# Architects Engineers Planners

# **BULLETIN NO. 1**

Dearborn Folrd Field Comfort Station NSA Project No. 215062.00 05/16/2018 page 1 of 2

### THIS IS NOT AN ORDER TO PROCEED WITH THE CHANGES DESCRIBED.

**ITEMIZED PROPOSAL:** Submit a proposal for each Bulletin item stating the amount to be added to, or deducted from, the Contract Amount in order to put into effect the described changes in the work. Submit the proposal within seven days of the date of the Bulletin.

**CONTRACT TIME**: Dates for work completion shall not be affected by reason of this Bulletin, except as specifically agreed in writing.

**INTENT:** Applicable provisions of the Contact Documents will govern the Work of the Contract; changes will be governed as if incorporated into the Contract Documents at the time of the Agreement.

- Whole Drawings, Sheet Nos.: M1.0, E1.0, E2.0 and E3.0
- Partial Drawings: None.
- Project Manual Documents: None.
- ITEM NO. 1 Revise panel RP-A voltage from 120/208V.,1Ph.,3W. to 120/240V.,1Ph.,3W.
  - a) Refer to Sheet: E1.0, E2.0 and E3.0.
    - 1. Revise voltage of RP-A.

REASON FOR CHANGE: Per DTE requirement/recommendation.

- ITEM NO. 2 Revise ECH-1 and ECH-2 voltage from 208V.,1Ph.,3W. to 240V.,1Ph.,3W.
  - a) Refer to Sheet: M1.0.
    - 1. Revise ECH-1 and ECH-2 voltage on schedule.
  - b) Refer to Sheet: E1.0 and E2.0
    - 1. Revise ECH-1 and ECH-2 voltage on plan.

REASON FOR CHANGE: Per DTE requirement/recommendation.

- ITEM NO. 3 Revise location of utility meter from inside to exterior.
  - a) Refer to Sheet: E1.0 and E3.0.
    - 1. Revise location of utility meter.

REASON FOR CHANGE: Per DTE requirement.

Project No. 215062.00

Date: 05/16/18

ITEM NO. 4 Delete Exhaust Fan Control Wiring Diagram.

- a) Refer to Sheet: E3.0.
  - 1. Delete Control Wiring Diagram.

REASON FOR CHANGE: No longer needed after Addendum No.3 exhaust fan revisions.

ITEM NO. 5 Revise circuit breakers size from 20A., 2P. to 30A., 2p. for circuit breakers serving ECH-1 and ECH-2.

- a) Refer to Sheet: E1.0.
  - 1. Revise Panel Schedule RP-A.

REASON FOR CHANGE: Clarification.

ITEM NO. 6 Add branch circuit for WH-1.

- a) Refer to Sheet: E3.0.
  - 1. Add control branch circuit for WH-1.

REASON FOR CHANGE: Clarification.

## **END OF BULLETIN WRITE-UP**

Prepared by:

NSA Architects, Engineers, Planners

Eric A. Stockwell Project Architect

|     | GRILLE, REGISTER AND DIFFUSER SCHEDULE |         |           |           |                |        |       |  |  |  |  |
|-----|--|---------|-----------|-----------|----------------|--------|-------|--|--|--|--|
| TAG | BASIS OF DESIGN                        | TYPE    | CFM RANGE | NECK SIZE | SURFACE MODULE | MAX NC | NOTES |  |  |  |  |
| S-1 | TITUS, TDC                             | SUPPLY  | 0-160     | 6"        | 12x12          | 30     | 1     |  |  |  |  |
| S-2 | TITUS, TDC                             | SUPPLY  | 0-160     | 6"        | 24X24          | 30     | 1     |  |  |  |  |
| S-3 | TITUS, TDC                             | SUPPLY  | 300-500   | 10"       | 24X24          | 30     | 1     |  |  |  |  |
| E-1 | TITUS, 350R                            | EXHAUST | 50-350    | 10"x10"   | 12"X12"        | 30     | 1     |  |  |  |  |
| R-1 | TITUS, PAR                             | RETURN  | 500-700   | 12"x12"   | 24"x24"        | 30     | 1     |  |  |  |  |
| R-2 | TITUS, PAR                             | RETURN  | 100-300   | 8"x8"     | 12"X12"        | 30     | 1     |  |  |  |  |

1) OPPOSED BLADE VOLUME DAMPER, WHITE FINISH

|              |                                 |                       |          | FAN S       | SCHEDULE |        |        |      |       |       |    |          |
|--------------|---------------------------------|-----------------------|----------|-------------|----------|--------|--------|------|-------|-------|----|----------|
|              |                                 |                       |          |             |          |        |        |      |       |       |    |          |
| TAG          | BASIS OF DESIGN                 | LOCATION              | SERVICE  | TYPE        | CFM      | E.S.P. | DRIVE  | HP   | VOLTS | PHASE | Hz | COMMENTS |
| EF-1/EF-2    | GREENHECK G-080 G               | ROOF                  | FACILITY | CENTRIFUGAL | 300      | 0.25   | DIRECT | 1/30 | 120   | 1     | 60 | 1,2,3    |
| NOTES:       |                                 |                       |          |             |          |        |        |      |       |       |    |          |
| 1) PROVIDE D | ISCONNECT SWITCH, BACK-DRAFT DA | AMPER, AND BIRDSCREEN |          |             |          |        |        |      |       |       |    |          |
| 2) PROVIDE R | OOF CURB.                       |                       |          |             |          |        |        |      |       |       |    |          |
| 3) INTERLOCK | ( WITH LIGHT SWITCH.            |                       |          |             |          |        |        |      |       |       |    |          |

