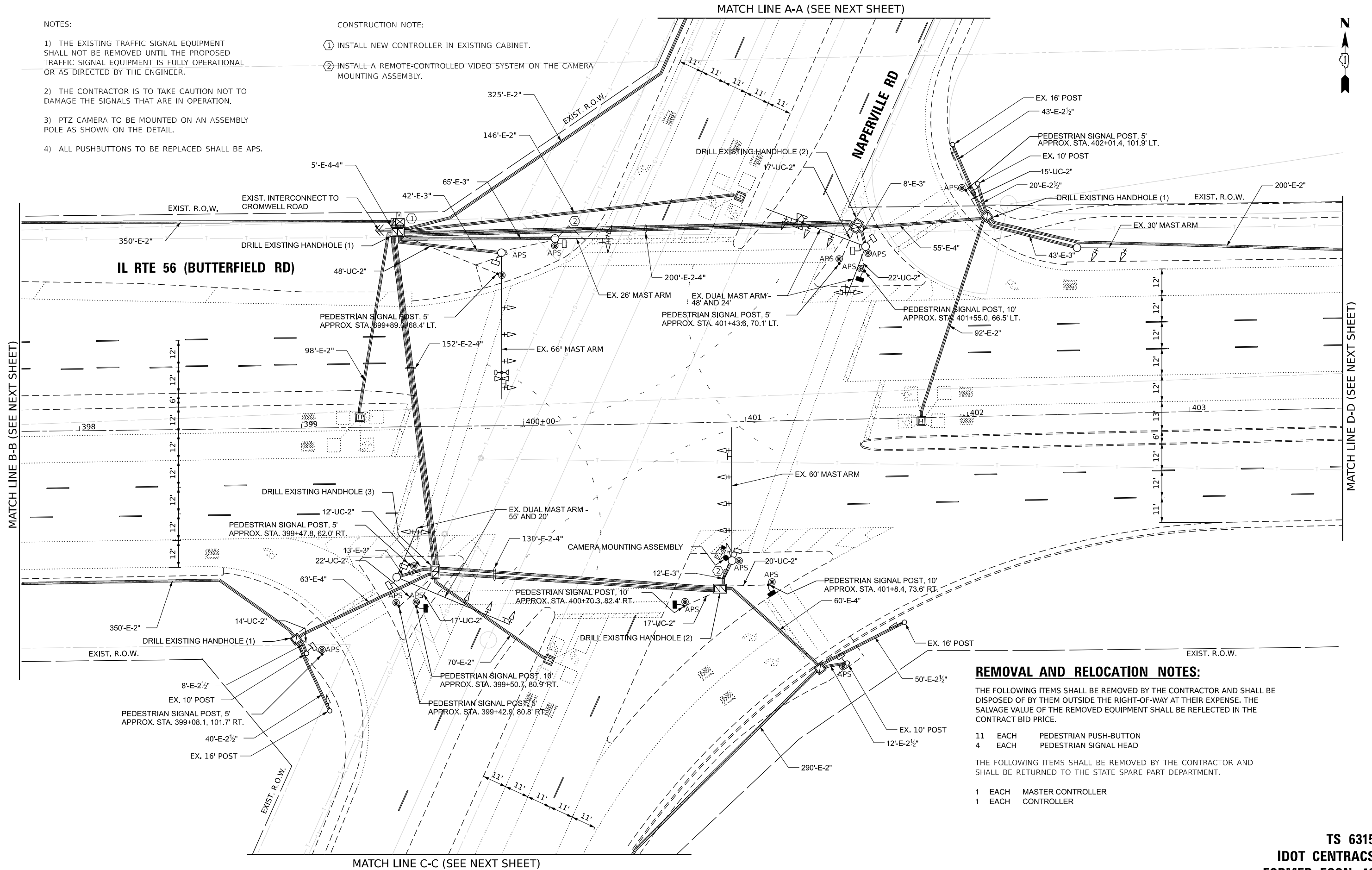


NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON AN ASSEMBLY POLE AS SHOWN ON THE DETAIL.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

CONSTRUCTION NOTE:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE CAMERA MOUNTING ASSEMBLY.



- 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.
- 11 EACH PEDESTRIAN PUSH-BUTTON
 - 4 EACH PEDESTRIAN SIGNAL HEAD
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.
- 1 EACH MASTER CONTROLLER
 - 1 EACH CONTROLLER

TS SHT NO. 30

MODEL: 4400.DWG
FILE NAME: D:\ENR22-2R\TS30-MODTIL56\NAPERVILLE.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

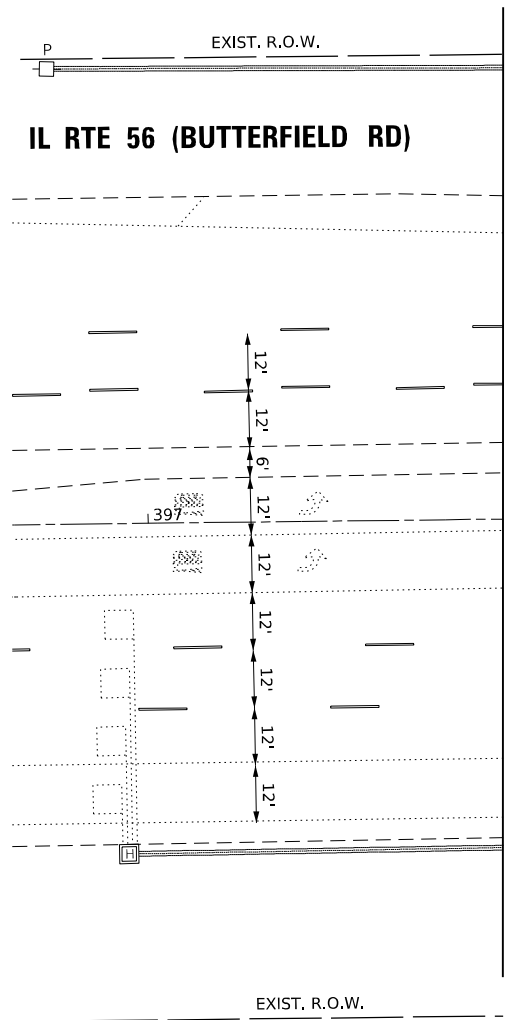
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 1 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND NAPERVILLE ROAD**

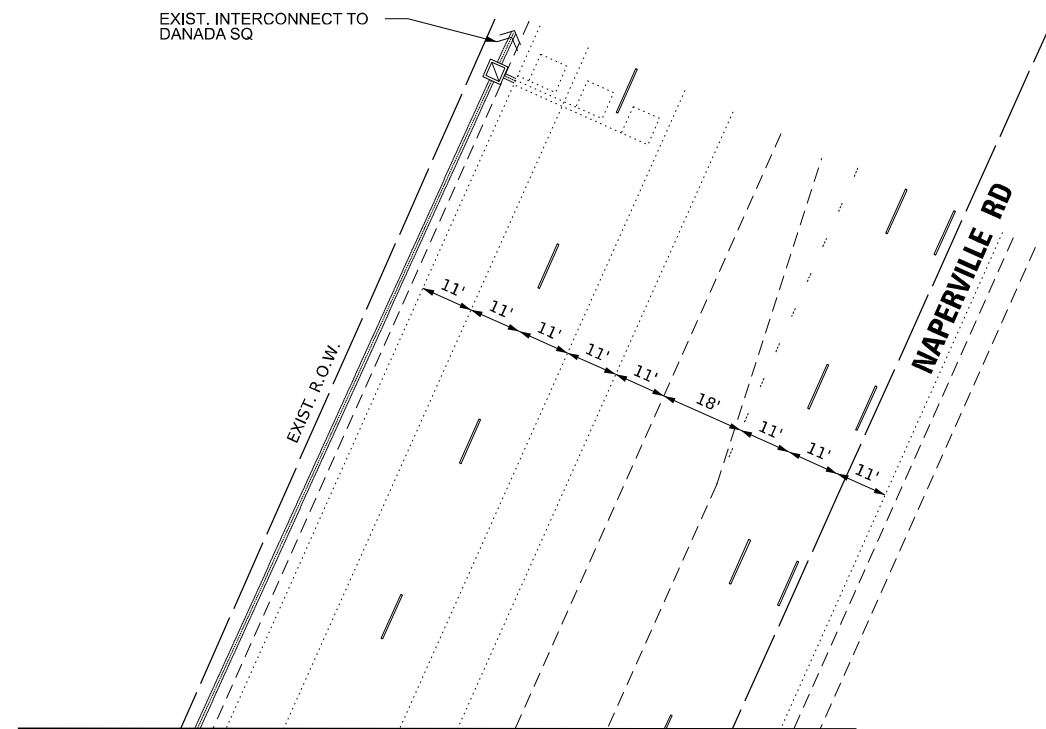
SCALE: 1" = 20' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	201
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

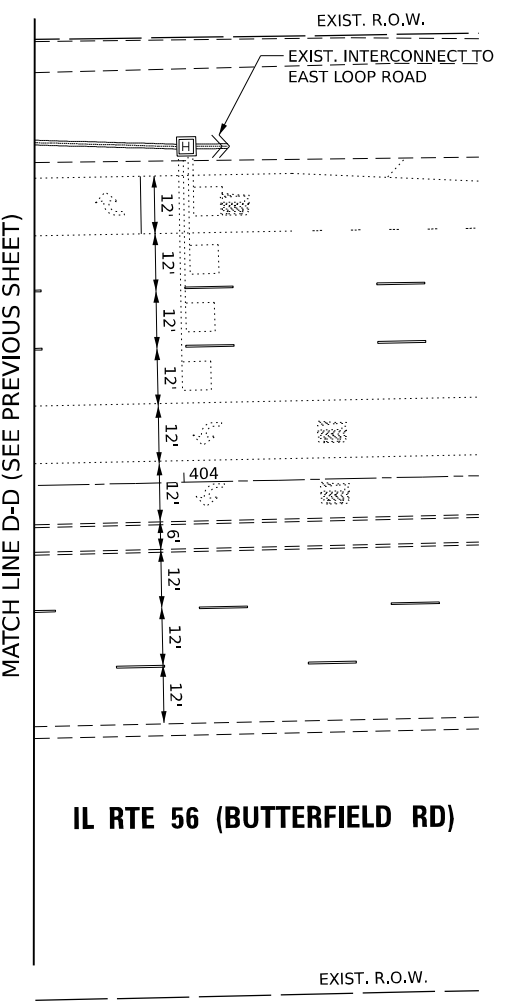
**TS 6315
IDOT CONTRACS
FORMER ECON 46**



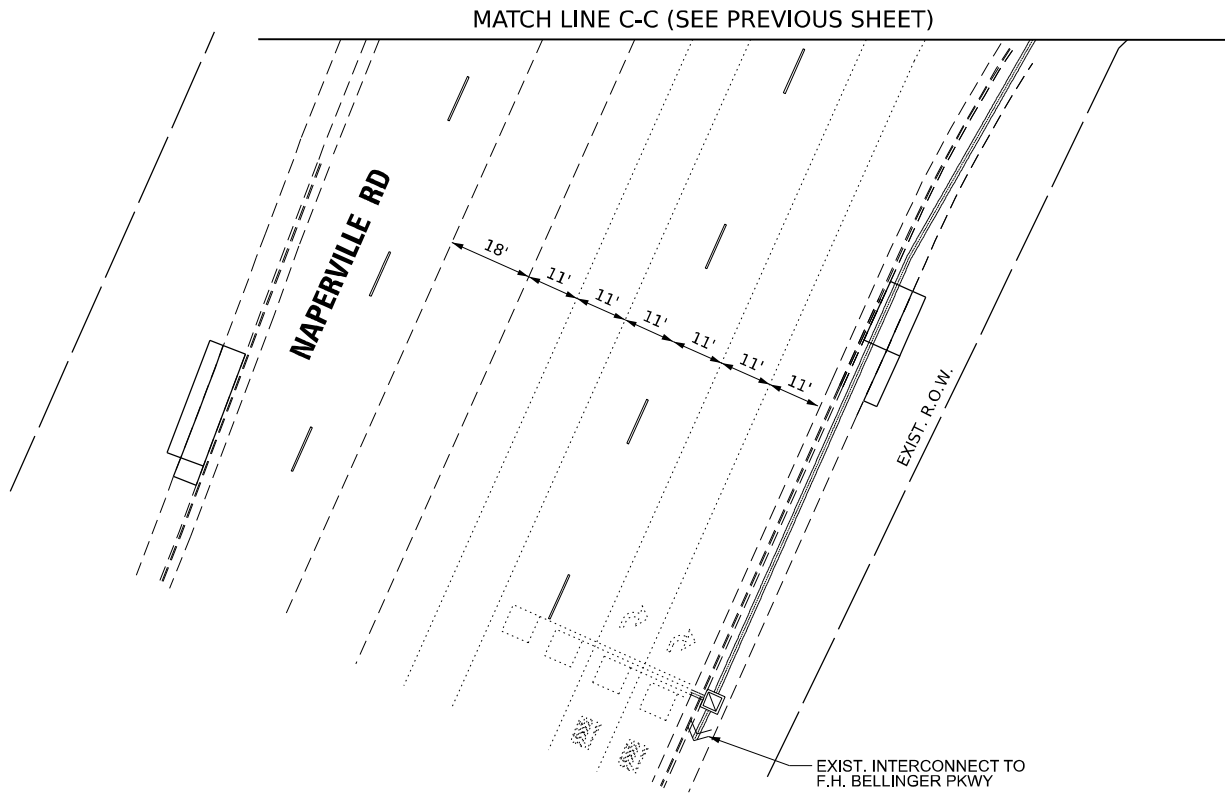
MATCH LINE B-B (SEE PREVIOUS SHEET)



MATCH LINE A-A (SEE PREVIOUS SHEET)



MATCH LINE D-D (SEE PREVIOUS SHEET)



MATCH LINE C-C (SEE PREVIOUS SHEET)

TS SHT NO. 31

MODEL NAME: D:\ENR22-2R-TS31-MODTL56\NAPERVILLE.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

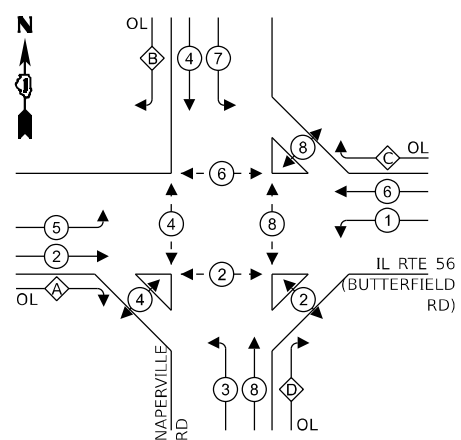
**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND NAPERVILLE ROAD**

SCALE: 1" = 20' SHEET 2 OF 2 SHEETS STA. TO STA.

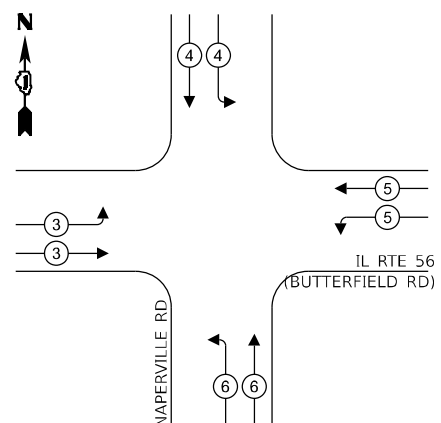
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	202
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6315
IDOT CENTRACS
FORMER ECON 46**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

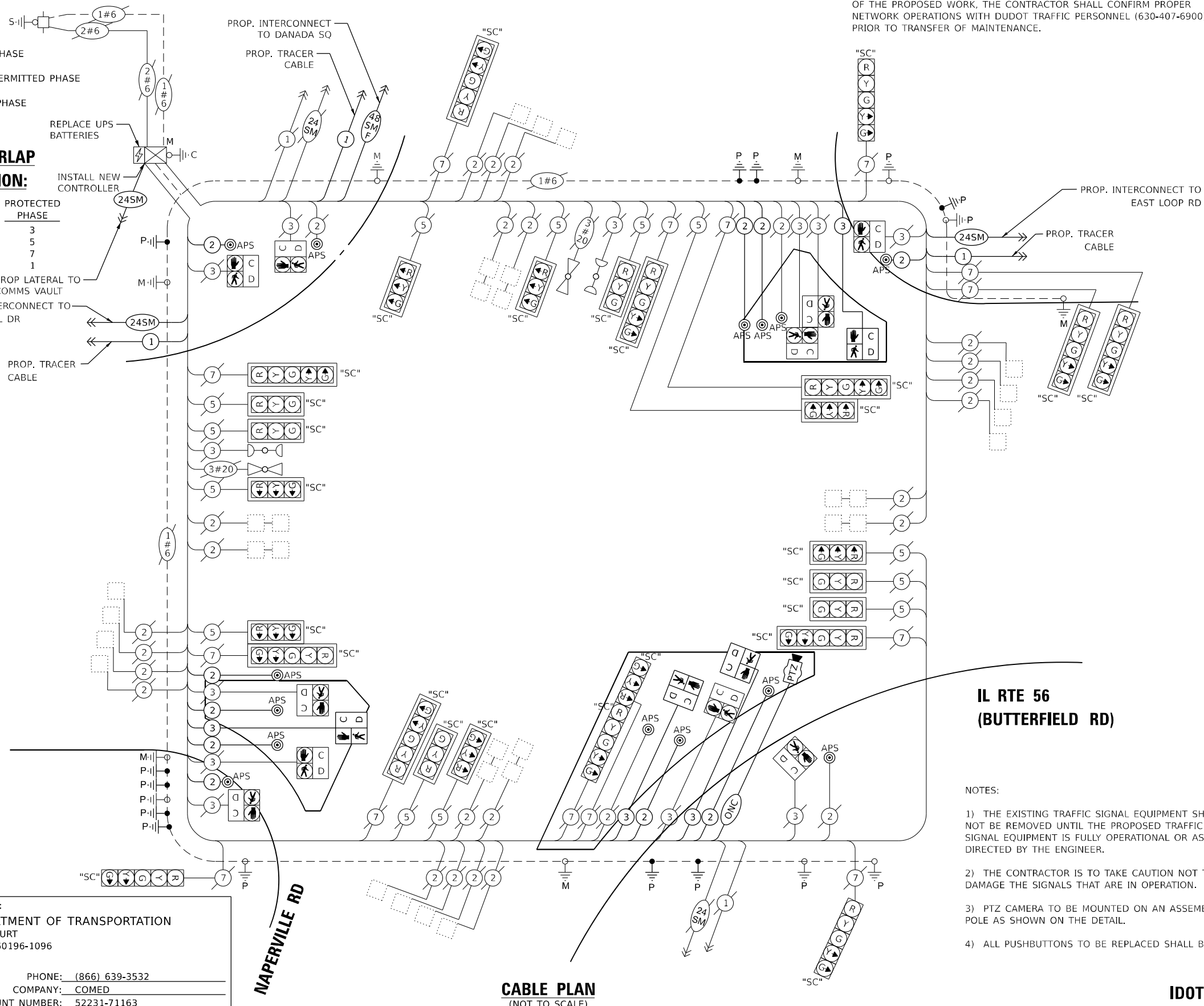
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1

PROP LATERAL TO COMMS VAULT
 PROP. INTERCONNECT TO CROMWELL DR

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W CENTER COURT
 SCHAUMBURG, IL 60196-1096
 ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 52231-71163

NOTE:

1) CONTRACTOR SHALL TAKE CARE TO MAINTAIN AND REESTABLISH THE FIBER OPTIC CONNECTION ALONG NAPERVILLE ROAD THAT SERVES THE DUPAGE COUNTY CENTRAL SIGNAL SYSTEM. AFTER COMPLETION OF THE PROPOSED WORK, THE CONTRACTOR SHALL CONFIRM PROPER NETWORK OPERATIONS WITH DUDOT TRAFFIC PERSONNEL (630-407-6900) PRIOR TO TRANSFER OF MAINTENANCE.



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	14	11	154
4-SECTION	-	14	-
5-SECTION	13	13	169
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	14	15	210
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	-	20	-
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	1	35	35
	-	15	-
TOTAL UPS SIZING		743	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1348	

IL RTE 56 (BUTTERFIELD RD)

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON AN ASSEMBLY POLE AS SHOWN ON THE DETAIL.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

CABLE PLAN (NOT TO SCALE)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 56 (BUTTERFIELD RD) AND NAPERVILLE ROAD

TS 6315 IDOT CENTRACS FORMER ECON 46

TS SHT NO. 32

MODEL: 1400BELMONT
 FILE NAME: D:\ENR2024\TS32-CABLI\NAPERVILLE.dwg

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME	= shassan
DESIGNED	- JR
REVISION	-
DRAWN	- SR
REVISION	-
PLOT SCALE	= \$SCALE\$
CHECKED	- JR
REVISION	-
PLOT DATE	= 2/23/2024
DATE	- 07/14/2023
REVISION	-

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	203
				CONTRACT NO. 62N32
ILLINOIS FED. AID PROJECT				

TS SHT NO. 33

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-ar-13533-STM\56\NAPERVILLE.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND NAPERVILLE ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

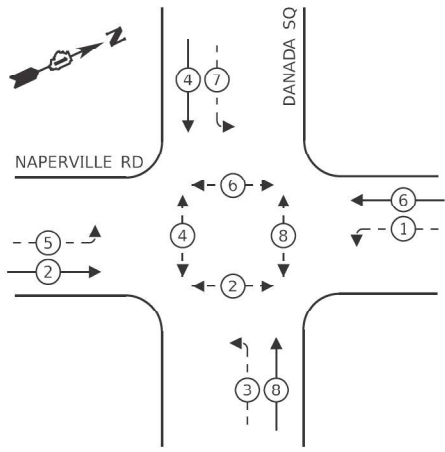
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	204
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6315
IDOT CENTRACS
FORMER ECON 46**

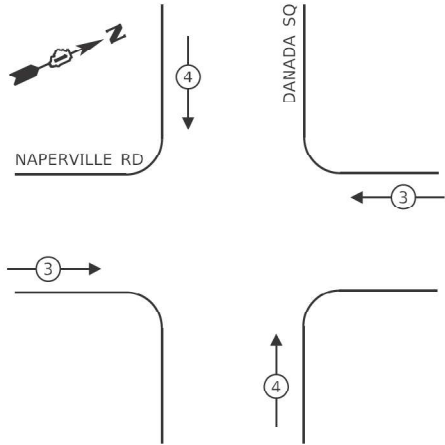
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	204
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2535
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1220
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2224
DRILL EXISTING HANDHOLE	EACH	10
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	372
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	4
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	6
LAYER III (NETWORK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	14
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	40
LED SIGNAL FACE, LENS COVER	EACH	27
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	10
CAMERA MOUNTING ASSEMBLY	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
POWER OVER ETHERNET EXTENDER	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	27

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE

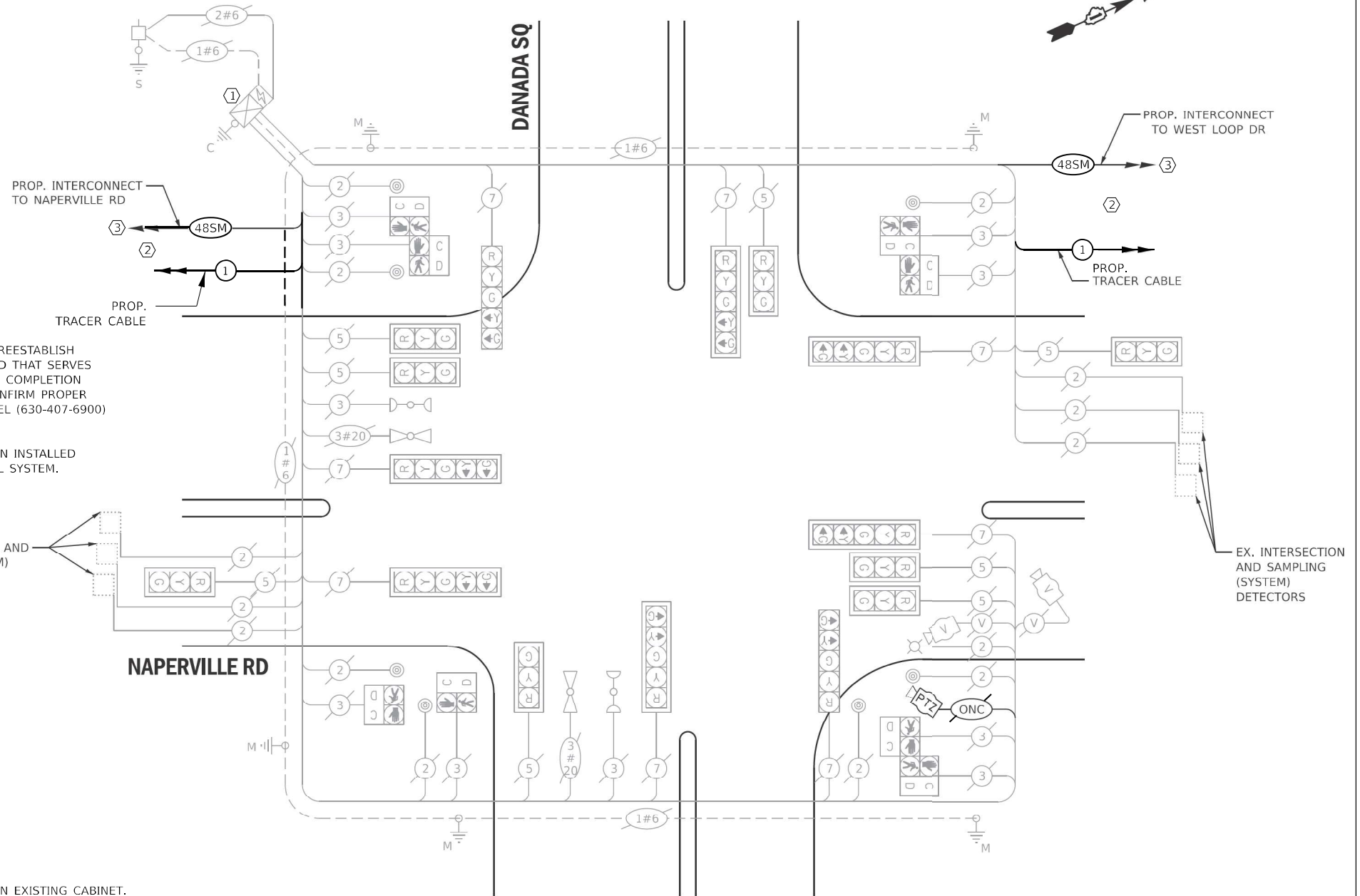


LEGEND:

- ⊛ PROTECTED PHASE
- ⊛-⊛ PROTECTED/PERMITTED PHASE
- ⊛-⊛ PEDESTRIAN PHASE
- ⊛ OL OVERLAP

NOTES:

- 1) CONTRACTOR SHALL TAKE CARE TO MAINTAIN AND REESTABLISH THE FIBER OPTIC CONNECTION ALONG NAPERVILLE ROAD THAT SERVES THE DUPAGE COUNTY CENTRAL SIGNAL SYSTEM. AFTER COMPLETION OF THE PROPOSED WORK, THE CONTRACTOR SHALL CONFIRM PROPER NETWORK OPERATIONS WITH DUDOT TRAFFIC PERSONNEL (630-407-6900) PRIOR TO TRANSFER OF MAINTENANCE.
- 2) EXISTING LAYER III (NETWORK) SWITCH IS TO REMAIN INSTALLED AND IN USE FOR THE DUPAGE COUNTY CENTRAL SIGNAL SYSTEM.



CONSTRUCTION NOTE:

- ① INSTALL LAYER II (DATALINK) SWITCH IN EXISTING CABINET.
- ② REMOVE EXISTING FIBER OPTIC (2) AND TRACER CABLES FROM IL RTE 56 (BUTTERFIELD RD) TO EAST-WEST LOOP ROAD.
- ③ INSTALL NEW 48 SINGLE MODE FIBER OPTIC CABLE AND TRACER CABLE FROM IL RTE 56 (BUTTERFIELD RD) TO EAST-WEST LOOP ROAD.

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
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
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	1	250	50	125.0
PTZ CAMERA	1	75	100	75.0
TOTAL =				841.4

ENERGY COSTS TO:

DUPAGE COUNTY D.O.T.

421 N. COUNTY FARM RD.
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO
PHONE: (630)-424-5704
COMPANY: COM-ED LOMBARD
ACCOUNT NUMBER:

CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2358
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	786
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	786
CENTRACS LICENSE EXPANSION	EACH	1

TS SHT NO. 34

MODEL NAME: D:\ENR22-2017-134-CABILL\SD\NAPERVILLE.DWG

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

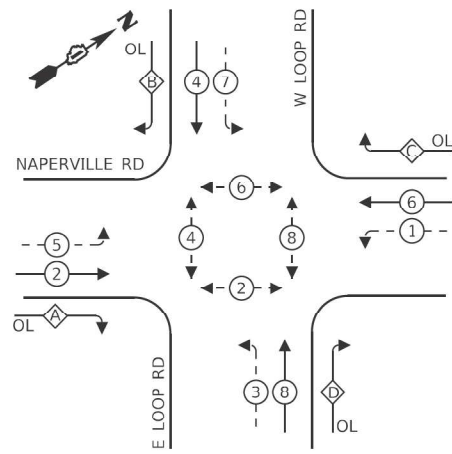
CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
NAPERVILLE RD AND DANADA SQ

SCALE: 1" = 20' SHEET 1 OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	205
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 8045
DUDOT
IDOT CENTRACS

EXISTING CONTROLLER SEQUENCE



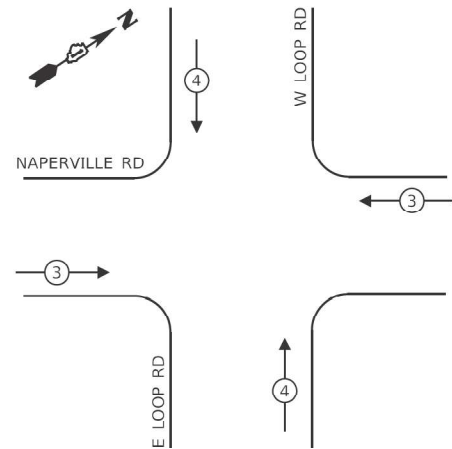
LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

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



NOTES:

- 1) CONTRACTOR SHALL TAKE CARE TO MAINTAIN AND REESTABLISH THE FIBER OPTIC CONNECTION ALONG NAPERVILLE ROAD THAT SERVES THE DUPAGE COUNTY CENTRAL SIGNAL SYSTEM. AFTER COMPLETION OF THE PROPOSED WORK, THE CONTRACTOR SHALL CONFIRM PROPER NETWORK OPERATIONS WITH DUDOT TRAFFIC PERSONNEL (630-407-6900) PRIOR TO TRANSFER OF MAINTENANCE.
- 2) EXISTING LAYER II (DATALINK) SWITCH IS TO REMAIN INSTALLED AND IN USE FOR THE DUPAGE COUNTY CENTRAL SIGNAL SYSTEM.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	11	50	110.0
(YELLOW)	20	20	5	20.0
(GREEN)	20	12	45	108.0
PERMISSIVE ARROW	36	10	10	36.0
PED. SIGNAL	8	20	100	160.0
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	2	250	50	250.0
PTZ CAMERA	-	75	100	-
TOTAL =				809.0

ENERGY COSTS TO:

DUPAGE COUNTY D.O.T.

421 N. COUNTY FARM RD.
WHEATON, IL 60187

ENERGY SUPPLY: CONTACT: MR. JOE STACHO
PHONE: (630)-424-5704
COMPANY: COM-ED LOMBARD
ACCOUNT NUMBER:

CONSTRUCTION NOTE:

- ① INSTALL LAYER II (DATALINK) SWITCH IN EXISTING CABINET.
- ② REMOVE EXISTING FIBER OPTIC (2) AND TRACER CABLES FROM IL RTE 56 (BUTTERFIELD RD) TO EAST-WEST LOOP ROAD.
- ③ INSTALL NEW 48 SINGLE MODE FIBER OPTIC CABLE AND TRACER CABLE FROM IL RTE 56 (BUTTERFIELD RD) TO EAST-WEST LOOP ROAD.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2940
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	980
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTICIP (SPECIAL)	EACH	1
FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE	FOOT	980
CENTRACS LICENSE EXPANSION	EACH	1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES NAPERVILLE RD AND LOOP RD

SCALE: 1" = 20' SHEET 1 OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	206
				CONTRACT NO. 62N32

ILLINOIS FED. AID PROJECT

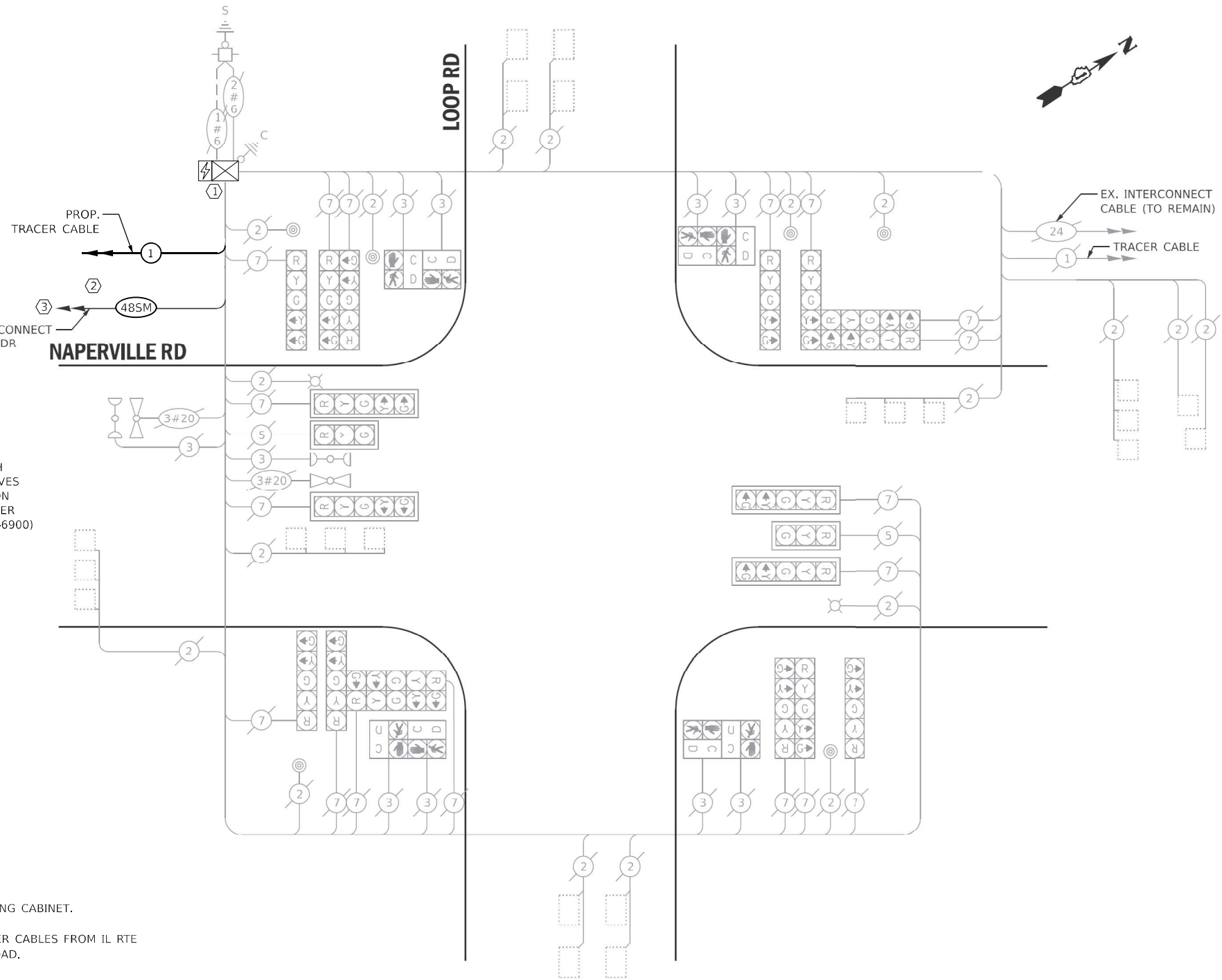
TS SHT NO. 35

MODEL NAME: D:\ENR22-01\TS35-CABLI568\WESTLOOP.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**TS 8076
DUDOT
IDOT CENTRACS**



CABLE PLAN
(NOT TO SCALE)

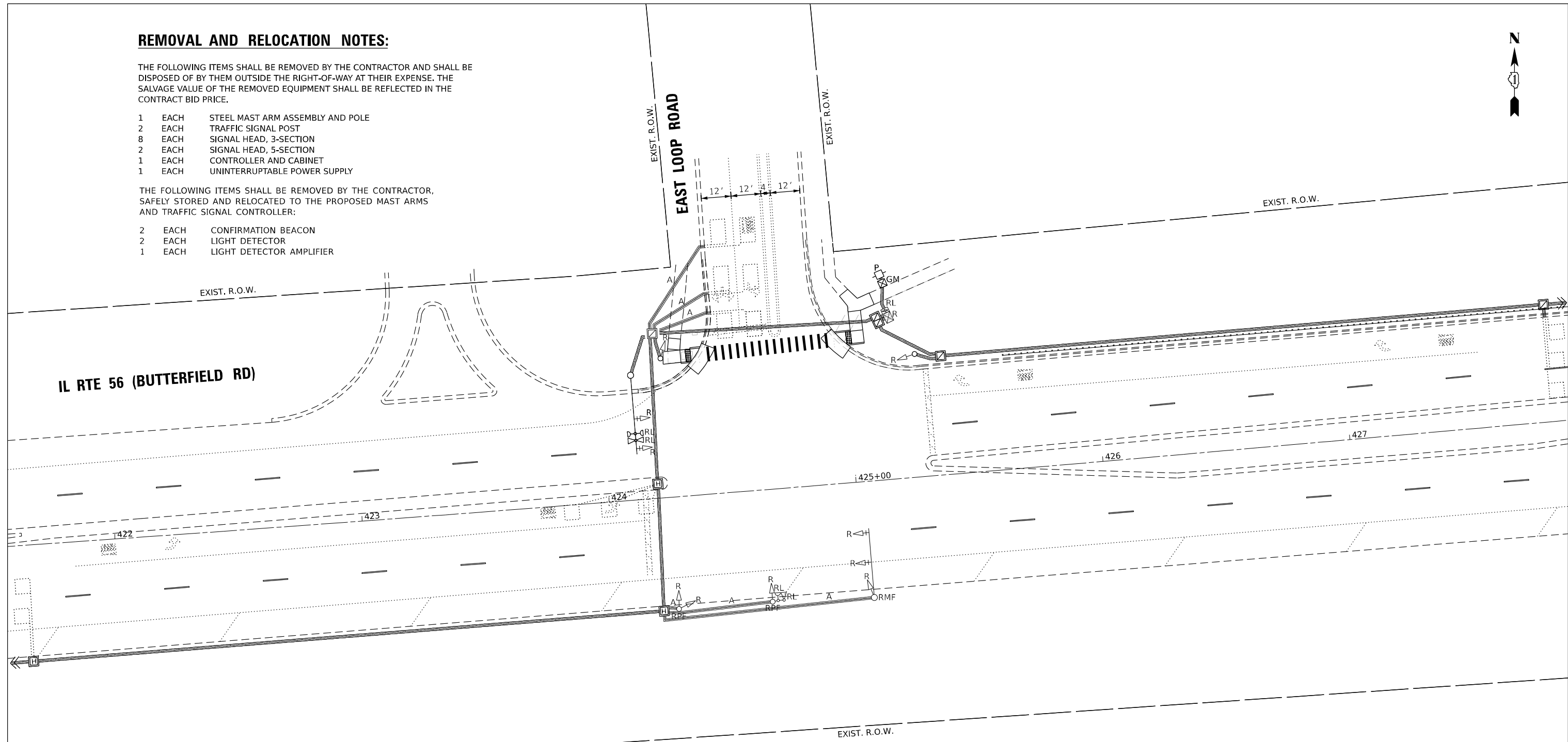
REMOVAL AND RELOCATION NOTES:

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 POLE
- 2 EACH TRAFFIC SIGNAL POST
- 8 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 1 EACH CONTROLLER AND CABINET
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING ITEMS 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
- 1 EACH LIGHT DETECTOR AMPLIFIER



- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.

TS SHT NO. 36

MODEL NAME: D:\2023\2023-2024\TS36-REMI56EASTLOOP.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND E LOOP ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	207
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

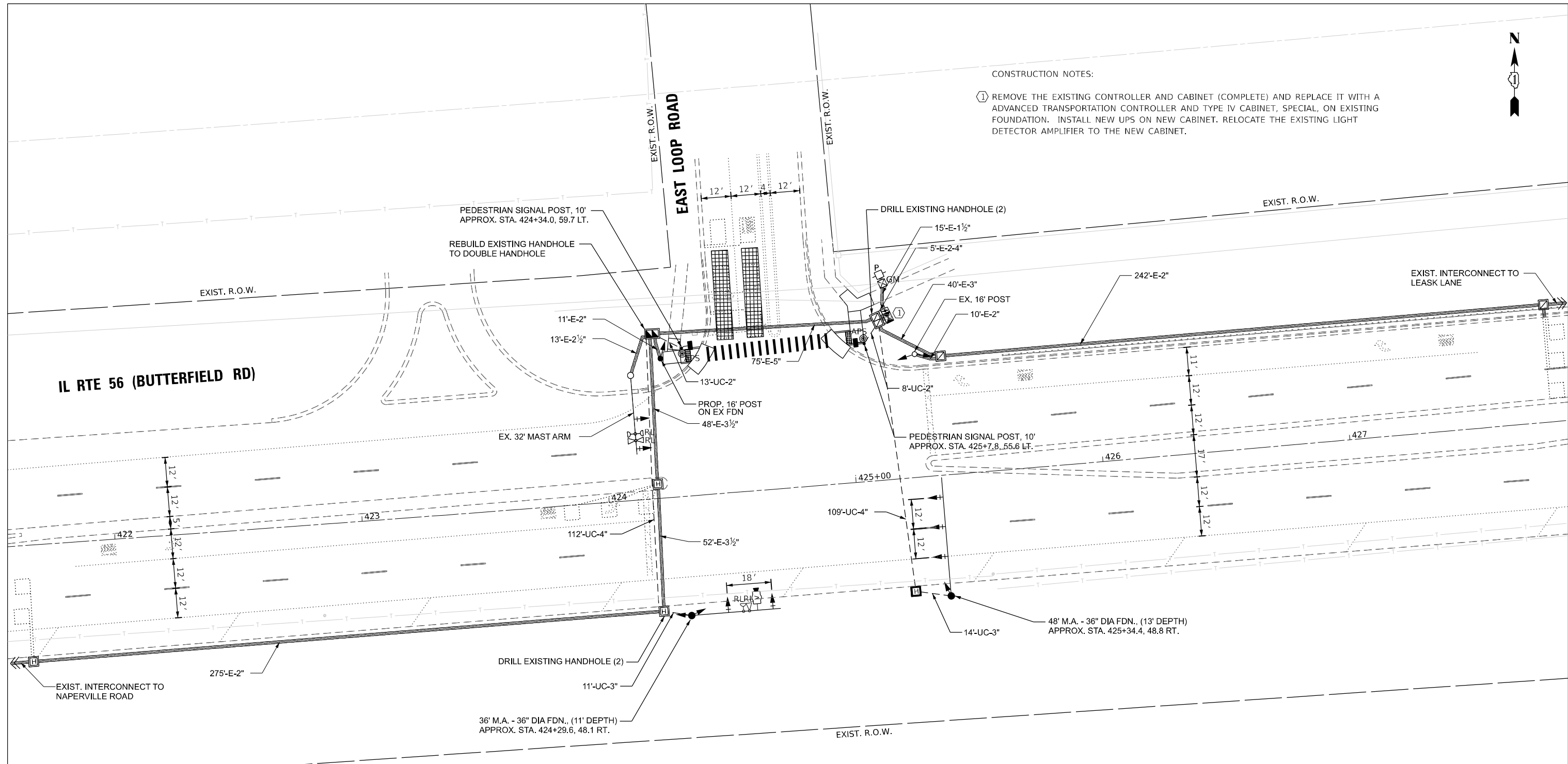
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

TS 20660
IDOT CENTRACS
FORMER ECON 46



CONSTRUCTION NOTES:

- ① REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV CABINET, SPECIAL, ON EXISTING FOUNDATION. INSTALL NEW UPS ON NEW CABINET. RELOCATE THE EXISTING LIGHT DETECTOR AMPLIFIER TO THE NEW CABINET.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREET SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 37

MODEL NAME: D:\2020-265-SUR\2020-265-SUR-TS37-MOD156EAST.ODP.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND E LOOP ROAD

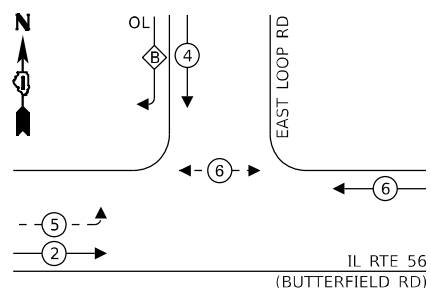
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	208
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 20660
IDOT CENTRACS
FORMER ECON 46

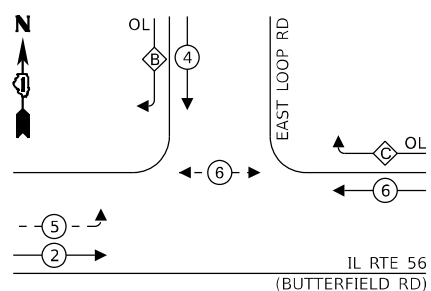
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.



EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

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

RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

PROP. INTERCONNECT TO NAPERVILLE RD

LEGEND:

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

RIGHT TURN OVERLAP

PHASE DESIGNATION:

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

NOTES:

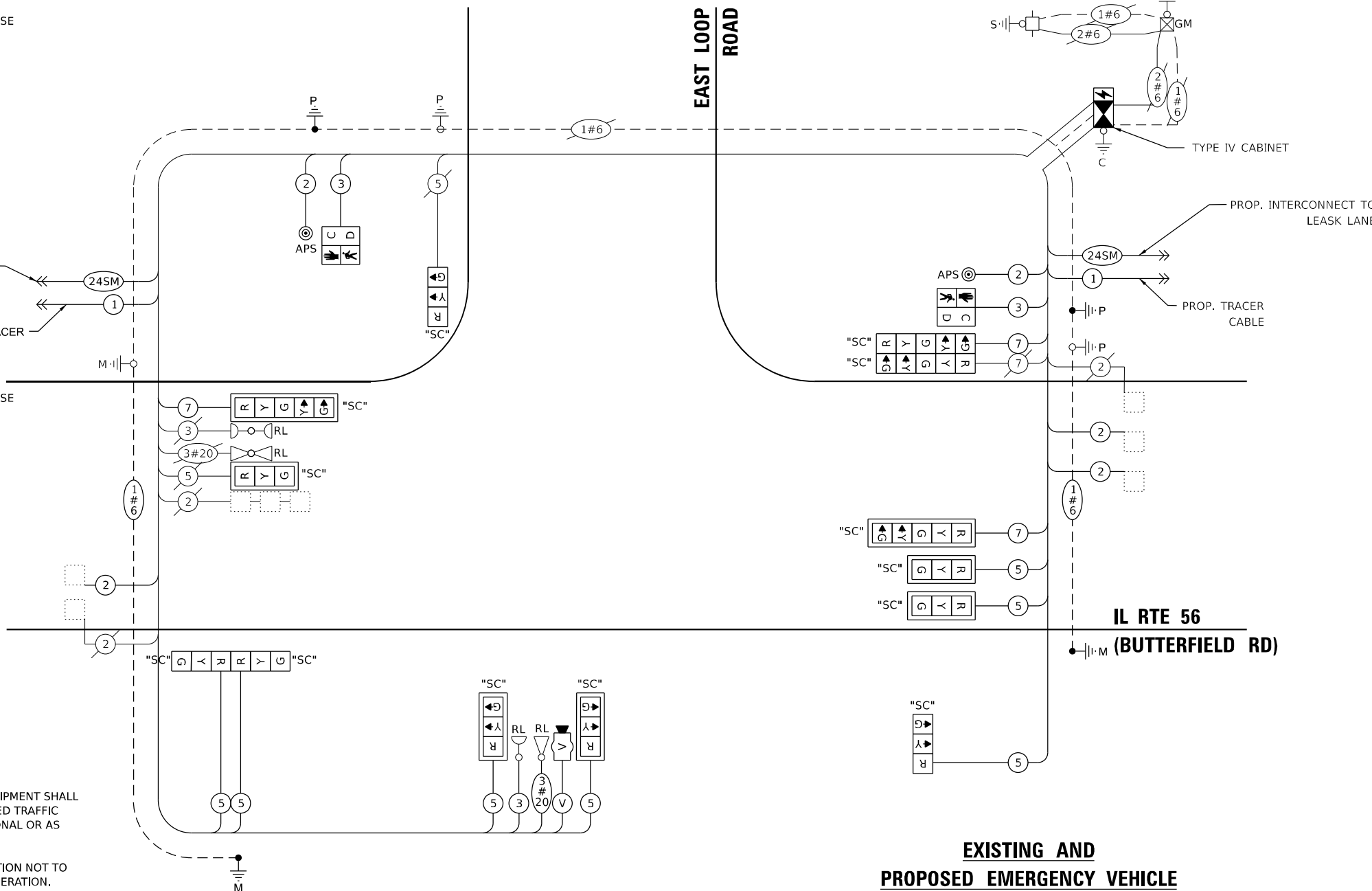
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREET SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

ENERGY COSTS TO:

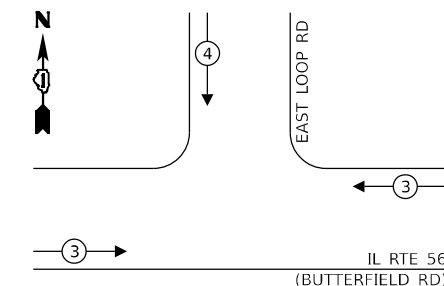
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 17790-78082



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND E LOOP ROAD

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	209
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	9	11	99
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		411	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1016	

TS SHT NO. 38

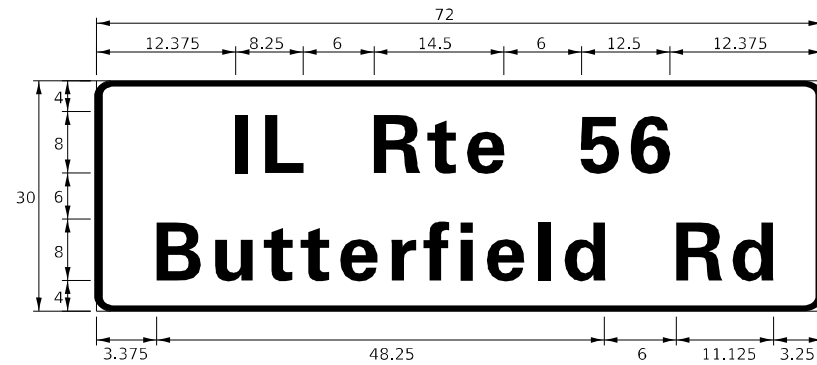
MODEL: 1409BELNAMES
FILE NAME: D:\ENR2020-265-SUR-TS38-CABL SER EAST LOOP.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

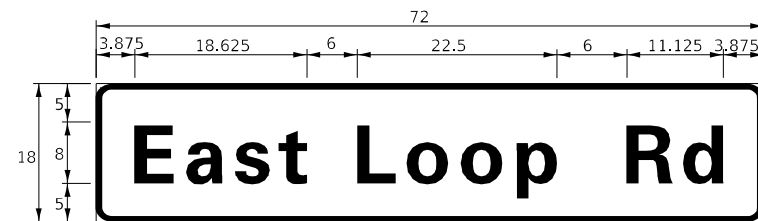
USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

TS 20660
IDOT CENTRACS
FORMER ECON 46

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9.0	1	ZZ	2

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	18
SIGN PANEL - TYPE 2	SQ FT	15
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	21
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	221
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	166
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	462
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1607
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	472
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	937
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	457
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	6
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	FOOT	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	EACH	279
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	2
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	13
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 39

MODEL: 1400BELMAME
FILE NAME: D:\ENR22-ar\TS39-STML56EASTLOOP.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAMES SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND E LOOP ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	210
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

**TS 20660
IDOT CENTRACS
FORMER ECON 46**



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 STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH TRAFFIC SIGNAL POST
- 2 EACH PEDESTRIAN PUSHBUTTON POST
- 7 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH PEDESTRIAN PUSHBUTTON

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

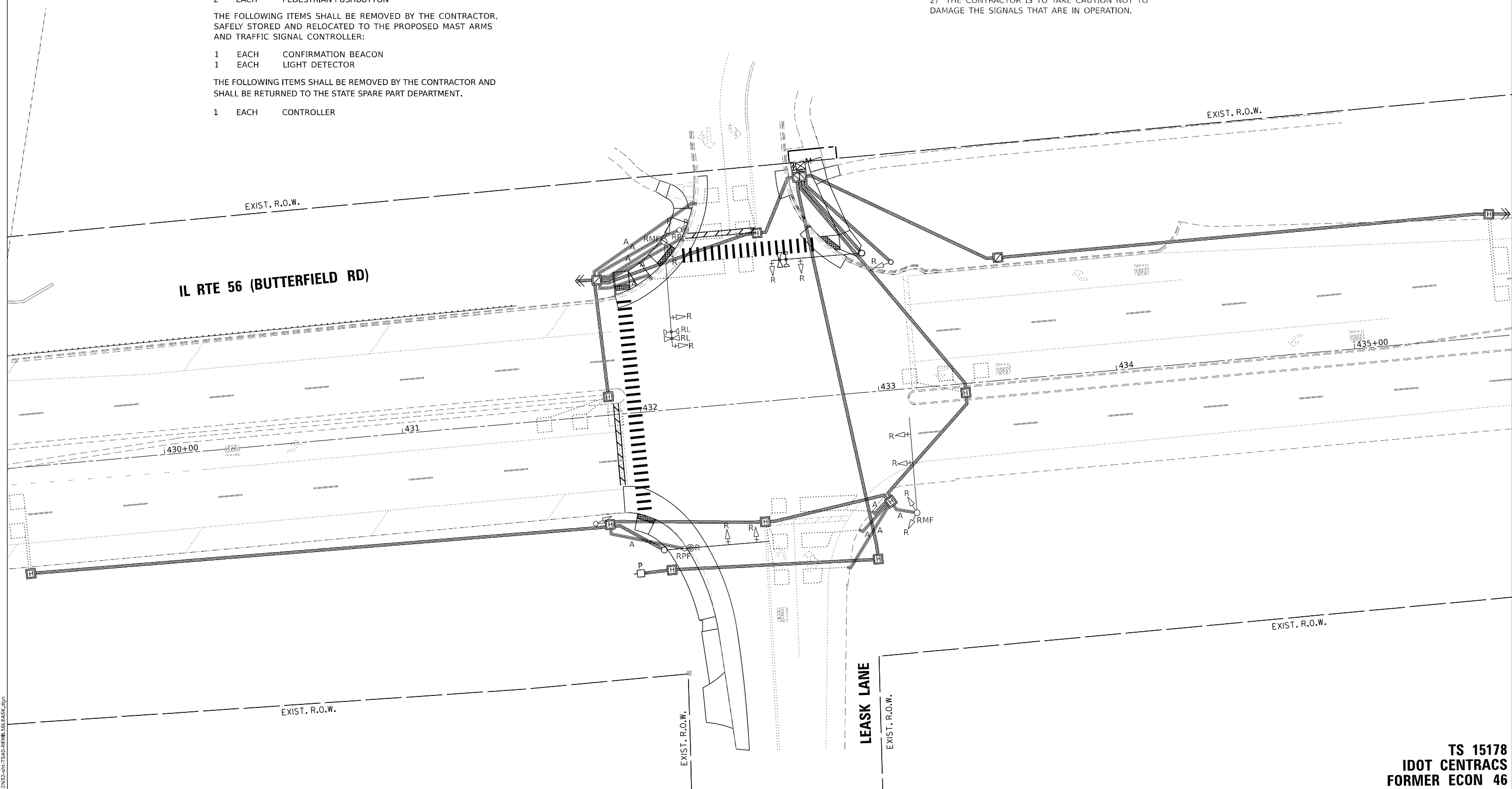
- 1 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH CONTROLLER

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.



