FOR INDEX OF SHEETS, SEE SHEET 2
FOR LIST OF STATE STANDARDS, SEE SHEET 2

01-18-2019 LETTING ITEM 121

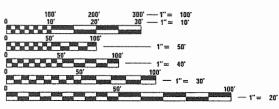
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

# PLANS FOR PROPOSED FEDERAL-AID HIGHWAY

FAU 2678A(YORK ROAD)
GRAND AVENUE TO GREEN STREET
RESURFACING
SECTION 18-00098-00-RS
PROJECT JZKB(780)
VILLAGE OF BENSENVILLE
DuPAGE COUNTY
C-91-204-18

#### TRAFFIC DATA

YORK ROAD (FAU 2678)
MAJOR COLLECTOR
TRAFFIC = 12,600 ADT (2016)
POSTED SPEED = 40 MPH
DESIGN SPEED = 40 MPH



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.



LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672.

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SITE STOOM

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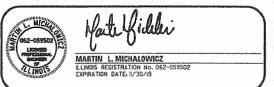
**LOCATION MAP** 

NET LENGTH = 8,443 FT. = 1.60 MILE

GROSS LENGTH = 8,443 FT. = 1.60 MILE

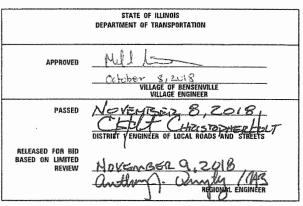
END IMPROVEMENTS GREEN STREET STA 106+00

BEGIN IMPROVEMENTS GRAND AVE STA 22+00



CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500
PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 04/30/19





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CONTRACT NO. 61F38

ENGINEER: CARMEN E. RAMOS, P.E., SCHAUMBURG, IL

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FEDERAL

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#### INDEX OF SHEETS

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| 17-34 | COVER SHEET GENERAL NOTES, INDEX OF SHEETS, INDEX OF STANDARDS SUMMARY OF QUANTITIES TYPICAL SECTIONS ALIGNMENT, TIES AND BENCHMARK PLAN ROADWAY PLANS RED OAK STREET DETAIL SIDEWALK RAMP DETAILS TRAFFIC SIGNAL PLANS VILLAGE & DISTRICT 1 DETAILS |
|       |  |

#### **HIGHWAY STANDARDS**

| <br>      |  |
|-----------|--|
| 000001-07 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                   |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS                              |
| 424001-11 | PERPENDICULAR CURB RAMPS                                       |
| 424016-05 |  |
| 424021-05 | DEPRESSED CORNER FOR SIDEWALKS                                 |
| 424026-03 | ENTRANCE / ALLEY PEDESTRIAN CROSSINGS                          |
| 604001-04 | FRAME AND LIDS TYPE 1  |
| 604051-04 | FRAME AND GRATE TYPE 11  |
|           | CONC. CURB TYPE B AND COMB. CONC CURB AND GUTTER               |
| 630001-12 | STEEL PLATE BEAM GUARDRAIL                                     |
| 630101-10 | STRONG POST GUARDRAIL ATTACHED TO CULVERT                      |
| 631011-10 | TRAFFIC BARRIER TERMINAL, TYPE 2                               |
| 701101-05 | OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE    |
| 701427-05 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER.,         |
|           | FOR SPEEDS <= 40 MPH   |
| 701602-10 | URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL TURN LANE |
| 701606-10 | URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN |
| 701611-01 | URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN   |
| 701701-10 | URBAN LANE CLOSURE, MULTILANE INTERSECTION                     |
| 701801-06 | SIDEWALK, CORNER OR CROSSWALK CLOSURE                          |
| 701901-08 |  |
| 720001-01 | SIGN PANEL MOUNTING DETAILS                                    |
| 720006-04 | SIGN PANEL ERECTION DETAILS                                    |
| 720011-01 | METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS                 |
| 725001-01 | OBJECT AND TERMINAL MARKERS                                    |
| 728001-01 |  |
| 729001-01 |  |
| 731001-01 |  |
| 780001-05 |  |
| 782006    | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS          |
| 814001-03 | HANDHOLES  |
| 814006-02 | DOUBLE HANDHOLES   |
| 857001-01 |  |
| 873001-02 |  |
|           | CONCRETE FOUNDATION DETAILS                                    |
|           | TRAFFIC SIGNAL MOUNTING DETAILS                                |
|           | DETECTOR LOOP INSTALLATIONS                                    |
| 886006-01 | TYPICAL LAYOUTS FOR DETECTION LOOPS                            |
|           |  |

#### GENERAL NOTES

#### SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2019; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JUNE 2014 SEVENTH EDITION; THE "ILLINOIS URBAN MANUAL " AND THE "ILLINOIS URBAN MANUAL FIELD MANUAL FOR INSPECTION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES"; THE "AMERICANS WITH DISABILITIES ACT OF 1990 ACCESSIBILITY GUIDELINES"; THE "ORAFT" REHABILITATION ACT OF 1973 (SECTION 504); THE "DETAILS" IN THE PLANS; AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

#### UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48 HOURS NOTIFICATION IS REQUIRED,)

WHENEVER DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS.

ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR.

THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS. CONTACT WATER DEPARTMENT FOR THEM TO TURN VALVES OR OPERATE HYDRANTS. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

#### STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE ENGINEER, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEFE LOCATIONS

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT.

#### MISCELLANEOUS

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

AGGREGATE BASE REPAIR, CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

RELOCATING EXISTING SIGNS: EXISTING SIGNS WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REINSTALLED UPON COMPLETION OF CONFLICTING IMPROVEMENTS IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". STOP SIGNS, SPEED LIMIT SIGNS, AND STREET NAME SIGNS SHALL BE UP AND VISIBLE AT ALL TIMES.

CURB AND GUTTER TO BE REMOVED AT DRIVEWAYS SHALL BE REPLACED WITH DEPRESSED CURB AND GUTTER.

QUANTITIES FOR NEW INLETS, CATCH BASINS, AND FRAMES AND LIDS HAVE BEEN INCLUDED AS CONTIGENCY ITEMS. THE ENGINEER SHALL VERIFY THE NEED FOR REPLACEMENT AS WELL AS THE TYPE NEEDED BEFORE THE CONTRACTOR ORDERS THESE ITEMS.

THE CONTRACTOR SHALL COORDINATE DETECTOR LOOP WORK WITH DUPAGE COUNTY DIVISION OF TRANSPORTATION AND CLOSELY FOLLOW THE SPECIAL PROVISIONS FOR DETECTOR LOOPS.

THE CONTRACTOR SHOULD BE AWARE THAT CONTAMINATED SOILS WERE FOUND AT THE INTERSECTIONS OF YORK RD AND GEORGE STREET AS WELL AS YORK RD AND GREEN ST. PRELIMARY SITE INVESTIGATION REPORTS AVAILABLE UPON REQUEST.

SIGNS AND POSTS ALONG YORK ROAD SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. QUANTITIES FOR NEW SIGNS AND POSTS HAVE BEEN INCLUDED AS CONTIGENCY ITEMS. THE ENGINEER SHALL VERIFY THE TYPE NEEDED BEFORE THE CONTRACTOR ORDERS THESE ITEMS.

#### **PAVING**

HOT-MIX ASPHALT BINDER COURSE SHALL NOT BE PLACED ADJACENT TO CURB AND GUTTER UNTIL THE CURB AND GUTTER HAS BEEN PROPERLY CURED AND BACKFILLED TO THE SATISFACTION OF THE ENGINEER.

THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE, BINDER, OR BASE UPON ... WHICH THE HOT-MIX ASPHALT MATERIALS ARE PLACED. THE THICKNESSES SHOWN ON THE PLANS ARE THE MINIMUM ACCEPTABLE THICKNESSES.

#### **LANDSCAPING**

RESTORATION WORK WILL BE PAID FOR UP TO TWO FEET ADJACENT TO RECONSTRUCTED CURB AND GUTTER OR SIDEWALK. AREAS OUTSIDE THE TWO FOOT ZONE THAT ARE DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE THE RESONSIBILITY OF THE CONTRACTOR TO RESTORE.

CONTRACTOR SHALL BE CAUTIOUS NOT TO DISTURB ANY PARKWAY TREES DURING CONSTRUCTION. ANY TREES THAT ARE DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE THE RESONSIBILITY OF THE CONTRACTOR TO REPLACE IN KIND.

TO STA.

| FILE NAME =                                | USER NAME = doconnell  | DESIGNED | MLM | R | REVISED |   |      |
|--|------------------------|----------|-----|---|---------|---|------|
| N:\Bensenville\180145\Civil\GEN_180145.SHT |                        | DRAWN    | MLM | R | REVISED |   |      |
|  | PLOT SCALE = 40'       | CHECKED  | JGS | R | REVISED |   | <br> |
| Default                                    | PLOT DATE = 11/14/2018 | DATE     | -   | R | REVISED | - | <br> |

SCALE: NONE

| CODE<br>NUMBER | ITEM   | UNIT  | TOTAL<br>QUANTITY |
|----------------|--|-------|-------------------|
| 20101200       | TREE ROOT PRUNING                            | EACH  | 10                |
| 20101350       | TREE PRUNING (OVER 10 INCH DIAMETER)         | EACH  | 20                |
| 20200100       | EARTH EXCAVATION                             | CU YD | 25                |
| 21101600       | TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH    | SQ YD | 800               |
| 25200110       | SODDING, SALT TOLERANT                       | SQ YD | 800               |
| 25200200       | SUPPLEMENTAL WATERING                        | UNIT  | 10                |
| 28000510       | INLET FILTERS                                | EACH  | 83                |
| 31101100       | SUBBASE GRANULAR MATERIAL, TYPE B            | CU YD | 388               |
| 40600290       | BITUMINOUS MATERIALS (TACK COAT)             | POUND | 34880             |
| 40600400       | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS   | TON   | 10                |
| 40600635       | LEVELING BINDER (MACHINE METHOD), N70        | TON   | 262               |
| 40600982       | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 299               |
| 40603085       | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70  | TON   | 6511              |
| 40603340       | HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 | TON   | 5788              |
| 42400200       | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH     | SQFT  | 5972              |
| 42400800       | DETECTABLE WARNINGS                          | SQ FT | 417               |
| 44000166       | HOT-MIX ASPHALT SURFACE REMOVAL, 4 1/4"      | SQ YD | 45420             |
| 44000171       | HOT-MIX ASPHALT SURFACE REMOVAL, 5 1/2"      | SQ YD | 6250              |
| 44000500       | COMBINATION CURB AND GUTTER REMOVAL          | FOOT  | 3952              |
| 44000600       | SIDEWALK REMOVAL                             | SQ FT | 6067              |
| 44200176       | PAVEMENT PATCHING, TYPE I, 15 INCH           | SQ YD | 1000              |
| 44200180       | PAVEMENT PATCHING, TYPE II, 15 INCH          | SQ YD | 1000              |
| 44200184       | PAVEMENT PATCHING, TYPE III, 15 INCH         | SQ YD | 900               |
|                |  | l     |                   |

#### ∆ INDICATES SPECIALTY ITEM

CODE NUMBER

| ŀ | 44200186          | DAVISACNE DATCHNIC TYPE BY 45 INCH                        | SQ YD  | 800 |
|---|-------------------|---|--------|-----|
| ŀ | 44200186          | PAVEMENT PATCHING, TYPE IV, 15 INCH                       | 3Q 10  | 800 |
|   | 56500600          | DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED               | EACH   | 5   |
| ļ | 60200105          | CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID | EACH   | 10  |
| ŀ | 60200102          | CATCH BASINS, TIPE A, 4 -DIAMETER, TIPE I PRAME, OPEN LID | EACH   | 10  |
| Į | 60234200          | INLETS, TYPE A, TYPE 1 FRAME, OPEN LID                    | EACH   | 10  |
| ł | 60250200          | CATCH BASINS TO BE ADJUSTED                               | EACH   | 20  |
| ŀ | 00230200          | CATICAT DASING TO BE ADJUSTED                             | Erecti |     |
| [ | 60260100          | INLETS TO BE ADJUSTED                                     | EACH   | 10  |
| ł | 60265700          | VALVE VAULTS TO BE ADJUSTED                               | EACH   | 5   |
| Ì |                   |   |        |     |
| ŀ | 60266600          | VALVE BOXES TO BE ADJUSTED                                | EACH   | 27  |
| ł | 60404800          | FRAMES AND GRATES, TYPE 11                                | EACH   | 4   |
| ſ |                   |   | FACIL  |     |
| ŀ | 60406100          | FRAMES AND LIDS, TYPE 1, CLOSED LID                       | EACH   | 5   |
| Į | 63000001          | STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS          | FOOT   | 125 |
| , | 63000030          | STRONG POST GUARDRAIL ATTACHED TO CULVERT                 | FOOT   | 10  |
| ļ |                   |   |        |     |
| ŀ | 63100045          | TRAFFIC BARRIER TERMINAL, TYPE 2                          | EACH   | 4   |
| l | 63200310          | GUARDRAIL REMOVAL   | FOOT   | 120 |
| ŀ | 66900200          | NON-SPECIAL WASTE DISPOSAL                                | CU YD  | 25  |
| t |                   |   |        |     |
| ŀ | 66900530          | SOIL DISPOSAL ANALYSIS                                    | EACH   | 2   |
| ŀ | 67000400          | ENGINEER'S FIELD OFFICE, TYPE A                           | CAL MO | 2   |
| F | 67100100          | MOBILIZATION  | L SUM  | 1   |
| ŀ | 07100100          | IMOBILIZATION   | 25011  |     |
| ŀ | 66901001          | REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN                | LSUM   | 1   |
| Ţ | 66901002          | ON-SITE MONITORING OF REGULATED SUBSTANCES                | CAL DA | 5   |
| - | 66901003          | REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT            | LSUM   | 1   |
| 1 | 00201002          | INCOURTED SOBSTANCES FINAL CONSTRUCTION REPORT            | LJOIVI | T.  |
| ļ | 70102632          | TRAFFIC CONTROL AND PROTECTION, STANDARD 701602           | L SUM  | 1   |
| ŀ | 70102635          | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701           | L SUM  | 1   |
| ł | . 0 1 0 1 0 1 0 1 |   |        |     |

ITEM

TOTAL QUANTITY

UNIT

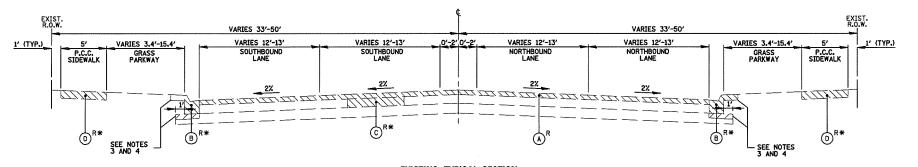
| FILE NAME =                                | USER NAME = doconnell  | DESIGNED MLM | REVISED - |                              | VILLAGE OF BENSENVILLE                       | FAU SECTION         | COUNTY TOTAL SHEET NO. |
|--|------------------------|--------------|-----------|------------------------------|--|---------------------|------------------------|
| N:\Bensenville\180145\Civil\500_180145-01. | нт                     | DRAWN MLM    | REVISED   | STATE OF ILLINOIS            | YORK ROAD                                    | 2678 18-00098-00-RS | DuPAGE 45 3            |
|  | PLOT SCALE = 40'       | CHECKED JGS  | REVISED - | DEPARTMENT OF TRANSPORTATION | SUMMARY OF QUANTITIES                        |                     | CONTRACT NO. 61F38     |
| Default                                    | PLOT DATE = 11/14/2018 | DATE         | REVISED   |                              | SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA. | ILLINOIS FED. AID   | D PROJECT              |

|   | CODE<br>NUMBER | ITEM   | UNIT  | TOTAL<br>QUANTITY |
|---|----------------|--|-------|-------------------|
|   | 70102640       | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801                    | L SUM | 1                 |
| Δ | 72000100       | SIGN PANEL - TYPE 1  | SQ FT | 150               |
| Δ | 72000200       | SIGN PANEL - TYPE 2  | SQ FT | 50                |
| Δ | 72400310       | REMOVE SIGN PANEL - TYPE 1   | SQ FT | 200               |
| Δ | 72501000       | TERMINAL MARKER - DIRECT APPLIED                                   | EACH  | 2                 |
| Δ | 72800100       | TELESCOPING STEEL SIGN SUPPORT                                     | FOOT  | 100               |
| Δ | 72900100       | METAL POST - TYPE A  | FOOT  | 100               |
| Δ | 72900200       | METAL POST - TYPE B  | FOOT  | 50                |
| Δ | 73100100       | BASE FOR TELESCOPING STEEL SIGN SUPPORT                            | EACH  | 5                 |
| Δ | 73700100       | REMOVE GROUND MOUNTED SIGN SUPPORT                                 | EACH  | 20                |
| Δ | 78000100       | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS               | SQ FT | 146               |
| Δ | 78000200       | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                           | FOOT  | 15732             |
| Δ | 78000400       | THERMOPLASTIC PAVEMENT MARKING - LINE 6"                           | FOOT  | 1941              |
| Δ | 78000600       | THERMOPLASTIC PAVEMENT MARKING - LINE 12"                          | FOOT  | 560               |
| Δ | 78000650       | THERMOPLASTIC PAVEMENT MARKING - LINE 24"                          | FOOT  | 388               |
| Δ | 78200005       | GUARDRAIL REFLECTORS, TYPE A                                       | EACH  | 8                 |
| Δ | 81028220       | UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.                     | FOOT  | 45                |
| Δ | 85000200       | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                | EACH  | 3                 |
| Δ | 87300010       | GROUNDING EXISTING HANDHOLE FRAME AND COVER                        | EACH  | 4                 |
| Δ | 87301215       | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                        | FOOT  | 485               |
| Δ | 87301225       | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                        | FOOT  | 50                |
| Δ | 87301900       | ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FOOT  | 142               |
| Δ | 87502440       | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.                       | EACH  | 1                 |
|   |                |  |       |                   |

|   | CODE<br>NUMBER | ITEM  | UNIT  | TOTAL<br>QUANTITY |
|---|----------------|---|-------|-------------------|
| Δ | 87800100       | CONCRETE FOUNDATION, TYPE A   | FOOT  | 20                |
|   |                |   |       |                   |
| Δ | 87900200       | DRILL EXISTING HANDHOLE   | EACH  | 5                 |
| Δ | 88102717       | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH  | 12                |
| Δ | 88600600       | DETECTOR LOOP REPLACEMENT   | FOOT  | 1255              |
| Δ | 88800100       | PEDESTRIAN PUSH-BUTTON  | EACH  | 12                |
| Δ | 89502200       | MODIFY EXISTING CONTROLLER  | EACH  | 3                 |
| Δ | 89502210       | MODIFY EXISTING CONTROLLER CABINET  | EACH  | 3                 |
| Δ | 89502300       | REMOVE ELECTRIC CABLE FROM CONDUIT  | FOOT  | 189               |
| Δ | 89502375       | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  | EACH  | 3                 |
| Δ | X0324599       | ROD AND CLEAN EXISTING CONDUIT  | FOOT  | 200               |
|   | X0327611       | REMOVE AND REINSTALL BRICK PAVER  | SQ FT | 100               |
|   | X0327890       | DRIVEWAY REMOVAL AND REPLACEMENT  | SQ YD | 450               |
|   | X0540000       | BRICK PAVERS  | SQ FT | 15                |
|   | X6030310       | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)                                  | EACH  | 54                |
|   | X6040205       | FRAMES AND LIDS, SPECIAL  | EACH  | 60                |
| Δ | X8760055       | PEDESTRIAN PUSH-BUTTON POST, TYPE A                                       | EACH  | 4                 |
| Δ | XX006668       | HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER                          | EACH  | 1                 |
|   | XX009048       | CURB AND GUTTER (SPECIAL)   | FOOT  | 3952              |
|   | Z0013798       | CONSTRUCTION LAYOUT   | L SUM | 1                 |
|   | Z0030850       | TEMPORARY INFORMATION SIGNING   | SQ FT | 35                |
|   |                | <u> </u>  |       | J                 |

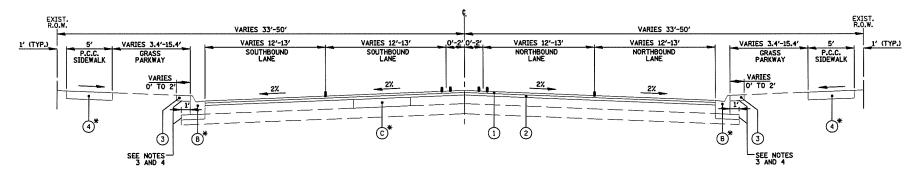
#### ∆ INDICATES SPECIALTY ITEM

| FILE NAME =                              | USER NAME = doconnell  | DESIGNED MLM | REVISED - |                              |             |         |        |         | NSENVILLE  |         | FAU  | SECTION         | COUNTY     | TOTAL   | SHEET NO. |
|--|------------------------|--------------|-----------|------------------------------|-------------|---------|--------|---------|------------|---------|------|-----------------|------------|---------|-----------|
| N:\Bensenville\180145\Civil\500_180145-6 | ?.внт                  | DRAWN MLM    | REVISED   | STATE OF ILLINOIS            |             |         |        | ORK RO  |            |         | 2678 | 18-00098-00-RS  | DuPAGE     | 45      | 4         |
|  | PLOT SCALE = 40'       | CHECKED JGS  | REVISED - | DEPARTMENT OF TRANSPORTATION |             |         | SUMMAR | RY OF C | LUANTITIES |         |      |                 | CONTRAC    | T NO. 6 | 1F38      |
| Default                                  | PLOT DATE = 11/14/2018 | DATE         | REVISED - |                              | SCALE: NONE | SHEET 1 | OF 1   | SHEET   | rs sta.    | TO STA. |      | ILLINOIS FED. A | ID PROJECT |         |           |

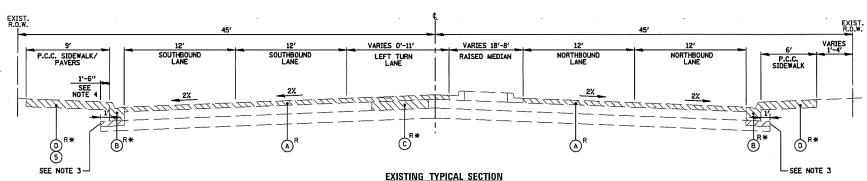


#### **EXISTING TYPICAL SECTION** YORK ROAD 25+00 TO 70+00 & 76+50 TO 104+00

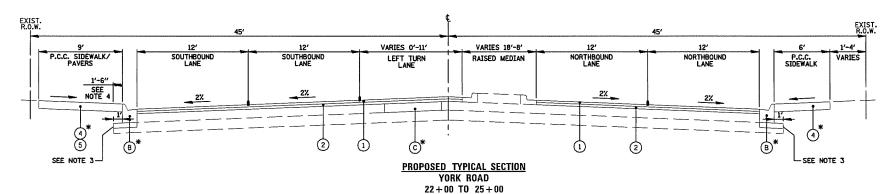
4-LANE SECTION



#### PROPOSED TYPICAL SECTION YORK ROAD 25+00 TO 70+00 & 76+50 TO 104+00 4-LANE SECTION



YORK ROAD 22+00 TO 25+00 5-LANE SECTION AT GRAND AVENUE



5-LANE SECTION AT GRAND AVENUE

NOTE: FOR DRIVEWAY REPLACEMENT DETAIL SEE TYPICAL SECTIONS SHEET 2

- (A) HOT-MIX ASPHALT SURFACE REMOVAL, 4 1/4" (44000166)
- \*B COMBINATION CURB AND GUTTER REMOVAL (44000500) MATCH EXISTING)
- \*(C) PAVEMENT PATCHING (TYPE AND THICKNESS WILL VARY)
- \*(D) SIDEWALK REMOVAL (44000600)
- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (2") (40603340)
- \*(2) HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70 (2 1/4") (40603085)
- 3 SODDING, SALT TOLERANT (25200200) TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH (21101600)
- (4) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (42400200)
- 5) REMOVE AND REINSTALL BRICK PAVER (X0327611)
- R REMOVAL
- \* AT LOCATIONS AS DIRECTED BY THE ENGINEER

#### NOTES:

1. CONTRACTOR SHALL MILL PAVEMENT BEFORE PATCHING.

2. THE EXISTING PAVEMENT SECTION CONSISTS OF VARIABLE DEPTH HMA. A CONCRETE BASE COURSE EXISTS IN SOME LOCATIONS. SEE PAVEMENT CORES FOR DETAILS OF EXISTING PAVEMENT STRUCTURE.

