

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------|---------|----------|--------------------|--------------|
| 785 | 132-4TS | MADISON | 11 | 1 |
| | | ILLINOIS | CONTRACT NO. 76T77 | |

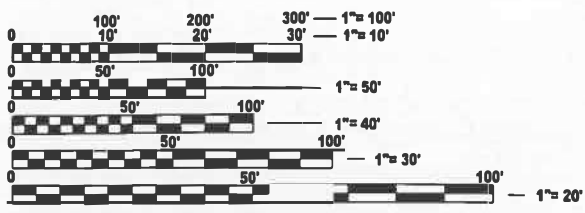
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED
HIGHWAY PLANS

FAP ROUTE 785 (IL 111-140)
SECTION 132-4TS

TRAFFIC SIGNAL REPLACEMENT
MADISON COUNTY

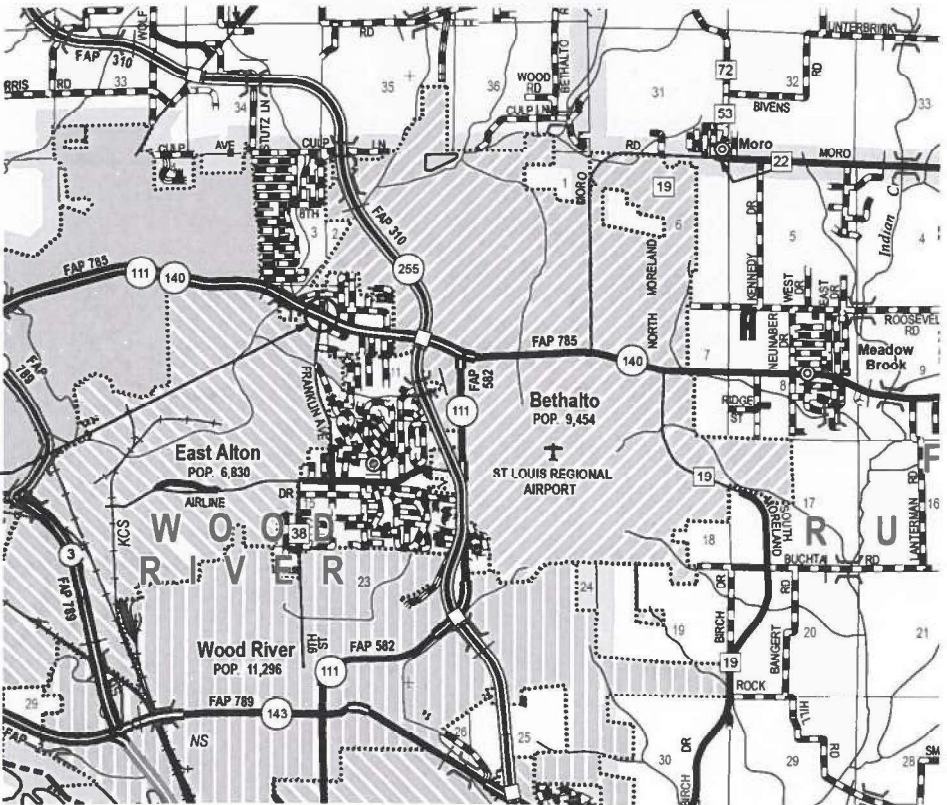
C-98-113-24



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

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

SITE LOCATION
N: 815,078.031
E: 2,321,389.536
LAT: 38.905092°
LONG: -90.079512°



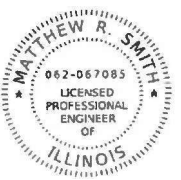
PROJECT ENGINEER CHERYL KEPLAR
PROJECT MANAGER RICHARD BARBEE

CONTRACT NO. 76T77

FUHRMANN
ENGINEERING
WWW.FUHRMANN-ENG.COM

PLANS PREPARED BY
1022 Eastport Plaza Drive
Collinsville, Illinois 62234
Phone: (618) 855-8000
Illinois Professional Design Firm
No. 184-003252
License Expires 4/30/2026

GROSS LENGTH = 708.00 FT. = 0.134 MILE
NET LENGTH = 708.00 FT. = 0.134 MILE



XX/XX/XXXX

License Expires 11/30/2025

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Mar. 12, 2025

[Signature]
REGIONAL ENGINEER

May 9, 2025
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2025
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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| 5 | REMOVAL PLAN |
| 6-9 | TRAFFIC SIGNAL DETAILS |
| 10-11 | SOIL BORINGS |

HIGHWAY STANDARDS

| | |
|-----------|--|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE |
| 701101-05 | OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION |
| 701901-10 | TRAFFIC CONTROL DEVICES |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720016-04 | MAST ARM MOUNTED STREET NAME SIGNS |
| 805001-01 | ELECTRICAL SERVICE INSTALLATION DETAILS |
| 814001-03 | HANDHOLES |
| 814006-03 | DOUBLE HANDHOLES |
| 838001-01 | BREAKAWAY DEVICES |
| 857001-01 | STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES |
| 873001-02 | TRAFFIC SIGNAL GROUNDING & BONDING |
| 877001-08 | STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55' |
| 878001-11 | CONCRETE FOUNDATION DETAILS |
| 880006-01 | TRAFFIC SIGNAL MOUNTING DETAILS |
| 886001-01 | DETECTOR LOOP INSTALLATIONS |
| 886006-01 | TYPICAL LAYOUTS FOR DETECTION LOOPS |