TS SHT NO. 40

MODEL: 1400.DWGNAME: D:\2023\2023-2024\TS15178\15178-265-SUR-SW&TS\15178-265-SUR-SW&TS.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND LEASK LANE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	211
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

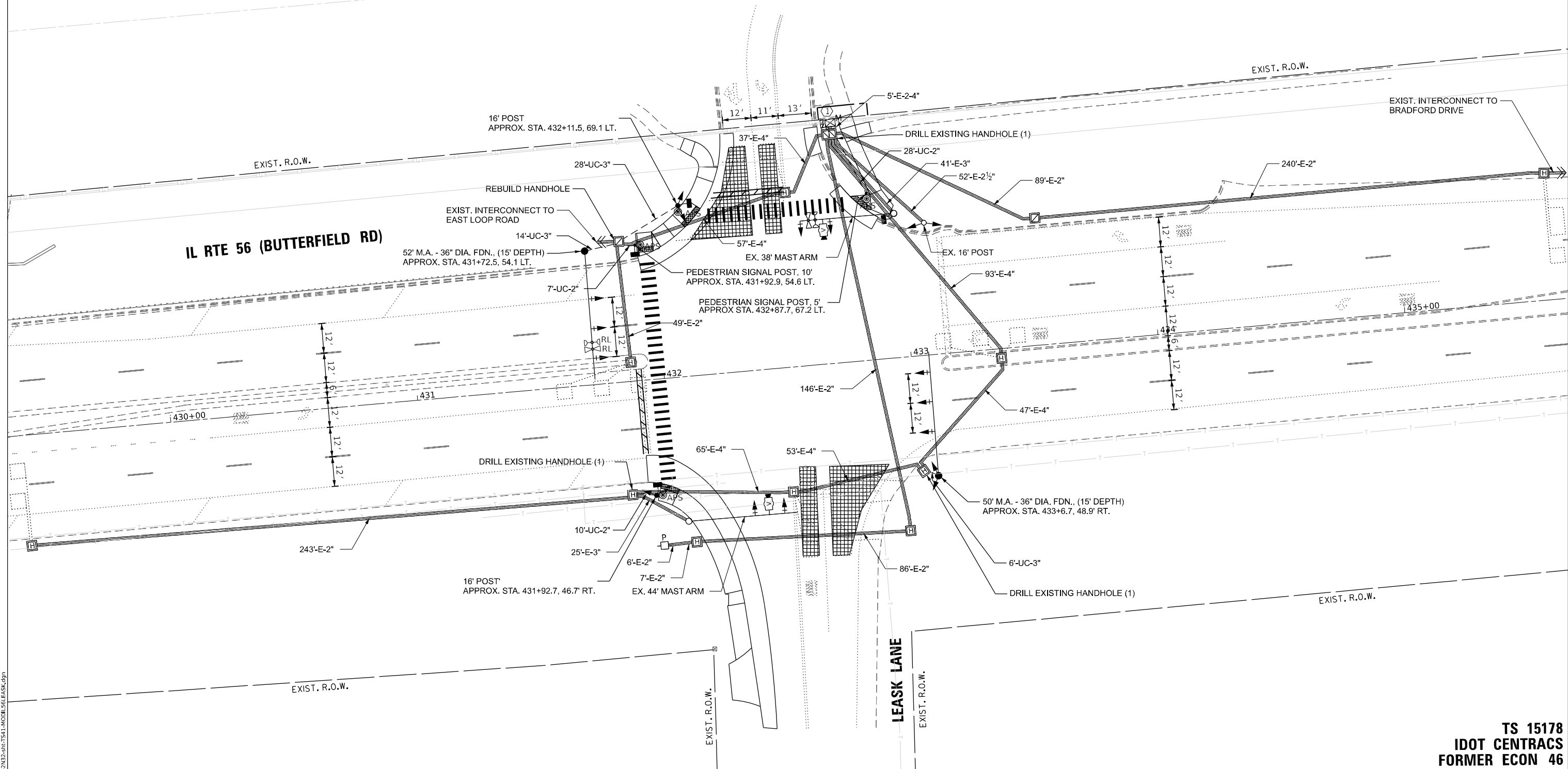
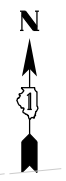
**TS 15178
IDOT CENTRACS
FORMER ECON 46**

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREETS SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.



TS SHT NO. 41

MODEL NAME: D:\2022-2023\TS11-MOD156-EASK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

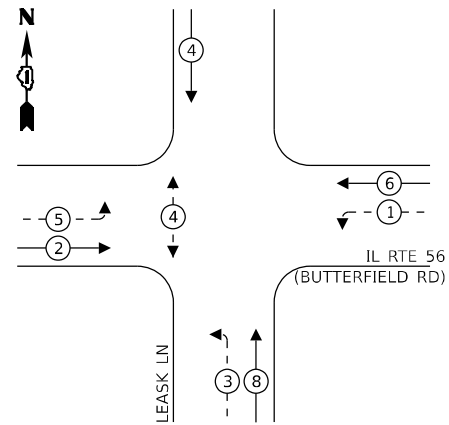
**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND LEASK LANE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

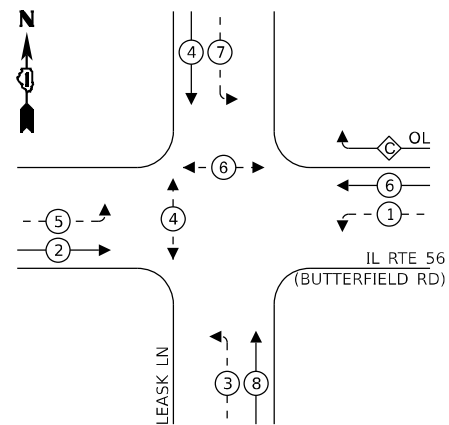
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	212
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 15178
IDOT CENTRACS
FORMER ECON 46**

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

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

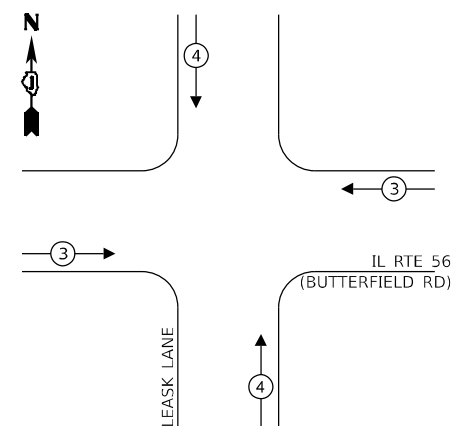
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREETS SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

PROP. INTERCONNECT TO EAST LOOP ROAD

PROP. TRACER CABLE

REPLACE UPS BATTERIES
INSTALL NEW CONTROLLER

PROP. INTERCONNECT TO BRADFORD DR

PROP. TRACER CABLE

IL RTE 56 (BUTTERFIELD RD)

LEASK LANE

CABLE PLAN (NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION	-	14	-
5-SECTION	10	13	130
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	4	15	60
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		528	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1133	

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 17790-78082

TS SHT NO. 42

MODEL: 1400BELMONT
FILE NAME: D:\ENR2024\TS12-CABLI\6161EASK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

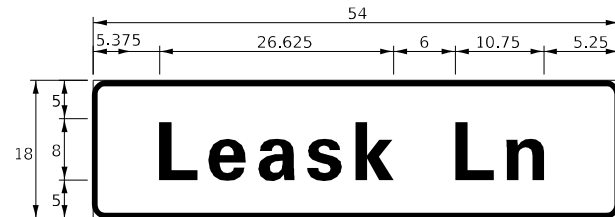
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 56 (BUTTERFIELD RD) AND LEASK LANE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	213
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 15178 IDOT CENTRACS FORMER ECON 46

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6.75	1	ZZ	2

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	13.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	45
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	48
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	685
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	940
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1389
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1459
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	885
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	857
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	206
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	18
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	4

TS SHT NO. 43

MODEL: 1400BELNAMES
FILE NAME: D:\ENR22-ar-TS43-STML1561EASK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND LEASK LANE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	214
			CONTRACT NO. 62N32	
		ILLINOIS FED. AID PROJECT		

**TS 15178
IDOT CENTRACS
FORMER ECON 46**

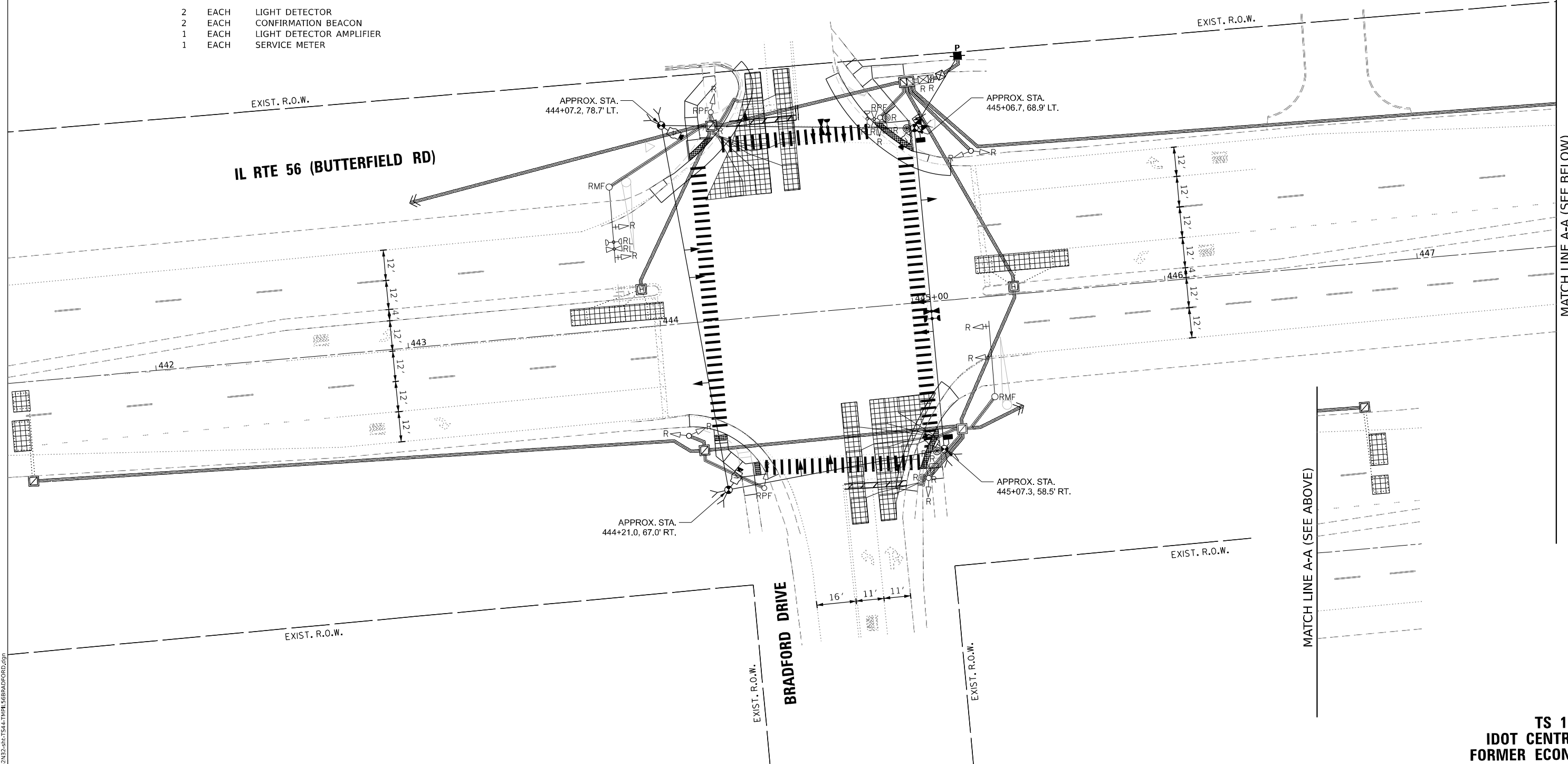
REMOVAL AND RELOCATION NOTES:

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 STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH TRAFFIC SIGNAL POST
- 10 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH CONTROLLER AND CABINET
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING ITEMS 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
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH SERVICE METER



TS SHT NO. 44

MODEL NAME: D:\ENR22-01\TS44.TMPL 56BRADFORD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND BRADFORD DRIVE**

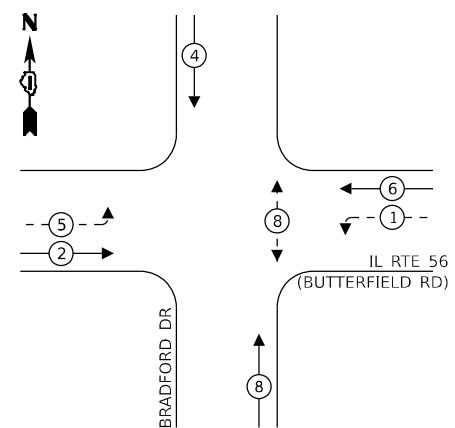
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	215
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

**TS 15175
IDOT CENTRACS
FORMER ECON 46**



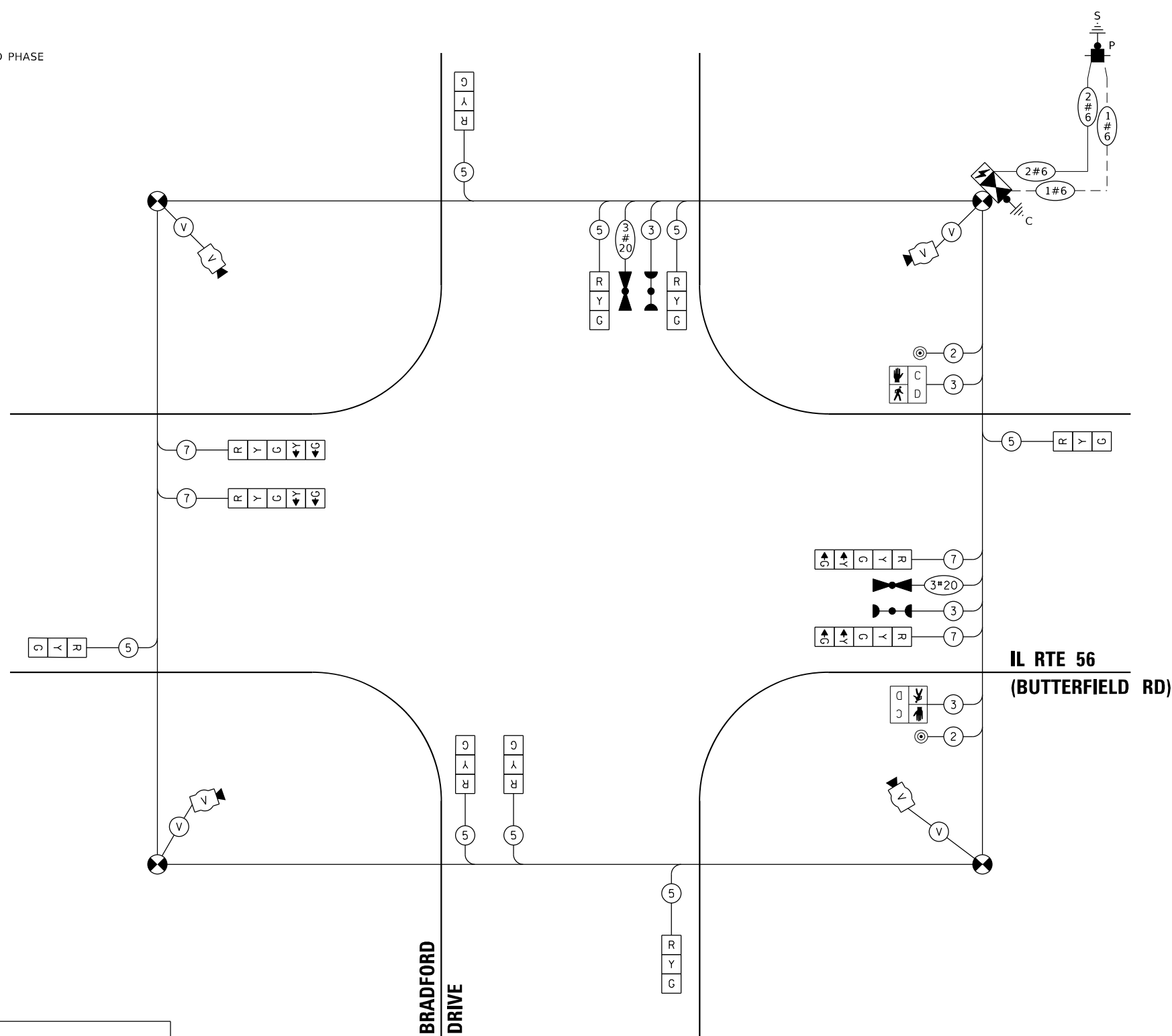
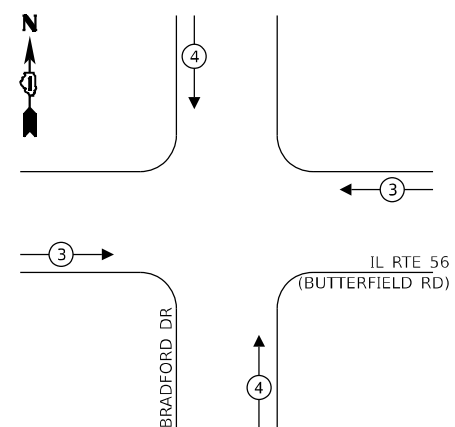
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

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

**TEMPORARY EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	4	20	80
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		460	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1065	

ENERGY COSTS TO:
 CITY OF WHEATON
 303 W WESLEY STREET
 WHEATON, IL 60187

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 17790-78082

TS SHT NO. 45

MODEL: 1409BELNAME
 FILE NAME: D:\ENR2024\TS15175\TCEB\BRADFORD.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

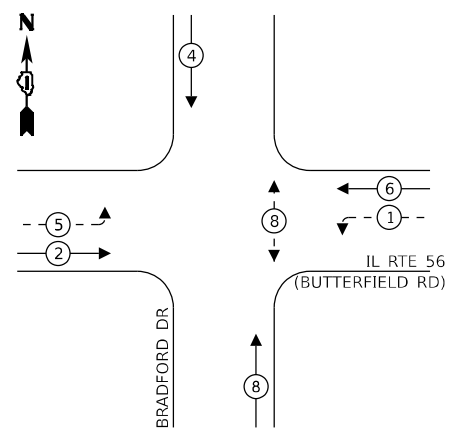
**TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND BRADFORD DRIVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

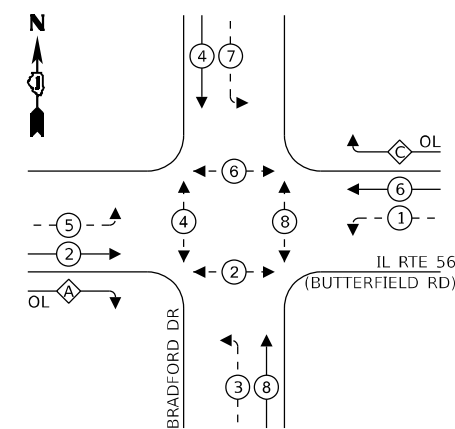
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	216
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 15175
IDOT CENTRACS
FORMER ECON 46**

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

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

LEGEND:

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

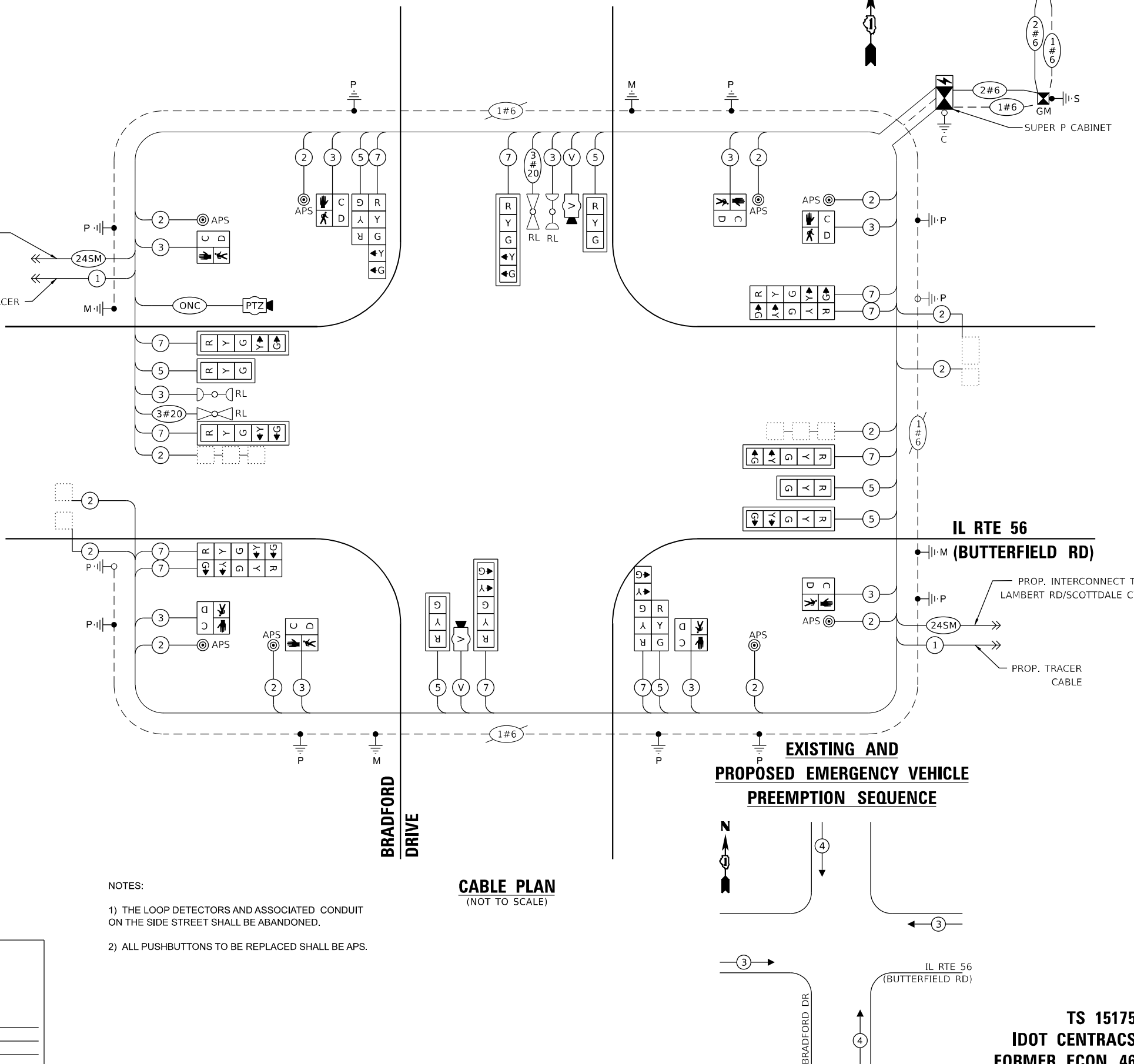
RIGHT TURN OVERLAP PHASE DESIGNATION:

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

ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

PROP. INTERCONNECT TO LEASK LANE

PROP. TRACER CABLE



CABLE PLAN
(NOT TO SCALE)

NOTES:

- 1) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREET SHALL BE ABANDONED.
- 2) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	6	11	66
4-SECTION	-	14	-
5-SECTION	12	13	156
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	8	15	120
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	2	20	40
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	1	35	35
	-	15	-
TOTAL UPS SIZING			592
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1197

ENERGY COSTS TO:

CITY OF WHEATON
303 W WESLEY STREET
WHEATON, IL 60187

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 17790-78082

TS SHT NO. 47

MODEL NAME: D:\ENR2024\2024-08-15\TS17\CABIN\BRADFORD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

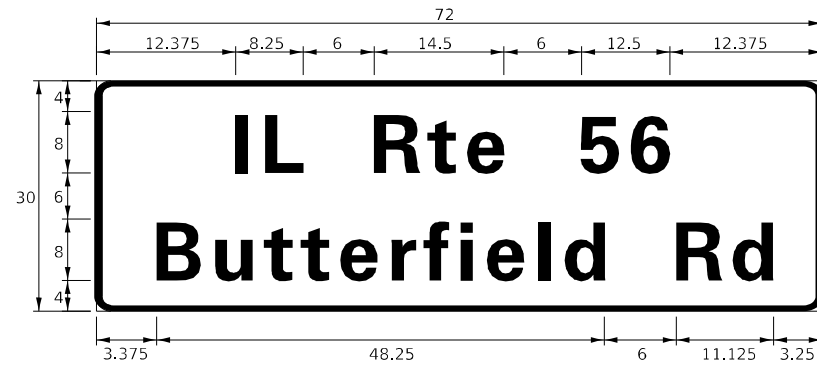
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND BRADFORD DRIVE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

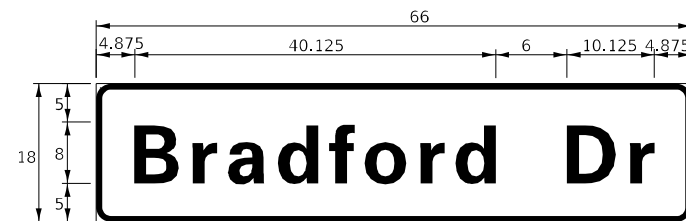
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	218
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS 15175
IDOT CENTRACS
FORMER ECON 46

SIGN PANEL – TYPE 1 OR TYPE 2



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



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	1	ZZ	2

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	643
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	35
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	526
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1341
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1719
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1589
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2434
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2007
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	50
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1732
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	23.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	18
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	286
ADVANCED TRANSPORTATION CONTROLLER AND TYPE SUPER P CABINET, SPECIAL	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	201
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	6
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	28
LED SIGNAL FACE, LENS COVER	EACH	18
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 48

MODEL: 1400BELNAMES
FILE NAME: D:\ENR22-ar\TS48-STML56BRADFORD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND BRADFORD DRIVE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	219
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 15175
IDOT CENTRACS
FORMER ECON 46

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② REMOVE EXISTING MAST ARM AND INSTALL NEW MAST ARM.

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.

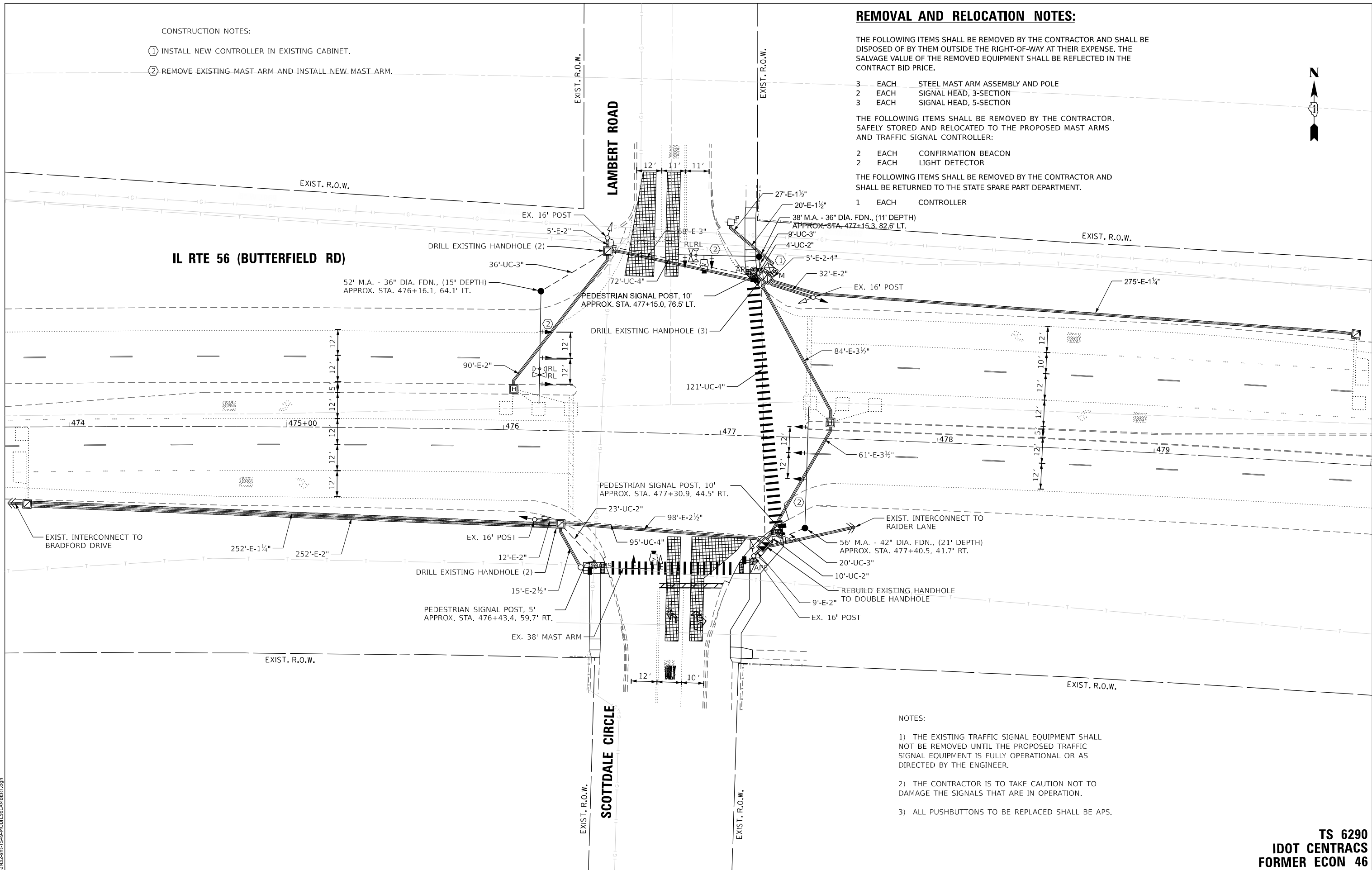
- 3 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 2 EACH SIGNAL HEAD, 3-SECTION
- 3 EACH SIGNAL HEAD, 5-SECTION

THE FOLLOWING ITEMS 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

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH CONTROLLER



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 49

MODEL NAME: D:\ENR22-cir-TS49-MOD156-LAMBERT.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISIONS -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

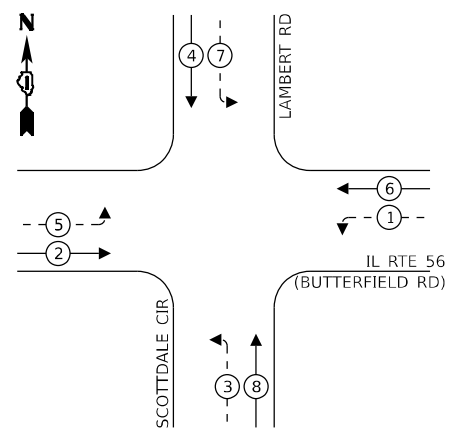
**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND LAMBERT ROAD/SCOTTDALE CIRCLE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

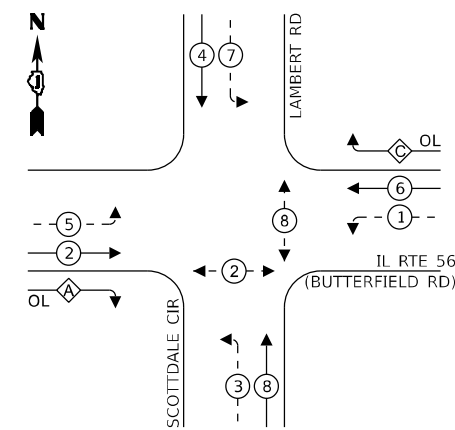
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	220
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6290
IDOT CENTRACS
FORMER ECON 46**

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

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

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

PROP. INTERCONNECT TO BRADFORD DR

NOTES:

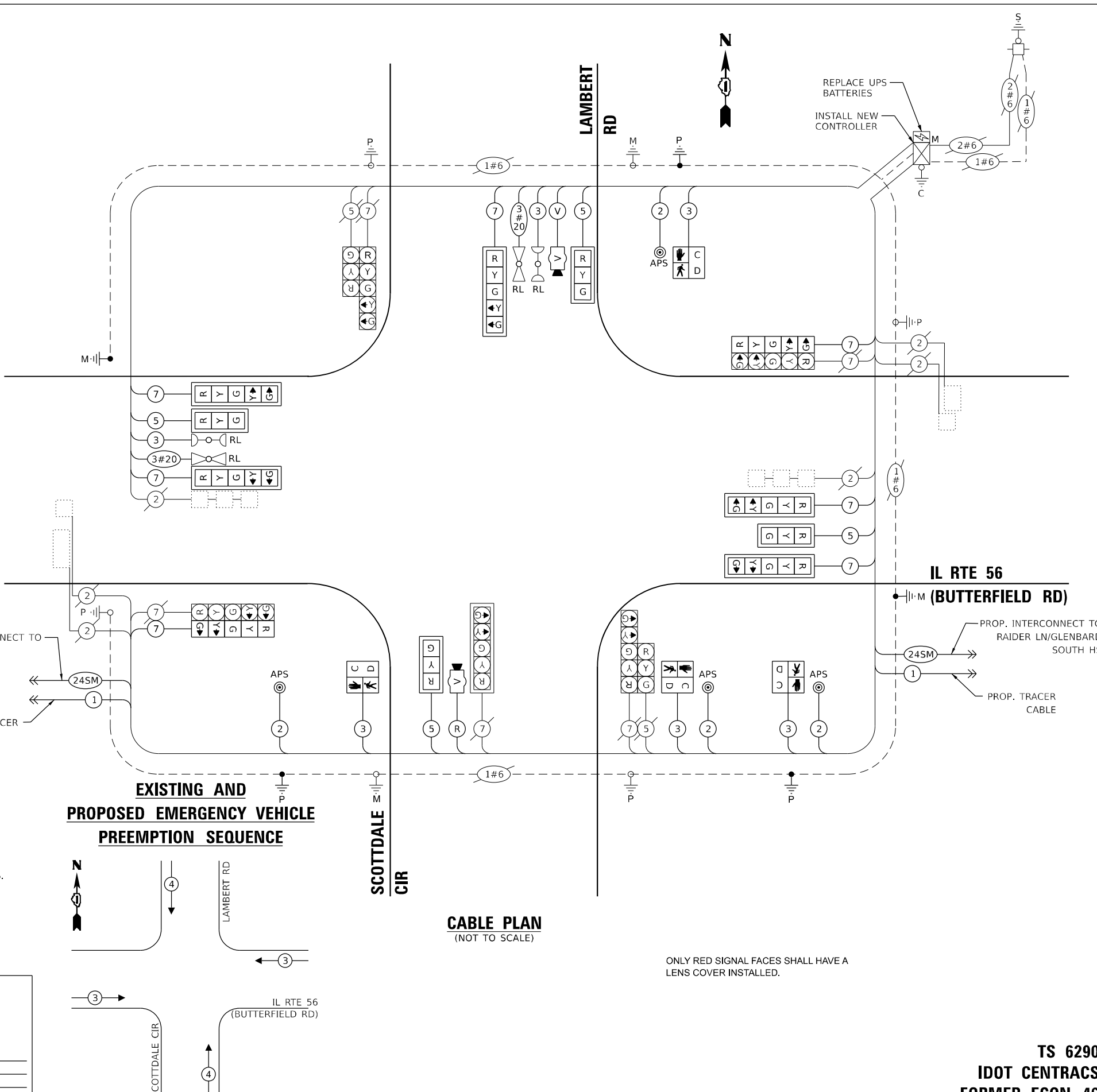
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

ENERGY COSTS TO:

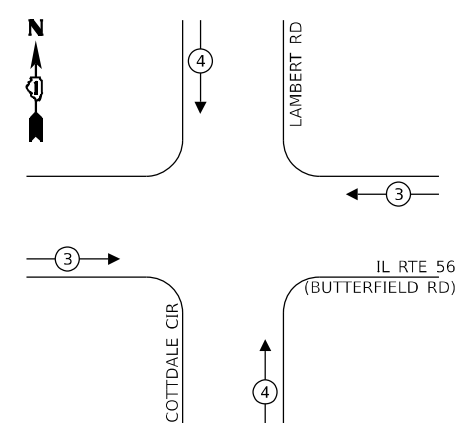
CITY OF WHEATON
303 W WESLEY STREET
WHEATON, IL 60187

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 17790-78082



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN (NOT TO SCALE)

ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS			
EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	6	11	66
4-SECTION	-	14	-
5-SECTION	12	13	156
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	4	15	60
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		532	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1137	

TS SHT NO. 50

MODEL: 1400BELNAMES
FILE NAME: D:\ENR2024\TS6290\CABLE\6290-LAMBERT.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

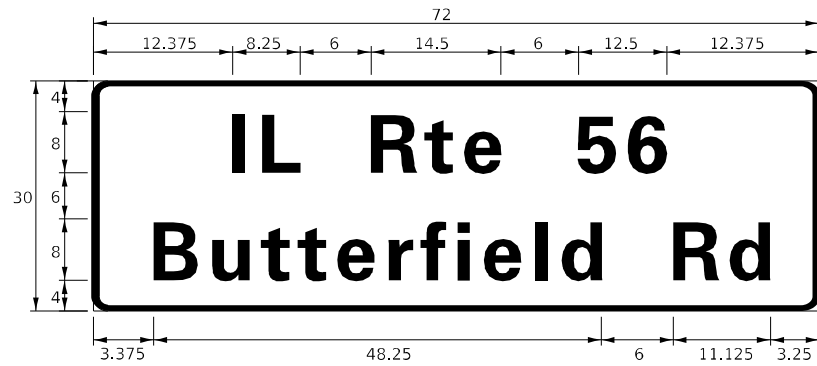
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND LAMBERT ROAD/SCOTTDALE CIRCLE
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

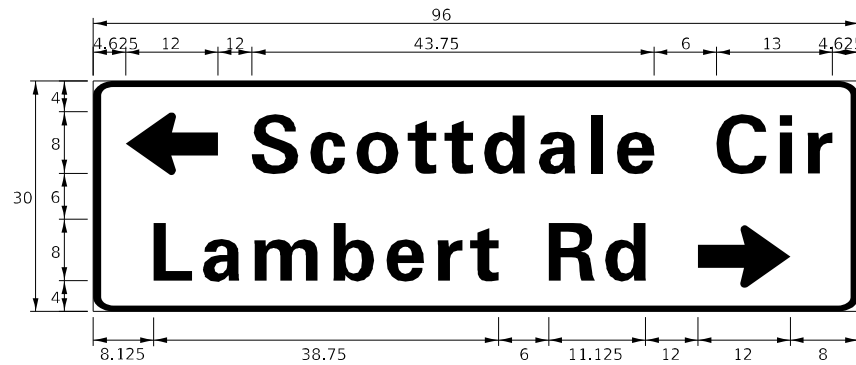
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	221
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS 6290 IDOT CENTRACS FORMER ECON 46

SIGN PANEL – TYPE 1 OR TYPE 2

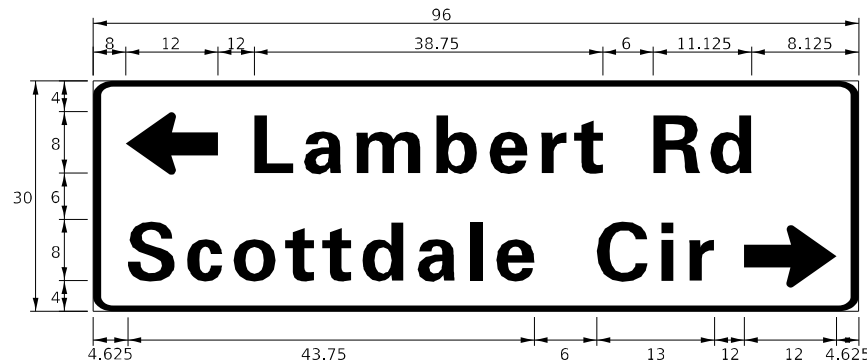


DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	20	2	ZZ	1

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



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	20	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	70
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	37
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	65
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	288
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	667
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	958
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	813
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1267
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	706
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 56 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	9
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	264
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	18
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	7

TS SHT NO. 51

MODEL: 1400BELMAME
FILE NAME: D:\ENR22-ar-TSS1-STM156-LAMBERT.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES**
IL ROUTE 56 (BUTTERFIELD RD) AND LAMBERT ROAD/SCOTTTDALE CIRCLE
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	222
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 6290
IDOT CENTRACS
FORMER ECON 46**

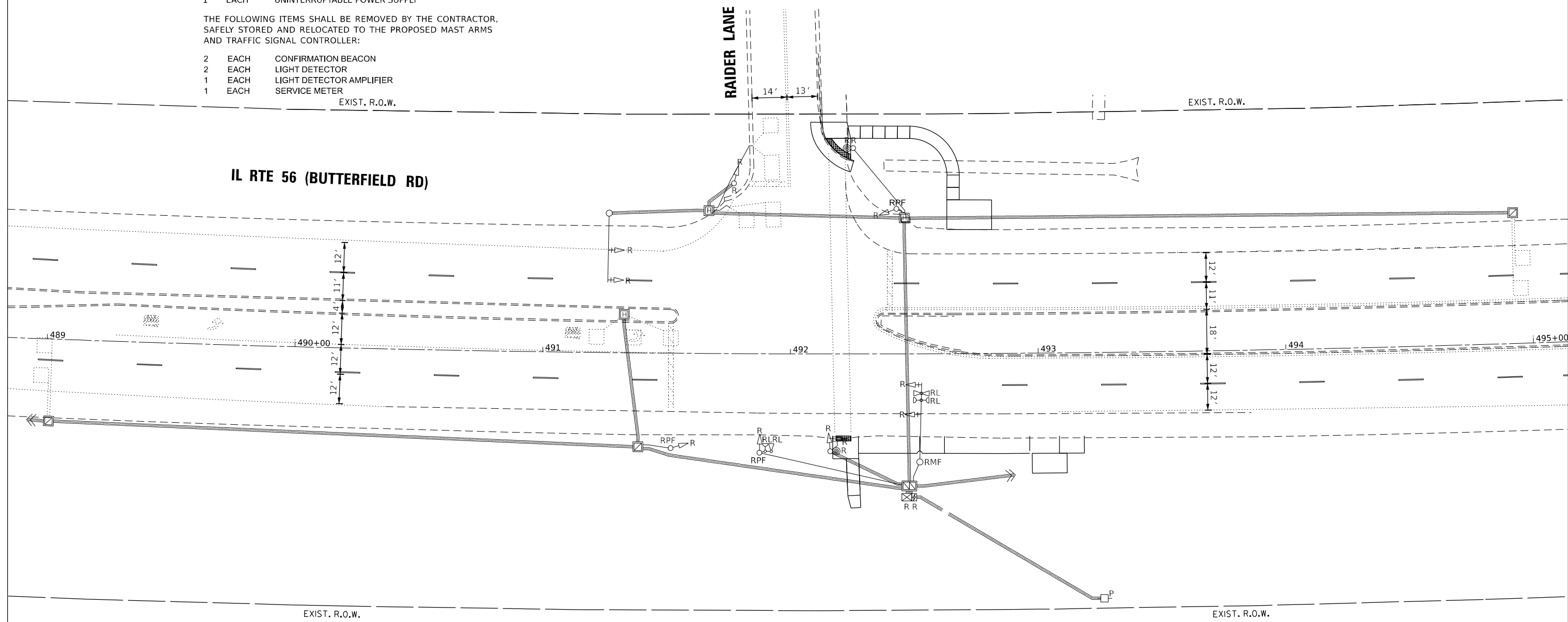
REMOVAL AND RELOCATION NOTES:

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 POLE
- 3 EACH TRAFFIC SIGNAL POST
- 1 EACH PEDESTRIAN SIGNAL POST
- 6 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION
- 1 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH CONTROLLER AND CABINET
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING ITEMS 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
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH SERVICE METER



TS SHT NO. 52

MODEL NAME: BUTTERFIELD
FILE NAME: D:\2023\2023-2024\TS52-RELOCATED\RAIDER.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND RAIDER LANE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

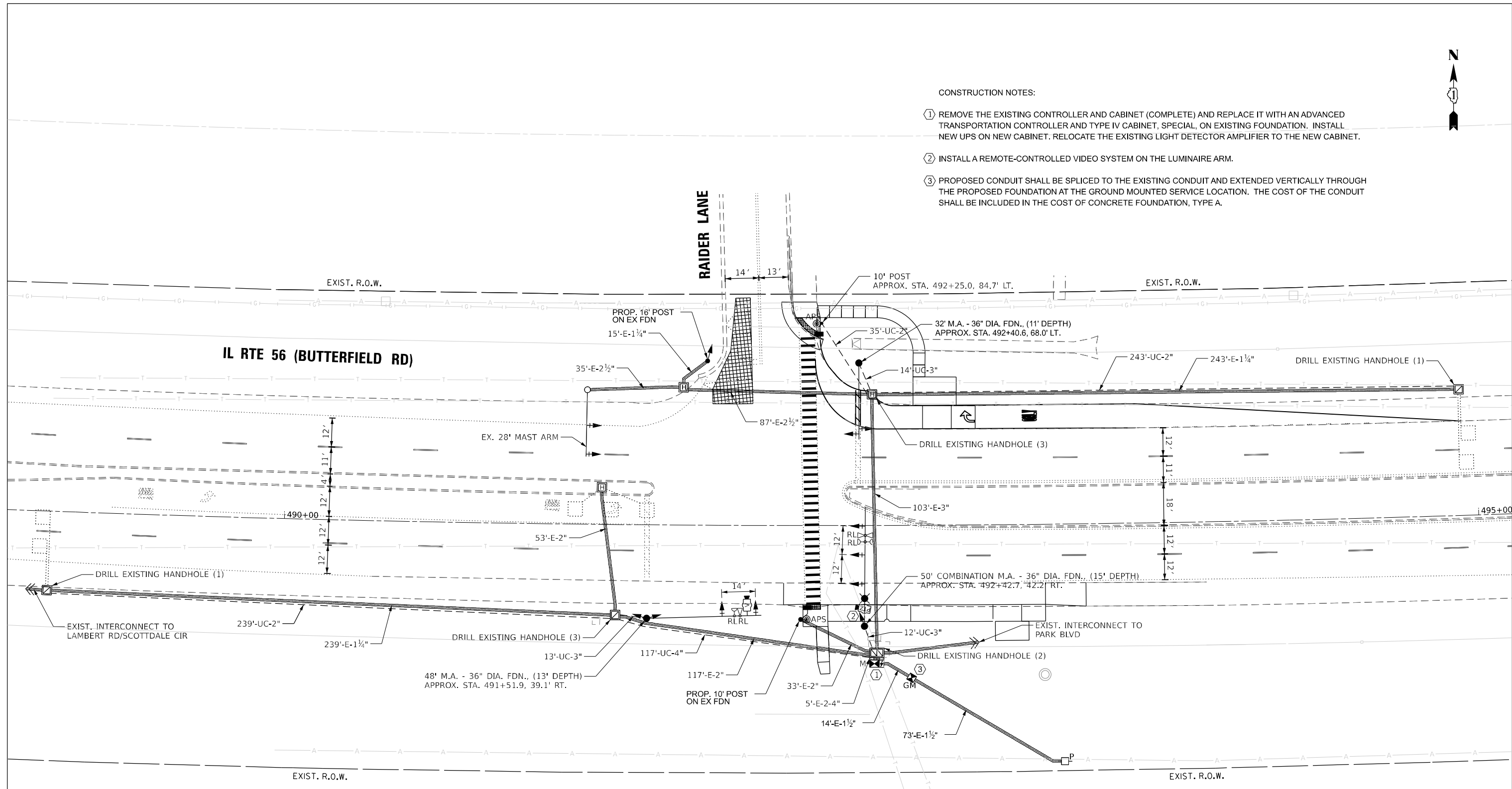
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	223
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6340
IDOT CENTRACS
FORMER ECON 46**