3. CONTRACTOR SHALL REMOVE AND REPLACE ANY UNSUITABLE MATERIAL UNDER CURB AND GUTTER REPLACEMENT LOCATIONS AS DIRECTED BY THE ENGINEER. DISTURBED SOIL BEHIND REPLACED CURB AND GUTTER SHALL BE SODDED AS SHOWN IN THE PROPOSED TYPICAL SECTIONS.

4. CONTRACTOR SHALL REMOVE AND REPLACE BRICK PAVERS BEHIND CURB AND CUTTER REPLACEMENT LOCATIONS AS DIRECTED BY THE ENGINEER.

5. AGGREGATE BASE REPAIR (SUBBASE GRANULAR MATERIAL, TYPE B) UNDER SIDEWALKS AND CURB AND GUTTER WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

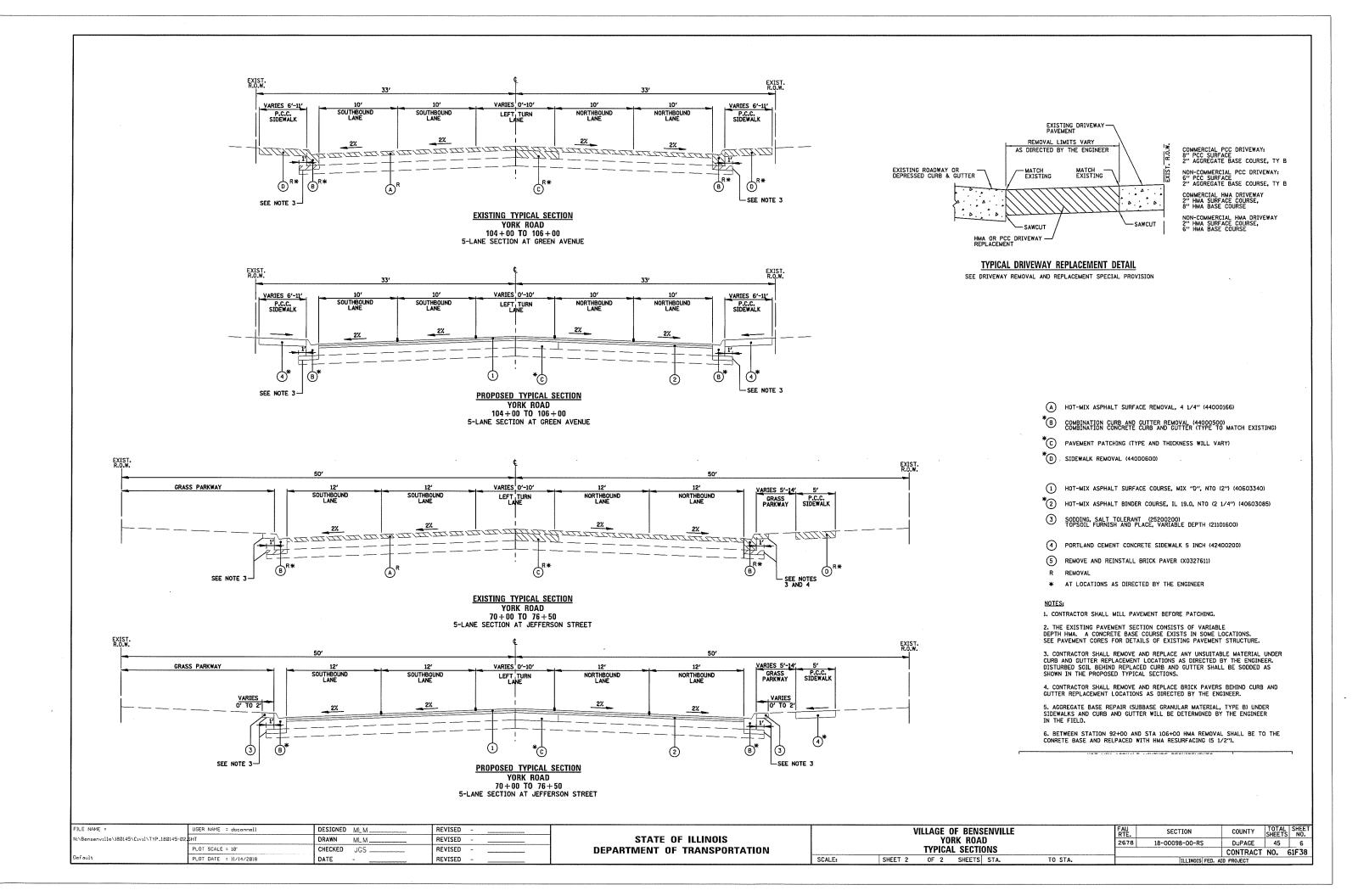
6. BETWEEN STATION 92+00 AND STA 106+00 HMA REMOVAL SHALL BE TO THE CONRETE BASE AND RELPACED WITH HMA RESURFACING (5  $1/2^{\prime\prime}$ ).

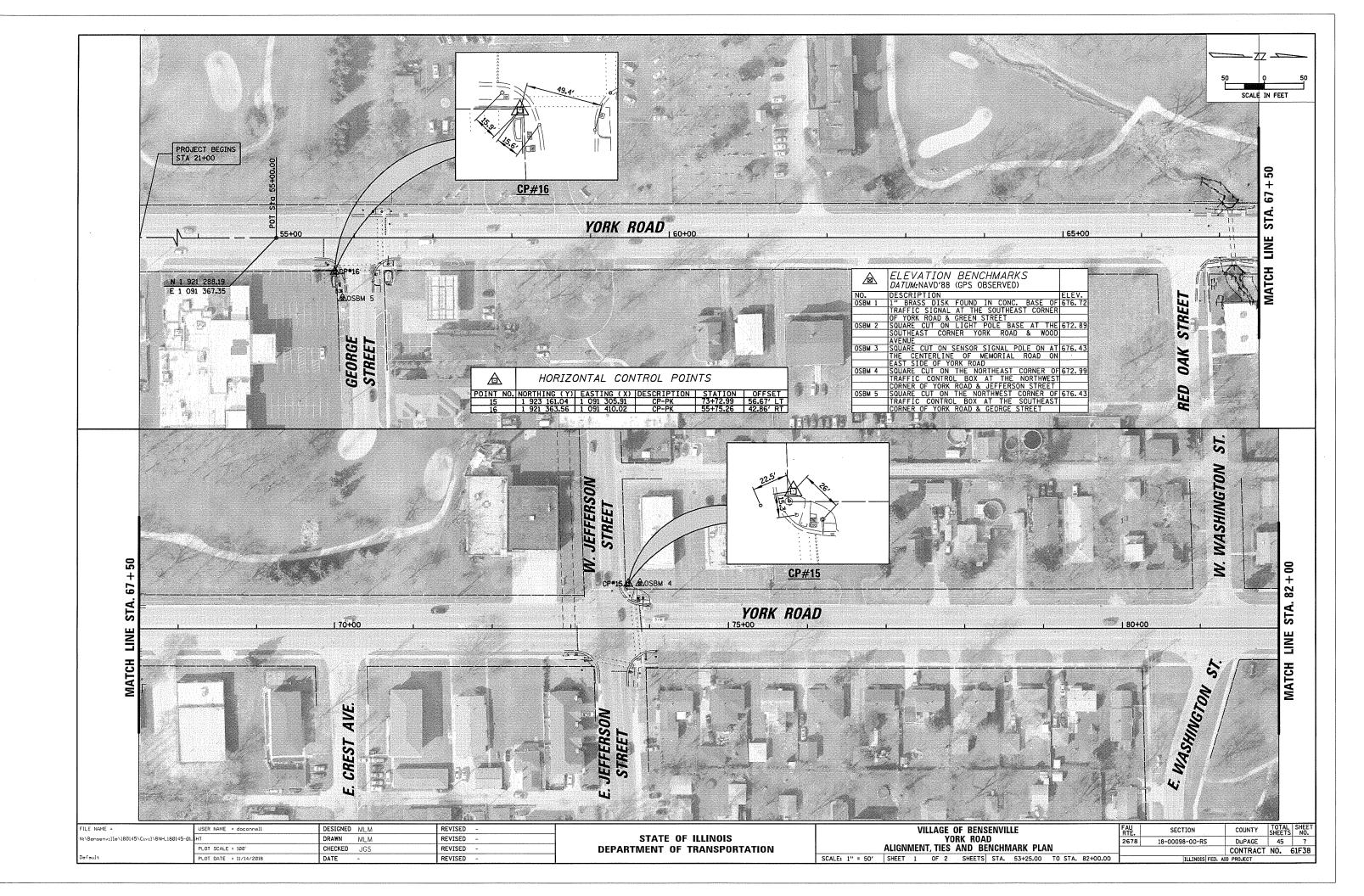
| HOT-MIX ASPHALT MIXTURE REQUIREMENTS  |   |
|---|---|
| MIXTURE TYPE  | AIR VOIDS @Ndes   |
| HMA RESURFACING (4-1/4") HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NTO (IL-9.5mm); 2" HOT-MIX ASPHALT BINDER COURSE, IL 19.0, NTO; 2 1/4"  | 4% @ 70 GYR.<br>4% @ 70 GYR.                                      |
| HMA RESURFACING (5-1/2") HOT-MIX ASPHALT SURFACE COURSE, MIX "O", N70 (IL-9.5mm); 2" HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70; 2 3/4" LEVELING BINDER (MACHINE METHOD), N70; 3/4" (IL-9.5mm) | 4% <b>c</b> 70 GYR.<br>4% <b>c</b> 70 GYR.<br>4% <b>c</b> 70 GYR. |
| PAVEMENT PATCHING (CLASS D PATCHES)<br>HOT-MIX ASPHALT BINDER, IL 19.0  | 4% c 70 GYR.  |
| DRIVEWAY REPLACEMENT (HMA)<br>HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 2"<br>HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0), N50  | 4% @ 70 GYR.<br>4% @ 70 GYR.                                      |

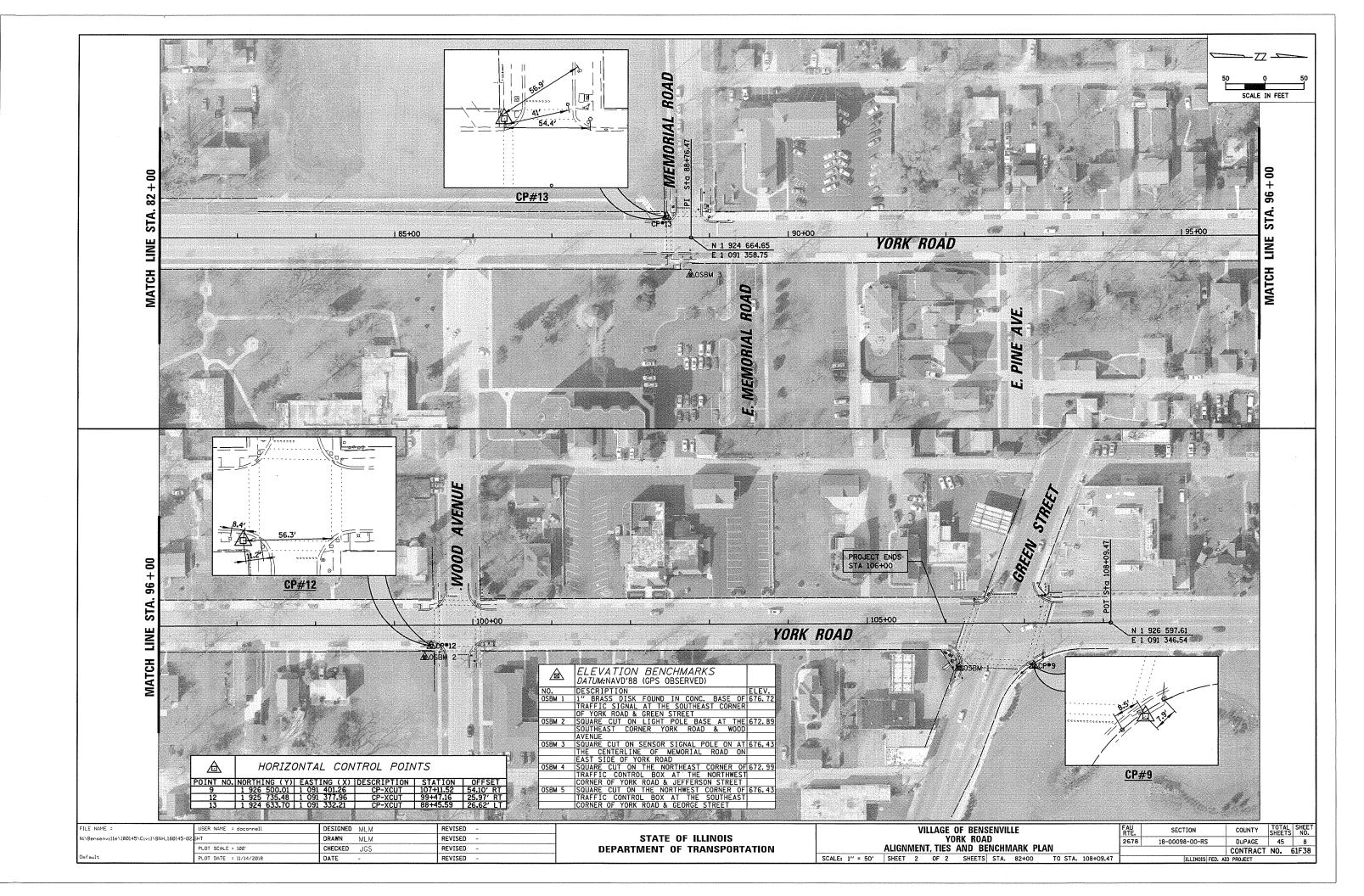
1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.

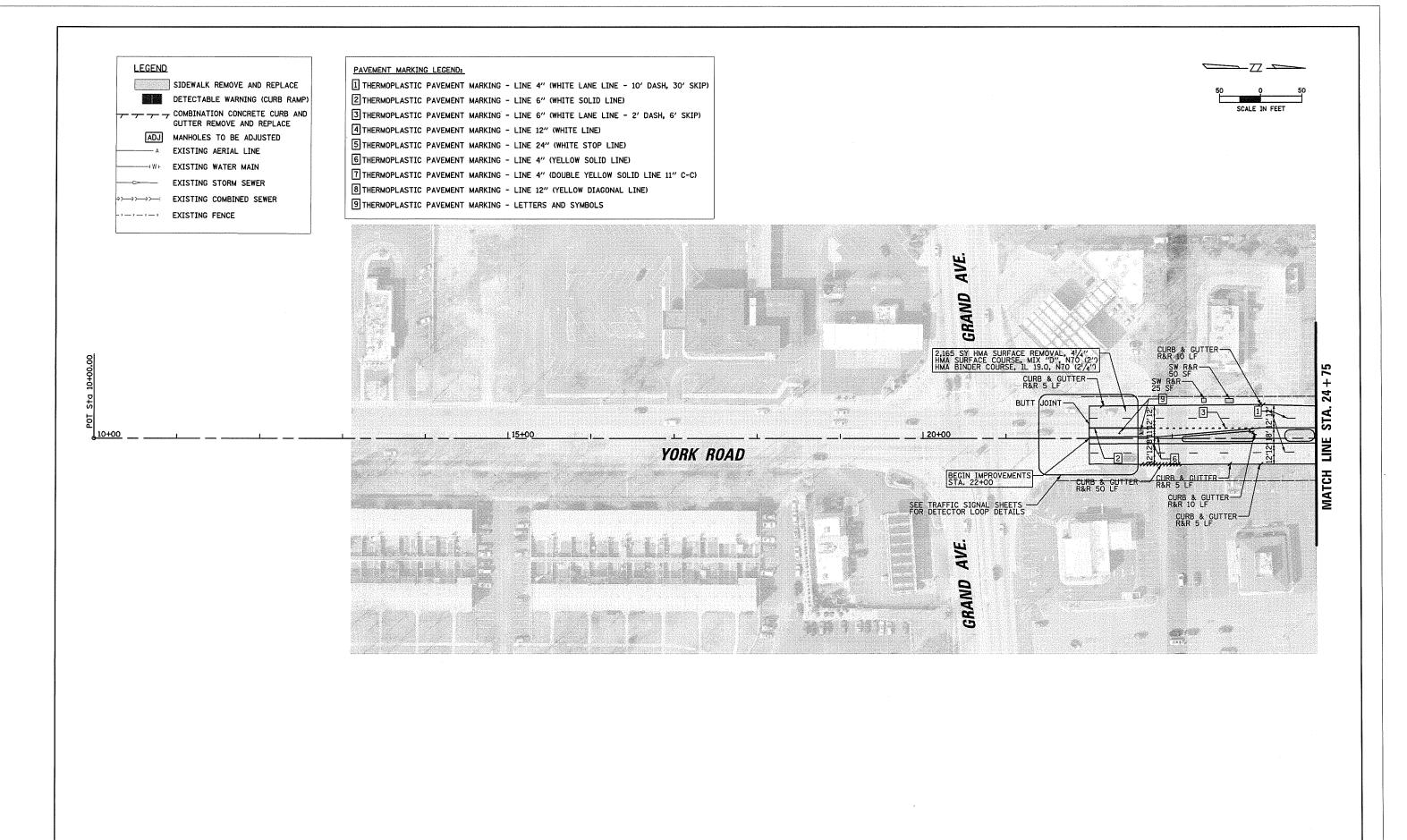
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIAL SEE SPECIAL PROVISIONS.

| FILE NAME =                                | USER NAME = doconnell  | DESIGNED MLM | REVISED - |                              | VILLAGE OF BENSENVILLE                       | FAU SECTION         | COUNTY TOTAL SHEET |
|--|------------------------|--------------|-----------|------------------------------|--|---------------------|--------------------|
| N:\Bensenv1lle\180145\C1v11\TYP_190145-01. | SHT                    | DRAWN MLM    | REVISED - | STATE OF ILLINOIS            | YORK ROAD                                    | 2678 18-00098-00-RS | DuPAGE 45 5        |
|  | PLOT SCALE = 10'       | CHECKED JGS  | REVISED - | DEPARTMENT OF TRANSPORTATION | TYPICAL SECTIONS                             |                     | CONTRACT NO. 61F38 |
| Default                                    | PLOT DATE = 11/14/2018 | DATE -       | REVISED - |                              | SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA. | ILLINOIS FED. A     |                    |