|            | Architects                               |
|------------|--|
|            | Engineers                                |
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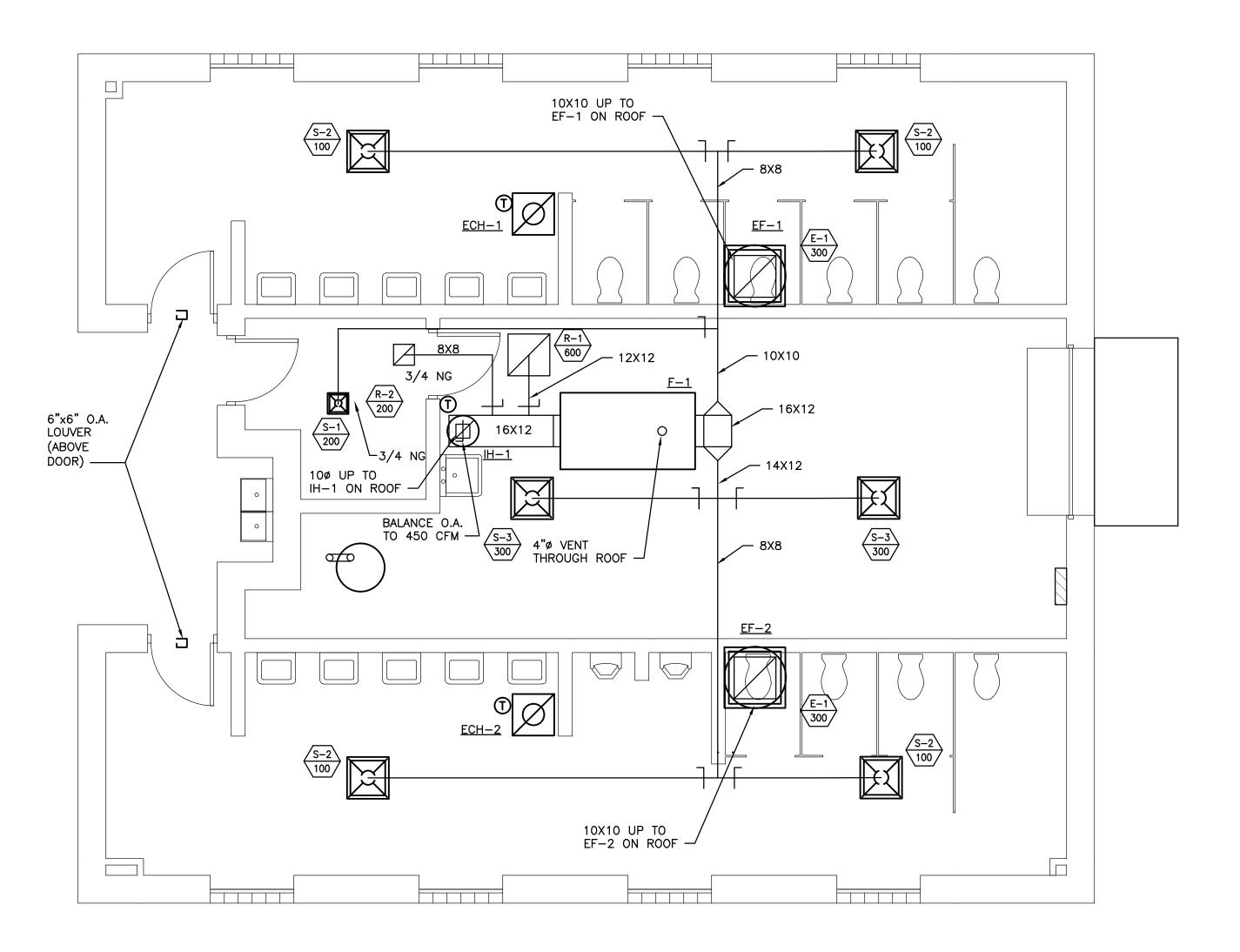
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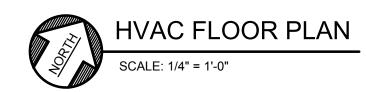
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|              |                       |                             |                              | FURNACE SCHEDU | LE      |             |              |                 |                   |                   |
|--------------|-----------------------|-----------------------------|------------------------------|----------------|---------|-------------|--------------|-----------------|-------------------|-------------------|
| TAG LOCATION |                       | BASIS OF                    | E.S.P.                       | CFM            | HEATING | SECTION     | ELECTRICAL   |                 | NOTES/ACCESSORIES |                   |
| TAG          | LOCATION MANUFACTURER |                             | MODEL NO.                    | E.S.F.         | CFIVI   | INPUT (MBH) | OUTPUT (MBH) | VOLTS / PH / HZ | HP                | NOTES/ACCESSORIES |
| F-1          | UTILITY ROOM          | TRANE                       | TUH1B080A9H31A               | 0.50           | 1200    | 80          | 76           | 120/1/60        | 1/2               | 1,2               |
| NOTES:       |                       |                             |                              |                |         |             |              |                 |                   |                   |
| 1) UNIT TO B | E MOUNTED BETWEEN     | TRUSSES, SUPPORTED BY SPRIN | G/ISOLATION MOUNTS AT FOUR ( | CORNERS.       |         |             |              |                 |                   |                   |
| 2) PROVIDE   | DISCONNECT SWITCH, E  | DIGITAL TEMPERATURE ROOM SE | NSOR                         |                |         |             |              |                 |                   |                   |