CONSTRUCTION NOTES:

- ① REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH AN ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV CABINET, SPECIAL, ON EXISTING FOUNDATION. INSTALL NEW UPS ON NEW CABINET. RELOCATE THE EXISTING LIGHT DETECTOR AMPLIFIER TO THE NEW CABINET.
- ② INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE LUMINAIRE ARM.
- ③ PROPOSED CONDUIT SHALL BE SPLICED TO THE EXISTING CONDUIT AND EXTENDED VERTICALLY THROUGH THE PROPOSED FOUNDATION AT THE GROUND MOUNTED SERVICE LOCATION. THE COST OF THE CONDUIT SHALL BE INCLUDED IN THE COST OF CONCRETE FOUNDATION, TYPE A.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 53
MODEL NAME: BUTTERFIELD
 FILE NAME: D:\2020-265-SUR-TS53-MOD156RAIDER.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

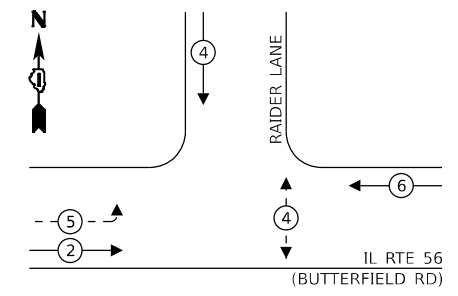
TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND RAIDER LANE
 SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	224
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6340
IDOT CENTRACS
FORMER ECON 46



EXISTING AND PROPOSED CONTROLLER SEQUENCE

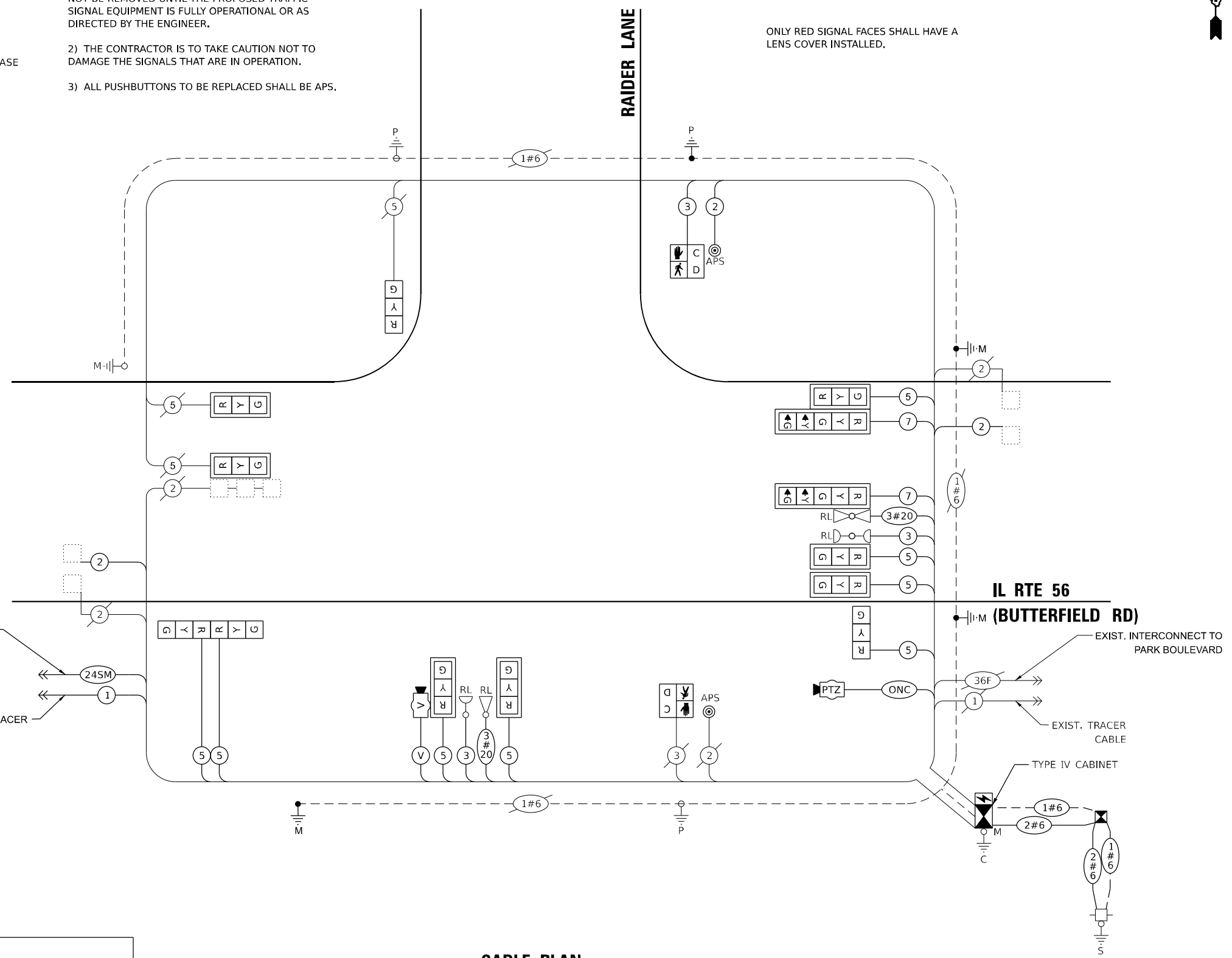
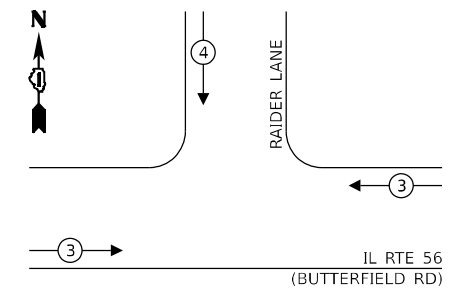


LEGEND:

- ⊙ (with star) PROTECTED PHASE
- ⊙ (with horizontal line) PROTECTED/PERMITTED PHASE
- ⊙ (with vertical line) PEDESTRIAN PHASE
- ⊙ (with diagonal line) OVERLAP

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	11	11	121
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		407	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1012	

ENERGY COSTS TO:
GLENBARD SOUTH HIGH SCHOOL
 23W200 BUTTERFIELD RD
 GLEN ELLYN, IL 60137

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 01310-86078

TS SHT NO. 54

MODEL: 1400BELMAME
FILE NAME: D:\ENR2024\TS-54\CABLE\SRANDER.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND RAIDER LANE

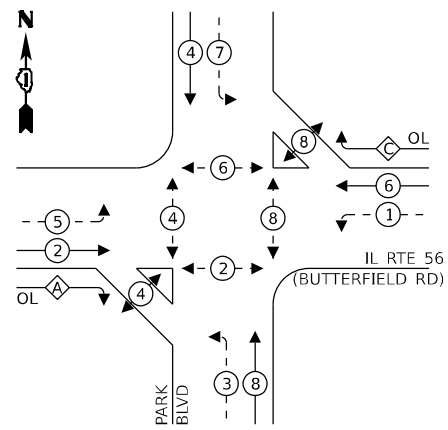
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	225
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS 6340
IDOT CENTRACS
FORMER ECON 46



EXISTING AND PROPOSED CONTROLLER SEQUENCE



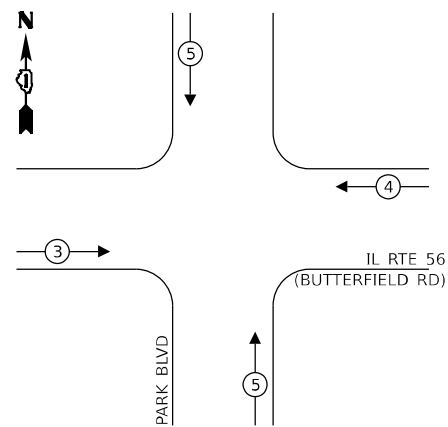
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

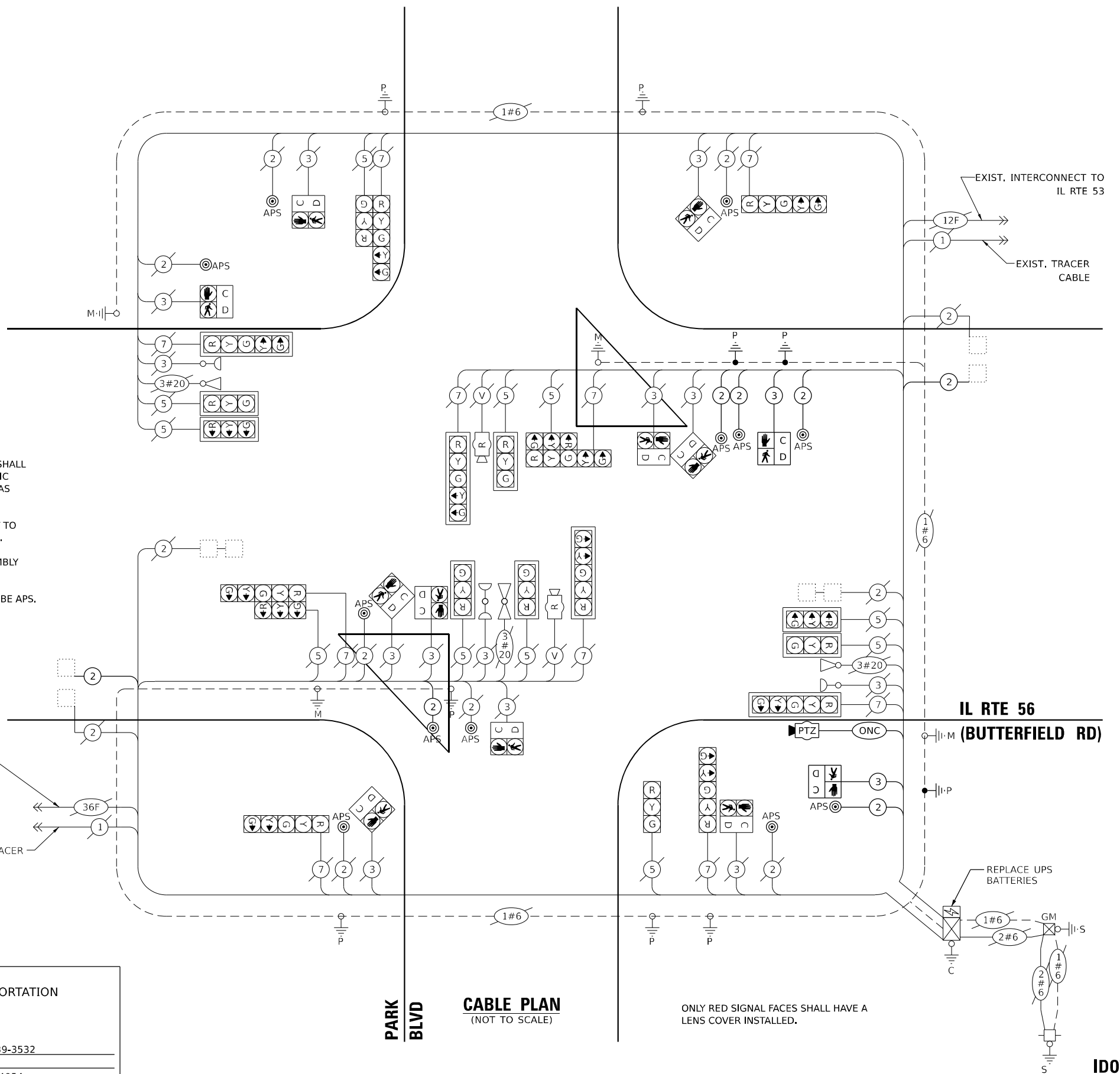
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON AN ASSEMBLY POLE AS SHOWN IN THE DETAIL.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	11	11	121
4-SECTION	-	14	-
5-SECTION	10	13	130
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	12	15	180
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING	681		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1286		

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W CENTER COURT
 SCHAUMBURG, ILLINOIS 60196
 ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 00770-74054

TS SHT NO. 57

MODEL: 1400BELMONT
 FILE NAME: D:\ENR22-2024-TSS7-CABLI-SER-PARKBLVD.dgn
 AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME	DESIGNED	REVISION
shassan	JR	-
	SR	-
	JR	-
		-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 56 (BUTTERFIELD RD) AND PARK BOULEVARD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	228
CONTRACT NO. 62N32				

TS 6305 IDOT CENTRACS FORMER ECON 46

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

TS SHT NO. 58

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-ar\TS58-STML56PARKBLVD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND PARK BOULEVARD**

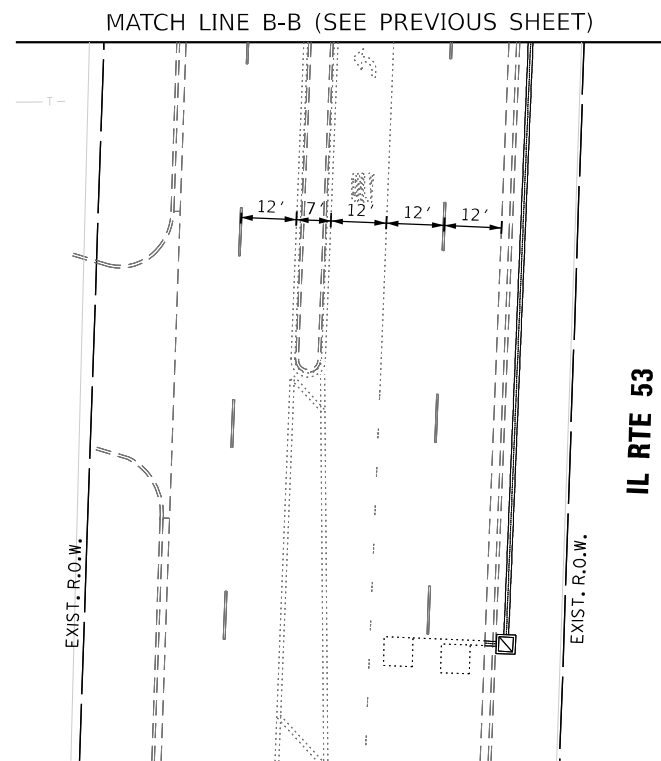
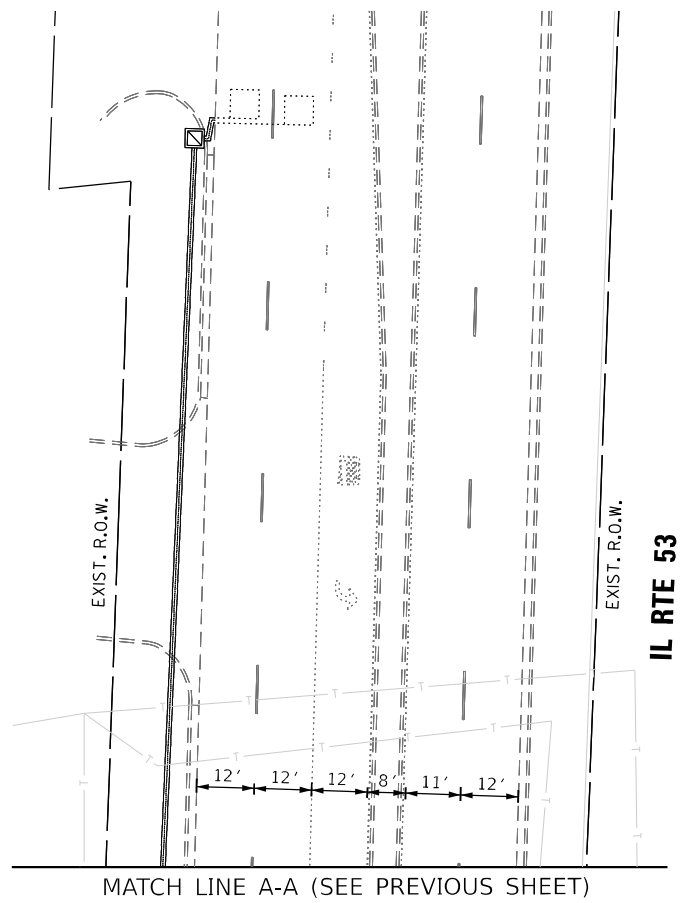
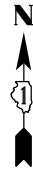
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	229
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	103
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT NEW TRAFFIC SIGNAL POST	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	943
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	268
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	796
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	418
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	84
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	12
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	21
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	10
CAMERA MOUNTING ASSEMBLY	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	21

**TS 6305
IDOT CENTRACS
FORMER ECON 46**



TS SHT NO. 60

MODEL NAME: D:\2023\2023-2024\TS60-MODTL56IL53.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND IL ROUTE 53**

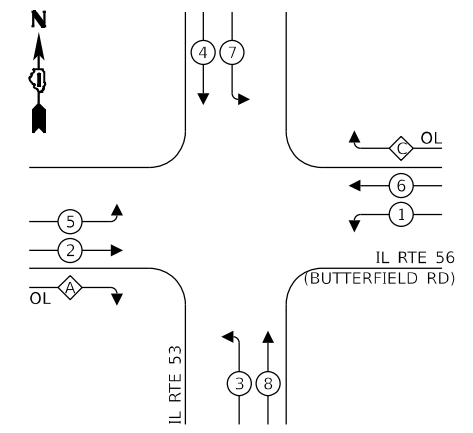
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	231
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 7835
IDOT CENTRACS
FORMER ECON 46**



EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

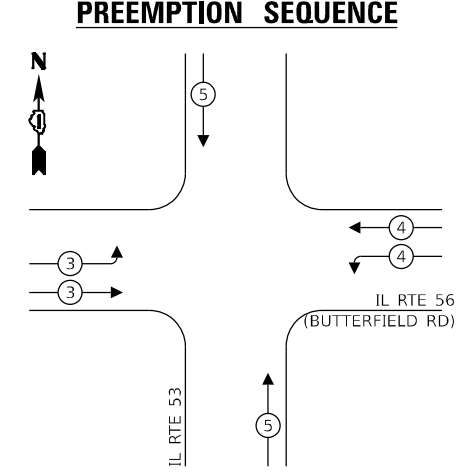
RIGHT TURN OVERLAP

PHASE DESIGNATION:

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

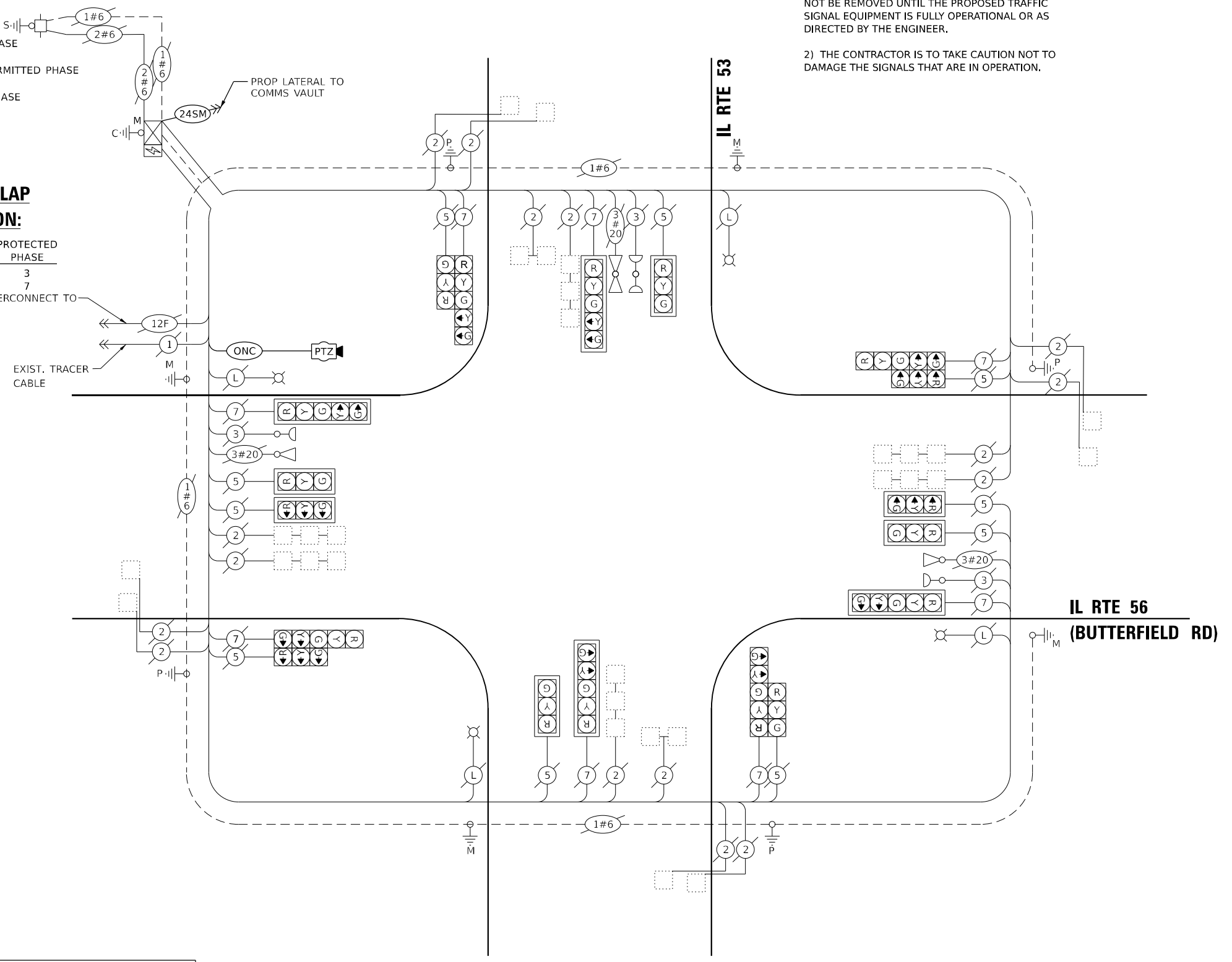
EXIST. INTERCONNECT TO PARK BLVD

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		424	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	4	240	960
TOTAL SERVICE WIRE SIZING		1989	

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 00770-74054

TS SHT NO. 61

MODEL: 1400BELNAMES
FILE NAME: D:\SERV2\2023\TS61\CABLE\SERIES.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND IL ROUTE 53

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	232
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 7835
IDOT CENTRACS
FORMER ECON 46

TS SHT NO. 62

MODEL: 140901.DWG
 FILE NAME: D:\62N32-ar-1562-5TMI-56153.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
 IL ROUTE 56 (BUTTERFIELD RD) AND IL ROUTE 53**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	233
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

**TS 7835
 IDOT CENTRACS
 FORMER ECON 46**

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	95
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

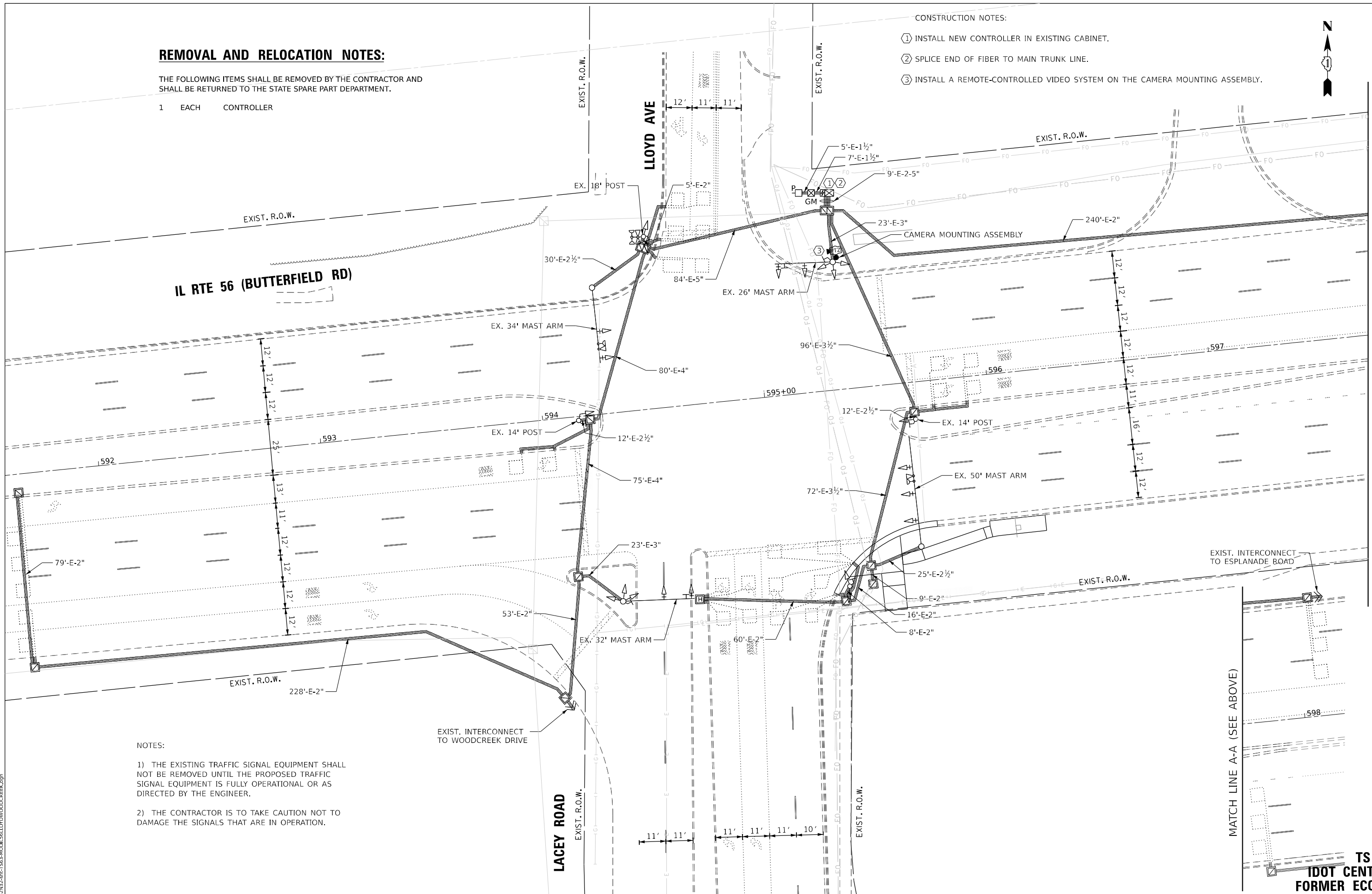
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH CONTROLLER

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② SPLICE END OF FIBER TO MAIN TRUNK LINE.
- ③ INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE CAMERA MOUNTING ASSEMBLY.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.

TS SHT NO. 63

MODEL NAME: D:\2023\2023-01-15\63-MOD1561LOYDWOODCREEK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND LACEY ROAD/LOYD AVENUE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

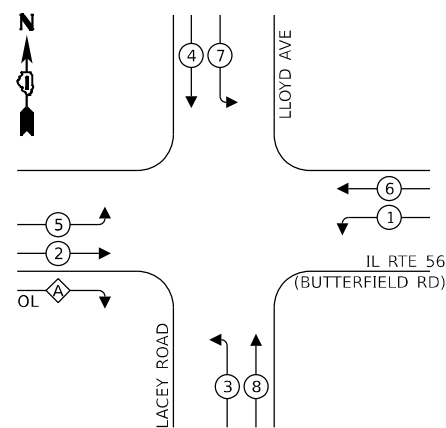
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	234
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6350
IDOT CENTRACS
FORMER ECON 41**

MATCH LINE A-A (SEE BELOW)

MATCH LINE A-A (SEE ABOVE)

EXISTING AND PROPOSED CONTROLLER SEQUENCE



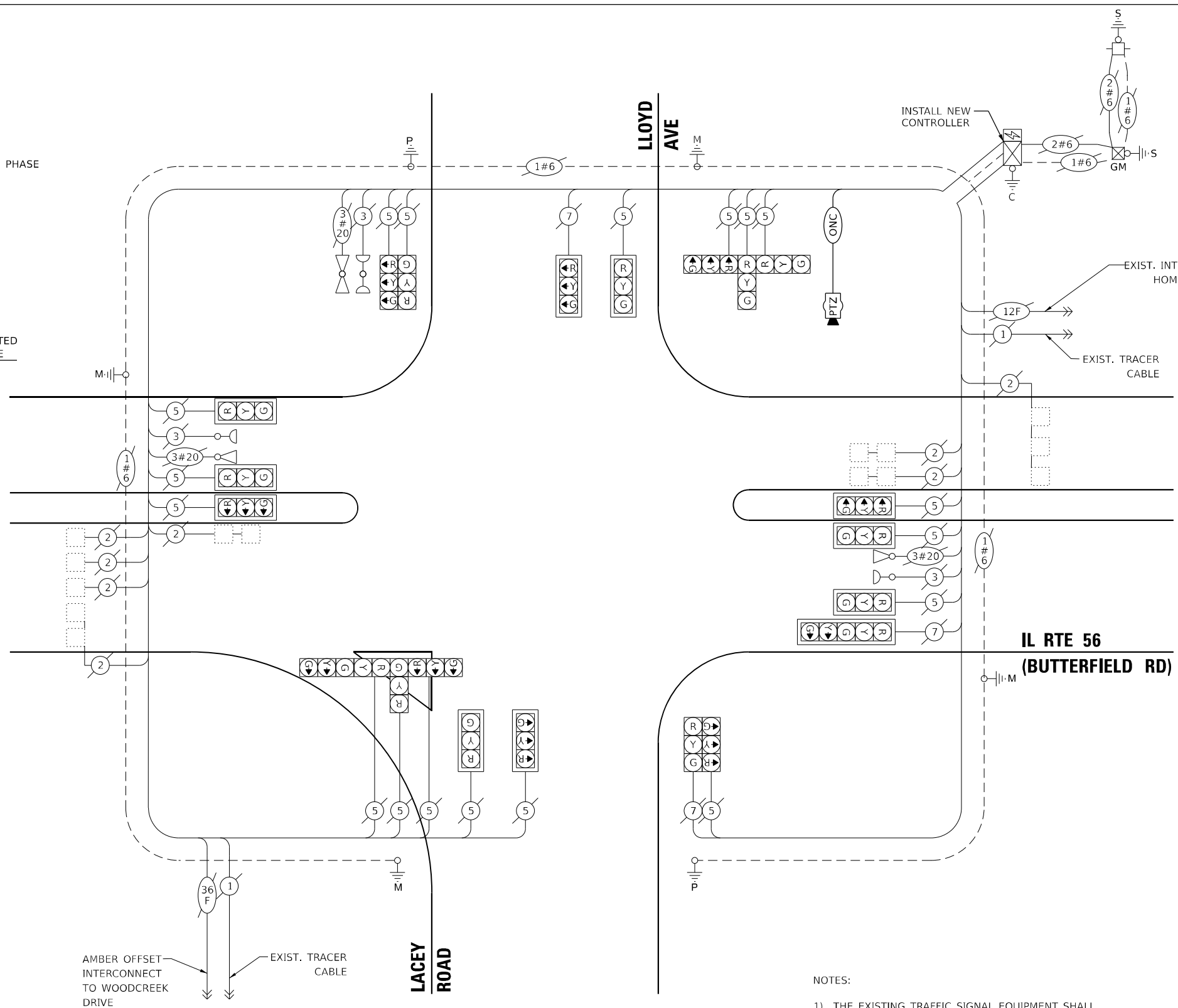
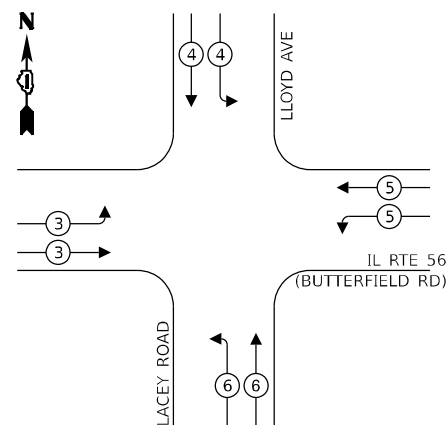
LEGEND:

- ⊙* PROTECTED PHASE
- ⊙* - PROTECTED/PERMITTED PHASE
- ⊙* > PEDESTRIAN PHASE
- ⊙* OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	19	11	209
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		485	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1090	

ENERGY COSTS TO:
 VILLAGE OF DOWNERS GROVE
 801 BURLINGTON AVE
 DOWNERS GROVE, IL 60515

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 10531-30092

TS SHT NO. 64

MODEL: 1400BELMANS
 FILE NAME: D:\ENR2024\TS64\CABLE\1561LOYDWOODCREEK.dwg

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND LACEY ROAD/LLOYD AVENUE

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	235
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS SHT NO. 65

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-ar-TS65-STML56\LLOYWOODCREK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND LACEY ROAD/LLOYD AVENUE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

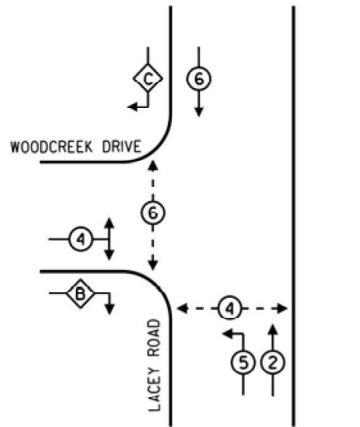
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	236
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6350
IDOT CENTRACS
FORMER ECON 41**

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	94
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

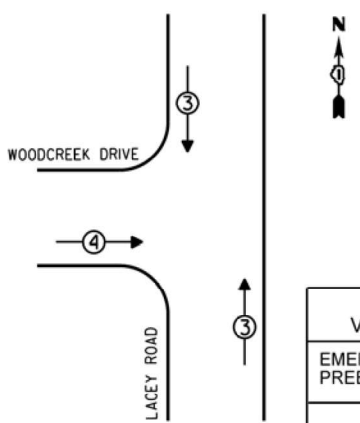
CONTROLLER SEQUENCE



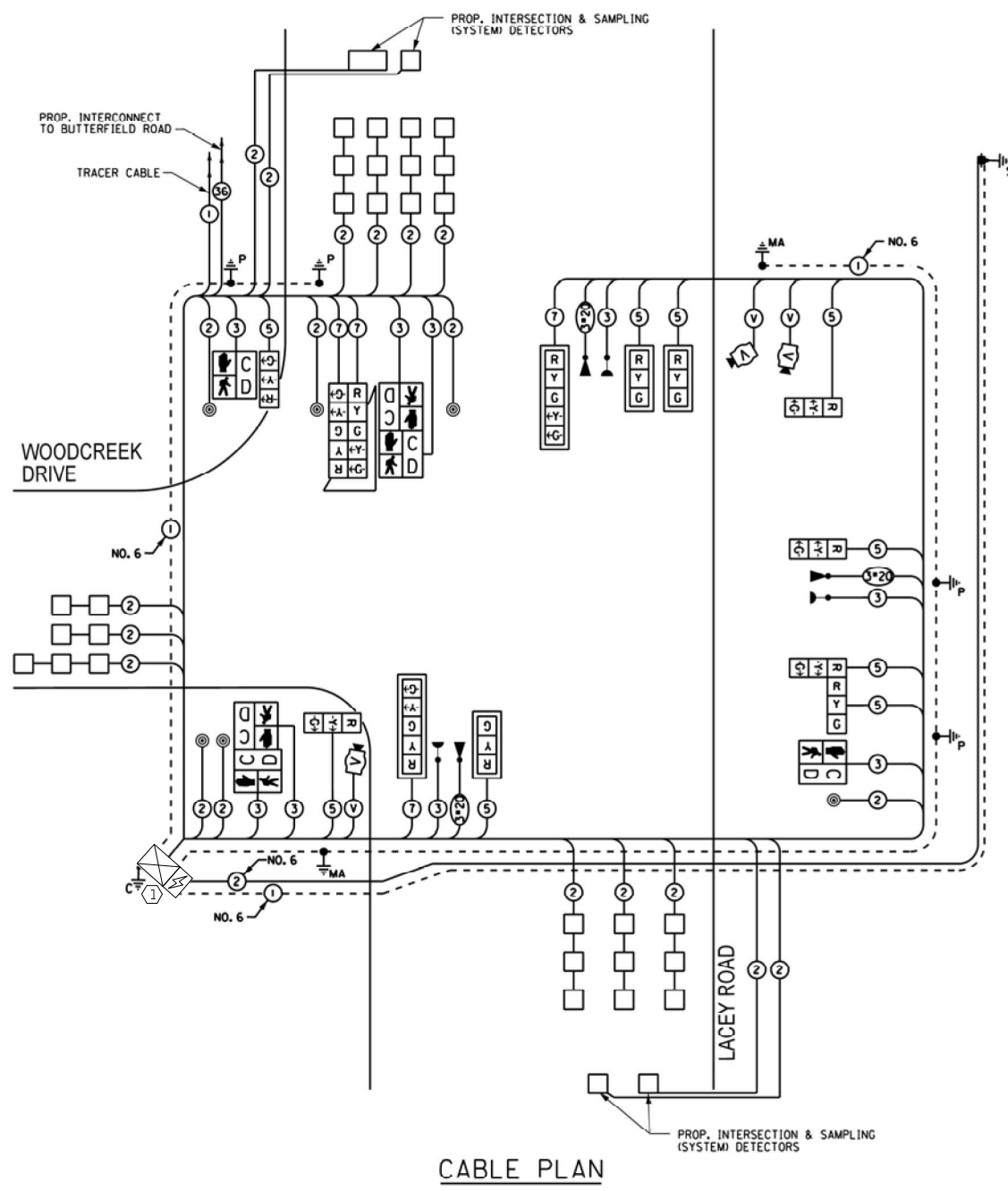
PHASE DESIGNATION DIAGRAM

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

NOTES:
1) ALL CABLES AND EQUIPMENT SHOWN ARE EXISTING.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

CONSTRUCTION NOTES:
① INSTALL NEW LAYER II (DATALINK) SWITCH IN EXISTING CABINET.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED % OPERATIONS	WATTAGE	
SIGNAL (RED)	13	135	17	0.50	110.50
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	6	90	25	1.00	150.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	3	84	25	0.50	37.50
VIDEO SYSTEM	1	150		1.00	150.00
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	687.60

VILLAGE OF DOWNERS GROVE
5101 WALNUT AVENUE
DOWNERS GROVE, ILLINOIS 60515

ENERGY SUPPLY - CONTACT: ILYAS MOHIUDDIN
PHONE: (708) 235-2692
COMPANY: COMED

TS SHT NO. 66

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
LACEY ROAD AND WOODCREEK AVENUE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	237
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 13133
DOWNERS GROVE
IDOT CENTRACS**



CONSTRUCTION NOTES:

- ① REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH A FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL, ON EXISTING FOUNDATION. INSTALL NEW UPS ON NEW CABINET. RELOCATE THE EXISTING LIGHT DETECTOR AMPLIFIER TO THE NEW CABINET.
- ② REMOVE EXISTING SIGNAL POST AND INSTALL MAST ARM.
- ③ REMOVE EXISTING MAST ARM AND INSTALL NEW MAST ARM.
- ④ REMOVE HANDHOLE.

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.

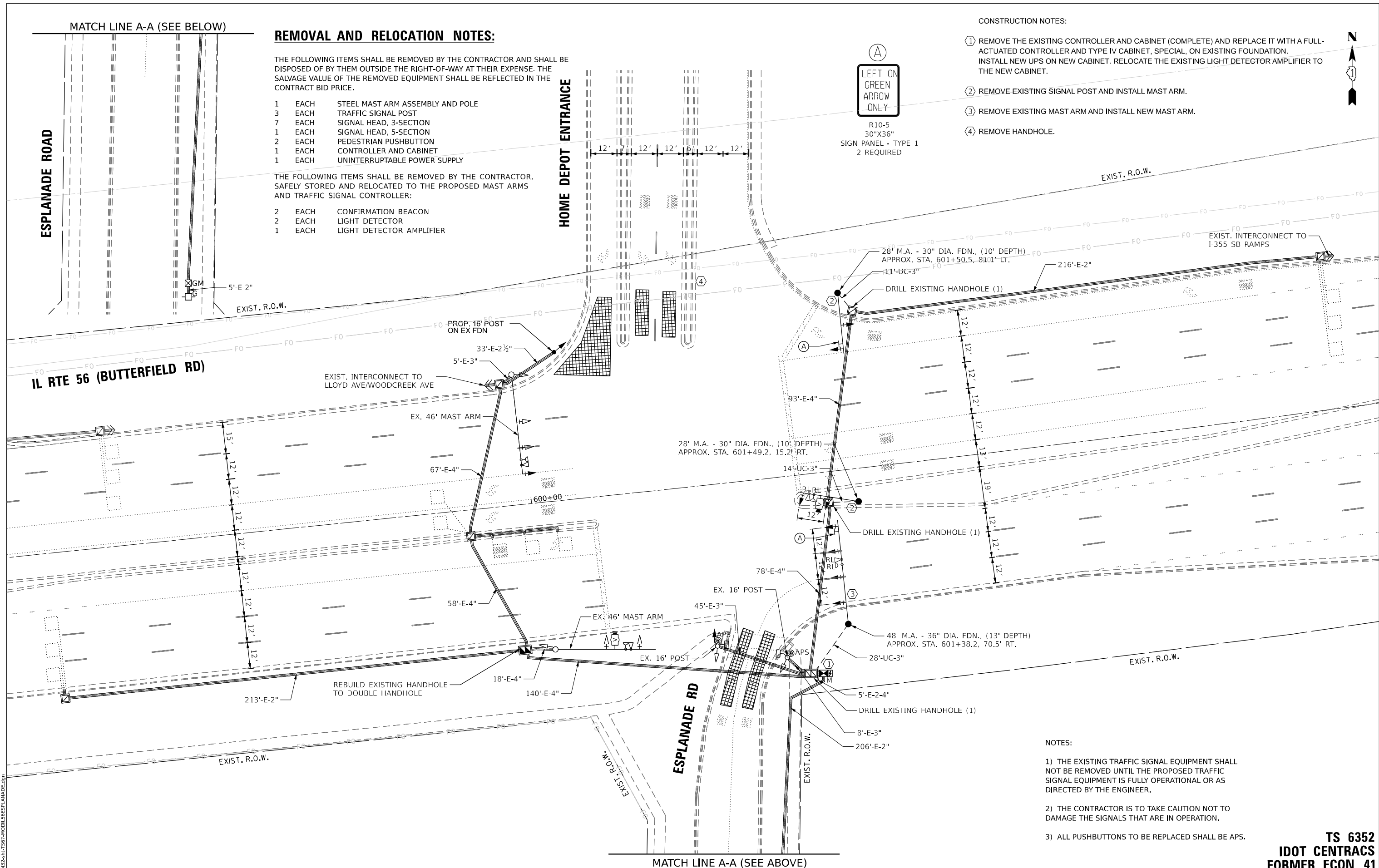
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 3 EACH TRAFFIC SIGNAL POST
- 7 EACH SIGNAL HEAD, 3-SECTION
- 1 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH CONTROLLER AND CABINET
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING ITEMS 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
- 1 EACH LIGHT DETECTOR AMPLIFIER

Ⓐ
LEFT ON GREEN
ARROW
ONLY

R10-5
30"X36"
SIGN PANEL - TYPE 1
2 REQUIRED



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 67

MODEL NAME: D:\2023\2023-01-15\67-MOD156ESPLANADE.RVP

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND ESPLANADE ROAD

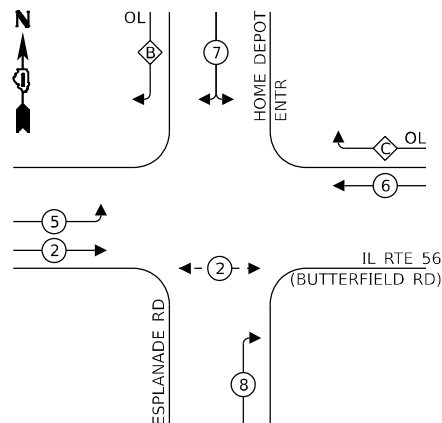
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	238
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6352
IDOT CENTRACS
FORMER ECON 41



EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

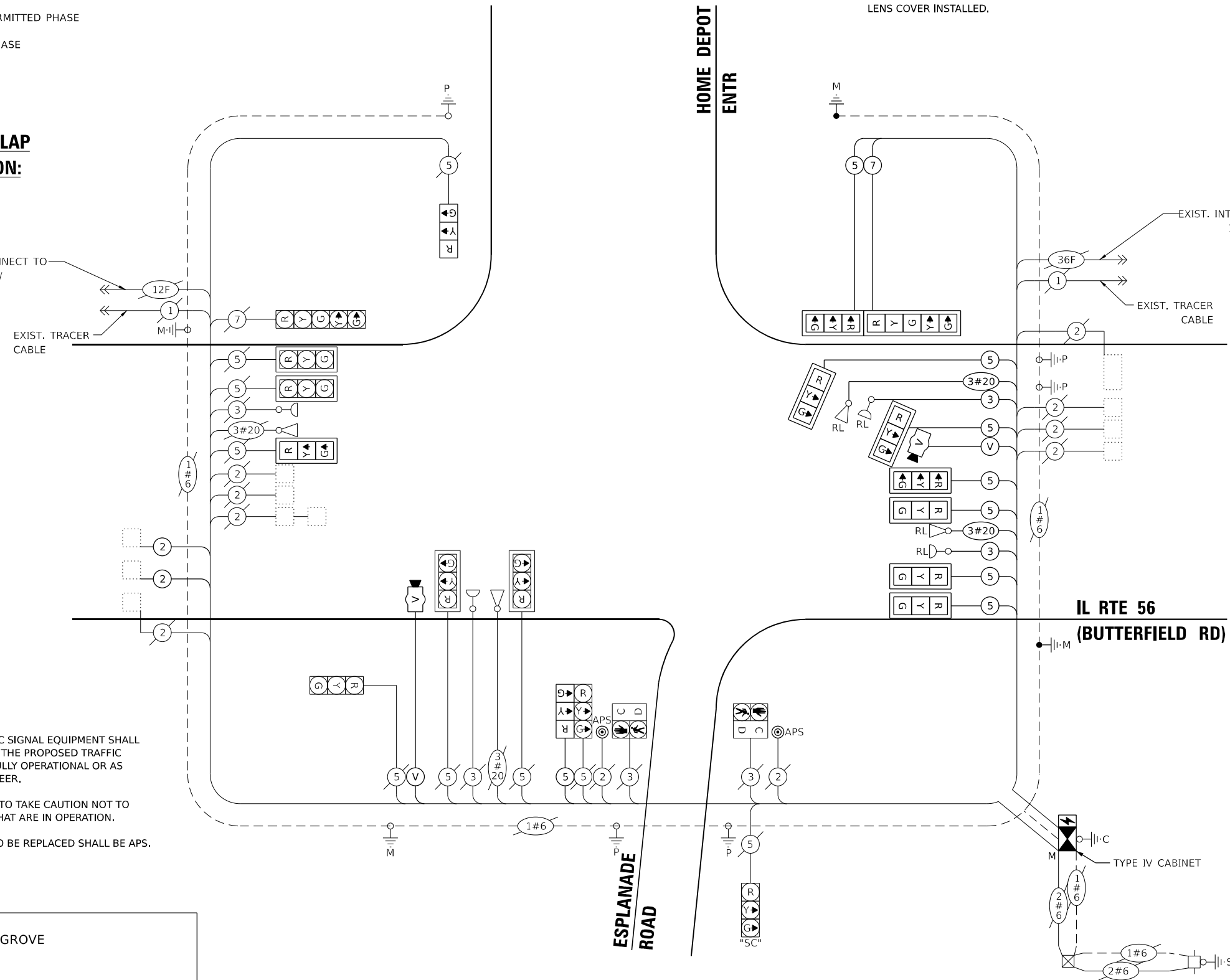
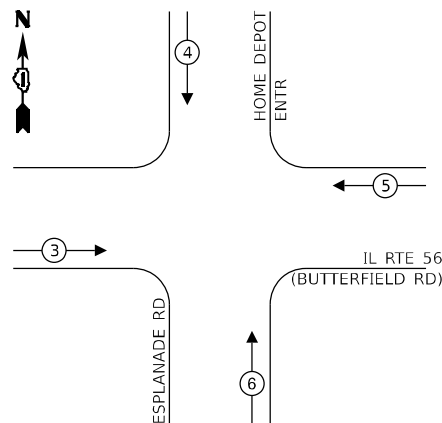
- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PROTECTED PHASE
B	= 5 + 7 + 8
C	= 6 + 7

EXIST. INTERCONNECT TO WOODCREEK DR/ LLOYD AVE

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

CABLE PLAN
(NOT TO SCALE)

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

ENERGY COSTS TO:

VILLAGE OF DOWNERS GROVE
801 BURLINGTON AVE
DOWNERS GROVE, IL 60515

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 10531-30092

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	17	11	187
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	2	15	30
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		473	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1078	

TS SHT NO. 68

MODEL: 1400BELMONT
FILE NAME: D:\ENR2024\TS68\CABIN SER\ESPLANADE.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

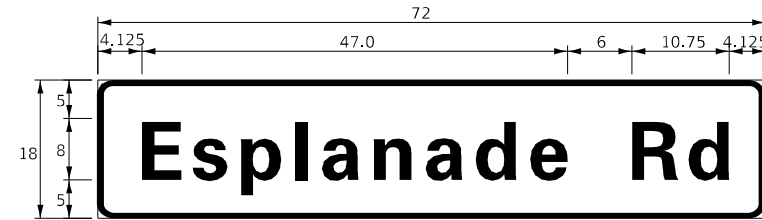
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND ESPLANADE ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	239
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS 6352
IDOT CENTRACS
FORMER ECON 41

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9.0	1	ZZ	2

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	33
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	269
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1299
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	255
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	788
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	341
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	10
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	269
LAYER II (DATA LINK) SWITCH	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	2
LED SIGNAL FACE, LENS COVER	EACH	19
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	2
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	8

TS SHT NO. 69

MODEL: \\MODEL\AMES
FILE NAME: D:\2023\2-24-23\69-STML\56ESPLANADE.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

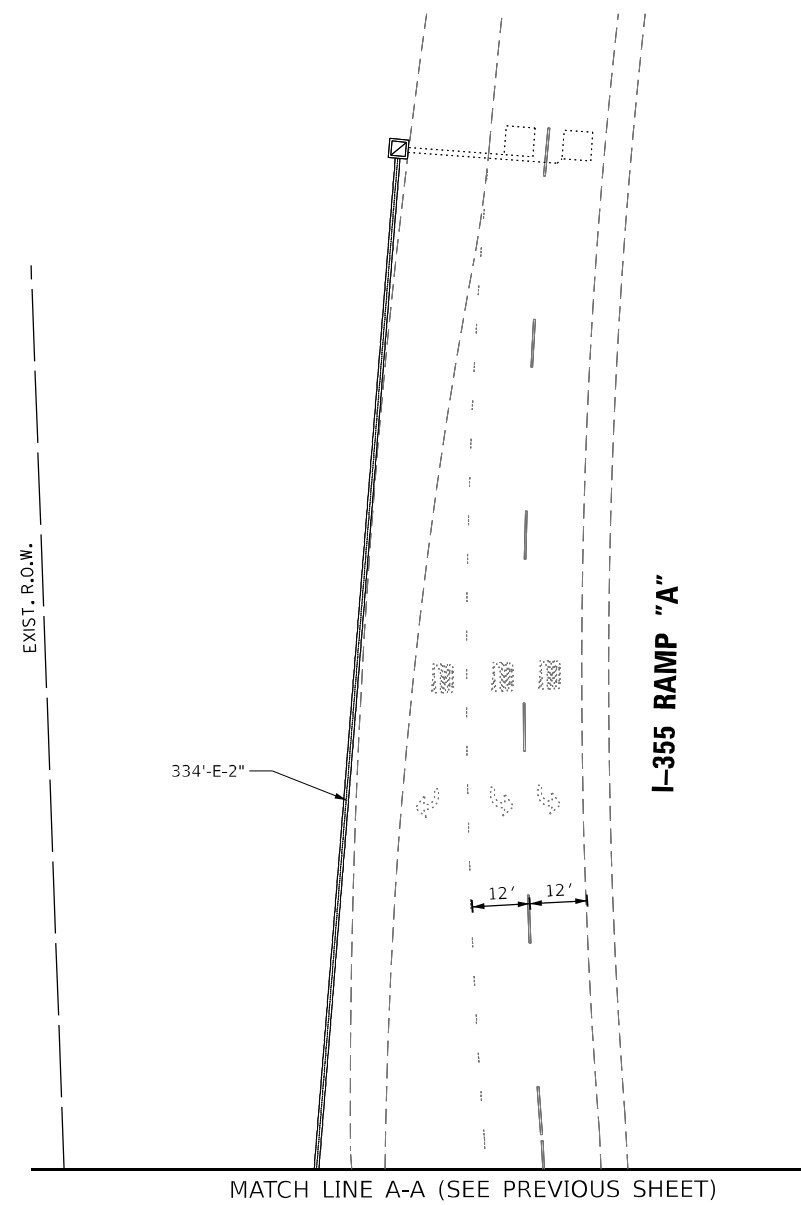
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND ESPLANADE ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	240
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

**TS 6352
IDOT CENTRACS
FORMER ECON 41**



TS SHT NO. 71

MODEL: I-355SB.RAMP.A
FILE NAME: D:\2022-23\TS1-MODTL56-I-355SB.RAMP.S.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND I-355 SB RAMP**

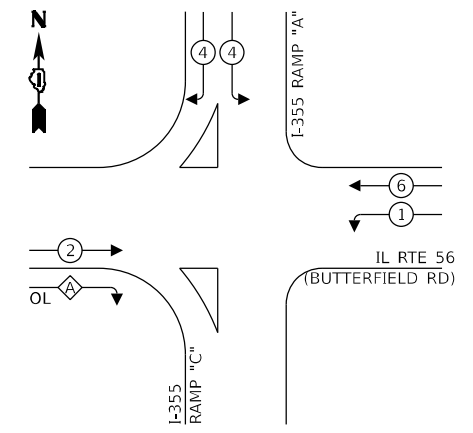
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	242
CONTRACT NO. 62N32				
		ILLINOIS	FED. AID PROJECT	

**TS 20630
IDOT CENTRACS
FORMER ECON 41**



EXISTING AND PROPOSED CONTROLLER SEQUENCE



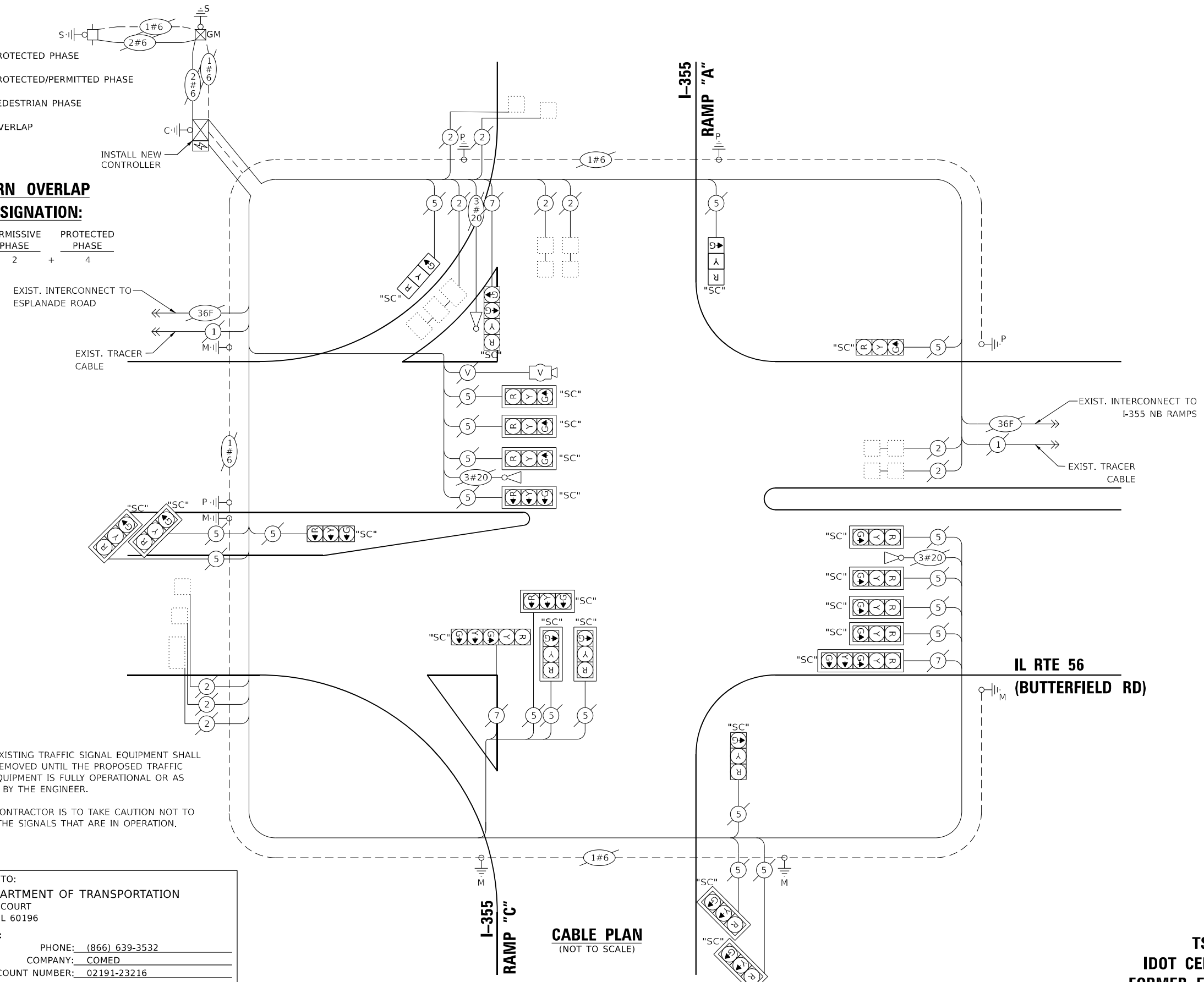
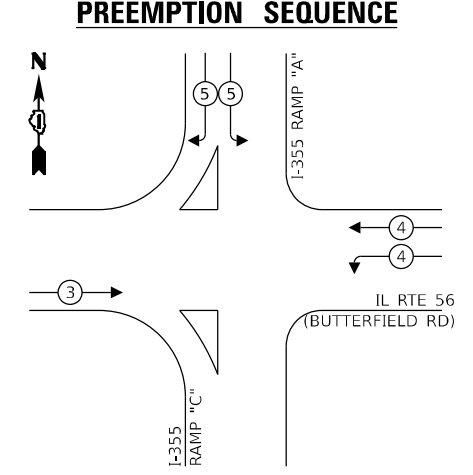
LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 4

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.

