# EXHIBIT A

# SCOPE OF WORK FOR
# SAC CITY ELEMENTARY SCHOOL PROJECT

Electrician and Rolling Hills Propane Company

## Sac City Elementary School Scope of Work for New FOTS Hut, Quote Needed for work listed Below:

- We are relocating our Part II site in Sac City from the OLD East Sac County Middle School located at 300 S 11th St to the Elementary School 400 S 16th St.
- We are relocating to a hut outside the Elementary School Bus Barn.
- The ICN Hut sets slightly off of the Compass 4 points - For reference the "wall with the door" will be considered as being the "South Wall". Electrical panels will be on the "East Wall" and HVAC units on the "West Wall".
- Please use "Job Number RITM0032801" on all quotes, invoices and correspondences.
- Please forward all questions regarding this quote request to: **brian.clayton@icn.state.is.us**

**The ICN would like to receive Quotes for the following: (Excluding Propane related work listed for Rolling Hills Propane Company. NOTE: the propane information is included due to coordination necessary between electrician and propane vendors.)**

1. New 200 Amp Electrical Entrance
    a. Mid-American Energy has installed a new Secondary Transformer next to the ICN Hut.
    b. Electrician needs to Install new cables from Secondary Transformer to the Meter Socket.
        i. Distance from Secondary Transformer and Meter Socket location will be about 25 horizonal feet.
        ii. Cables shall be at or below the minimum depth required by Code.
        iii. Cables shall be installed in Waterproof Conduit and be plugged on both ends.
            1 Continuous, "Non-Jointed" conduit will be preferred.
            2 Cables shall be sized to have less Voltage Drop then maximum allowed by NEC Code.
                a List "Estimated Voltage Drop" in Quote.
    c. Install new 200-amp Meter Socket into Hut.
        i. Install a New 200 Amp Electrical Meter Socket Box on the outside southeast corner where the existing 100 Amp Meter Socket is at.
        ii. Remove and discard existing meter socket.
        iii. Remove and discard existing entrance wiring and conduit.
            1 Existing 100 Amp Wiring and Conduit will probably not meet Code Specs for new 200-amp entrance service.
    d. Install new wiring & conduit (as needed) from meter socket to the hut's New 200 Amp Disconnect Breaker on the East Wall.
    e. Wire from the Disconnect Breaker to the new 200 Amp "A" Panel.
        i. Option #3 - New 200 Amp Disconnect Breaker can be placed on the South wall if it allows for more efficient install of other electrical components.
    f. All NEC, Local & State Code Space Clearances must be followed for all electrical components.
2. Install New 200 Amp "A" Electric Breaker Panel in Hut
    a. Install a New 200 Amp "A" Breaker Panel - Currently the hut only has a 100 Amp Disconnect breaker and a 100 Amp "B" Panel only, there is no "A" Panel existing.
        i. Move the Generator Water Jacket Heater and the Generator Battery Charger circuits from the current "B" Panel to the new 200 Amp "A" Panel. (See Circuit Breaker Layout Excel Spreadsheet).
            1 Generator Water Jacket Heater Circuit - 20 Amp, Double Pole, 120 VAC.
            2 Generator Battery Charger Circuit - 20 Amp, Double Pole, 120 VAC.

ii. Remaining electrical circuits will be installed on New 200 Amp "B" Panel. (See Circuit Breaker Layout Excel Spreadsheet).
iii. Placement of "A" Panel can be as shown on Option #1 or Option #2 in drawing.
iv. Due to size of ATS, New Disconnect Breaker can be moved to the adjacent South wall, (wall with the door). (This is shown as Option #3).
v. "A" Panel will need to be connected to the ATS Switch on a 150 Amp Breaker.

3. Install Automatic Transfer Switch (ATS)
   a. Pickup 200 Amp ATS form ICN Warehouse.
      i. Coordinate with ICN Facilities Group for pickup time or to coordinate delivery of switch to site.
   b. Install ATS per location indicated by either Option #1 or Option #2 drawing.
   c. ATS will sit directly on the floor. Anchor securely.
   d. Connect ATS to B Panel.
   e. Connect ATS to Generator.
   f. Connect ATS to Commercial Power from the "A" Panel.