GENERAL NOTES

- 1 UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:
- | | | |
|------------------------|--------------|--------------|
| UTILITY | ABOVE GROUND | BELOW GROUND |
| AMEREN | X | |
| AT&T | X | |
| CHARTER COMMUNICATIONS | X | |
| VILLAGE OF BETHALTO | | X |
- 2 EXISTING UTILITIES ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION OBTAINED FROM THE LOCAL AGENCIES, OWNERS, AND FIELD SURVEYS. THE ACCURACY AND COMPLETENESS OF SAID INFORMATION IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE, NATURE AND EXACT LOCATIONS OF ALL UTILITY LINES AND APPURTENANCES WITH THE LIMITS OF IMPROVEMENTS.
- 3 THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUBCONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
- 4 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 5 ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DIPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY. ACCORDING TO THE ARTICLE 202.30 OF THE STANDARD SPECIFICATION AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE COSTS OF THE UNDERGROUND CONDUIT.
- 6 ALL ELEVATIONS REFER TO THE USGS MEAN SEA LEVEL DATUM.
- 7 ALL TURF AREAS DISTURBED BY THE CONTRACTOR SHALL BE SEEDED AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- 8 THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR ELECTRICAL CABLES ASSOCIATED WITH TRAFFIC SIGNALS WITHIN THE PROJECT LIMITS. IF ANY OF THESE EXIST WITHIN TH EPROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ATRICLE 109.04 OF THE STANDARD SPECIFICATIONS.

COMMITMENTS

NONE

REV - MS

MODEL: General Notes Sheet
FILE NAME: G:\FE\pds\ 2020\20-1686 PTB 197-4\ VARIOUS PH 1 & 11 D8 - FEI PRIME TEAMING IN\LEADAIR, LLC\WO-05\CADD\CADD Sheets\08\6177-sht-General Notes.dgn

| | | | | | | | | | | | |
|---|------------------------------|--------------------|-----------|---|---|-----------------------------|---------|---------|--------|--------------|-----------|
|  <div><div>FUHRMANN</div><div>ENGINEERING</div><div>WWW.FUHRMANN-ENG.COM</div></div> | USER NAME = ggayt | DESIGNED = SRH | REVISED = | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | GENERAL NOTES F.A.P. 785 (IL 111/149) FRANKLIN AVE/THELMA AVE. | F.A.P RTE. | | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | DRAWN = | REVISED = | | | 785 | 132-4TS | MADISON | 11 | 2 | |
| | PLOT SCALE = 0.188888' / in. | CHECKED = BDS | REVISED = | | | CONTRACT NO. 76177 | | | | | |
| | PLOT DATE = 1/23/2025 | DATE = | REVISED = | | | ILLINOIS FED. AID PROJECT | | | | | |
| SCALE: | | SHEET OF 11 SHEETS | | | | STA. TO STA. | | | | | |

MODEL: SQO.1
FILE NAME: G:\FEI\06a\ 202020-1686 PTB 197-4\ VARIOUS PH I & II D8 - FEI PRIME TEAMING IN\LEADAIR, LLC\WO-05\CADD\CADD Sheets\0876777-sh-SQO.dgn

| SUMMARY OF QUANTITIES | | | | CONSTRUCTION CODE |
|-----------------------|---|--------|-------|-------------------|
| | | | | 100% STATE |
| CODE NO | ITEM | UNIT | TOTAL | TRAFFIC SIGNALS |
| | | | | 0021 |
| | | | | URBAN |
| | | | | |
| | | | | |
| 40200800 | AGGREGATE SURFACE COURSE, TYPE B | TON | 38 | 38 |
| | | | | |
| * 66900200 | NON-SPECIAL WASTE DISPOSAL | CU YD | 583 | 583 |
| | | | | |
| * 66900530 | SOIL DISPOSAL ANALYSIS | EACH | 1 | 1 |
| | | | | |
| * 66901001 | REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN | L SUM | 1 | 1 |
| | | | | |
| * 66901003 | REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT | L SUM | 1 | 1 |
| | | | | |
| * 66901006 | REGULATED SUBSTANCES MONITORING | CAL DA | 4 | 4 |
| | | | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 |
| | | | | |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 |
| | | | | |
| * 72000100 | SIGN PANEL - TYPE 1 | SQ FT | 15 | 15 |
| | | | | |
| * 72000200 | SIGN PANEL - TYPE 2 | SQ FT | 20 | 20 |
| | | | | |
| * 72400310 | REMOVE SIGN PANEL - TYPE 1 | SQ FT | 18 | 18 |
| | | | | |
| * 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 195 | 195 |
| | | | | |
| 78300201 | PAVEMENT MARKING REMOVAL - GRINDING | SQ FT | 390 | 390 |
| | | | | |
| 80500100 | SERVICE INSTALLATION, TYPE A | EACH | 1 | 1 |
| | | | | |

*SPECIALTY ITEM

* SPECIALTY ITEM

| SUMMARY OF QUANTITIES | | | | CONSTRUCTION CODE |
|-----------------------|---|------|-------|-------------------|
| | | | | 100% STATE |
| CODE NO | ITEM | UNIT | TOTAL | TRAFFIC SIGNALS |
| | | | | 0021 |
| | | | | URBAN |
| | | | | |
| | | | | |
| 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FOOT | 549 | 549 |
| | | | | |
| 81028240 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FOOT | 206 | 206 |
| | | | | |
| 81028250 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 5" DIA. | FOOT | 126 | 126 |
| | | | | |
| 81028330 | UNDERGROUND CONDUIT, PVC, 1 1/4" DIA. | FOOT | 201 | 201 |
| | | | | |
| 81028350 | UNDERGROUND CONDUIT, PVC, 2" DIA. | FOOT | 89 | 89 |
| | | | | |
| 81028370 | UNDERGROUND CONDUIT, PVC, 3" DIA. | FOOT | 48 | 48 |
| | | | | |
| 81028400 | UNDERGROUND CONDUIT, PVC, 5" DIA. | FOOT | 8 | 8 |
| | | | | |
| 81400100 | HANDHOLE | EACH | 7 | 7 |
| | | | | |
| 81400300 | DOUBLE HANDHOLE | EACH | 1 | 1 |
| | | | | |
| 84500120 | REMOVAL OF ELECTRIC SERVICE INSTALLATION | EACH | 1 | 1 |
| | | | | |
| 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 | 1 |
| | | | | |
| 85700200 | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET | EACH | 1 | 1 |
| | | | | |
| 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 1885 | 1885 |
| | | | | |
| 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 1576 | 1576 |
| | | | | |