|   | INTAKE HOOD             |                     |      |           |      |            |       |  |  |  |
|---|-------------------------|---------------------|------|-----------|------|------------|-------|--|--|--|
| TAG                                       | BASIS OF DESIGN         | MODEL               | TYPE | CFM RANGE | SIZE | THROAT DIA | NOTES |  |  |  |
| IH-1 GREENHECK GRSF-10 INTAKE 450 20" 10" |                         |                     |      |           |      |            |       |  |  |  |
| NOTES:                                    | NOTES:                  |                     |      |           |      |            |       |  |  |  |
| 1) PROVIDI                                | E INSECT/BIRD SCREEN, A | ND BACK-DRAFT DAMPE | R.   |           |      |            |       |  |  |  |

|                     | ELECTRIC CEILING HEATER SCHEDULE                                   |             |          |     |  |  |  |  |  |  |  |
|---------------------|--|-------------|----------|-----|--|--|--|--|--|--|--|
|                     |  | ELECTRICAL  |          |     |  |  |  |  |  |  |  |
| TAG                 | BASIS OF DESIGN  | VOLTS/PHASE | COMMENTS |     |  |  |  |  |  |  |  |
| ECH-1/ECH-2         | MARKEL F3485A1   | 5 KW        | 240/1    | 1,2 |  |  |  |  |  |  |  |
| NOTE 1: INTEGRAL BU | NOTE 1: INTEGRAL BUILT IN ADJUSTABLE THERMOSTAT, DISCONNECT SWITCH |             |          |     |  |  |  |  |  |  |  |
| NOTE 2: RECESS MOU  | NOTE 2: RECESS MOUNTED CEILING HEATER                              |             |          |     |  |  |  |  |  |  |  |





# **GENERAL NOTES**

- PRIOR TO PURCHASE OF ANY MECHANICAL EQUIPMENT, MECHANICAL CONTRACTOR TO VERIFY EXACT SERVICE VOLTAGE (208V. VS. 240V.) WITH ELECTRICAL CONTRACTOR.
- RUN SUPPLY/EXHAUST/RETURN DUCTWORK ABOVE CEILING. PROVIDE INSULATION IN UNCONDITIONED SPACE.
- MOUNT F-1 FLUSH TO BOTTOM CHORD OF TRUSS. COORDINATE WITH STRUCTURAL.

| Client | t:    |      |       |
|--------|-------|------|-------|
| CI     | TY OF | DEAF | RBORI |

MICHIGAN

DEARBORN

Project Title: FORD FIELD COMFORT STATION

| • | Date:      | Issued fo     |
|---|------------|---------------|
|   | 03-18-2016 | OWNER REVIE   |
|   | 04-25-2016 | BIDS & PERMIT |
|   | 02-27-2017 | BIDS & PERMIT |
|   | 04-03-2017 | ADDENDUM NO.  |
|   | 06-19-2017 | CONSTRUCTIO   |
|   | 05-16-18   | BULLETIN NO   |
|   |            |               |

Checked: CAD Drawing File: Copyright © 2014 NSA Architects, Engineers. Planners

Project Number: 215062.01

Sheet Title: **HVAC PLAN** 

Sheet Number:

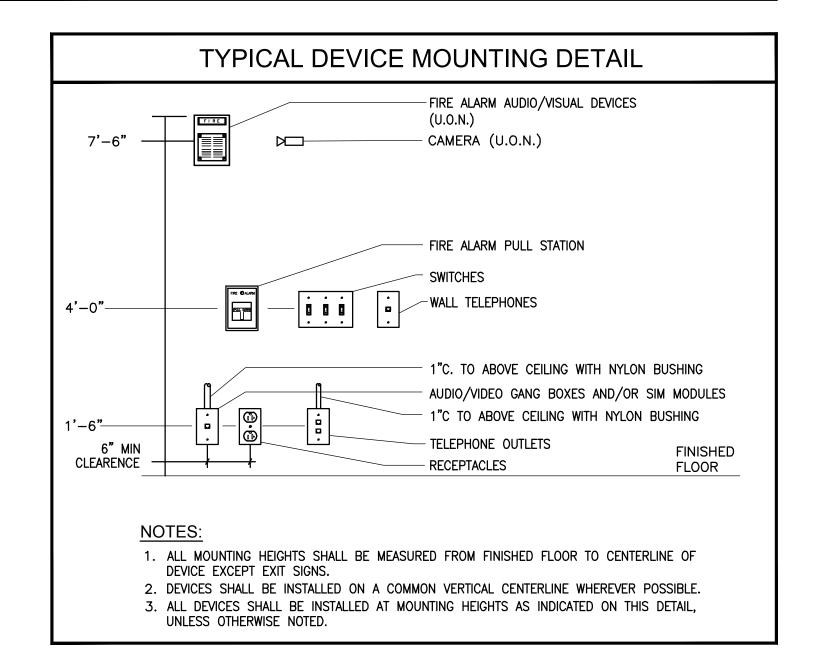
M1.0

|    |                                      | A (UTILITY ROOM 103) 200A MCB. |   |     |        |   |        |  |      |       |        |       |      |      |       |   | LT-AMPS                                 |   |      |        | T                                       |     |                                     |    |
|----|--------------------------------------|--------------------------------|---|-----|--------|---|--------|--|------|-------|--------|-------|------|------|-------|---|---|---|------|--------|---|-----|-------------------------------------|----|
|    | LOAD DESCRIPTION                     | A/C                            | HTG                                     | KIT | MIS    | MTS                                     | RCP    | LTB  | СВ   | Р     | CKT    | PH    | CKT  | Р    | СВ    | LTG                                     | RCP                                     | MTS                                     | MIS  | KIT    | HTG                                     | A/C | LOAD DESCRIPTION                    | N  |
|    | GATOR                                |                                |   |     |        |   | 10.40  |  | 100  | 2     | 1      | Α     | 2    | 1    | 20    |   |   |   | 2.30 |        |   |     | MEN'S ROOM HAND DRYER               | 2  |
| 76 | BATOR                                |                                |   |     |        |   | 10.40  |  | 100  |       | 3      | В     | 4    | 1    | 20    |   |   |   | 2.30 |        |   |     | MEN'S ROOM HAND DRYER               | 4  |
| _  | ECH-1                                |                                | 2.50                                    |     |        | *************************************** |        | 7  | 30   | 5     | 5      | Α     | 6    | 1    | 20    |   |   |   | 2.30 |        |   |     | MEN'S ROOM HAND DRYER               | 6  |
| 75 | CON-1                                |                                | 2.50                                    |     |        | *************************************** |        | 7  | 1 30 |       | 7      | В     | 8    | 1    | 20    |   |   |   | 2.30 |        |   |     | WOMEN'S ROOM HAND DRYER             | 8  |
| C  | COILING DOOR (3/4 HP)                |                                |   |     |        | 1.66                                    |        | ••••••••••   | 20   | 1     | 9      | Α     | 10   | 1    | 20    | *************************************** |   | *************************************** | 2.30 |        |   |     | WOMEN'S ROOM HAND DRYER             | 1  |
| V  | VOMEN'S ROOM 101 LTG.                |                                |   |     |        | *************************************** |        | 0.59   | 20   | 1     | 11     | В     | 12   | 1    | 20    | *************************************** |   |   | 2.30 |        |   |     | WOMEN'S ROOM HAND DRYER             | -1 |
| O  | OFFICE 102 & EXTERIOR LTG.           |                                |   |     |        |   |        | 0.27   | 20   | 1     | 13     | Α     | 14   | 1    | 20    |   | 0.72                                    |   |      |        |   |     | S. & E. UTILITY ROOM WALL RCPT. (2) | 1  |
| U  | JTILITY ROOM 103 LTG.                |                                |   |     |        |   |        | 0.25   | 20   | 1     | 15     | В     | 16   | 1    | 20    |   | 0.36                                    |   | -    |        |   |     | EXTERIOR RCPT. WEST SIDE (2)        | 1  |
| N  | MEN'S ROOM 104 LTG.                  |                                |   |     |        |   |        | 0.54   | 20   | 1     | 17     | Α     | 18   | 1    | 20    |   | 0.72                                    |   |      |        |   |     | EXTERIOR RCPT. SOUTH/WEST SIDE (4)  | 1  |
| N  | IL/EM LTG.                           |                                | *************************************** |     |        |   |        | 0.18   | 20   | 1     | 19     | В     | 20   | 1/   | 38    |   | 0.36                                    | •                                       | •    |        |   |     | OFFICE 102 RCPT. (2)                | 2  |
| E  | EXTERIOR LTG.                        |                                |   |     |        |   | -      | 0.51   | 20   | 1     | 21     | Α     | 22   |      |       |   |   | •                                       | •    |        | 2.50                                    |     |                                     | 2  |
| F  | LUSHOMETERS                          |                                | *************************************** |     | 0.60   |   |        | ······································   | 20   | 1     | 23     | В     | 24   | 14   | 30    | <i></i>                                 | *************************************** | •                                       |      |        | 2.50                                    | •   | ECH-2                               | 2  |
| E  | EXTERIOR RCPT. WEST SIDE COLUMN (1)  |                                | *************************************** |     | •••••  |   |        | 0.18   | 20   | 1     | 25     | Α     | 26   | 1    | 20    |   | 0.18                                    | ••••••                                  |      |        | *************************************** |     | UTILITY ROOM RCPT. (1)              | 2  |
| E  | EXTERIOR RCPT. SOUTH SIDE COLUMN (1) |                                |   |     |        |   | -      | 0.18   | 20   | 1     | 27     | В     | 28   | 1    | 20    |   | 0.36                                    |   | -    |        |   |     | N. & W.UTILITY ROOM WALL RCPT. (2)  | 2  |
| D  | ORINKING FOUNTAIN                    |                                |   |     | 0.02   |   |        |  | 20   | 1     | 29     | Α     | 30   | 1    | 20    |   | 0.18                                    |   |      |        |   |     | MEN'S ROOM RCPT. (1)                | 3  |