ENERGY COSTS TO:
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W CENTER COURT
 SVHAUMBURG, IL 60196

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 02191-23216

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	20	11	220
4-SECTION	1	14	14
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		490	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1095	

TS SHT NO. 72

MODEL: 1408ELMAME
 FILE NAME: D:\ENR2024\TS72-CABLI56_1355SBRAMPS.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

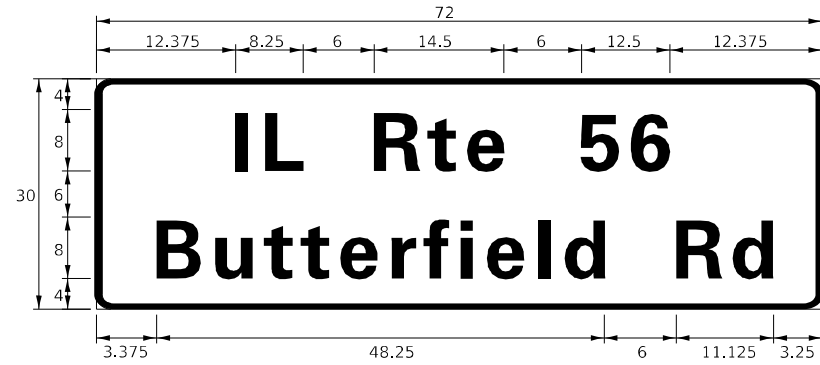
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
 EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL ROUTE 56 (BUTTERFIELD RD) AND I-355 SB RAMPS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	243
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 20630
 IDOT CENTRACS
 FORMER ECON 41

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	15
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	23
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	21

TS SHT NO. 73

MODEL: 1400BELMAME
FILE NAME: D:\2023\24-25\23-24\TS73-SHT156_135558RAMPS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND I-355 SB RAMPS**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	244
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 20630
IDOT CENTRACS
FORMER ECON 41**

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.

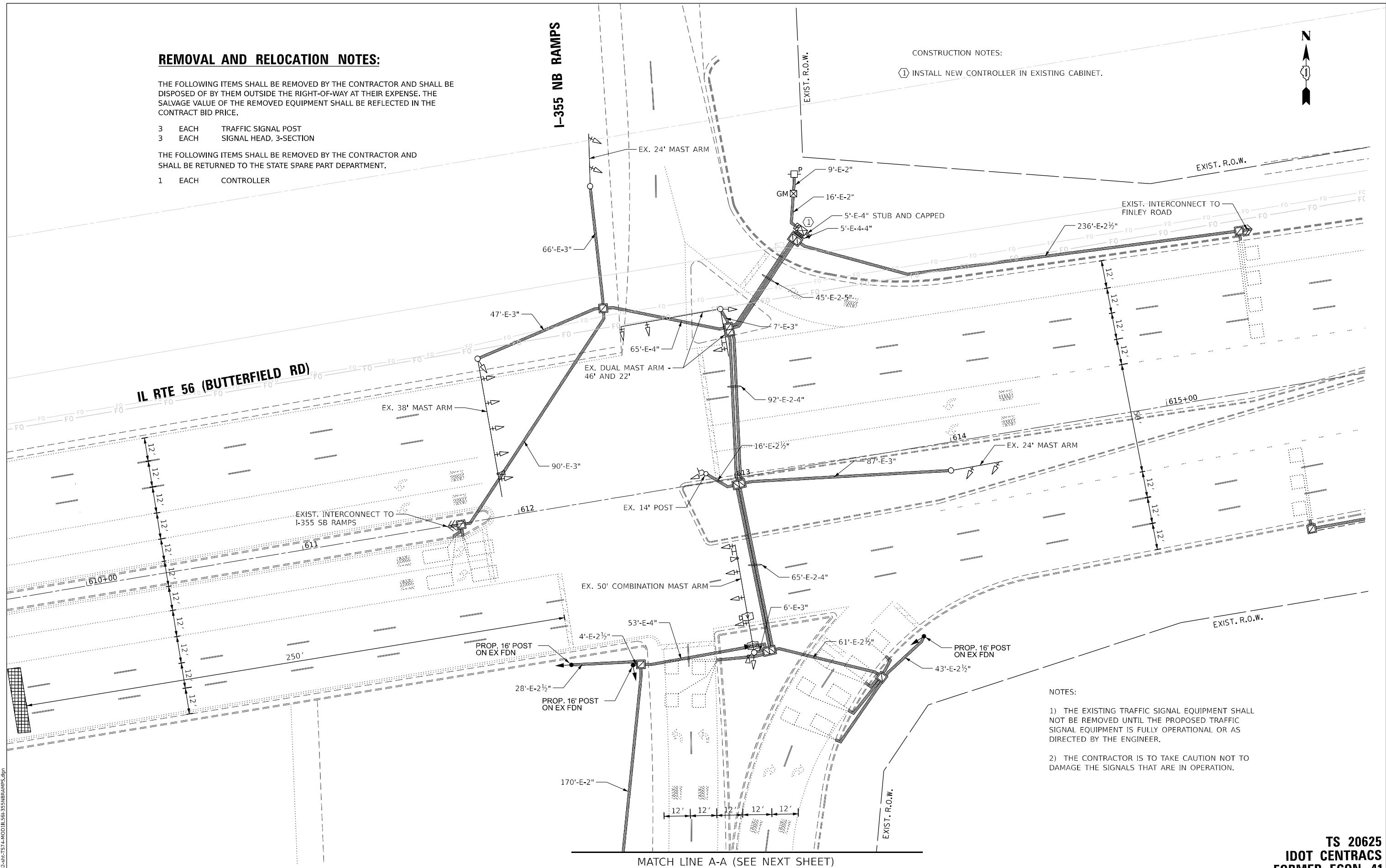
- 3 EACH TRAFFIC SIGNAL POST
- 3 EACH SIGNAL HEAD, 3-SECTION

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH CONTROLLER

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.



- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.

TS SHT NO. 74

MODEL: I:\MODELS\AME\TS\4-ROAD\I-355\NB\RAMP5.dgn
FILE NAME: D:\2022\2023\TS\4-ROAD\I-355\NB\RAMP5.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 1 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND I-355 NB RAMP**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	245
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

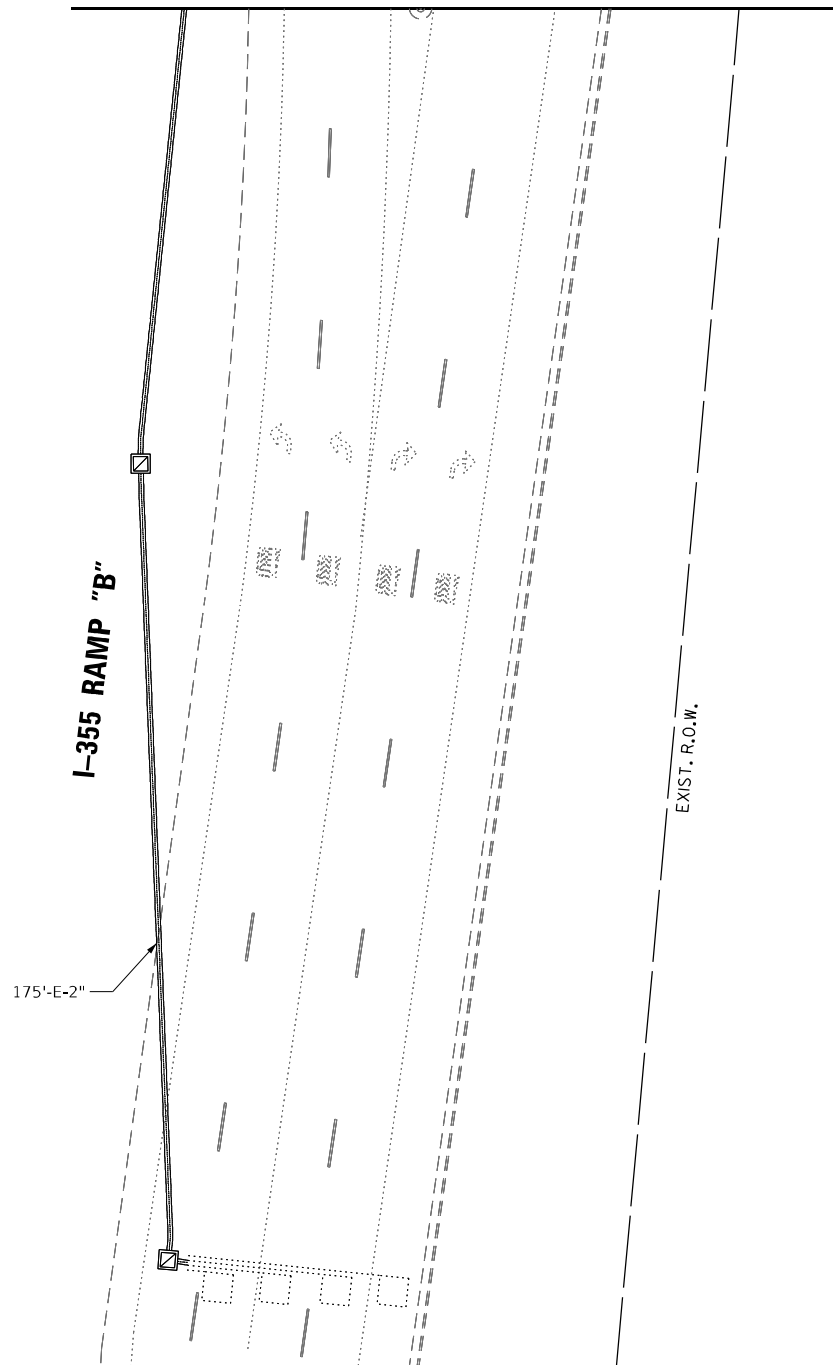
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

MATCH LINE A-A (SEE NEXT SHEET)

**TS 20625
IDOT CENTRACS
FORMER ECON 41**



MATCH LINE A-A (SEE PREVIOUS SHEET)



TS SHT NO. 75

MODEL NAME: D:\2022-2023\TS\75\MODTL56-I355NB.RAMP.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND I-355 NB RAMP

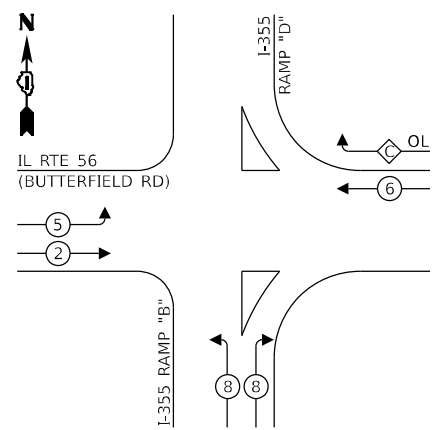
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	246
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

TS 20625
IDOT CENTRACS
FORMER ECON 41



EXISTING AND PROPOSED CONTROLLER SEQUENCE



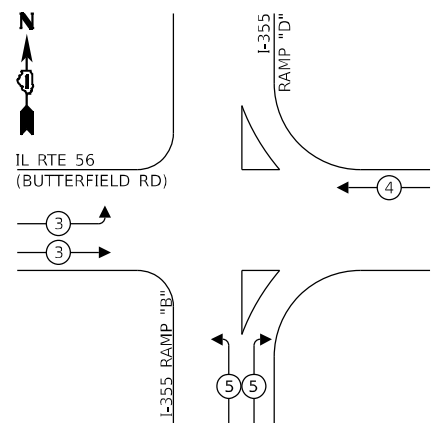
LEGEND:

- ⊙ — PROTECTED PHASE
- ⊙ — PROTECTED/PERMITTED PHASE
- ⊙ — PEDESTRIAN PHASE
- ⊙ — OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 8

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXIST. INTERCONNECT TO I-355 SB RAMPS

EXIST. TRACER CABLE

IL RTE 56 (BUTTERFIELD RD)

I-355 RAMP "B"

CABLE PLAN (NOT TO SCALE)

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON THE LUMINAIRE ARM.

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 02191-23216

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	20	11	220
4-SECTION	1	14	14
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		490	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1095	

TS SHT NO. 76

MODEL: 1400BELNAME
FILE NAME: D:\ENR22-04-TS76-CABLI-S55IBRAMPS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
DESIGNED	- JR
DRAWN	- SR
PILOT SCALE	= \$SCALE\$
PILOT DATE	= 2/23/2024

REVISD	-
REVISD	-
REVISD	-
REVISD	-

DATE	- 07/14/2023
REVISD	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

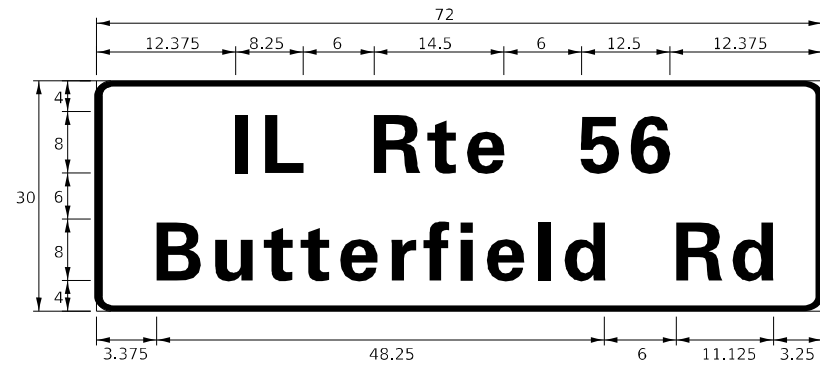
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 56 (BUTTERFIELD RD) AND I-355 NB RAMPS

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	247
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 20625 IDOT CENTRACS FORMER ECON 41

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	15.0	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	15
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	312
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	21
POWER OVER ETHERNET EXTENDER	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	20

TS SHT NO. 77

MODEL: 4100BELNAMES
FILE NAME: D:\2022-24\TS77-STML 56\35518R0AMP5.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND I-355 NB RAMP**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	248
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 20625
IDOT CENTRACS
FORMER ECON 41**

MATCH LINE A-A (SEE NEXT SHEET)

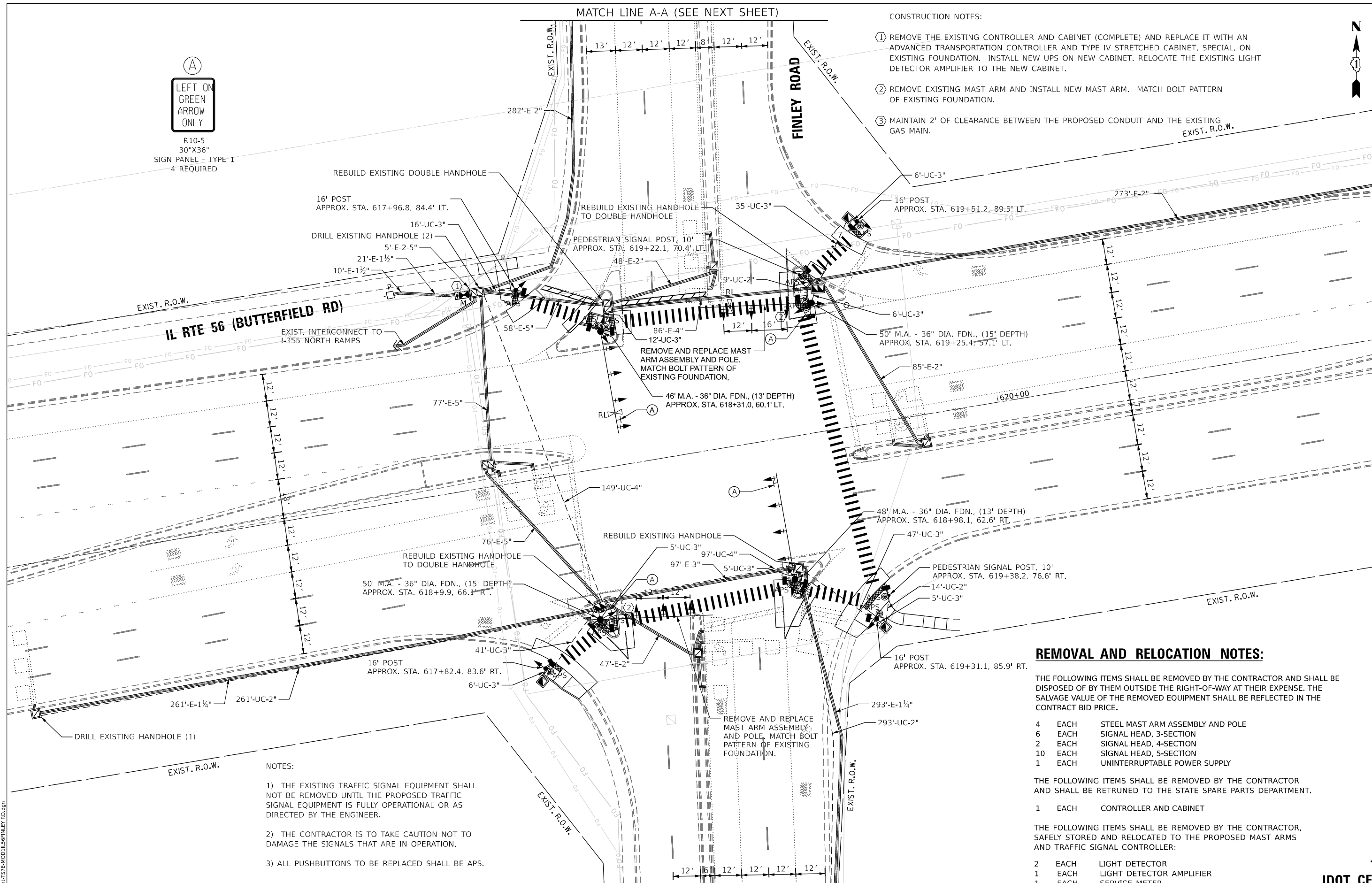
CONSTRUCTION NOTES:

- ① REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE) AND REPLACE IT WITH AN ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL, ON EXISTING FOUNDATION. INSTALL NEW UPS ON NEW CABINET. RELOCATE THE EXISTING LIGHT DETECTOR AMPLIFIER TO THE NEW CABINET.
- ② REMOVE EXISTING MAST ARM AND INSTALL NEW MAST ARM. MATCH BOLT PATTERN OF EXISTING FOUNDATION.
- ③ MAINTAIN 2' OF CLEARANCE BETWEEN THE PROPOSED CONDUIT AND THE EXISTING GAS MAIN.



(A)
LEFT ON
GREEN
ARROW
ONLY

R10-5
30"X36"
SIGN PANEL - TYPE 1
4 REQUIRED



MATCH LINE C-C (SEE NEXT SHEET)

MATCH LINE B-B (SEE NEXT SHEET)

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 |
| 6 | EACH | SIGNAL HEAD, 3-SECTION |
| 2 | EACH | SIGNAL HEAD, 4-SECTION |
| 10 | EACH | SIGNAL HEAD, 5-SECTION |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY |

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PARTS DEPARTMENT.

- | | | |
|---|------|------------------------|
| 1 | EACH | CONTROLLER AND CABINET |
|---|------|------------------------|

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

- | | | |
|---|------|--------------------------|
| 2 | EACH | LIGHT DETECTOR |
| 1 | EACH | LIGHT DETECTOR AMPLIFIER |
| 1 | EACH | SERVICE METER |

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 78
MODEL NAME: D:\2025\25-01\TS18-MOD\15FINLEY RD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

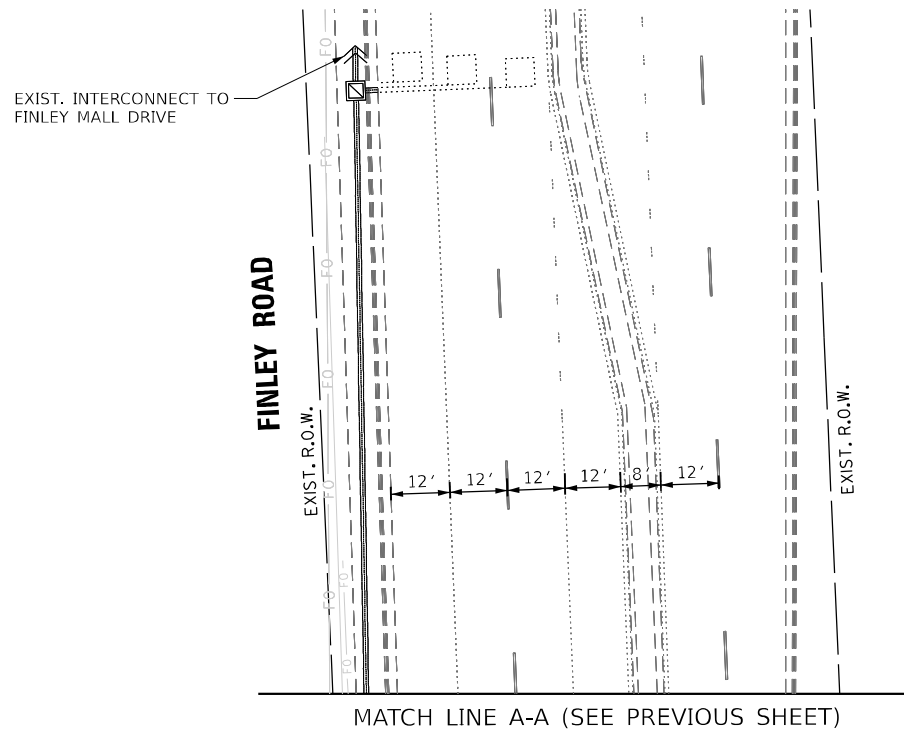
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 1 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND FINLEY ROAD

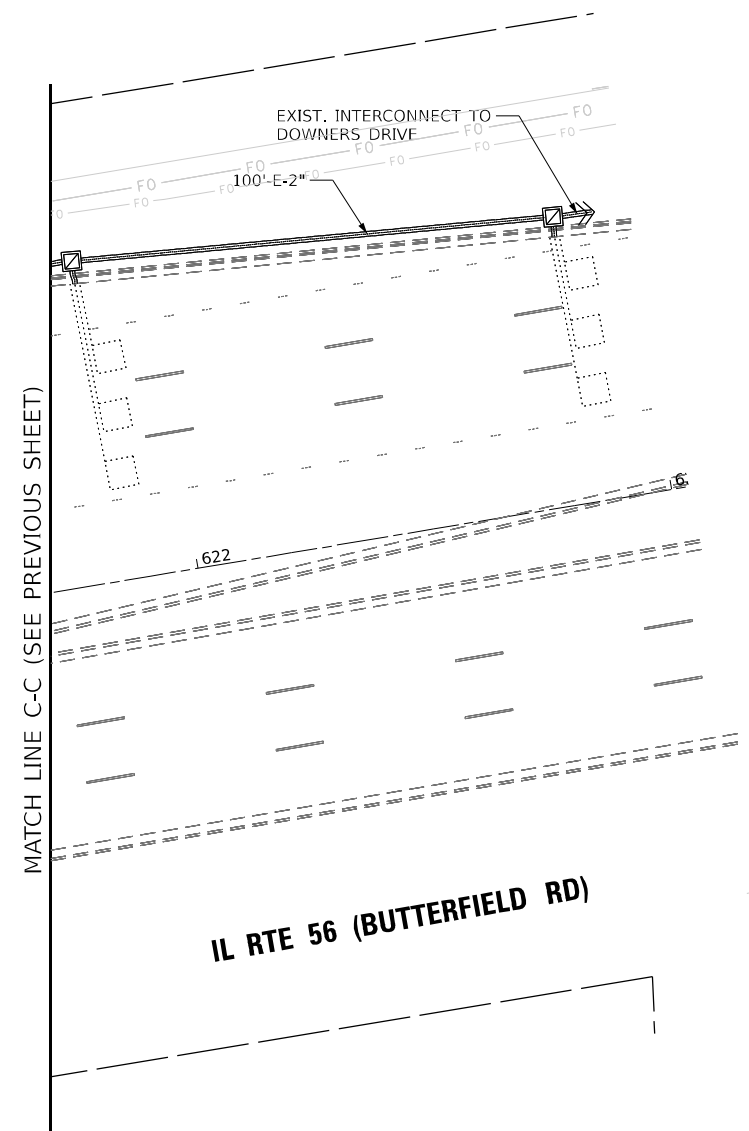
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	249
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

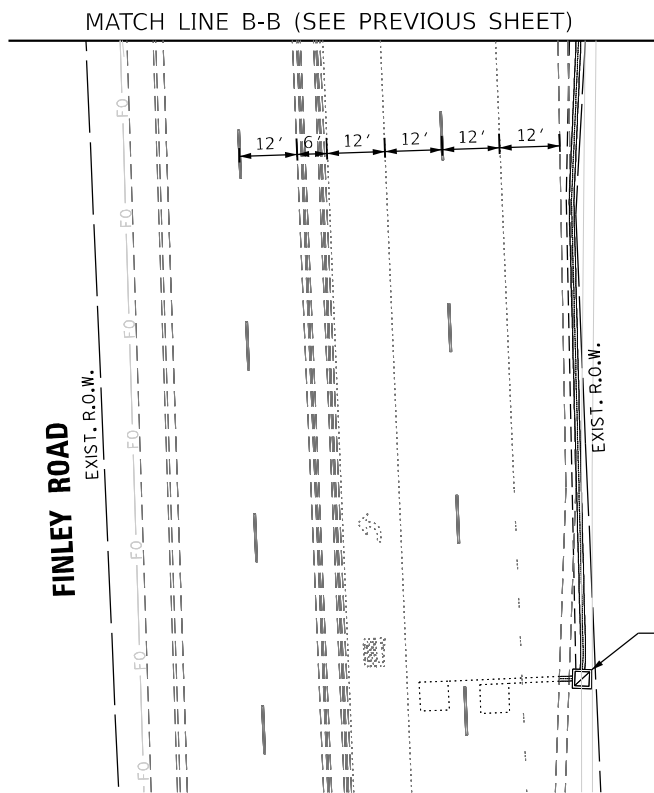
TS 6275
IDOT CENTRACS
FORMER ECON 41



MATCH LINE A-A (SEE PREVIOUS SHEET)



MATCH LINE C-C (SEE PREVIOUS SHEET)



MATCH LINE B-B (SEE PREVIOUS SHEET)

TS SHT NO. 79

MODEL NAME: D:\ENR22-ar\1579-MODTL56\FINLEY RD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

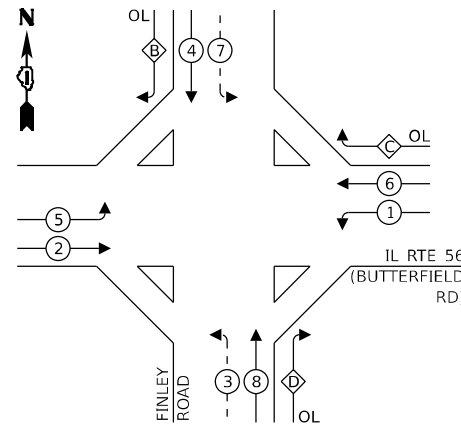
**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND FINLEY ROAD**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	250
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 6275
IDOT CENTRACS
FORMER ECON 41**

EXISTING CONTROLLER SEQUENCE



LEGEND:

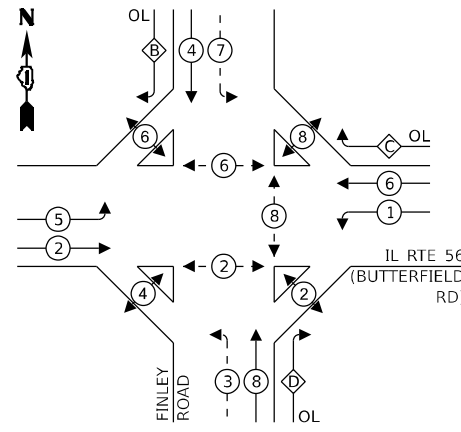
- ← * → DUAL ENTRY PHASE
- ← * - SINGLE ENTRY PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

RIGHT TURN OVERLAP

PHASE DESIGNATION:

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

PROPOSED CONTROLLER SEQUENCE



LEGEND:

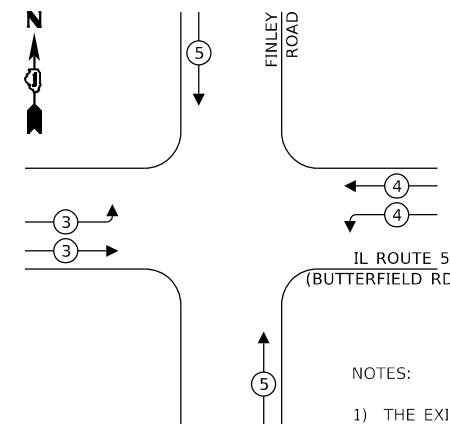
- ← * → DUAL ENTRY PHASE
- ← * - SINGLE ENTRY PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

RIGHT TURN OVERLAP

PHASE DESIGNATION:

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

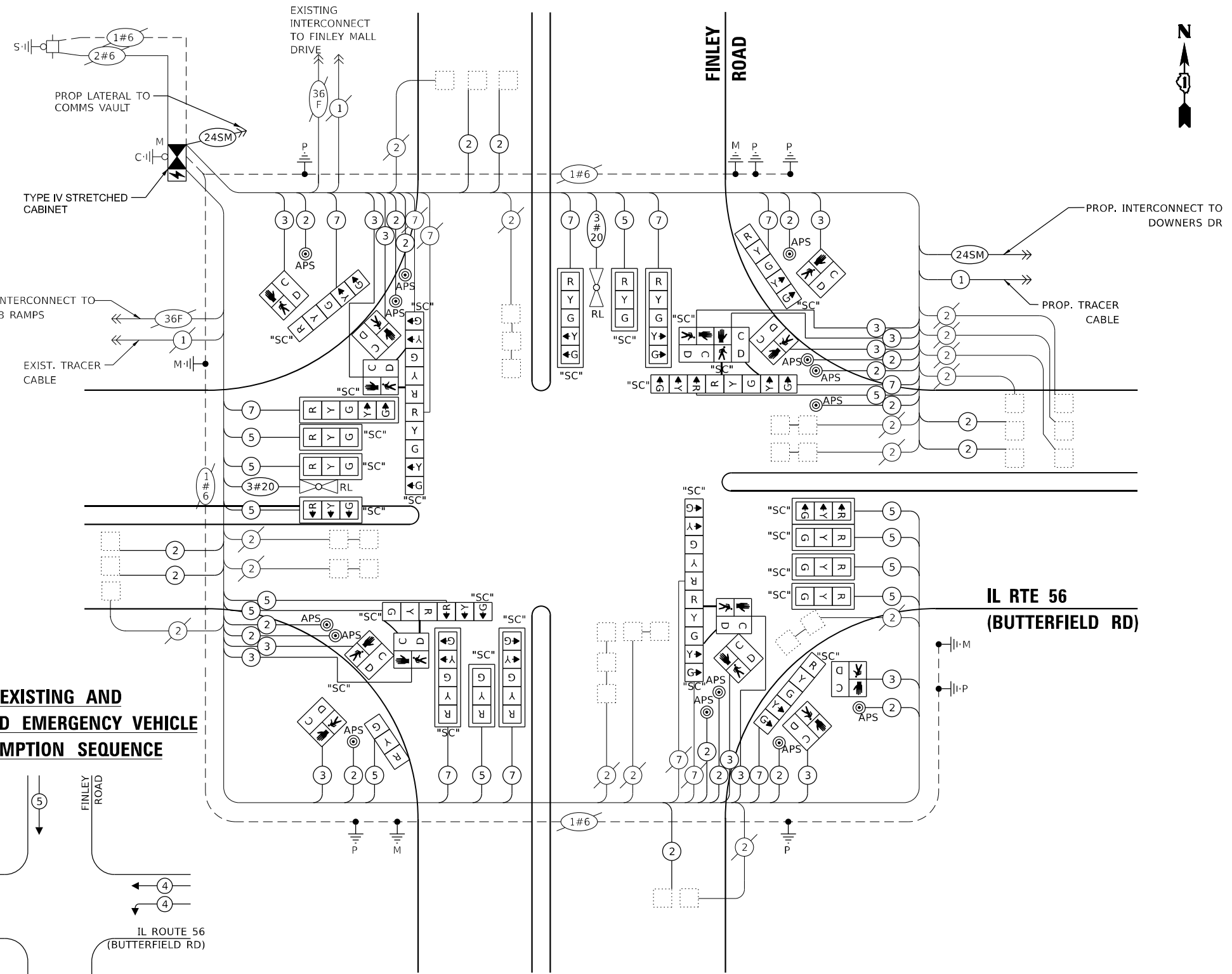
EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

CABLE PLAN (NOT TO SCALE)



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	13	11	143
4-SECTION	-	14	-
5-SECTION	13	13	169
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	14	15	210
MASTER CONTROLLER	1	150	150
UPS	1	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	-	20	-
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	1	35	35
	-	15	-
TOTAL UPS SIZING		732	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1337	

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 10531-30092

TS SHT NO. 80

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-2020-265-SUR-TS80-CABIN SERFINLEY RD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

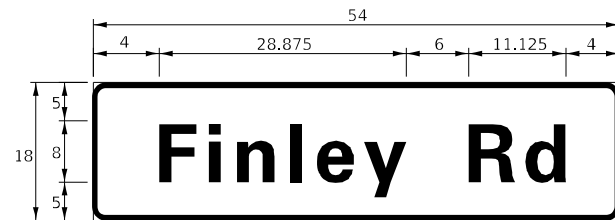
**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND FINLEY ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

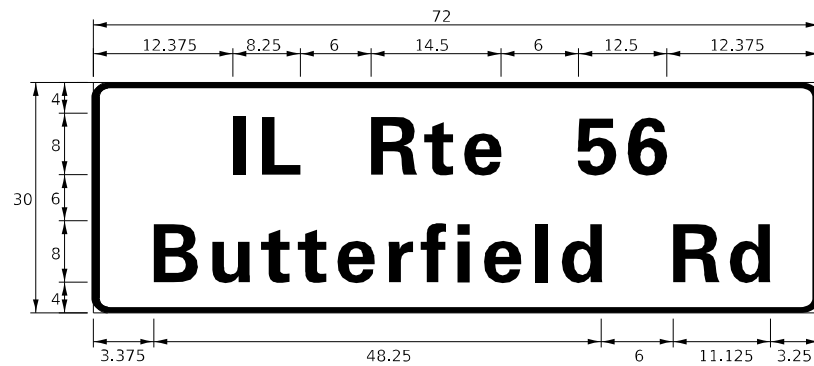
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	251
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6275
IDOT CENTRACS
FORMER ECON 41**

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6.75	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	43.5
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	577
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	184
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	246
HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	3071
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3197
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3221
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1996
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2741
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1077
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	56
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	14
INDUCTIVE LOOP DETECTOR	EACH	22
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	427
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
LAYER III (NETWORK) SWITCH	EACH	1
REBUILD EXISTING DOUBLE HANDHOLE	EACH	1
ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV STRETCHED CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	14
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	26
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	2
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	1

TS SHT NO. 81

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-ar-TS81-STML56FINLEY RD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

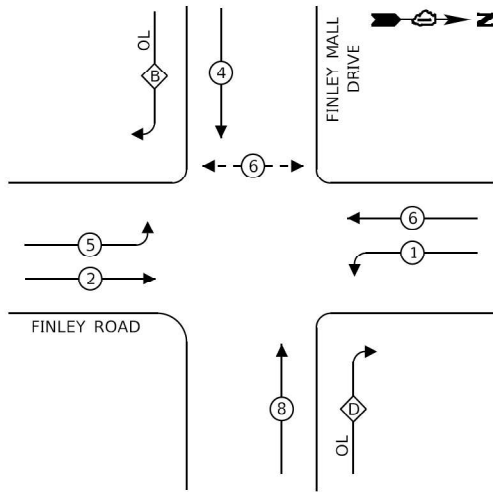
**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND FINLEY ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	252
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

**TS 6275
IDOT CENTRACS
FORMER ECON 41**

PROPOSED CONTROLLER SEQUENCE



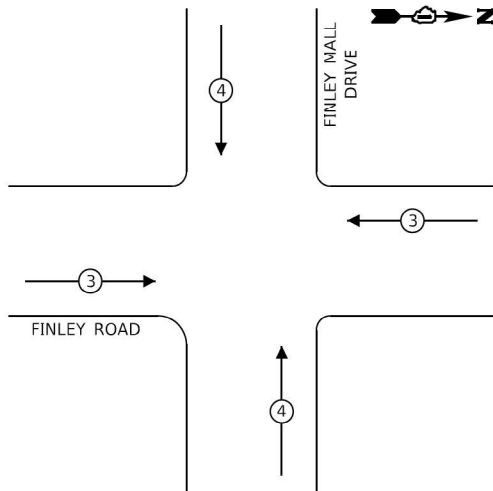
LEGEND:

- ← ⊙ → PROTECTED PHASE
- ← ⊙ ⊙ → PROTECTED/PERMITTED PHASE
- ← ⊙ ⊙ ⊙ → PEDESTRIAN PHASE
- ← ⊙ ⊙ ⊙ ⊙ → OVERLAP
- * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B =	4	5
D =	8	1

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

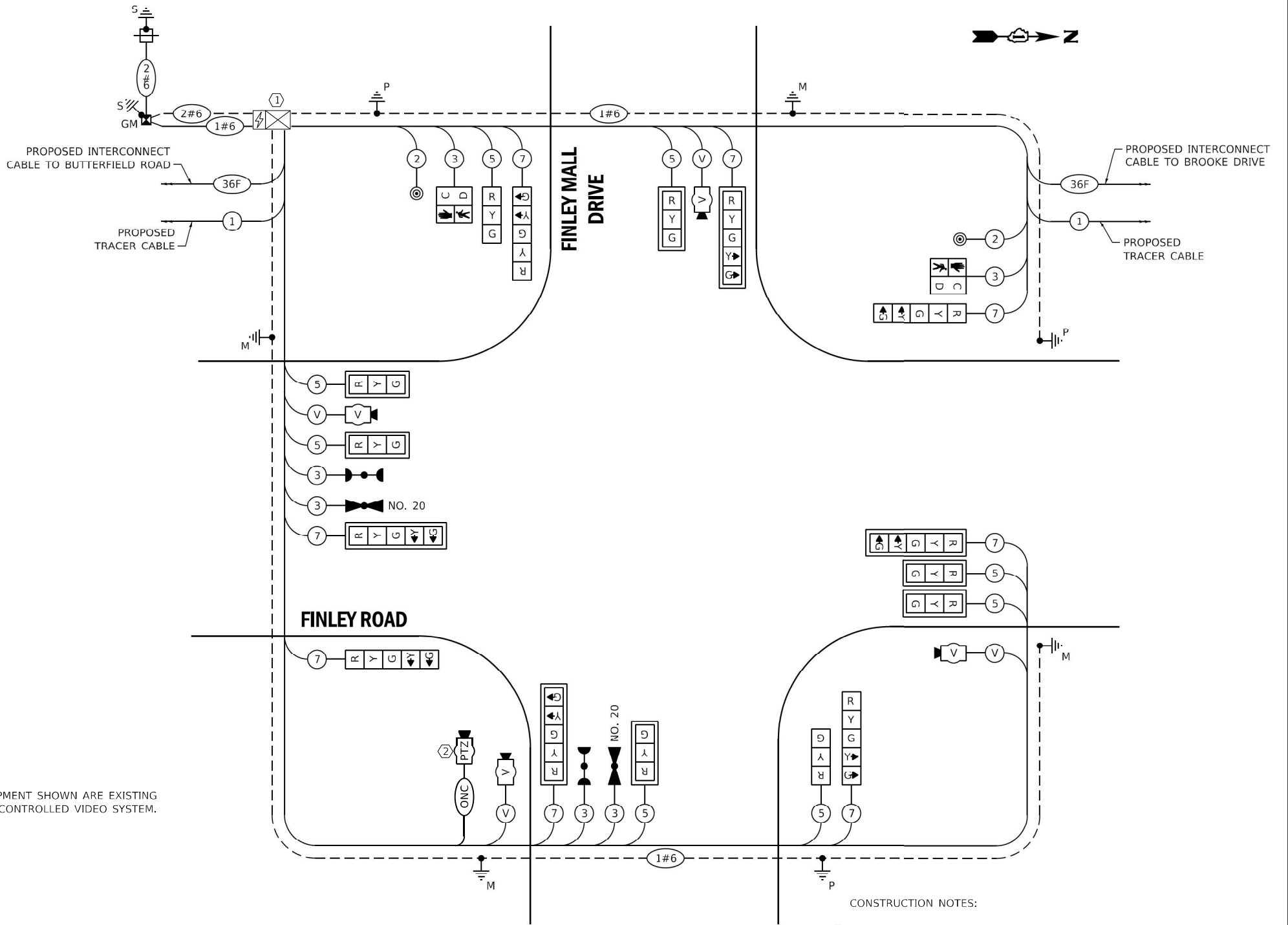
NOTES:

1) ALL CABLES AND EQUIPMENT SHOWN ARE EXISTING EXCEPT FOR THE REMOTE CONTROLLED VIDEO SYSTEM.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	159
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

CABLE PLAN (NOT TO SCALE)



CONSTRUCTION NOTES:

- ① INSTALL NEW LAYER II (DATALINK) SWITCH IN EXISTING CABINET.
- ② INSTALL A NEW REMOTE CONTROLLED VIDEO SYSTEM ON EXISTING LUMINAIRE ARM.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	50	136.0
(YELLOW)	16	25	5	20.0
(GREEN)	16	15	45	108.0
PERMISSIVE ARROW	16	12	10	19.2
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	-	-	-	-
FLASHER	-	-	-	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
TOTAL =				597.6

ENERGY COSTS TO:

VILLAGE OF DOWNERS GROVE

5101 WALNUT AVENUE
DOWNERS GROVE, IL 60515

ENERGY SUPPLY: CONTACT: _____
PHONE: _____
COMPANY: COMED
ACCOUNT NUMBER: _____

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
FINLEY ROAD AND MALL DRIVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	253
CONTRACT NO. 62N32				

ILLINOIS FED. AID PROJECT

**TS 13132
DOWNERS GROVE
IDOT CENTRACS**

TS SHT NO. 82

MODEL NAME: D:\ENR22-01-TS82-CABILL\SRFINLEYMALL_DR.dgn
FILE NAME: D:\ENR22-01-TS82-CABILL\SRFINLEYMALL_DR.dgn

CABLE PLAN
FINLEY RD.

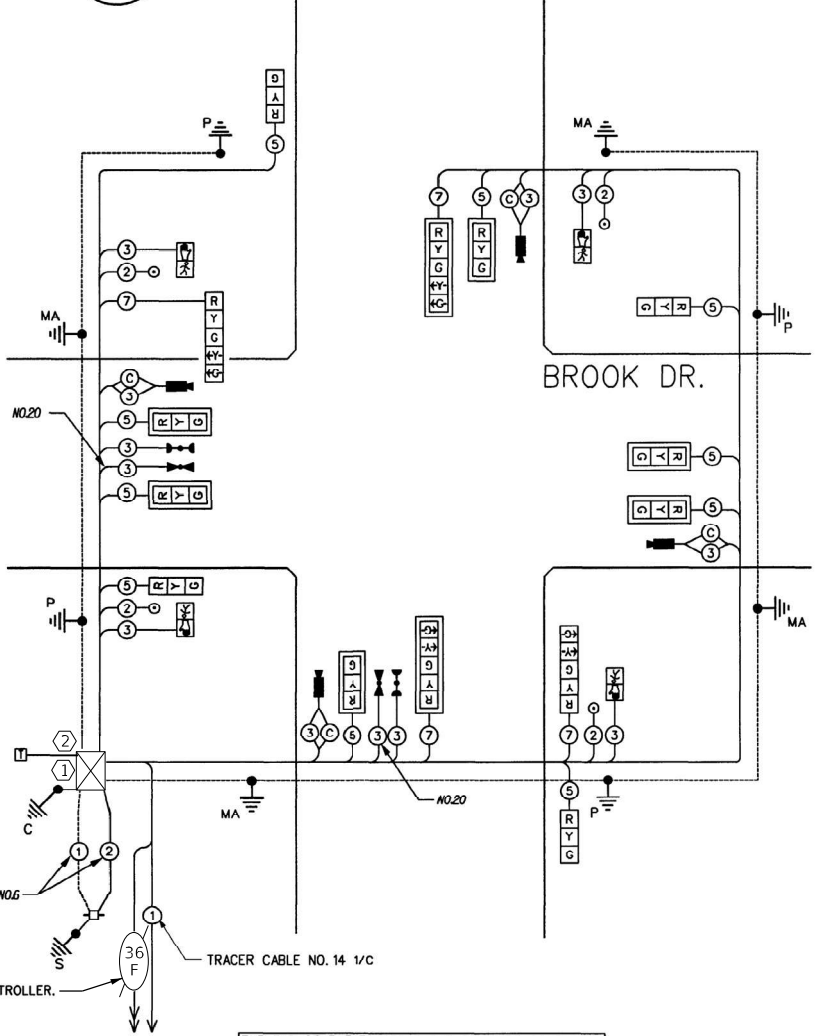


REMOVAL AND RELOCATION NOTES:

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 CONTROLLER

NOTES:
1) ALL CABLES AND EQUIPMENT SHOWN ARE EXISTING.



