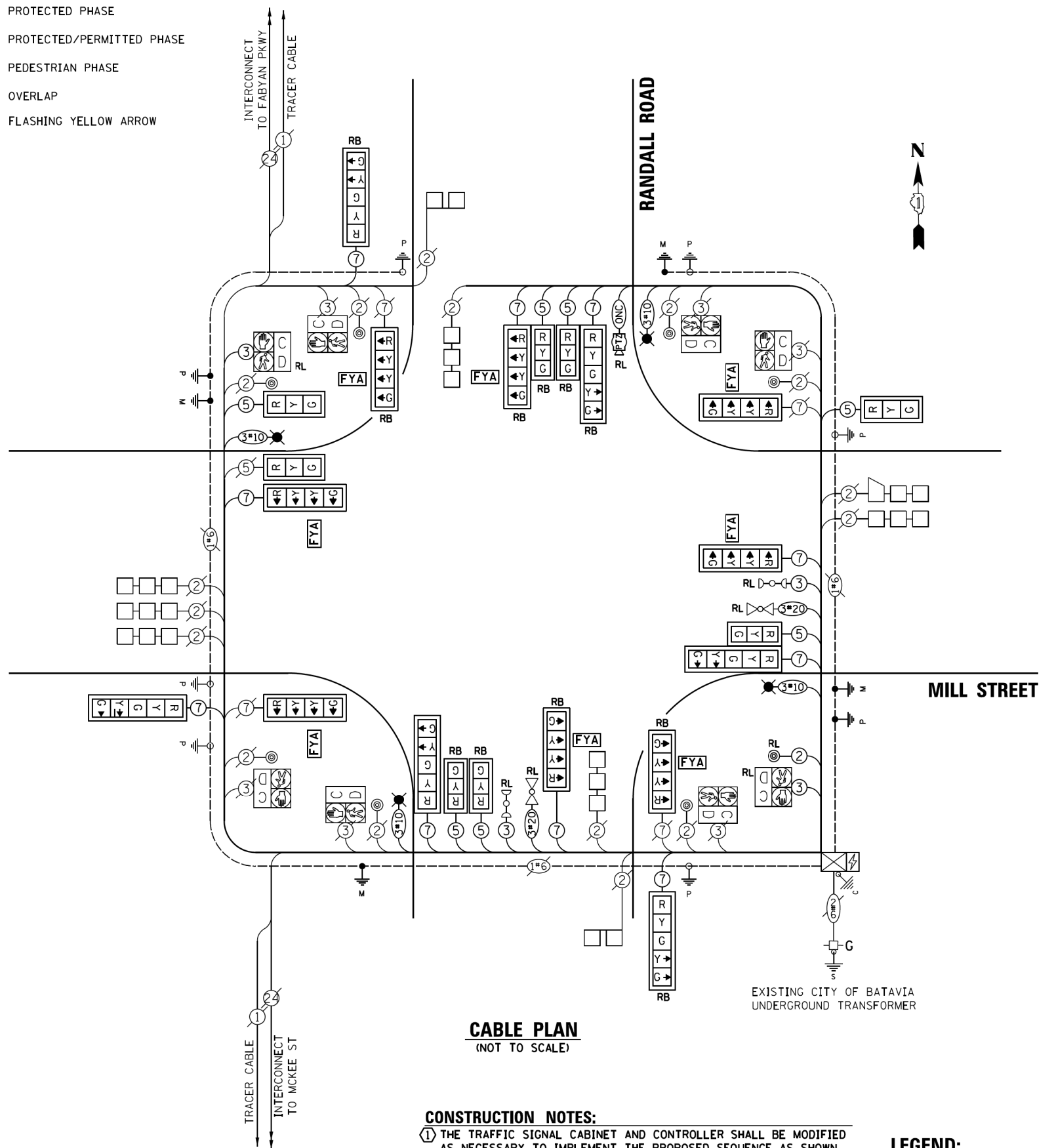
ENERGY SUPPLY: CONTACT: ELECTRIC UTILITY DIVISION
PHONE: 630-454-2350
COMPANY: CITY OF BATAVIA
ACCOUNT NUMBER:



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 2,000' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ ⊙ OL OVERLAP
- ⊙ FYA FLASHING YELLOW ARROW



CABLE PLAN (NOT TO SCALE)

CONSTRUCTION NOTES:

- ① THE TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE MODIFIED AS NECESSARY TO IMPLEMENT THE PROPOSED SEQUENCE AS SHOWN ON THE PLAN, INCLUDING THE FLASHING YELLOW ARROW PHASE.
- ② THE EXISTING HANDHOLE FRAME AND COVER SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

LEGEND:

- ⊙ FYA = INDICATES FLASHING YELLOW ARROW
- ⊙ ONC = OUTDOOR NETWORK CABLE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

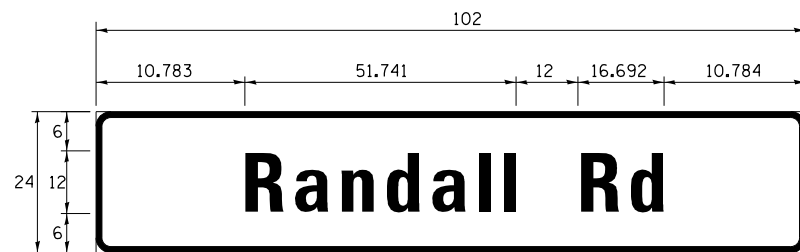
CABLE PLAN, PHASE DESIGNATION DIAGRAM
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
RANDALL ROAD AND MILL STREET

SCALE: SHEET OF SHEETS STA. TO STA.

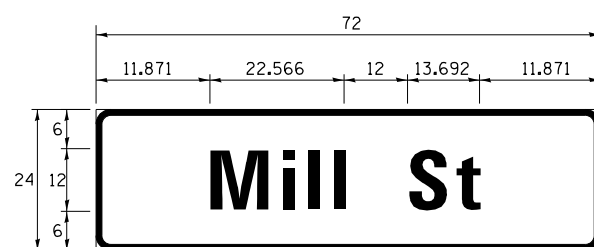
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-5P	KANE	171	149
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	17.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	12.0	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	85.0
SIGN PANEL - TYPE 2	SQ FT	58.0
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	83.0
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	314.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	2,577.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1.0
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	10.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	59.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	707.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,080.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,961.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,037.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	48.0
DRILL EXISTING HANDHOLE	EACH	10.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	9.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	4.0
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4.0
TRAFFIC SIGNAL BACKPLATE	EACH	7.0
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10.0
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	2.0
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1.0
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2.0
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7,938.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	339.0
* ROD AND CLEAN EXISTING CONDUIT	FOOT	500.0
OUTDOOR RATED NETWORK CABLE	FOOT	214.5
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	EACH	1.0
MODIFY EXISTING CONTROLLER AND CABINET	EACH	1.0
RELOCATE EXISTING PTZ CAMERA	EACH	1.0

*Nominal Quantity to be Used as Directed by the Engineer

DATE	BY	DATE	BY
SURVEYED	ALIGNED	SURVEYED	ALIGNED
GRADES CHECKED	RT. OF WAY CHECKED	GRADES CHECKED	RT. OF WAY CHECKED
STRUCTURE NOTATIONS OK'D		STRUCTURE NOTATIONS OK'D	
PROFILE	PLAN	PROFILE	PLAN
NOTE BOOK NO.	NOTE BOOK NO.	NOTE BOOK NO.	NOTE BOOK NO.

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-9300

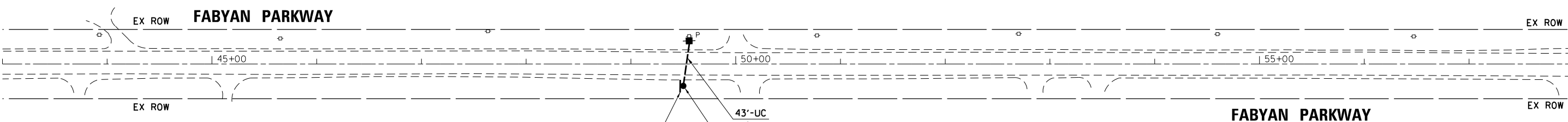


TS SHT NO.109

FILE NAME ESL_Sheet-20_QTY_Randall-Mill	USER NAME = fbariso	DESIGNED - TFS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES AND MAST ARM MOUNTED STREET NAME SIGN RANDALL ROAD AND MILL STREET			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB	REVISED -		VAR.	12-00424-00-SP	KANE	171	150			
		CHECKED - GMZ	REVISED -		CONTRACT NO. 61E74							
		PLOT DATE = 11/16/2018	DATE - 11/16/2018		REVISIED -	SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	HSIP-W3HX(781)	

PROFILE SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 STRUCTURE NOTATIONS OKWD
 SURVEYED _____
 GRADES CHECKED _____
 PLAN SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 923-5500

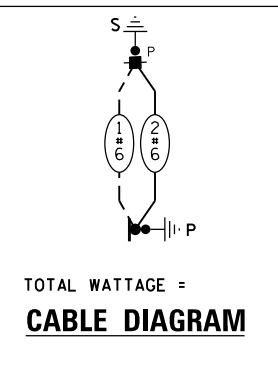
MATCH LINE STA. 58+00
 MATCH LINE STA. 73+00



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	WATTAGE	% OPERATION	TOTAL WATTAGE
RADAR SPEED SIGN	1	15	100	15.0
TOTAL =				15.0

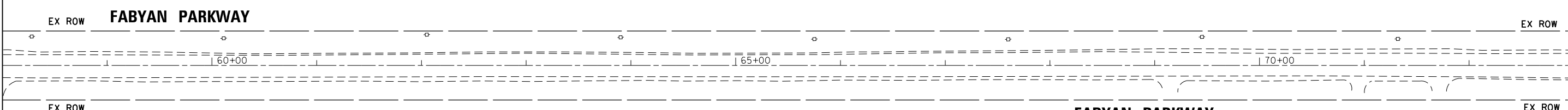
ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175
 ENERGY SUPPLY: CONTACT: VIVIANA FELICIANO
 PHONE: (630) 723-2127
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3183143047



30" x 36" SPEED LIMIT 45
 30" x 42" YOUR SPEED XX
 16' POST ON CONCRETE FOUNDATION, TYPE A
 APPROX. STA. 49+50
 20.83' RT
 (SEE SHEET 170 FOR DETAILS)

SCHEDULE OF QUANTITIES

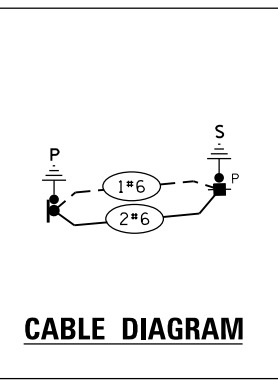
ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	15.0
SERVICE INSTALLATION - POLE MOUNTED	EACH	2.0
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	70.0
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	153.0
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	109.0
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2.0
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
RADAR SPEED SIGN	EACH	2.0