| JE | URNACE F-1, 1/2HP.                   |                                |   |     |        | 1.18                                    |        |  | 20   | 1     | 31     | В     | 32   | 1    | 20    |   | 0.18                                    |   |      |        |   |     | WOMEN'S ROOM RCPT. (1)              | 3  |
| M  | VH-1                                 |                                |   |     | 0.05   | )                                       |        |  | 20   | 1     | 33     | Α     | 34   | 1    | 20    |   |   |   |      |        |   |     | SPARE                               | 3  |
| 43 | PARE                                 |                                |   |     |        |   |        |  | 20   | 1     | 35     | В     | 36   | 1    | 20    | *************************************** |   |   |      |        |   |     | SPARE                               | 3  |
| S  | SPACE                                |                                |   |     |        | *************************************** |        |  | 20   | 1     | 37     | Α     | 38   | 1    | 20    |   |   | *************************************** |      |        |   |     | SPACE                               | 3  |
| S  | SPACE                                |                                |   |     |        | •                                       |        |  | 20   | 1     | 39     | В     | 40   | 1    | 20    |   |   | *************************************** |      |        |   |     | SPACE                               | 4  |
| s  | SPACE                                |                                |   |     |        | *************************************** | •      |  | 20   | 1     | 41     | Α     | 42   | 1    | 20    |   |   | •                                       | •    |        |   | •   | SPACE                               | 4  |
| Į  |                                      | 11186                          |   |     |        |   | l bevi | 400  | i    |       |        |       |      |      |       |   | T 11150                                 |   |      |        |   |     | 10050000050                         |    |
| ┕  | CONNECTED KILO-VOLT-                 | -AMPS                          |   |     |        |   | DEM    |  |      |       |        |       | LOAD |      | EMANL | KILO-VO                                 | LI-AMPS                                 |   |      |        |   |     | ACCESSORIES                         | _  |
|    | LOAD TYPE                            | A                              | В                                       |     | TOTAL  |   | FACT   | Comments of the Comments of th | l    | HOLL  | TNO    | I     | LOAD | IYPE |       |   | Α                                       | В                                       |      | TOTAL  |   |     | SURFACE                             | _  |
|    | IGHTING (LTG)                        | 1.50                           | 1.20                                    |     | 270    |   | 1.0    | Mark.  | ļ    |       | TING   | 1.50  |      |      |       |   | 1.50                                    | 1.20                                    |      | 2.70   |   |     | FLUSH                               |    |
|    | ECEPTACLES (RCP)                     | 12.20                          | 11.66                                   |     | 23.86  |   | NEC    |  |      |       | EPTAC  | LES   |      |      |       |   | 8.66                                    | 8.27                                    |      | 16.93  |   |     | NEMA ENCLOSURE TYPE NUMBER          | _  |
|    | MOTORS (MTS)                         | 1.66                           | 1.18                                    |     | 284    |   | 0.6    |  |      | MOTO  |        | .=    |      |      |       |   | 1.08                                    | 0.77                                    | è    | 1.84   |   |     | ISOLATED GROUND BUS                 | _  |
|    | MISCELLANEOUS (MIS)                  | 6.97                           | 7.50                                    |     | 14.47  |   | 1.0    |  |      |       | ELLAN  | IEOUS |      |      |       |   | 6.97                                    | 7.50                                    |      | 14.47  |   |     | HANDLE ATTACHMENT                   |    |
|    | ITCHEN (KIT)                         | 0.00                           | 0.00                                    |     | 0.00   |   | 0.6    |  |      | KITCI |        |       |      |      |       |   | 0.00                                    | 0.00                                    |      | 0.00   |   |     | ARC-FAULT PROTECTION                |    |
|    | IEATING (HTG)                        | 5.00                           | 5.00                                    |     | 10.00  |   | 0.6    |  |      |       | TING   |       |      |      |       |   | 3.25                                    | 3.25                                    |      | 6.50   |   |     | EQUIPMENT GROUND BAR                |    |
| -  | IR CONDITIONING (A/C)                | 0.00                           | 0.00                                    |     | 0.00   |   | 0.6    | 35   |      |       | CONDI  |       | G    |      |       |   | 0.00                                    | 0.00                                    |      | 0.00   |   |     | BUS MATERIAL                        |    |
|    | ONNECTED kVA                         | 27.32                          | 26.54                                   |     | 53.87  |   |        |  |      |       | AND k\ |       |      |      |       |   | 21.45                                   | 20.99                                   |      | 42.44  |   |     | ALARM SWITCHES                      |    |
| C  | CONNECTED AMPS                       | 227.70                         | 221.18                                  |     | 224.44 |   | I      |  |      | DEM   | AND AI | MPS   |      |      |       |   | 178.76                                  | 174.94                                  |      | 176.85 |   |     | SHUNTTRIP CIRCUIT BREAKER           | _  |

