

Service Center North Fuel Island Replacement

Bid # 23-49

ADDENDUM No. 1

November 6, 2023

Any and all changes to the Contract Document are valid only if they are included by written addendum to all potential respondents, which will be mailed, emailed and/or faxed prior to the bid due date to all who are known to have received a complete bid document. Each respondent must acknowledge receipt of any addenda by indicating on the Bid Form. Each respondent, by acknowledging receipt of any addenda, is responsible for the contents of the addenda and any changes to the bid proposal therein. Failure to acknowledge receipt of any addenda may cause the bid to be rejected. If any language or figures contained in this addendum are in conflict with the original document, this addendum shall prevail.

This addendum consists of the following:

1. Addendum Number One (1) is attached and consists of a total of twelve (12) pages including this cover sheet. Any changes to the drawings or specifications noted within Addendum Number One (1) will be reflected in subsequent drawing issues.

Please feel free to call (847-866-2910) or email (<u>lithomas@cityofevanston.org</u>) with any questions or comments.

Sincerely,

Linda Thomas Purchasing Specialist

Service Center North Fuel Island Replacement

Bid # 23-49

ADDENDUM No. 1

November 6, 2023

This addendum forms a part of the Specifications and Bid Documents for Bid #23-49 and modifies these documents. This addendum consists of the following:

Vendor Questions:

 The product piping spec'd is Perma Pipe Inc. only. We are not very familiar with this brand as an industry standard. We typically use OPW Flexworks or FE Petro XP Flexible piping systems or Ameron LCX double wall rigid fiberglass piping for product and Ameron single wall piping for tank venting.

The City is open to considering alternate piping products. Please refer to Section 01 63 00 Substitutions and Product Options for details on proposing substitutions Prior to Bid Opening, With Bid, and After Award of Contract.

2. One the drawing M06 it shows ³/₄" plywood sheeting. We have never installed plywood in this area and I believe this is not approved with the State Fire Marshal's office. We would use in this application a Slide Rail Shoring system which is removed once tanks are in and backfilled. We will place filter fabric on the tank bottom and side walls prior to backfill to prevent migration of outside soil/stone.

The City is open to considering alternate installation methods. Please refer to Section 01 63 00 Substitutions and Product Options for details on proposing substitutions Prior to Bid Opening, With Bid, and After Award of Contract.

3. Also on Drawing M06 it shows installing a concrete anchoring pad. The industry does not do this as a standard any more due to additional cost for labor and materials to install it. This also takes longer to perform. Now we use preformed concrete dead men system that is provided by both specified tank manufactures. They are placed along side of the tanks and then anchored to the dead men with their tank straps and turnbuckle system. This saves a lot of install time on the install.

The City is open to considering alternate anchoring methods that reduce installation time and cost. Please refer to Section 01 63 00 Substitutions and Product Options for details on proposing substitutions Prior to Bid Opening, With Bid, and After Award of Contract.

4. On Drawing S03 and S04 it shows the canopy columns to be anchored above the top of the island form concrete. Normally we use around a 1'-2" subset under finished grade so the anchor bolts are not exposed and provide and trip hazard.

General Note 2 on DWG S03 and Detail 1 on DWG S04 indicates the column and footing details are to be determined by the Contractor and the canopy vendor.

5. Are there any vehicles that are pre-2008 that wish to utilize the AIM RFID Nozzle tag readers?

The intent is for the new fueling system to be equipped with nozzle readers, but the RFID vehicle modules are not part of the base bid and would be procured later if the City desires.

6. Please clarify if the City's RFP is requiring AIM RFID modules that plug into the vehicles OBDII as part of the base bid?

The intent is for the new fueling system to be equipped with nozzle readers, but the RFID vehicle modules are not part of the base bid and would be procured later if the City desires.