4. Install new 200 Amp "B" Panel
   a. Install a New 200 Amp "B" Breaker Panel - (Currently the hut only has a 100 amp "B" Panel.)
   b. "B" Panel should have a 150 Amp Main Breaker from the ATS.
   c. "B" Panel can be installed per Option #1 or Option #2.
   d. Existing Conduits will need to be rerouted to "B" Panel.
   e. See Breaker Panel Worksheet for list of circuits.
      i. Five Circuits - 20 Amp, Single Pole, 120 VAC.
         1 Overhead Lights
         2 Exhaust Fan & Intake Louvers
         3 Receptacles Group #1
         4 Receptacles Group #2
         5 Receptacles Group #3
      ii. One Circuits - 15 Amp, Single Pole, 120 VAC.
         1 Outside Security Light
      iii. One Circuits - 30 Amp, Double Pole, 240 VAC.
         1 Two Baseboard Heaters (on same breaker)
      iv. Five Circuits - 20 Amp, Double Pole, 240 VAC.
         1 HVAC #1
         2 HVAC #2
         3 DC Rectifier #1
         4 DC Rectifier #2
         5 DC Rectifier #3

5. Grounding Loops - Interior & Exterior
   a. Interior Ground loop in Hut is already installed.
      i. Electrician to verify all existing connections.
      ii. Electrician to install any missing connections needed per Code.
   b. Install Outside Grounding Loop and Rods as needed.
      i. Grounding Field Ohm value should meet or exceed standards for Data Rooms in NEC and IEEE.
      ii. Exothermic Welding is required for all outside connections.
   c. Bond exterior grounding loop onto internal master ground bar.
   d. Grounding connections should meet Code requirements and any needed for Power Quality.

6. HVAC Wiring – Upgrade to 20 Amp Circuits
   a. HVAC Receptacle Plugs are currently wired with 240 VAC / 15 amp breaker.
   b. New 15,000 to 24,000 BTU HVAC units will be installed.
      i. General review of specs on web show units drawing 13 Amps to 15 Amps, which will require 20 amp wiring and breakers.

ii. Breakers need to be replaced with 20 Amp Breakers suitable for Window type HVAC units.

c. Existing Wiring on these Two circuits need to be Verified to be able to handle a 20-amp Circuit.

i. Replace wiring & conduit as needed.

7. Heater Thermostat - Relocation

a. Due to placement on the east wall, the Heater thermostat may need to be moved and rewired with new conduit.

i. Do not mount thermostat over baseboard heaters.

8. Installation of New Propane Tank. (To be done by Rolling Hills)

a. Rolling Hills will move one 1000-gallon tank from Menlo Regen Hut to Sac City Elem Sch.

i. Contractor will Install tank with side at least 10 feet from Hut on the North side.

ii. Tank's east end should line up with the east wall of the Hut.

iii. Install tank on Concrete Blocks, parallel to the North edge of Concrete Pad & Hut.

iv. Rolling Hills will refill tank after install.

1 Only refill tank half full, based on amount of fuel at Middle School.

2 Move fuel from the Middle School to the Elementary School tank after decommission below.

v. Rolling Hills and Electrician will coordinate connections to Generator.

9. Rolling Hills will connect Propane tank to Generator. (To be done by Rolling Hills)

a. Install Propane Line from the Tank to the Generator.

b. Propane Line to tank should be installed well below Depth required by State and Local Codes.

i. External Protection for Propane Line is required from the tank cap to below ground level.

ii. Propane Line should be covered by heavy plastic duct work or be connected to fence T-Posts, one on either side of the Propane Line.

c. Vendor will need to Update regulators and valves as needed - Use Kohler Specs for Pipe size.

i. ICN or Vendor will supply the fuel capacity/specs and Pipe Size needed.

ii. Propane Line and Regulators need to support the following fuel supply to generator.

1 LP Gas - 7.0 Cubic Meter per Hour or (Rolling Hills and Electrician to verify).

2 LP Gas - 246 Cubic Feet per Hour (Rolling Hills and Electrician to verify).

3 Pipe Size should be large enough to allow generator start up at full fuel usage at Start-up under winter conditions.

4 Pressure should be about 11 inch/$H_2O$.

d. Per NFPA & Kohler, it looks like this pipe should be at least 1 ¼", (Rolling Hills and Electrician to verify).

10. Install Generator

a. ICN will coordinate a generator to be picked up at Newton, taken to 3E, & prepared for Install.

b. Electrician will pick up generator from 3E.

c. Install Pad and Generator at least 10 feet west of the west end of Propane Tank.

d. Install parallel to the edge of the concrete slab parking area.

e. Install conduit & power wires from generator to Hut.

i. Cables shall be sized to have less Voltage Drop then maximum allowed by NEC Code.