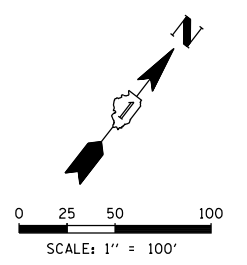
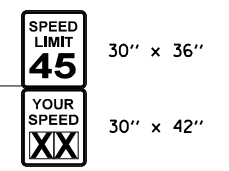
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	QUANTITY	WATTAGE	% OPERATION	TOTAL WATTAGE
RADAR SPEED SIGN	1	15	100	15.0
TOTAL =				15.0

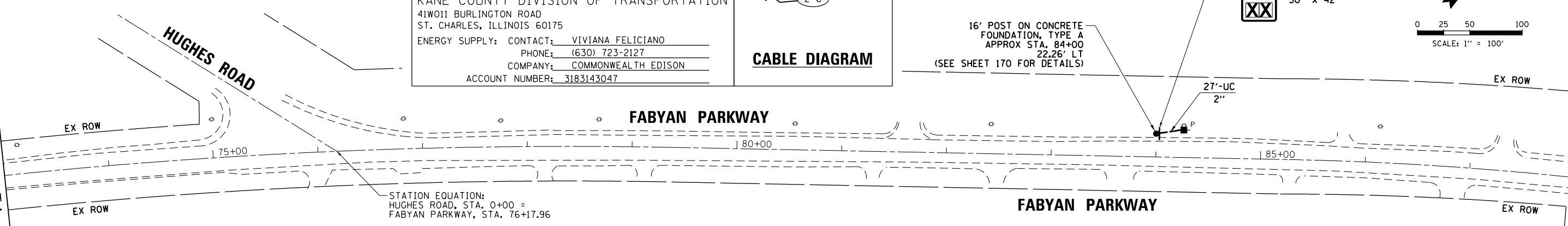
ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175
 ENERGY SUPPLY: CONTACT: VIVIANA FELICIANO
 PHONE: (630) 723-2127
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3183143047



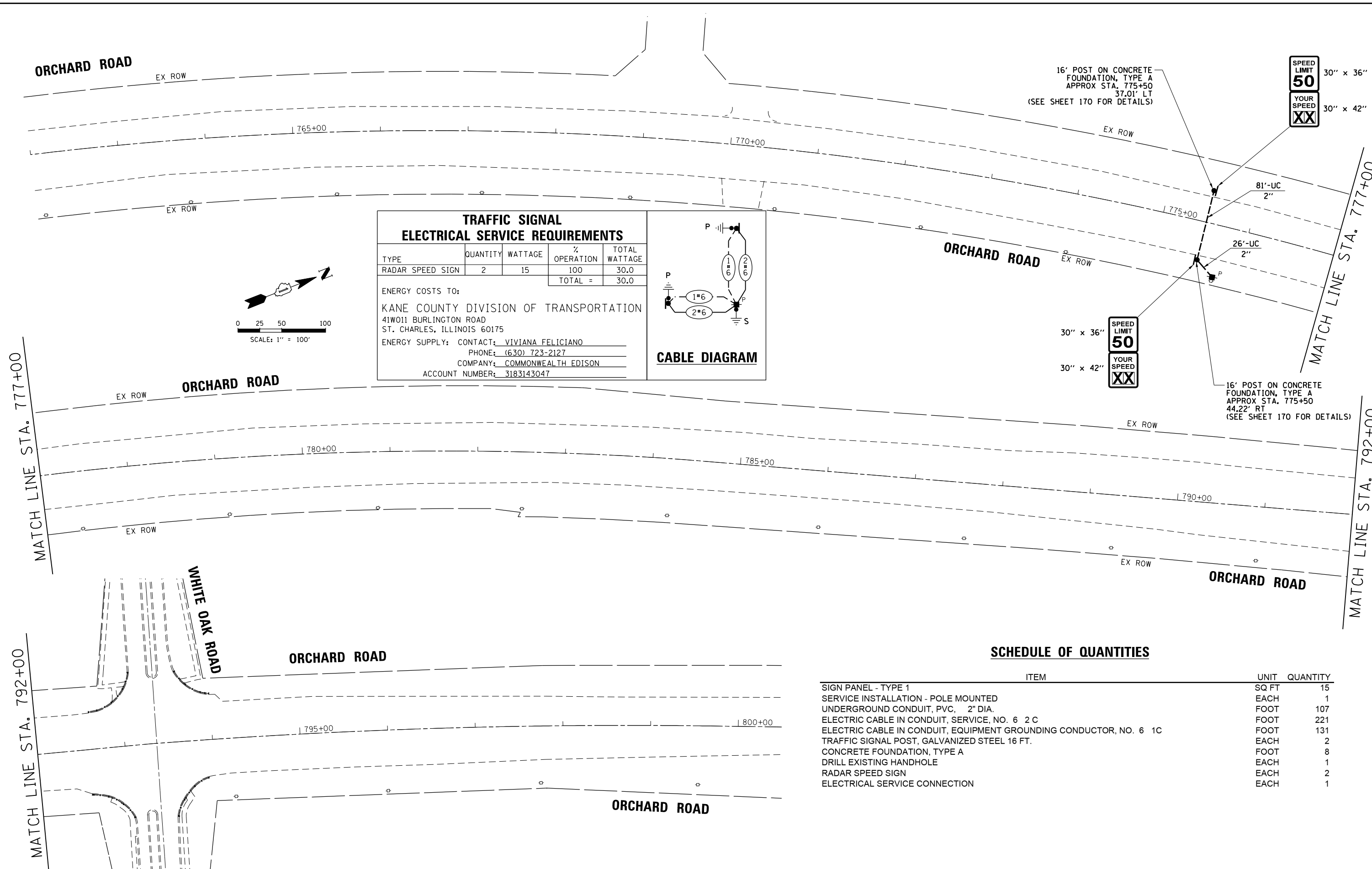
16' POST ON CONCRETE FOUNDATION, TYPE A
 APPROX. STA. 84+00
 22.26' LT
 (SEE SHEET 170 FOR DETAILS)



MATCH LINE STA. 73+00

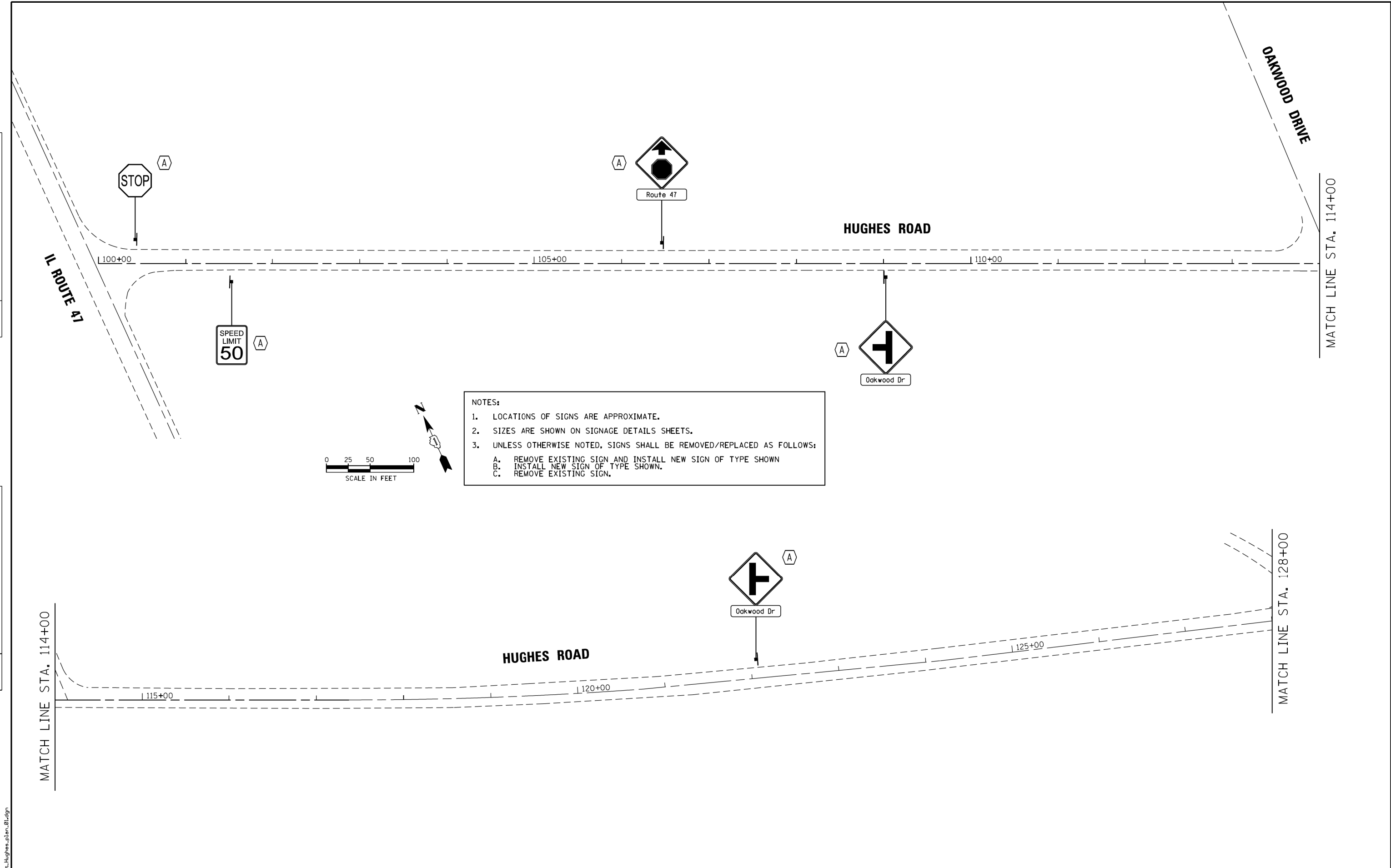


PROFILE SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 STRUCTURE NOTATIONS CWK/D
 PLAN SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 ENGINEERING LTD.
CHRISTOPHER B. BURKE
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5938



PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHECKED	



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

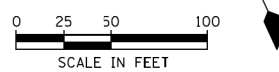
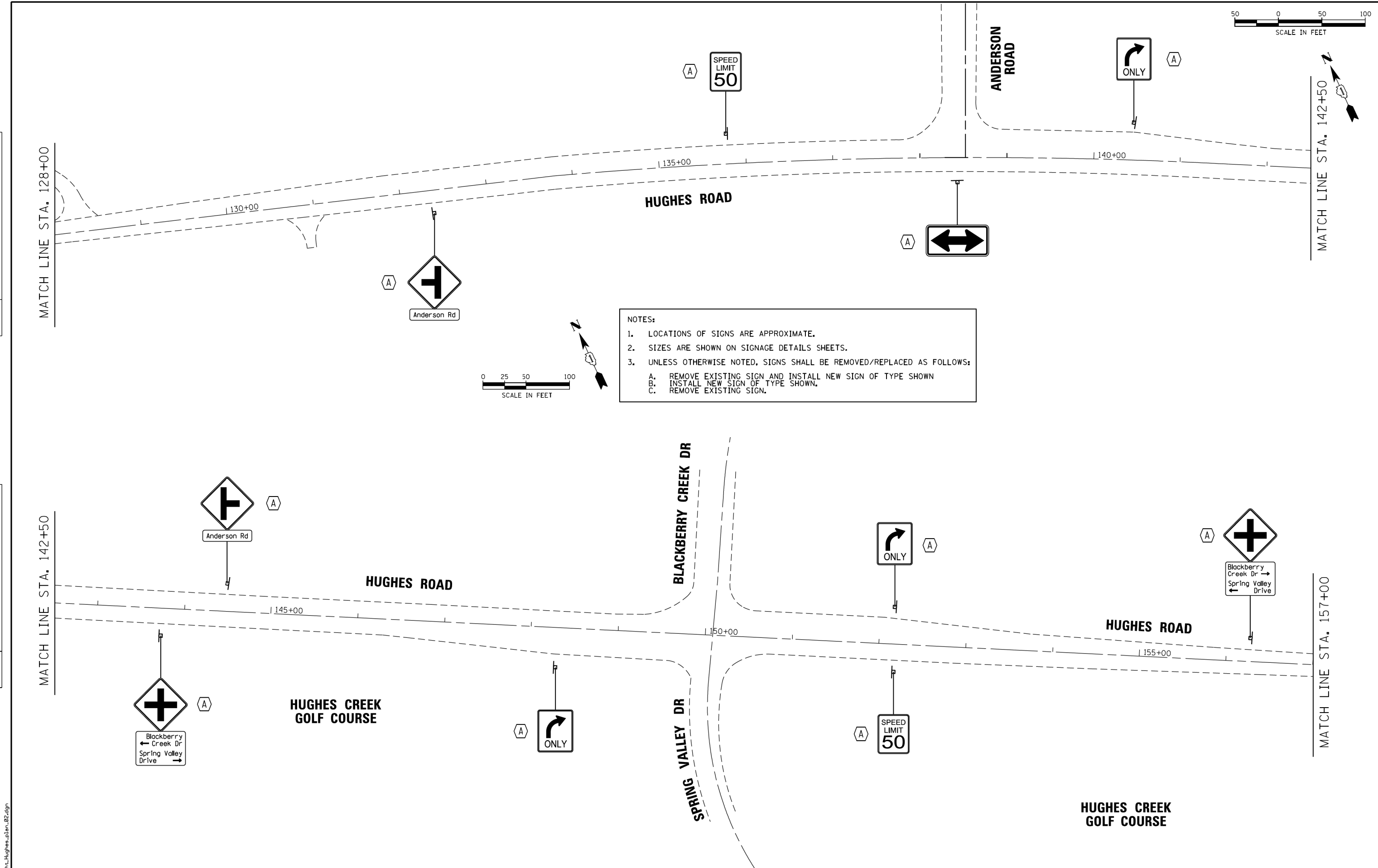
**SIGNING PLAN
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	153
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

FILE NAME: KH_sht_Hughes.p1en_01.dgn

PLAN	SUBMITTED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	ALIGNMENT CHECKED		
	FILE NAME		

PROFILE	SUBMITTED	BY	DATE
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATION		
	ORFD		



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.

FILE NAME: KH_sht_Hughes.p1en_02.dgn



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1in.	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

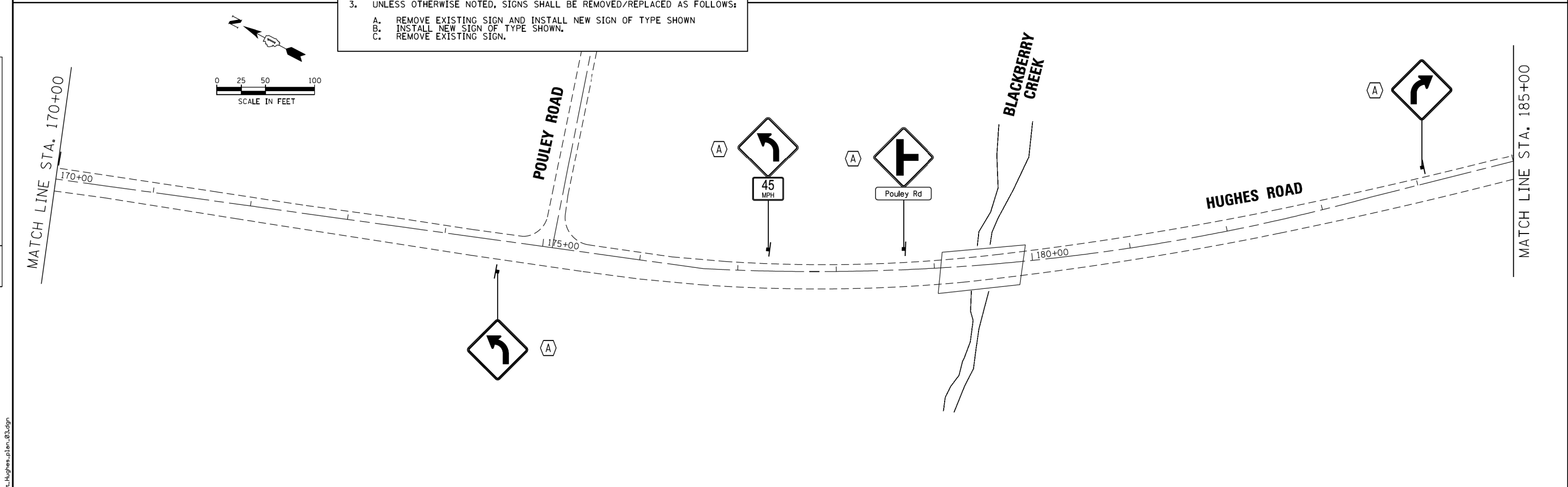
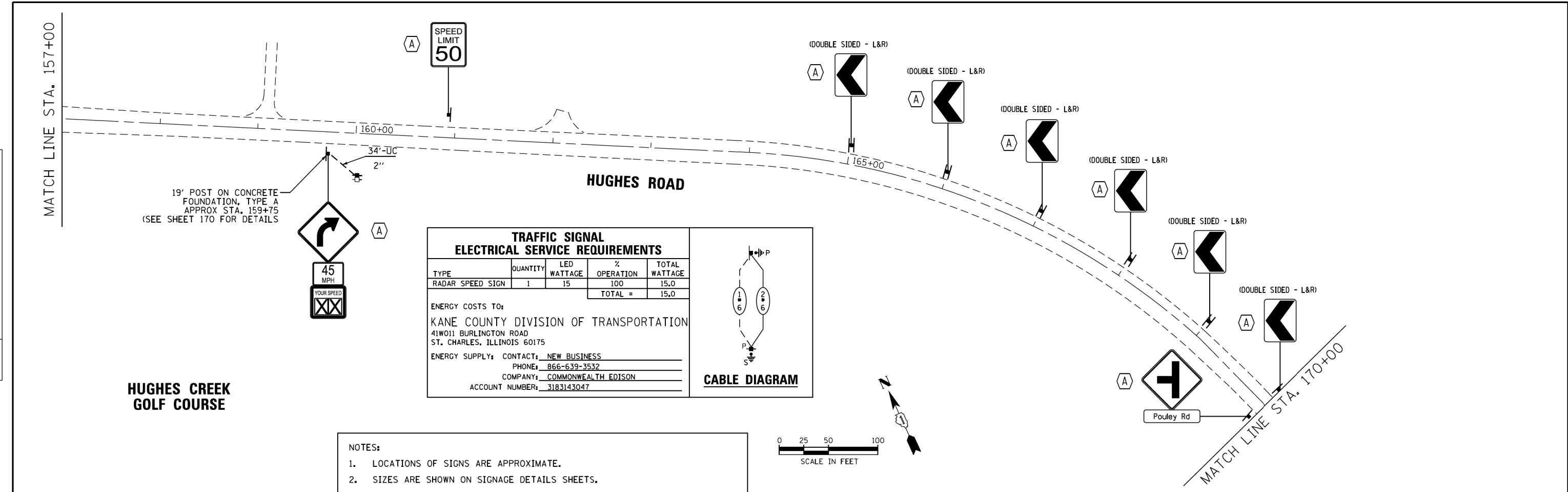
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	154
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SUBMITTED	
PLOTTED	
ALIGNMENT CHECKED	
NOTED	
FILE NAME	
NO.	

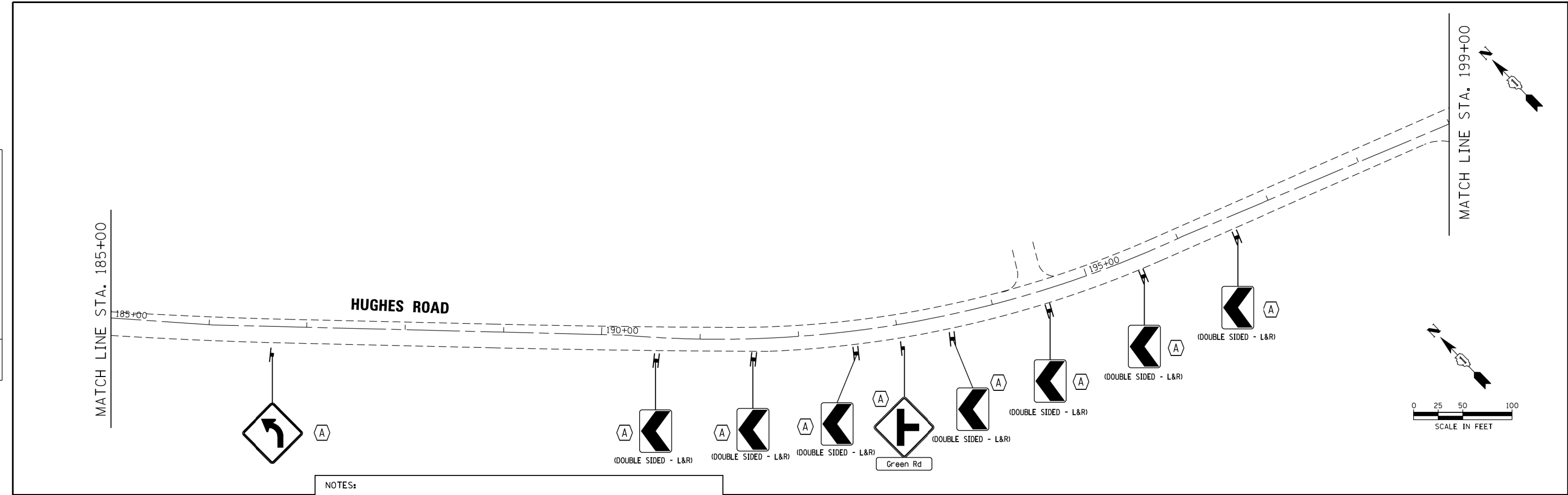
DATE	
BY	
PROFILE	
SUBMITTED	
PLOTTED	
GRADES CHECKED	
NOTED	
STRUCTURE NOTATION	
NO.	