7. How many AIM RFID module kits should be quoted as part of the base bid?

The intent is for the new fueling system to be equipped with nozzle readers, but the RFID vehicle modules are not part of the base bid and would be procured later if the City desires. 8. Please specify the number of dual tank vehicles the City wishes to use AIM RFID with?

The intent is for the new fueling system to be equipped with nozzle readers, but the RFID vehicle modules are not part of the base bid and would be procured later if the City desires.

9. The RFP states a 24 month Mfg warranty rather than the standard 1 year warranty for the Fuel Management System? To clarify, should the AIM RFID kits also be warranted for a period of 2 years?

The intent is for the new fueling system to be equipped with nozzle readers, but the RFID vehicle modules are not part of the base bid and would be procured later if the City desires.

10. Does the City require a Cloud based system such as FM Live? If cloud is not required, does the city wish to see an option for a Cloud based fuel management system?

A cloud based system is preferred. Ideally, the system should support single-sign-on (SSO).

11. Does the City desire a certain amount of Prokees (Chip keys)?

The intent is for the system to utilize fob readers, not prokees/chip keys or prox cards. Five hundred (500) fob readers shall be provided in the base bid.

12. In addition to the prokees/chip keeys, does the city desire an HID prox card/fob reader for the fuel management system?

The intent is for the system to utilize fob readers, not prokees/chip keys or prox cards.

13. How many total hoses will the FMU (Fuel Management Unit) need to control? Looks like 8 from the drawing but just want to confirm.

Eight.

14. Does labor need to be included in the 2-year manufacturer warranty?

A five (5) year warranty is desired (with labor included).

15. Under "Service Contract" you have 5 years listed for software, hardware, and labor but under fuel-management warranty you have 2 years listed. Can you please clarify if you are looking for a 2 year or a 5-year warranty for the fuel-management system? And does the 2- or 5-year warranty need to include labor for the fuel-management system?

A five (5) year warranty is desired (with labor included).

Attached Drawing Updates:

- M03 Mechanical Plan New Work
- M04 Diagrams
- M05 Schedules and Sections
- M06 Details
- E03 Electrical Power Plan
- E04 Electrical Schedules & Single Line Diagram

Other Attachments:

• The non-mandatory pre-bid meeting participant list is attached.

Note: Acknowledgment of this Addendum is required in the Bid.



| | | SCALE | | | CITY OF EVANSTON, ILLINOIS |
|---------------------|-----|---------|-------|--------|-------------------------------|
| | | | | | |
| | | 10 I | 20 FT | 1"-10' | |
| NO.1 | | | | 1 = 10 | SERVICE CENTER |
| EVISION DESCRIPTION | | | | | NORTH FUEL ISLAND REPLACEMENT |
| | Day | an 6 of | 10 | | |

NEW CONSTRUCTION KEY NOTES

1 INSTALL NEW FUEL DISPENSER (TYP OF 4)

(2) INSTALL FUEL MANAGEMENT SITE CONTROLLER.

(3) INSTALL FUEL OIL UNDERGROUND TANKS.



INSTALL NEW GAS LINE FOR NEW GENERATOR ALONG RETAINING BRICK WALL WITH SUPPORT AS REQUIRED 4 FEET ABOVE GRADE. COORDINATE WITH ELECTRICAL FOR CONNECTION AT GENERATOR.

NOTES:

1. CONTRACTOR TO VERIFY VERTICAL AND HORIZONTAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

- 2. ROUTE ALL PIPING IN FIELD AS APPROVED BY THE
- AUTHORITY. DEPTH OF BURY AS SHOWN AND APPROVED BY THE 3. AUTHORITY.
- SLOPE ALL PIPING TOWARD UNDERGROUND STORAGE 4. TANKS.
- PROVIDE DOUBLE ELBOW SWING JOINTS AT EACH CHANGE 5. OF DIRECTION FOR ALL FUEL OIL PIPING.



| MECHANICAL | PROJECT NO.: 00280 | | | | | | | |
|----------------------------|--------------------|-----|----|-------|--|--|--|--|
| D | DWG: | MO | 3 | | | | | |
| | SHEET: | 13 | OF | 20 | | | | |
| MECHANICAL PLAN - NEW WORK | DATE: OCT 2 | 023 | R | EV: 0 | | | | |



| ••••••• | |
|------------------|--|
| PLUG VALVE (TYP) | |

DATE

EXP. 11-30-2023 NO.