1 List "Estimated Voltage Drop" in Quote.

f. Install conduit & signal wires from generator to hut per Kohler standards.

g. Install grounding for Generator.

h. Connect propane to Generator. (Coordinate with Rolling Hills)

i. Turn-up and test Generator and alarms.

**AFTER INSTALLATION IS COMPLETE AND SERVICE HAS BEEN ESTABLISHED AT ELEMENTARY SCHOOL THE ORIGINAL SITE AT THE OLD MIDDLE SCHOOL WILL BE DECOMMISSIONED.**

11. Decommission Middle School - Electrical Removal

a. Electrician needs to shut down & remove the following -

i. Shut down all power to ATS and "B" Panel at the "A" Panel'.

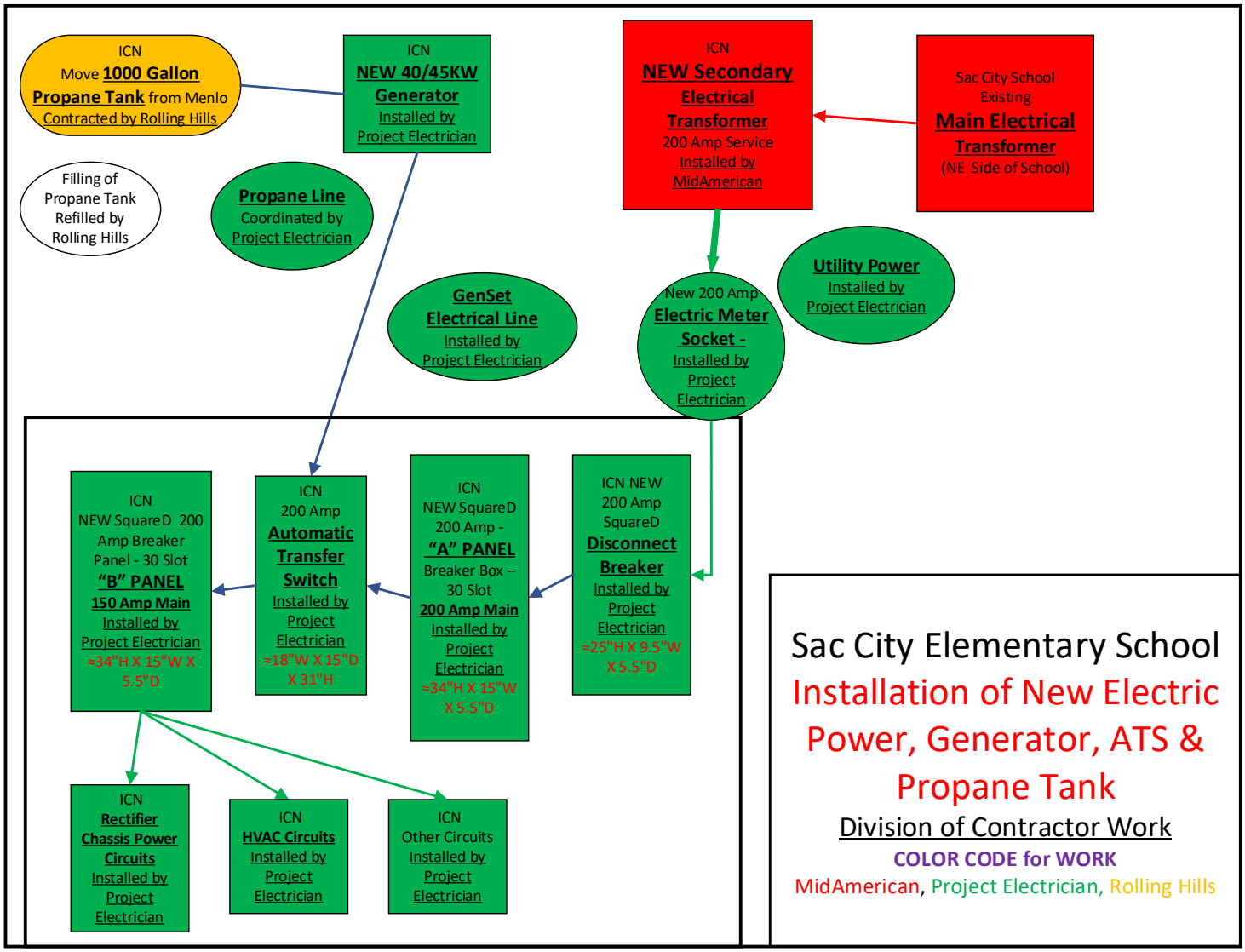
ii. Disconnect Rectifiers and all related Conduit back to the "B" Panel.
iii. Disconnect & remove any Conduit, Receptacles or other connections out of the "B" Panel.
iv. Disconnect "B" Panel from the ATS.
v. Remove "B" Panel and related Conduit.
vi. Disconnect ATS from "A" Panel and related Conduit.