REV - MS



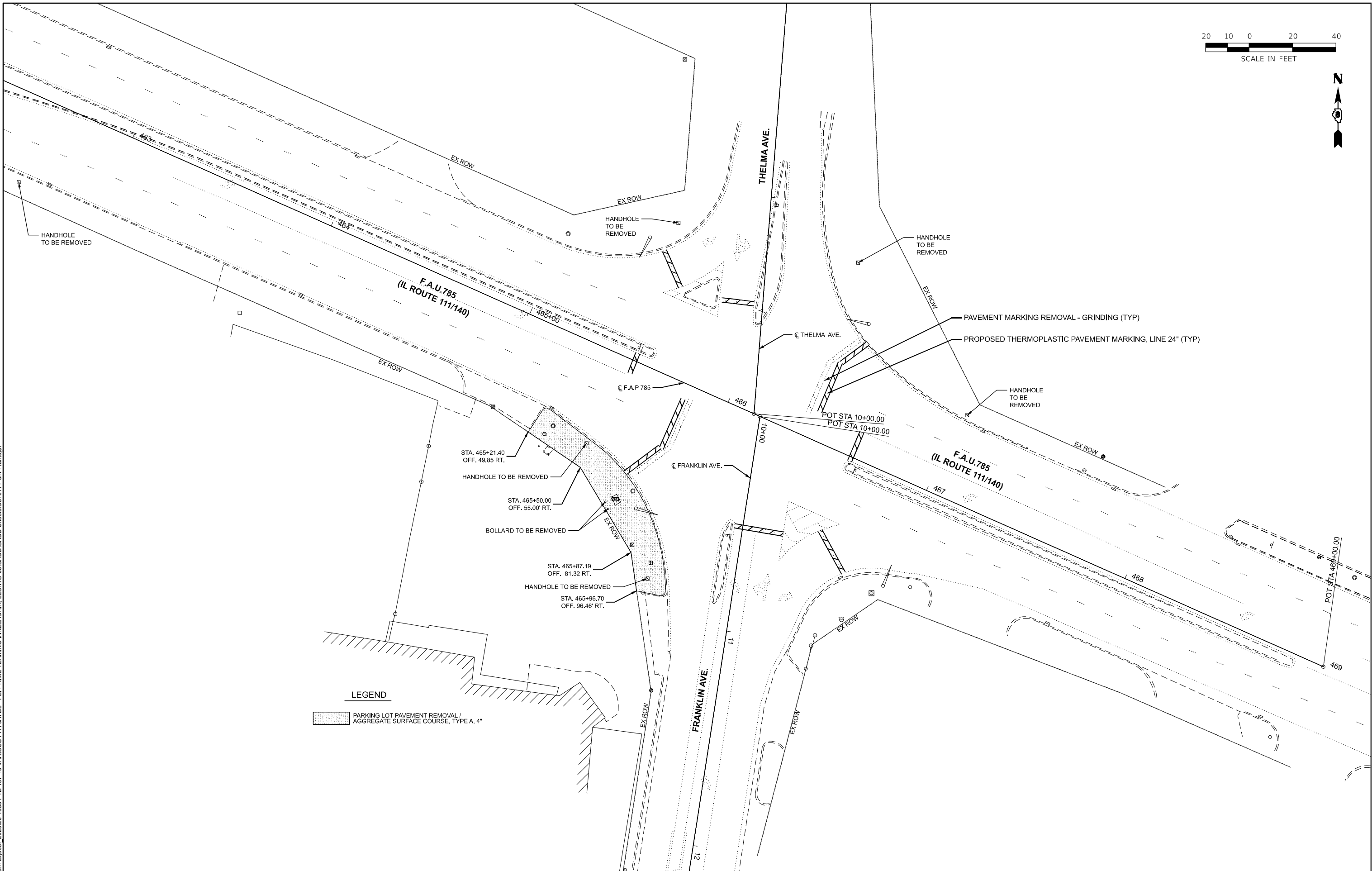
| | | |
|------------------------------|----------------|-----------|
| USER NAME = ggayt | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.166666' / in. | CHECKED - BDS | REVISED - |
| PLOT DATE = 2/5/2025 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
F.A.P. 785 (IL 111 / 140) & FRANKLIN AVE / THELMA AVE.

SCALE: SHEET OF 11 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 785 | 132-4TS | MADISON | 11 | 3 |
| CONTRACT NO. 76T77 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



LEGEND

PARKING LOT PAVEMENT REMOVAL / AGGREGATE SURFACE COURSE, TYPE A, 4"

MODEL: Plan
FILE NAME: C:\FEI\jobs\2020\20-1686 PTB 197-40 VARIOUS PH I & II D8 - FEI PRIME TEAMING IN\LEAD\AIR.LLC\WO-05\CADD\CADD Sheets\0876777-sht-Plan.dgn



| | | |
|--------------------------------|----------------|-----------|
| USER NAME = msmith | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.16666633" / in. | CHECKED - BDS | REVISED - |
| PLOT DATE = 2/10/2025 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
F.A.P. 785 (IL 111/140) FRANKLIN AVE./THELMA AVE.