OCT 6, 2023

APPD

| | SCALE | CITY OF EVANSTON, ILLINOIS | |
|----------------------|--------------|-------------------------------|---|
| | | | |
| | | | |
| M NO.1 | NO SCALE | SERVICE CENTER | |
| REVISION DESCRIPTION | | NORTH FUEL ISLAND REPLACEMENT | |
| | Dago 7 of 12 | | _ |

Page / of 12

DATE: OCT 2023

REV:

| IANK | | | | | | | | | | | |
|-----------|-------------------------------------|----------|--------------------|-----------|----------------|--------------------------------|---------------------------|---------------|--|--|--|
| UNIT I.D. | LOCATION | SERVICE | CAPACITY (GAL.) | DIA. (FT) | LENGTH (FT) | MAX WORKING PRESSURE (PSIG) | MANUFACTURER MODEL NO. | REMARKS/NOTES | | | |
| FOST-1 | SERVICE CENTER NORTH FUEL ISLAND | UNLEADED | 15,000 | 10' | 30' | | ZCL/XERXES | 1,2,3 | | | |
| FOST-2 | SERVICE CENTER NORTH FUEL ISLAND | DIESEL | 15,000 | 10' | 30' | | ZCL/XERXES | 1,2,3 | | | |
| | | | | | | | | | | | |

| | | | F | PUMPS | | | | | | |
|-------------------------------------|--|--|---|--|--|--|---|--|---|---|
| LOCATION | SERVICE | TYPE | FUEL OIL | | MOTOR | | TOR | | MANUFACTURER | REMARKS/NOTES |
| | | | GPM | HEAD ('H2O) | BHP | HP | RPM | V/PH/HZ | MODEL NO. | |
| SERVICE CENTER NORTH FUEL ISLAND | FOST-1 (UNLEADED) | CENTRIFUGAL | 40 | 60 | | $\left\{ \begin{array}{c} 2 \end{array} \right\}$ | | 208/3/60 | MAXXUM STP | 1,2 |
| SERVICE CENTER NORTH FUEL ISLAND | FOST-2 (DIESEL) | CENTRIFUGAL | 40 | 80 | | | | 208/3/60 | MAXXUM STP | 1,2 |
| | | | | | | | | | | |
| | LOCATION SERVICE CENTER NORTH FUEL ISLAND SERVICE CENTER NORTH FUEL ISLAND | LOCATION SERVICE SERVICE CENTER FOST-1 (UNLEADED) NORTH FUEL ISLAND FOST-2 (DIESEL) NORTH FUEL ISLAND FOST-2 (DIESEL) | LOCATIONSERVICETYPESERVICE CENTER NORTH FUEL ISLANDFOST-1 (UNLEADED)CENTRIFUGALSERVICE CENTER NORTH FUEL ISLANDFOST-2 (DIESEL)CENTRIFUGAL | LOCATION SERVICE TYPE FI Image: Service center NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 | PUMPS LOCATION SERVICE TYPE FUE OIL 0 0 0 0 0 SERVICE CENTER NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 60 SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 Image: Service center of the service cen | IDCATION SERVICE TYPE FUL OIL Image: Ima | LOCATION SERVICE TYPE FULOL MOD LOCATION SERVICE SERVICE OPP HP MOD SERVICE CENTER NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 60 2 | PUMPS LOCATION SERVICE TYPE FUE OIL MOTO MOTO SERVICE CENTER NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 60 2 SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 1 2 SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 1 2 | PUMPS LOCATION SERVICE TYPE FUEL OIL MOTOR GPM HEAD ('H2O) BHP HP RPM V/PH/HZ SERVICE CENTER NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 60 2 208/3/60 SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 1 2 208/3/60 | PUMPS LOCATION SERVICE TYPE FUE IL MOTOR MANUFACTURER MODEL NO. SERVICE CENTER NORTH FUEL ISLAND FOST-1 (UNLEADED) CENTRIFUGAL 40 60 2 208/3/60 MAXXUM STP SERVICE CENTER NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 1 2 208/3/60 MAXXUM STP NORTH FUEL ISLAND FOST-2 (DIESEL) CENTRIFUGAL 40 80 1 2 208/3/60 MAXXUM STP |