FILE NAME: KH_sht_Hughes.p1en_03.dgn

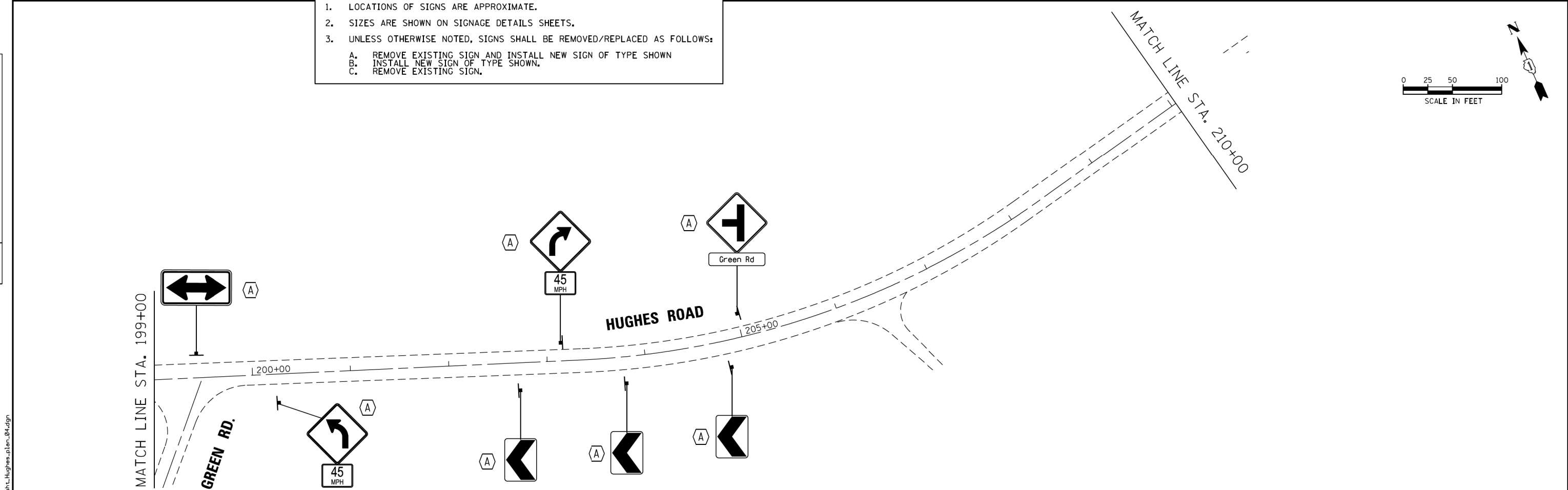
PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NOTE BOOK NO.	
	CADD FILE NAME	



NOTES:

1. LOCATIONS OF SIGNS ARE APPROXIMATE.
2. SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
3. UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



ESI CONSULTANTS, LTD.
 3718 W. 116TH STREET, SUITE 100
 MARIETTA, IL 62428
 www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIGNING PLAN			
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	156
				CONTRACT NO. -
ILLINOIS FED. AID PROJECT				

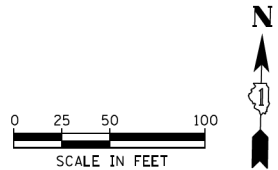
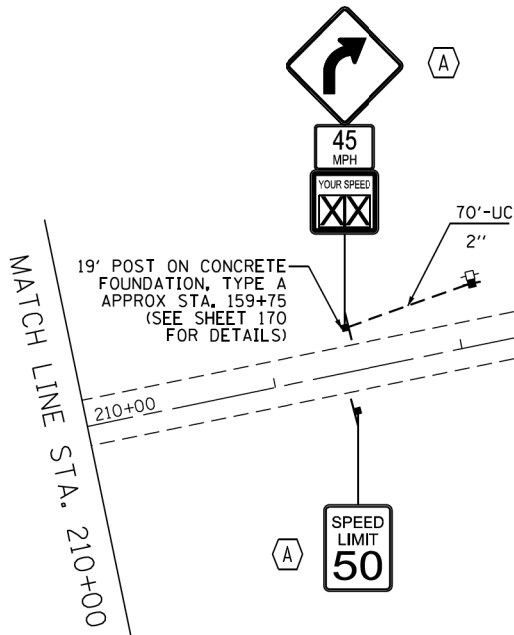
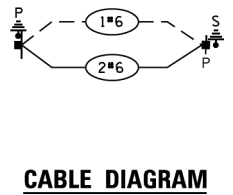
FILE NAME: KH_sht_Hughes.p1en_04.dgn

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	FILE NAME		
	NOTE BOOK NO.		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS OK'D		
	NOTE BOOK NO.		

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS				
TYPE	QUANTITY	LED WATTAGE	% OPERATION	TOTAL WATTAGE
RADAR SPEED SIGN	1	15	100	15.0
			TOTAL =	15.0

ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 866-639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3183143047



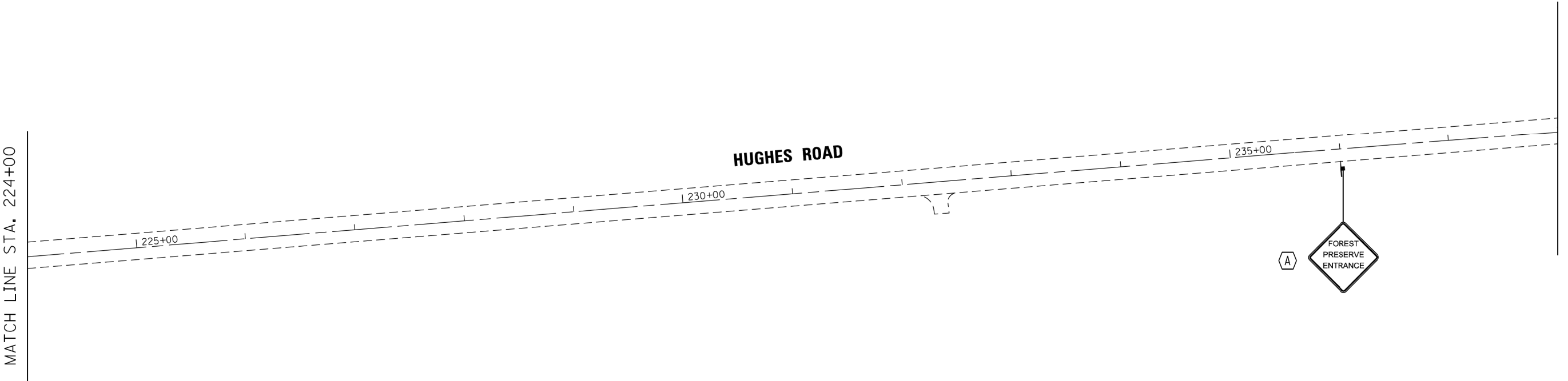
NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.

MATCH LINE STA. 224+00

MATCH LINE STA. 238+00

MATCH LINE STA. 224+00



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
 HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	157
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

FILE NAME: KH_sht_Hughes.p1en_05.dgn

**JOHNSON'S MOUND
FOREST PRESERVE**

MATCH LINE STA. 238+00

**FOREST PRESERVE
ENTRANCE**

**FOREST PRESERVE
ENTRANCE**



FOREST PRESERVE ENTRANCE

MATCH LINE STA. 252+00

240+00

245+00

250+00

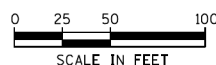
HUGHES ROAD

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTE BOOK NO.		
	FILE NAME		



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



MATCH LINE STA. 252+00

HUGHES ROAD

MATCH LINE STA. 266+00

255+00

260+00

265+00

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NOTE BOOK NO.		
	STRUCTURE NOTATION		

FILE NAME: KH_sht_Hughes.p1en_08.dgn

ESI CONSULTANTS, LTD.
 375 N. HILL STREET, SUITE 100
 SAUNTEE, IL 62454
 www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	158
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATION	
	FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATION	
	FILE NAME	

MATCH LINE STA. 266+00

MATCH LINE STA. 280+00

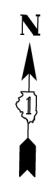
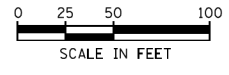
MATCH LINE STA. 280+00

MATCH LINE STA. 294+00

HUGHES ROAD

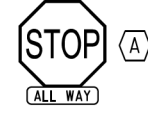
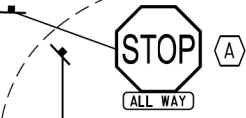
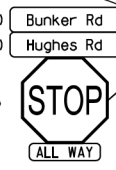
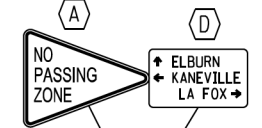
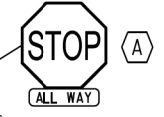
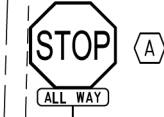
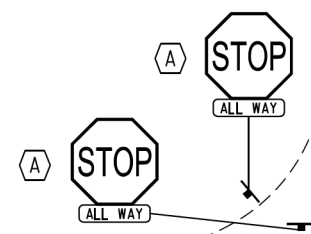
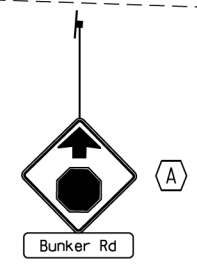
HUGHES ROAD

BUNKER ROAD



NOTES:

1. LOCATIONS OF SIGNS ARE APPROXIMATE.
2. SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
3. UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.
 - D. REMOVE AND REINSTALL EXISTING SIGN.