# **GENERAL NOTES**

- 1. ALL WIRING IN CONDUITS SHALL RUN CONCEALED UNLESS OTHERWISE NOTED.
- 2. ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
- 3. CONSTRUCTION DOCUMENTS CONSIST OF PLANS, DETAILS, DIAGRAMS, AND SPECIFICATIONS.
- 4. ALL RACEWAYS AND CABLE TRAYS (IF ANY) RUNNING ACROSS BUILDING EXPANSION JOINTS SHALL BE EQUIPPED WITH EXPANSION FITTINGS.
- 5. ELECTRICAL SERVICES (HOME RUNS) SHOWN ON THE DRAWINGS ARE SHOWN DIAGRAMMATICALLY, CONTRACTOR SHALL VERIFY ROUTING AND MEET CONDUCTOR FILL/AMAPACITY REQUIREMENTS PER THE NATIONAL ELECTRICAL CODE.
- 6. CONTRACTOR SHALL REVIEW CONTRACT DOCUMENTS OF ALL TRADES TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT, COORDINATE EXACT LOCATION WITH THE ARCHITECTURAL DRAWINGS.
- 7. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATION OF ALL DEVICES UNLESS SHOWN ON ELECTRICAL DRAWINGS.
- 8. PROVIDE ALL REQUIRED SUPPORTS AND MATERIALS TO INSTALL ELECTRICAL DEVICES AND EQUIPMENT. COORDINATE WITH MANUFACTURES SUBMITTALS.
- 9. ALL ELECTRICAL WIRING FROM THE SERVICE ENTRANCE TO DOWNSTREAM DEVICES SHALL BE COPPER (CU) UNLESS OTHERWISE NOTED ON PLANS.
- 10. LIGHTING/RECEPTACLE BRANCH CIRCUITS 100 FEET AND FURTHER FROM THEIR ASSOCIATED PANELS SHALL BE FED WITH #10 WIRING MINIMUM. UNLESS OTHERWISE NOTED.
- 11. PROVIDE LABELING OF CIRCUIT NUMBERS ALL RECEPTACLES.
- 12. ELECTRICAL CONTRACTOR TO VERIFY EXACT SERVICE VOLTAGE (208V. VS. 240V.) WITH UTILITY COMPANY AND COORDINATE EQUIPMENT VOLTAGE REQUIREMENTS WITH MECHANICAL TRADES.

|      | LUMINAIRE SCHEDULE |   |               |       |                           |  |  |  |  |
|------|--------------------|---|---------------|-------|---------------------------|--|--|--|--|
| TYPE | MANUFACTURER       | CATALOG NUMBER                                      | LAMP          | VOLTS | MOUNTING                  | DESCRIPTION  |  |  |  |
| LA   | JUNO               | L6-50401-G3-L600P-<br>CS-WET                        | LED<br>45.3W. | 120   | RECESS                    | 6" DIAMETER RECESSED<br>LED DOWNLIGHT, IC RATED.                             |  |  |  |
| LAE  | JUNO               | L6-50401-G3-BR<br>L600P-CS-WET                      | LED<br>45.3W. | 120   | RECESS                    | 6" DIAMETER RECESSED LED DOWNLIGHT WITH EMERGENCY BATTERY BACK-UP, IC RATED. |  |  |  |
| LB   | LITHONIA           | LED Z SERIES<br>ZL2NL48-3000LM-MDD-<br>35K-80CRI-WH | LED<br>42W.   | MVOLT | SURFACE/<br>CHAIN<br>HUNG | 4' LONG SURFACE CEILING/CHAIN HUNG<br>LED LENSED STRIPLIGHT FIXTURE.         |  |  |  |
| LC   | SOLERA             | SMRT-24LED-120-0PL<br>-TP-SG                        | LED<br>29W.   | 120   | SURFACE                   | 9 1/2" DIAMETER SURFACE<br>MOUNTED LED LAMP                                  |  |  |  |
| EM   | LITHONIA           | ELM2-LED-HO   | 6W            | MVOLT | CEILING                   | EMERGENCY LIGHT FIXTURE WITH<br>BATTERY PACK FOR 90 MINUTES                  |  |  |  |



| SYMBOL                                 | DESCRIPTION   |
|--|---|
| Φ                                      | DUPLEX RECEPTACLE NEMA 5-20R-125V, WHEN NOTED "D" DEDICATED                   |
| <b>#</b>                               | DOUBLE DUPLEX RECEPTACLE NEMA 5-20R-125V                                      |
| <b>P</b>                               |   |
| <b>(</b>                               | JUNCTION BOX  |
|  | NON-FUSED DISCONNECT SWITCH   |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | SINGLE PHASE, THREE PHASE MOTOR   |
|  | ELECTRICAL PANELS (RECESSED , SURFACE MOUNTED @ 6'-6" A.F.F. TO TOP)          |
| •                                      | ELEC SERVICE CONNECTION (SINGLE POINT) AT EQPT. DISCONNECT DEVICE BY EQPT MFR |
| $\mathbf{W}$                           | UTILITY METER   |
| $\circ$                                | CEILING OR WALL MOUNTED FIXTURE   |
|  | WALL MOUNTED 84" MIN. A.F.F. BATTERY POWERED EMERGENCY BACKUP LIGHT FIXTURE   |
| <b>├</b>                               | CEILING OR WALL MTD FLUORESCENT FIXTURE, SEE FIXTURE SCHED.                   |
| S                                      | SINGLE POLE TOGGLE SWITCH   |
| SK                                     | KEY OPERATED SWITCH   |
| PC                                     | PHOTOCELL   |