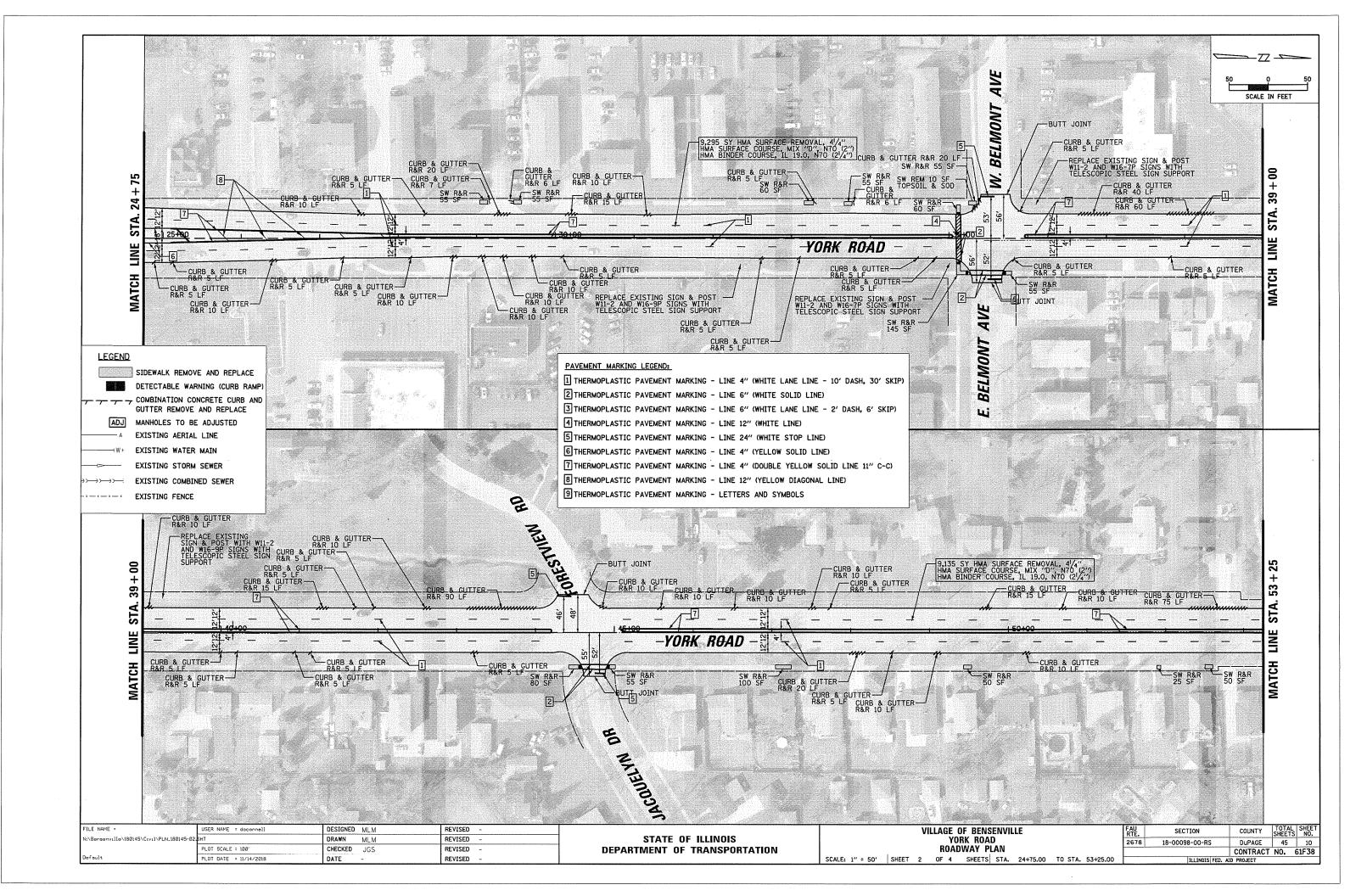


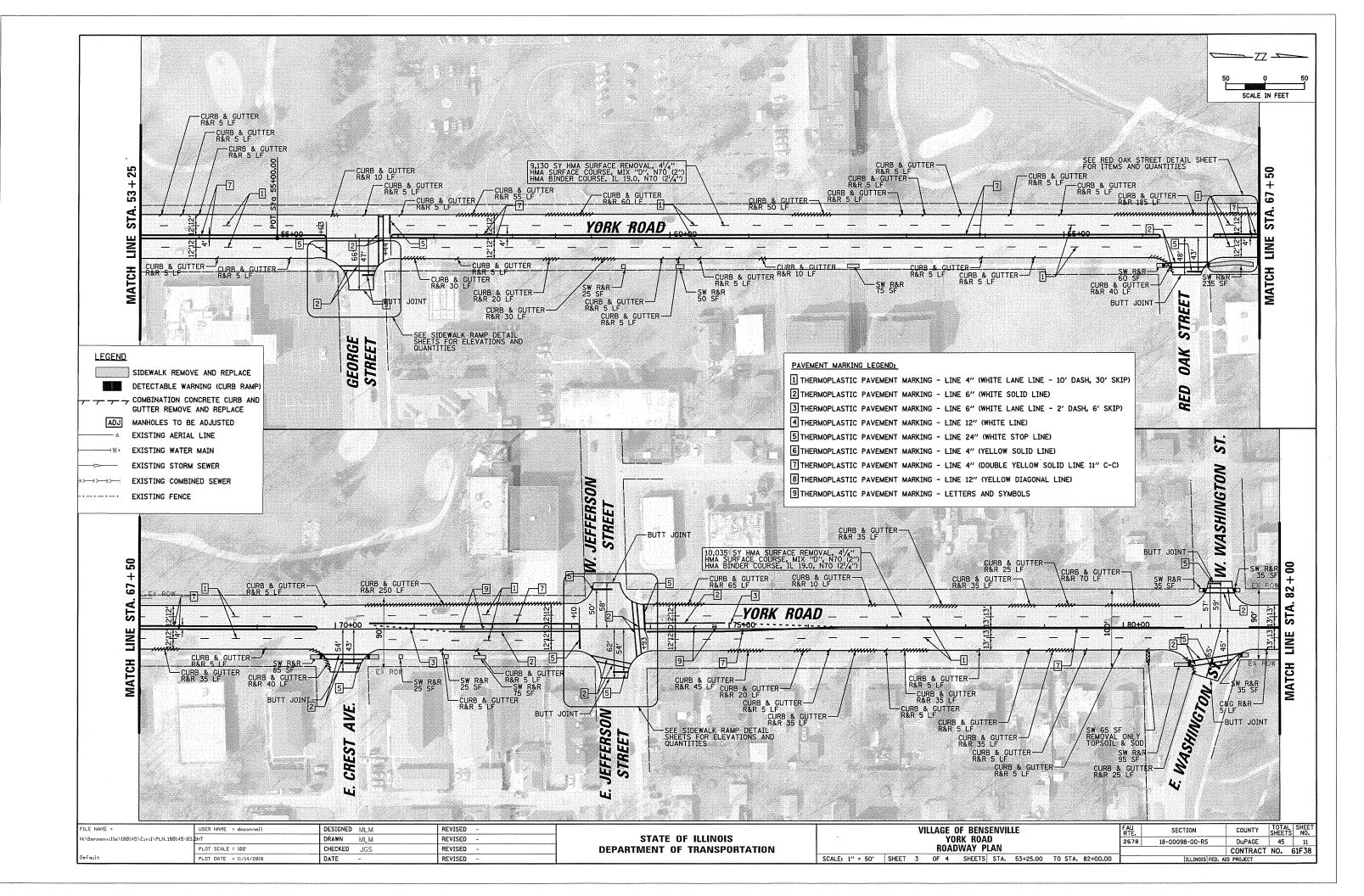


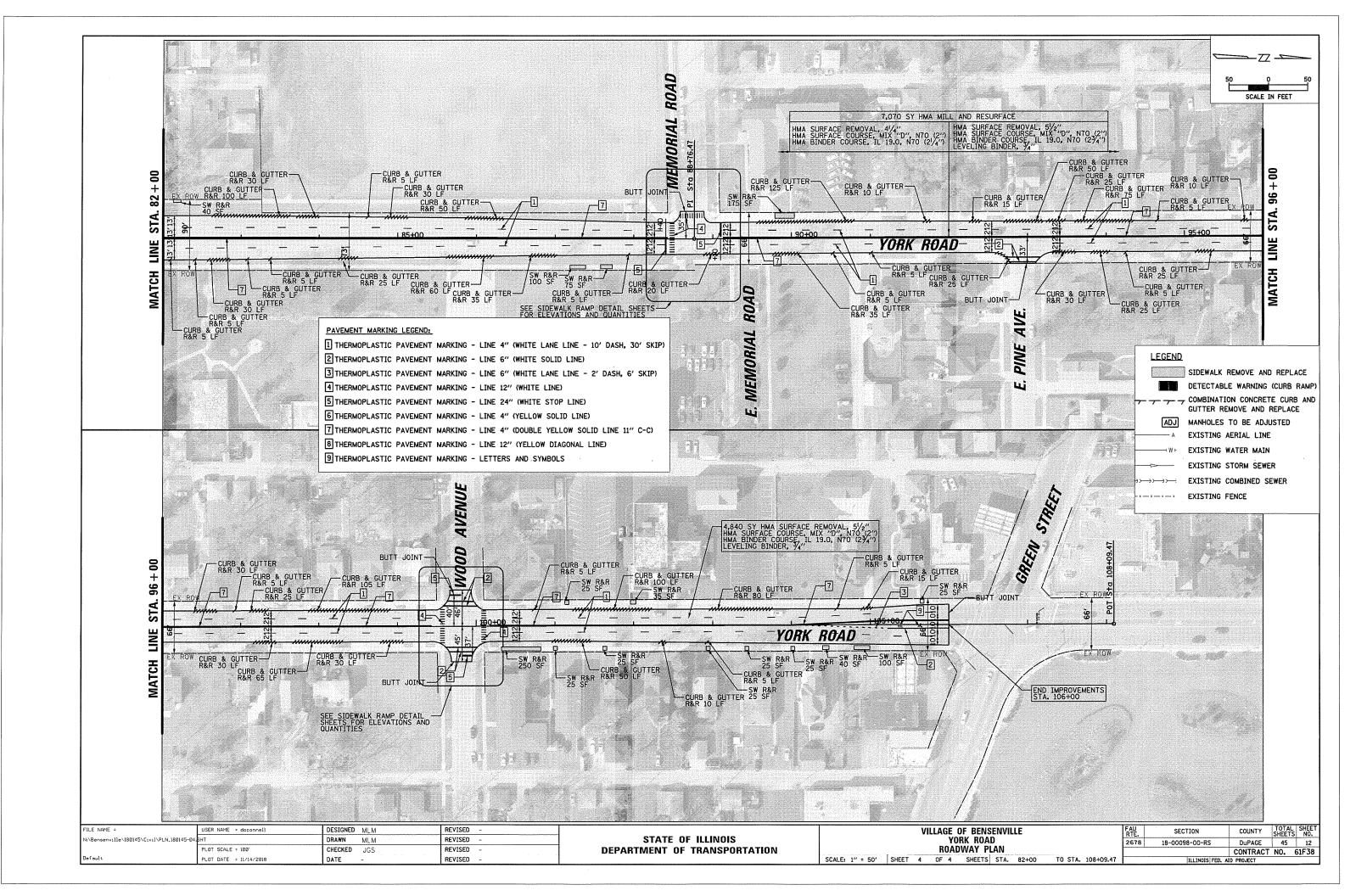


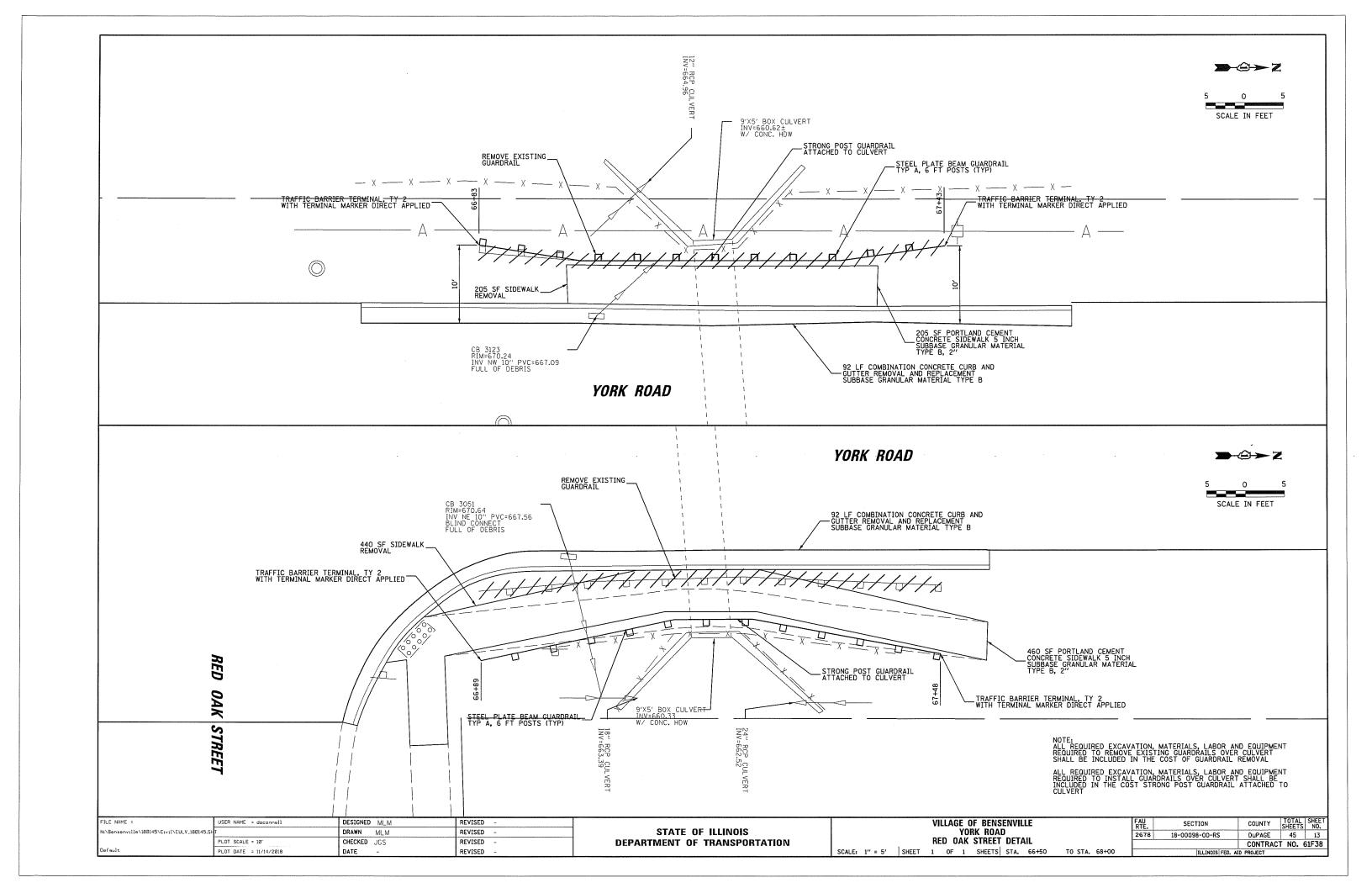
|     | FILE NAME =                                | USER NAME = doconnell  | DESIGNED MLM | REVISED - |                              | VILLAGE                      |
|-----|--|------------------------|--------------|-----------|------------------------------|------------------------------|
| - 1 | N:\Bensenville\180145\Civil\PLN_180145-01. | нт                     | DRAWN MLM    | REVISED - | STATE OF ILLINOIS            | ( Y                          |
| - 1 |  | PLDT SCALE = 100'      | CHECKED JGS  | REVISED - | DEPARTMENT OF TRANSPORTATION | ROA                          |
| I   | Default                                    | PLOT DATE = 11/14/2018 | DATE         | REVISED - |                              | SCALE: 1" = 50' SHEET 1 OF 4 |
|     |  |                        |              |           |                              | •                            |

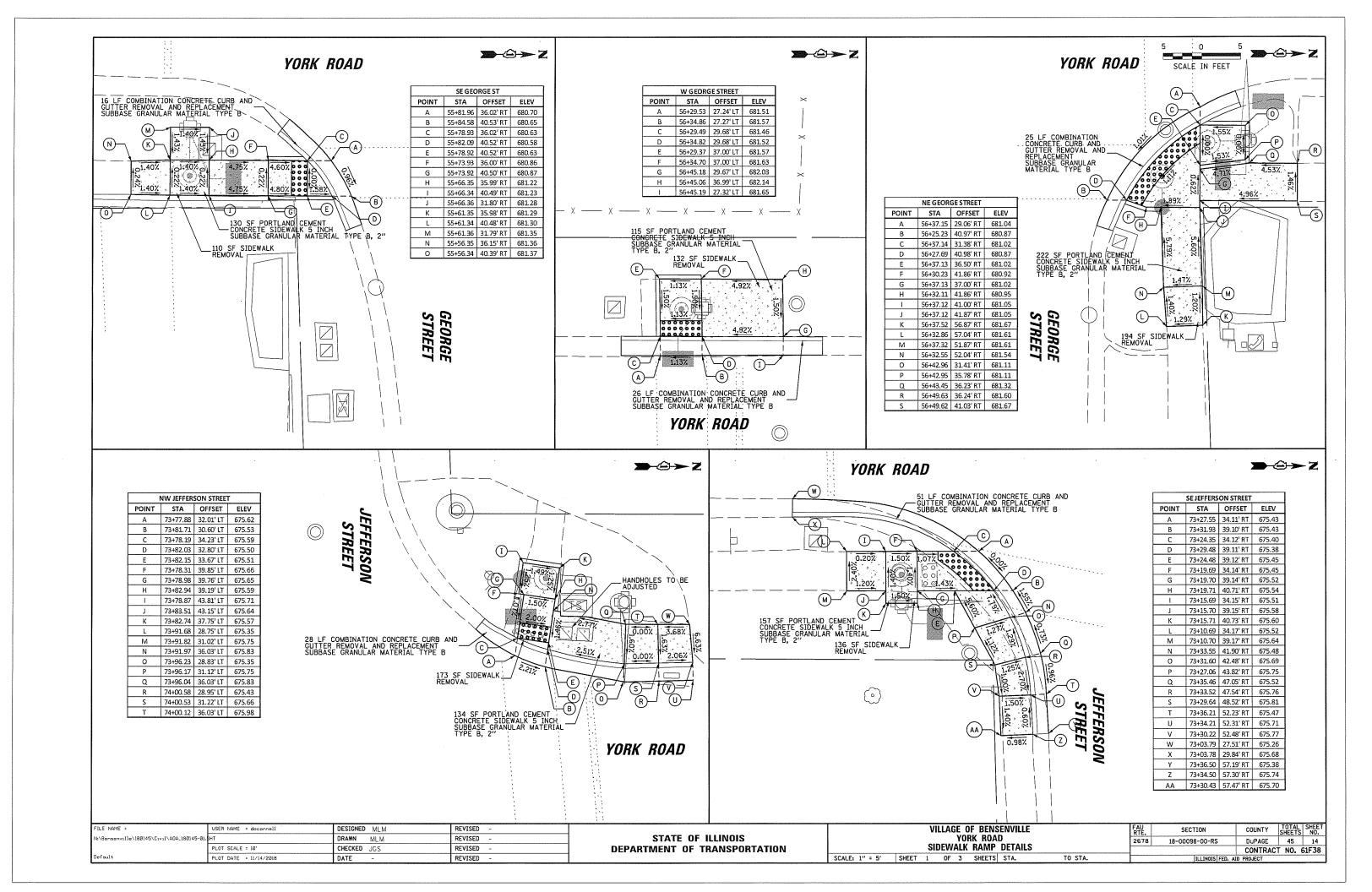
| VILLAGE OF BENSENVILLE   | FAU<br>RTE. | SECTION          | COUNTY                | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|-------------|------------------|-----------------------|-----------------|--------------|
| YORK ROAD<br>ROADWAY PLAN  | 2678        | 18-00098-00-RS   | DUPAGE                | 45              | 9            |
| SCALE: 1" = 50' SHEET 1 OF 4 SHEETS STA. 10+00.00 TO STA. 24+75.00 |             | ILLINOIS FED. AI | CONTRACT<br>D PROJECT | NO.             | 61F38        |