(DOUBLE SIDED)
(DOUBLE SIDED)

Bunker Rd
Hughes Rd



FILE NAME: KH_sht_Hughes.p1en_07.dgn



USER NAME = bhenrichs	DESIGNED	REVISED
PLOT SCALE = 100.0002' / 1" =	DRAWN	REVISED
PLOT DATE = 11/15/2018	CHECKED	REVISED
	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

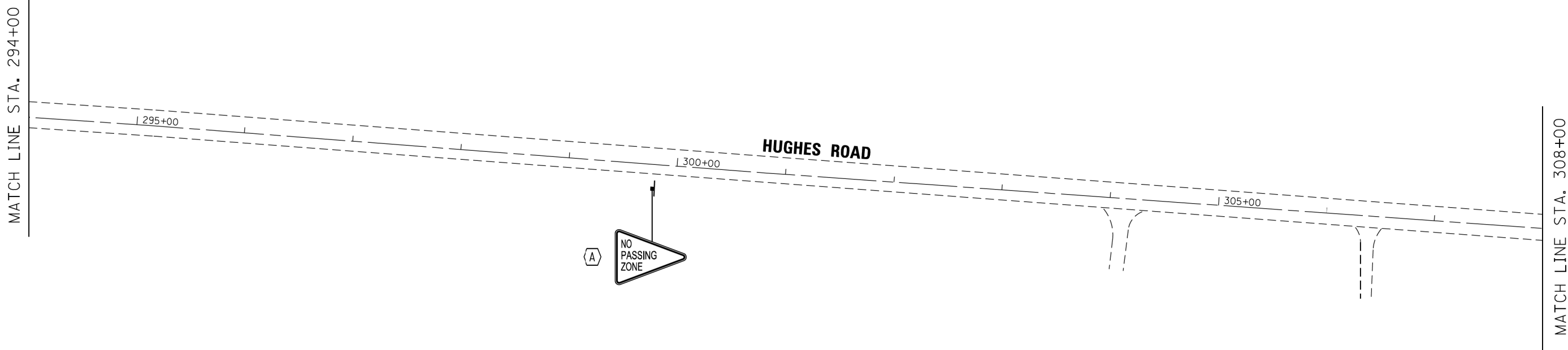
SIGNING PLAN
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	159
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTE BOOK NO.		
	FILE NAME		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATION OK'D		
	FILE NAME		



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

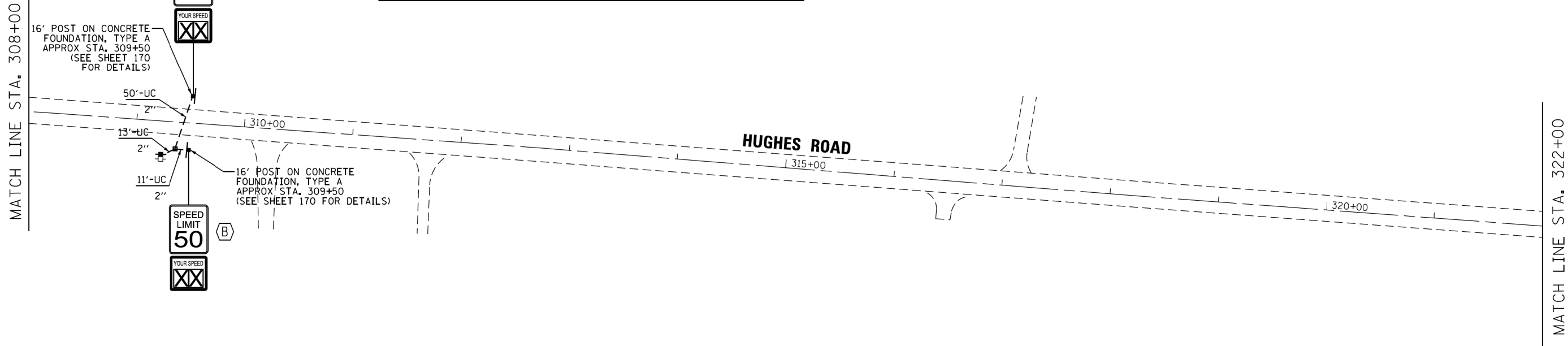
TYPE	QUANTITY	LED WATTAGE	% OPERATION	TOTAL WATTAGE
RADAR SPEED SIGN	2	15	100	30.0
TOTAL =				30.0

ENERGY COSTS TO:
KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 866-639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3183143047

CABLE DIAGRAM

- NOTES:**
- LOCATIONS OF SIGNS ARE APPROXIMATE.
 - SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
 - UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN
 - C. REMOVE EXISTING SIGN.



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

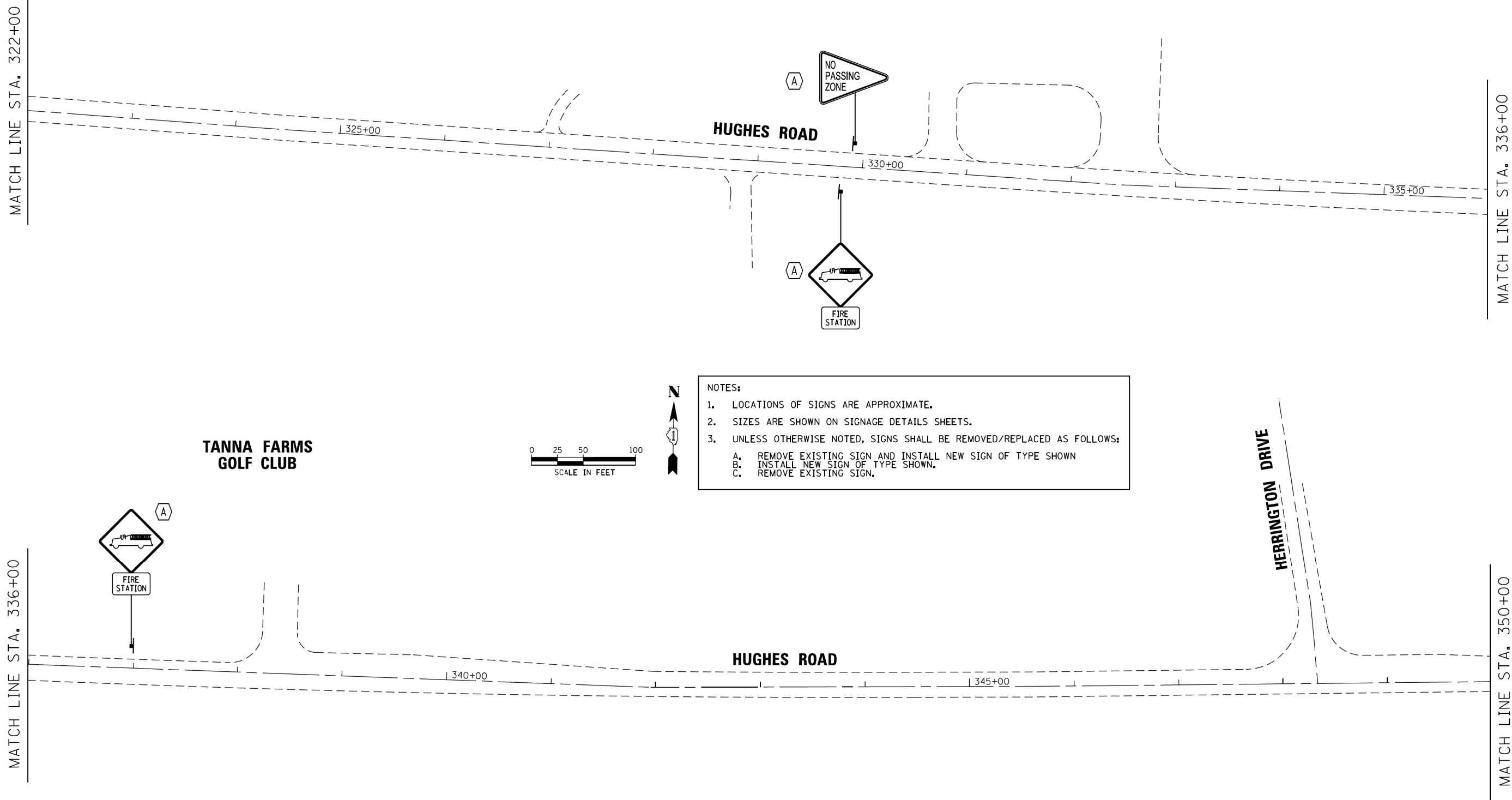
SIGNING PLAN			
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	160
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

FILE NAME: KH_sht_Hughes.p1en_08.dgn

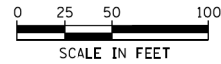
PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		

PROFILE	SUBMITTED	BY	DATE
	GRADES CHECKED		
	STRUCTURE NOTATIONS OK'D		
	NOTE BOOK NO.		



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY

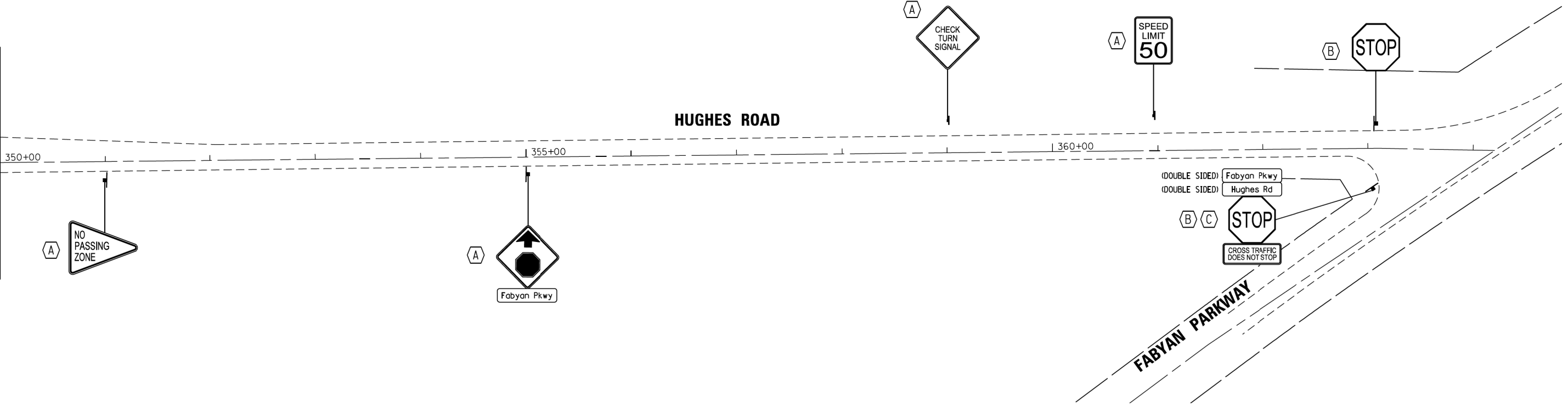
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	161
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

FILE NAME: KH_sht_Hughes.p1en_08.dgn

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		

MATCH LINE STA. 350+00



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN			
HUGHES ROAD FROM IL ROUTE 47 TO FABYAN PARKWAY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	162
CONTRACT NO.				-
ILLINOIS FED. AID PROJECT				

FILE NAME: KH_sht_Hughes.p1en_18.dgn

DATE	
BY	
PLAN	
SUBMITTED	
PLOTTED	
ALIGNMENT CHECKED	
FILE NAME	
NOTE BOOK NO.	

DATE	
BY	
PROFILE	
SUBMITTED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION OK'D	
NOTE BOOK NO.	