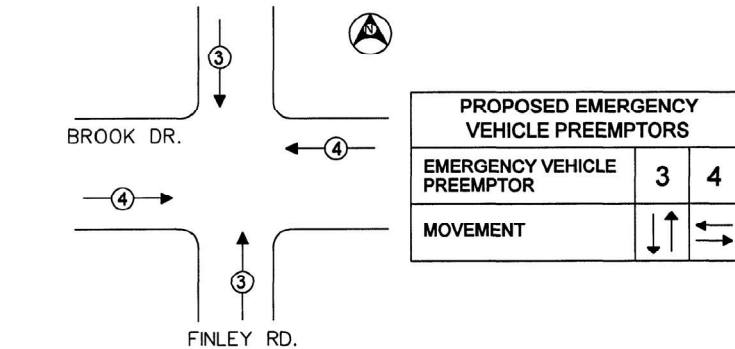
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO CONTROLLER CABINET.

- CONSTRUCTION NOTES:
- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
 - ② INSTALL NEW LAYER II (DATALINK) SWITCH IN EXISTING CABINET.

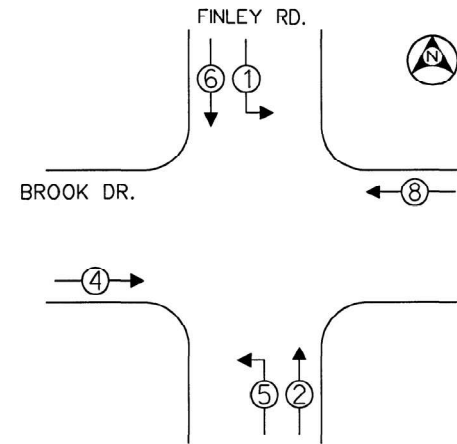
SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



LEGEND

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

PHASE DESIGNATION DIAGRAM

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND	LED %	OPERATIONS	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.50
(GREEN)	14	135	15	0.25	52.50
ARROW	8	135	12	0.10	9.6
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO: TOTAL =					350.1

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.1)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	15 (4.0)	20" + L-2"	
E - M ARM POLE		SIGNAL POST	2 (1.0)	MAST ARM (L) POLE	(6.1 + L - 1.0) =
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

TS SHT NO. 83

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
FINLEY ROAD AND BROOK DRIVE

TS 13131
DOWNERS GROVE
IDOT CENTRACS

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 STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH SIGNAL HEAD, 5-SECTION
- 1 EACH CONTROLLER

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

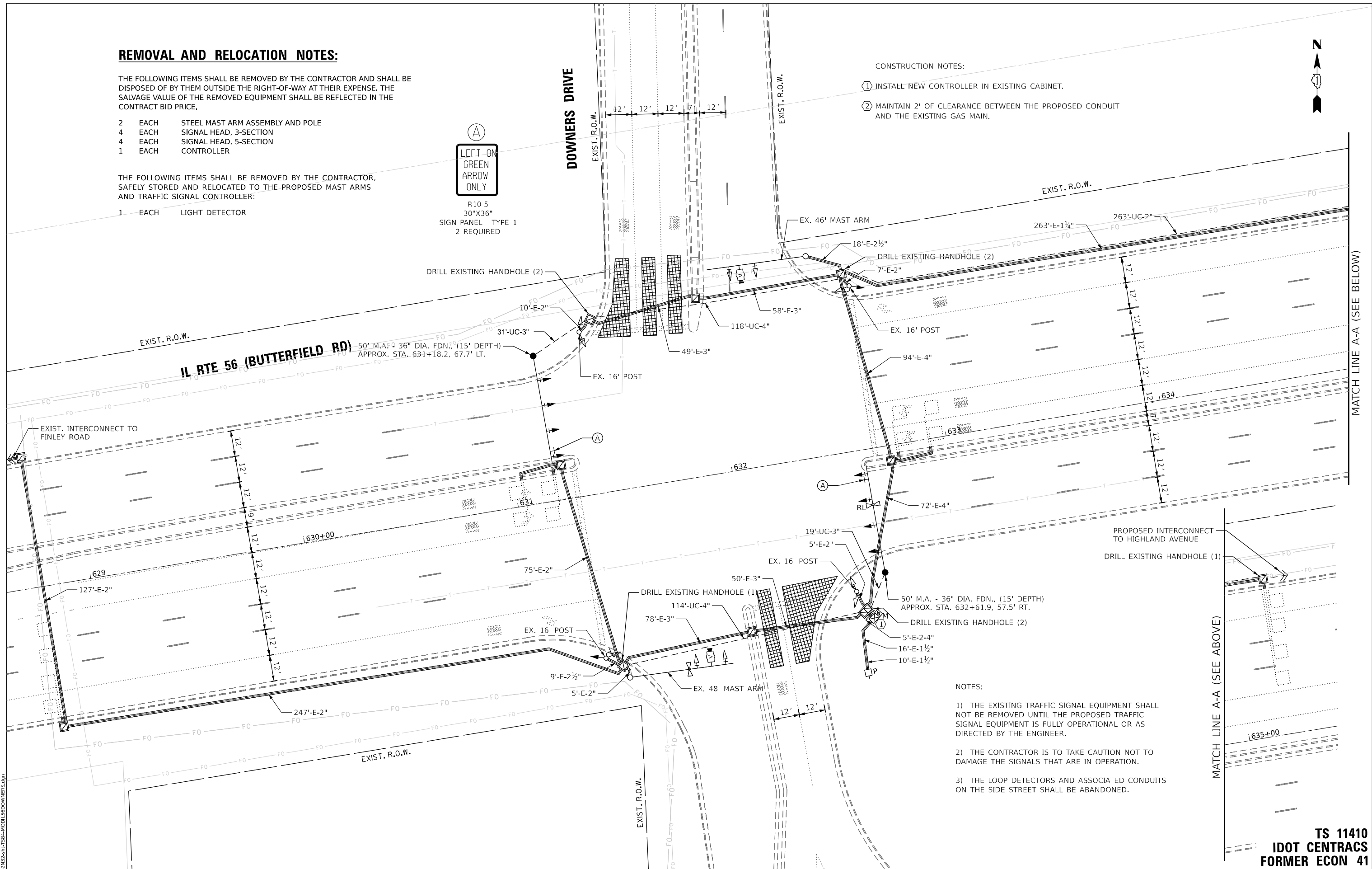
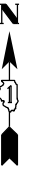
- 1 EACH LIGHT DETECTOR



R10-5
30"X36"
SIGN PANEL - TYPE 1
2 REQUIRED

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② MAINTAIN 2' OF CLEARANCE BETWEEN THE PROPOSED CONDUIT AND THE EXISTING GAS MAIN.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

TS SHT NO. 84

MODEL NAME: D:\ENR22-ar\TS84-MOBI-66DOWNERS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND DOWNERS DRIVE**

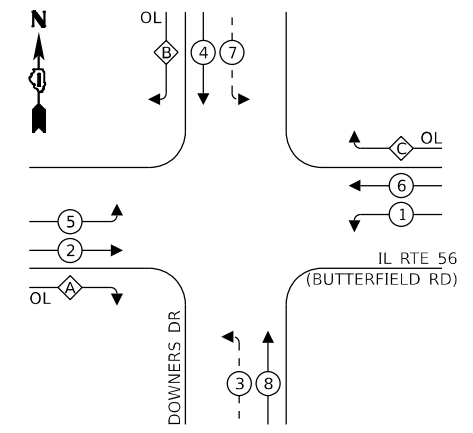
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	255
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 11410
IDOT CENTRACS
FORMER ECON 41**



EXISTING AND PROPOSED CONTROLLER SEQUENCE



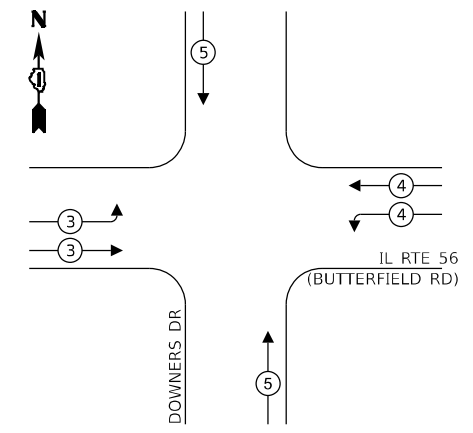
LEGEND:

- ⊙ - PROTECTED PHASE
- ⊙ - PROTECTED/PERMITTED PHASE
- ⊙ - PEDESTRIAN PHASE
- ⊙ - OVERLAP

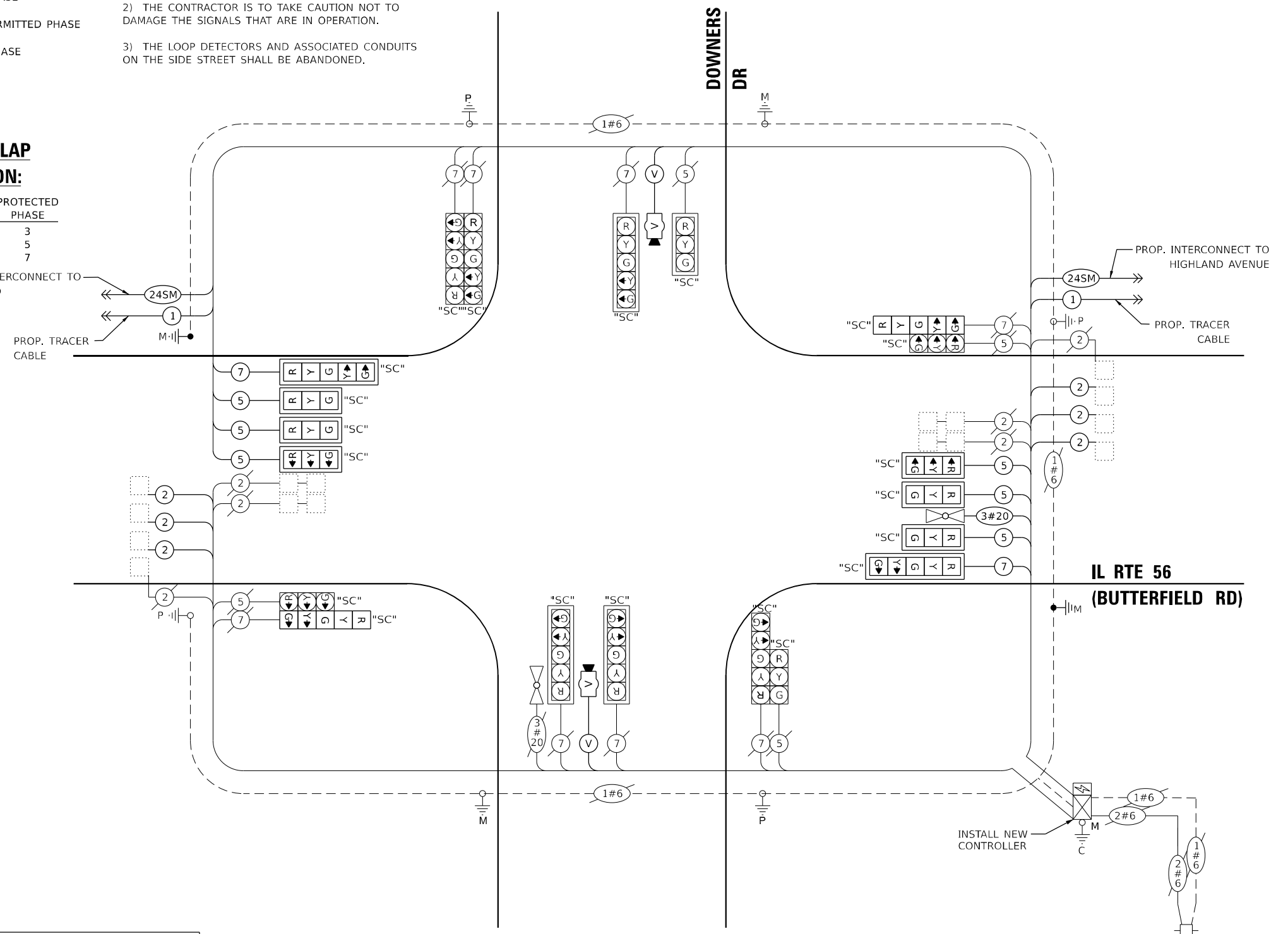
RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	10	13	130
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		490	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1095	

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 10531-30092

TS SHT NO. 85

MODEL: 1140BELMONT
FILE NAME: D:\ENR2023\1140-TS85-CABLE\TS85-CABLE.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

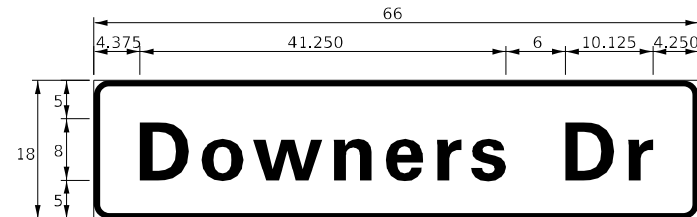
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND DOWNERS DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	256
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

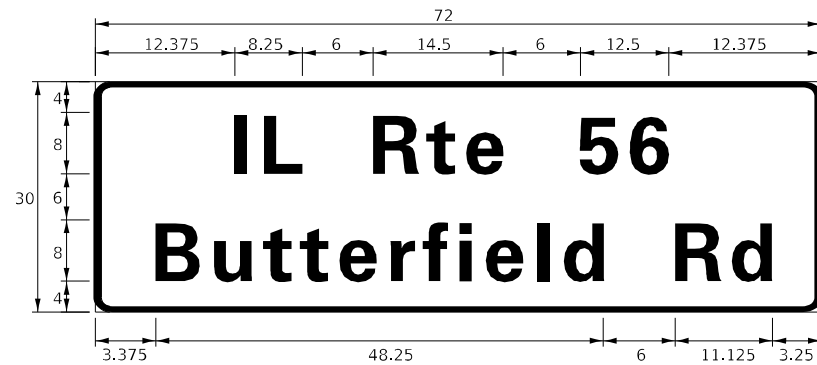
TS 11410
IDOT CENTRACS
FORMER ECON 41

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	31.5
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	263
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	50
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	232
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1511
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	461
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2658
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	349
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	96
LAYER II (DATA LINK) SWITCH	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	20
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	10

TS SHT NO. 86

MODEL: 1140BELMAME
FILE NAME: D:\62N32-ar-1140-5TMI-56DOWNERS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

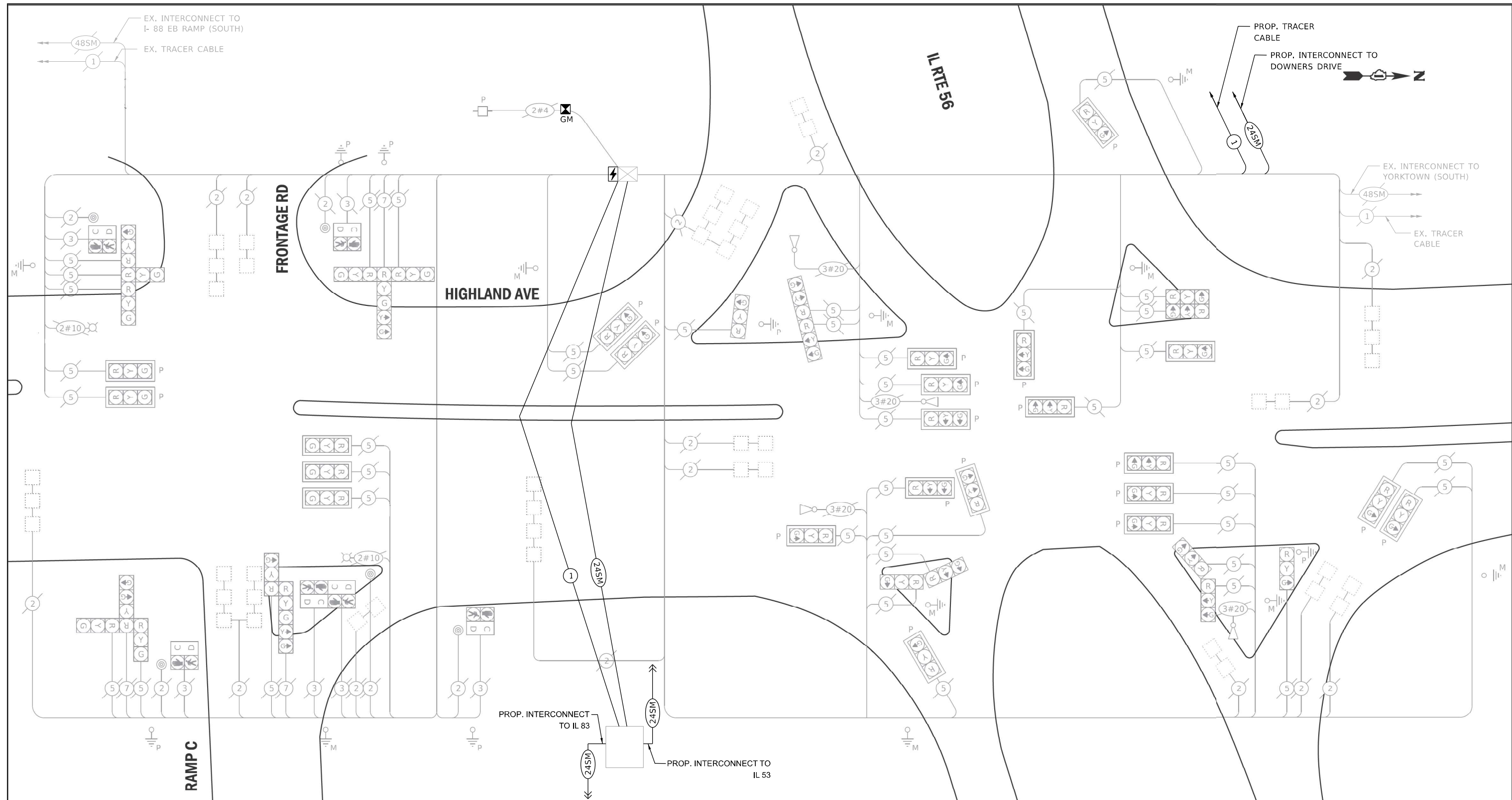
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND DOWNERS DRIVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	257
			CONTRACT NO. 62N32	
		ILLINOIS FED. AID PROJECT		

**TS 11410
IDOT CENTRACS
FORMER ECON 41**



SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	50
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
JUNCTION BOX	EACH	1
LEVEL III (NETWORK) SWITCH	EACH	1
UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	1

TS SHT NO. 87

MODEL: \\MODEL\AMES
FILE NAME: D:\ENR22-ar-TS87-CAB\HIGHLAND.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

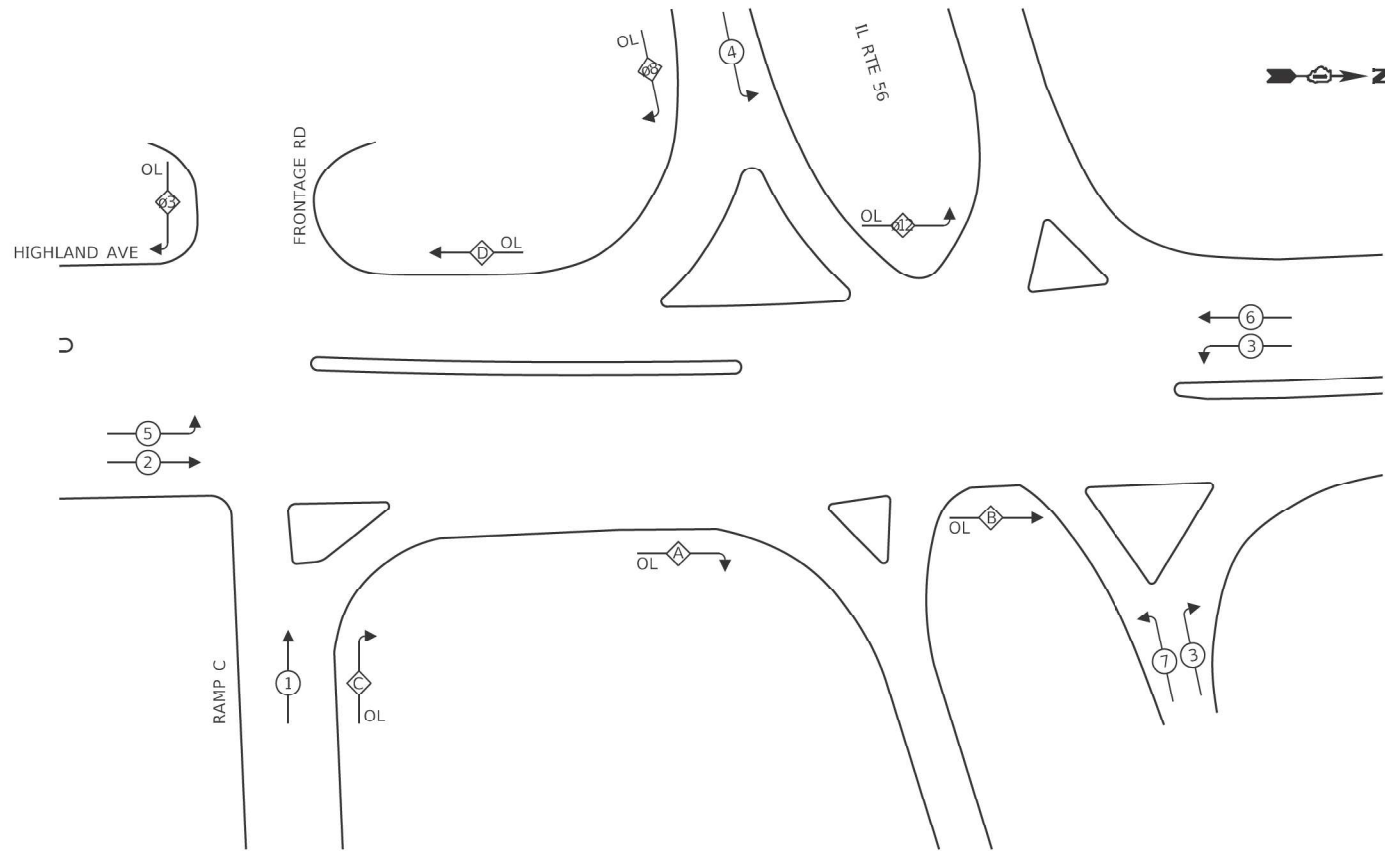
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES - AREA 4
IL ROUTE 56 (BUTTERFIELD ROAD) AND HIGHLAND AVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

TS 6280		IDOT CENTRACS AND DUPAGE CENTRACS	
F.A.P. RTE. 365	SECTION 2020-265-SUR, SW & TS	COUNTY DUPAGE	TOTAL SHEETS 462 SHEET NO. 258
		CONTRACT NO. 62N32	
		ILLINOIS FED. AID PROJECT	

EXISTING CONTROLLER SEQUENCE



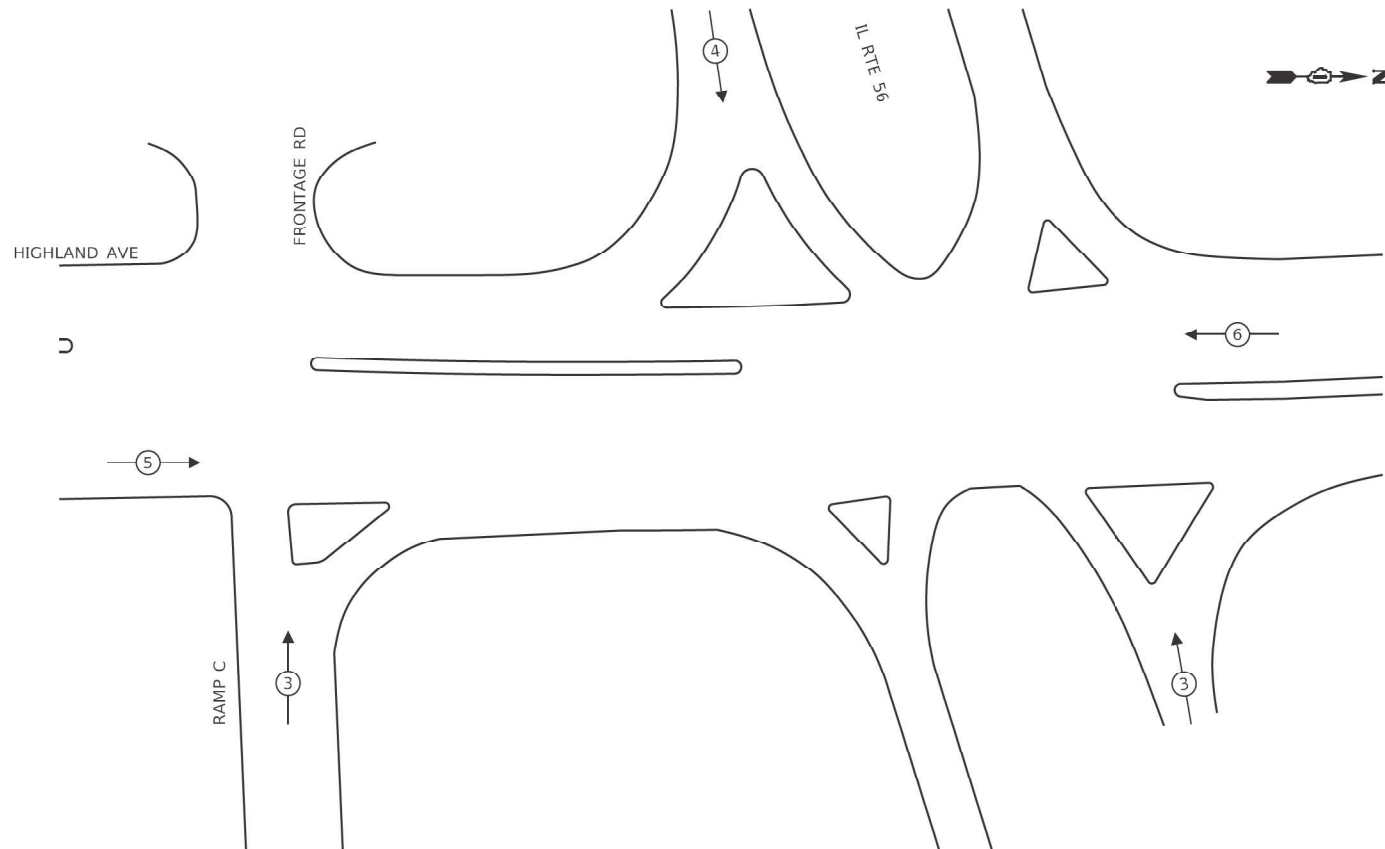
LEGEND:

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

**RIGHT TURN OVERLAP
PHASE DESIGNATION:**

OL A	=	1	+	2	+	4	+	5
OL B	=	1	+	2	+	5		
OL C	=	1	+	4	-	1G		
OL D	=	2	+	4				
OL 03	=	3						
OL 08	=	1		3		5		8
OL 0D	=	1	+	5				

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	22	11	242
4-SECTION	1	14	14
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	16	22	352
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			954
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1559

ENERGY COSTS TO:
VILLAGE OF LOMBARD
 255 E. WILSON AVE
 LOMBARD, IL 60148-3926

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 11831-41069 & 05462-35009

TS SHT NO. 88

MODEL: 4100BELNAMES
 FILE NAME: D:\ENR22-ar\TSBB-CABHIGHLAND2.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE
PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES - AREA 4
IL ROUTE 56 (BUTTERFIELD ROAD) AND HIGHLAND AVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	259
			CONTRACT NO. 62N32	
		ILLINOIS	FED. AID PROJECT	

**TS 6280
IDOT CENTRACS AND DUPAGE CENTRACS**

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 STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH SIGNAL HEAD, 5-SECTION

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PARTS DEPARTMENT.

- 1 EACH CONTROLLER

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW, THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

VILLAGE OF LOMBARD
PUBLIC WORKS DEPARTMENT
630-620-5740

- 4 EACH LIGHT DETECTOR
- 4 EACH CONFIRMATION BEACON

RETURN TO PACE:

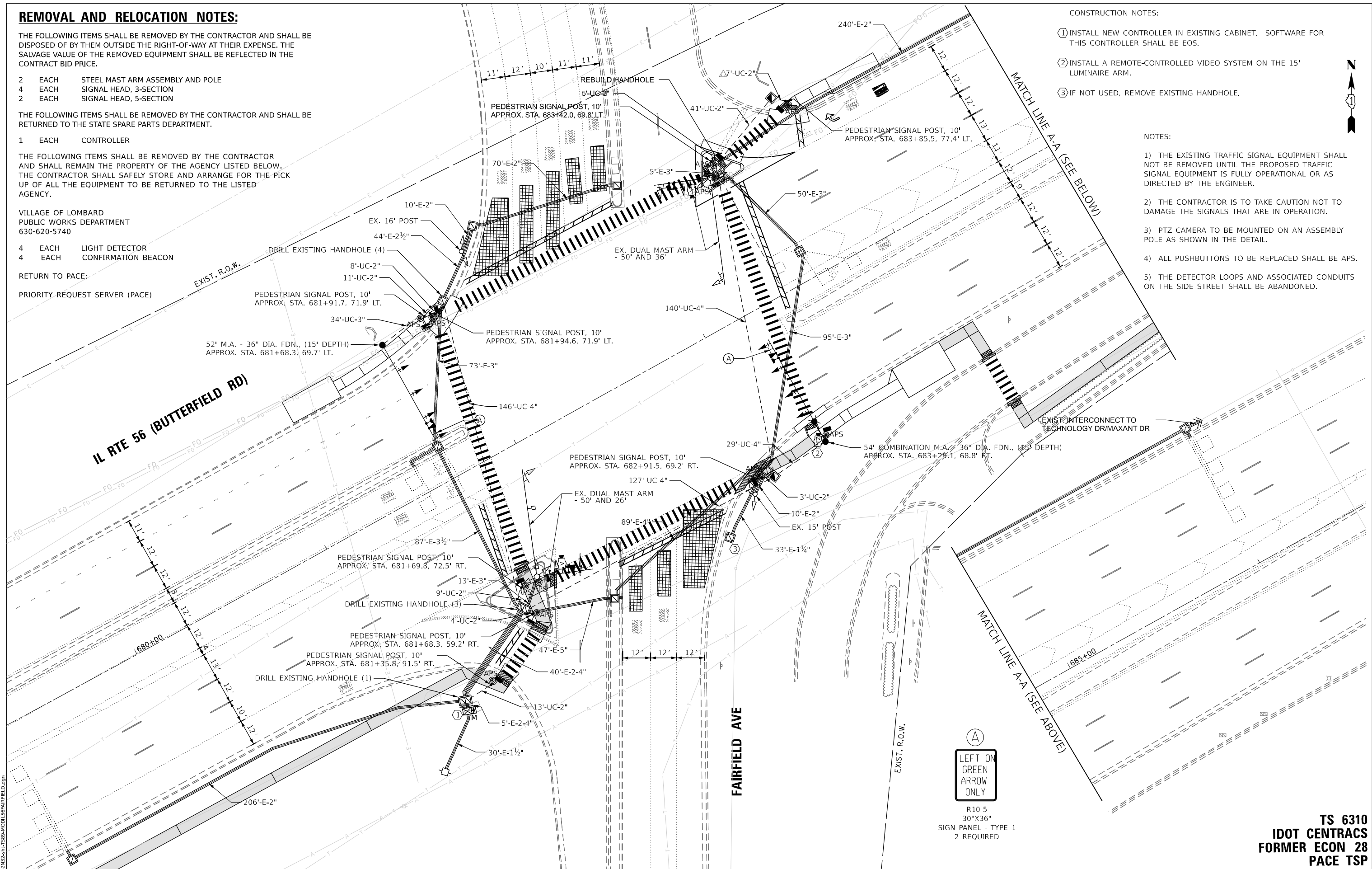
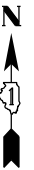
PRIORITY REQUEST SERVER (PACE)

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET. SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
- ② INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE 15' LUMINAIRE ARM.
- ③ IF NOT USED, REMOVE EXISTING HANDHOLE.

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON AN ASSEMBLY POLE AS SHOWN IN THE DETAIL.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 5) THE DETECTOR LOOPS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.



TS SHT NO. 89

MODEL NAME: TS6310-01-TS89-MOD156FAIRFIELD.dgn
FILE NAME: D:\ENR2024\TS6310-01-TS89-MOD156FAIRFIELD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

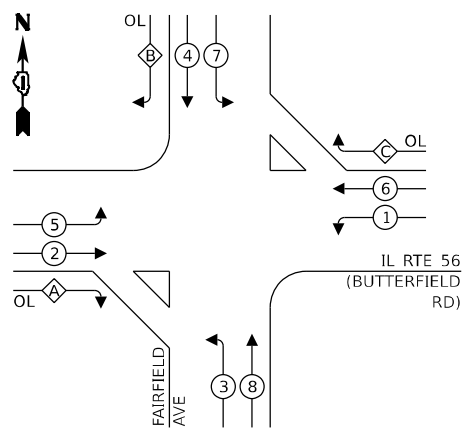
**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND FAIRFIELD AVENUE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	260
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6310
IDOT CENTRACS
FORMER ECON 28
PACE TS**

EXISTING CONTROLLER SEQUENCE



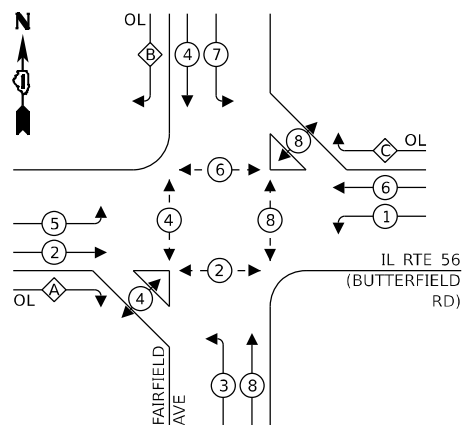
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED CONTROLLER SEQUENCE



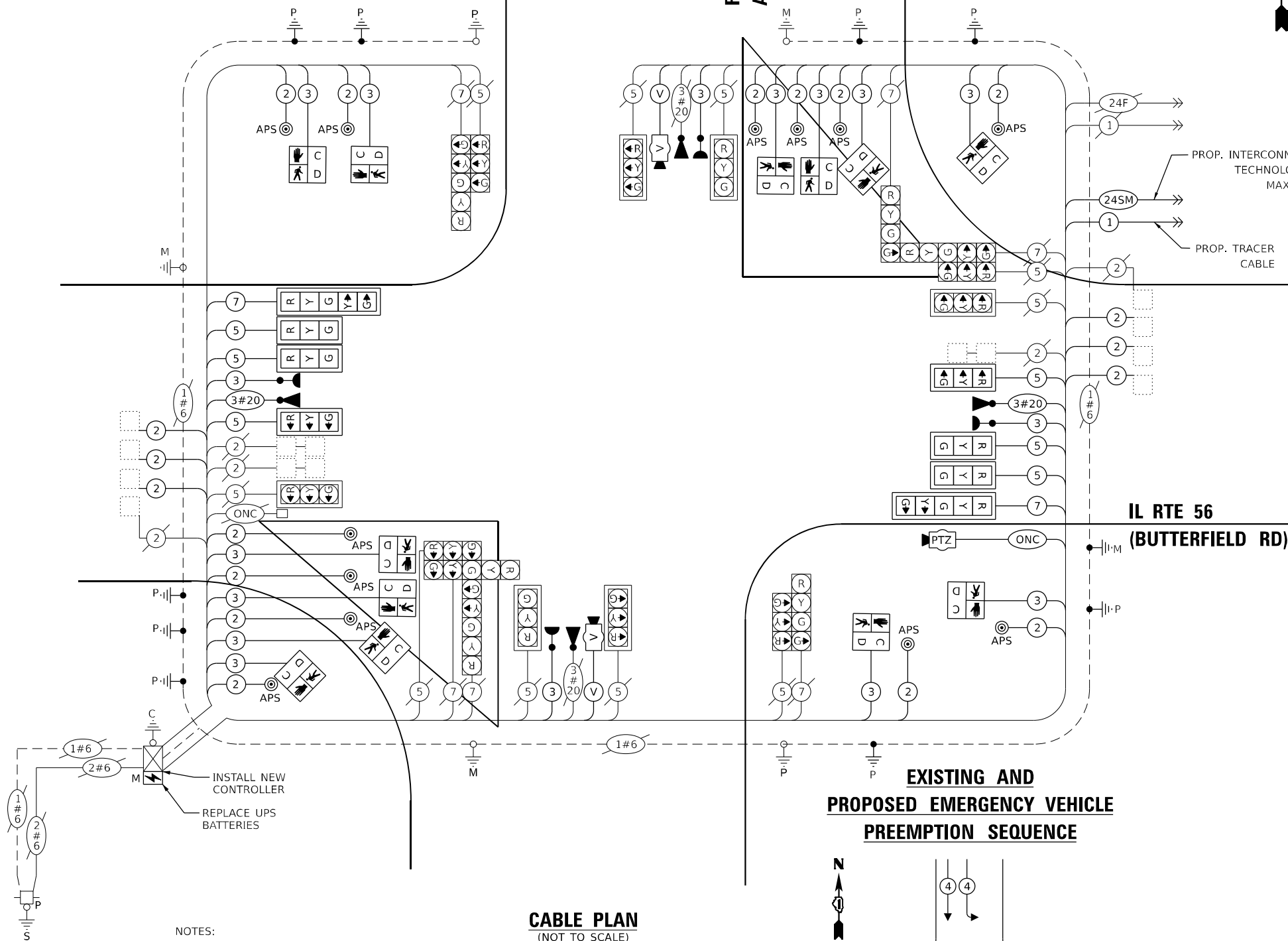
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

NOTE:
ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.



CABLE PLAN
(NOT TO SCALE)

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) PTZ CAMERA TO BE MOUNTED ON AN ASSEMBLY POLE AS SHOWN IN THE DETAIL.
 - 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

NOTE:
SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

ENERGY COSTS TO:
VILLAGE OF LOMBARD
255 E WILSON AVENUE
LOMARD, ILLINOIS 60148

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 54941-66036

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	16	11	176
4-SECTION	2	14	28
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	12	15	180
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	2	20	40
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	2	35	70
	1	15	15
TOTAL UPS SIZING		762	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1367	

TS SHT NO. 90

MODEL: 4400BELNAMES
FILE NAME: D:\SERV2\2024\TS90CABLI\SERVARELID.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

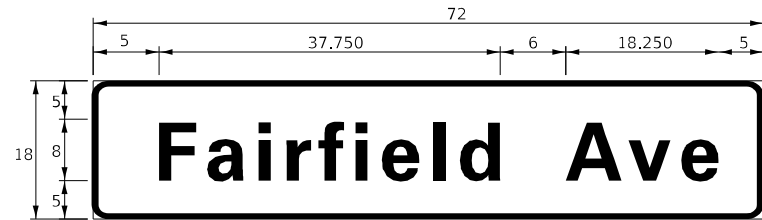
**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND FAIRFIELD AVENUE**

F.A.P. RTE. 365	SECTION 2020-265-SUR, SW & TS	COUNTY DUPAGE	TOTAL SHEETS 462	SHEET NO. 261
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

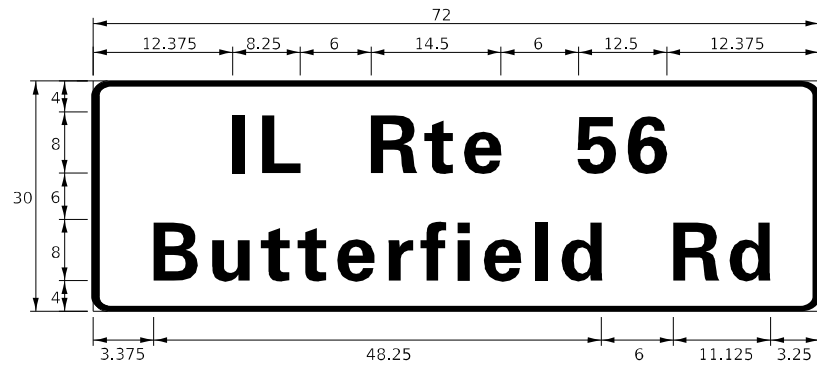
**TS 6310
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY PREEMPTION SEQUENCE

SIGN PANEL – TYPE 1 OR TYPE 2

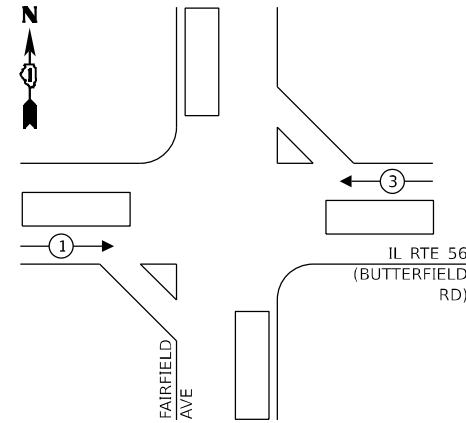


DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	9	2	ZZ	2



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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	48
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	101
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	34
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	442
HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2904
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4165
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1947
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	601
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2559
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1919
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	12
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	6
LIGHT DETECTOR	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	FOOT	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	663
OUTDOOR RATED NETWORK CABLE	EACH	288
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	8
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	FOOT	12
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	EACH	32
LED SIGNAL FACE, LENS COVER	EACH	24
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	16

TS SHT NO. 91

MODEL: 1400BELMAME
FILE NAME: D:\ENR22-ar\TS91-STML 56FAIRFIELD.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND FAIRFIELD AVENUE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	262
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6310
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

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 STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL POST
- 10 EACH SIGNAL HEAD, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH CABINET (TS1) (COMPLETE)
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

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

- 1 EACH SERVICE METER
- 1 EACH LAYER II SWITCH (PACE)
- 1 EACH ACCESS POINT EQUIPMENT (PACE)
- 1 EACH WIRELESS ACCESS POINT (PACE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

VILLAGE OF LOMBARD
PUBLIC WORKS DEPARTMENT
630-620-5740

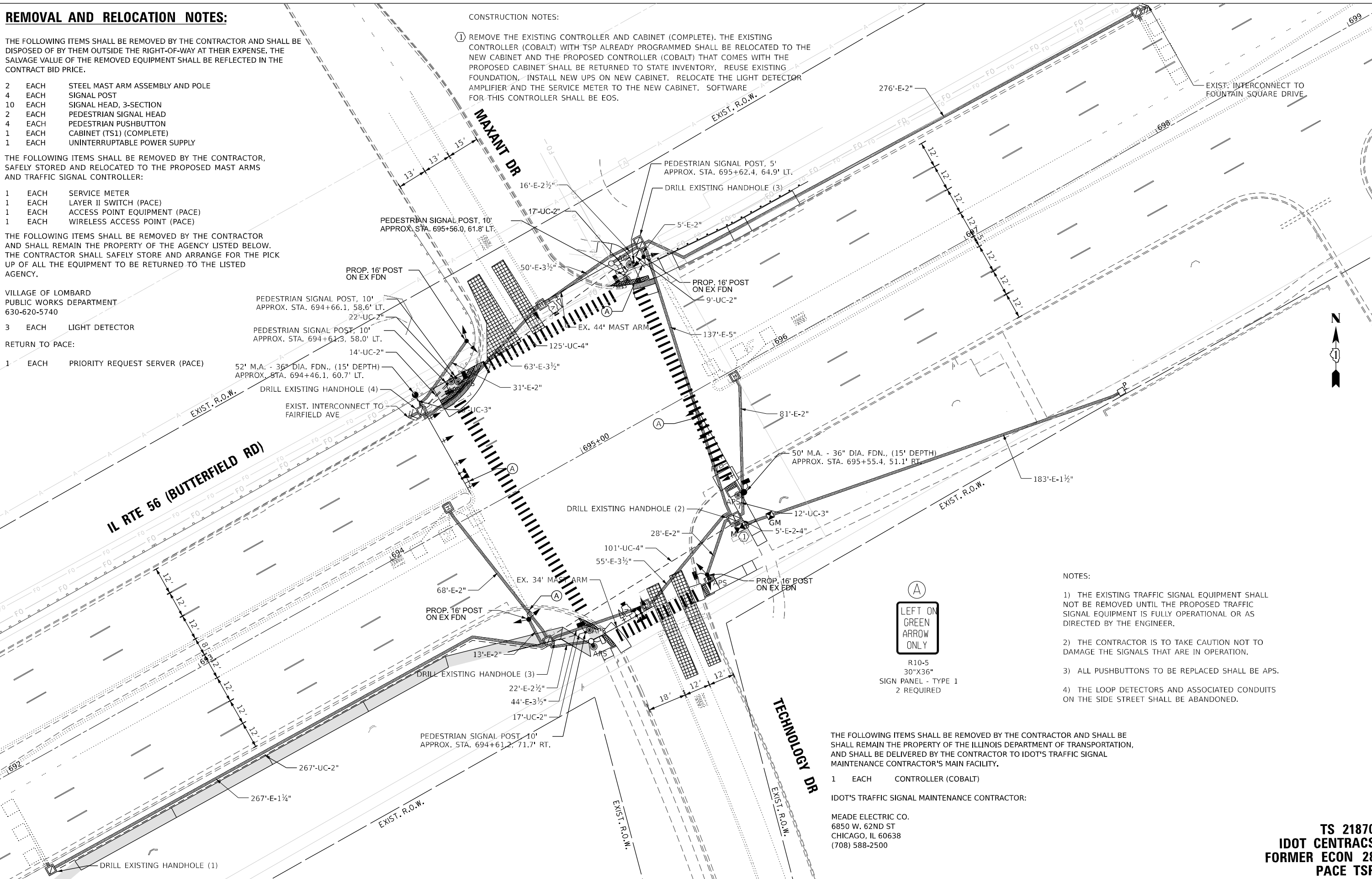
- 3 EACH LIGHT DETECTOR

RETURN TO PACE:

- 1 EACH PRIORITY REQUEST SERVER (PACE)

CONSTRUCTION NOTES:

- ① REMOVE THE EXISTING CONTROLLER AND CABINET (COMPLETE). THE EXISTING CONTROLLER (COBALT) WITH TSP ALREADY PROGRAMMED SHALL BE RELOCATED TO THE NEW CABINET AND THE PROPOSED CONTROLLER (COBALT) THAT COMES WITH THE PROPOSED CABINET SHALL BE RETURNED TO STATE INVENTORY. REUSE EXISTING FOUNDATION. INSTALL NEW UPS ON NEW CABINET. RELOCATE THE LIGHT DETECTOR AMPLIFIER AND THE SERVICE METER TO THE NEW CABINET. SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.