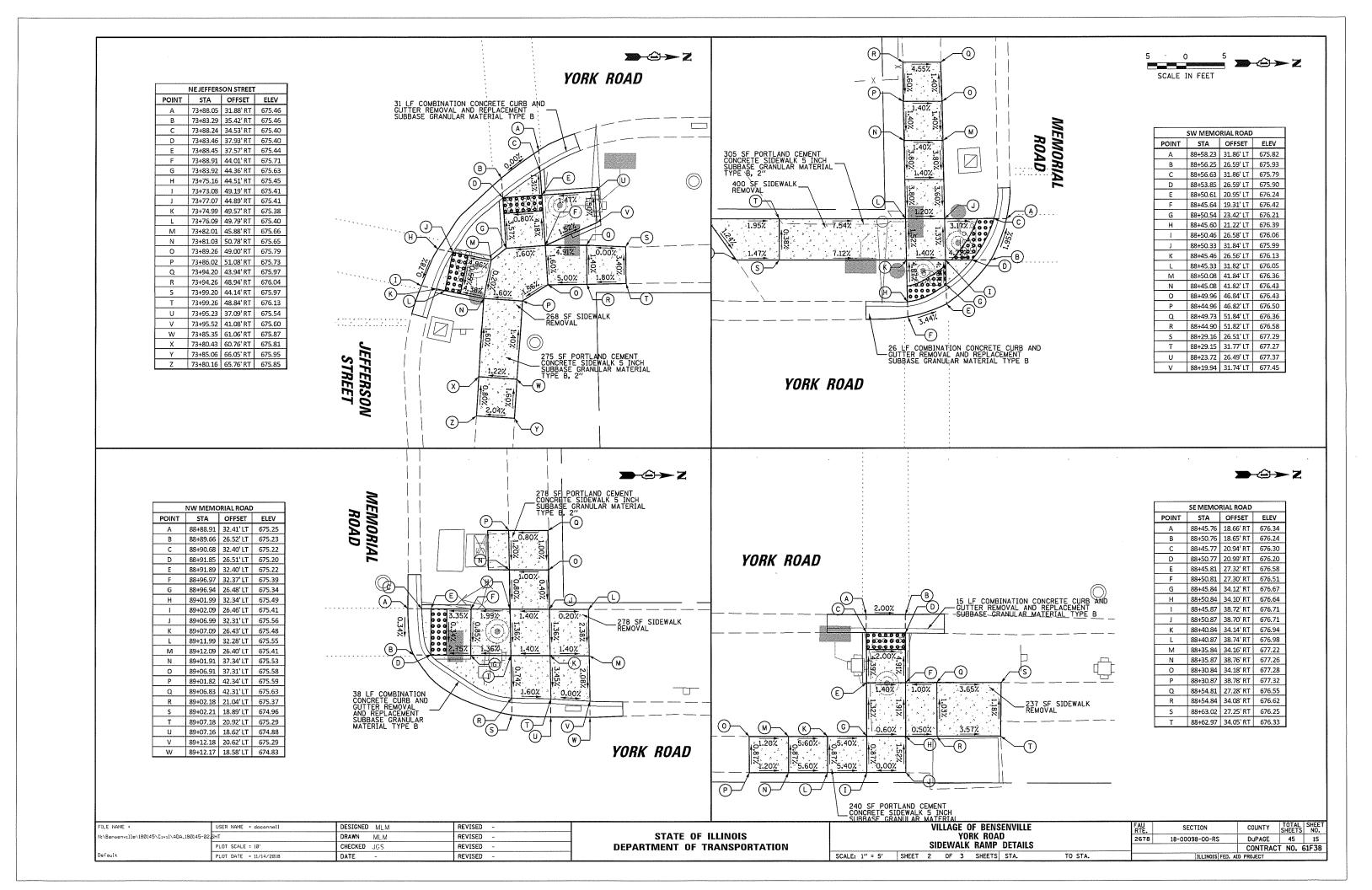


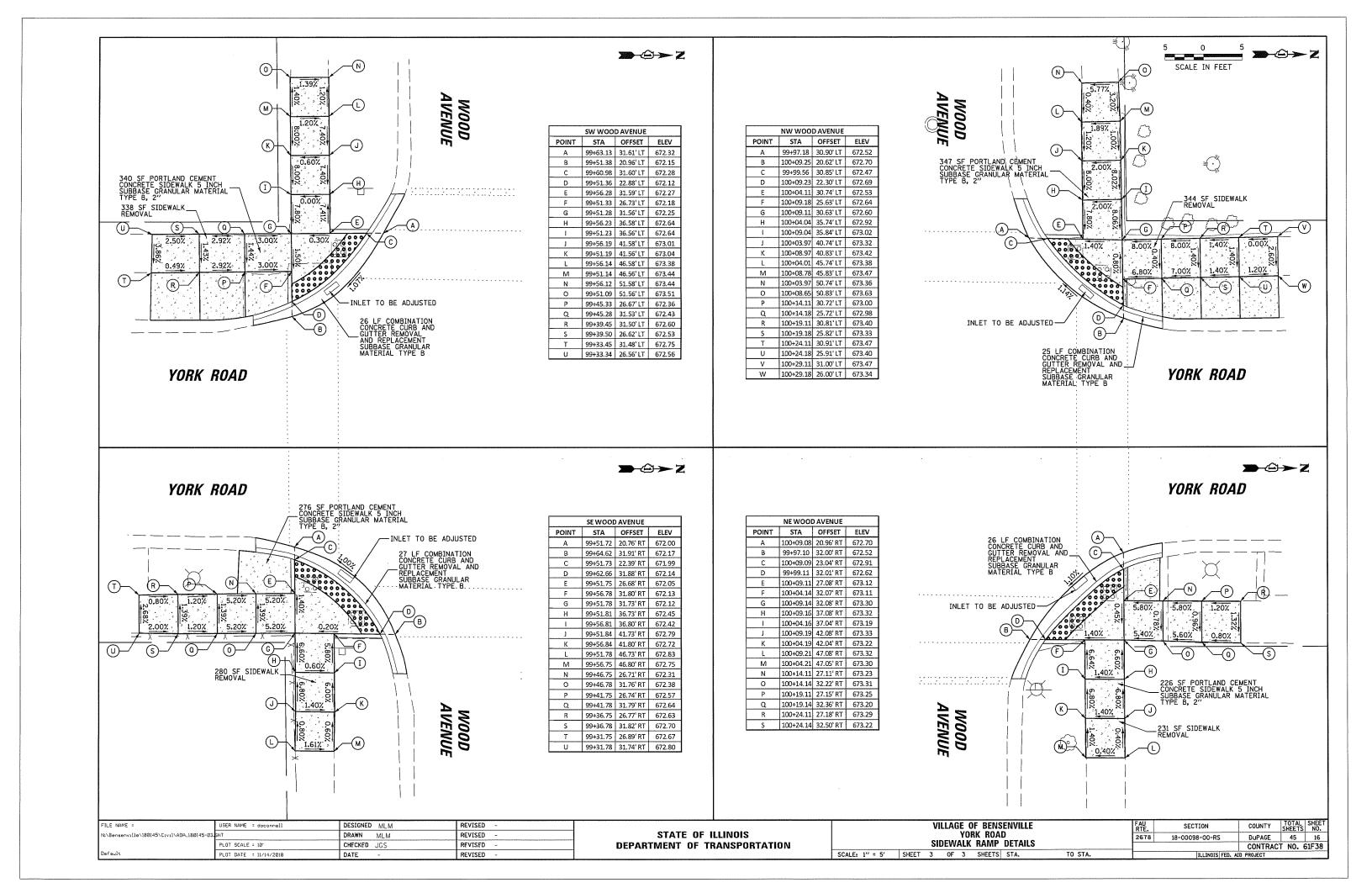












## TRAFFIC SIGNAL LEGEND (NOT TO SCALE)

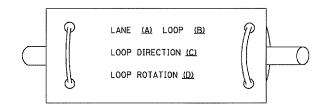
|  |                                |  |  |   | ····              |   |                  |   |
|--|--------------------------------|--|--|---|-------------------|---|------------------|---|
| ITEM   | EXISTING                       | PROPOSED                                     | ITEM   | EXISTING  | PROPOSED          | ITEM  | EXISTING         | PROPOSED  |
| CONTROLLER CABINET   | $\boxtimes$                    |  | HANDHOLE<br>-SQUARE  |   |                   | SIGNAL HEAD<br>-(P) PROGRAMMABLE SIGNAL HEAD                            |                  | R R Y   |
| COMMUNICATION CABINET  | ECC                            | CC   | -ROUND   |   |                   |   |                  | Y Y G G G G G G G G G G G G G G G G G G   |
| MASTER CONTROLLER  | EMC                            | мс   | HEAVY DUTY HANDHOLE -SQUARE -ROUND                                 | H (B)   | ⊞ ⊕               |   |                  | R   |
| MASTER MASTER CONTROLLER   | EMMC                           | ммс  | DOUBLE HANDHOLE  |   | <b>33</b>         | SIGNAL HEAD WITH BACKPLATE  | (A) (B) (B)      | R R R   |
| UNINTERRUPTABLE POWER SUPPLY                                       | <b>3</b>                       | $\mathcal{F}$                                | JUNCTION BOX   |   | 0                 | -(P) PROGRAMMABLE SIGNAL HEAD<br>-(RB) RETROREFLECTIVE BACKPLATE        |                  | Y Y Y G   |
| SERVICE INSTALLATION<br>-(P) POLE MOUNTED                          | - <u>-</u> -                   | - <mark></mark> P                            | RAILROAD CANTILEVER MAST ARM                                       | X <del>OX X</del>                                       | I <del>CI I</del> |   |                  | R     R   Y   G   G   G   G   G   G   G   G   G   |
| SERVICE INSTALLATION   |                                |  | RAILROAD FLASHING SIGNAL   | <del>XoX</del>  | X <del>-X</del>   |   | P RB             | P RB  |
| -(G) GROUND MOUNTED<br>-(GM) GROUND MOUNTED METERED                | $\boxtimes^{G} \boxtimes^{GM}$ | <b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup> | RAILROAD CROSSING GATE   | <del>X0X&gt;</del>                                      | X <del>o X</del>  | PEDESTRIAN SIGNAL HEAD  | <b>①</b>         | <b>F</b>  |
| TELEPHONE CONNECTION   | ET                             | T  | RAILROAD CROSSBUCK   | ₹   | *                 | AT RAILROAD INTERSECTIONS   |                  | ¥   |
| STEEL MAST ARM ASSEMBLY AND POLE                                   | O                              | •——  | RAILROAD CONTROLLER CABINET  |   | <b>&gt;</b> <     | PEDESTRIAN SIGNAL HEAD<br>WITH COUNTDOWN TIMER                          | © C<br>(A) D     | <u>♥</u> c<br><b>⊀</b> D  |
| ALUMINUM MAST ARM ASSEMBLY AND POLE                                | 0                              |  | UNDERGROUND CONDUIT (UC), GALVANIZED STEEL                         | annual annual desired and                               |                   |   |                  |   |
| STEEL COMBINATION MAST ARM<br>ASSEMBLY AND POLE WITH LUMINAIRE     | o <del>`</del> ──              | • <del>×</del>                               | TEMPORARY SPAN WIRE,<br>TETHER WIRE, AND CABLE                     |   |                   | ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"                         |                  |   |
| SIGNAL POST  | 0                              | <ul> <li>● BM</li> </ul>                     | SYSTEM ITEM  | S   | SP                | NUMBER OF CONDUCTORS, ELECTRIC<br>CABLE NO. 14, UNLESS NOTED OTHERWISE. |                  |   |
| -(BM) BARREL MOUNTED - TEMPORARY                                   | _                              | _  | INTERSECTION ITEM  | 1   | IP                | ALL DETECTOR LOOP CABLE TO BE SHIELDED                                  |                  | 0   |
| WOOD POLE  | ⊗ .                            | 9  | REMOVE ITEM  |   | R                 | GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)                     | (1*6)            | (1*6)   |
| GUY WIRE   | >                              | <b>&gt;</b>                                  | RELOCATE ITEM  |   | RL                | ELECTRIC CABLE IN CONDUIT, TRACER                                       |                  | <u>—</u> 1)—  |
| SIGNAL HEAD  |                                | <b>→</b>                                     | ABANDON ITEM   |   | A                 | NO. 14 1/C  | - /              |   |
| SIGNAL HEAD WITH BACKPLATE   | +D>                            |  | CONTROLLER CABINET AND FOUNDATION TO BE REMOVED                    |   | RCF               | COAXIAL CABLE   | — <u> </u>       | <u>—</u> ©—   |
| SIGNAL HEAD OPTICALLY PROGRAMMED FLASHER INSTALLATION              | -D' +D'                        |  | MAST ARM POLE AND  | •   | RMF               | VENDOR CABLE  |                  |   |
| -(FS) SOLAR POWERED  | ODF ODFS                       | FS FS  | FOUNDATION TO BE REMOVED  SIGNAL POST AND FOUNDATION TO BE REMOVED |   | RPF               | COPPER INTERCONNECT CABLE,<br>NO. 18, 3 PAIR TWISTED, SHIELDED          | 6#18             | <del></del>   |
| PEDESTRIAN SIGNAL HEAD   | -[]                            | -1   | DETECTOR LOOP, TYPE I  |   |                   | FIBER OPTIC CABLE -NO. 62.5/125, MMI2F                                  | — <u>(12F)</u> — | ——————————————————————————————————————  |
| PEDESTRIAN PUSH BUTTON<br>-(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON |                                |  | PREFORMED DETECTOR LOOP  |   | P P               | -NO. 62.5/125, MM12F SM12F<br>-NO. 62.5/125, MM12F SM24F                |                  | —(24F)—   |
| RADAR DETECTION SENSOR   | R J                            | R.   | SAMPLING (SYSTEM) DETECTOR   | $\begin{bmatrix} \tilde{s} \end{bmatrix}$ $(\tilde{s})$ | s s               |   |                  | —36F—   |
| VIDEO DETECTION CAMERA   | (V)                            | <b>₽</b>                                     | INTERSECTION AND SAMPLING (SYSTEM) DETECTOR                        | [ <u>Is]</u> ( <u>(</u> s)                              | IS (IS)           |   | . –              |   |
| RADAR/VIDEO DETECTION ZONE   |                                |  | QUEUE AND SAMPLING   | [ <u>os</u> ] (ĉs)                                      | os os             | GROUND ROD<br>-(C) CONTROLLER<br>-(M) MAST ARM                          | ic im ip is      | $\stackrel{=}{\uparrow}^{C} \stackrel{=}{\uparrow}^{M} \stackrel{=}{\uparrow}^{P} \stackrel{=}{\uparrow}^{S}$ |
| PAN, TILT, ZOOM (PTZ) CAMERA                                       | PTZ                            | ₽TZ¶   | (SYSTEM) DETECTOR WIRELESS DETECTOR SENSOR                         | @<br>@  | <b>©</b>          | -(M) MAST ARM<br>-(P) POST<br>-(S) SERVICE                              |                  |   |
| EMERGENCY VEHICLE LIGHT DETECTOR                                   | $\bowtie$                      | <b>~</b>                                     | WIRELESS ACCESS POINT  | $\Box$  |                   |   |                  |   |
| CONFIMATION BEACON   | o()                            | <b>↔</b>                                     |  | <del></del>   |                   |   |                  |   |
| WIRELESS INTERCONNECT  | <del>0-1   </del>              | •-+ <del>   </del>                           |  |   |                   |   |                  |   |
|  |                                |  | į .  |   |                   |   |                  |   |

| FI | LE NAME = | USER NAME = leysa           | DESIGNED - | ΙP        | REVISED - |                              | DISTRICT ONE                           |         |           |      | F.A.U<br>RTE.  | SECTION | COUNTY      | TOTAL SHEET |                 |            |  |
|----|-----------|-----------------------------|------------|-----------|-----------|------------------------------|--|---------|-----------|------|----------------|---------|-------------|-------------|-----------------|------------|--|
| ta | 05.dgn    |                             | DRAWN -    | IP        | REVISED - | STATE OF ILLINOIS            | STANDARD TRAFFIC SIGNAL DESIGN DETAILS |         | DETAILE   | 2678 | 18-00098-00-RS | DuPAGE  | 45 17       |             |                 |            |  |
| 1  |           | PLOT SCALE = 50.0000 '/ in. | CHECKED -  | LP        | REVISED - | DEPARTMENT OF TRANSPORTATION |  |         | DE I AILS |      | TS-05          | CONTRAC | T NO. 61F38 |             |                 |            |  |
| De | fault     | PLOT DATE = 9/29/2016       | DATE -     | 9/29/2016 | REVISED - |                              | SCALE: NONE                            | SHEET 1 | OF        | 7 S  | HEETS          | STA.    | TO STA.     |             | ILLINOIS FED. A | ID PROJECT |  |

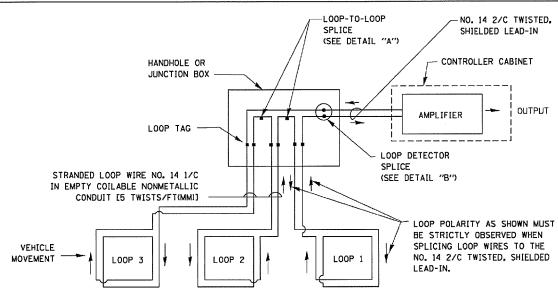
#### **LOOP DETECTOR NOTES**

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

#### LOOP LEAD-IN CABLE TAG

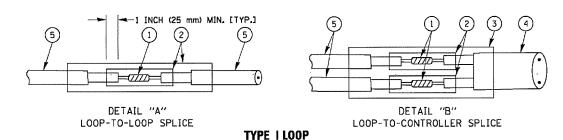


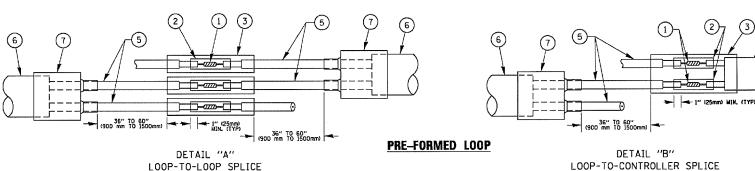
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





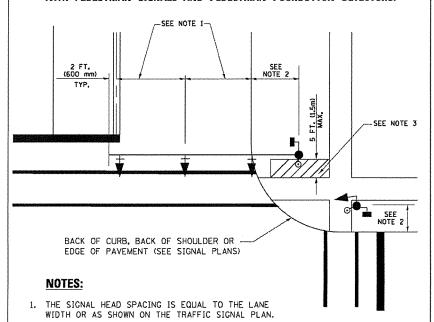
#### LOOP DETECTOR SPLICE

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

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

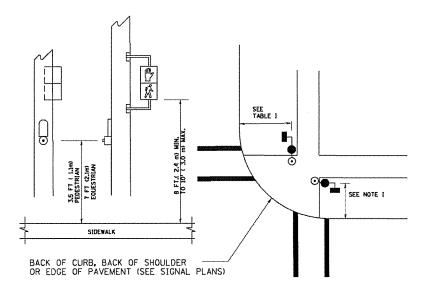
| FILE NAME =                               | USER NAME = factory         | DESIGNED - DAD  | REVISED - DAG 1-1-14 |                              |             | DISTRICT ONE                           | RTE.      | SECTION                        | COUNTY    | SHEETS NO. |
|---|-----------------------------|-----------------|----------------------|------------------------------|-------------|--|-----------|--------------------------------|-----------|------------|
| c:\pw_work\pwidot\footemj\d0108315\ts05.6 | lgn                         | DRAWN - BCK     | REVISED -            | STATE OF ILLINOIS            |             |  | 2678      | 18-00098-00-RS                 | DuPAGE    | 45 18      |
|   | PLOT SCALE = 50.0000 '/ in. | CHECKED - DAD   | REVISED -            | DEPARTMENT OF TRANSPORTATION |             | STANDARD TRAFFIC SIGNAL DESIGN DETAILS |           | TS-05                          | CONTRACT  | NO. 61F38  |
|   | PLOT DATE = 1/13/2014       | DATE - 10-28-09 | REVISED -            |                              | SCALE: NONE | SHEET NO. 2 OF 7 SHEETS STA. TO STA.   | FED. ROAD | DIST. NO. 1   ILLINDIS FED. AL | D PROJECT |            |

# TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



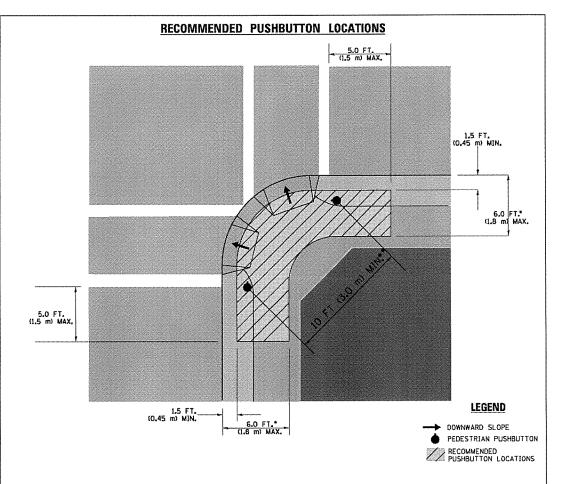
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5, THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

## PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- •• WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

#### NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

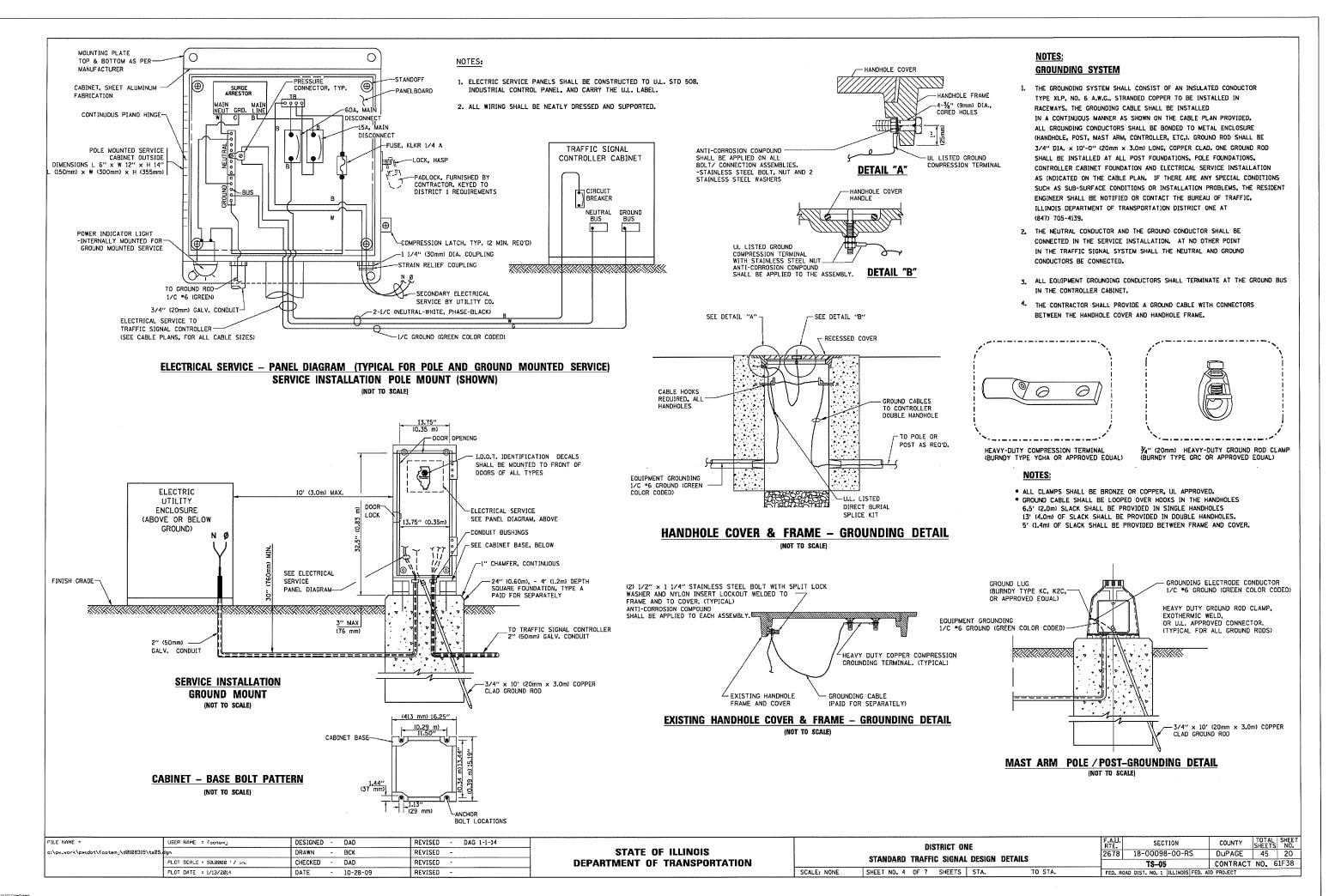
#### TRAFFIC SIGNAL EQUIPMENT OFFSET

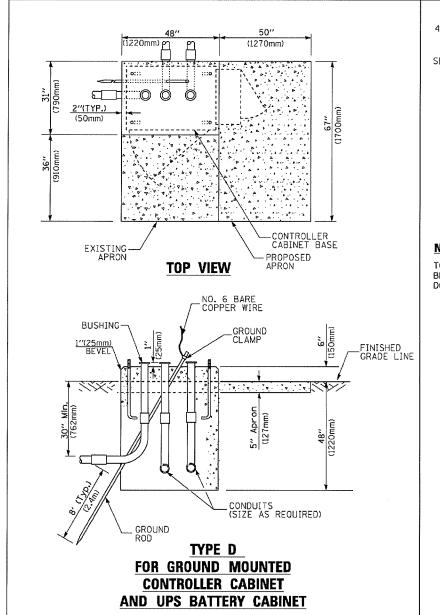
| TRAFFIC SIGNAL EQUIPMENT              | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM<br>DISTANCE FROM EDGE OF PAVEMENT<br>TO CENTERLINE OF FOUNDATION) |
|---------------------------------------|---|---|
| TRAFFIC SIGNAL MAST ARM POLE          | 6 FT (1.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| TRAFFIC SIGNAL POST                   | 4 FT (1,2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| PEDESTRIAN SIGNAL POST                | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| PEDESTRIAN PUSHBUTTON POST            | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| TEMPORARY WOOD POLE                   | 6 FT (I.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| CONTROLLER CABINET                    | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |
| SERVICE INSTALLATION,<br>GROUND MOUNT | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |

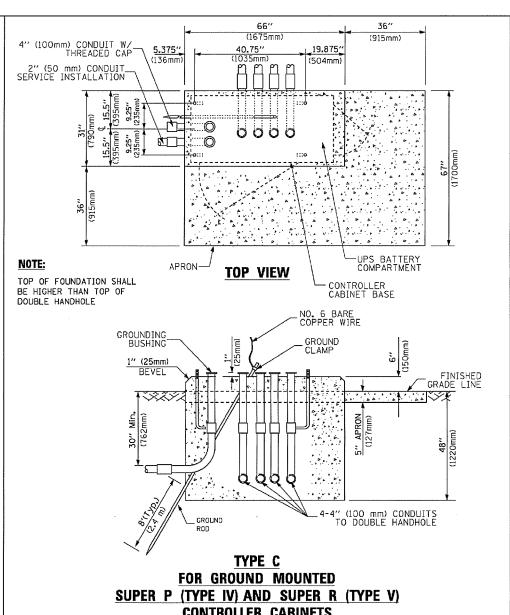
#### NOTES:

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

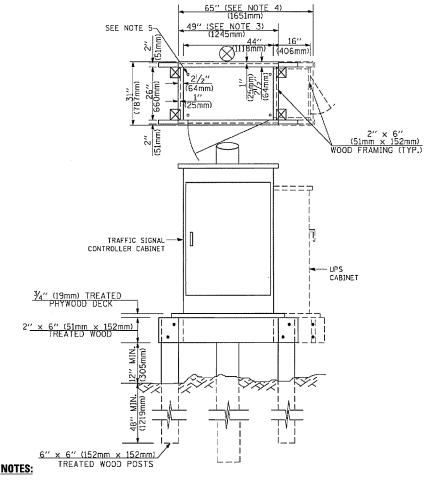
| FILE NAME =                              | USER NAME : footomj         | DESIGNED - DAD  | REVISED - DAG 1-1-14 |                              | DISTRICT ONE                                    | F.A.U. SECTION                       | COUNTY TOTAL SHEET |
|--|-----------------------------|-----------------|----------------------|------------------------------|---|--------------------------------------|--------------------|
| ci/pw.work/pwidot/footemj/d0188315/ts85. | dan                         | DRAWN - BCK     | REVISED -            | STATE OF ILLINOIS            | STANDARD TRAFFIC SIGNAL DESIGN DETAILS          | 2678 18-00098-00-RS                  | DuPAGE 45 19       |
|  | PLOT SCALE = 50.0000 '/ in. | CHECKED - DAD   | REVISED -            | DEPARTMENT OF TRANSPORTATION | STANDARD TRAFFIC SIGNAL DESIGN DETAILS          | TS-05                                | CONTRACT NO. 61F38 |
| 1  | PLOT DATE = 1/13/2014       | DATE - 10-28-09 | REVISED -            |                              | SCALE NONE SHEET NO. 3 OF 7 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 111 INDISTEED. | AID PROJECT        |







**CONTROLLER CABINETS** 



- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).
   ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16"  $\times$  25" (406mm  $\times$  635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IY AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

#### **TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM**

| CABLE SLACK LENGTH                                | FEET  | METER    |
|---|---|----------|
| HANDHOLE  | 6.5   | 2.0      |
| DOUBLE HANDHOLE                                   | 13.0  | 4.0      |
| SIGNAL POST                                       | 2.0   | 0.6      |
| MAST ARM  | 2.0   | 0.6      |
| CONTROLLER CABINET                                | 1.5   | 0.5      |
| FIBER OPTIC AT CABINET                            | 13.0  | 4.0      |
| ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION) | 1.5   | 0.5      |
| GROUND CABLE<br>(SIGNAL POST, MAST ARM, CABINET)  | 1.5   | 0.5      |
| GROUND CABLE<br>(BETWEEN FRAME AND COVER)         | 5.0   | 1.6      |
|   | HANDHOLE  DOUBLE HANDHOLE  SIGNAL POST  MAST ARM  CONTROLLER CABINET FIBER OPTIC AT CABINET  ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)  GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)  GROUND CABLE | HANDHOLE |

CABLE SLACK

| VERTICAL CABLE LENGTH   | FEET   | METER |
|---|--------|-------|
| MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM) | 20.0+L | 6.0+L |
| BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)  | 13.0   | 4.0   |
| PEDESTRIAN PUSH BUTTON  | 6.0    | 2.0   |
| SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP   | 13.5   | 4.1   |
| SERVICE INSTALLATION POLE MOUNT TO GROUND   | 13.5   | 4.1   |
| SERVICE INSTALLATION GROUND MOUNT   | 6.0    | 2.0   |
| FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)                             | 3.0    | 1.0   |

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|---------|--------|-------|-------|------|--------|---------|---|
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| FOUNDATION  | DEPTH        |
|---|--------------|
| TYPE A - Signal Post                                      | 4'-0" (1.2m) |
| TYPE C - CONTROLLER W/ UPS                                | 4'-0" (1.2m) |
| TYPE D - CONTROLLER                                       | 4'-0" (1.2m) |
| SERVICE INSTALLATION,<br>GROUND MOUNT,<br>TYPE A - SQUARE | 4'-0" (1.2m) |

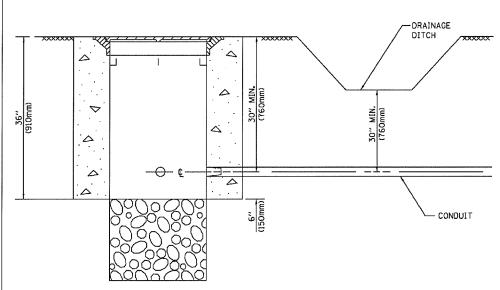
#### **DEPTH OF FOUNDATION**

| Mast Arm Length  | ① Foundation<br>Depth | Foundation<br>Diameter | Spiral<br>Diameter | Quantity of<br>Rebars | Size of<br>Rebors |
|--|-----------------------|------------------------|--------------------|-----------------------|-------------------|
| Less than 30' (9.1 m)  | 10'-0" (3.0 m)        | 30" (750mm)            | 24" (600mm)        | 8                     | 6(19)             |
| Greater than or equal to   | 13'-6" (4.1 m)        | 30" (750mm)            | 24" (600mm)        | 8                     | 6(19)             |
| 30' (9.1 m) and less than<br>40' (12.2 m)                              | 11'-0" (3.4 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>40' (12.2 m) and less than<br>50' (15.2 m) | 13'-0" (4.0 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)           | 15'-0" (4.6 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)       | 21'-0" (6.4 m)        | 42" (1060mm)           | 36" (900mm)        | 16                    | 8(25)             |
| Greater than or equal to<br>65' (19.8 m) and up to<br>75' (22.9 m)     | 25'-0" (7.6 m)        | 42" (1060mm)           | 36" (900mm)        | 16                    | 8(25)             |

- These foundation depths are for sites which have cohesive soils (clayey slit, sandy clay, etc.) along
  the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa).
  This strength shall be verified by boring data prior to construction or with testing by the Engineer
  during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
  design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination most arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001..

#### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

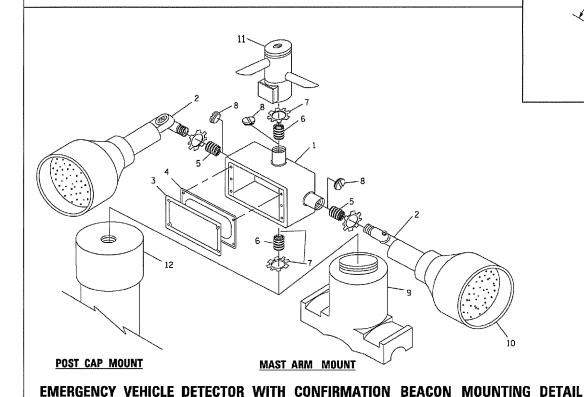
| FILE NAME =                              | USER NAME = footemj         | DESIGNED - DAG  | REVISED - DAG 1-1-14 |                              |  | DISTRICT ONE                         | F.A.U.  | SECTION        | COUNTY      | TOTAL SHEET |
|--|-----------------------------|-----------------|----------------------|------------------------------|--|--------------------------------------|---------|----------------|-------------|-------------|
| c:\pw_work\pwidot\footemj\dØ108315\t#05. | dgn                         | DRAWN - BCK     | REVISED -            | STATE OF ILLINOIS            |  |                                      | 2678    | 18-00098-00-RS | DuPAGE      | 45 21       |
|  | PLOT SCALE = 50.0000 '/ in. | CHECKED - DAD   | REVISED -            | DEPARTMENT OF TRANSPORTATION | STANDARD TRAFFIC SIGNAL DESIGN DETAILS |                                      |         | TS05           | CONTRAC     | T NO. 61F38 |
|  | PLOT DATE = 1/13/2014       | DATE - 10-28-09 | REVISED -            | 1                            | SCALE: NONE                            | SHEET NO. 5 OF 7 SHEETS STA. TO STA. | FED. RO |                | AID PROJECT |             |

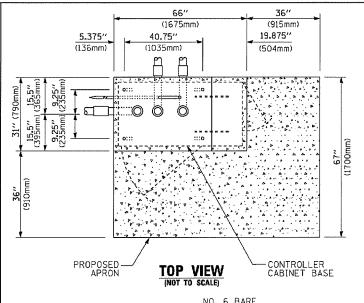


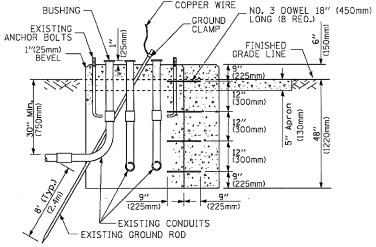
#### NOTES

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

### HANDHOLE WITH MINIMUM CONDUIT DEPTH







## MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)

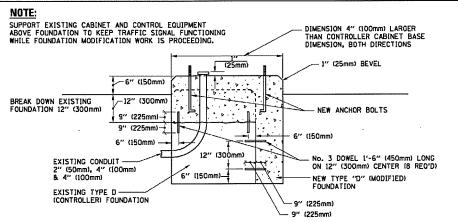
# RO.50" (12mm) RO.50" (12mm) RO.50" (12mm) RO.50" (12mm) RO.50" (12mm) RO.25" (12mm) RO.25" (130mm) RO.2

| A      | В             | С            | HEIGHT                   | WEIGHT          |
|--------|---------------|--------------|--------------------------|-----------------|
| VARIES | 9.5"(241mm)   | 19"(483mm)   | 7" (178mm) - 12" (300mm) | 53 lbs (24kg)   |
| VARIES | 10.75"(273mm) | 21.5"(546mm) | 7" (178mm) - 12" (300mm) | 68 lbs (31 kg)  |
| VARIES | 13.0"(330mm)  | 26"(660mm)   | 7" (178mm) - 12" (300mm) | 81 lbs (37 kg)  |
| VARIES | 18.5"(470mm)  | 37"(940mm)   | 7" (178mm) - 12" (300mm) | 126 lbs (57 kg) |

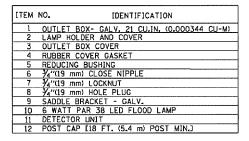
#### **SHROUD**

#### NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
  THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



#### MODIFY EXISTING TYPE "D" FOUNDATION



#### NOTES:

- 1, ALL ELECTRICAL ITEMS, EXCEPT ITEMS \*2 AND \*11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM \*1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT

  ITEM \*2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT

  ITEM \*9- "RAND-IT" SADDLE BRACKET OR FOLIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, 1TEM \*9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

# ANT MED CONDUIT CONDUIT CONDUIT TO BE REMOVED CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN EXISTING CONDUIT TO REMAIN PLAN ELEVATION

#### NOTES:

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

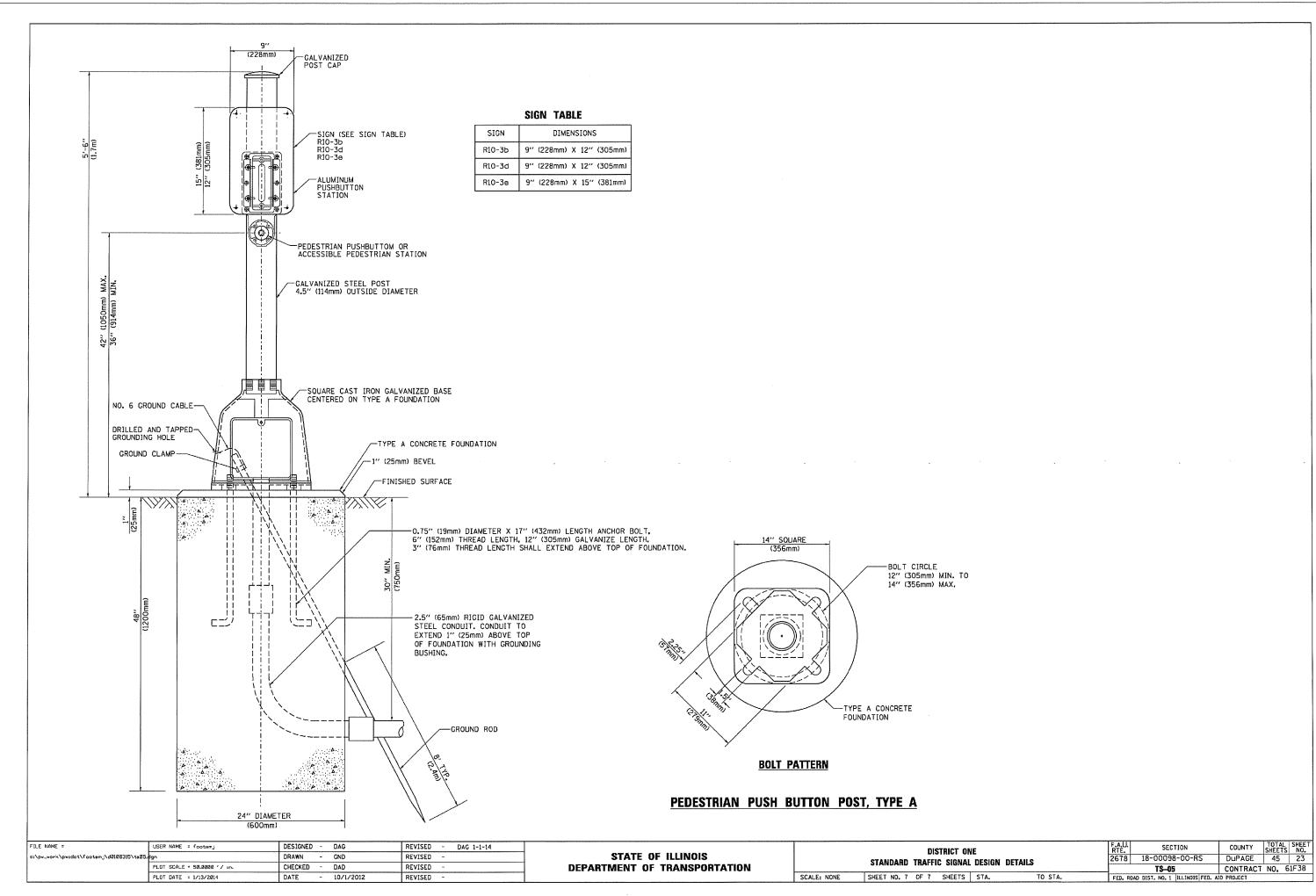
#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

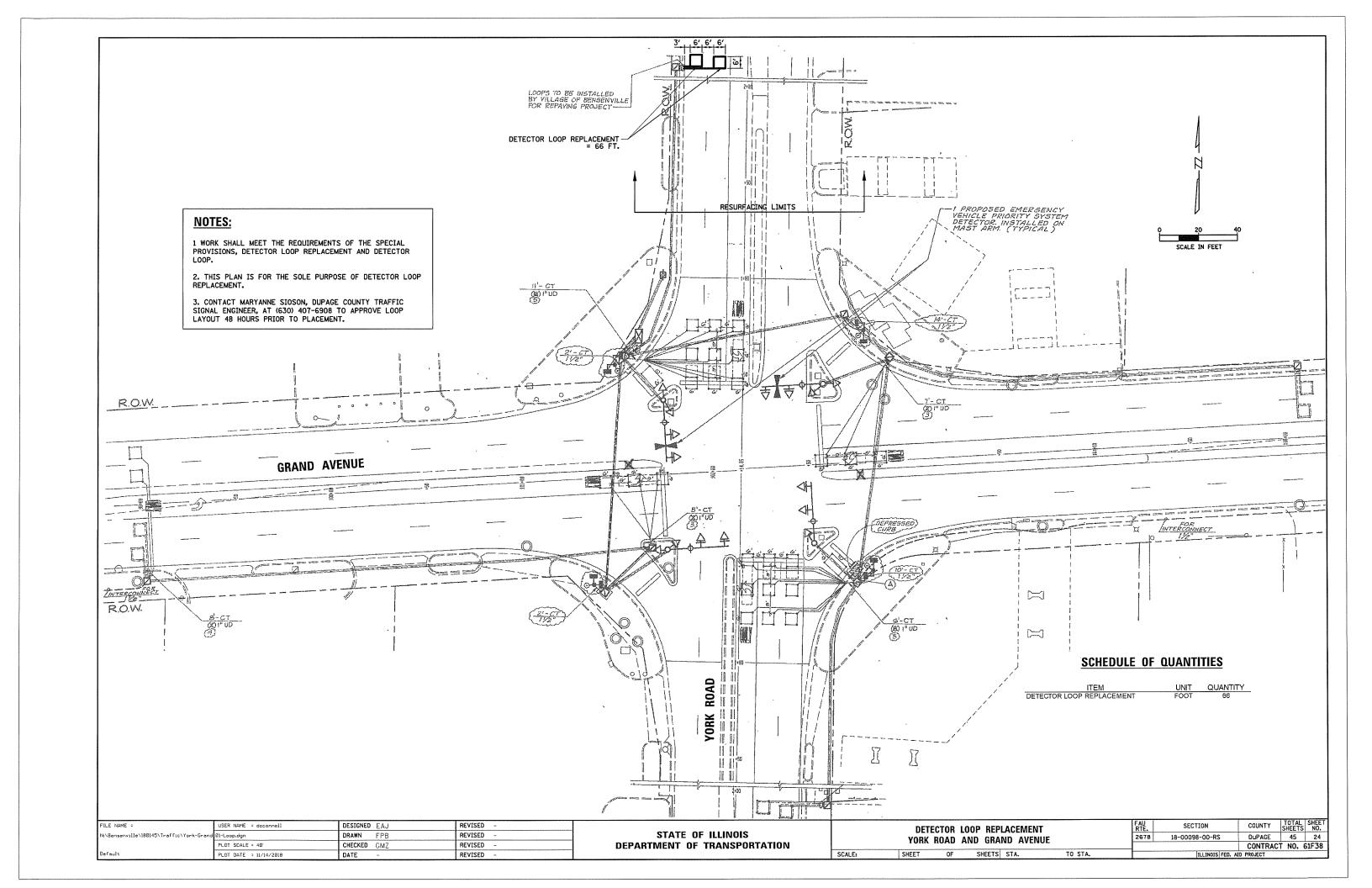
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|---|--|-----------------------|----------|-----|----------|---------|---|------------|
|   | c:\pw_work\pwidot\footemj\d0108315\ts05. | DRAWN                 | -        | BCK | REVISED  | -       |   |            |
|   | PLOT SCALE = 50.0000 '/ in.              |                       | CHECKED  | -   | DAD      | REVISED | - |            |
| - |  | PLOT DATE = 1/13/2014 | DATE     | -   | 10-28-09 | REVISED | - |            |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

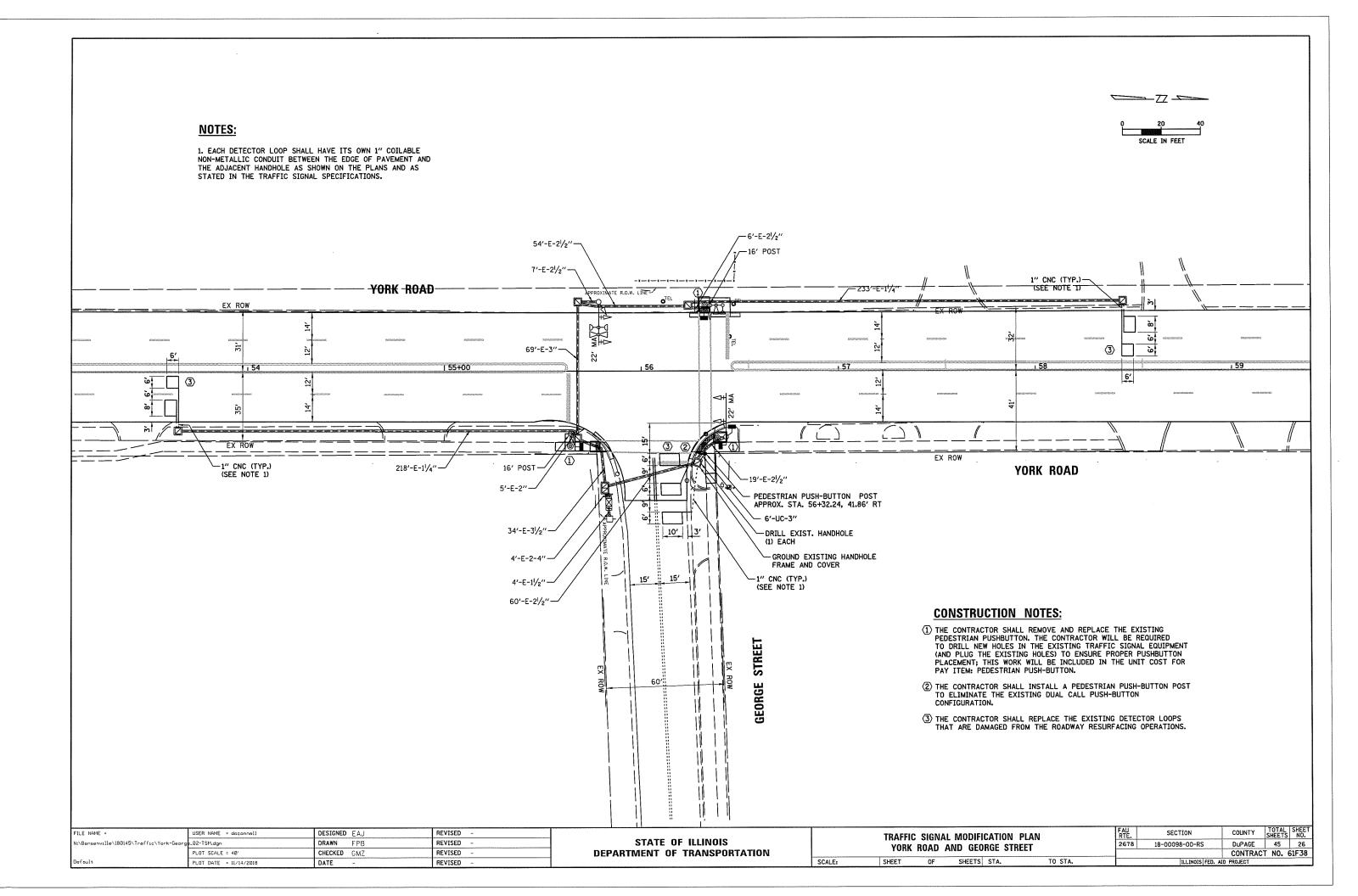
|   |                | F.A.U.<br>RTE.     | SECTION | COUNTY  | TOTAL   | SHEET<br>NO.   |        |    |    |  |
|---|----------------|--------------------|---------|---------|---|----------------|--------|----|----|--|
| DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS |                |                    |         |         |   | 18-00098-00-RS | DuPAGE | 45 | 22 |  |
|   | SIANUARU IN    | TS-05 CONTRACT NO. |         |         |   |                |        |    |    |  |
| SCALE: NONE   | SHEET NO. 6 OF | 7 SHEETS           | STA.    | TO STA. | FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT |                |        |    |    |  |

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### **REMOVAL NOTES:** THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE, THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON EACH EACH -6'-E-2<sup>1</sup>/2" 54'-E-21/2" 7'-E-21/2"-YORK ROAD MATE R.O.W. LINE -----69'-E-3"-1 54 1 55+00 1 . . . . . 218'-E-11/4" YORK ROAD 34'-E-31/2' 4'-E-2-4" 4'-E-11/2" 60'-E-21/2" COUNTY TOTAL SHEETS NO. DUPAGE 45 25 FILE NAME = DESIGNED EAJ REVISED -USER NAME = doconnell SECTION **REMOVAL PLAN** STATE OF ILLINOIS Ø1-REM.dgn REVISED 18-00098-00-RS YORK ROAD AND GEORGE STREET PLOT SCALE = 40' CHECKED GMZ REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61F38 SCALE: SHEETS STA. DATE SHEET OF TO STA. PLOT DATE = 11/14/2018 REVISED



#### **EXISTING CONTROLLER SEQUENCE LEGEND: ◆ \* PROTECTED PHASE** ← -\* - PROTECTED/PERMITTED PHASE YORK ROAD ◆ -(\*) PEDESTRIAN PHASE OVERLAP OVERLAP **—**②**→ ∢**-2)-▶ RIGHT TURN OVERLAP PHASE DESIGNATION: OVERLAP PERMISSIVE PROTECTED $(\mathcal{A})$ LETTER PHASE PHASE C = 1 + 2 YORK ROAD D-0-(I **EXISTING EMERGENCY VEHICLE** $\triangleright \infty$ PREEMPTION SEQUENCE (C)(Z)(Z) YORK ROAD YORK ROAD **--**3→ 1 <u>@</u> (2) TRAFFIC SIGNAL (1\*6) **ELECTRICAL SERVICE REQUIREMENTS** STREET NO. OF LED % WATTAGE OPERATION LAMPS WATTAGE SIGNAL (RED) 50 44.0 (YELLOW) 8.0 12 GEORGE PERMISSIVE ARROW 4.0 10 PED. SIGNAL 20 100 80.0 SCHEDULE OF QUANTITIES CONTROLLER 100 100.0 **CONSTRUCTION NOTES:** VIDEO SYSTEM 150 100 1 THE CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING BLANK-OUT SIGN 25 UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION PEDESTRIAN PUSHBUTTON. THE CONTRACTOR WILL BE REQUIRED FLASHER 50 TO DRILL NEW HOLES IN THE EXISTING TRAFFIC SIGNAL EQUIPMENT STREET NAME SIGN 50 120 (AND PLUG THE EXISTING HOLES) TO ENSURE PROPER PUSHBUTTON GROUNDING EXISTING HANDHOLE FRAME AND COVER **CABLE PLAN** LUMINAIRE ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C PLACEMENT; THIS WORK WILL BE INCLUDED IN THE UNIT COST FOR TOTAL = 279.2 (NOT TO SCALE) ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C PAY ITEM: PEDESTRIAN PUSH-BUTTON. ENERGY COSTS TO: CONCRETE FOUNDATION, TYPE A (2) THE CONTRACTOR SHALL INSTALL A PEDESTRIAN PUSH-BUTTON POST VILLAGE OF BENSENVILLE PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER TO ELIMINATE THE EXISTING DUAL CALL PUSH-BUTTON 12 S Center Street DETECTOR LOOP REPLACEMENT CONFIGURATION. Bensenville, IL 60106 PEDESTRIAN PUSH-BUTTON MODIFY EXISTING CONTROLLER ENERGY SUPPLY: CONTACT: NEW BUSINESS 3 THE CONTRACTOR SHALL REPLACE THE EXISTING DETECTOR LOOPS MODIFY EXISTING CONTROLLER CABINET PHONE: NEW PHONE THAT ARE DAMAGED FROM THE ROADWAY RESURFACING OPERATIONS. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT COMPANY: COMMONWEALTH EDISON PEDESTRIAN PUSH-BUTTON POST, TYPE A DESIGNED EAJ SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

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DRAWN FPB

CHECKED GMZ

DATE

FILE NAME :

USER NAME = doconnell

PLOT DATE = 11/14/2018

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SECTION

18-00098-00-RS

2678

TO STA.

DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

YORK ROAD AND GEORGE STREET

SHEETS STA.