uchall

MD SEAL AFFIXED

OCT 6, 2023

CHECKED

· · ·

EXP. 11-30-2023 NO. DATE

11/6/23

MD

APPD

100 SOUTH WACKER DRIVE, SUITE 1400

CHICAGO, ILLINOIS 60606









| | SCALE | CITY OF EVANSTON, ILLINOIS |
|-----------------------------|---|-------------------------------|
| ADDENDUM NO.1 | 8 0 8 16 FT LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | SERVICE CENTER |
| REVISION DESCRIPTION | 1/4"=1'-0 | NORTH FUEL ISLAND REPLACEMENT |
| | Page 8 of 12 | |

ADA PLAN REQUIREMENT



ADA DISPENSER SECTION SCALE: 1/4" = 1'-0"

NOTES:

- 1. LOCATE EQUIPMENT ALONG THE CENTERLINE OF THE ISLAND.
- 2. RUN CANOPY DOWNSPOUTS INSIDE EACH COLUMN.
- CONNECT TO STORM DRAIN LINES BELOW GRADE. 3. FUEL DISPENSERS, KEYPADS, AND ALL OTHER EQUIPMENT TO BE IN CONFORMANCE WITH THE ILLINOIS ACCESSIBILITY CODE. PROVIDE ALL OPERABLE PARTS TO BE WITHIN A 24-INCH MAXIMUM REACH FROM THE EDGE OF THE CURB AND AT A HEIGHT RANGE OF 15-INCHES TO 46-INCHES FROM THE FINISHED GRADE. REFER TO ADA REQUIREMENT PLAN AND SECTIONS ON THIS SHEET.



| MECHANICAL | PROJECT NO.: 00280 | | | | | | | |
|------------------------|--------------------|----------|------------|---|--------|--|--|--|
| | DWG: | Ν | M 0 | 5 | | | | |
| | SHEET: | | 15 | O | - 20 | | | |
| SCHEDULES AND SECTIONS | DATE: | OCT 2023 | | | REV: 0 | | | |



FUEL STORAGE TANK DETAIL



MANWAY AND CONTAINMENT SUMP DETAIL



FUEL STORAGE TANK - SECTION

NOT TO SCALE

CONTAINMENT LID

| | SCALE | CITY OF EVANSTON, ILLINOIS |
|---------------------|--------------|-------------------------------|
| | | |
| | | |
| IO.1 | NOT TO SCALE | SERVICE CENTER |
| EVISION DESCRIPTION | | NORTH FUEL ISLAND REPLACEMENT |
| | Dogo 0 of 12 | |

Page 9 of 12



- 1 1/8" Ø STEEL PIN WITH COTTER PIN

- 1 1/4" Ø STEEL ANCHOR ROD WITH WELDED EYELET LENGTH AS REQUIRED

- STEEL WELDLESS EYE NUT





MECHANICAL PROJECT NO.: 00280 M06 DWG: SHEET: 16 OF 20 DETAILS REV: DATE: OCT 2023



| | SCALE | CITY OF EVANSTON, ILLINOIS |
|-----------------------------|-------|-------------------------------|
| | | |
| | | |
| ADDENDUM NO. 1 | | SERVICE CENTER |
| REVISION DESCRIPTION | | NORTH FUEL ISLAND REPLACEMENT |
| | | |