R1-1
(36 x 36)
11 EACH



R1-3P
(30 x 12)
4 EACH



R2-1
(30 x 36)
10 EACH



R3-5R
(30 x 36)
3 EACH



W1-2L
(36 x 36)
4 EACH



W1-2R
(36 x 36)
4 EACH



W1-7
(60 x 30)
2 EACH



W1-8L
(24 x 30)
16 EACH



W1-8R
(24 x 30)
13 EACH



W2-1
(36 x 36)
2 EACH



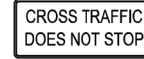
W2-2L
(36 x 36)
4 EACH



W2-2R
(36 x 36)
4 EACH



W3-1
(36 x 36)
4 EACH



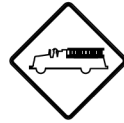
W4-4P
(36 x 18)
1 EACH



W7-3aP
(24 x 18)
1 EACH



W11-3 (DEER)
(36 x 36)
1 EACH



W11-8
(36 x 36)
2 EACH



W13-1P
(30 x 30)
4 EACH



W14-3
(48 x 48 x 36)
5 EACH



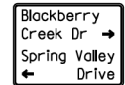
W16
(36 x 24)
2 EACH



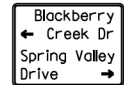
W
(36 x 36)
1 EACH



W
(36 x 36)
2 EACH



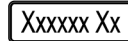
W16-8aP
(36 x 30)
1 EACH



W16-8aP
(36 x 30)
1 EACH



W16-8P
(VARIES x 8)
Route 47 - 1
Oakwood Dr - 2
Anderson Rd - 2
Pouley Rd - 2
Green Rd - 2
Bunker Rd - 2
Fabyan Pkwy - 1



D3-1
(VARIES x 12)
Bunker Rd - 2
Fabyan Pkwy - 2
Hughes Rd - 4

NOTES:

- ALL SIGN PANEL SIZES ARE IN INCHES.
- RADAR SPEED SIGNS SHALL BE INSTALLED PER THE DETAIL ON SHEET XX.
- ALL OTHER SIGNS SHALL BE INSTALLED PER IDOT STANDARDS.

SUMMARY OF QUANTITIES

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	746.5
SIGN PANEL - TYPE 2	SQ FT	25
REMOVE SIGN PANEL ASSEMBLY- TYPE A	EACH	46
REMOVE SIGN PANEL ASSEMBLY- TYPE B	EACH	21
REMOVE SIGN PANEL - TYPE 1	SQ FT	27
RELOCATE SIGN PANEL, TYPE 1	SQ FT	9
METAL POST - TYPE A	FOOT	294
METAL POST - TYPE B	FOOT	962
SERVICE INSTALLATION - POLE MOUNTED	EACH	3
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	178
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 1C	FOOT	729
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	16
RADAR SPEED SIGN	EACH	4

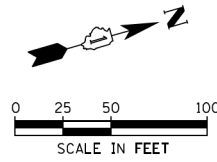
PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	PAID FILE NAME		
	NO.		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS OK'D		
	NO.		

300+00 305+00 310+00

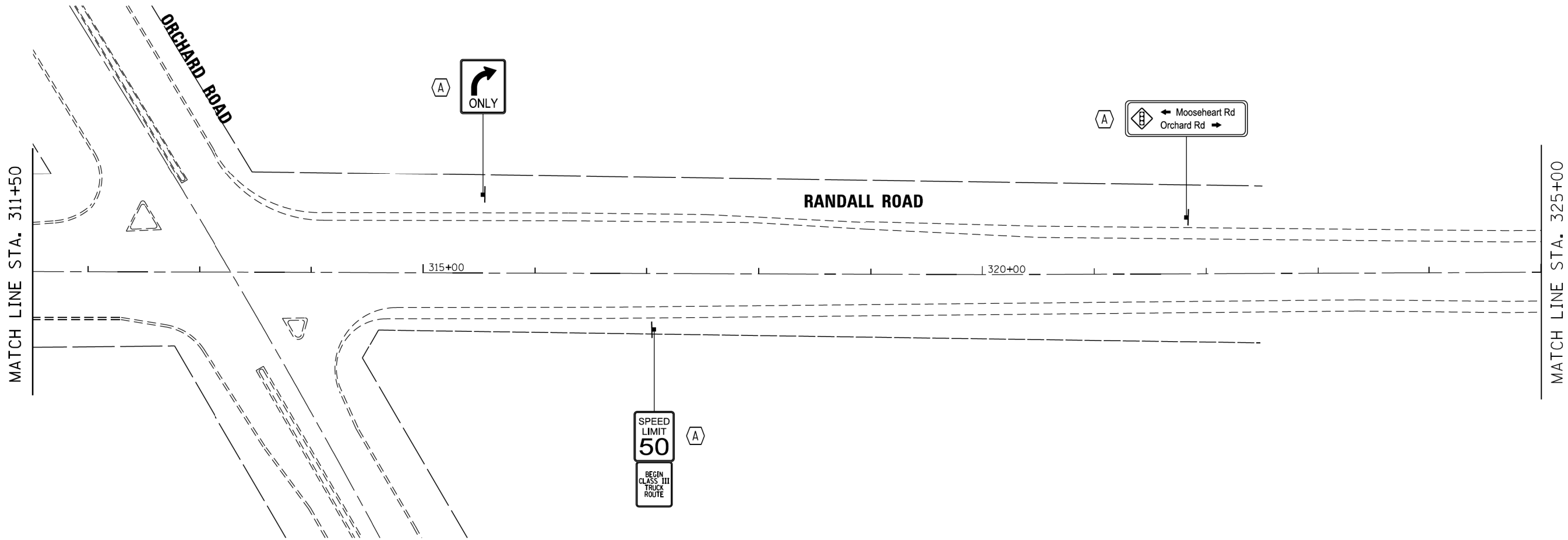
RANDALL ROAD

MATCH LINE STA. 311+50



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNING DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - B. INSTALL NEW SIGN OF TYPE SHOWN.
 - C. REMOVE EXISTING SIGN.



FILE NAME: KH_int.plt.dwg

ESI CONSULTANTS, LTD.
 375 N. WILSON STREET, SUITE 100
 SAUNTEEVA, IL 60155
 (630) 395-1100
 www.esiconsultants.com

USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	164
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO.	
	CADD FILE NAME	

PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK	
	NO.	
	STRUCTURE NOTATIONS DRPD	

MATCH LINE STA. 325+00

MATCH LINE STA. 339+50

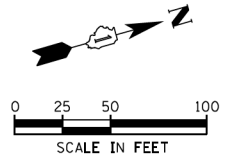
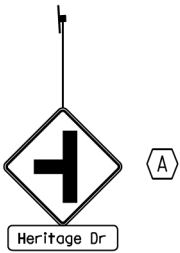
MATCH LINE STA. 339+50

MATCH LINE STA. 354+00

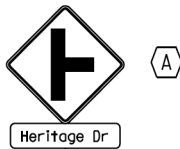
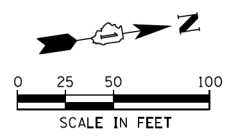
RANDALL ROAD

HERITAGE DRIVE

SPEED LIMIT 50



NOTES:
 1. LOCATIONS OF SIGNS ARE APPROXIMATE.
 2. SIZES ARE SHOWN ON SIGNING DETAILS SHEETS.
 3. UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 B. INSTALL NEW SIGN OF TYPE SHOWN.
 C. REMOVE EXISTING SIGN.



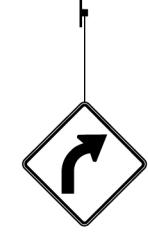
RANDALL ROAD

EMERGENCY PARKING ONLY

140'-UC
2"

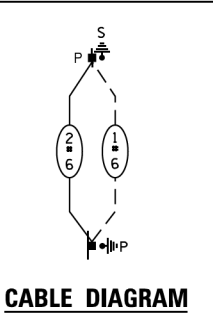
SPEED LIMIT 50
YOUR SPEED

EMERGENCY PARKING ONLY



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS				
TYPE	QUANTITY	LED WATTAGE	% OPERATION	TOTAL WATTAGE
RADAR SPEED SIGN	1	15	100	15.0
			TOTAL =	15.0

ENERGY COSTS TO:
 KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175
 ENERGY SUPPLY: CONTACT: NEW BUSINESS
 PHONE: 866-639-3532
 COMPANY: COMMONWEALTH EDISON
 ACCOUNT NUMBER: 3183143047



18' POST ON CONCRETE FOUNDATION, TYPE A APPROX STA. 345+50 (SEE SHEET 170 FOR DETAILS)

FILE NAME: KH_int.plt_02.dgn



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1"	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

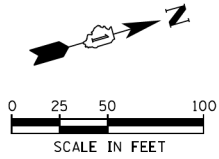
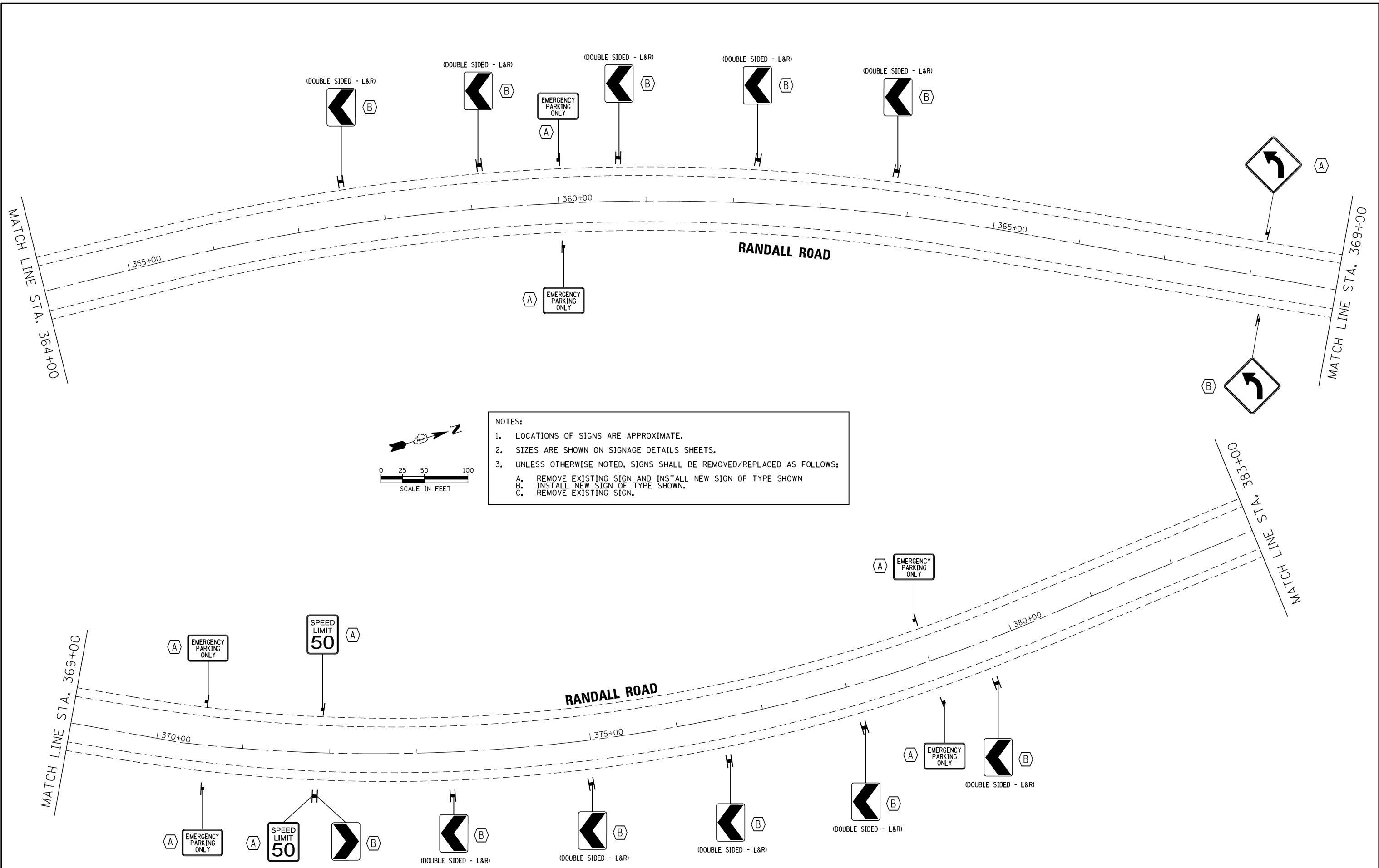
SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-SP	KANE	171	165
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

DATE	
BY	
SUBMITTED	
PLANNED	
ALIGNED	
CHECKED	
FILE NAME	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SUBMITTED	
PLANNED	
GRADES	
CHECKED	
STRUCTURE	
NOTATION	
PROFILE	
NOTE BOOK	
NO.	