- NOTES:**
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
 - 4) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH CONTROLLER (COBALT)

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR:

MEADE ELECTRIC CO.
6850 W. 62ND ST
CHICAGO, IL 60638
(708) 588-2500

TS SHT NO. 92
MODEL NAME: D:\ENR22-21-TS92-MOD156MAXANT.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND MAXANT DRIVE/TECHNOLOGY DRIVE**

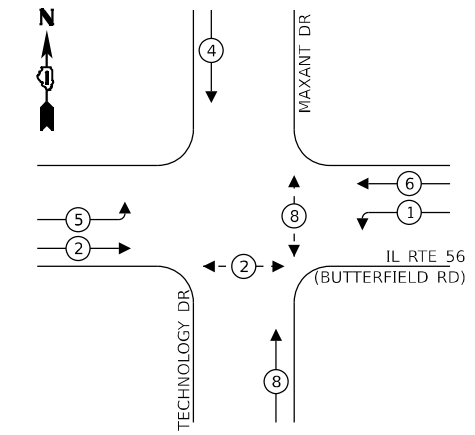
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	263
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 21870
IDOT CENTRACS
FORMER ECON 28
PACE TS**

EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY PREEMPTION SEQUENCE

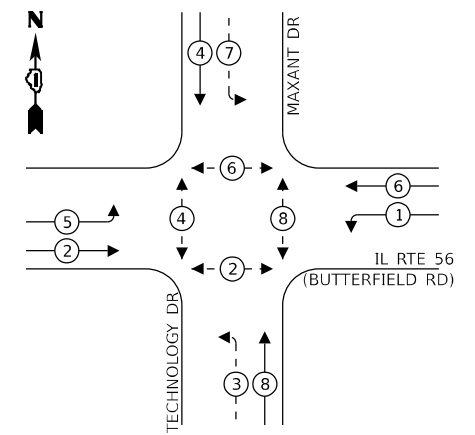
EXISTING CONTROLLER SEQUENCE



LEGEND:

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

PROPOSED CONTROLLER SEQUENCE



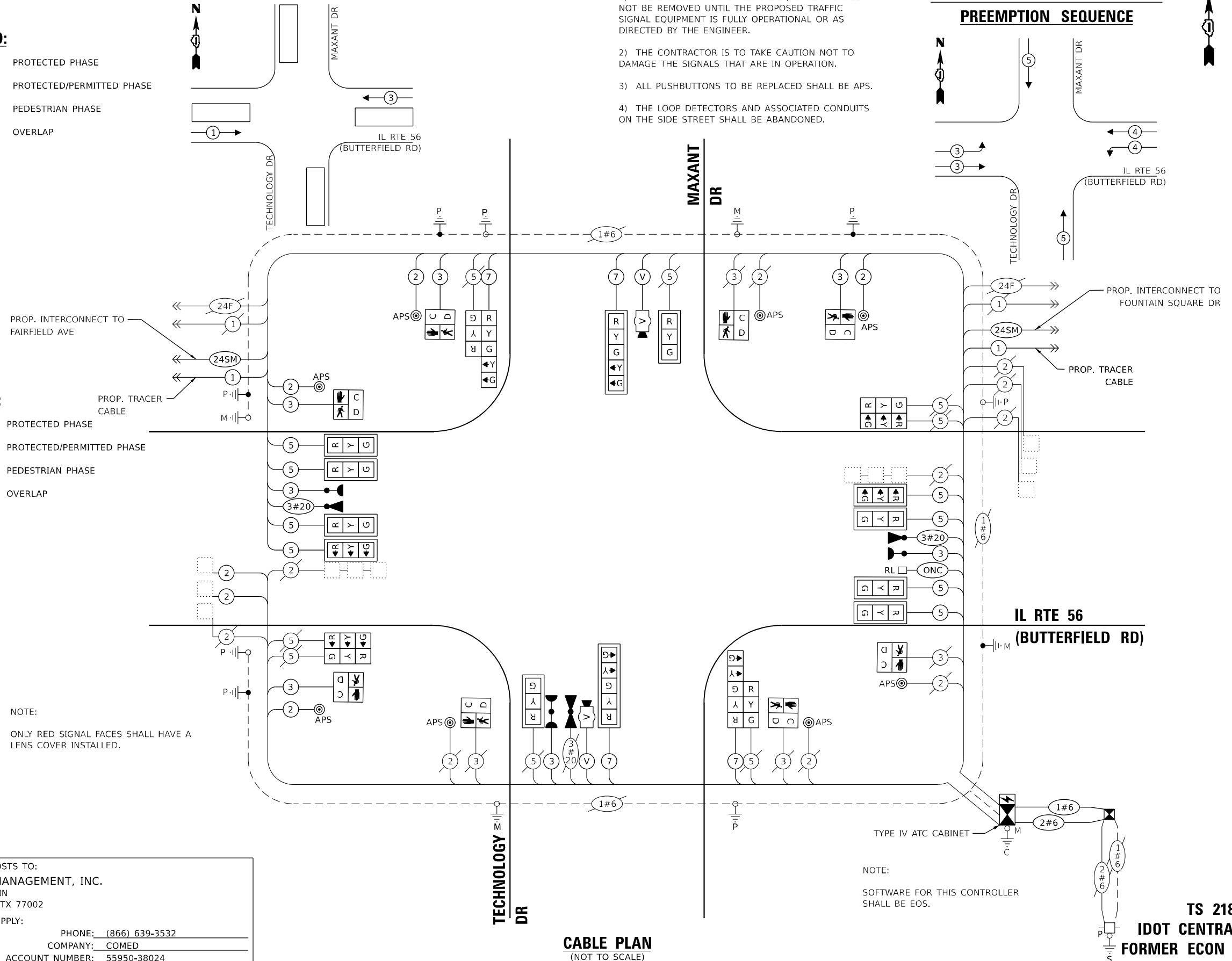
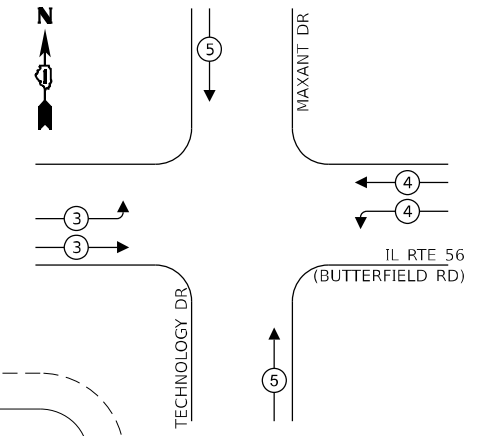
LEGEND:

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

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE:
ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

NOTE:
SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	16	11	176
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	2	35	70
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING	633		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING	1238		

ENERGY COSTS TO:
WASTE MANAGEMENT, INC.
1001 FANNIN
HOUSTON, TX 77002
ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 55950-38024

USER NAME	DESIGNED	REVISION
shassan	JR	-
	SR	-
	JR	-
		-

TS SHT NO. 93

MODEL: 1400BELMONT
FILE NAME: D:\ENR2024\TS93\CABL\EMAXANT.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

DESIGNED	REVISION
JR	-
SR	-
JR	-
	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

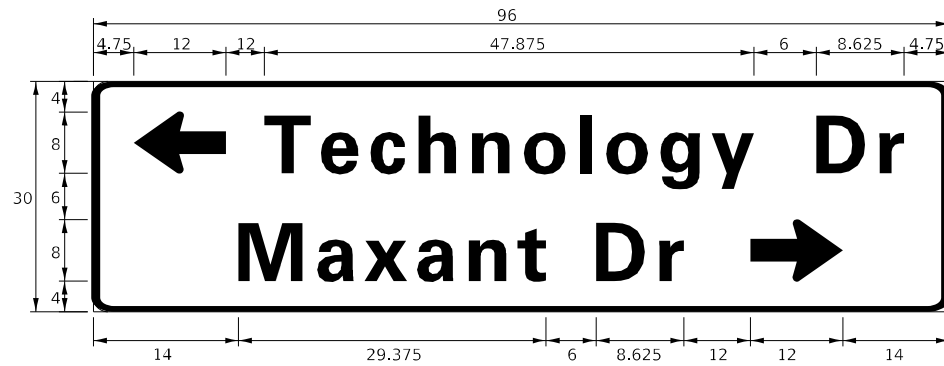
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND MAXANT DRIVE/TECHNOLOGY DRIVE
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	264

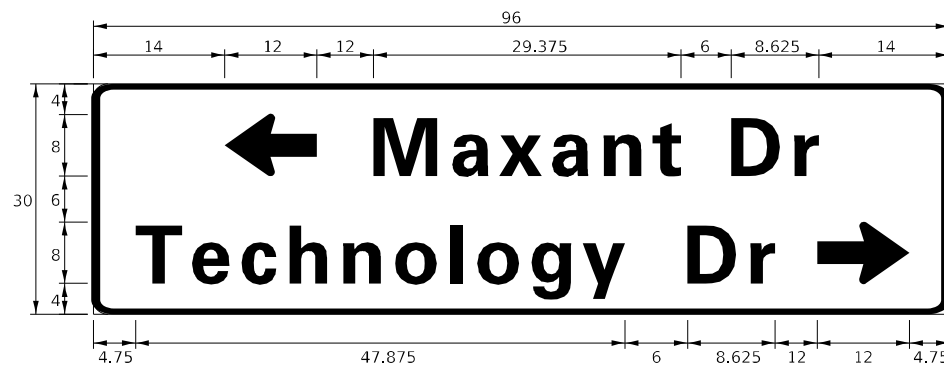
TS 21870
IDOT CENTRACS
FORMER ECON 28
PACE TSP

CONTRACT NO. 62N32
ILLINOIS FED. AID PROJECT

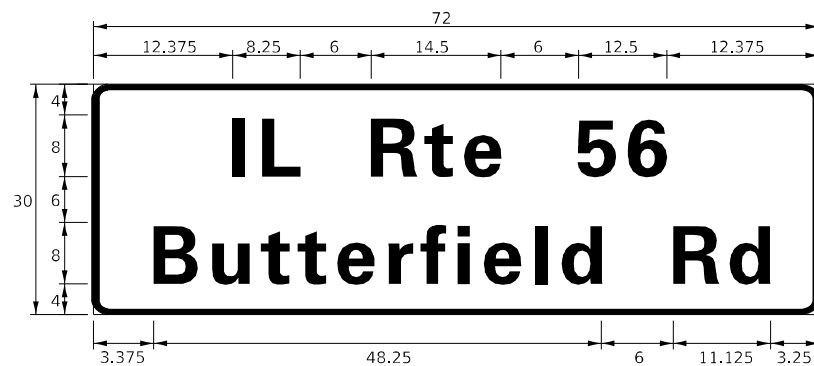
SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
c	20	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
c	20	2	ZZ	1



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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	30
SIGN PANEL - TYPE 2	SQ FT	70
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	346
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	226
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ADVANCED TRANSPORTATION CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1192
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1680
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1768
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	865
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	780
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	50
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1/C	FOOT	1043
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	5
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	9
LIGHT DETECTOR	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	465
OUTDOOR RATED NETWORK CABLE	FOOT	72
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	4
PEDESTRIAN SIGNAL POST, 5'	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	20
LED SIGNAL FACE, LENS COVER	EACH	20
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 94

MODEL: 440BELMAME
FILE NAME: D:\ENR22-ar-TS94-STML56MAXANT.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES**
IL ROUTE 56 (BUTTERFIELD RD) AND MAXANT DRIVE/TECHNOLOGY DRIVE
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	265
				CONTRACT NO. 62N32
				ILLINOIS FED. AID PROJECT

**TS 21870
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

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 STEEL MAST ARM ASSEMBLY AND POLE
- 6 EACH SIGNAL HEAD, 3-SECTION
- 1 EACH SIGNAL HEAD, 5-SECTION
- 2 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH PEDESTRIAN SIGNAL HEAD

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

- 1 EACH WIRELESS ACCESS POINT (PACE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

VILLAGE OF LOMBARD
PUBLIC WORKS DEPARTMENT
630-620-5740

- 3 EACH LIGHT DETECTOR
- 3 EACH CONFIRMATION BEACON

RETURN TO PACE:

- 1 EACH PRIORITY REQUEST SERVER (PACE)

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
- ② REMOVE EXISTING HANDHOLE.

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE DETECTOR LOOPS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

TS SHT NO. 95

MODEL NAME: TS6293-ARCSUR-SW-TS95-MODIF-FOUNTAIN.dgn
FILE NAME: D:\ENR22-ARCSUR-SW-TS95-MODIF-FOUNTAIN.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

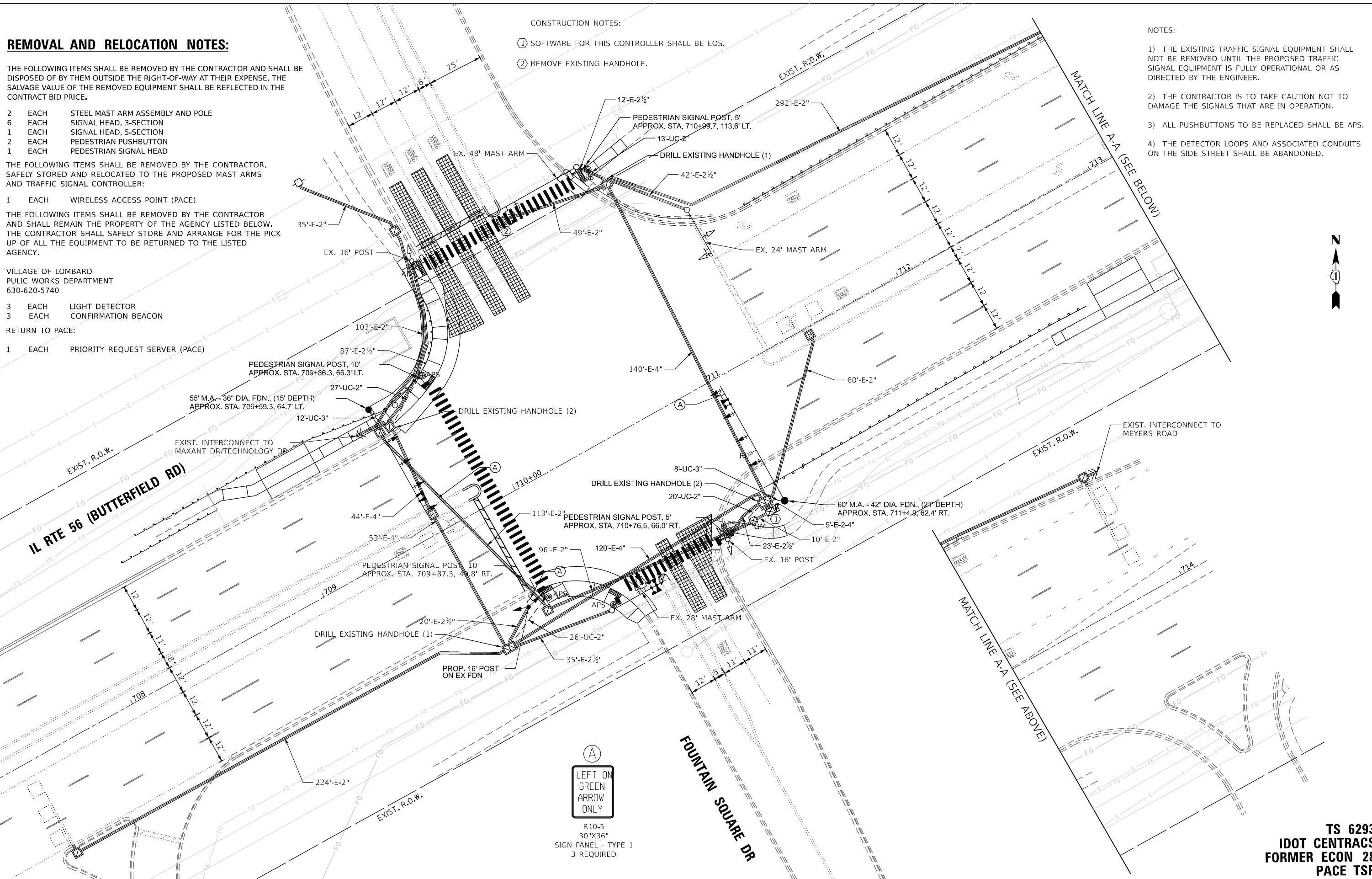
Ⓐ
LEFT ON GREEN
ARROW
ONLY
R10-5
30"X36"
SIGN PANEL - TYPE 1
3 REQUIRED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

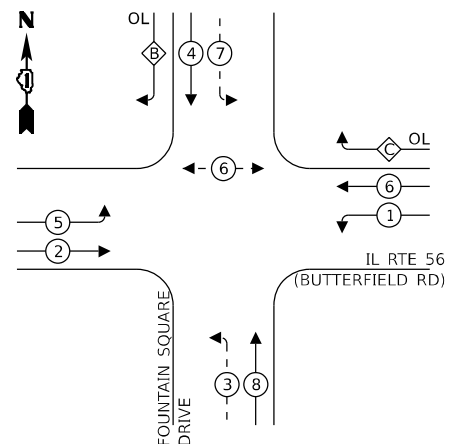
**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND FOUNTAIN SQUARE DRIVE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	266
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				



EXISTING CONTROLLER SEQUENCE



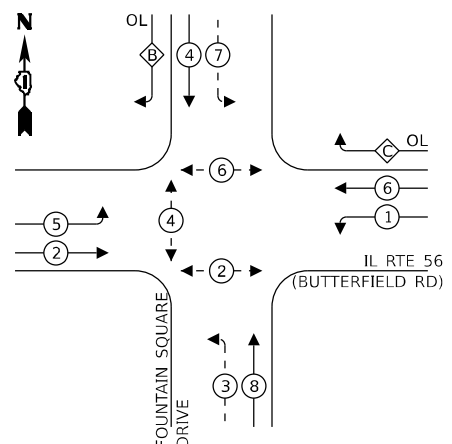
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED CONTROLLER SEQUENCE



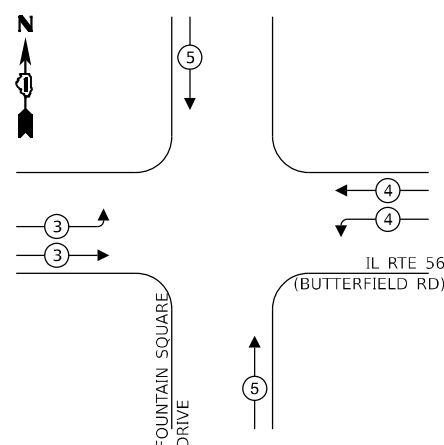
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



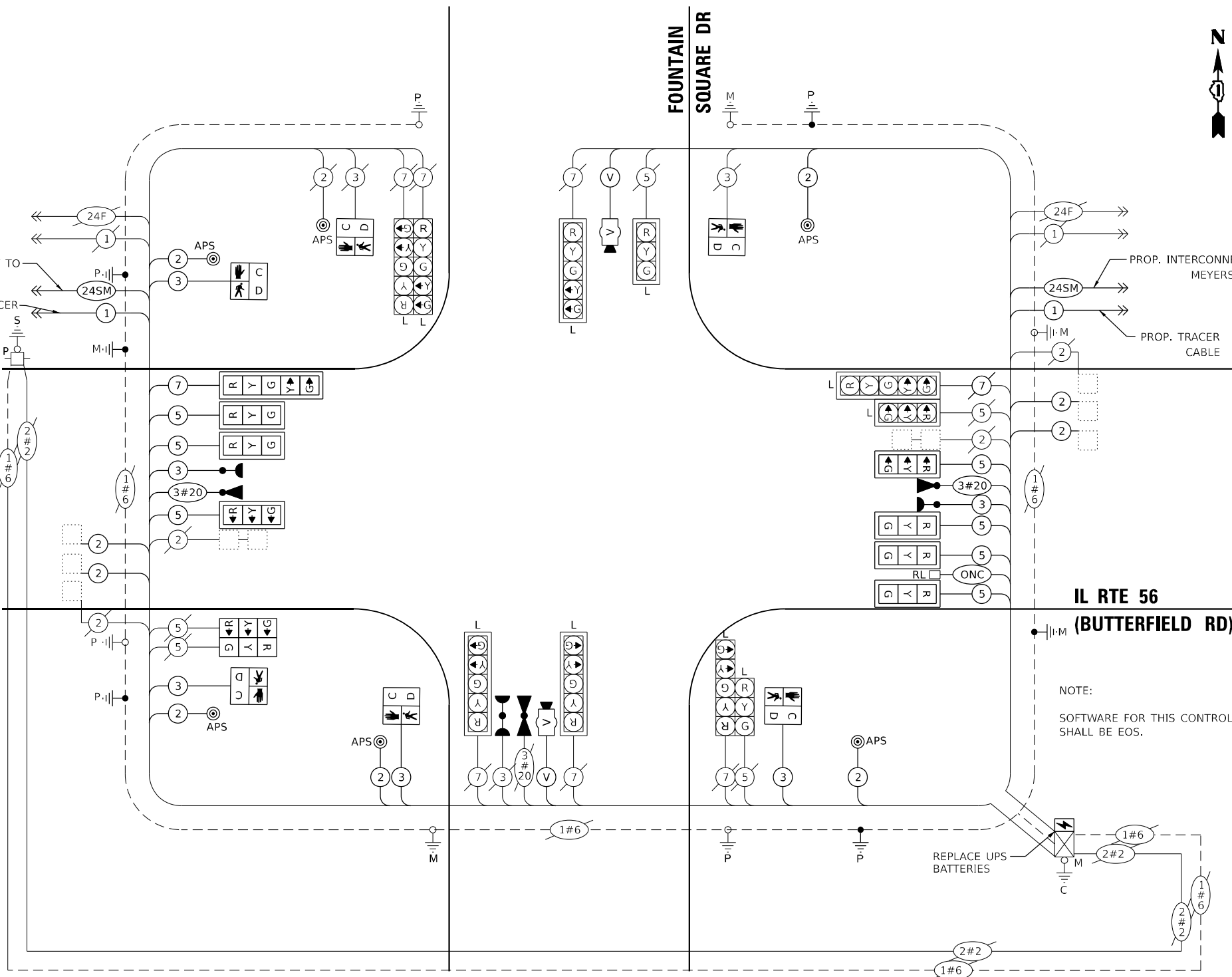
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	6	15	90
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		576	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1181	

ENERGY COSTS TO:
 VILLAGE OF LOMBARD
 255 E WILSON AVENUE
 LOMBARD, ILLINOIS 60148

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 55950-38024

PROP. INTERCONNECT TO TECHNOLOGY DR/
 MAXANT DR
 PROP. TRACER CABLE



CABLE PLAN (NOT TO SCALE)

NOTE:
 ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

NOTE:
 ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE DETECTOR LOOPS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

TS SHT NO. 96

MODEL: 1408BELNAMES
 FILE NAME: D:\ENR22-08-TS96-CABL-SIGFOUNTAIN.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

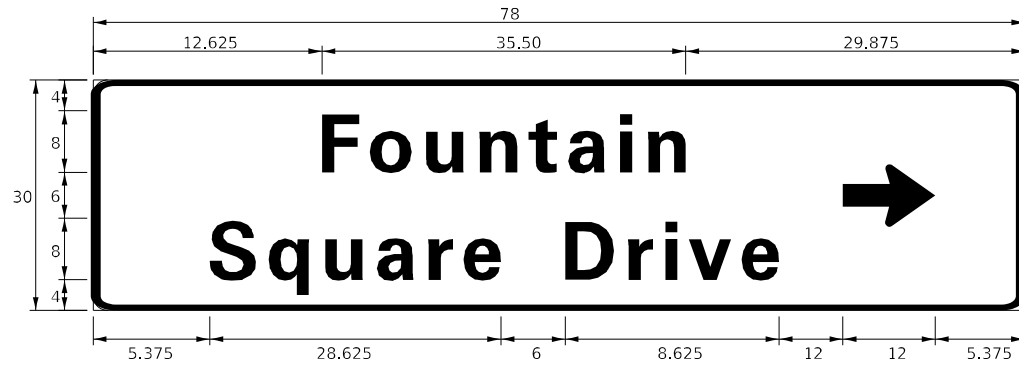
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
 EMERGENCY VEHICLE PREEMPTION SEQUENCE
 IL ROUTE 56 (BUTTERFIELD RD) AND FOUNTAIN SQUARE DRIVE
 SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

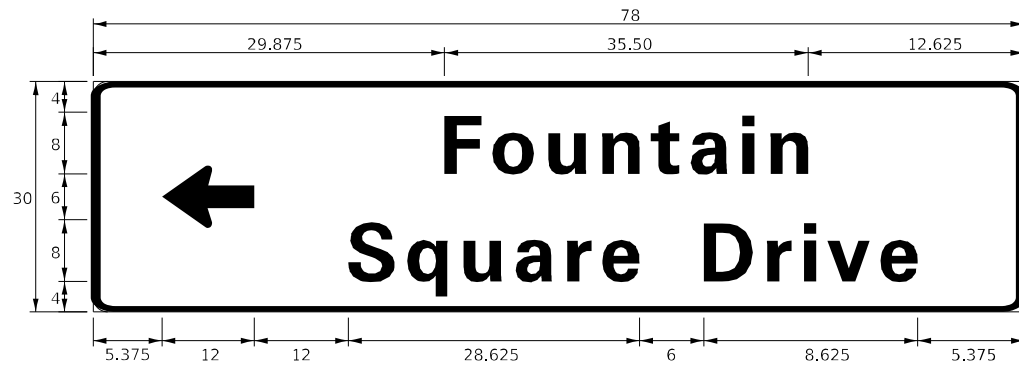
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	267
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6293
 IDOT CENTRACS
 FORMER ECON 28
 PACE TSP

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
c	16.25	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
c	16.25	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	22.5
SIGN PANEL - TYPE 2	SQ FT	32.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	86
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	20
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	971
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1247
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1432
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	317
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1703
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	901
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	4
LIGHT DETECTOR	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	477
OUTDOOR RATED NETWORK CABLE	FOOT	94
LAYER II (DATA LINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP SPECIAL	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	16
LED SIGNAL FACE, LENS COVER	EACH	20
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	10

TS SHT NO. 97

MODEL: 4400BELMAME
FILE NAME: D:\62N32-ar-1\597-5TMS\56FOUNTAIN.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND FOUNTAIN SQUARE DRIVE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	268
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6293
IDOT CENTRACS
FORMER ECON 28
PACE TSP

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
- 8 EACH SIGNAL HEAD, 3-SECTION
- 12 EACH SIGNAL HEAD, 5-SECTION
- 1 EACH CONTROLLER

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

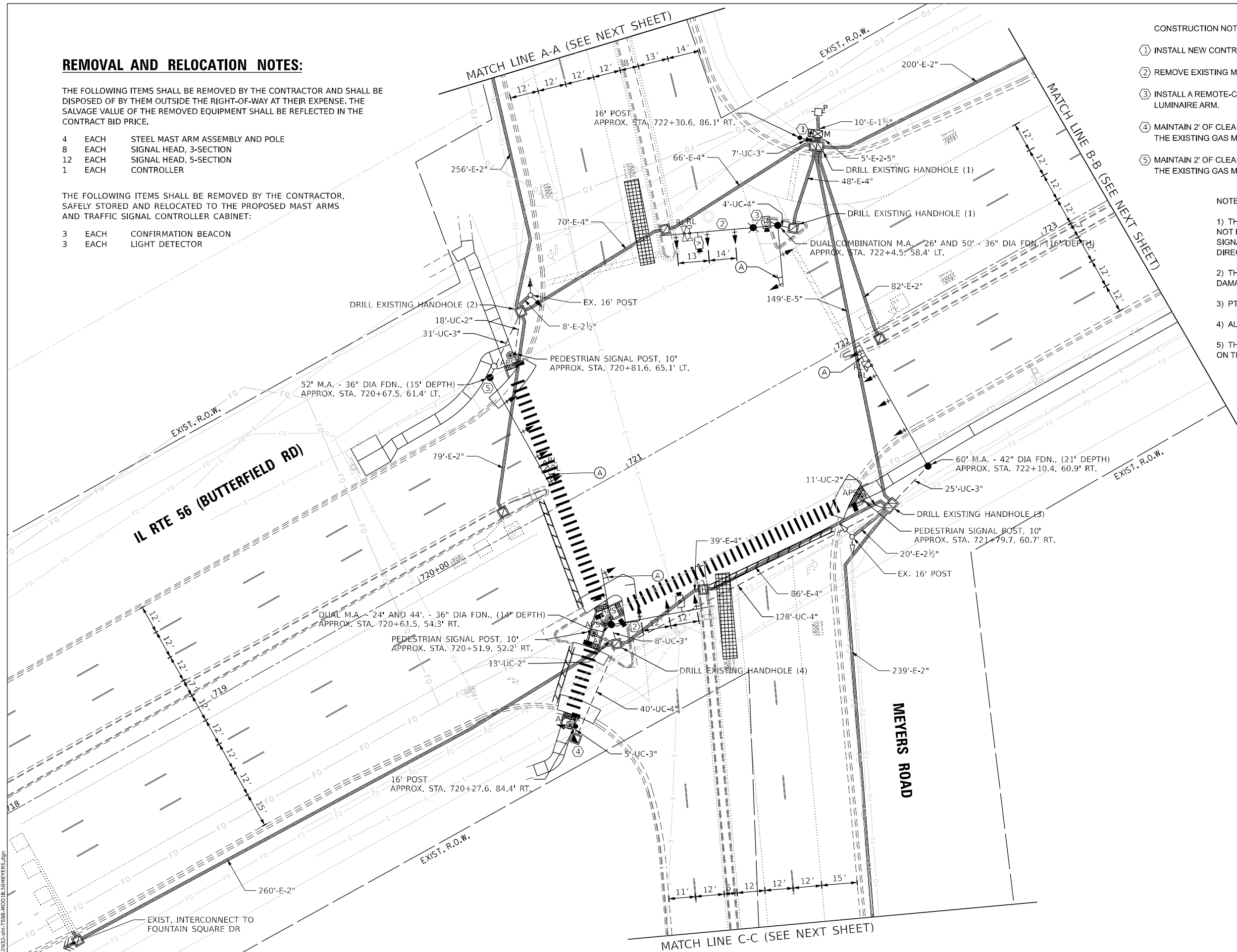
- 3 EACH CONFIRMATION BEACON
- 3 EACH LIGHT DETECTOR

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② REMOVE EXISTING MAST ARM AND INSTALL NEW MAST ARM.
- ③ INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE PROPOSED 15' LUMINAIRE ARM.
- ④ MAINTAIN 2' OF CLEARANCE BETWEEN THE PROPOSED HANDHOLE AND THE EXISTING GAS MAIN.
- ⑤ MAINTAIN 2' OF CLEARANCE BETWEEN THE PROPOSED MAST ARM AND THE EXISTING GAS MAIN.

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) PTZ CAMERA TO BE MOUNTED ON THE MAST ARM.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 5) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.



TS SHT NO. 98

MODEL NAME: D:\ENR22-ARC-TS08-MODTL5MEYERS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 1 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND MEYERS ROAD

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	269
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6295
IDOT CENTRACS
FORMER ECON 28
PACE TSP

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS -	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

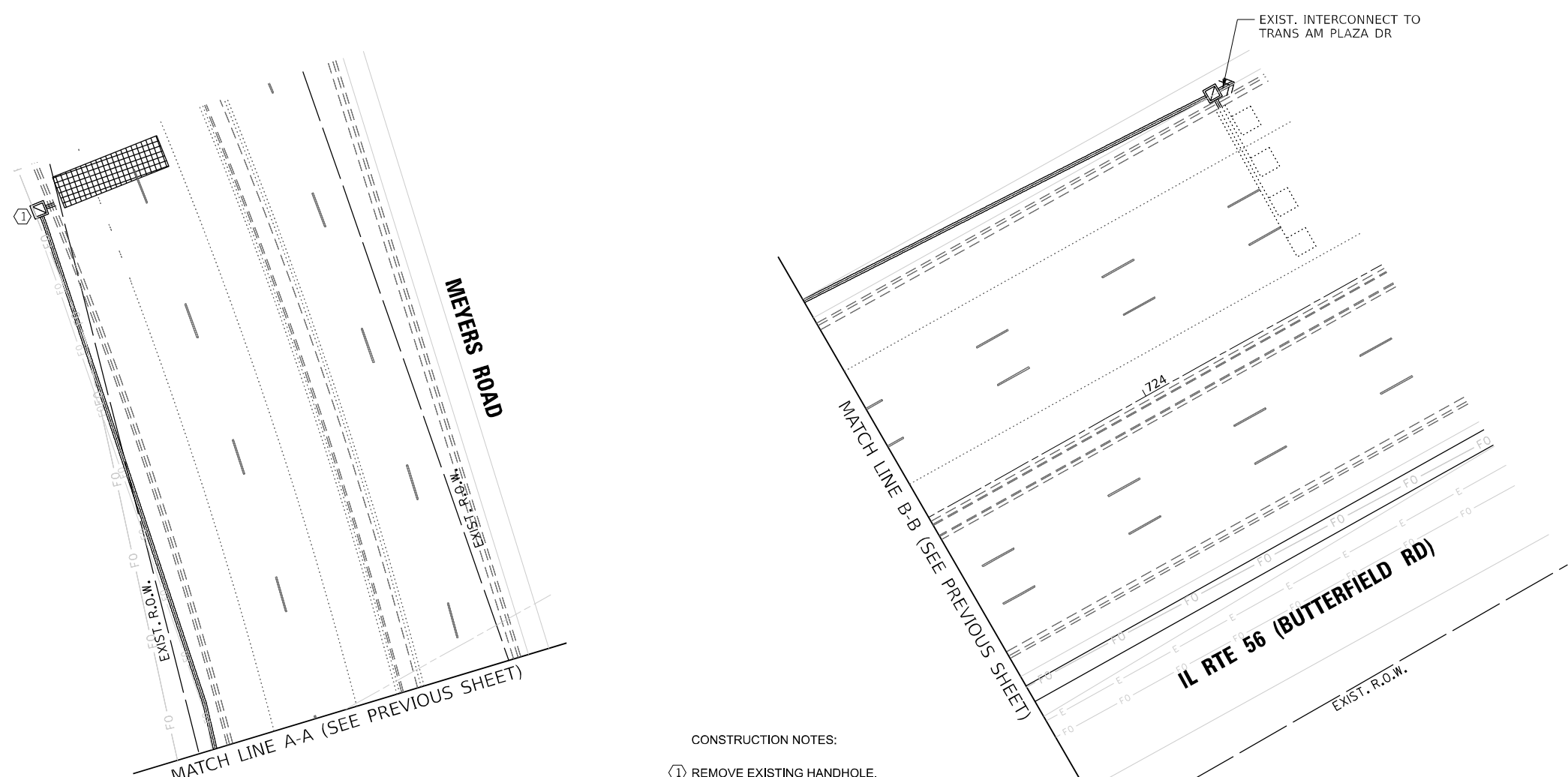
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
IL ROUTE 56 (BUTTERFIELD RD) AND MEYERS ROAD**

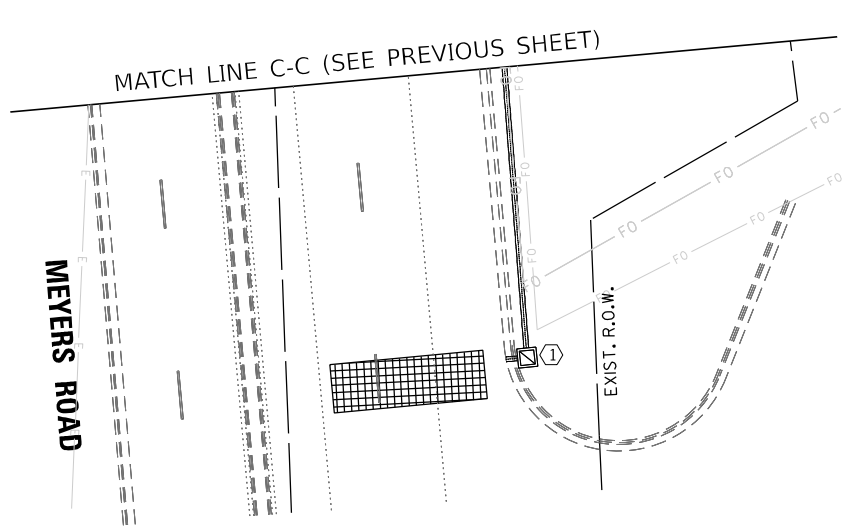
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	270
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

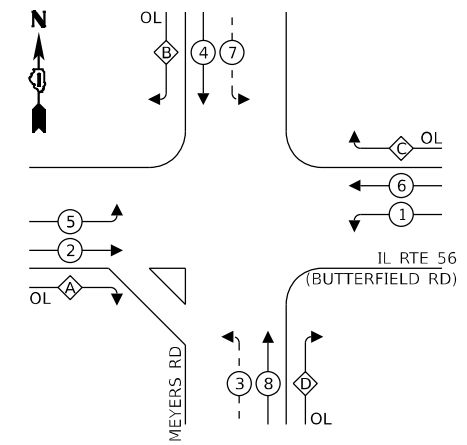
**TS 6295
IDOT CENTRACS
FORMER ECON 28
PACE TSP**



CONSTRUCTION NOTES:
① REMOVE EXISTING HANDHOLE.



EXISTING CONTROLLER SEQUENCE



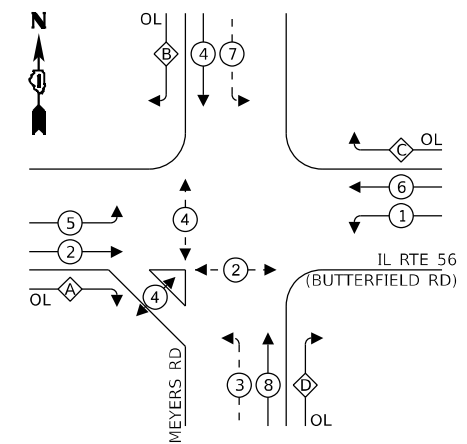
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

PROPOSED CONTROLLER SEQUENCE



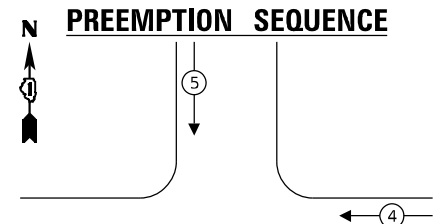
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

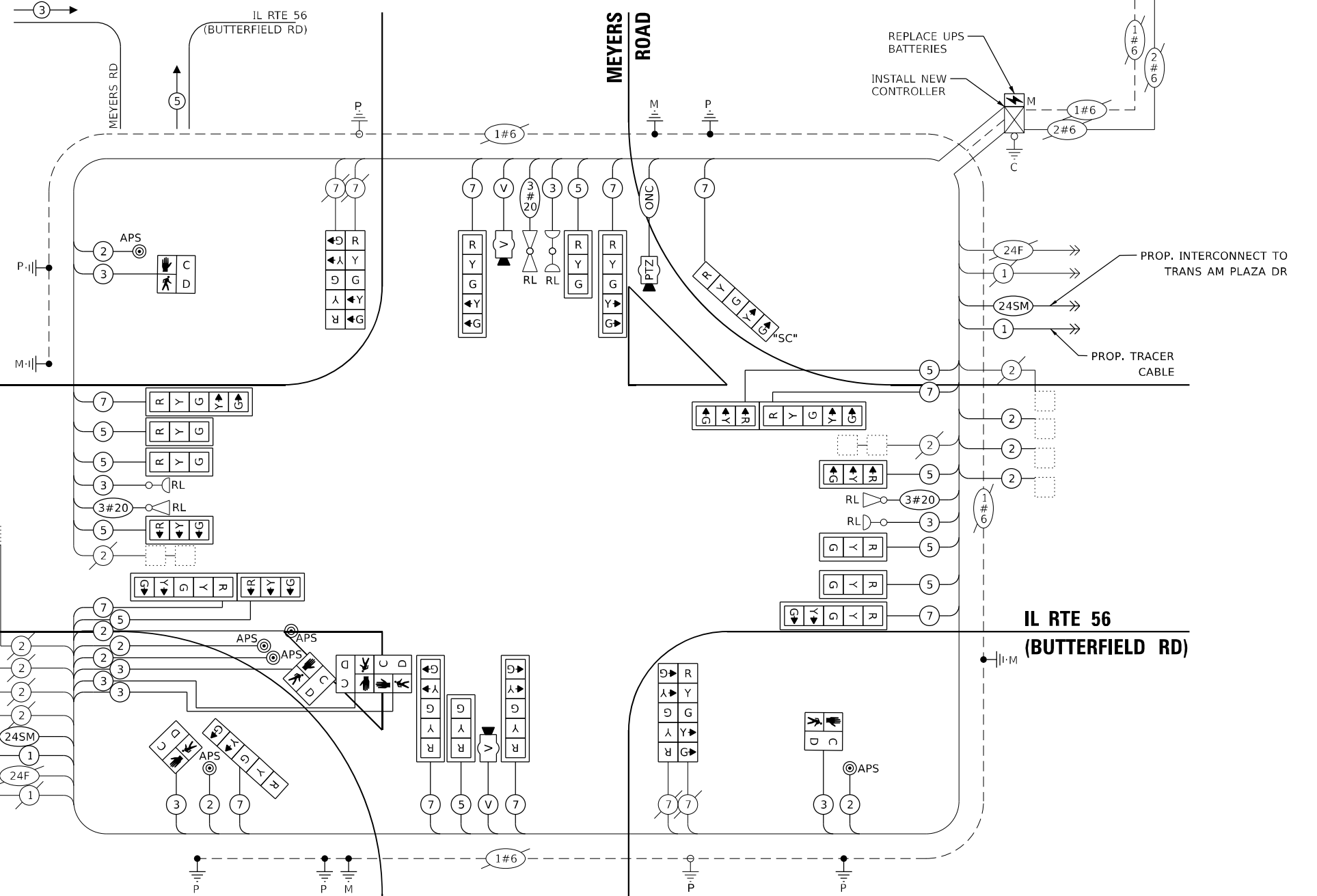
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2 +	3
B	= 4 +	5
C	= 6 +	7
D	= 8 +	1

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.



NOTE:

ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

CABLE PLAN (NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	14	13	182
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		632	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1237	

ENERGY COSTS TO:
 VILLAGE OF OAK BROOK
 1200 OAK BROOK ROAD
 OAK BROOK IL 60523
 ENERGY SUPPLY:
 PHONE: (630) 424-5704
 COMPANY: COMED
 ACCOUNT NUMBER: 07480-93003

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE IL ROUTE 56 (BUTTERFIELD RD) AND MEYERS ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	271
CONTRACT NO. 62N32				

TS SHT NO. 100

MODEL: 1400BELMANS
 FILE NAME: D:\ENR2020-265-SUR-TS100-CABLE\MYERS.DWG

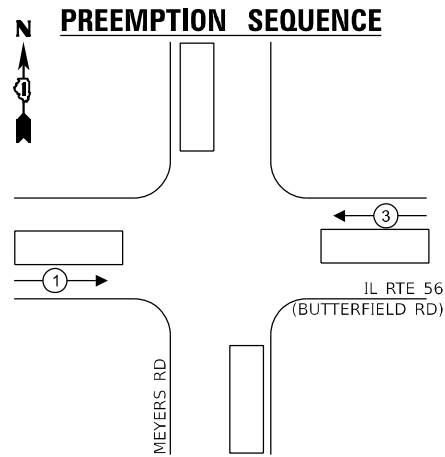
AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

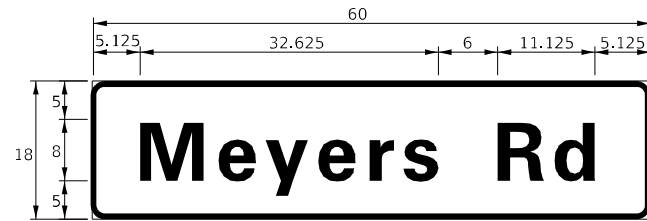
TS 6295 IDOT CENTRACS FORMER ECON 28 PACE TSP



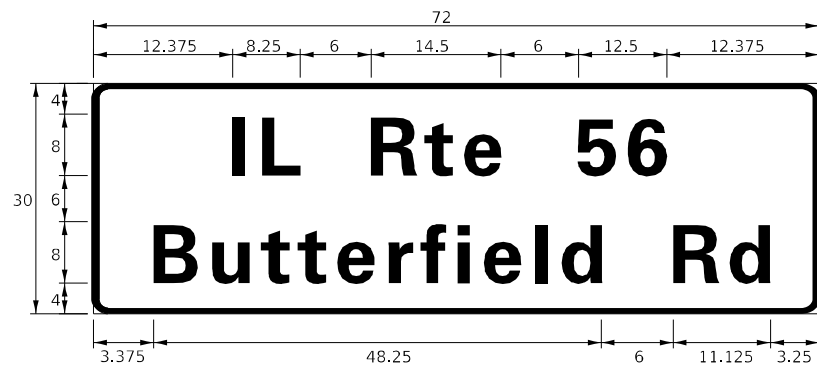
EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY



SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	7.5	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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	45
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	42
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	76
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	172
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1778
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2512
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2585
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2399
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	684
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1708
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 60 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 24 FT. AND 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 26 FT. AND 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
DRILL EXISTING HANDHOLE	EACH	11
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	18
INDUCTIVE LOOP DETECTOR	EACH	3
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	680
OUTDOOR RATED NETWORK CABLE	FOOT	128
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	24
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1

TS SHT NO. 101

MODEL: 440BELMAME
FILE NAME: D:\ENR22-ar-TS101-STHIL56MEYERS.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND MEYERS ROAD

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	272
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6295
IDOT CENTRACS
FORMER ECON 28
PACE TSP

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH MASTER CONTROLLER

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

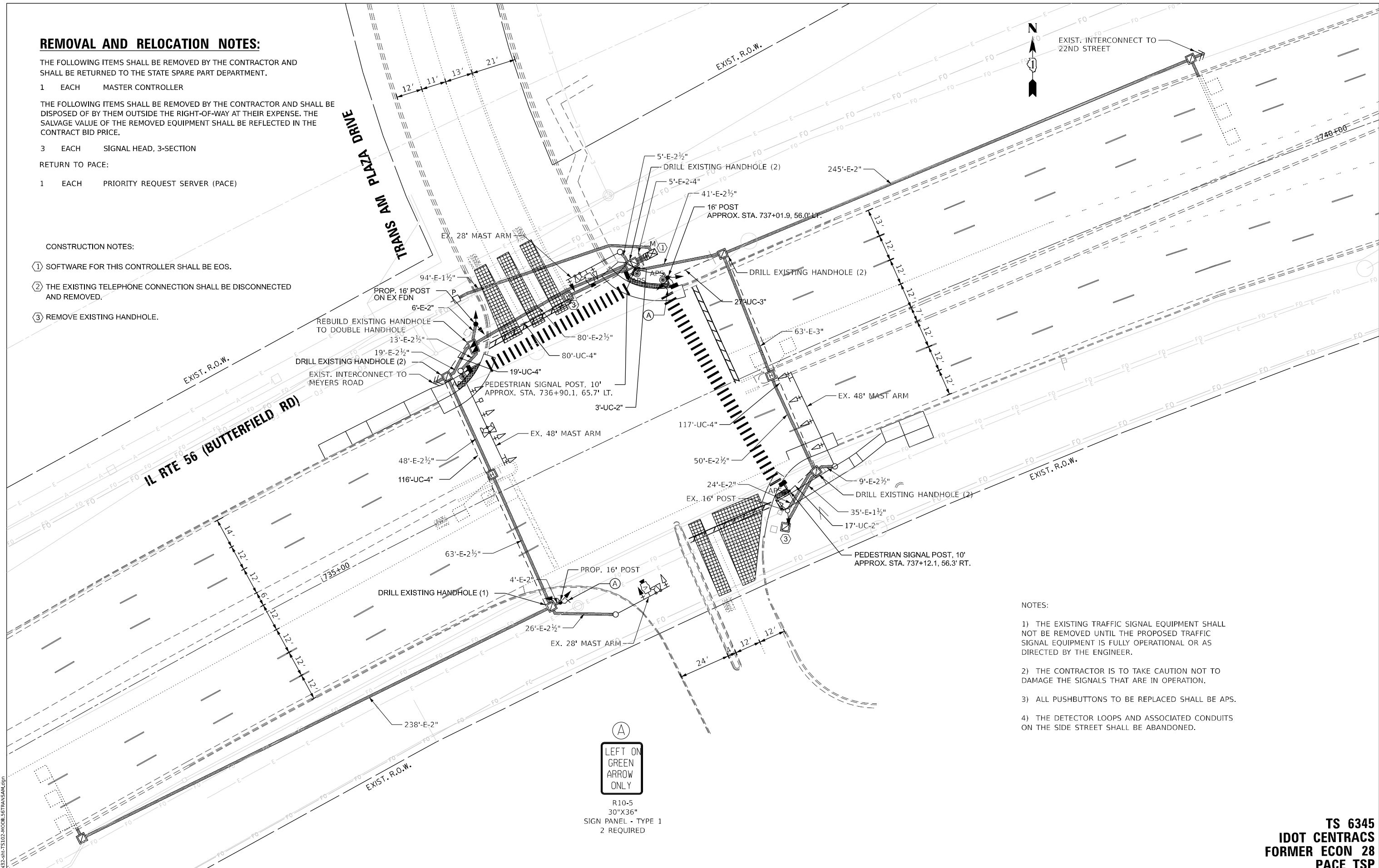
- 3 EACH SIGNAL HEAD, 3-SECTION

RETURN TO PACE:

- 1 EACH PRIORITY REQUEST SERVER (PACE)

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
- ② THE EXISTING TELEPHONE CONNECTION SHALL BE DISCONNECTED AND REMOVED.
- ③ REMOVE EXISTING HANDHOLE.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE DETECTOR LOOPS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.



TS SHT NO. 102

MODEL: 4400.DWGNAME: TS102-001.DWG FILE NAME: D:\ENR22-22-23\TS102-001\LETTRANSAM.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD) AND TRANS AM PLAZA DRIVE

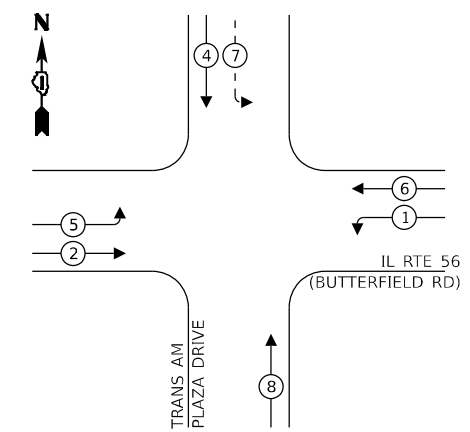
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	273
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

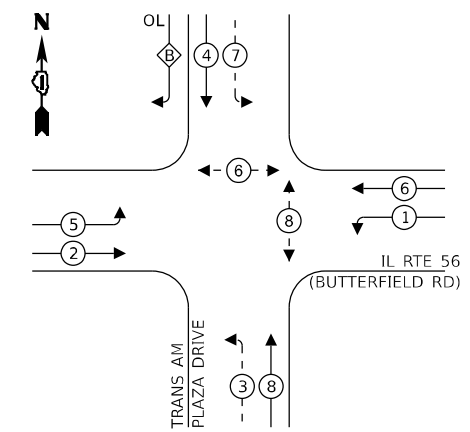
TS 6345
IDOT CENTRACS
FORMER ECON 28
PACE TSP

EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY PREEMPTION SEQUENCE

EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← (circle with star) → PROTECTED PHASE
- ← (circle with star and dash) → PROTECTED/PERMITTED PHASE
- ← (circle with star and arrow) → PEDESTRIAN PHASE
- ← (circle with OL) → OVERLAP

LEGEND:

- ← (circle with star) → PROTECTED PHASE
- ← (circle with star and dash) → PROTECTED/PERMITTED PHASE
- ← (circle with star and arrow) → PEDESTRIAN PHASE
- ← (circle with OL) → OVERLAP

RIGHT TURN OVERLAP

PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE DETECTOR LOOPS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

ENERGY COSTS TO:

CITY OF OAKBROOK TERRACE
17W275 BUTTERFIELD ROAD
OAKBROOK TERRACE, IL 60181

ENERGY SUPPLY:

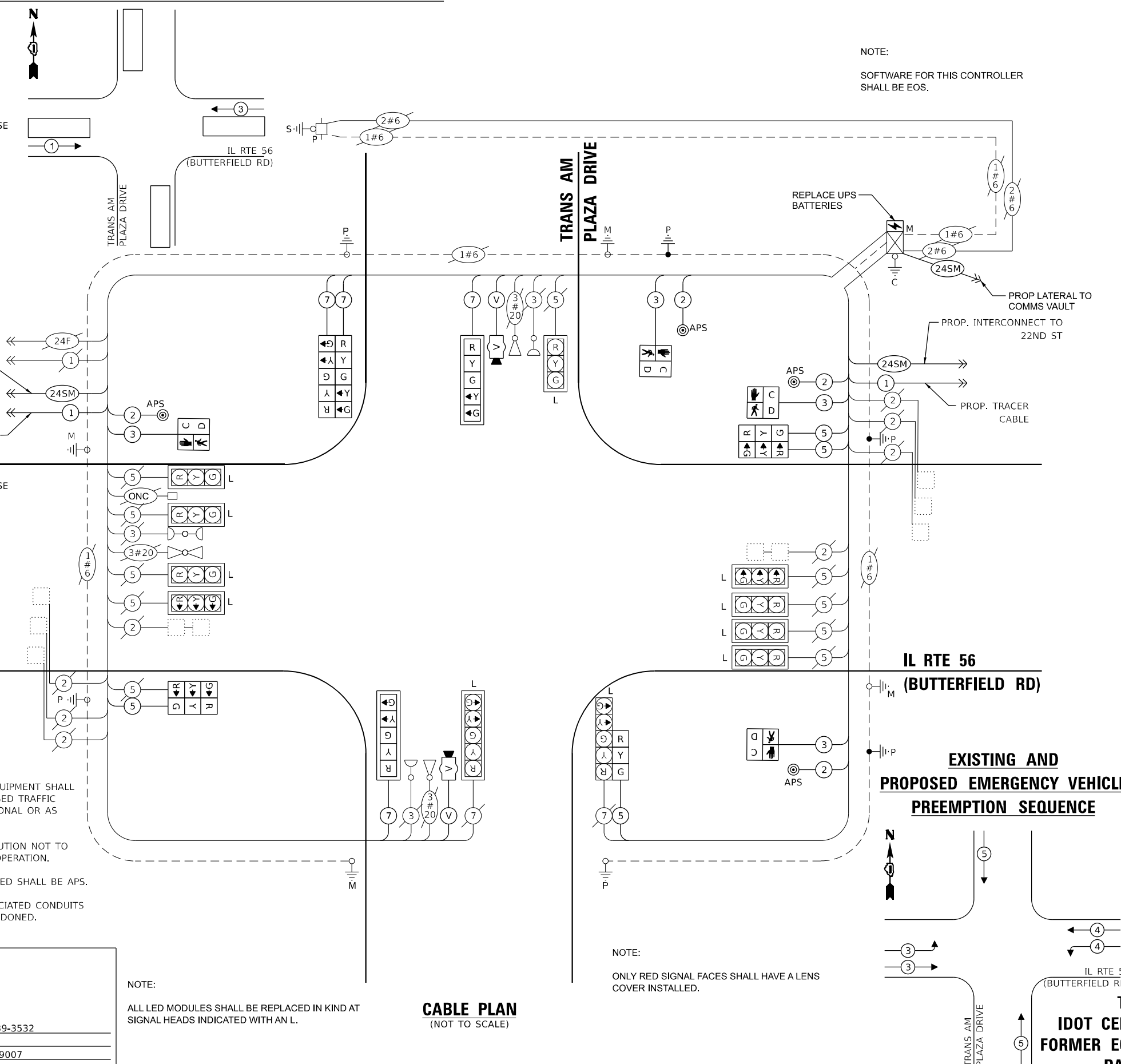
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 38580-39007

DESIGNED - JR	REVISED -
DRAWN - SR	REVISED -
CHECKED - JR	REVISED -
DATE - 07/14/2023	REVISED -

NOTE:

ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

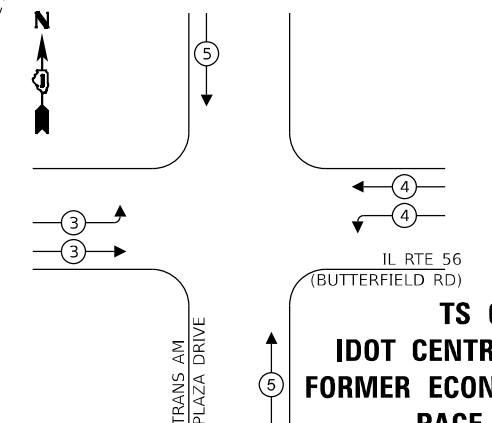
CABLE PLAN
(NOT TO SCALE)



NOTE:

SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE:

ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	14	11	154
4-SECTION	-	14	-
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	2	35	70
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		577	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1182	

TS SHT NO. 103

MODEL: 1400BELMAME
FILE NAME: D:\ENR2023\TS103\CABLESTRANSAM.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

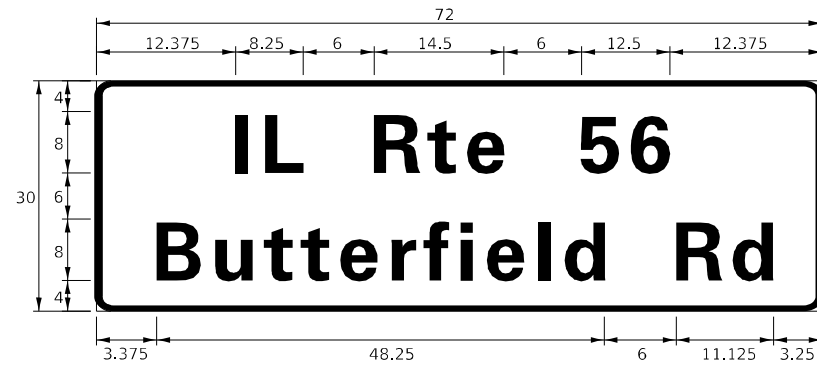
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL ROUTE 56 (BUTTERFIELD RD) AND TRANS AM PLAZA DRIVE
SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	274
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 6345
IDOT CENTRACS
FORMER ECON 28
PACE TSP

SIGN PANEL – TYPE 1 OR TYPE 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 DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	15
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	27
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	332
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	488
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	524
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	743
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	681
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	281
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING FOUNDATION	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	2
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	20
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	11

TS SHT NO. 104

MODEL: 1400BELNAME
FILE NAME: D:\ENR22-ar\TS104-STHIL56TRASAM.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
IL ROUTE 56 (BUTTERFIELD RD) AND TRANS AM PLAZA DRIVE**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	275
CONTRACT NO. 62N32				
SCALE: NTS		SHEET 1 OF 1 SHEETS		STA. TO STA.
ILLINOIS FED. AID PROJECT				

**TS 6345
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

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.