SCALE: SHEET OF 11 SHEETS STA. TO STA.


| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| 785 | 132-4TS | MADISON | 11 | 5 |
| CONTRACT NO. 76T77 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |


TRAFFIC SIGNAL LEGEND


- RREC


REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT
- PVCC


POLYVINYL CHLORIDE CONDUIT
- GSC


GALVANIZED STEEL CONDUIT
- 


EXISTING TRAFFIC SIGNAL MAST ARM
- 

EXISTING HANDHOLE
- 


EXISTING DOUBLE HANDHOLE
- 


EXISTING DETECTOR LOOP
- 


EXISTING CONTROLLER
- 


EXISTING STREET NAME SIGN/TRAFFIC SIGN
- 

EXISTING SERVICE INSTALLATION
-

EXISTING CONDUIT
- 

PROPOSED TRAFFIC SIGNAL MAST ARM
- 

PROPOSED HANDHOLE
- 

PROPOSED DOUBLE HANDHOLE
- 

PROPOSED DETECTOR LOOP
-

PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR FAP 785 (ILLINOIS 111/140) AND THELMA AVENUE / FRANKLIN AVENUE

| LOOP | PHASE (Ø) | LOOP SIZE (FT) | REQUIRED # OF TURNS | CALCULATED INDUCTANCE MICROHENRIES (µH) | CALCULATED RESISTANCE OHMS (Ω) |
|-------------------|-----------|----------------|---------------------|---|--------------------------------|
| 1. WB LT CD A | 1 | 6'X50'(Q) | 3-6-3 | 864.1 | 3.37 |
| 2. WB THRU CD A | 6 | 6'X50'(Q) | 3-6-3 | 861.5 | 3.31 |
| 3. WB THRU CD B | 6 | 6'X50'(Q) | 3-6-3 | 859.3 | 3.26 |
| 4. WB THRU CCO A | 6 | 6'X6' | 7 | 503.8 | 3.66 |
| 5. WB THRU CCO B | 6 | 6'X6' | 7 | 501.1 | 3.49 |
| - | | | | | |
| 6. EB LT CD A | 5 | 6'X50'(Q) | 3-6-3 | 806.2 | 2.05 |
| 7. EB THRU CD A | 2 | 6'X50'(Q) | 3-6-3 | 804.0 | 2.00 |
| 8. EB THRU CD B | 2 | 6'X50'(Q) | 3-6-3 | 800.7 | 1.93 |
| 9. EB THRU CCO A | 2 | 6'X6' | 5 | 247.7 | 2.10 |
| 10. EB THRU CCO B | 2 | 6'X6' | 5 | 244.9 | 2.03 |
| - | | | | | |
| 11. SB THRU CD A | 4 | 6'X50'(Q) | 3-6-3 | 827.4 | 2.53 |
| 12. SB RT CD A | 4 | 6'X40'(Q) | 3-6-3 | 674.7 | 2.17 |
| - | | | | | |
| 13. NB LT CD A | 8 | 6'X50'(Q) | 3-6-3 | 832.9 | 2.66 |
| 14. NB THRU CD A | 8 | 6'X50'(Q) | 3-6-3 | 829.8 | 2.59 |
| 15. NB RT CD A | 8 | 6'X40'(Q) | 3-6-3 | 675.4 | 2.19 |

ELECTRICAL GENERAL NOTES

1. ALL VEHICLE SIGNAL HEADS SHALL BE POLYCARBONATE AND HAVE 12" L.E.D. SECTIONS. ALL MOUNTING HARDWARE, SIGNAL POSTS, AND BASES SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-FREEZE PASTE COMPOUND SHALL BE BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
2. ALL MAST ARM MOUNTED SIGNAL HEADS SHALL HAVE BACKPLATES. BACKPLATES SHALL BE PLASTIC WITH YELLOW.
3. THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF THE SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE. ALL OF THE MAST ARMS SHALL BE GALVANIZED.
4. ALL TRAFFIC CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON FORK TONGUE CONNECTORS.
5. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
6. ALL HANDHOLES SHALL BE CAST-IN-PLACE PORTLAND CEMENT CONCRETE (PER ARTICLE 873.03(B)). THE CAST IN PLACE LEGEND IN THE COVER SHALL BE "TRAFFIC SIGNALS". SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
7. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONANT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATION. THE DEPARTMENT IS NOT A MEMBER OF JULIE AND DOES NOT LOCATE ITS OWN FACILITIES (SUCH AS UNDERGROUND CONTUIT AND/OR CABLE FOR TRAFFIC SIGNALS OR HIGHWAY LIGHTING). THE APPLICANT, AT HIS/HER OWN EXPENSE, MUST OBTAIN THE SERVICES OF A QUALIFIED ELECTRICAL CONTRACTOR TO LOCATE SUCH STATE-OWNED FACILITIES.
8. CABLE MARKING TAPE SHALL BE INCLUDED WITH THE PAY ITEM "UNDERGROUND CONDUIT" AND INSTALLED PER ARTICLE 810.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
9. A 1/4" NYLON PULL ROPE SHALL BE FURNISHED AND INSTALLED IN ALL SIGNAL CONDUITS, THIS WORK SHALL BE INCLUDED WITH THE CONDUIT PAY ITEM.