# OCCUPANCY SENSOR ("W" WALL) SENSOR SWITCH WVR-16 OR APPROVED EQUAL. 6" BELOW CLG LINE.

### **GENERAL ABBREVIATIONS** AMPERES KVA KILOVOLT AMPERES AMERICANS WITH DISABILITIES ACT KILOWATTS KW AFF ABOVE FINISH FLOOR LTG LIGHTING AMPERE INTERRUPTING CAPACITY MAIN CIRCUIT BREAKER MCB MDP MAIN DISTRIBUTION PANEL/SECTION ALUMINUM ARCH ARCHITECT MECH MECHANICAL ATS AUTOMATIC TRANSFER SWITCH MAIN SWITCHBOARD MSB AWG AMERICAN CB CIRCUIT CKT/CIRC CIRCUIT AMERICAN WIRE GAUGE **MISCELLANEOUS** CIRCUIT BREAKER MAIN LUGS ONLY NOT TO SCALE NOT IN CONTRACT COL COLUMN CURRENT TRANSFORMER PUSHBUTTON CU COPPER PERSONAL COMPUTER DWG DRAWING PANELBOARD EXHAUST FAN POWER PANEL ELEC POLYVINYL CHLORIDE ELECTRICAL EM **EMERGENCY** PWR POWER ELECTRICAL METALLIC TUBING REQ'D REQUIRED EMERGENCY POWER-OFF EPO SP SPARE ELECTRIC WATER COOLER TVSS TRANSIENT VOLTAGE SURGE FIRE ALARM ANNUNCIATOR PANEL SUPPRESSION FIRE ALARM CONTROL PANEL UNDERGROUND FULL LOAD AMPS UNDER COUNTER **FMCS** FACILITY MANAGEMENT CONTROL UNLESS OTHERWISE NOTED UON SYSTEM UNIT HEATER GROUND VOLT GROUND FAULT CIRCUIT INTERRUPTER VA **VOLT AMPERES** GFCI HAND-OFF-AUTOMATIC SWITCH VERIFY IN FIELD VIF INTEGRATED CARE MANAGEMENT SYSTEM WH

CENTERLINE

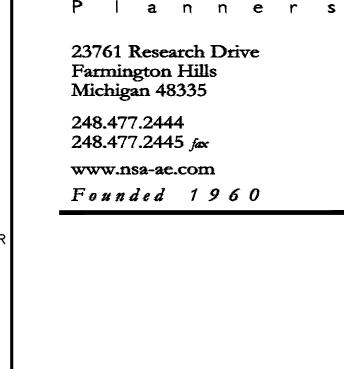
WATER HEATER

WEATHERPROOF

XFMR TRANSFORMER

Ø/PH PHASE

 $\triangle$  DELTA  $\ igsep$  WYE



Engineers

CITY OF DEARBORN

DEARBORN **MICHIGAN** 

Project Title: FORD FIELD COMFORT STATION

Issued for: 04-25-2016 BIDS & PERMITS 02-27-2017 BIDS & PERMITS 04-03-2017 ADDENDUM NO. 3 06-19-2017 CONSTRUCTION 05-16-18 **BULLETIN NO.1** 

Checked: Approved: CAD Drawing File:

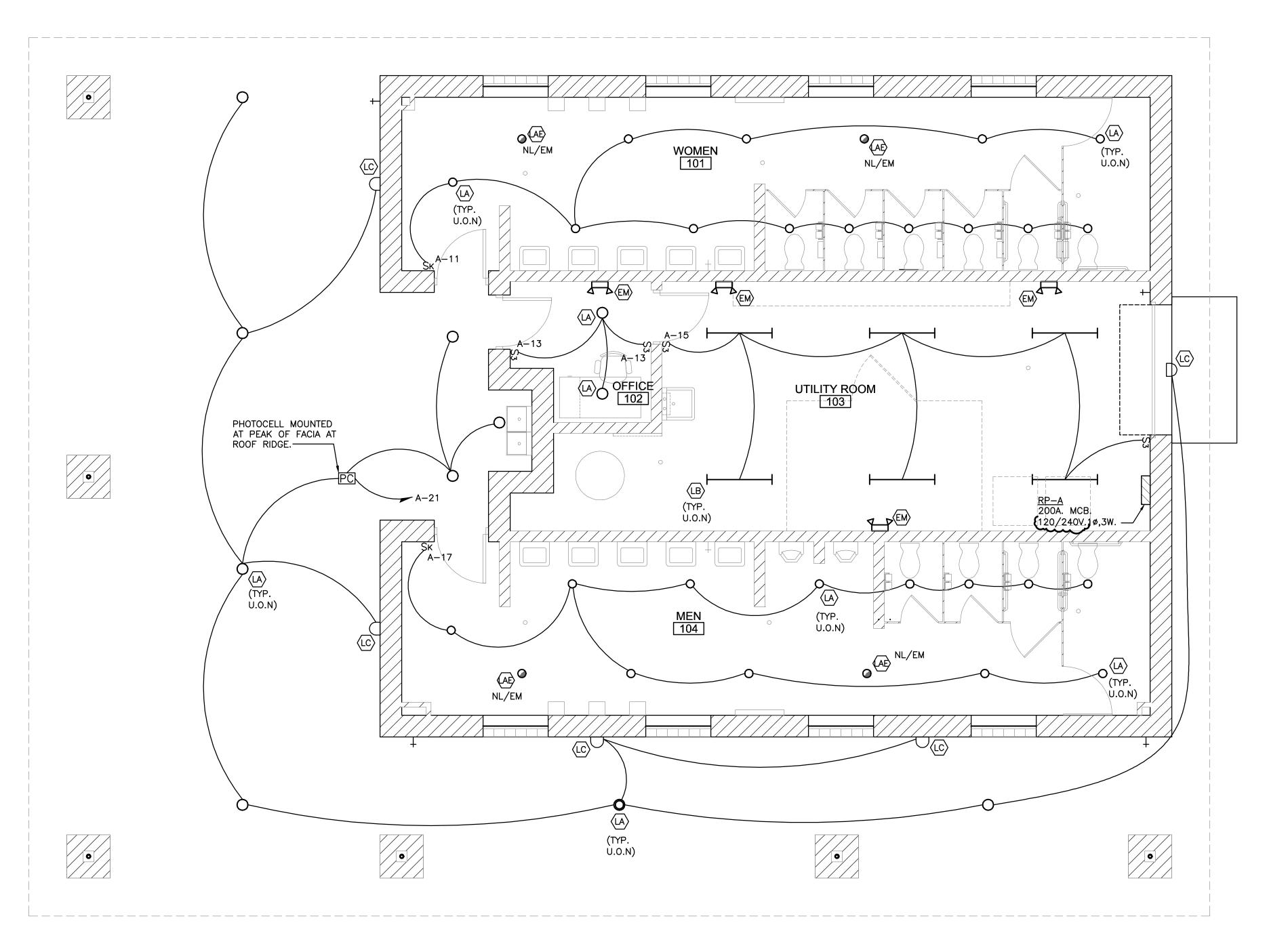
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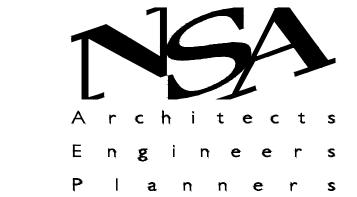
Sheet Title: **ELECTRICAL** SYMBOLS, LEGENDS, LUMINAIRE SCH. & NOTES