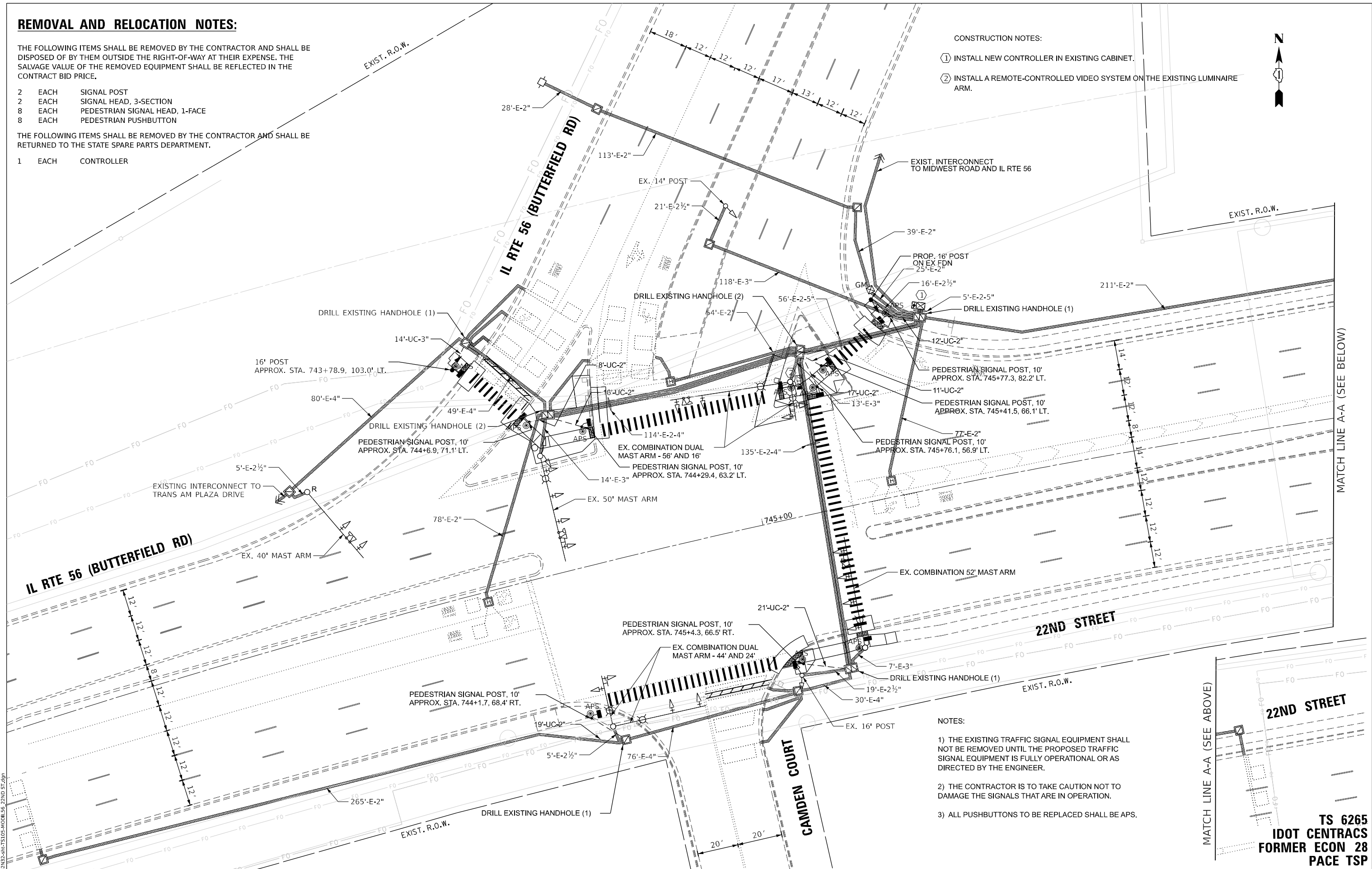
- 2 EACH SIGNAL POST
- 2 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSHBUTTON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PARTS DEPARTMENT.

- 1 EACH CONTROLLER

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE EXISTING LUMINAIRE ARM.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 105

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

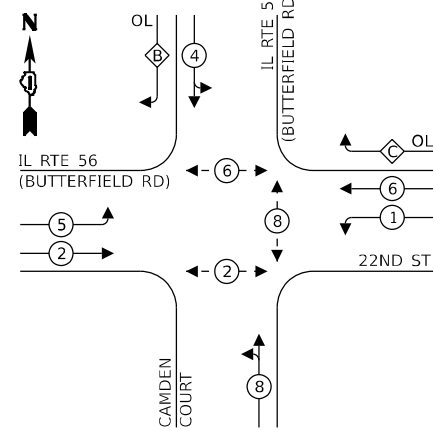
**TRAFFIC SIGNAL MODIFICATION PLAN
IL ROUTE 56 (BUTTERFIELD RD)/22ND STREET AND
IL 56 (BUTTERFIELD RD)/CAMDEN CT**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	276
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 6265
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



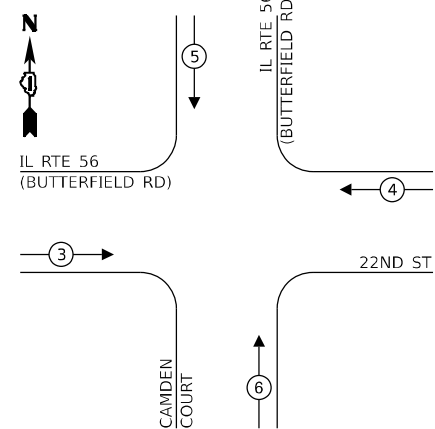
LEGEND:

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

RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

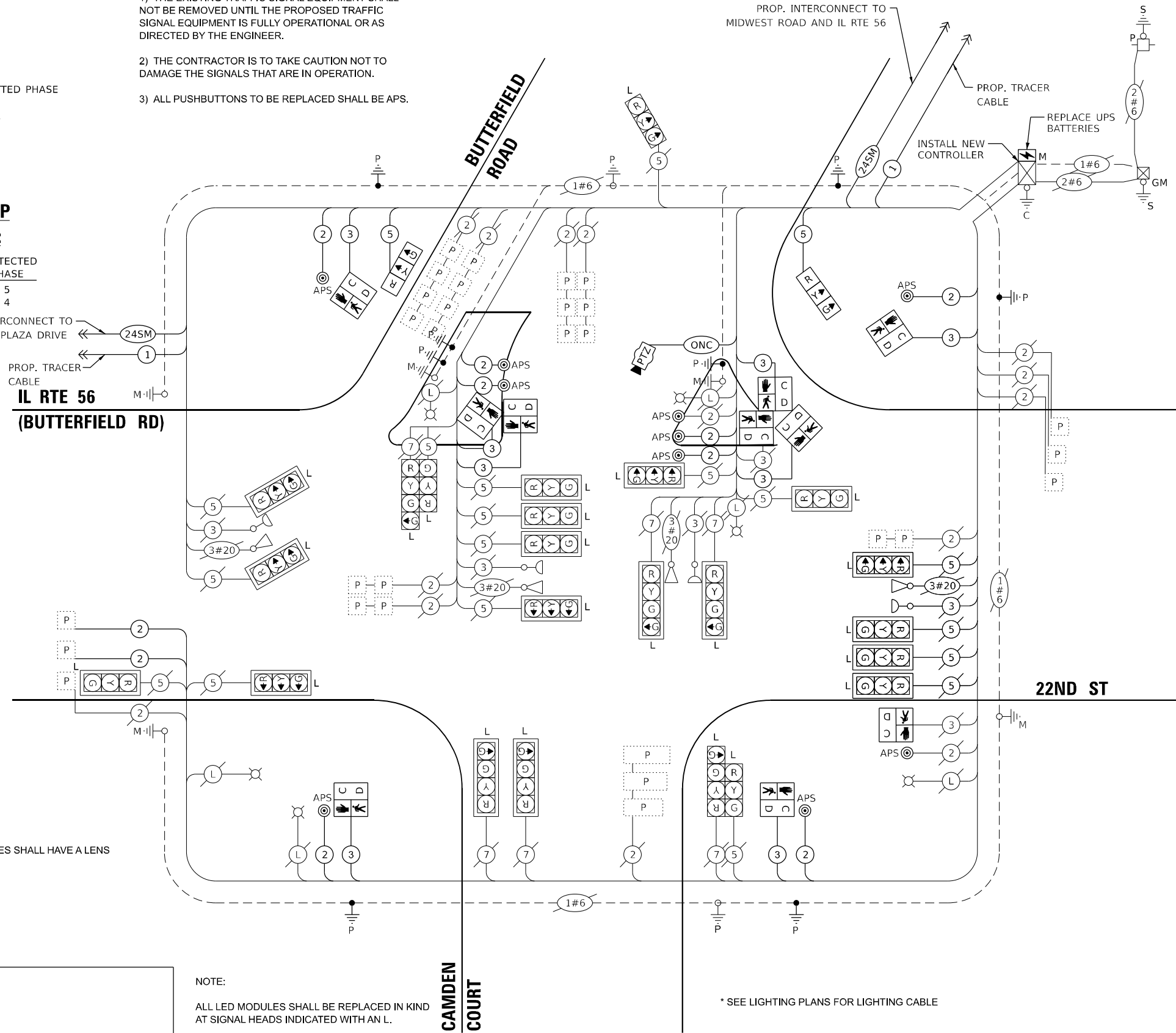


NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

PROP. INTERCONNECT TO TRANS AM PLAZA DRIVE
 PROP. TRACER CABLE
IL RTE 56 (BUTTERFIELD RD)

PROP. INTERCONNECT TO MIDWEST ROAD AND IL RTE 56



NOTE:
 ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

NOTE:
 ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

* SEE LIGHTING PLANS FOR LIGHTING CABLE

CABLE PLAN (NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	20	11	220
4-SECTION	6	14	84
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	10	15	150
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING	664		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	6	240	1440
TOTAL SERVICE WIRE SIZING	2709		

ENERGY COSTS TO:
 VILLAGE OF OAK BROOK
 1200 OAK BROOK ROAD
 OAK BROOK, IL 60523

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 07480-93003

TS SHT NO. 106

MODEL: 1408BELMONT
 FILE NAME: D:\ENR2024\TS106\CABLE56_22ND.ST.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 56 (BUTTERFIELD RD)/22ND STREET AND IL RTE 56/CAMDEN CT
 SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	277
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS 6265 IDOT CENTRACS FORMER ECON 28 PACE TSP



TS SHT NO. 107

MODEL: 4100BELNAMES
FILE NAME: D:\62N32-ar\TS107-STHIL56-22ND ST.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

**IL ROUTE 56 (BUTTERFIELD RD)22ND STREET AND
IL ROUTE 56 (BUTTERFIELD RD)CAMDEN CT**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	278
			CONTRACT NO. 62N32	
		ILLINOIS FED. AID PROJECT		

**TS 6265
IDOT CENTRACS
FORMER ECON 28
PACE TSP**

SCHEDULE OF QUANTITIES

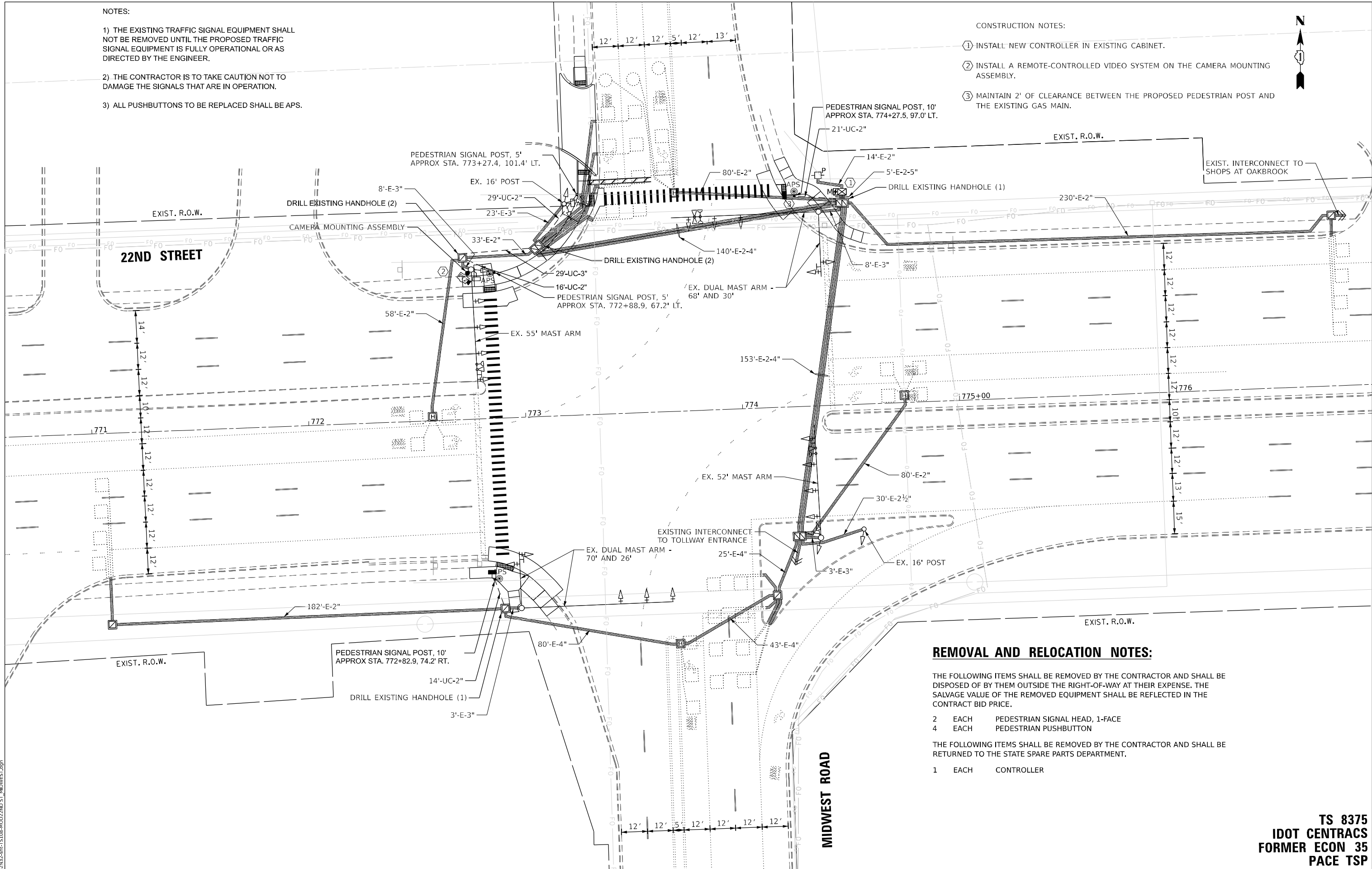
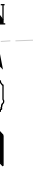
ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	104
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	14
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1655
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1727
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	303
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1258
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	880
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	147
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	7
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	10
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	28
LED SIGNAL FACE, LENS COVER	EACH	25
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	24

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

CONSTRUCTION NOTES:

- ① INSTALL NEW CONTROLLER IN EXISTING CABINET.
- ② INSTALL A REMOTE-CONTROLLED VIDEO SYSTEM ON THE CAMERA MOUNTING ASSEMBLY.
- ③ MAINTAIN 2' OF CLEARANCE BETWEEN THE PROPOSED PEDESTRIAN POST AND THE EXISTING GAS MAIN.



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 PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSHBUTTON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PARTS DEPARTMENT.

- 1 EACH CONTROLLER

TS SHT NO. 108

MODEL NAME: TS108
FILE NAME: D:\2024\TS108\002\2ND ST MIDWEST.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

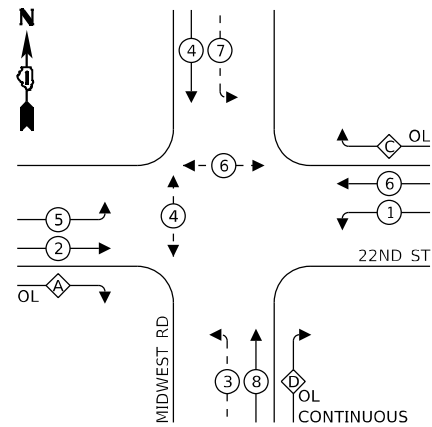
**TRAFFIC SIGNAL MODIFICATION PLAN
22ND STREET AND MIDWEST ROAD**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	279
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 8375
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

EXISTING AND PROPOSED CONTROLLER SEQUENCE



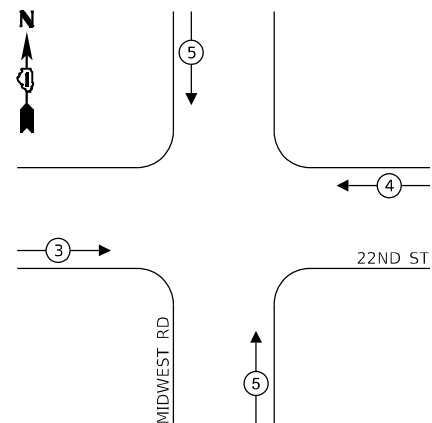
LEGEND:

- ← ⊙ ← 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
D	= NONE	+ ALL PHASES

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

NOTE:

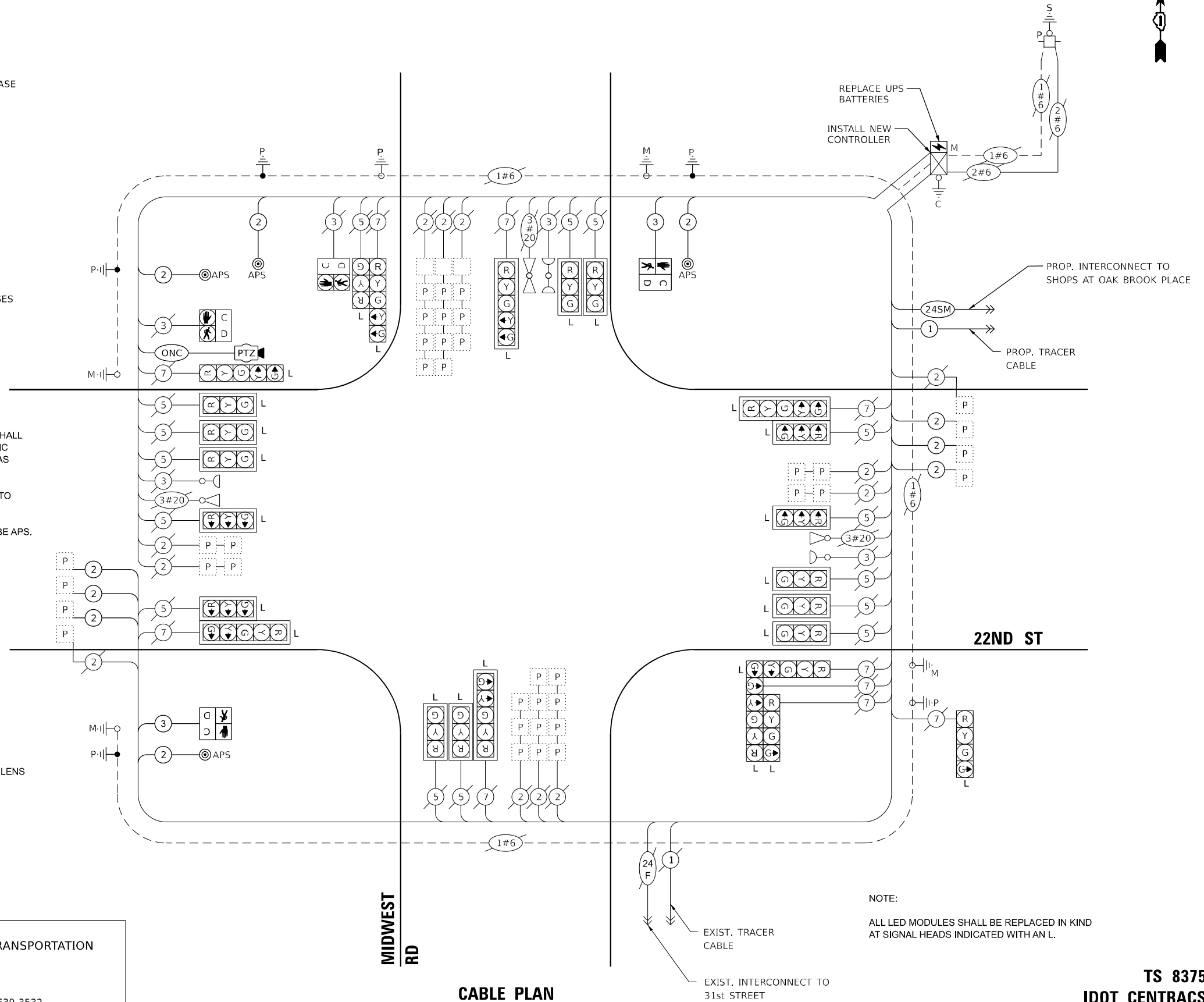
ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

NOTE:

ENERGY COSTS TO:
DUPAGE COUNTY DIVISION OF TRANSPORTATION
421 N COUNTY FARM ROAD
WHEATON, IL 60187

ENERGY SUPPLY:

PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 01110-13177



CABLE PLAN
(NOT TO SCALE)

NOTE:

ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	15	11	165
4-SECTION	2	14	28
5-SECTION	8	13	104
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		607	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1212	

TS SHT NO. 109

MODEL: 1409BELMONT
FILE NAME: D:\ENR22-CR-TS109-CAB22ND ST MIDWEST.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
22ND STREET AND MIDWEST ROAD

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	280
				CONTRACT NO. 62N32
		ILLINOIS	FED. AID PROJECT	

TS 8375
IDOT CENTRACS
FORMER ECON 35
PACE TSP

TS SHT NO. 110

MODEL: 4100BELMAME
FILE NAME: D:\62N32-ar-TS110-STR22ND ST_MIDWEST.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
22ND STREET AND MIDWEST ROAD**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	281
			CONTRACT NO. 62N32	
		ILLINOIS	FED. AID PROJECT	

**TS 8375
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	80
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	29
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	873
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	426
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2360
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	746
DRILL EXISTING HANDHOLE	EACH	6
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	265
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	2
PEDESTRIAN SIGNAL POST, 5'	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
COCONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	16
LED SIGNAL FACE, LENS COVER	EACH	25
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	2
CAMERA MOUNTING ASSEMBLY	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	25

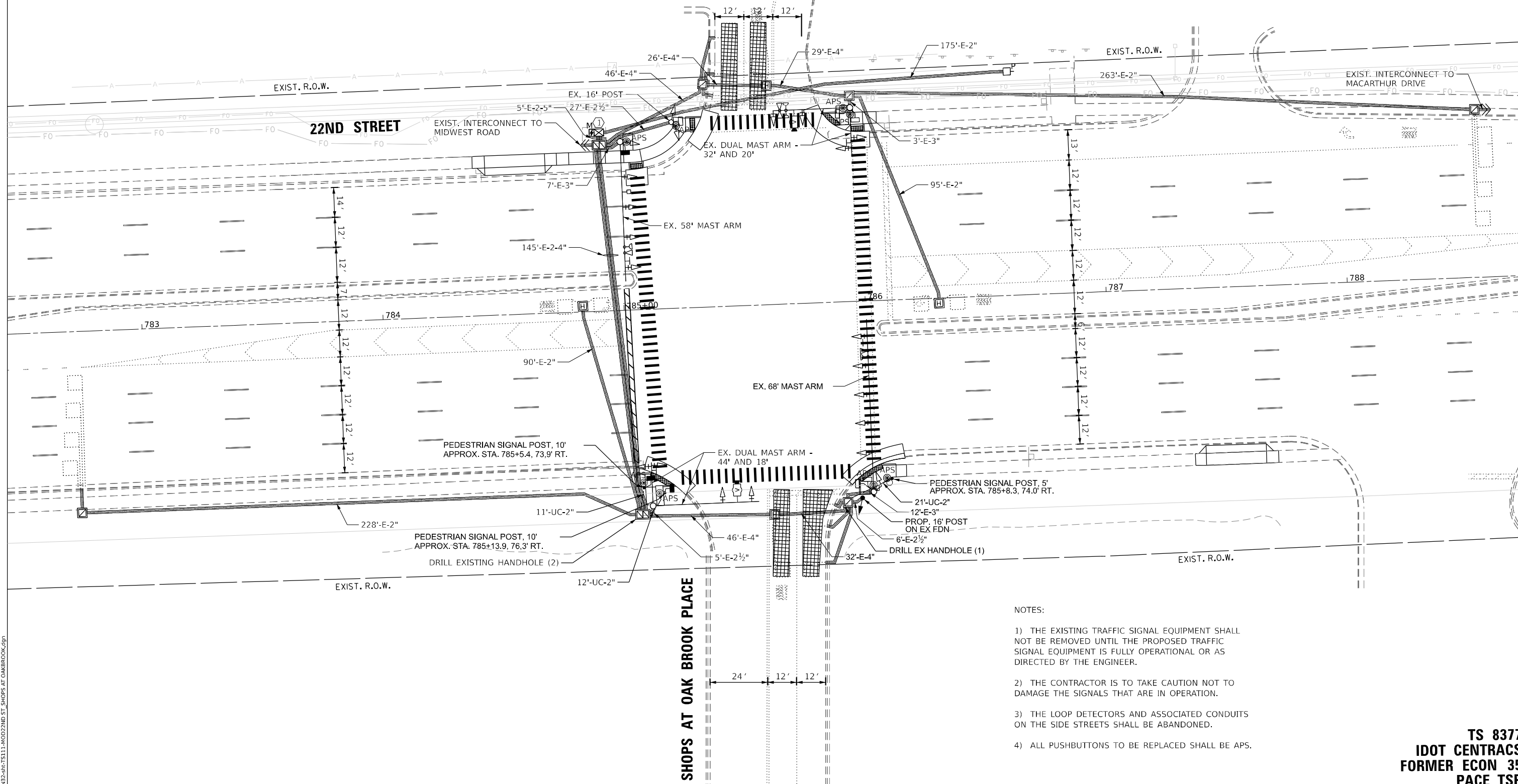
REMOVAL AND RELOCATION NOTES:

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 POST
- 1 EACH SIGNAL HEAD, 3-SECTION
- 1 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 6 EACH PEDESTRIAN PUSHBUTTON

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREETS SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 111

MODEL NAME: 62N35
FILE NAME: D:\2020-265-SUR\TS111-62N35\22ND ST_SHTOPS AT OAKBROOK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

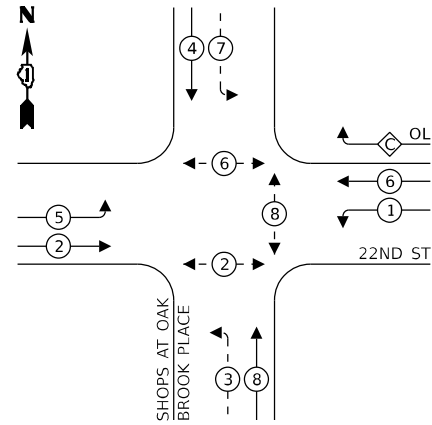
**TRAFFIC SIGNAL MODIFICATION PLAN
22ND STREET AND SHOPPES AT OAK BROOK PLACE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

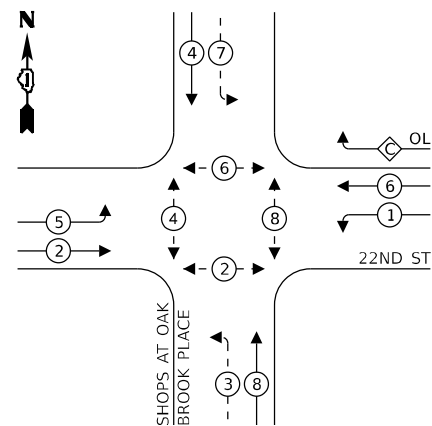
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	282
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 8377
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

EXISTING CONTROLLER SEQUENCE



PROPOSED 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

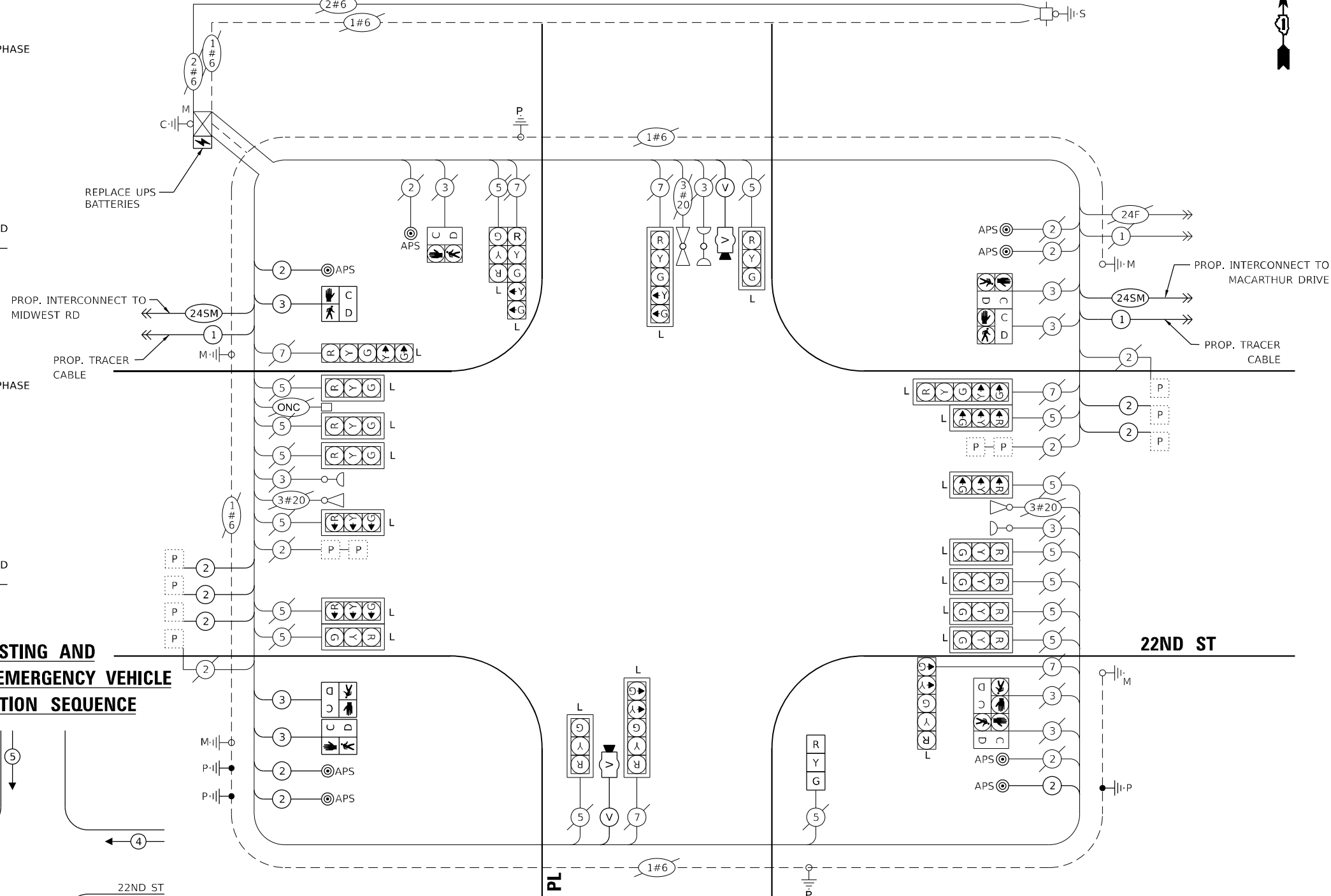
LEGEND:

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

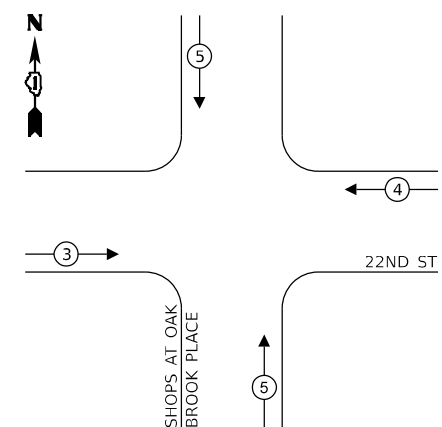
RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6	+ 7

NOTE:
SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.



EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTE:
ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.

NOTE:
ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

CABLE PLAN (NOT TO SCALE)

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREETS SHALL BE ABANDONED.
 - 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	16	11	176
4-SECTION	-	14	-
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	8	15	120
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	2	20	40
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	2	35	70
	1	15	15
TOTAL UPS SIZING			674
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1279

ENERGY COSTS TO:
VILLAGE OF OAK BROOK
1200 OAK BROOK ROAD
OAK BROOK, IL 60523

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 07480-93003

TS SHT NO. 112

MODEL: SHOPS AT OAK BROOK PLACE
FILE NAME: D:\ENR2024\2024-08-17\TS112-CAB22ND ST, SHOPS AT OAKBROOK.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 22ND STREET AND SHOPS AT OAK BROOK PLACE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	283
				CONTRACT NO. 62N32
ILLINOIS FED. AID PROJECT				

TS 8377 IDOT CENTRACS FORMER ECON 35 PACE TSP



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
22ND STREET AND SHOPS AT OAK BROOK PLACE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	284
			CONTRACT NO. 62N32	
		ILLINOIS	FED. AID PROJECT	

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	44
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	730
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	245
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2137
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	596
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
INDUCTIVE LOOP DETECTOR	EACH	9
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	2
PEDESTRIAN SIGNAL POST, 5'	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	22
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	5
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	21

**TS 8377
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

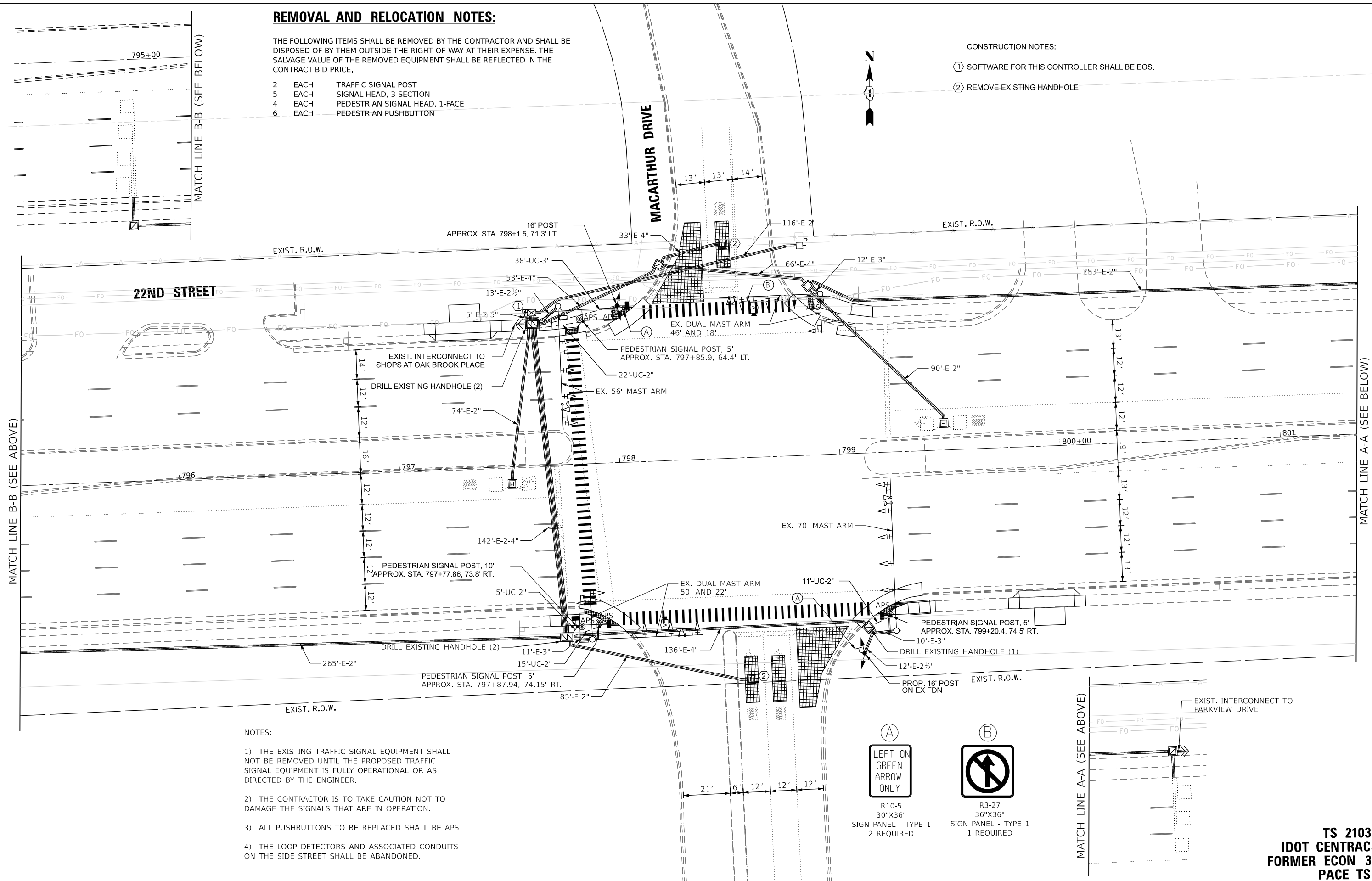
REMOVAL AND RELOCATION NOTES:

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 TRAFFIC SIGNAL POST
- 5 EACH SIGNAL HEAD, 3-SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 6 EACH PEDESTRIAN PUSHBUTTON

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
- ② REMOVE EXISTING HANDHOLE.



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.



R10-5
30"X36"
SIGN PANEL - TYPE 1
2 REQUIRED



R3-27
36"X36"
SIGN PANEL - TYPE 1
1 REQUIRED

TS SHT NO. 114

MODEL NAME: 62N32-2R1TS114-00022ND ST MACARTHUR.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

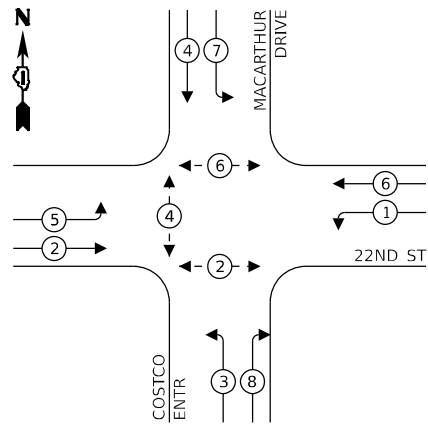
TRAFFIC SIGNAL MODIFICATION PLAN
22ND STREET AND MACARTHUR DRIVE

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	285
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 21030
IDOT CENTRACS
FORMER ECON 35
PACE TS

EXISTING AND PROPOSED CONTROLLER SEQUENCE

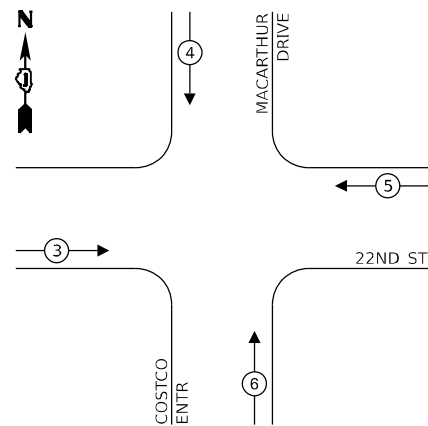


LEGEND:

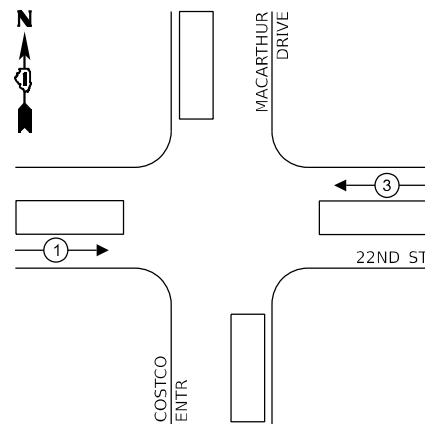
- ⊙ - PROTECTED PHASE
- ⊙ - - PROTECTED/PERMITTED PHASE
- ⊙ - ⊙ - PEDESTRIAN PHASE
- ⊙ - OL OVERLAP

NOTE:
SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY PREEMPTION SEQUENCE

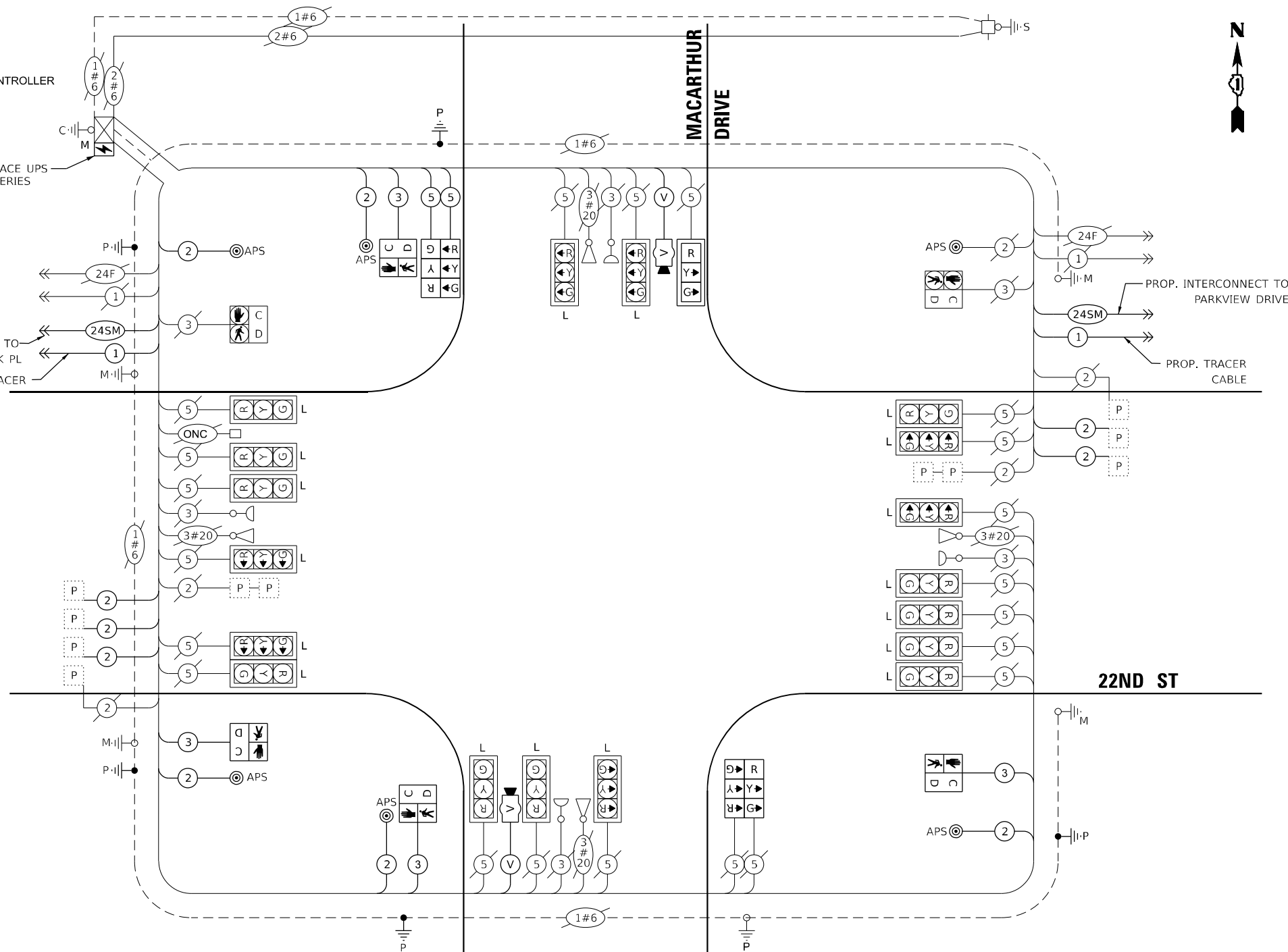


TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	23	11	253
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	6	15	90
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION RADAR OR VIDEO	1	25	25
BLANK-OUT SIGN	2	20	40
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	2	35	70
		15	-
TOTAL UPS SIZING		628	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING		1233	

ENERGY COSTS TO:
VILLAGE OF OAK BROOK
1200 OAK BROOK ROAD
OAK BROOK, IL 60523
ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 07480-93003

NOTE:
ONLY RED SIGNAL FACES SHALL HAVE A LENS COVER INSTALLED.



CABLE PLAN (NOT TO SCALE)

NOTE:
ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 115

MODEL: 1400BELMONT
FILE NAME: D:\ENR2024\24-115-CAB22ND ST MACARTHUR.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME	= shassan
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 2/23/2024

DESIGNED	- JR	REVISED	-
DRAWN	- SR	REVISED	-
CHECKED	- JR	REVISED	-
DATE	- 07/14/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
22ND STREET AND MACARTHUR DRIVE

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	286
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 21030
IDOT CENTRACS
FORMER ECON 35
PACE TSP

TS SHT NO. 116

MODEL: \\MS01\BELMAME
FILE NAME: D:\ENR22-ar-TS116-STR22ND ST_MACARTHUR.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
22ND STREET AND MACARTHUR DRIVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	287
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 21030
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	15
UNDERGROUND CONDUIT, GALVANIZED STEEL 2" DIA.	FOOT	53
UNDERGROUND CONDUIT, GALVANIZED STEEL 3" DIA.	FOOT	38
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	851
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	837
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	143
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2230
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	692
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	1
PEDESTRIAN SIGNAL POST, 5'	EACH	3
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	16
LED SIGNAL FACE, LENS COVER	EACH	23
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	18

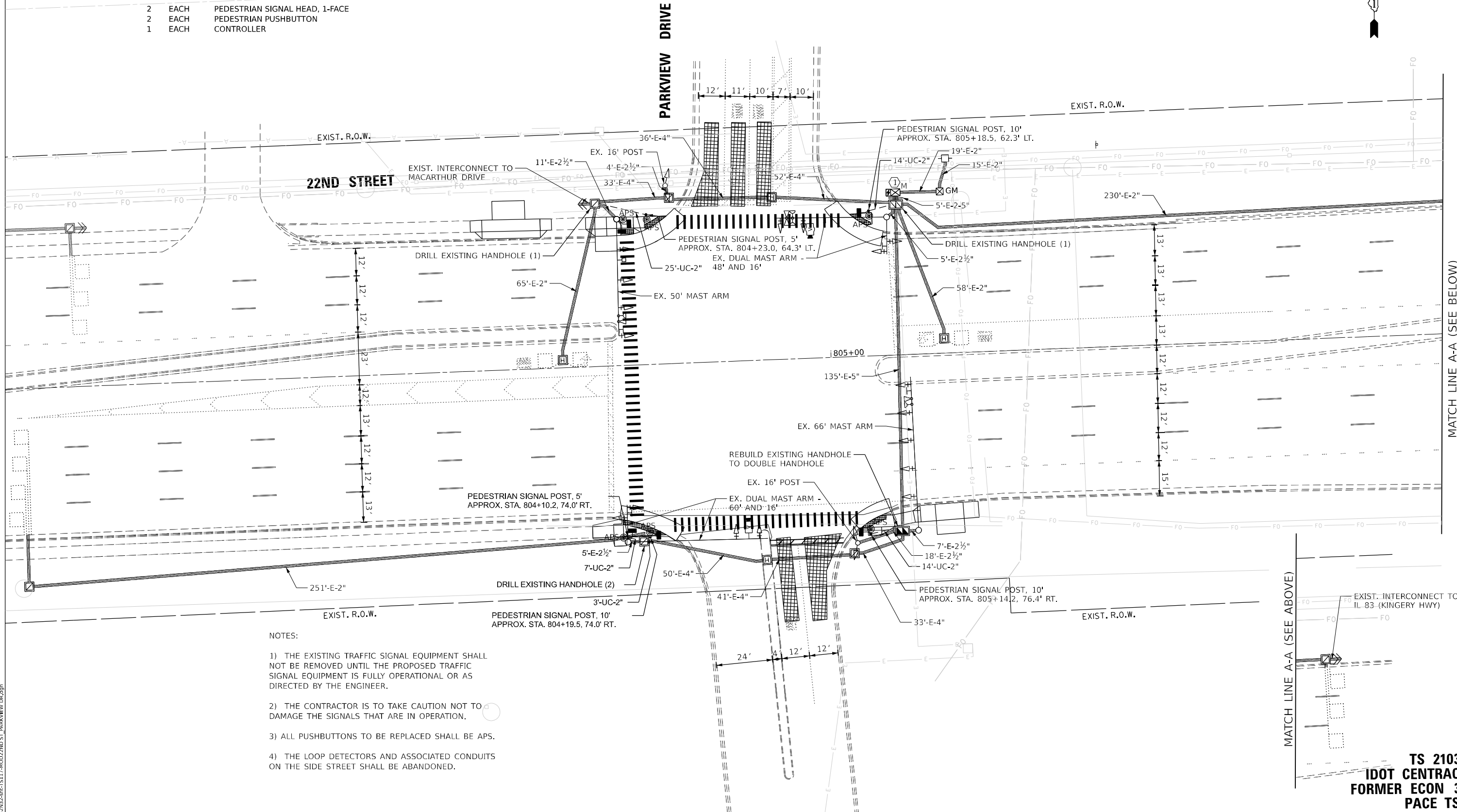
REMOVAL AND RELOCATION NOTES:

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 PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSHBUTTON
- 1 EACH CONTROLLER

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.



MATCH LINE A-A (SEE BELOW)

MATCH LINE A-A (SEE ABOVE)

NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.
- 4) THE LOOP DETECTORS AND ASSOCIATED CONDUITS ON THE SIDE STREET SHALL BE ABANDONED.