MODEL: TS01
FILE NAME: G:\FEI\jobs\ 2020\20-1686 PTB 197-40 VARIOUS PH I & II D8--FEI PRIME TEAMING IN\LEAD\AIR_LLC\WO-05\CADD\CADD Sheets\B87677-shit-TS01.dgn



FUHRMANN

ENGINEERING

WWW.FUHRMANN-ENG.COM

| | | |
|------------------------------|----------------|-----------|
| USER NAME = ggayt | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.166666' / in. | CHECKED - BDS | REVISED - |
| PLOT DATE = 1/22/2025 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL DETAILS

F.A.P. (IL ROUTE 111/140) & THELMA AVE./FRANKLIN AVE.

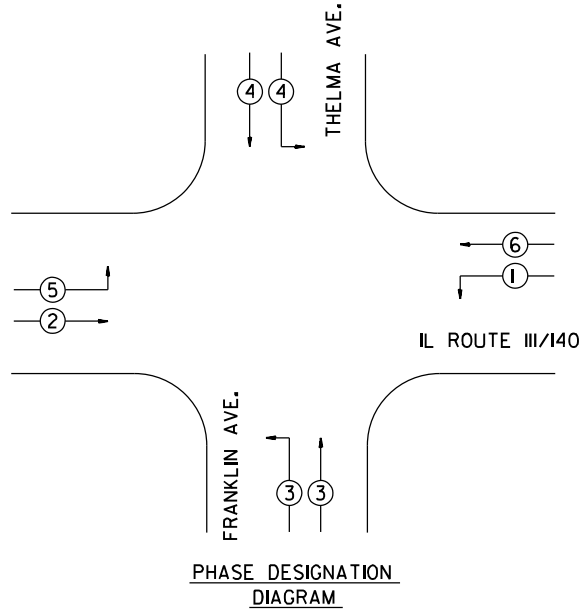
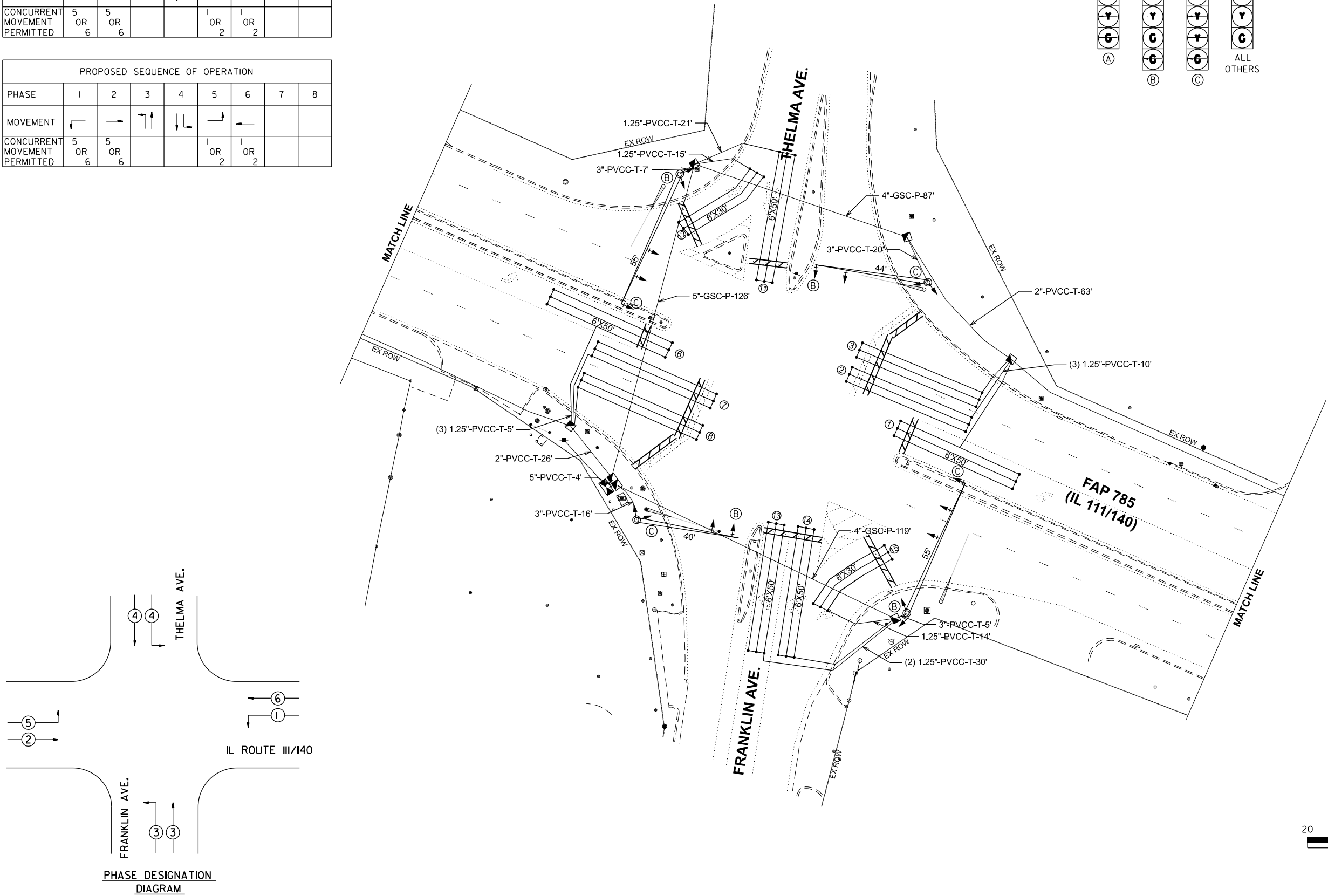
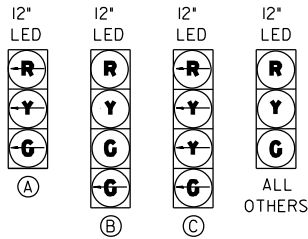
SCALE: SHEET OF 11 SHEETS STA. TO STA.