| | D' GP | | | | 0N· 「 | | RICA | RUO | M | | | | |
|---|--|--------|-------------|----------------------|----------------|-----------------|-------------------|---------------------|------------|--|-------------------------------------|-----------|--------------------|
| VOLTAGE: | [X] 208Y/120V; 3Ø; | 4 W; S | 5/N | A | υν: Ε 277V; | 3Ø; | | W; S/I | N | | DE / ··· | | |
| MAINS: 150 A | MPERES [] MAIN L ATINGS. SYMMETRICA | UGS ON | ILY RES: | [X] SHUN MAIN BRE | T TRI | P DEV R: 42k | | | [X] MAIN (| CIRCUIT BI | REAKER S: 22K AIO | TRIP C | P/FUSE RATING: 150 |
| MOUNTING: [X] | SURFACE [] FLUSH | - [] | BETWEEN | I FLANGE | ES OF | A CO | LUMN | | | ENCLOS | SURE: NEI | MA 1 | |
| SEF | RVES | A | OLTAMPS | S C | CKT NO | A የ | BC | CK NO | T | VOLTAMP B | S C | - | SERVES |
| FUEL DISPENSER | | 1440 | | | 1 | 20 | 2 | | 280 | | | CANOPY | Y LIGHTS |
| FUEL DISPENSER | | | 1440 | | 3 | 20 | | | | 1500 | | GENERA | ATOR BATTERY CH |
| | | 1440 | | 1440 | 57 | | $ _2^2$ | | 1500 | | 500 | GENER/ | ATOR ENCLOSURE |
| CONTROL/MONIT | ORING @ ISLAND | 1440 | 1000 | | 9 | 20 | 13 | 2 0 0 10 | 1300 | 1273 | | GLINLIN | |
| | | | | 1273 | 11 | 30 | Т, | 12 | | | 1273 | FUEL PL | UMP (FOP-2) |
| FUEL PUMP (FOP- | -1) | 1273 | | | 13 | -1- | Щ | 14 | 1273 | | | | |
| | SYSTEM | | 1273 | 1000 | 15 | $\frac{1}{20}$ | | ♀ 16 0 18 | | | | | |
| CONTROL/MONIT | ORING @ BUILDING | 1000 | | 1000 | 17 | 20 | | 0 20 | | | | | |
| WORKSTATION | | 1000 | 500 | | 21 | 20 | Τź | 0 22 | | | | | |
| | | | | | 23 | 20 | 12 | 24 | | | | | |
| | | | | | 25 | 20 | $\prod_{i=1}^{2}$ | 26 | ; | | | | |
| | | | | | 27 | $\frac{20}{20}$ | | <u>0</u> 28 | | | | | |
| | | | | | 29 | $\frac{20}{20}$ | | <u>v</u> 30 0 32 | , | | | | |
| | | | | | 33 | 20 | $\frac{1}{2}$ | 2 32 0 34 | · | | | | |
| | | | | | 35 | 20 | ź | 0 36 | | | | | |
| | | | | | 37 | 20 | <u></u> | 0 38 | | | | | |
| | | | | | 39 | 20 | <u>↓</u> Ţ² | <u>0</u> 40 | | | | | |
| | | 5450 | 4040 | 0740 | 41 | 20 | 12 | <u> </u> | 2052 | 0770 | 4770 | TOTAL | |
| | | 5155 | 4213 | 3/13 | | | | | 3055 | 2//3 | 1//3 | TUTAL | |
| | | | | | | | | | | | 2 | ØA | 8206 |
| | | | | | | | | | | | | | 20078 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Engineers, Ltd. | | | | | | | | | | | | | |
| Engineers, Ltd. | | | | | | | | | | | | | |
| ngineers, Ltd. frastructure Solutions er Drive, Suite 303 | | | | | | | | | | | | | |
| Engineers, Ltd. nfrastructure Solutions cker Drive, Suite 303 pis 60601-3007 P• 312.669.0525 Fax | | | | | | | | | | | | | |
| Engineers, Ltd. g Infrastructure Solutions /acker Drive, Suite 303 inois 60601-3007 09 • 312.669.0525 Fax ;ago@ccjm.com | | | | | | | | | | 062-044 REGISTE | HUJA 5514 5 RED | | |
| Engineers, Ltd. Infrastructure Solutions icker Drive, Suite 303 iois 60601-3007 9• 312.669.0525 Fax go@ccjm.com | | | | | | | | | | | STIA STIA RED LONAL FFP | | |
| Engineers, Ltd. g Infrastructure Solutions Vacker Drive, Suite 303 linois 60601-3007 309 • 312.669.0525 Fax 2ago@ccjm.com | | ESIGN | ED | C | CJM | 1 | | | | 062–046 REGISTE ENGINI OF | HU SIA RED LONAL EER | | |
| MEngineers, Ltd. st Wacker Drive, Suite 303 by Illinois 60601-3007 c).0609 • 312.669.0525 Fax chicago@ccjm.com GREELEY AND HANSE | | ESIGN | ED | C | -CJM | 1 | | | | 062-046 REGISTE ROFESS ENGINI | HU S514 RED LONAL EER | | |