TS SHT NO. 117

MODEL NAME: D:\ENR22-AR-TS117-00022ND ST PARKVIEW DR.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

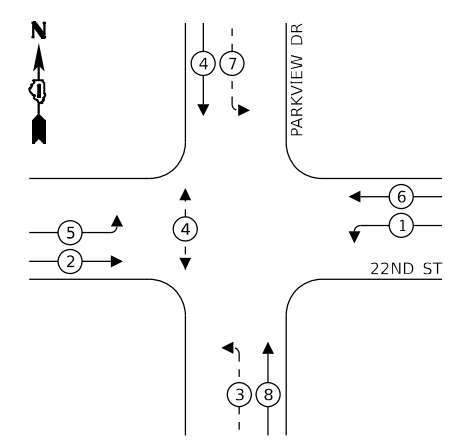
**TRAFFIC SIGNAL MODIFICATION PLAN
22ND STREET AND PARKVIEW DRIVE**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	288
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

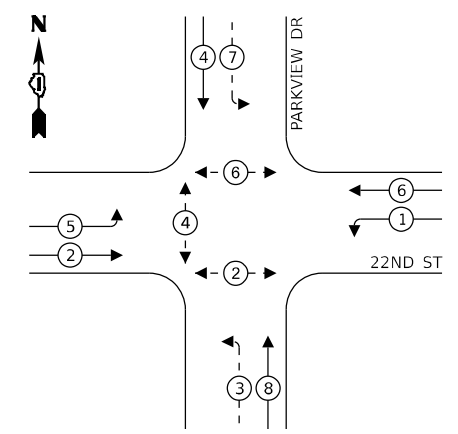
**TS 21035
IDOT CENTRACS
FORMER ECON 35
PACE TS**

EXISTING CONTROLLER SEQUENCE



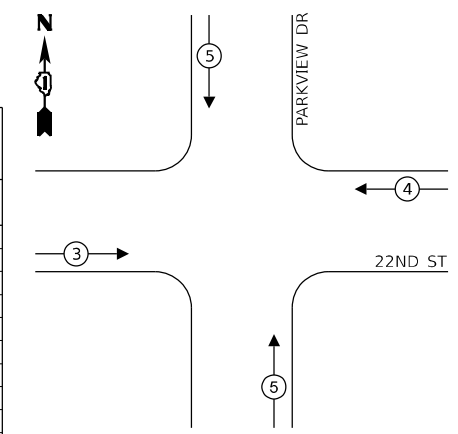
- LEGEND:**
- ← ⊙ ← PROTECTED PHASE
 - ← ⊙ - PROTECTED/PERMITTED PHASE
 - ← ⊙ → PEDESTRIAN PHASE
 - ← ⊙ OL OVERLAP

PROPOSED CONTROLLER SEQUENCE



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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

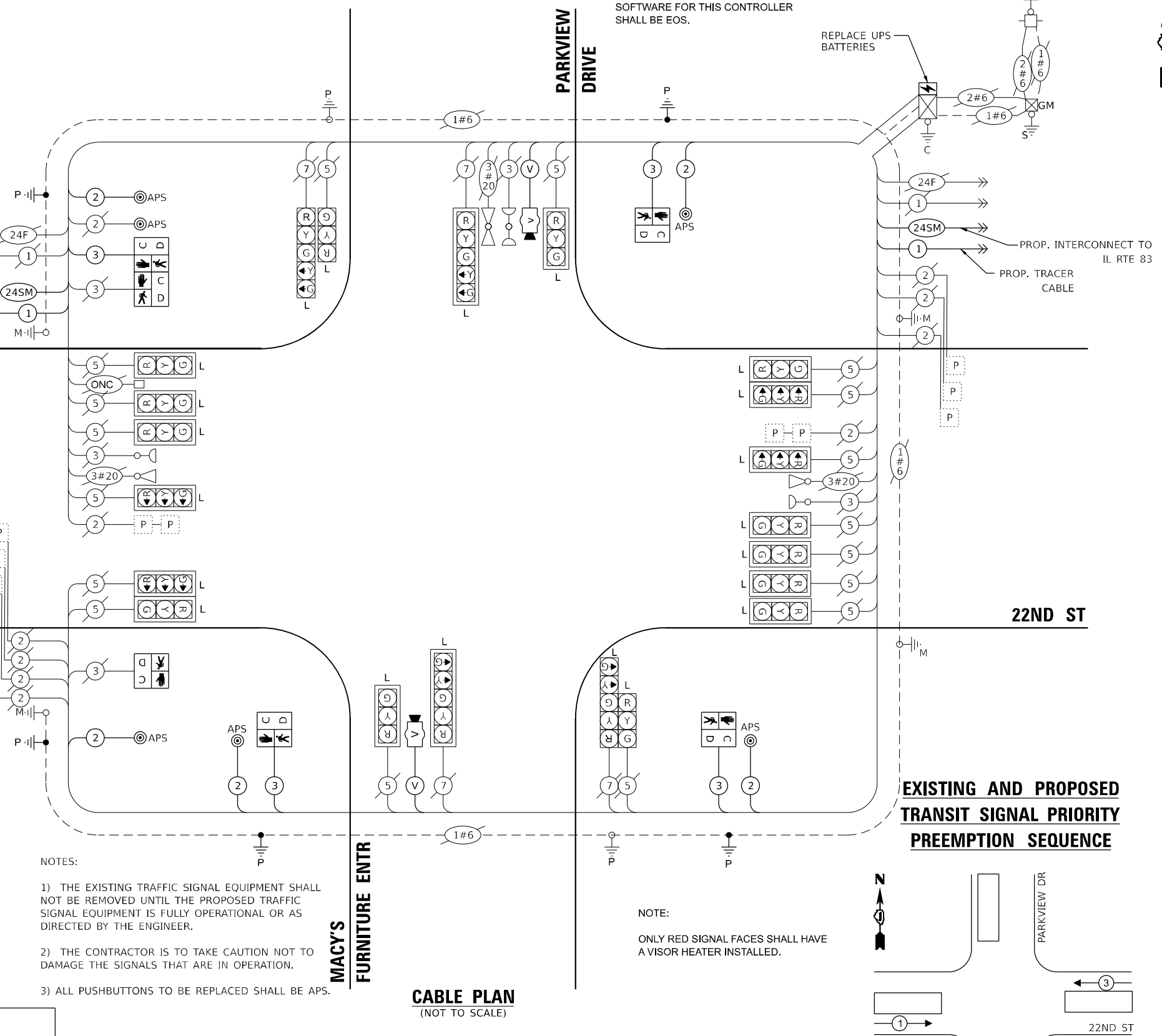


ENERGY COSTS TO:
 VILLAGE OF OAK BROOK
 1200 OAK BROOK ROAD
 OAK BROOK, IL 60523

ENERGY SUPPLY:
 PHONE: (866) 639-3532
 COMPANY: COMED
 ACCOUNT NUMBER: 07480-93003

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	17	11	187
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	6	15	90
MASTER CONTROLLER	1	150	150
UPS	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	2	20	40
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	2	35	70
		15	
TOTAL UPS SIZING			614
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1219



NOTE:
 SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

- NOTES:
- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
 - 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
 - 3) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

NOTE:
 ONLY RED SIGNAL FACES SHALL HAVE A VISOR HEATER INSTALLED.

NOTE:
 ALL LED MODULES SHALL BE REPLACED IN KIND AT SIGNAL HEADS INDICATED WITH AN L.

CABLE PLAN (NOT TO SCALE)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 22ND STREET AND PARKVIEW DRIVE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	289
CONTRACT NO. 62N32			ILLINOIS FED. AID PROJECT	

TS SHT NO. 118

MODEL NAME: TS118
 FILE NAME: D:\ENR2020-265-SUR-TS118-CAB22ND ST PARKVIEW DR.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME	= shassan
DESIGNED	- JR
REVISION	-
DRAWN	- SR
REVISION	-
PLOT SCALE	= \$SCALE\$
CHECKED	- JR
REVISION	-
PLOT DATE	= 2/23/2024
DATE	- 07/14/2023
REVISION	-

**TS 21035
 IDOT CENTRACS
 FORMER ECON 35
 PACE TSP**

TS SHT NO. 119

MODEL: 4400BELMAME
FILE NAME: D:\ENR22-ar-TS119-STR22ND ST_PARKVIEW.DWG



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
22ND STREET AND PARKVIEW DRIVE**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	290
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 21035
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	56
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	750
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	786
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	623
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
LAYER II (DATA LINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
PEDESTRIAN SIGNAL POST, 10'	EACH	3
PEDESTRIAN SIGNAL POST, 5'	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
LED SIGNAL FACE VISOR HEATER	EACH	21
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	16
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	2
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
LED SIGNAL MODULE REPLACEMENT	EACH	21

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 DUAL MAST ARM ASSEMBLY AND POLE
- 5 EACH TRAFFIC SIGNAL POST
- 21 EACH SIGNAL HEAD, 3-SECTION
- 8 EACH SIGNAL HEAD, 5-SECTION
- 1 EACH UNINTERRUPTABLE POWER SUPPLY
- 12 EACH TRAFFIC SIGNAL BACKPLATE

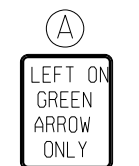
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE RETURNED TO THE STATE SPARE PART DEPARTMENT.

- 1 EACH CABINET (COMPLETE)
- 1 EACH PTZ CAMERA

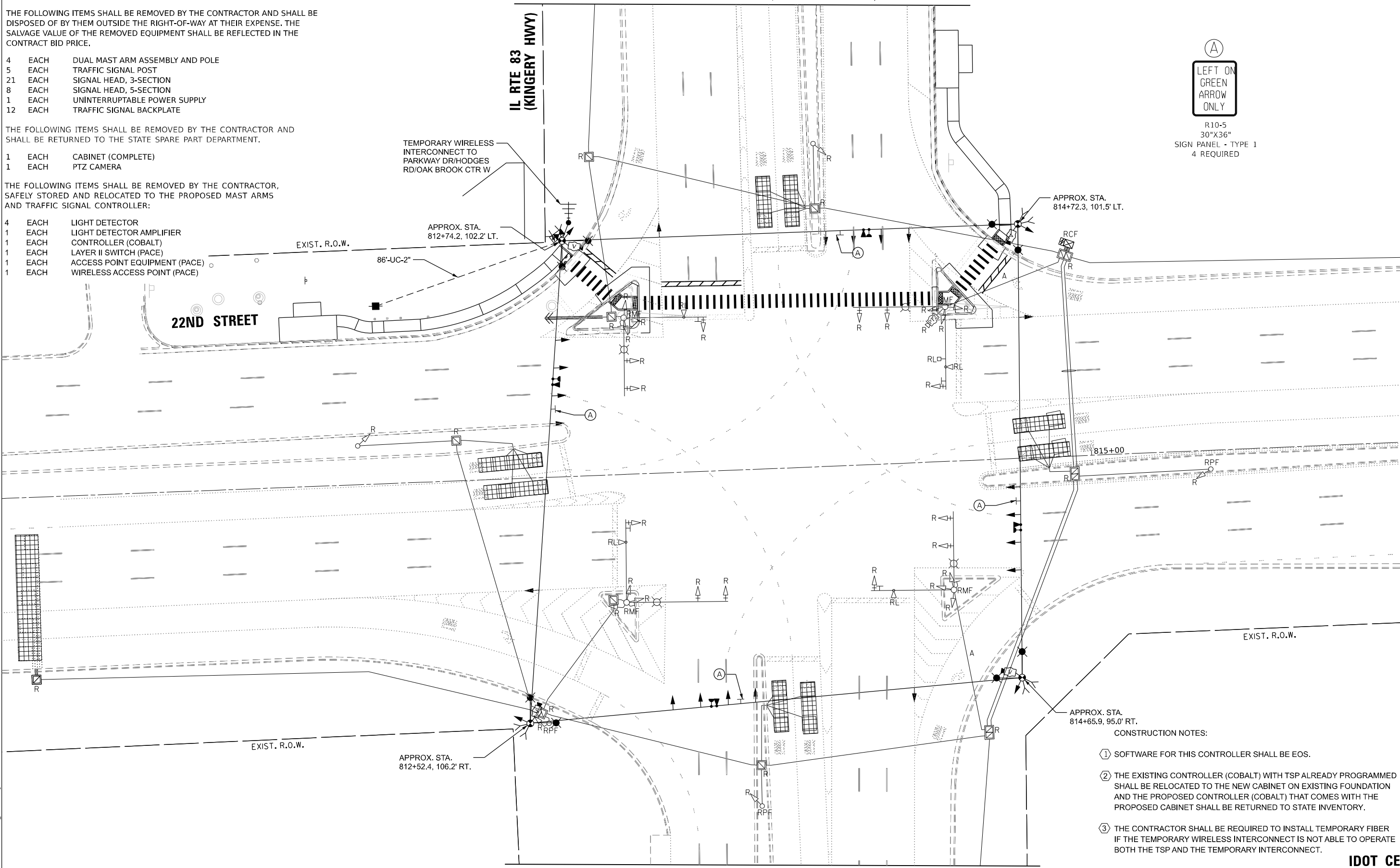
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

- 4 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER
- 1 EACH CONTROLLER (COBALT)
- 1 EACH LAYER II SWITCH (PACE)
- 1 EACH ACCESS POINT EQUIPMENT (PACE)
- 1 EACH WIRELESS ACCESS POINT (PACE)

MATCH LINE B-B (SEE NEXT SHEET)



R10-5
30"X36"
SIGN PANEL - TYPE 1
4 REQUIRED



MATCH LINE A-A (SEE NEXT SHEET)

- APPROX. STA. 814+65.9, 95.0' RT.
CONSTRUCTION NOTES:
- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
 - ② THE EXISTING CONTROLLER (COBALT) WITH TSP ALREADY PROGRAMMED SHALL BE RELOCATED TO THE NEW CABINET ON EXISTING FOUNDATION AND THE PROPOSED CONTROLLER (COBALT) THAT COMES WITH THE PROPOSED CABINET SHALL BE RETURNED TO STATE INVENTORY.
 - ③ THE CONTRACTOR SHALL BE REQUIRED TO INSTALL TEMPORARY FIBER IF THE TEMPORARY WIRELESS INTERCONNECT IS NOT ABLE TO OPERATE BOTH THE TSP AND THE TEMPORARY INTERCONNECT.

MATCH LINE C-C (SEE NEXT SHEET)

TS SHT NO. 120

MODEL NAME: TS550
FILE NAME: D:\2020-265-SUR-TS120-TMP12\2ND ST, IL RTE83.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (SHEET 1 OF 2)
22ND STREET AND IL ROUTE 83 (KINGERY HWY)**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	291
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62N32	

**TS 550
IDOT CENTRACS
FORMER ECON 35
PACE TSP**

TS SHT NO. 121

MODEL NAME: D:\B2024\24-01\TS121-TMP22ND ST, IL RTE83.dgn
 FILE NAME: D:\B2024\24-01\TS121-TMP22ND ST, IL RTE83.dgn

AMES Engineering, Inc.
 CONSULTING ENGINEERS
 6330 Belmont Road, Suite 4B
 Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	CHECKED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DATE - 07/14/2023	REVISED -
PLOT DATE = 2/23/2024		

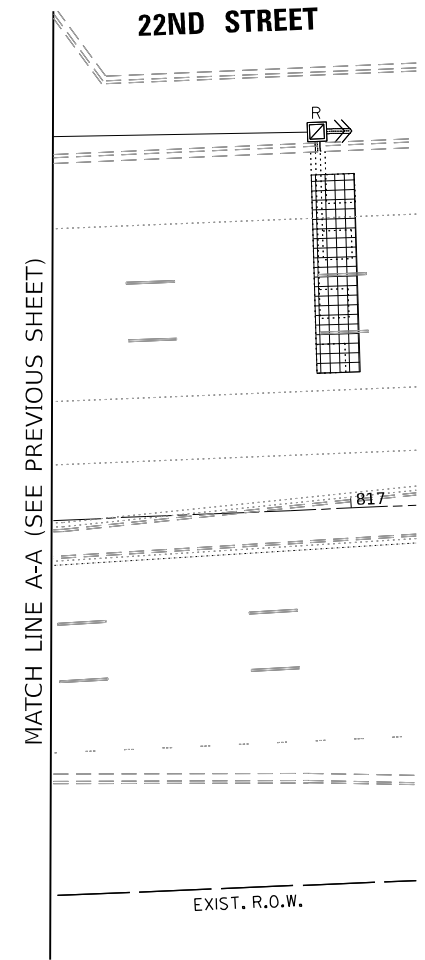
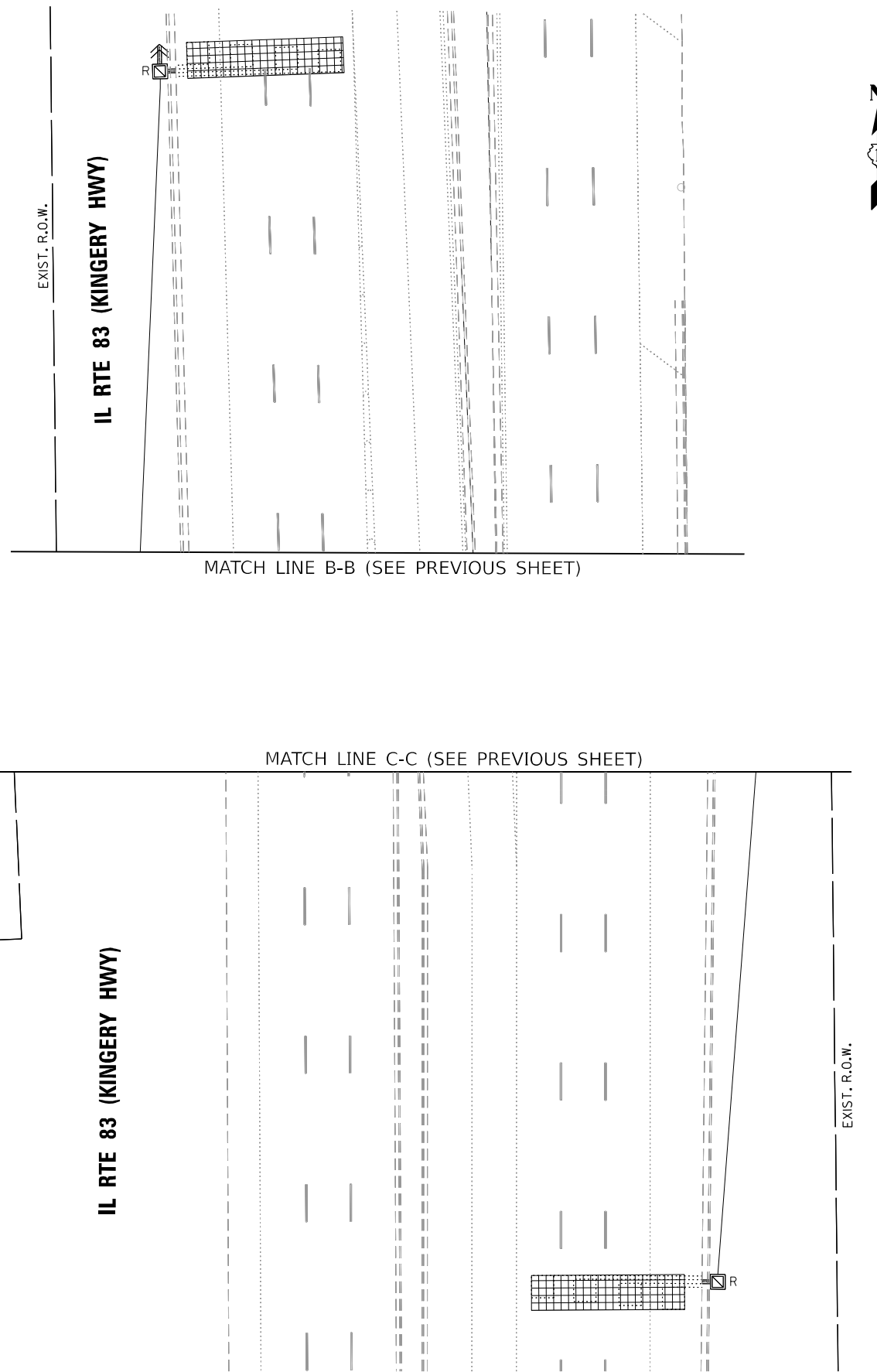
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN (SHEET 2 OF 2)
 22ND STREET AND IL ROUTE 83 (KINGERY HWY)**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

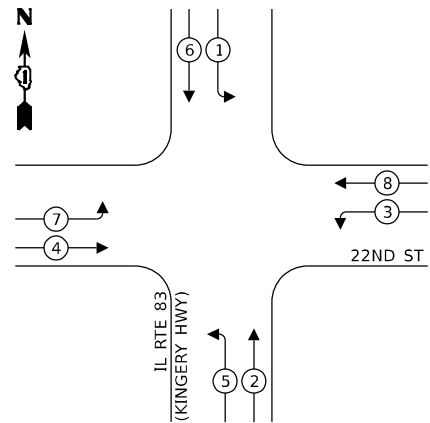
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	292
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 550
 IDOT CENTRACS
 FORMER ECON 35
 PACE TSP**





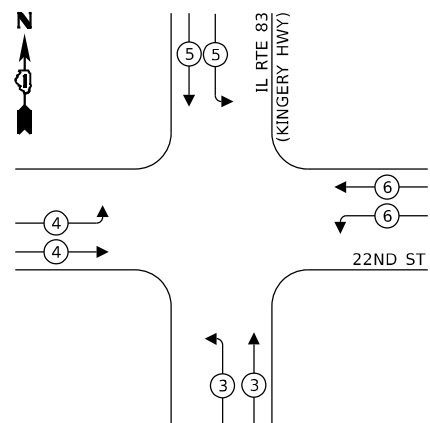
TEMPORARY CONTROLLER SEQUENCE



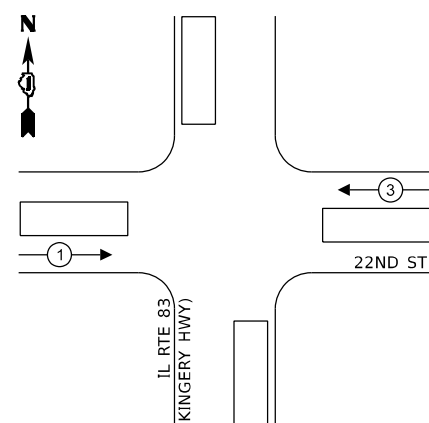
LEGEND:

- ← * → DUAL ENTRY PHASE
- ← * - - SINGLE ENTRY PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

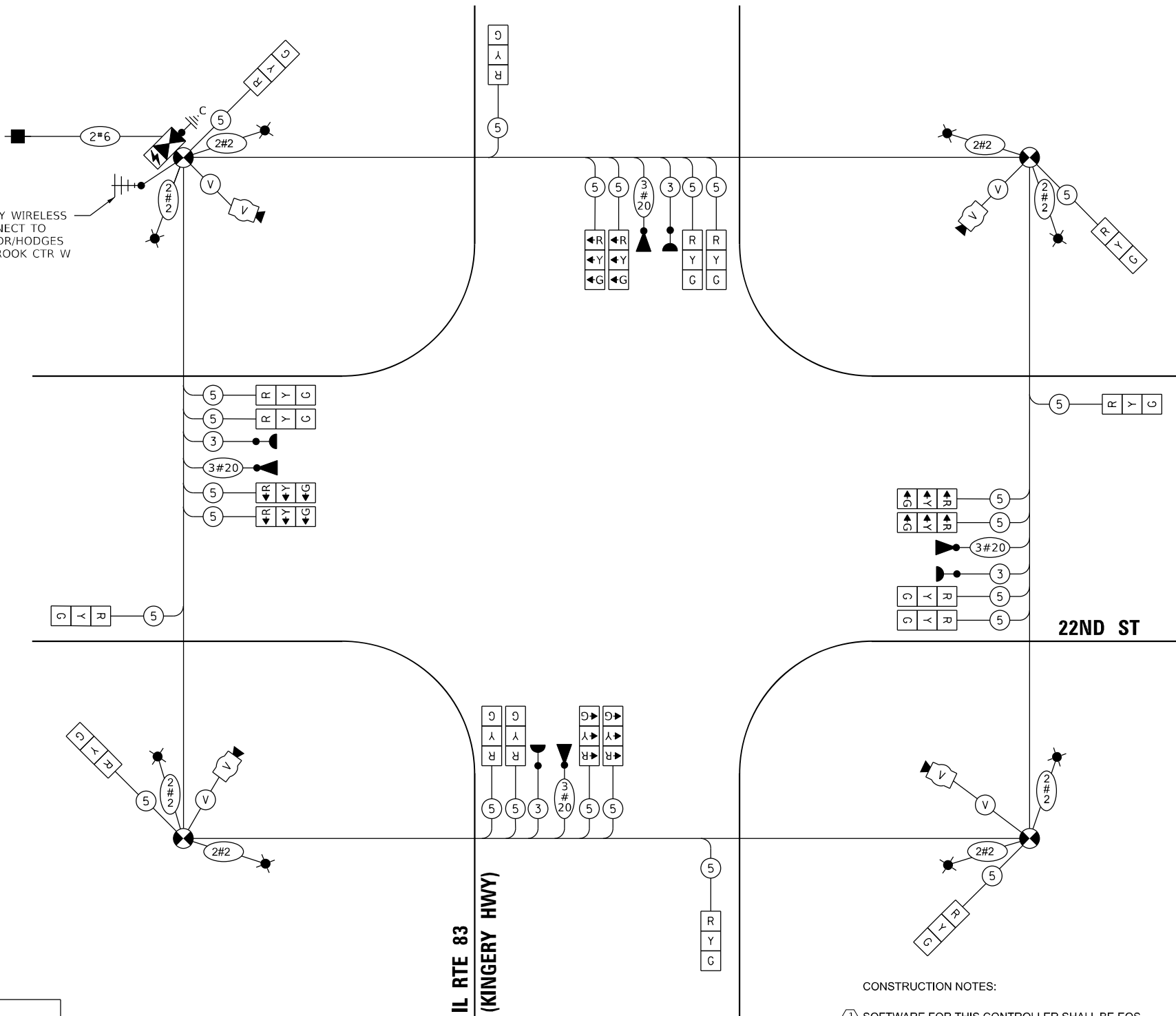
TEMPORARY EMERGENCY VEHICLE PREEMPTION



TEMPORARY CONTROLLER SEQUENCE



TEMPORARY WIRELESS INTERCONNECT TO PARKWAY DR/HODGES RD/OAK BROOK CTR W



TEMPORARY CABLE PLAN
(NOT TO SCALE)

CONSTRUCTION NOTES:
① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	24	11	264
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	-	15	-
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	4	20	80
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	1	35	35
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING	554		
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	8	240	1960
TOTAL SERVICE WIRE SIZING	3119		

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 38580-39007

TS SHT NO. 122

MODEL: 1400BELMONT
FILE NAME: D:\ENR2024\TS122-TCP22ND ST, IL RTE83.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan
DESIGNED - JR
DRAWN - SR
CHECKED - JR
DATE - 07/14/2023
PLOT SCALE = \$SCALE\$
PLOT DATE = 2/23/2024

REVISOR -
REVISION -
REVISOR -
REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM
AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
22ND STREET AND IL ROUTE 83 (KINGERY HWY)

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	293
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 550
IDOT CENTRACS
FORMER ECON 35
PACE TSP

TS SHT NO. 124

MODEL NAME: D:\ENR22-21\TS124-MOD222ND ST_IL RTE83.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan	DESIGNED - JR	REVISED -
DRAWN - SR	REVISIONS	
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

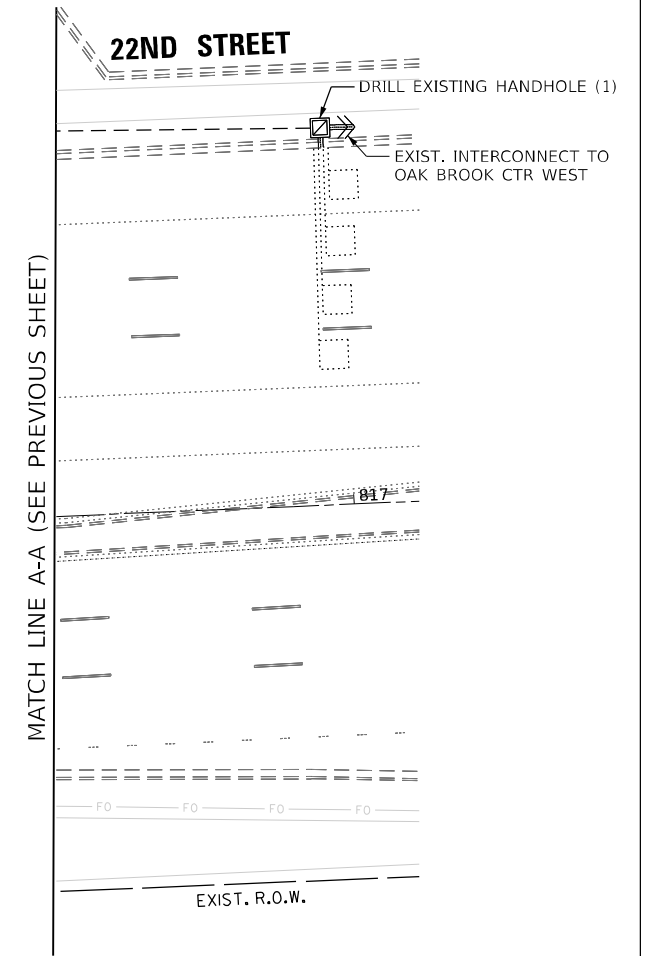
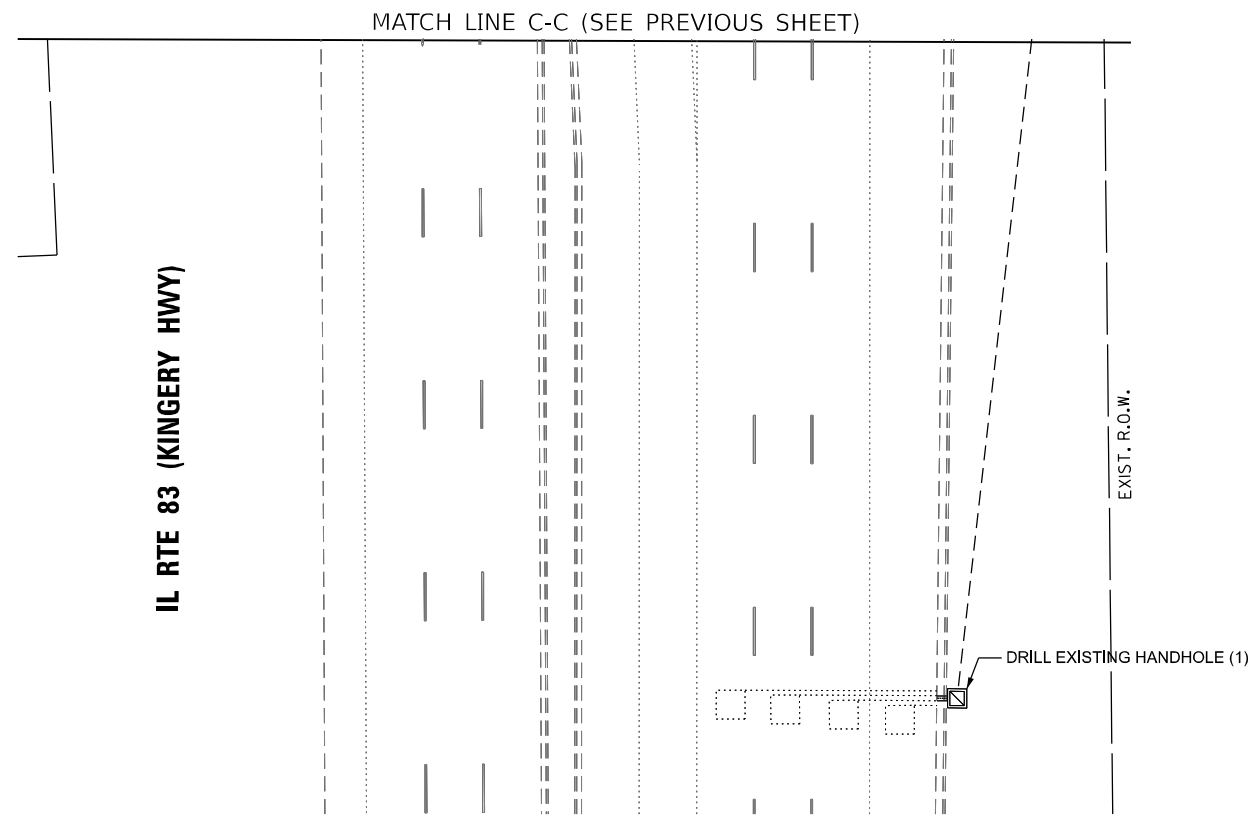
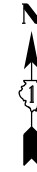
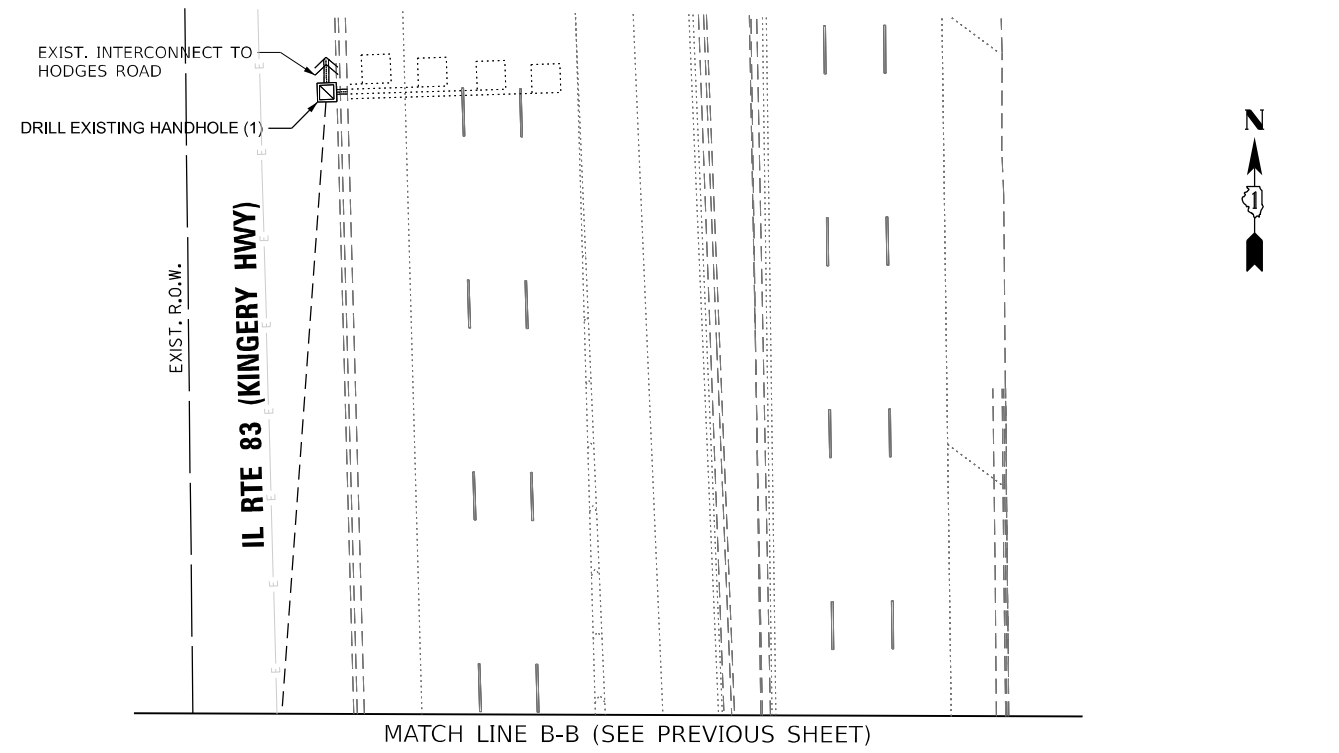
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODIFICATION PLAN (SHEET 2 OF 2)
22ND STREET AND IL ROUTE 83 (KINGERY HWY)**

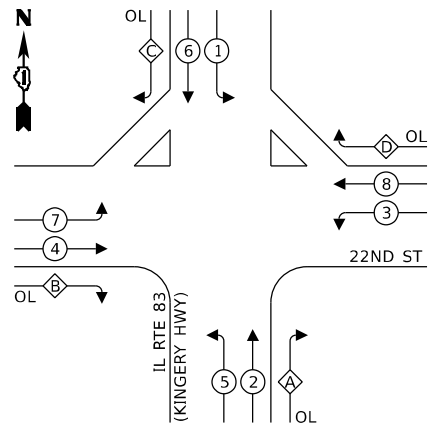
SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	295
CONTRACT NO. 62N32				
ILLINOIS		FED. AID PROJECT		

**TS 550
IDOT CENTRACS
FORMER ECON 35
PACE TSP**



EXISTING CONTROLLER SEQUENCE



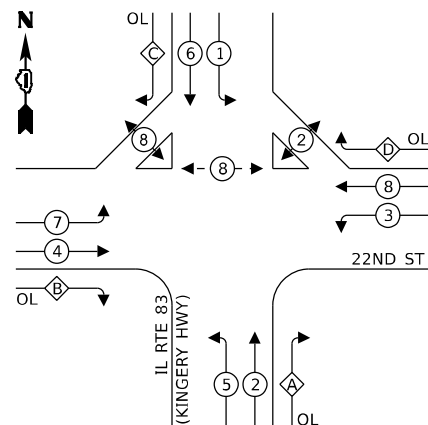
LEGEND:

- ← ⊗ ← DUAL ENTRY PHASE
- ← ⊗ SINGLE ENTRY 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

PROPOSED CONTROLLER SEQUENCE



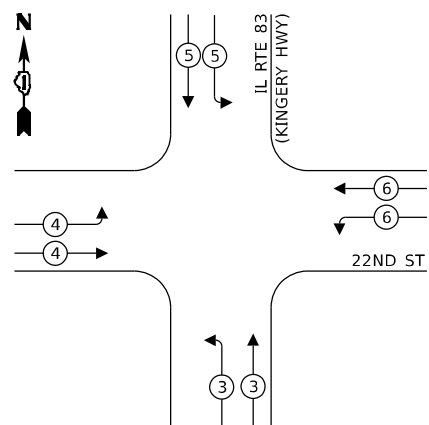
LEGEND:

- ← ⊗ ← DUAL ENTRY PHASE
- ← ⊗ SINGLE ENTRY PHASE
- ← ⊗ → PEDESTRIAN PHASE
- ← ⊗ OL OVERLAP

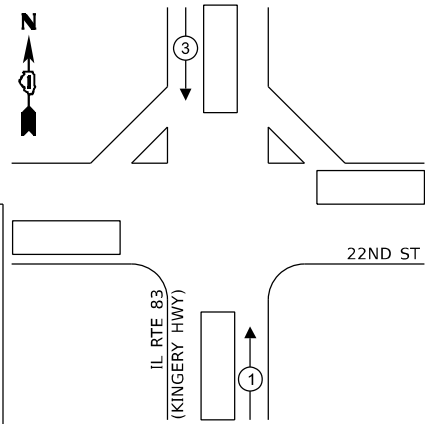
RIGHT TURN OVERLAP PHASE DESIGNATION:

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

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

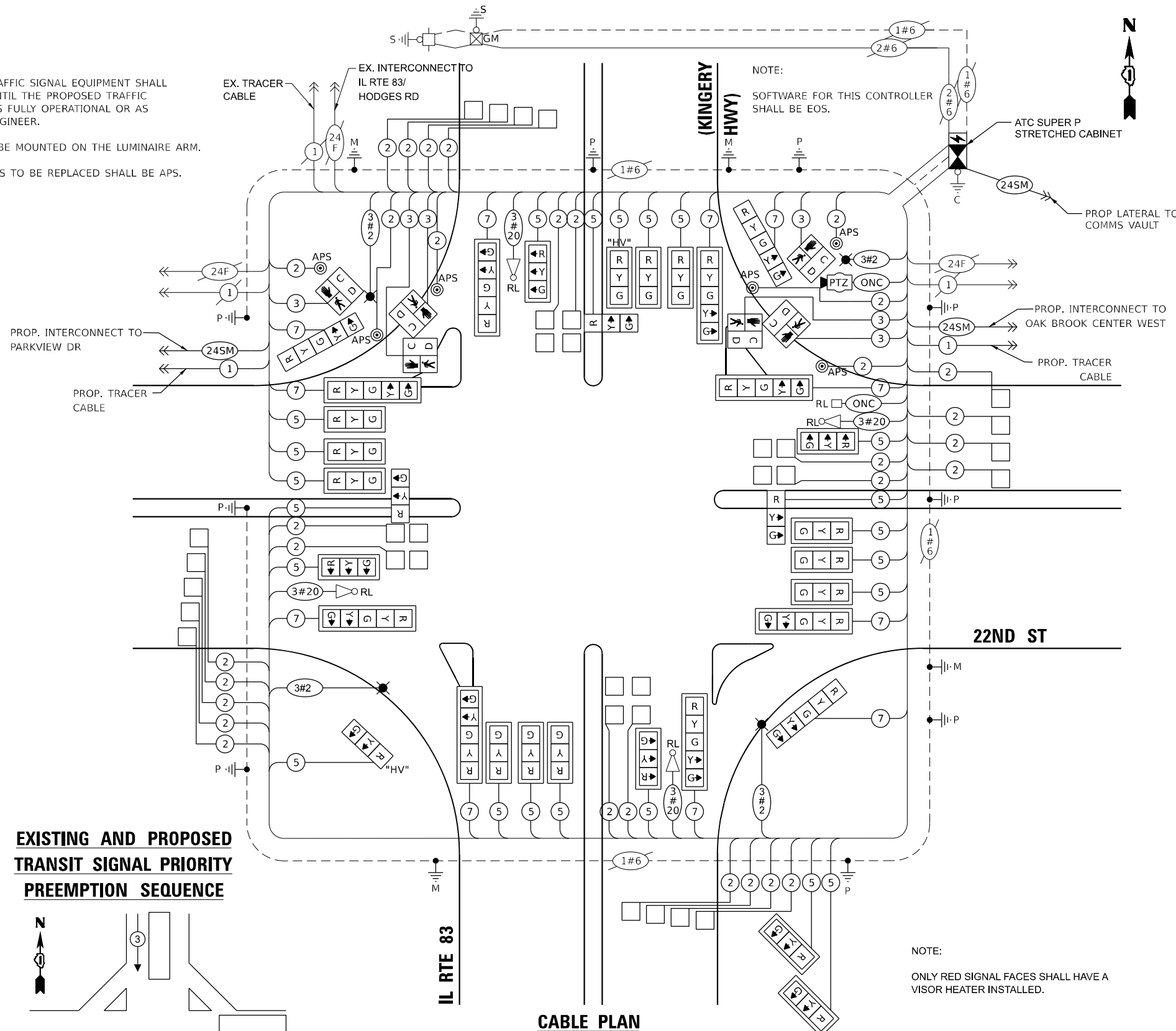


EXISTING AND PROPOSED TRANSIT SIGNAL PRIORITY PREEMPTION SEQUENCE



NOTES:

- THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- PTZ CAMERA TO BE MOUNTED ON THE LUMINAIRE ARM.
- ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.



CABLE PLAN
(NOT TO SCALE)

NOTE:
ONLY RED SIGNAL FACES SHALL HAVE A VISOR HEATER INSTALLED.

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	22	11	242
4-SECTION	-	14	-
5-SECTION	11	13	143
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	2	35	70
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING		720	
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	4	240	960
TOTAL SERVICE WIRE SIZING		2285	

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 W CENTER COURT
SCHAUMBURG, IL 60196

ENERGY SUPPLY:
PHONE: (866) 639-3532
COMPANY: COMED
ACCOUNT NUMBER: 385

TS SHT NO. 125

MODEL NAME: D:\ENR22-CR-TS125-CAB22ND ST IL RTE83.dwg
FILE NAME: D:\ENR22-CR-TS125-CAB22ND ST IL RTE83.dwg

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = shassan
DESIGNED - JR
DRAWN - SR
PLOT SCALE = \$SCALE\$
CHECKED - JR
PLOT DATE = 2/23/2024

REVISOR -
REVISION -
REVISOR -
REVISION -
DATE - 07/14/2023

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
22ND STREET AND IL ROUTE 83 (KINGERY HWY)

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	296

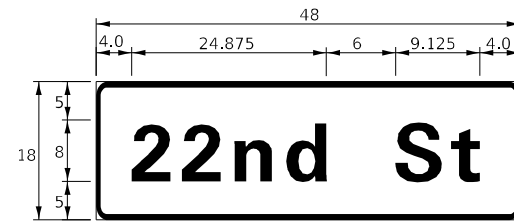
CONTRACT NO. 62N32
ILLINOIS FED. AID PROJECT

TS 550
IDOT CENTRACS
FORMER ECON 35
PACE TSP

SIGN PANEL – TYPE 1 OR TYPE 2



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



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	1	ZZ	2

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

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	76.5
SIGN PANEL - TYPE 2	SQ FT	30
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1293
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	440
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1113
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1018
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2452
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	7896
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3284
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	10110
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	3033
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	7
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 54 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 60 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 24 FT. AND 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 24 FT. AND 64 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	28
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	32
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	44
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	18
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	20
INDUCTIVE LOOP DETECTOR	EACH	25
DETECTOR LOOP, TYPE I	FOOT	512
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING DOUBLE HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1399
OUTDOOR RATED NETWORK CABLE	FOOT	124
ADVANCED TRANSPORTATION CONTROLLER AND TYPE SUPER P STRETCHED CABINET (SPECIAL)	EACH	1
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	1
LED SIGNAL FACE VISOR HEATER	EACH	33
LAYER III (NETWORK) SWITCH	EACH	1
UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A, 12-INCH DIAMETER	FOOT	4
RELOCATE EXISTING LIGHTING CONTROLLER	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 48 PORT	EACH	1
RELOCATE EXISTING LUMINAIRE	EACH	4

TS SHT NO. 126

MODEL: 4140BELNAMES
FILE NAME: D:\ENR22-ar-TS126-STR22ND ST_IL_RTB83.dgn



USER NAME = shassan	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAST ARM MOUNTED STREET NAME SIGNS AND
SCHEDULE OF QUANTITIES
22ND STREET AND IL ROUTE 83 (KINGERY HWY)**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	297
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

**TS 550
IDOT CENTRACS
FORMER ECON 35**

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 STEEL MAST ARM ASSEMBLY AND POLE
- 2 EACH SIGNAL POST
- 10 EACH SIGNAL HEAD, 3-SECTION
- 5 EACH PEDESTRIAN PUSHBUTTON

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

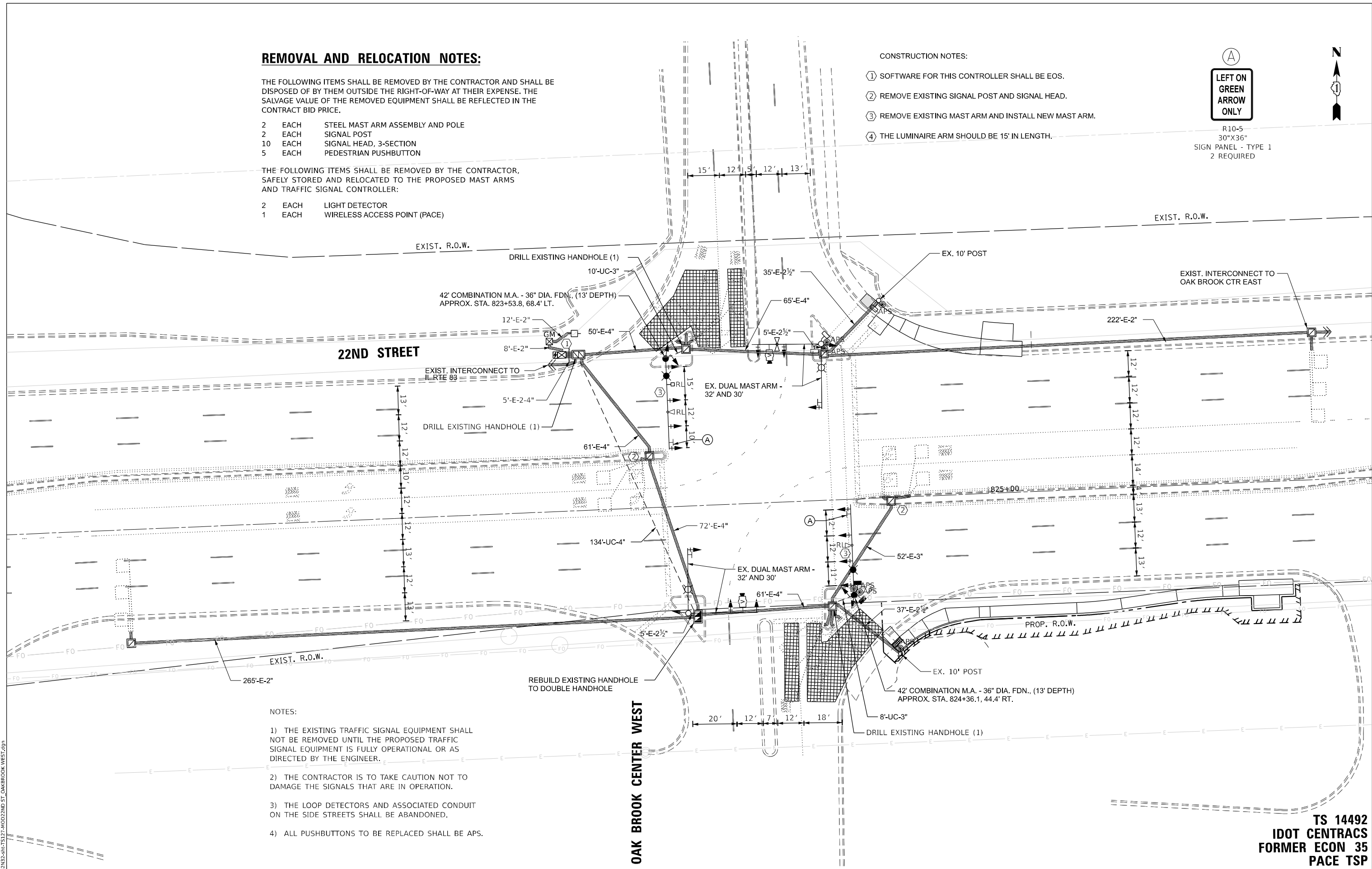
- 2 EACH LIGHT DETECTOR
- 1 EACH WIRELESS ACCESS POINT (PACE)

CONSTRUCTION NOTES:

- ① SOFTWARE FOR THIS CONTROLLER SHALL BE EOS.
- ② REMOVE EXISTING SIGNAL POST AND SIGNAL HEAD.
- ③ REMOVE EXISTING MAST ARM AND INSTALL NEW MAST ARM.
- ④ THE LUMINAIRE ARM SHOULD BE 15' IN LENGTH.



R10-5
30"X36"
SIGN PANEL - TYPE 1
2 REQUIRED



NOTES:

- 1) THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR IS TO TAKE CAUTION NOT TO DAMAGE THE SIGNALS THAT ARE IN OPERATION.
- 3) THE LOOP DETECTORS AND ASSOCIATED CONDUIT ON THE SIDE STREETS SHALL BE ABANDONED.
- 4) ALL PUSHBUTTONS TO BE REPLACED SHALL BE APS.

TS SHT NO. 127

MODEL NAME: D:\BEN22-ARC-TS127-1\00222ND ST OAKBROOK WEST.dgn

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60516

USER NAME = msomer	DESIGNED - JR	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - SR	REVISED -
PLOT DATE = 2/23/2024	CHECKED - JR	REVISED -
	DATE - 07/14/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
22ND STREET AND OAKBROOK CENTER WEST

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	298
CONTRACT NO. 62N32				
ILLINOIS FED. AID PROJECT				

TS 14492
IDOT CENTRACS
FORMER ECON 35
PACE TS



USER NAME = shassan	DESIGNED - JR	REVISED -
	DRAWN - SR	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JR	REVISED -
PLOT DATE = 2/23/2024	DATE - 07/14/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
22ND STREET AND OAKBROOK CENTER WEST**

SCALE: NTS SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	2020-265-SUR, SW & TS	DUPAGE	462	300
			CONTRACT NO. 62N32	
		ILLINOIS FED. AID PROJECT		

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 1	SQ FT	15
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	18
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	134
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	664
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	520
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2052
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	799
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	289
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	12
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	424
LAYER II (DATA LINK) SWITCH	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
LED SIGNAL FACE VISOR HEATER	EACH	20
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
LED PEDESTRIAN SIGNAL MODULE REPLACEMENT	EACH	4
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
CENTRACS LICENSE EXPANSION	EACH	1
FIBER OPTIC INTERCONNECT CENTER, 24 PORT	EACH	1
RELOCATE EXISTING LUMINAIRE	EACH	2

**TS 14492
IDOT CENTRACS
FORMER ECON 35
PACE TSP**