| F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| 785 | 132-4TS | MADISON | 11 | 6 |
| CONTRACT NO. 76T77 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

| EXISTING SEQUENCE OF OPERATION | | | | | | | | |
|--------------------------------|--------|--------|---|---|--------|--------|---|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| MOVEMENT | | | | | | | | |
| CONCURRENT MOVEMENT PERMITTED | 5 OR 6 | 5 OR 6 | | | 1 OR 2 | 1 OR 2 | | |

| PROPOSED SEQUENCE OF OPERATION | | | | | | | | |
|--------------------------------|--------|--------|---|---|--------|--------|---|---|
| PHASE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| MOVEMENT | | | | | | | | |
| CONCURRENT MOVEMENT PERMITTED | 5 OR 6 | 5 OR 6 | | | 1 OR 2 | 1 OR 2 | | |

TRAFFIC SIGNAL FACES



MODEL: Signal Plan
FILE NAME: C:\FEI\jobs\2020\20-1686 PTB 197-40 VARIOUS PH 1 & 11 D8 - FEI PRIME TEAMING\IN\LEAD\AIR, LLC\WO-05\CADD\CADD Sheets\B87677-sht-TS02.dgn



| | |
|------------|---------------------|
| USER NAME | = msmith |
| PLOT SCALE | = 0.16666633" / in. |
| PLOT DATE | = 2/10/2025 |

| | |
|----------|-------|
| DESIGNED | - SRH |
| DRAWN | - |
| CHECKED | - BDS |
| DATE | - |

| | |
|---------|---|
| REVISED | - |
| REVISED | - |
| REVISED | - |
| REVISED | - |

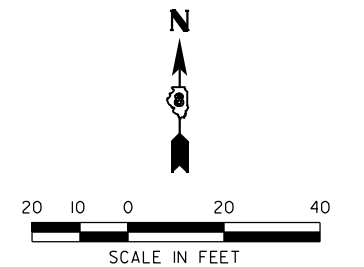
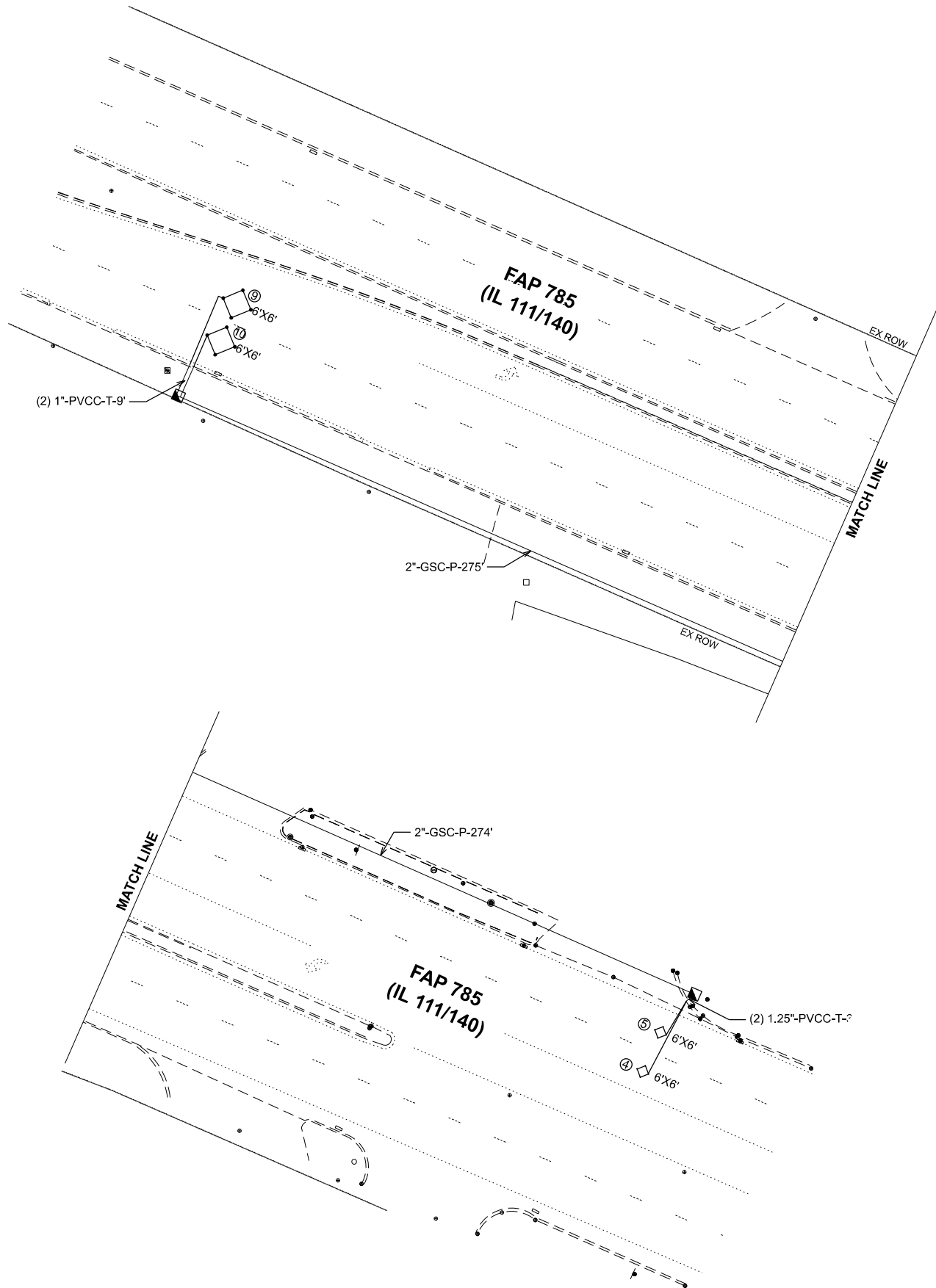
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLANS
F.A.P. 785 (IL 111/143) FRANKLIN AVE./THELMA AVE.