A TYLin Company

100 SOUTH WACKER DRIVE, SUITE 1400

CHICAGO, ILLINOIS 60606

DRAWN

CHECKED

CCJM

CCJM SEAL AFFIXED

OCTOBER 6, 2023

NO.

DATE

AA

APPD



FEEDER SCHEDULE USE THIS TABLE UNLESS NOTED OTHERWISE ON THE DRAWINGS/PLANS

| | | | 1 | | | 1 |
|--|---|-------------------------------|-----------------|-------------------|--|--|
| CIRCUIT BREAKER/FUSE SIZE (AMPERES) | FEEDER SIZE (AWG OR KCMIL) (NOTE 8) | GROUND SIZE (AWG OR KCMIL) | CONDUIT SIZE | NUMBER OF SETS | SERVICE ENTRANCE GROUND (AWG OR KCMIL) | SERVICE ENTRANCE GROUND CONDUIT SIZE |
| 15 | 3#12 | 1#12 | 3/4 | 1 | 1#8 | 3/4 |
| 20 | 3#12 | 1#12 | 3/4 | 1 | 1#8 | 3/4 |
| 25 | 3#12 | 1#12 | 3/4 | 1 | 1#8 | 3/4 |
| 30 | 3#10 | 1#10 | 3/4 | 1 | 1#8 | 3/4 |
| 35 | 3#8 | 1#10 | 1 | 1 | 1#8 | 3/4 |
| 40 | 3#8 | 1#10 | 1 | 1 | 1#8 | 3/4 |
| 45 | 3#6 | 1#10 | 1 1/4 | 1 | 1#8 | 3/4 |
| 50 | 3#6 | 1#10 | 1 1/4 | 1 | 1#8 | 3/4 |
| 60 | 3#4 | 1#8 | 1 1/4 | 1 | 1#8 | 3/4 |
| 70 | 3#4 | 1#8 | 1 1/2 | 1 | 1#8 | 3/4 |
| 80 | 3#3 | 1#8 | 1 1/2 | 1 | 1#8 | 3/4 |
| 90 | 3#2 | 1#8 | 1 1/2 | 1 | 1#8 | 3/4 |
| 100 | 3#1 | 1#8 | 2 | 1 | 1#6 | 3/4 |
| 110 | 3#1 | 1#6 | 2 | 1 | 1#6 | 3/4 |
| 125 | 3#1/0 | 1#6 | 2 | 1 | 1#6 | 3/4 |
| 150 | 3#1/0 | 1#6 | 2 1/2 | 1 | 1#6 | 3/4 |
| 175 | 3#2/0 | 1#6 | 2 1/2 | 1 | 1#4 | 3/4 |
| 200 | 3#3/0 | 1#6 | 2 1/2 | 1 | 1#4 | 3/4 |

| | SCALE | CITY OF EVANSTON, ILLINOIS |
|----------------------|-------|-------------------------------|
| | | |
| | | |
| ADDENDUM NO. 1 | | SERVICE CENTER |
| REVISION DESCRIPTION | | NORTH FUEL ISLAND REPLACEMENT |
| | | |