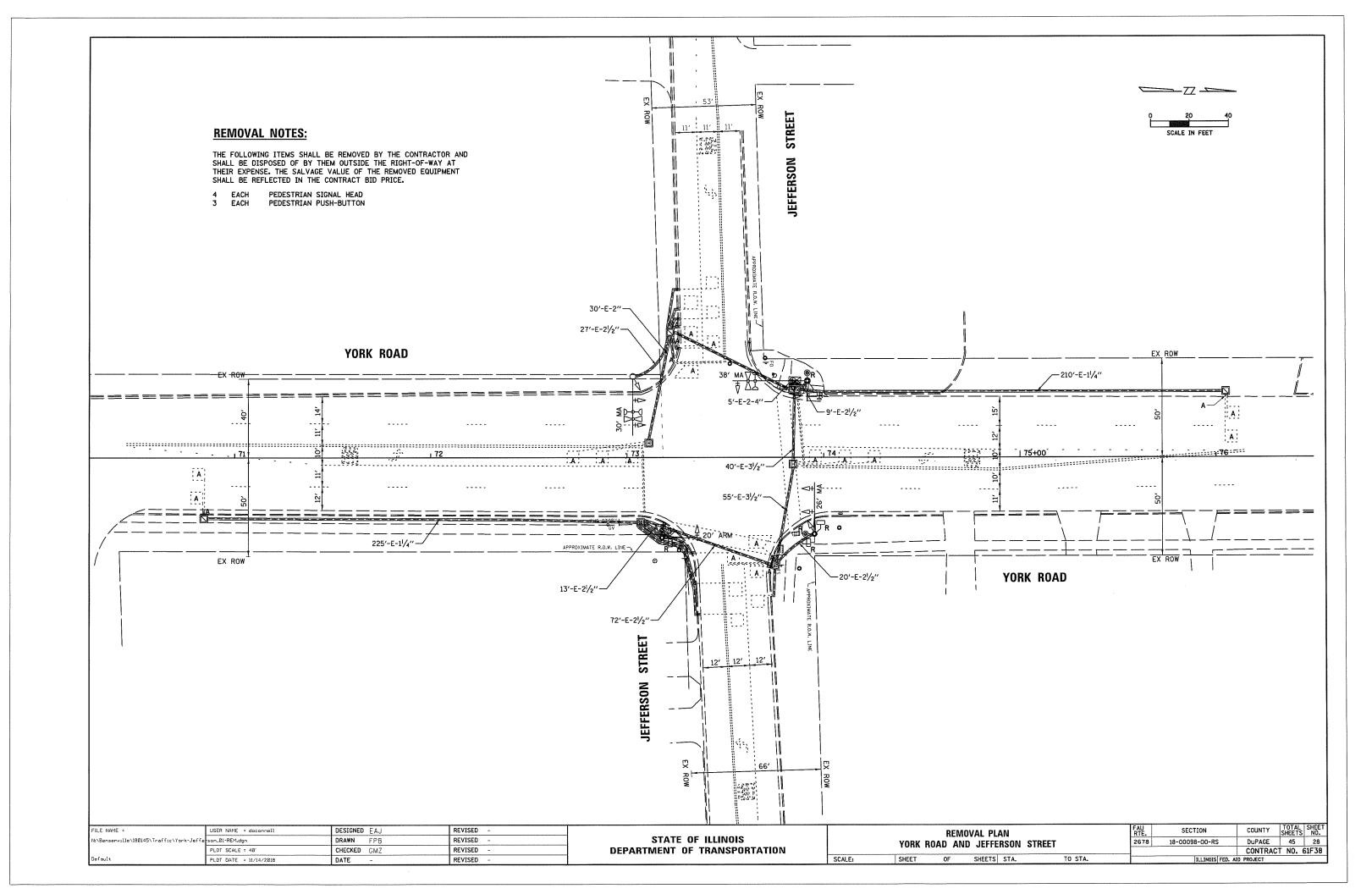
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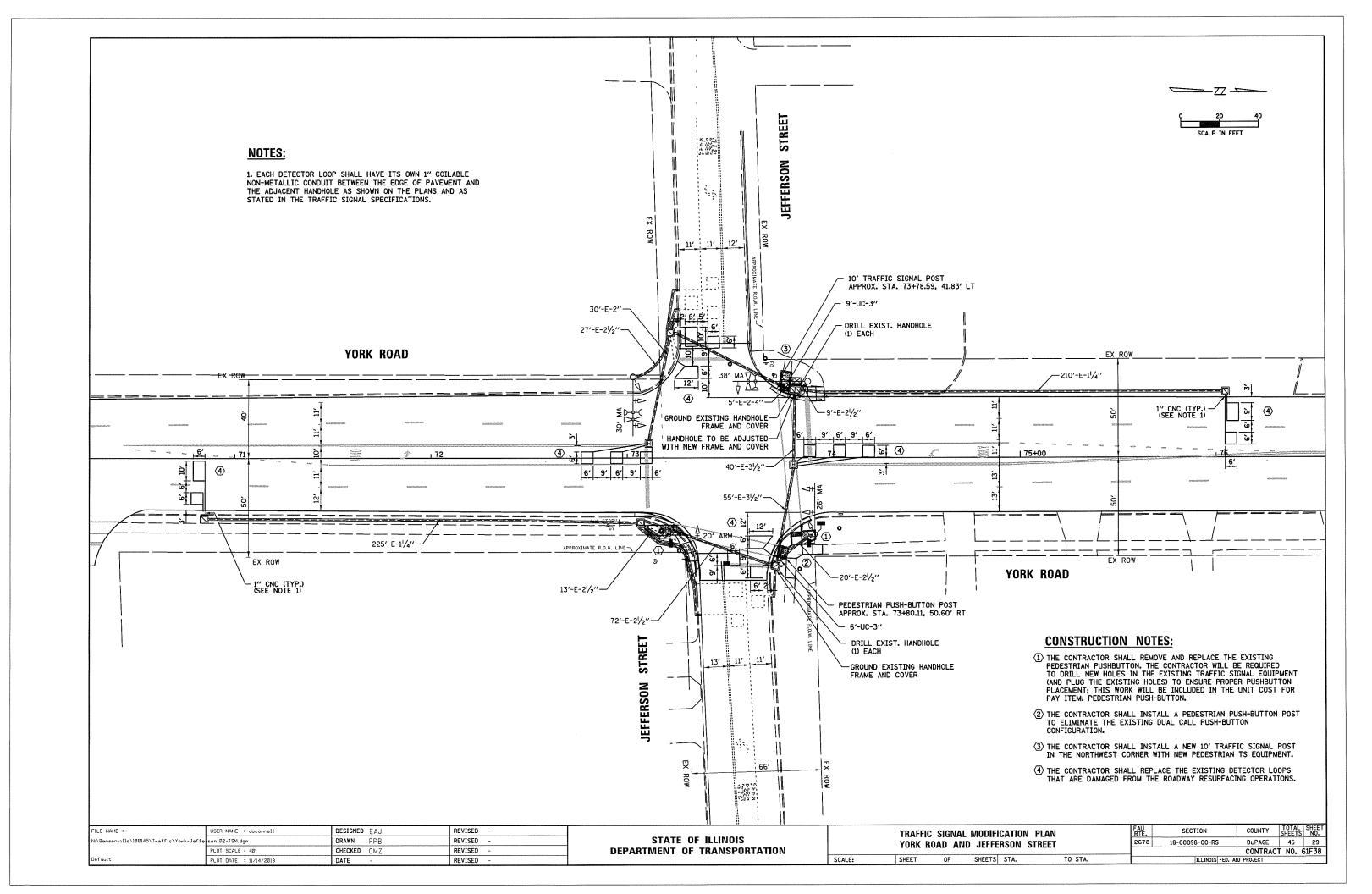
257

COUNTY SHEETS NO.

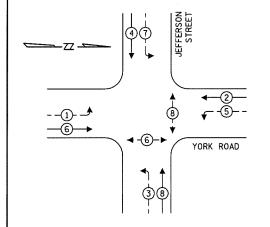
DUPAGE 45 27

CONTRACT NO. 61F38









#### LEGEND:

**←**(\*)— PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

**CONSTRUCTION NOTES:** 

(3) THE CONTRACTOR SHALL INSTALL A NEW 10' TRAFFIC SIGNAL POST IN THE NORTHWEST CORNER WITH NEW PEDESTRIAN TS EQUIPMENT.

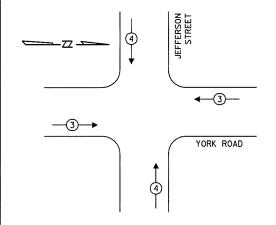
4 THE CONTRACTOR SHALL REPLACE THE EXISTING DETECTOR LOOPS

THAT ARE DAMAGED FROM THE ROADWAY RESURFACING OPERATIONS.

→ PEDESTRIAN PHASE

OL OVERLAP

#### **EXISTING EMERGENCY VEHICLE** PREEMPTION SEQUENCE



#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

|                  | NO. OF | LED     | 7.        | TOTAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 10     | 11      | 50        | 55.0    |
| (YELLOW)         | 10     | 20      | 5         | 10.0    |
| (GREEN)          | 10     | 12      | 45        | 54.0    |
| PERMISSIVE ARROW | 16     | 10      | 10        | 16.0    |
| PED. SIGNAL      | 4      | 20      | 100       | 80.0    |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | -      | 25      | 100       | -       |
| VIDEO SYSTEM     | -      | 150     | 100       | -       |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | -      | 120     | 50        | -       |
| LUMINAIRE        | -      | _       | _         | -       |
|                  |        |         | TOTAL =   | 315.0   |

**ENERGY COSTS TO:** 

VILLAGE OF BENSENVILLE

12 S Center Street Bensenville, IL 60106

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE

COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

DESIGNED EAJ REVISED DRAWN FPB REVISED son\_Ø3-CAB.dgn PLOT SCALE = 40' CHECKED GMZ REVISED PLOT DATE = 11/14/2018 DATE REVISED

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE SECTION 18-00098-00-RS 2678 YORK ROAD AND JEFFERSON STREET SCALE: SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

PEDESTRIAN PUSH-BUTTON

MODIFY EXISTING CONTROLLER

MODIFY EXISTING CONTROLLER CABINET

REMOVE ELECTRIC CABLE FROM CONDUIT

PEDESTRIAN PUSH-BUTTON POST, TYPE A

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

<u>~</u> ZZ <u>∽</u>

50

610

EACH

EACH

FACH

FOOT

EACH

EACH

EACH

COUNTY TOTAL SHEE NO.

DuPAGE 45 30

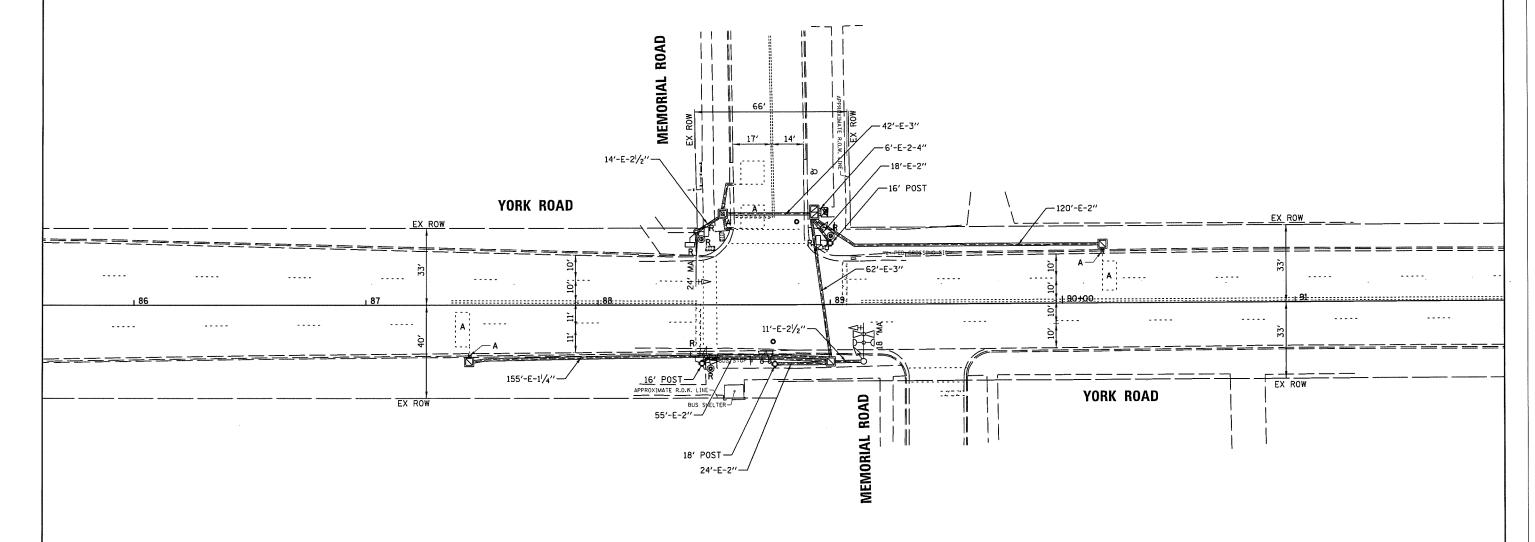
CONTRACT NO. 61F38

#### **₽** C **◎ 1** D ③ 4 YORK ROAD (EXXE) 4 (3#20) (~X-X0X<del>+</del>X<del>\$</del> 4 $\mathbb{C}$ ≫₹ $\langle 1 \rangle$ 2 JEFFERSON Street SCHEDULE OF QUANTITIES UNIT QUANTITY UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. FOOT MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION FACH 1 THE CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING GROUNDING EXISTING HANDHOLE FRAME AND COVER EACH PEDESTRIAN PUSHBUTTON. THE CONTRACTOR WILL BE REQUIRED ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C FOOT TO DRILL NEW HOLES IN THE EXISTING TRAFFIC SIGNAL EQUIPMENT FOOT (AND PLUG THE EXISTING HOLES) TO ENSURE PROPER PUSHBUTTON ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C FOOT PLACEMENT; THIS WORK WILL BE INCLUDED IN THE UNIT COST FOR PAY ITEM: PEDESTRIAN PUSH-BUTTON. TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT. EACH CONCRETE FOUNDATION, TYPE A FOOT CABLE PLAN DRILL EXISTING HANDHOLE 2 THE CONTRACTOR SHALL INSTALL A PEDESTRIAN PUSH-BUTTON POST (NOT TO SCALE) PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH TO ELIMINATE THE EXISTING DUAL CALL PUSH-BUTTON DETECTOR LOOP REPLACEMENT FOOT

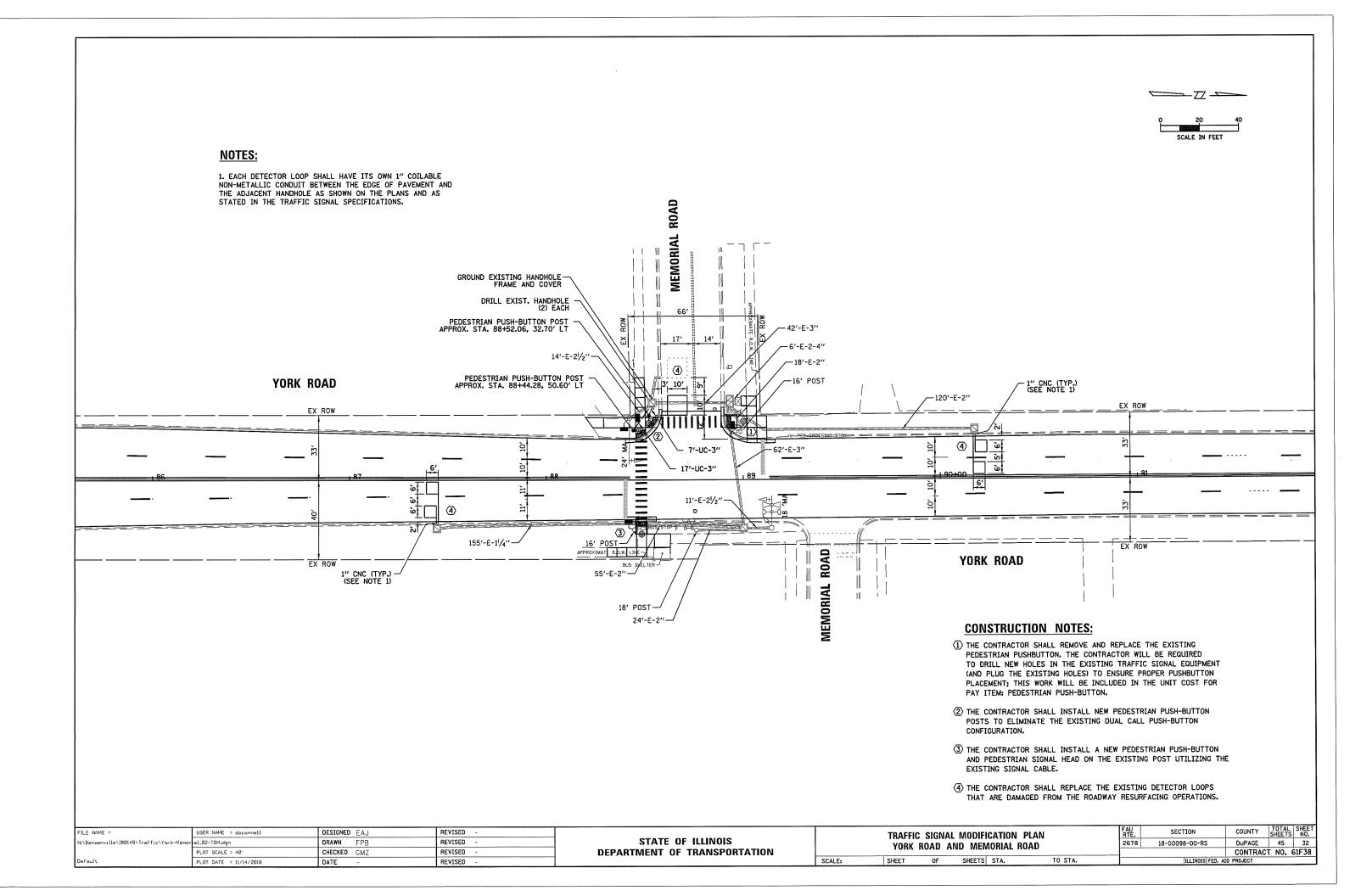
#### **REMOVAL NOTES:**

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

4 EACH PEDESTRIAN SIGNAL HEAD 3 EACH PEDESTRIAN PUSH-BUTTON

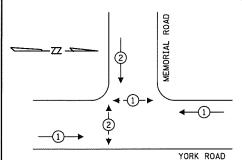


| FILE NAME =                              | USER NAME = documell   | DESIGNED EAJ | REVISED - |                              | REMOVAL PLAN<br>YORK ROAD AND MEMORIAL ROAD |       | FAU<br>RTE. | SECTION        | COUNTY  | TOTAL SHEET<br>SHEETS NO. |   |                 |            |  |   |
|--|------------------------|--------------|-----------|------------------------------|---|-------|-------------|----------------|---------|---------------------------|---|-----------------|------------|--|---|
| N:\Bensenville\180145\Traffic\York-Memor | al_01-REM.dgn          | DRAWN FPB    | REVISED - | STATE OF ILLINOIS            |   |       | 2678        | 18-00098-00-RS | DuPAGE  | 45 31                     | 1 |                 |            |  |   |
|  | PLOT SCALE = 40'       | CHECKED GMZ  | REVISED - | DEPARTMENT OF TRANSPORTATION |   |       |             |                | CONTRAC | CT NO. 61F38              | 1 |                 |            |  |   |
| Default                                  | PLOT DATE = 11/14/2018 | DATE -       | REVISED ~ |                              | SCALE:                                      | SHEET | 0F          | SHEET          | S STA.  | TO STA.                   |   | ILLINOIS FED. A | ID PROJECT |  | ĺ |



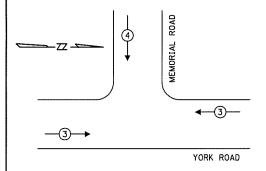
#### **EXISTING CONTROLLER SEQUENCE**

#### **LEGEND:**



**★**PROTECTED PHASE ← -(\*)- - PROTECTED/PERMITTED PHASE → -(\*)-- PEDESTRIAN PHASE OVERLAP

#### **EXISTING EMERGENCY VEHICLE** PREEMPTION SEQUENCE



#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

| İ                | NO. OF | LED     | %         | TOTAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 6      | 11      | 50        | 33.0    |
| (YELLOW)         | 6      | 20      | 5         | 6.0     |
| (GREEN)          | 6      | 12      | 45        | 32.4    |
| PERMISSIVE ARROW | _      | 10      | 10        | -       |
| PED. SIGNAL      | 4      | 20      | 100       | 80.0    |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | -      | 25      | 100       | -       |
| VIDEO SYSTEM     | -      | 150     | 100       | -       |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | -      | 120     | 50        | -       |
| LUMINAIRE        | _      | -       | -         | -       |
|                  |        | •       | TOTAL =   | 251.4   |

ENERGY COSTS TO:

VILLAGE OF CHICAGO RIDGE

10455 S. Ridgeland Ave. Chicago Ridge, Illinois 60415

ENERGY SUPPLY: CONTACT: NEW BUSINESS PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER: ---

REVISED -FILE NAME = USER NAME = doconnell DESIGNED EAJ DRAWN FPB REVISED 1\_03~CAB.dgn PLOT SCALE = 40' CHECKED GMZ REVISED PLOT DATE = 11/14/2018 DATE REVISED

4

**CONSTRUCTION NOTES:** 

PAY ITEM: PEDESTRIAN PUSH-BUTTON.

EXISTING SIGNAL CABLE.

1 THE CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING PEDESTRIAN PUSHBUTTON. THE CONTRACTOR WILL BE REQUIRED

(2) THE CONTRACTOR SHALL INSTALL NEW PEDESTRIAN PUSH-BUTTON

POSTS TO ELIMINATE THE EXISTING DUAL CALL PUSH-BUTTON

4 THE CONTRACTOR SHALL REPLACE THE EXISTING DETECTOR LOOPS

(3) THE CONTRACTOR SHALL INSTALL A NEW PEDESTRIAN PUSH-BUTTON AND PEDESTRIAN SIGNAL HEAD ON THE EXISTING POST UTILIZING THE

THAT ARE DAMAGED FROM THE ROADWAY RESURFACING OPERATIONS.