SCALE: 1"=20' SHEET OF 11 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| 785 | 132-4TS | MADISON | 11 | 7 |
| CONTRACT NO. 76177 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Signal Plan 2
FILE NAME: C:\FEIjobs\202020-1686 PTB 197-40 VARIOUS PH I & II D8 - FEI PRIME TEAMING\IN\LEAD\AIR, LLC\WO-05\CADD\CADD Sheets\B87677-sht-TS02.dgn

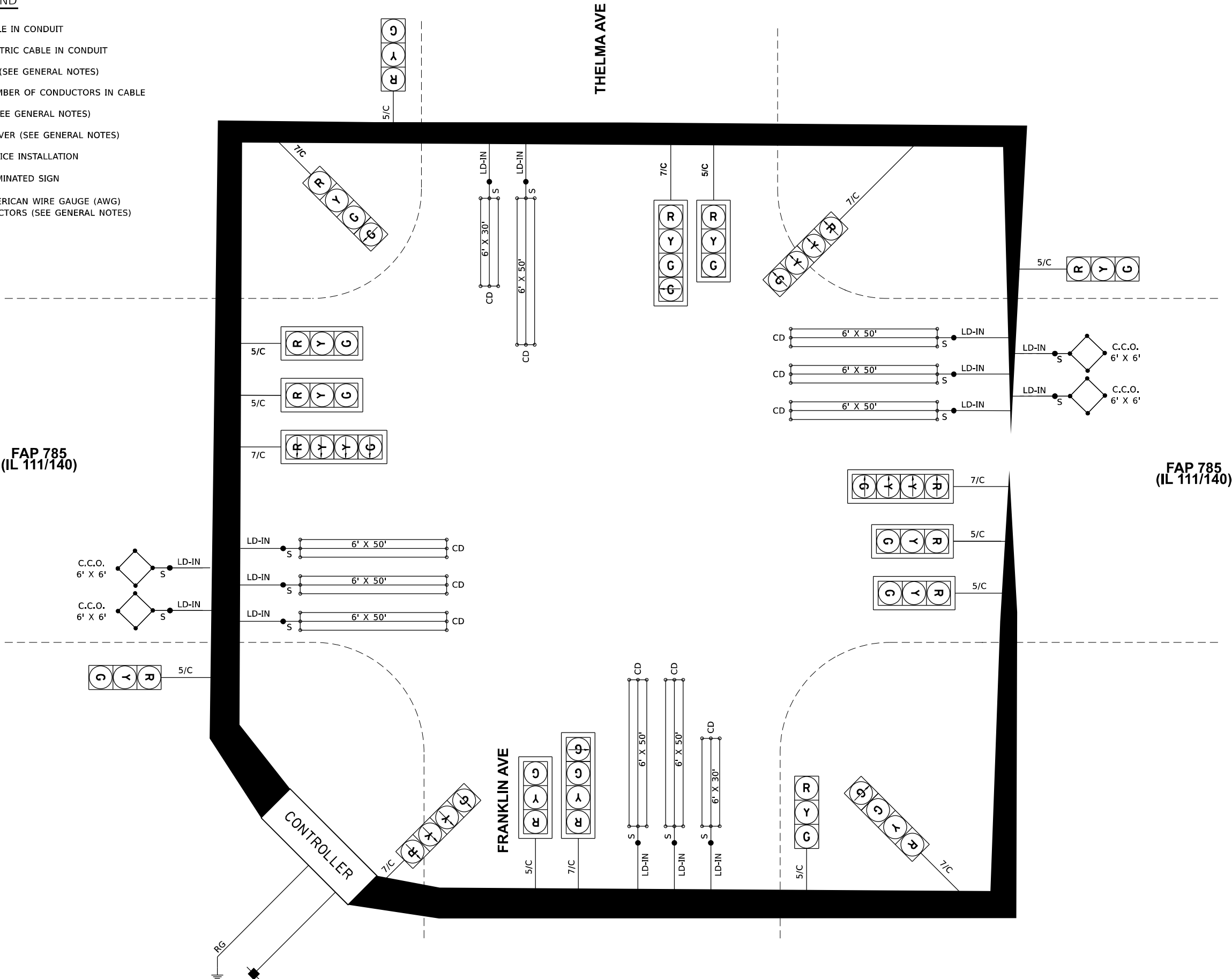


| | | |
|--------------------------------|----------------|-----------|
| USER NAME = msmith | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.16666633" / ft. | CHECKED - BDS | REVISED - |
| PLOT DATE = 2/10/2025 | DATE - | REVISED - |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| 785 | 132-4TS | MADISON | 11 | 8 |
| CONTRACT NO. 76T77 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

CABLE DIAGRAM LEGEND

- ELECTRIC CABLE IN CONDUIT
- EXISTING ELECTRIC CABLE IN CONDUIT
- CABLE SPLICE (SEE GENERAL NOTES)
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- CD CALL DELAY (SEE GENERAL NOTES)
- CCO CALL CARRY OVER (SEE GENERAL NOTES)
- EXISTING SERVICE INSTALLATION
- EXISTING ILLUMINATED SIGN
- #6 INDICATES AMERICAN WIRE GAUGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)



FAP 785
(IL 111/140)

FAP 785
(IL 111/140)

MODEL: Cable Diagram
FILE NAME: G:\FEIjobs\ 2020\20-1686 PTB 197-40 VARIOUS PH I & II D8 - FEI PRIME TEAMING IN\LEAD\AIR, LLO\WO-05\CADD\CADD Sheets\B87677-sht-TS04.dgn



| | | |
|--------------------------------|----------------|-----------|
| USER NAME = ggayt | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.16666633" / in. | CHECKED - BDS | REVISED - |
| PLOT DATE = 2/5/2025 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL DETAILS
F.A.P. (IL ROUTE 111/140) & FRANKLIN AVE./THELMA AVE.