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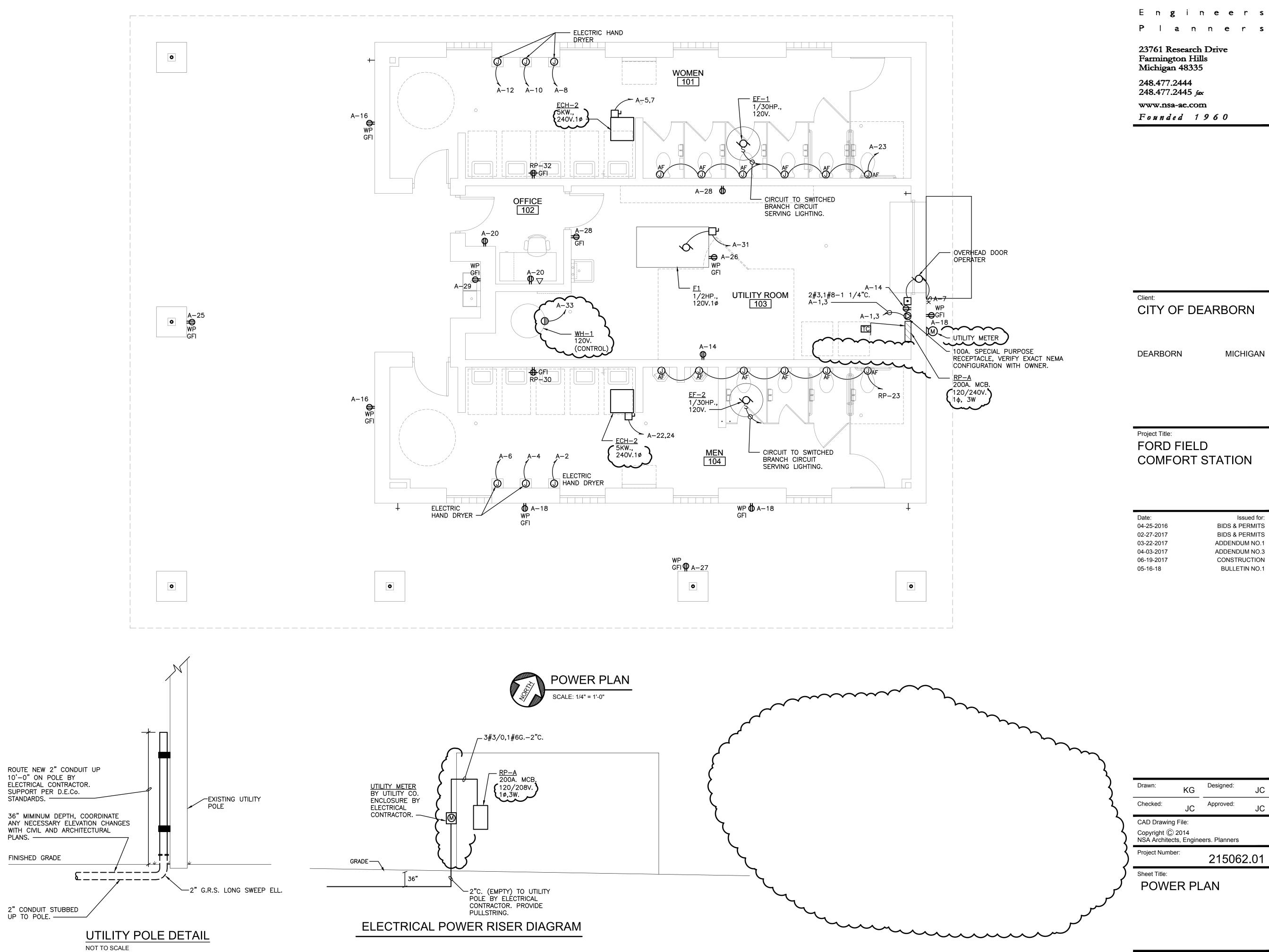
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LIGHTING PLAN

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