TO DRILL NEW HOLES IN THE EXISTING TRAFFIC SIGNAL EQUIPMENT (AND PLUG THE EXISTING HOLES) TO ENSURE PROPER PUSHBUTTON PLACEMENT; THIS WORK WILL BE INCLUDED IN THE UNIT COST FOR

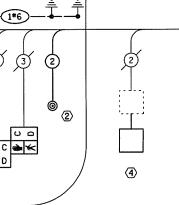
#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

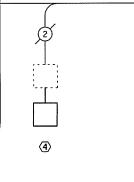
#### FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C FOOT 55 CONCRETE FOUNDATION, TYPE A FOOT DRILL EXISTING HANDHOLE EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER DETECTOR LOOP REPLACEMENT FOOT 230 PEDESTRIAN PUSH-BUTTON MODIFY EXISTING CONTROLLER EACH MODIFY EXISTING CONTROLLER CABINET EACH REMOVE ELECTRIC CABLE FROM CONDUIT FOOT REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH PEDESTRIAN PUSH-BUTTON POST, TYPE A EACH SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION SECTION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE YORK ROAD AND MEMORIAL ROAD

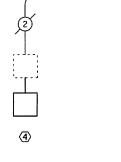
SCHEDULE OF QUANTITIES

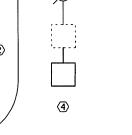
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION **CABLE PLAN** GROUNDING EXISTING HANDHOLE FRAME AND COVER

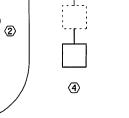
|           | P P H = = = = = = = = = = = = = = = = = |   |
|-----------|---|---|
|           | 2 3 3 2                                 | 2 |
| YORK ROAD | ② <b>P</b> C <b>S</b> C                 | 4 |
|           |   |   |

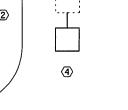


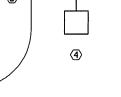










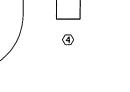


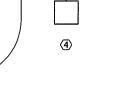






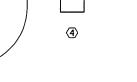


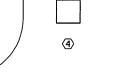






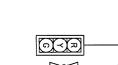












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MEMORIAL

4

(NOT TO SCALE)

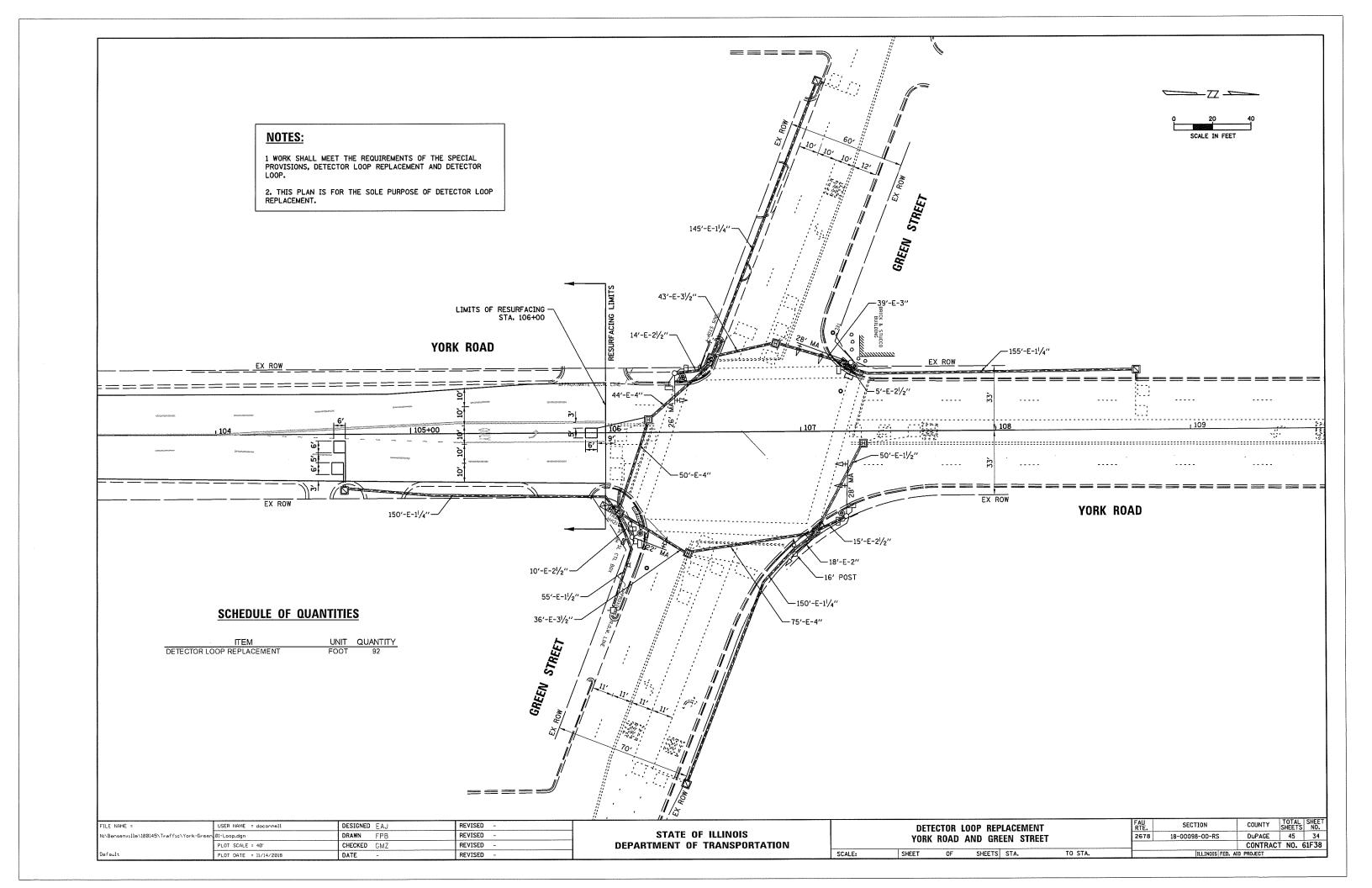
COUNTY SHEETS NO.

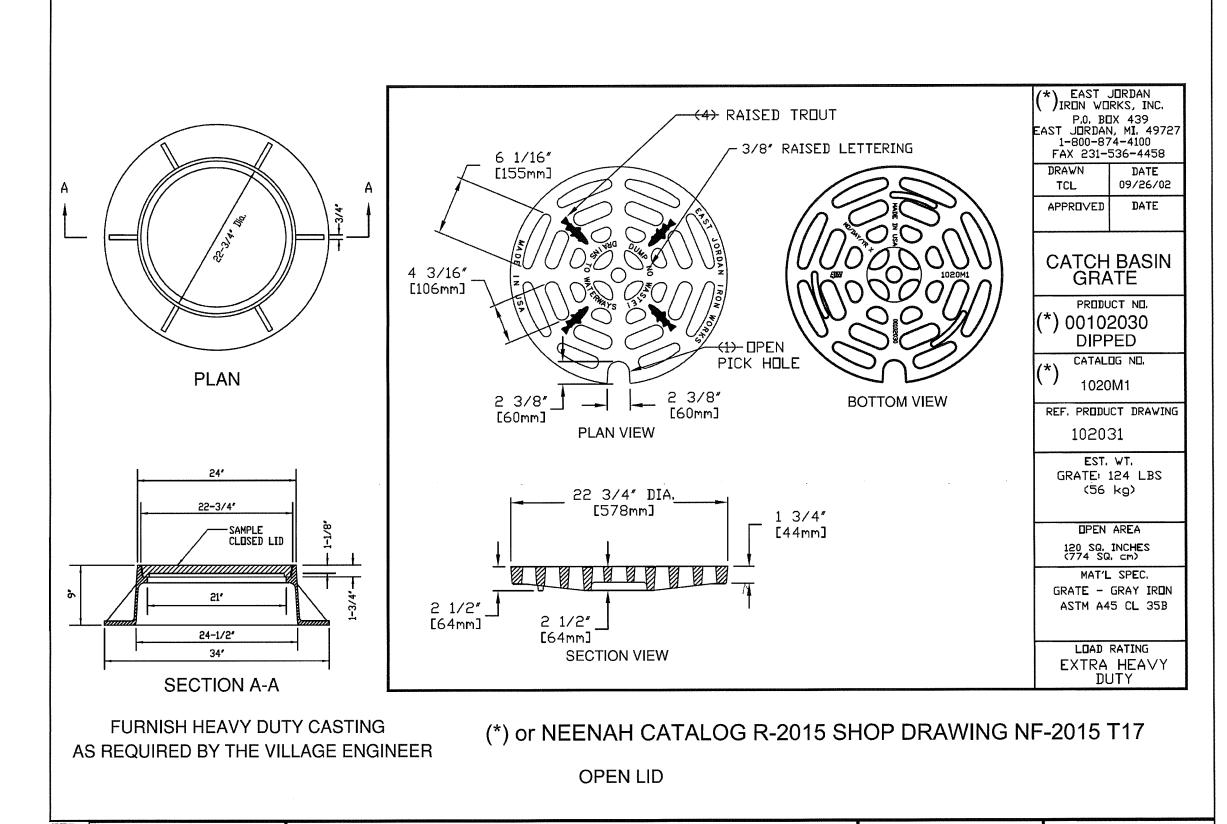
DUPAGE 45 33 2678 18-00098-00-RS CONTRACT NO. 61F38

UNIT QUANTITY

EACH

EACH





B

VILLAGE OF BENSENVILLE 12 S, CENTER STREET BENSENVILLE, IL 60106 WWW.BENSENVILLE,IL.US

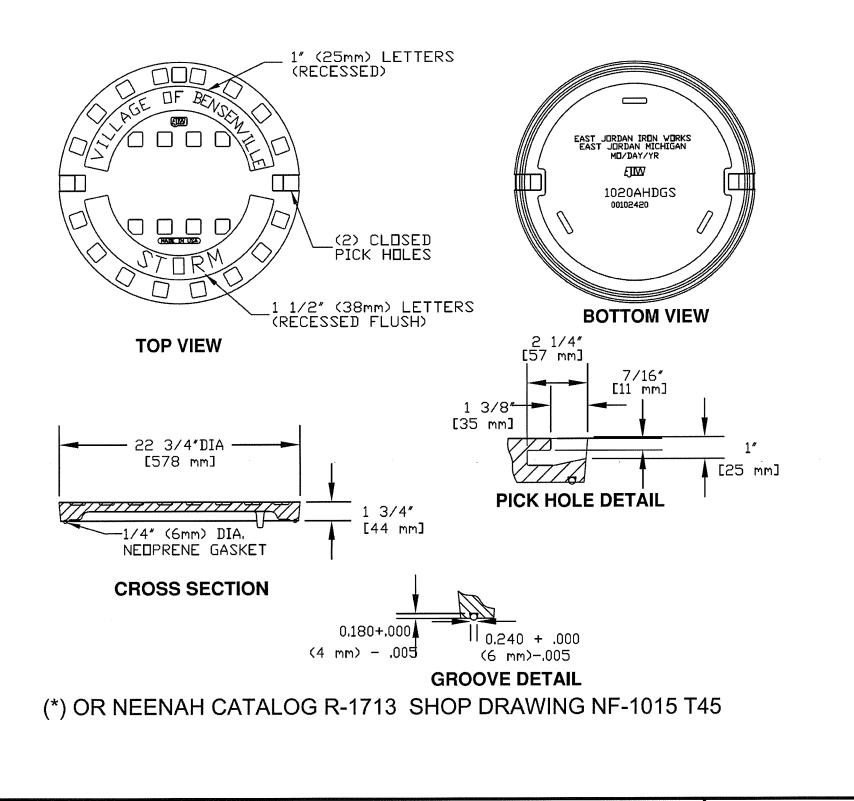
# STORM FRAME AND LID STANDARD (OPEN)

VILLAGE OF BENSENVILLE
SPECIFICATIONS AND DETAILS

FILE LOCATION

G:\ENGINEERING\STANDARDS\ NEW
STANDARDS\STORM

| FILE NAME =                               | USER NAME = doconnell  | DESIGNED MLM | REVISED   |                              |        | VILLAGE OF BENSENVILLE   |         | FAU. | SECTION        | COUNTY      | SHEETS NO.  |
|---|------------------------|--------------|-----------|------------------------------|--------|--------------------------|---------|------|----------------|-------------|-------------|
| N:\Bensenville\180145\Civil\DET_LA_180145 | Ø1.SHT                 | DRAWN MLM    | REVISED   | STATE OF ILLINOIS            |        | YORK ROAD                | İ       | 2678 | 18-00098-00-RS | DuPAGE      | 45 35       |
|   | PLOT SCALE = 2'        | CHECKED JGS  | REVISED - | DEPARTMENT OF TRANSPORTATION |        | VILLAGE DETAILS          |         | ,    |                | CONTRAC     | T NO. 61F38 |
| Default                                   | PLOT DATE = 11/14/2018 | DATE         | REVISED   |                              | SCALE: | SHEET 1 OF 4 SHEETS STA. | TO STA. |      | ILLINOIS FED.  | AID PROJECT |             |



(\*) EAST JORDAN IRON WORKS, INC. P.O. BOX 439 EAST JORDAN, MI. 49727

EAST JORDAN, MI. 49721 1-800-874-4100 FAX 231-536-4458

| DRAWN    | DATE     |
|----------|----------|
| SMH      | 11/11/02 |
| APPROVED | DATE     |

## SPECIAL LETTERED COVER

(\*) PRODUCT NO.

00102421

CATALOG NO.

(\*)

1020A

REF. PRODUCT DRAWING 102067

EST. WT. COVER WT: 115 LBS. (52 kg)

OPEN AREA

N/A

MAT'L SPEC. COVER - GRAY IRON ASTM A48 CL 35

LOAD RATING

**HEAVY DUTY** 

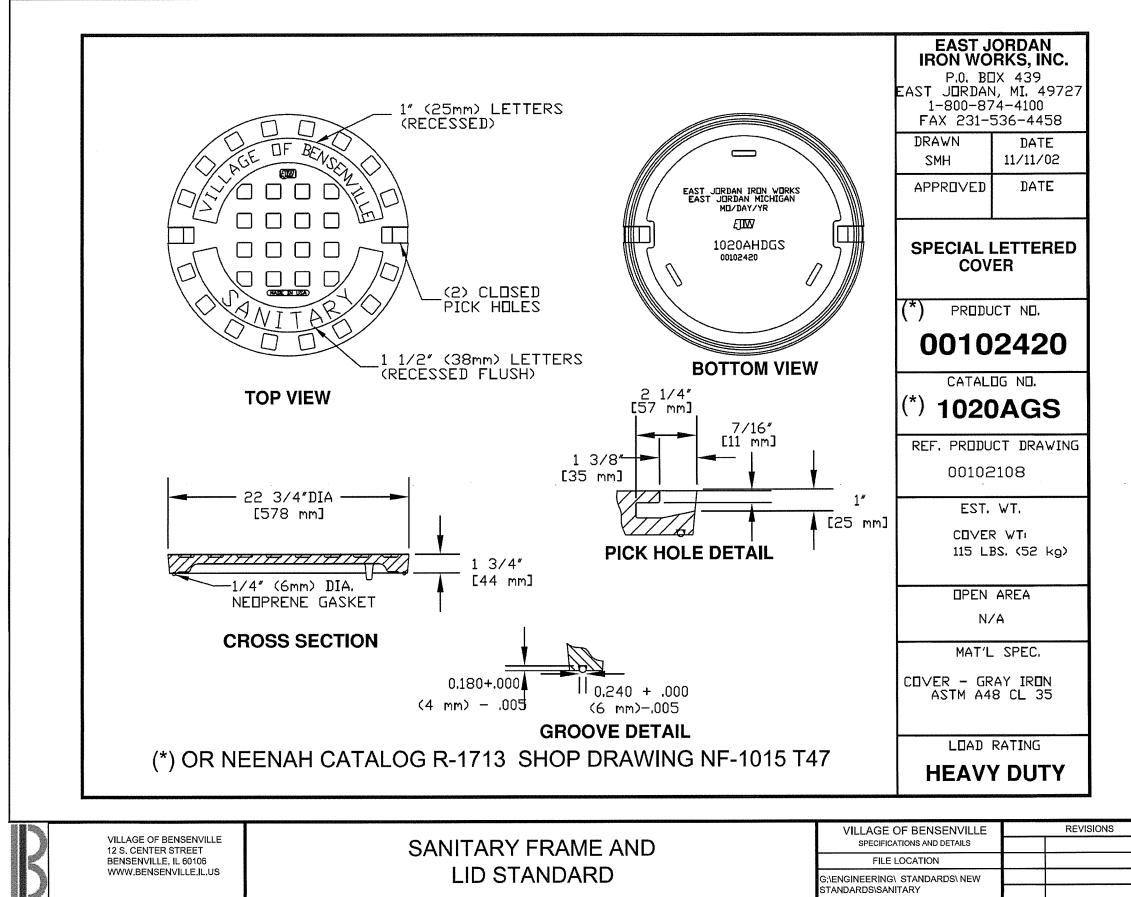


VILLAGE OF BENSENVILLE 12 S. CENTER STREET BENSENVILLE, IL 60106 WWW.BENSENVILLE,IL.US

## STORM FRAME AND LID STANDARD (CLOSED)

| VILLAGE OF BENSENVILLE        | REVISIONS |
|-------------------------------|-----------|
| SPECIFICATIONS AND DETAILS    |           |
| FILE LOCATION                 |           |
| G:\ENGINEERING\STANDARDS\ NEW |           |
| STANDARDS\STORM               |           |

| FILE NAME =                               | USER NAME = doconnell  | DESIGNED MLM | REVISED   |                              | \ \ \          | /ILLAGE OF BENSENVILLE   | FAU<br>RTE. | SECTION         | COUNTY     | SHEETS NO.  |
|---|------------------------|--------------|-----------|------------------------------|----------------|--------------------------|-------------|-----------------|------------|-------------|
| N;\Bensenville\180145\Civil\0ET_LA_180145 | Ø2.SHT                 | DRAWN MLM    | REVISED - | STATE OF ILLINOIS            |                | YORK ROAD                | 2678        | 18-00098-00-RS  | DuPAGE     | 45 36       |
|   | PLOT SCALE = 2'        | CHECKED JGS  | REVISED   | DEPARTMENT OF TRANSPORTATION |                | VILLAGE DETAILS          |             |                 | CONTRACT   | T NO. 61F38 |
| Default                                   | PLOT DATE = 11/14/2018 | DATE         | REVISED - |                              | SCALE: SHEET 2 | OF 4 SHEETS STA. TO STA. |             | ILLINOIS FED. A | ID PROJECT |             |



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

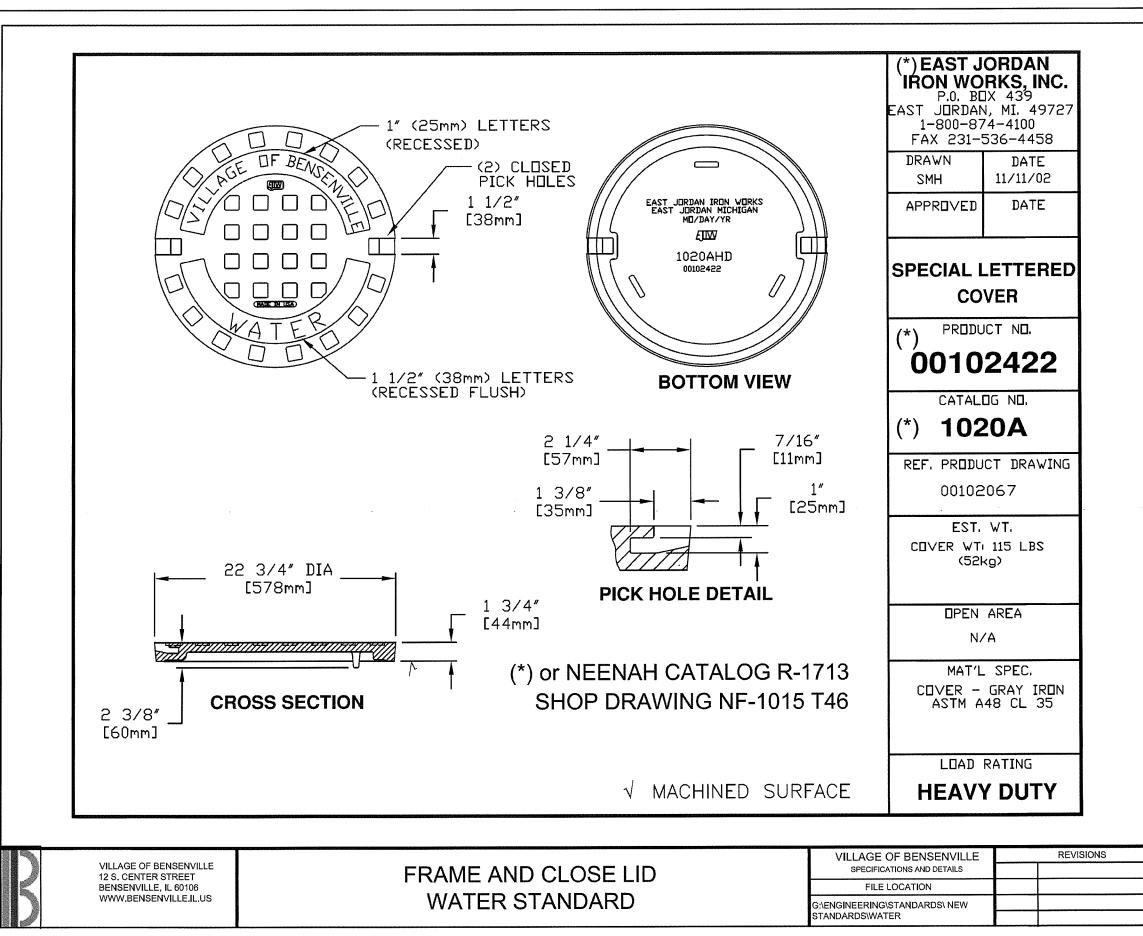
SCALE:

VILLAGE OF BENSENVILLE
YORK ROAD
VILLAGE DETAILS

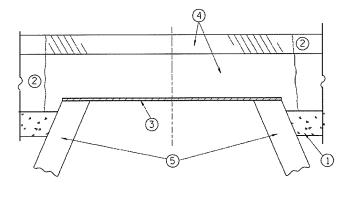
FAU
RTE.
2678 1

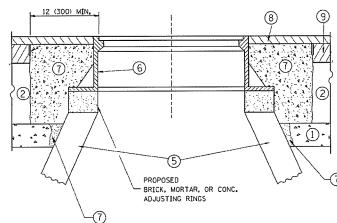
TO STA.

SHEET 3 OF 4 SHEETS STA.



VILLAGE OF BENSENVILLE FILE NAME = DESIGNED MLM. SECTION USER NAME = doconnell DRAWN MLM STATE OF ILLINOIS DUPAGE 45 38
CONTRACT NO. 61F38 N:\Bensenville\180145\C:v:1\DET\_LA\_180145 04.SHT REVISED 18-00098-00-RS VILLAGE DETAILS **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 2' CHECKED JGS REVISED TO STA. SHEET 4 OF 4 SHEETS STA. SCALE:





#### NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION, THE FRAME WILL NOT BE REMOYED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40)
  THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

#### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\*
  CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING
  BASE COURSE OR THE BINDER COURSE.
- \* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

#### LEGEND

- SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- (7) CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

#### LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

#### BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

COUNTY TOTAL SHEET NO.