SCALE: NTS SHEET OF 11 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| 785 | 132-4TS | MADISON | 11 | 9 |
| CONTRACT NO. 76T77 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Page 1 of 1

Date 5/23/88

| ROUTE | FAP 785 | DESCRIPTION | LOGGED BY |
|-------|---------|---|------------|
| | | Traffic Signals at IL 111/140 and Franklin/Thelma in Cottage Hills | Larry Ford |

SECTION 132-4TS-1 **LOCATION** NE 1/4, SEC. 10, TWP. 5N, RNG. 9W, 3 PM

| | | | | |
|--------|---------|-----------------|------------|-------------|
| COUNTY | Madison | DRILLING METHOD | Hand Auger | HAMMER TYPE |
|--------|---------|-----------------|------------|-------------|

[illegible]

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



Page 1 of 1

Date 5/23/88

| ROUTE | FAP 785 | DESCRIPTION | LOGGED BY |
|-------|---------|---|------------|
| | | Traffic Signals at IL 111/140 and Franklin/Thelma in Cottage Hills | Larry Ford |

SECTION 132-4TS-1 LOCATION NE 1/4, SEC. 10, TWP. 5N, RNG. 9W, 3 PM

| | | | | |
|--------|---------|-----------------|------------|-------------|
| COUNTY | Madison | DRILLING METHOD | Hand Auger | HAMMER TYPE |
|--------|---------|-----------------|------------|-------------|

| STRUCT. NO. | | D | B | U | M | |
|---------------------------------|---------------|------|-------|-------|----|--|
| Station | | E | L | C | O | |
| | | P | O | S | I | |
| | | T | W | Qu | S | |
| | | H | S | (tsf) | T | |
| | | (ft) | (/6") | (%) | | |
| BORING NO. | 2 SE Quad | | | | | |
| Station | 466+93 | | | | | |
| Offset | 56.00ft Right | | | | | |
| Ground Surface Elev. | 496.9 ft | | | | | |
| LIMESTONE Rock | 496.4 | | | NC | | |
| | | | | 1.0 | 13 | |
| Brown and Gray SILT | | | | 1.0 | 23 | |
| | 494.9 | | | | | |
| | | | | 2.0 | 24 | |
| Brown and Gray Silty CLAY | | | | 2.0 | 25 | |
| | | | | 1.3 | 24 | |
| | -5 | | | 1.2 | 25 | |
| | | | | 1.0 | 27 | |
| | | | | 1.0 | 24 | |
| | | | | 0.7 | 19 | |
| | | | | 0.5 | 25 | |
| | -10 | | | 0.5 | 26 | |
| | | | | 0.7 | 25 | |
| | 484.9 | | | | | |
| END OF HAND AUGER | | | | | | |
| Pocket Penetrometer used for Qu | | | | | | |
| | -15 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | -20 | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



| | | |
|--------------------------------|----------------|-----------|
| USER NAME = bschm | DESIGNED - SRH | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 0.16666633' / in. | CHECKED - BDS | REVISED - |
| PLOT DATE = 11/1/2024 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

| | | | | | | | | | |
|---------------------|-------|----|----|--------|---------------|---------------------------|---------|-----------------|--------------|
| SOIL BORINGS | | | | | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | | | 785 | 132-4TS | MADISON | 11 | 10 |
| SCALE: | SHEET | OF | 11 | SHEETS | STA. | TO STA. | | | |
| | | | | | | CONTRACT NO. 76T77 | | | |
| | | | | | | ILLINOIS FED. AID PROJECT | | | |



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Date 5/23/88

SECTION 132-4TS-1 LOCATION NE 1/4, SEC. 10, TWP. 5N, RNG. 9W, 3 PM

| | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|---|--|
| STRUCT. NO. _____ Station _____ | D E P T H | B L O W S | U C S Qu | M O I S T | Surface Water Elev. _____ ft | |
| | | | | | Stream Bed Elev. _____ ft | |
| BORING NO. 3 NE Quad Station 466+52 Offset 55.00 ft Left | | | | | Groundwater Elev.: _____ | |
| Ground Surface Elev. 495.4 ft (ft) (/6") (tsf) (%) | | | | | First Encounter 481.9 ft ▼ Upon Completion _____ ft After Hrs. _____ ft | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)



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Date 5/23/88

SECTION 132-4TS-1 LOCATION NE 1/4, SEC. 10, TWP. 5N, RNG. 9W, 3 PM

| | | | | | | | |
|----------------------------|-----------------------|-----------------------|-------------|-----------------------|---------------------------|------------------|----|
| STRUCT. NO. _____ | D E P T H | B L O W S | U C S | M O I S T | Surface Water Elev. _____ | ft | |
| Station _____ | | | | | Stream Bed Elev. _____ | ft | |
| BORING NO. 4 NW Quad | | | | | Groundwater Elev.: _____ | | |
| Station 465+48 | | | | | First Encounter 479.1 | ft | |
| Offset 55.00ft Left | | | | | Upon Completion _____ | ft | |
| Ground Surface Elev. 493.1 | ft | (ft) | (/6") | (tsf) | (%) | After Hrs. _____ | ft |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)