NOTES:

1. LOCATIONS OF SIGNS ARE APPROXIMATE.
2. SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
3. UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 B. INSTALL NEW SIGN OF TYPE SHOWN.
 C. REMOVE EXISTING SIGN.

FILE NAME: KH_int.plt_03.dgn



USER NAME = bhenrichs	DESIGNED	REVISIONS
	DRAWN	REVISIONS
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISIONS
PLOT DATE = 11/15/2018	DATE	REVISIONS

	REVISIONS
	REVISIONS
	REVISIONS
	REVISIONS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	12-00424-00-SP	KANE	171	166
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

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

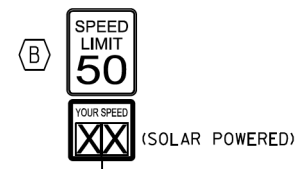
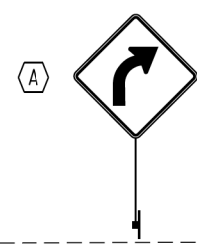
PROFILE	SUBMITTED	BY	DATE
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		

MATCH LINE STA. 383+00

MATCH LINE STA. 398+00

MATCH LINE STA. 398+00

MATCH LINE STA. 413+00



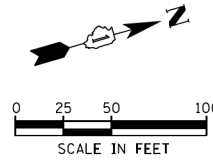
18' POST ON CONCRETE FOUNDATION, TYPE A APPROX STA. 390+50 (SEE SHEET XX FOR DETAILS)

RANDALL ROAD

RANDALL ROAD

Stationing: 385+00, 390+00, 395+00

Stationing: 400+00, 405+00, 410+00



NOTES:
 1. LOCATIONS OF SIGNS ARE APPROXIMATE.
 2. SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
 3. UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 A. REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 B. INSTALL NEW SIGN OF TYPE SHOWN.
 C. REMOVE EXISTING SIGN.

FILE NAME: KH_int.plt_04.dgn



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

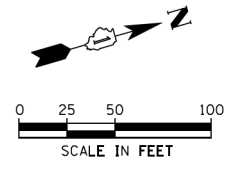
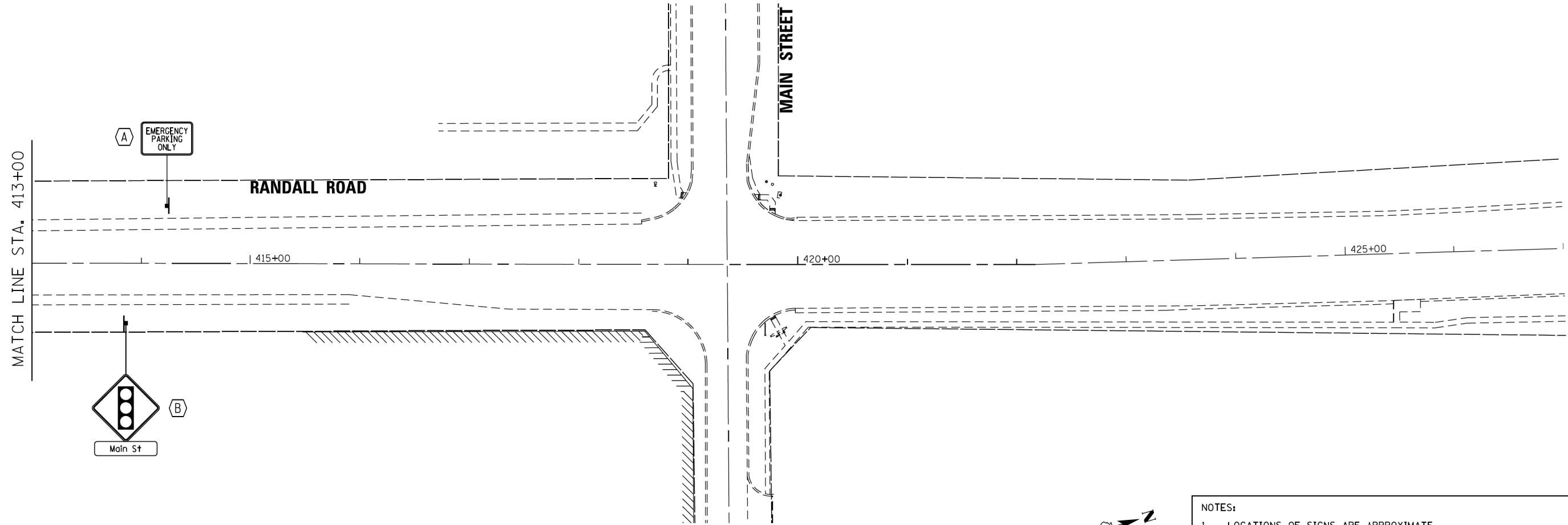
SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	167
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

PLAN	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		

PROFILE	SUBMITTED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		



NOTES:

- LOCATIONS OF SIGNS ARE APPROXIMATE.
- SIZES ARE SHOWN ON SIGNAGE DETAILS SHEETS.
- UNLESS OTHERWISE NOTED, SIGNS SHALL BE REMOVED/REPLACED AS FOLLOWS:
 - REMOVE EXISTING SIGN AND INSTALL NEW SIGN OF TYPE SHOWN
 - INSTALL NEW SIGN OF TYPE SHOWN.
 - REMOVE EXISTING SIGN.

FILE NAME: KH_11_15_18.plt_05.dgn



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0002' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	168
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

PLAN	SUBMITTED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	ALIGNMENT CHECKED	
	FILE NAME	

PROFILE	SUBMITTED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	ALIGNMENT CHECKED	
	STRUCTURE NOTATION	CHFD



R2-1
(36 x 48)
7 EACH



R2-1
(36 x 48)
1 EACH



R3-5R
(30 x 36)
1 EACH



R5-1101
(24 x 30)
1 EACH



R8-4
(48 x 36)
11 EACH



W1-2L
(48 x 48)
2 EACH



W1-2R
(48 x 48)
2 EACH



W1-8L
(36 x 48)
10 EACH



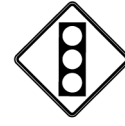
W1-8R
(36 x 48)
11 EACH



W2-2L
(48 x 48)
1 EACH



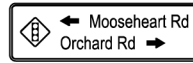
W2-2R
(48 x 48)
1 EACH



W3-3
(48 x 48)
1 EACH



W16-8P
(VARIES x 8)
Heritage Dr - 2
Main St - 1



D3-2
(78 x 30)
1 EACH

NOTES:

- ALL SIGN PANEL SIZES ARE IN INCHES.
- RADAR SPEED SIGNS SHALL BE INSTALLED PER THE DETAIL ON SHEET XX.
- ALL OTHER SIGNS SHALL BE INSTALLED PER IDOT STANDARDS.

SUMMARY OF QUANTITIES

ITEM	UNIT	QTY
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	608.5
REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	21
REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	3
METAL POST - TYPE A	FOOT	691
METAL POST - TYPE B	FOOT	291
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	140
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 1C	FOOT	459
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	8
RADAR SPEED SIGN	EACH	2

FILE NAME: KH_sht.dwg



USER NAME = bhenrichs	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 200.0004' / 1" =	CHECKED	REVISED
PLOT DATE = 11/15/2018	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
RANDALL ROAD FROM ORCHARD ROAD TO MAIN STREET

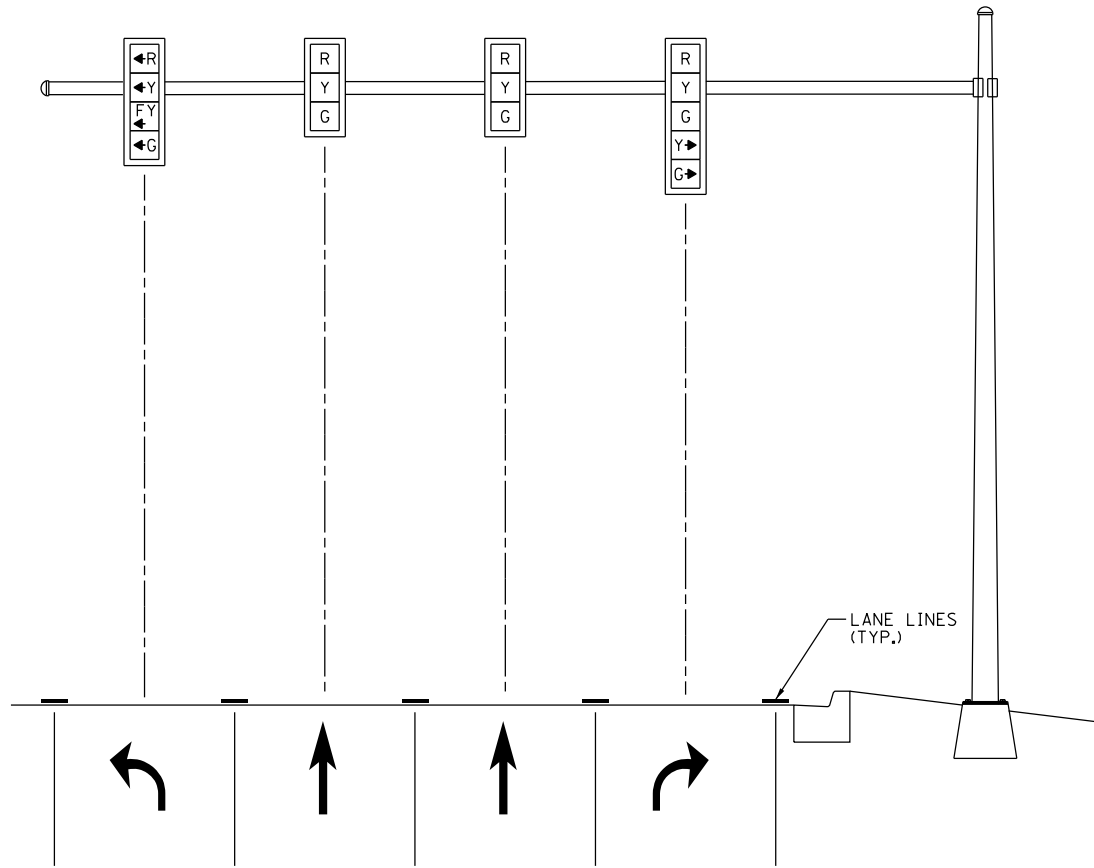
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	12-00424-00-SP	KANE	171	169
CONTRACT NO.			-	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