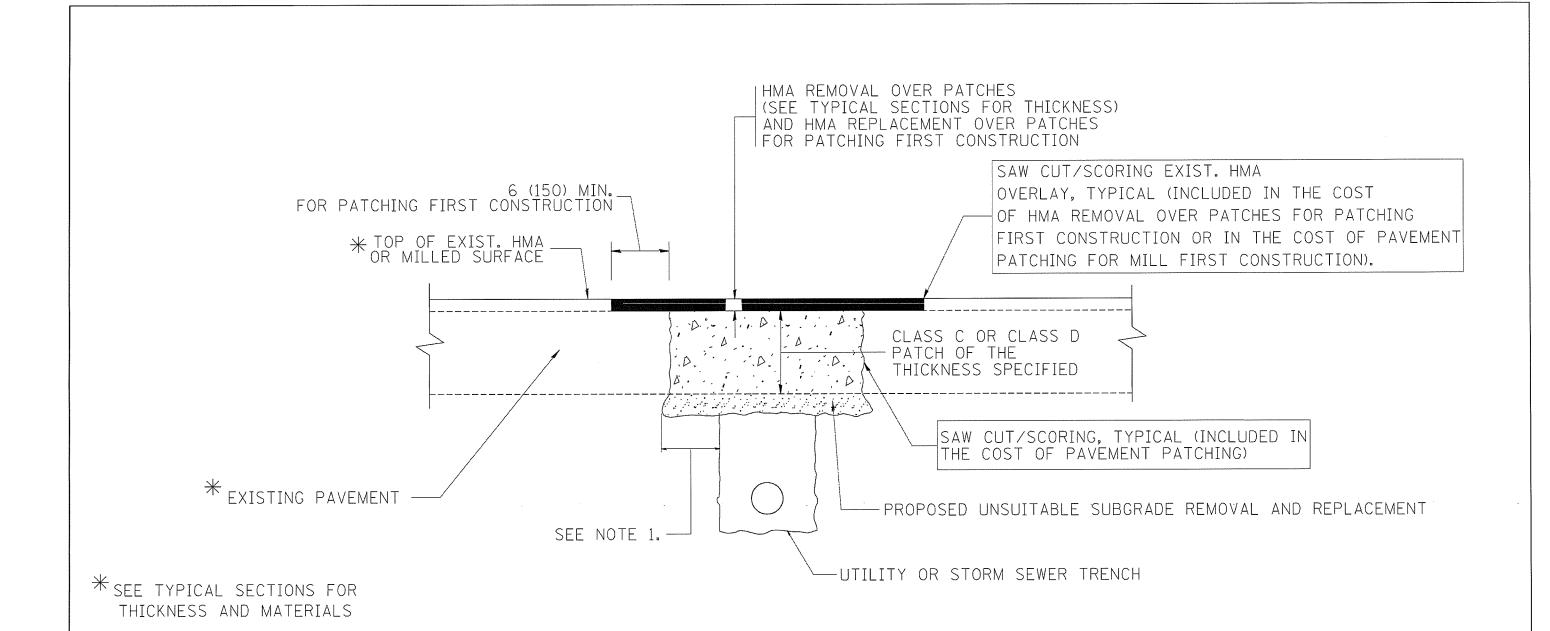
DUPAGE 45 39

CONTRACT NO. 61F38

| FILE NAME =                              | USER NAME = bauerdl         | DESIGNED | - | R. SHAH  | REVISED | - R. WIEDEMAN 05-14-04 |
|--|-----------------------------|----------|---|----------|---------|------------------------|
| cs/pw_work/pwidot/bauerd1/d0108315/bd28. | ign                         | DRAWN    | - |          | REVISED | - R. BORO 01-01-07     |
|  | PLOT SCALE = 1968.5000 '/ m | CHECKED  | - |          | REVISED | - R. BORO 03-09-11     |
|  | PLOT DATE = 12/6/2011       | DATE     | - | 10-25-94 | REVISED | - R. BORO 12-06-11     |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|   | D                | ETAILS FOR |                |         | F.A.U.<br>RTE. | SECTION                         | COUNTY     |
|---|------------------|------------|----------------|---------|----------------|---------------------------------|------------|
|   |                  | 2678       | 18-00098-00-RS | DUPAGE  |                |                                 |            |
| FRAMES AND LIDS ADJUSTMENT WITH MILLING |                  |            |                |         |                | BD600-03 (BD-8)                 | CONTRA     |
| SCALE: NONE                             | SHEET NO. 1 OF 1 | SHEETS     | STA.           | TO STA. | FEO. R         | OAD DIST. NO. 1 ILLINOIS FEO. A | ID PROJECT |



#### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

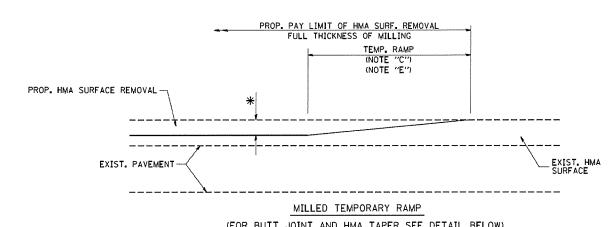
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

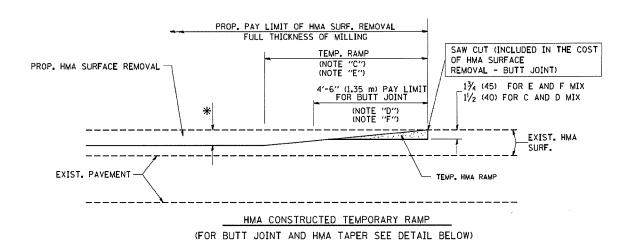
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| FILE NAME =                   | USER NAME = bauerdl        | DESIGNED - R. SHAH | REVISED - A. ABBAS 04-27-98 |                              |             | PAVEMENT PATCHING I         | :OR       | F.A.U.   | SECTION                        | COUNTY      | TOTAL SHEET |
|-------------------------------|----------------------------|--------------------|-----------------------------|------------------------------|-------------|-----------------------------|-----------|----------|--------------------------------|-------------|-------------|
| c:/projects/diststd22x34/bd22 | dgn                        | DRAWN -            | REVISED - R. BORO 01-01-07  | STATE OF ILLINOIS            |             | HMA SURFACED PAVEM          |           | 2678     | 18-00098-00-RS                 | DuPAGE      | 45 40       |
|                               | PLOT SCALE = 50.000 '/ IN. | CHECKED -          | REVISED - R. BORO 09-04-07  | DEPARTMENT OF TRANSPORTATION |             | HIMA SURFACED PAVEIN        |           |          | BD400-04 (BD-22)               | CONTRACT    | T NO. 61F38 |
|                               | PLOT DATE = 10/27/2008     | DATE - 10-25-94    | REVISED - K. ENG 10-27-08   |                              | SCALE: NONE | SHEET NO. 1 OF 1 SHEETS STA | . TO STA. | FED. ROA | AD DIST. NO. 1   ILLINOIS FED. | AID PROJECT |             |



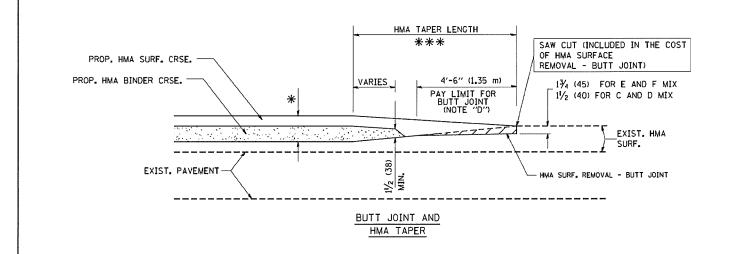
#### (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1

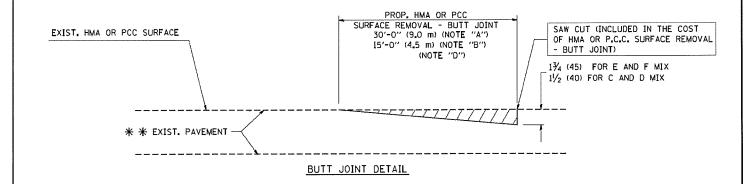


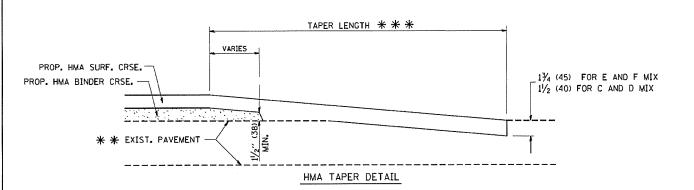
#### OPTION 2

#### TYPICAL TEMPORARY RAMP



#### TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





#### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

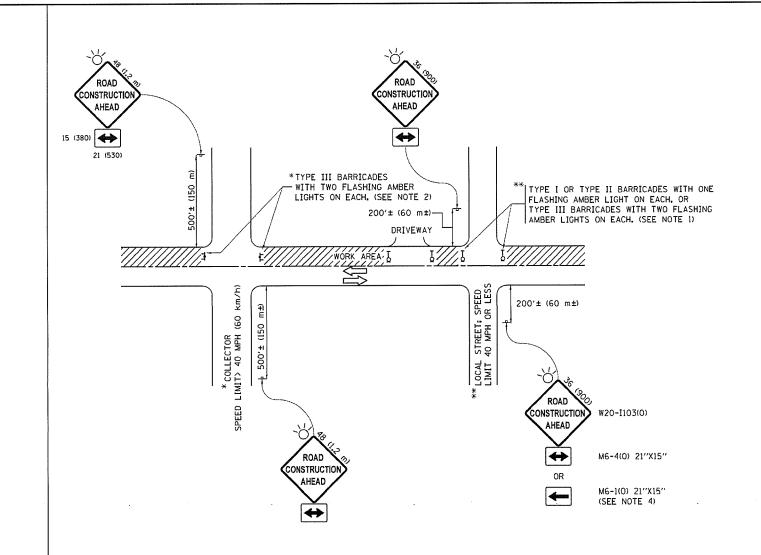
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\* \*\* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SOUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

| FILE NAME =               | USER NAME = goglionobt       | DESIGNED - M. DE YONG | REVISED - R. SHAH 10-25-94  |                              | BUTT JOINT AND                                   | F.A.U. SECTION                        | COUNTY TOTAL SHEET NO. |
|---------------------------|------------------------------|-----------------------|-----------------------------|------------------------------|--|---------------------------------------|------------------------|
| W:\diststd\22x34\bd32.dgn |                              | DRAWN -               | REVISED - A. ABBAS 03-21-97 | STATE OF ILLINOIS            | HMA TAPER DETAILS                                | 2678 18-00098-00-RS                   | DuPAGE 45 41           |
|                           | PLOT SCALE = 50.0020 ' / IN. | CHECKED -             | REVISED - M. GOMEZ 04-06-01 | DEPARTMENT OF TRANSPORTATION |  | BD400-05 BD32                         | CONTRACT NO. 61F38     |
|                           | PLOT DATE = 1/4/2008         | DATE - 06-13-90       | REVISED - R. BORO 01-01-07  |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. A | ID PROJECT             |



#### NOTES:

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEICHT
- 4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (MG-1 OR MG-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

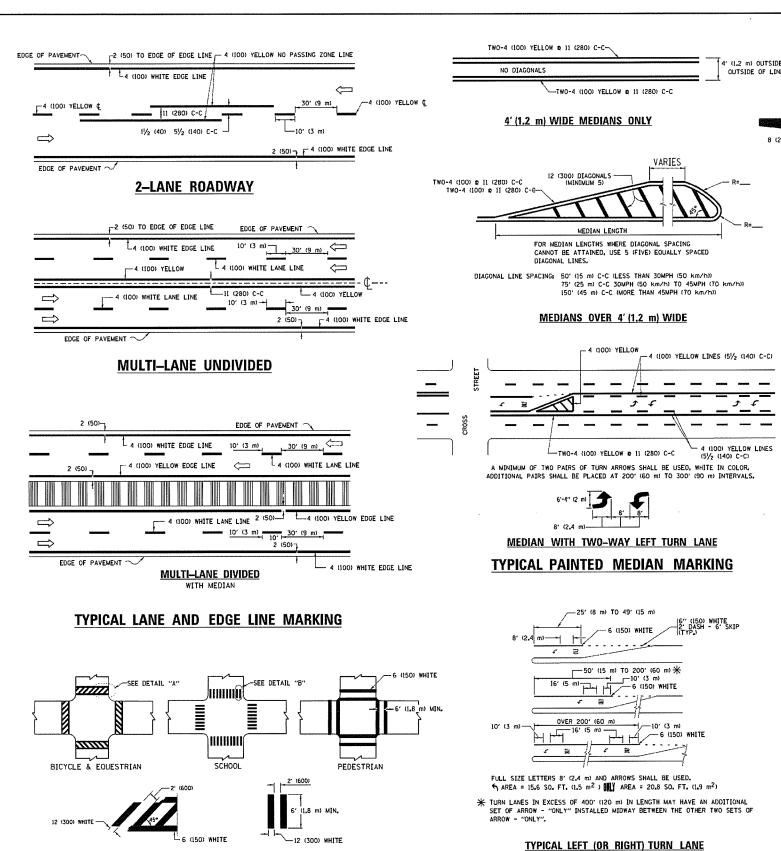
COUNTY TOTAL SHEE NO.

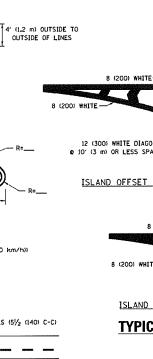
DuPage 45 42

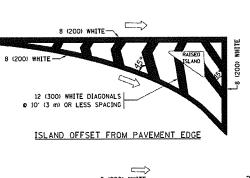
CONTRACT NO. 61F38

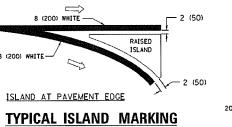
| FILE NAME =                                | USER NAME = footemj                           | DESIGNED - L.H.A.                         | REVISED - A. HOUSEH 10-15-96   |
|--|---|---|--------------------------------|
| pwr\\IL084EBIDINTEG.rllIncre.govrPWIDDT\Do | cuments/100T Offices/Bistrict 1/Projects/Dist | à <b>⊕Rà¥M</b> \CADDota\CADahea≀s\tal&dgn | REVISED -T. RAMMACHER 01-06-00 |
|  | PLOT SCALE = 50,000 '/ in.                    | CHECKED -                                 | REVISED - A. SCHUETZE 07-01-13 |
| Defoult                                    | PLOT DATE = 9/15/2016                         | DATE - 06-89                              | REVISED - A. SCHUETZE 09-15-16 |

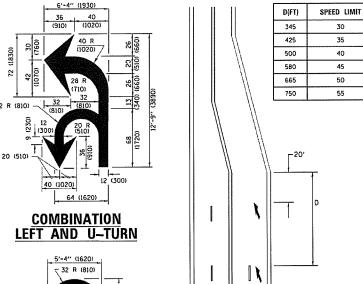
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION











#### LANE REDUCTION TRANSITION

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

|   |   | <u> </u>                           | UKIN  |  |
|---|---|------------------------------------|---|--|
| TYPE OF MARKING   | WIDTH OF LINE   | PATTERN                            | COLOR   | SPACING /REMARKS   |
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)   | SKIP-DASH                          | YELLOW  | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT   | 2 @ 4 (100)   | SOLID                              | YELLOW  | 11 (280) C-C   |
| NO PASSING ZONE LINES:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                                | 4 (100)<br>2 <b>e</b> 4 (100)   | SOLID<br>SOLID                     | YELLOW<br>YELLOW  | SI/2 (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN  |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH             | WHITE   | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| DOTTED LINES<br>(EXTENSIONS OF CENTER, LANE OR<br>TURN LANE MARKINGS)                             | SAME AS LINE BEING<br>EXTENDED  | SKIP-DASH                          | SAME AS LINE BEING<br>EXTENDED                          | 2' (600) LINE WITH 6' (1.8 m) SPACE  |
| EDGE LINES  | 4 (100)   | SOLID                              | YELLOW-LEFT<br>WHITE-RIGHT                              | OUTLINE MEDIANS IN YELLOW  |
| TURN LANE MARKINGS  | 6 (150) LINE: FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2.4m))   | SOLID                              | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 c 4 (100)<br>EACH DIRECTION<br>8' (2.4m) LEFT ARROW   | SKIP-DASH<br>AND SOLID<br>IN PAIRS | WHITE   | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL                 |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIACONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 <b>e</b> 6 (150)<br>12 (300) <b>e</b> 45°<br>12 (300) <b>e</b> 90°                                | SOLID<br>SOLID<br>SOLID            | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (I,8 m) APART<br>2' (500) APART<br>2' (500) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)  | SOL10                              | WHITE   | PLACE 4" (1.2 m) (N ADVANCE OF AND PARALLE, TO CROSSWALK, IF PRESENT, OTHERNISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS   | 2 ¢ 4 (100) WITH<br>12 (300) DIAGONALS<br>¢ 45°<br>NO DIAGONALS USED FOR<br>4' (1,2 m) WIDE MEDIANS | SOLID                              | YELLOW:<br>TWO WAY TRAFFIC<br>WHITE:<br>ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.  |
| CORE MARKING AND<br>CHANNELIZING LINES  | 8 (200) WITH 12 (300)<br>DIAGONALS @ 45°  | SOLID                              | WHITE   | DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))                      |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE<br>LINES: "RR" IS 6' (1.8 m<br>LETTERS: 16 (400)<br>LINE FOR "X"                | SOLID                              | WHITE   | SEE STATE STANDARD 780001<br>AREA OFI<br>"R"-3.6 SO, FT. (0.33 m²) EACH<br>"X"-54.0 SO, FT. (5.0 m²)   |
| SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')  | 12 (300) <b>p</b> 45°   | SOLIO                              | WHITE - RIGHT<br>YELLOW - LEFT                          | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)<br>150' (45 m) C-C (0VER 45MPH (70 km/h))                        |
| U TURN ARROW  | SEE DETAIL  | SOLID                              | WHITE   | 16.3 SF  |
| 2 ARROW COMBINATION<br>LEFT AND U TURN  | SEE DETAIL  | SOLID                              | WHITE   | 30,4 SF  |

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FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

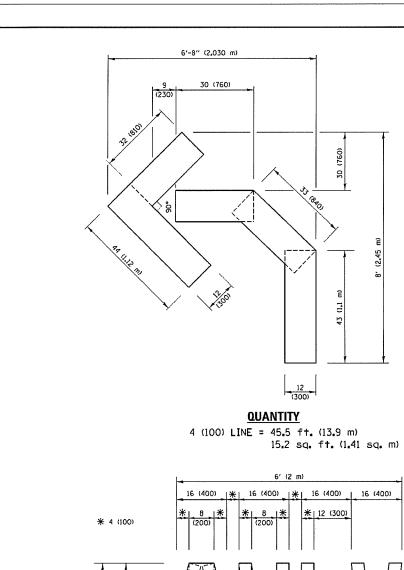
DETAIL "B"

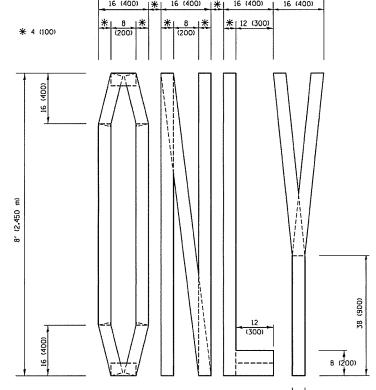
DETAIL "A"

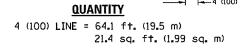
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL TURN LANE MARKING

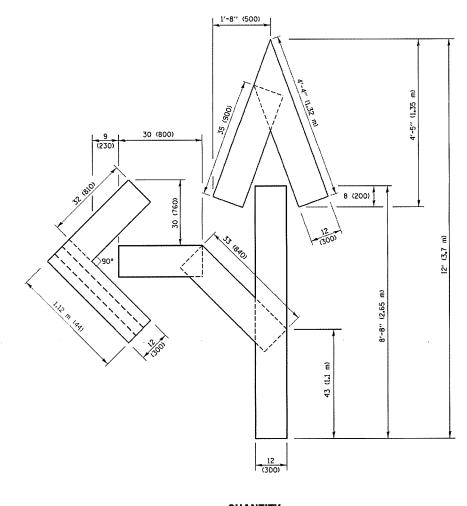
| DISTRICT ONE |         |      |        |      |         | F.A.U<br>RTE. | SECTION                   | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------------|---------|------|--------|------|---------|---------------|---------------------------|----------|-----------------|--------------|
|              |         |      |        |      |         | 2678          | 18-00098-00-RS            | DuPAGE   | 45              | 43           |
|              |         |      |        |      |         |               | TC-13                     | CONTRACT | NO. E           | 1F38         |
| SCALE: NONE  | SHEET 1 | OF 1 | SHEETS | STA. | TO STA. |               | ILLINOIS FEO. AID PROJECT |          |                 |              |







4 (100)

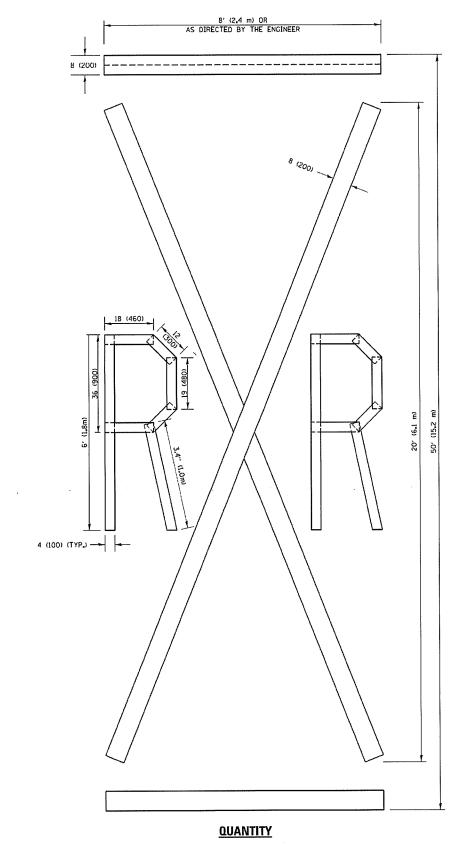


#### **QUANTITY**

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

#### NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



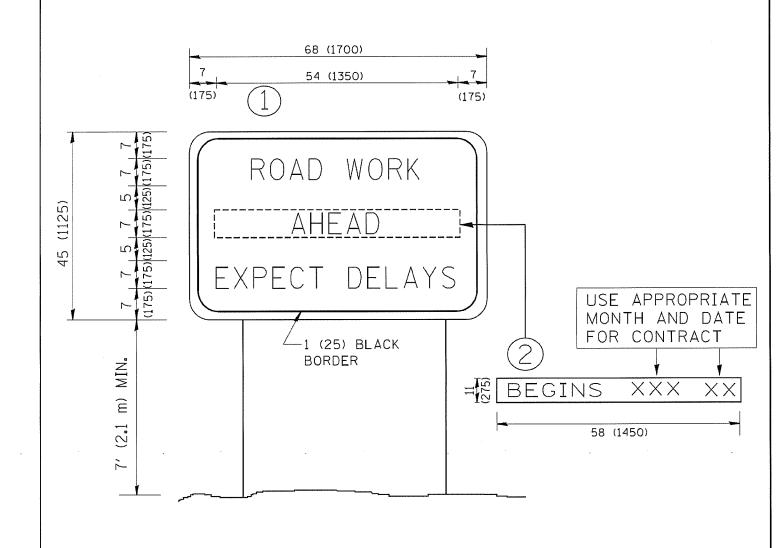
4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

| FILE NAME =                                | USER NAME = footemj                           | DESIGNED -                                  | REVISED | -T. RAMMACHER 03-02-98 |
|--|---|---|---------|------------------------|
| pwr//IL084E8IDINTEG.:llimois.gov:PWIDDT/Do | coments/IDOT Offices/District (\Projects/Dist | ∂ <b>®RAXXX</b> \CADData\CADshee\s\to16.dgn | REVISED | -E. GOMEZ 08-28-00     |
|  | PLOT SCALE = 50,0000 '/ in.                   | CHECKED -                                   | REVISED | -E. GOMEZ 08-28-00     |
|  | PLOT DATE = 9/15/2016                         | DATE - 09-18-94                             | REVISED | - A. SCHUETZE 09-15-16 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|             |                         |             |         | F.A.U.<br>RTE. | SECTION                      | COUNTY    | TOTAL | SHEET<br>NO. |
|-------------|-------------------------|-------------|---------|----------------|------------------------------|-----------|-------|--------------|
| SHORT       | TERM PAVEMENT MARKING   | LETTERS AND | SYMBOLS | 2678           | 18-00098-00-RS               | DuPAGE    | 45    | 44           |
|             |                         |             |         |                | TC-16                        | CONTRACT  | NO.   | 61F38        |
| SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA.        | TO STA. | FED. ROAD      | DIST. NO. 1 ILLINOIS FED. AT | D PROJECT |       |              |



## NOTES:

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

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

| FILE NAME =               | USER NAME = gaglianobt     | DESIGNED - | REVISED - R. MIRS 09-15-97     |                              | ARTERIAL ROAD                                    | F.A.U. SECTION                      | COUNTY TOTAL SHEET |
|---------------------------|----------------------------|------------|--------------------------------|------------------------------|--|-------------------------------------|--------------------|
| W:\diststd\22x34\tc22.dgn |                            | DRAWN -    | REVISED - R. MIRS 12-11-97     | STATE OF ILLINOIS            | l .  | 2678 18-00098-00-RS                 | DuPAGE 45 45       |
|                           | PLOT SCALE = 50.000 '/ IN. | CHECKED -  | REVISED -T. RAMMACHER 02-02-99 | DEPARTMENT OF TRANSPORTATION | INFORMATION SIGN                                 | TC-22                               | CONTRACT NO. 61F38 |
|                           | PLOT DATE = 1/4/2008       | DATE -     | REVISED - C. JUCIUS 01-31-07   |                              | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. | . AID PROJECT      |