Page 11 of 12

NOTES:

1. FEEDERS AND BRANCH CIRCUITS ARE SIZED FOR INSTALLATION IN CONDUITS, NOT APPLICABLE FOR OTHER RACEWAYS.

2. ALL SERVICE ENTRANCE UNDERGROUND CONDUITS SHALL BE CONCRETE ENCASED.

3. ALL EXPOSED CONDUIT UP TO 8'-0 SHALL BE RGS AND ALL OUTDOOR CONDUIT SHALL BE RGS.

4. HVAC MOTOR CIRCUIT BREAKERS SHALL BE HACR TYPE.

5. ALL CONDUCTORS SHALL BE COPPER.

6. FEEDER SIZES BASED ON AMBIENT TEMPERATURE OF 30 DEG. C (80 DEG. F) COPPER THWN/THHN CONDUCTORS AT TEMPERATURE RATING OF 75 DEG.C

7. ALL FEEDER SIZES ARE BASED ON MAXIMUM 100' CIRCUIT LENGTH AND MAXIMUM THREE CURRENT CARRYING CONDUCTORS AND GROUND PER RACEWAY. INCREASE FEEDER SIZE TO NEXT HIGHER NUMBER FOR LONGER LENGTHS AND MORE THAN THREE CURRENT CARRYING CONDUCTORS. DERATE PER NEC.

8. INSTEAD OF 3 WIRES AS SHOWN IN THE SCHEDULE, 4 WIRES ARE REQUIRED FOR DISTRIBUTION SYSTEMS THAT REQUIRE NEUTRAL WIRE SUCH AS PANELBOARDS AND SPECIAL MECHANICAL EQUIPMENT. REFER TO EQUIPMENT SCHEDULE IN MECHANICAL DRAWINGS AND PANEL SCHEDULES AND ONE LINE DIAGRAMS IN ELECTRICAL DRAWINGS FOR EXACT FEEDER QUANTITY REQUIRED.

9. FEEDERS SERVING COMPUTER CIRCUIT PANELS WITH 200% NEUTRAL AND IG SHALL HAVE DOUBLE NEUTRAL AND DOUBLE GROUND UP TO SERVING TRANSFORMER OR MAIN SERVICE BOARD. CONDUIT SIZE SHALL MEET NEC REQUIREMENTS. CONTRACTOR TO VERIFY IN FIELD BEFORE BID.

10. IDENTIFICATION OF UNGROUNDED CONDUCTORS WHERE MORE THAN ONE NOMINAL VOLTAGE SYSTEM EXISTS IN BUILDING. EACH GROUNDED CONDUCTOR OF A MULTIWIRE BRANCH CIRCUIT WHERE ACCESSIBLE, SHALL BE IDENTIFIED BY PHASE AND SYSTEM. THIS MEANS OF IDENTIFICATION SHALL BE PERMITTED TO BE BY SEPARATE COLOR CODING, MARKING TAPE, TAGGING, OR OTHER APPROVED MEANS AND SHALL BE PERMANENTLY POSTED AT EACH BRANCH-CIRCUIT PANELBOARD.

| | | | | 1 |
|--|--------------------|--------------|--------|---|
| ELECTRICAL | PROJECT NO.: 00280 | | | |
| ELECTRICAL SCHEDULES & SINGLE LINE DIAGRAM | DWG: SHEET: | E04 20 0 | F 20 | |
| | DATE: | OCTOBER 2023 | REV: - | |