DATE	BY	SURVEYED	ALIGNED	CHECKED	RT. OF WAY CHECKED	ADD. FILE NAME
DATE	BY	GRADES CHECKED	BLM. NOTED	STRUCTURE NOTATIONS OK'D		
DATE	BY	PROFILE	NOTE BOOK			
DATE	BY	PLAN	NOTE BOOK			

CHRISTOPHER B. BURKE ENGINEERING LTD.
 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (647) 923-5500

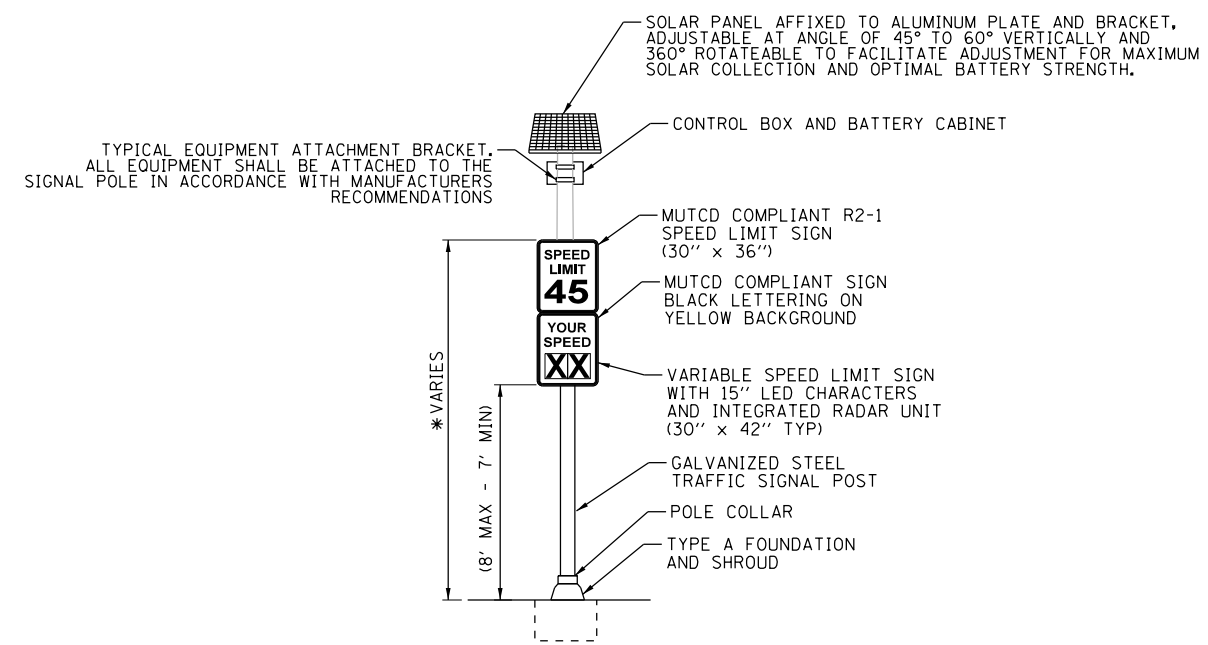
DATE	BY	SURVEYED	ALIGNED	CHECKED	RT. OF WAY CHECKED	ADD. FILE NAME
DATE	BY	GRADES CHECKED	BLM. NOTED	STRUCTURE NOTATIONS OK'D		
DATE	BY	PROFILE	NOTE BOOK			
DATE	BY	PLAN	NOTE BOOK			



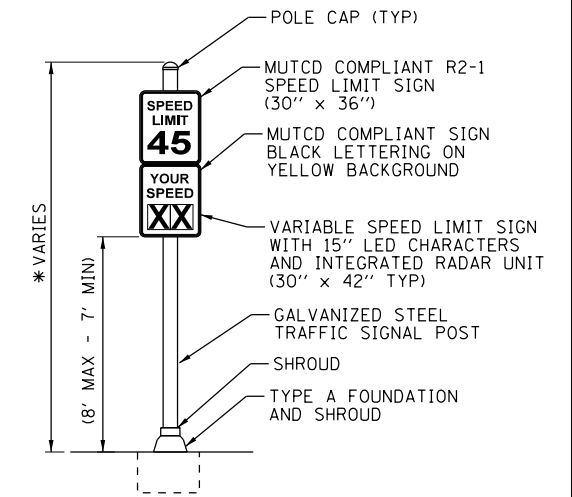
STANDARD MAST ARM SIGNAL HEAD ALIGNMENT
 (NOT TO SCALE)



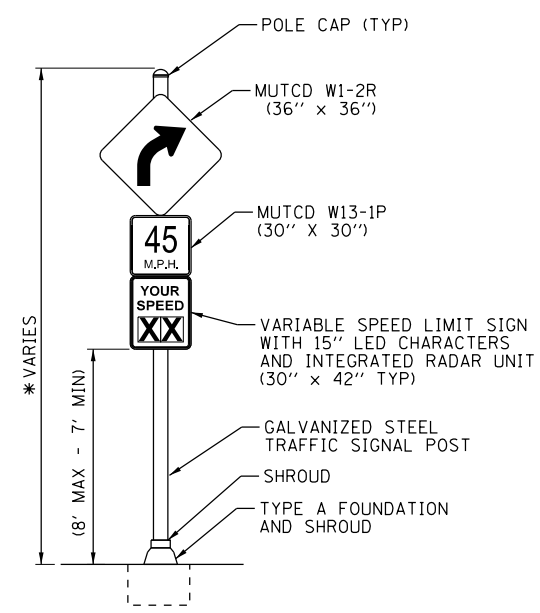
- NOTES:**
- COLOR: BACKGROUND: WHITE
MESSAGE: BLACK
 - LINE 1 IS SERIES C
LINE 2, 4 AND 5 ARE SERIES D
LINE 3 IS SERIES B
 - ALL DIMENSIONS SHOWN ARE IN INCHES



STANDARD CMS SPEED LIMIT SIGN ASSEMBLY DETAIL (SOLAR POWERED)
 (NOT TO SCALE)



STANDARD CMS SPEED LIMIT SIGN ASSEMBLY DETAIL
 (NOT TO SCALE)



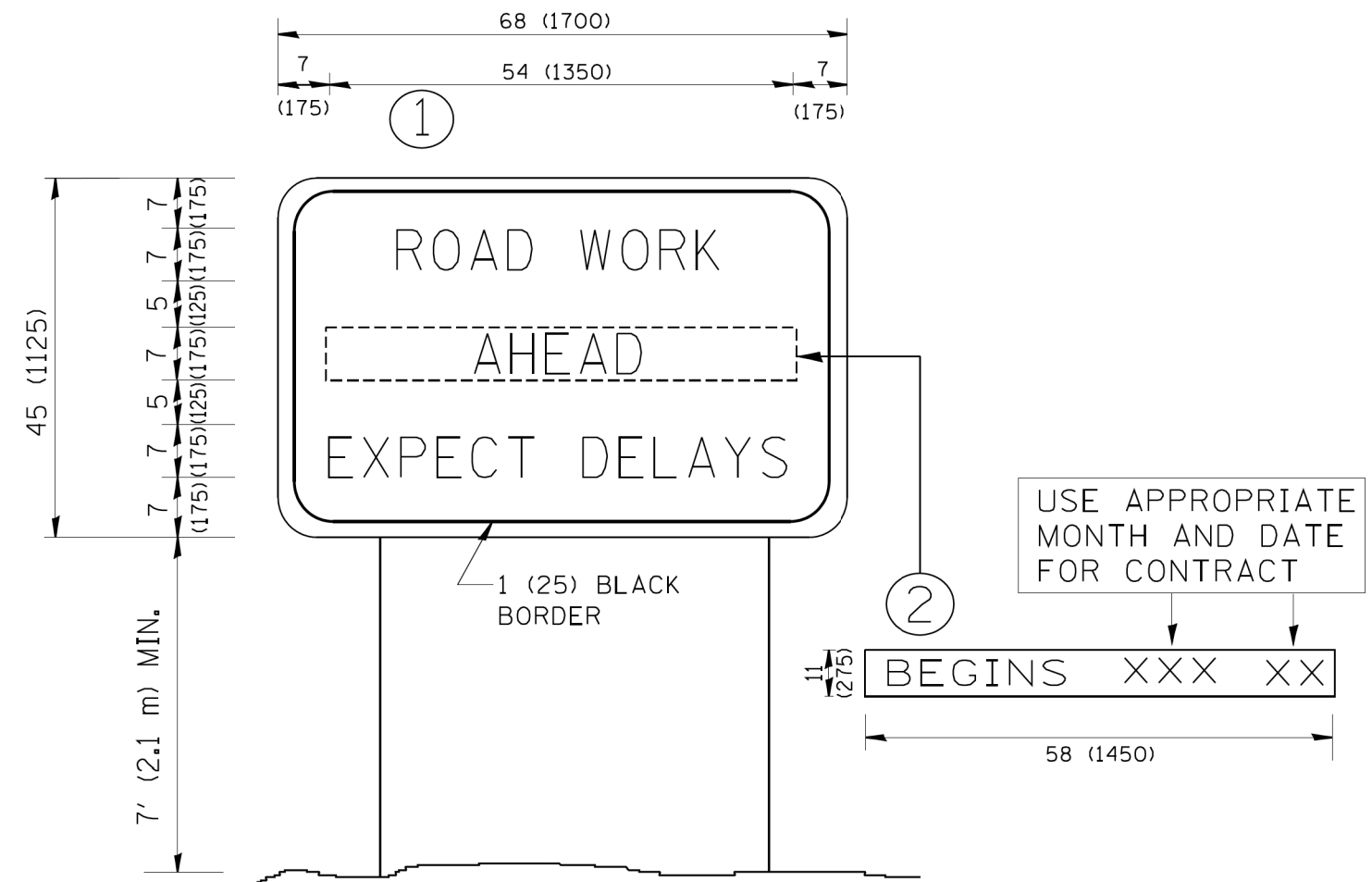
STANDARD CMS CURVE AHEAD WARNING SIGN ASSEMBLY DETAIL
 (NOT TO SCALE)

FILE NAME	USER NAME = fbariso	DESIGNED - TFS	REVISED -
Detail sheet-01		DRAWN - FPB	REVISED -
	PLOT SCALE = 2"	CHECKED - GMZ	REVISED -
	PLOT DATE = 11/16/2018	DATE - 11/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	170
CONTRACT NO. 61E74			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT HS1P-W3HX(781)	



NOTES:

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

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl.enobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	12-00424-00-SP	KANE	171	171
TC-22		CONTRACT NO. 61E74		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				