12. Decommission Middle School - Generator & ATS Removal
    a. Electrician will disconnect & remove the following -
        i. Disconnect Generator cabling from ATS.
        ii. Disconnect and remove ATS.
            1 Return the ATS to the ICN Warehouse.
                a Coordinate drop off with ICN Facilities Group.
    b. Disconnect Electrical & Signal Wires from Generator.
        i. Disconnect and remove Generator Power & Signal Wires & Conduit between Generator and ATS.
            1 Plug/Repair holes in wall with suitable Concrete grout.
    c. Remove Generator.
        i. Mouse proof unit and take it to the Newton Regen for Storage (1915 E. 5th St S, Newton, IA., coordinates 41.683116860995504, -93.04885245918082)
    d. Remove Generator Concrete Base.
        i. Repair blacktop as needed to be level with surrounding surface.

13. Decommission Middle School - Propane Tank Removal. (To be done by Rolling Hills)
    a. Turn off propane at the tank valve
    b. Disconnect Propane Line from Generator.
        i. Cut off Propane line & duct at Ground Level.
        ii. Fill in hole with concrete or blacktop.
    c. Disconnect Propane Line from Propane Tank.
        i. Cut off propane line & duct at Ground Level.
        ii. Fill in hole with concrete or blacktop.
    d. Remove propane fuel from tank.
        i. Move fuel from the Middle School to the Elementary School tank after decommission.
    e. Load tank for transport.
    f. Remove concrete blocks.
        i. Fill in Holes where blocks were with Blacktop.
    g. As weather permits - Vendor should paint tank before taking to Menlo.
    h. Take painted tank to Menlo for Storage.

After award, all work shall be coordinated with the ICN Facilities Group:

- RD Boswell -
    - 515-725-4738
    - Rd.boswell@icn.state.ia.us
- Greg Dorrell
    - 515-281-0643
    - greg.dorrell@icn.state.ia.us




# Sac City Elementary School

## Installation of New Electric Power, Generator, ATS & Propane Tank

Division of Contractor Work

**COLOR CODE for WORK**

MidAmerican, Project Electrician, Rolling Hills



Sac City Elementary School

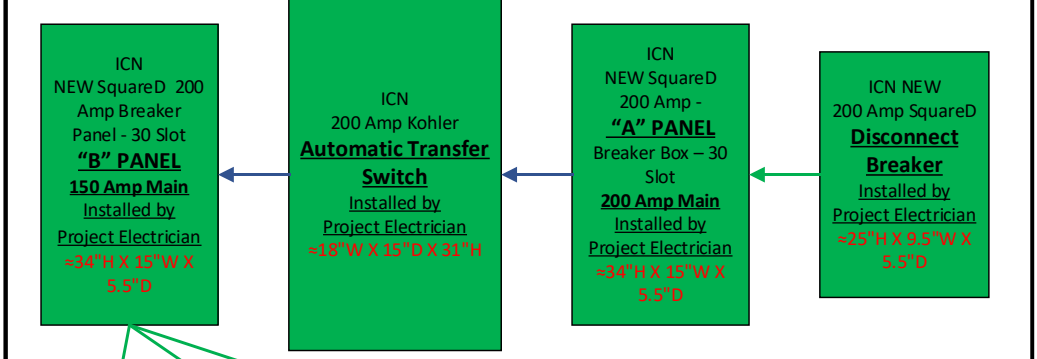
RECONFIGURATION of New Electric Panels & ATS on East Wall

Division of Contractor Work

**COLOR CODE for WORK**

MidAmerican, Project Electrician, Rolling Hills

**Option #1**




**Option #1** – Linear Panel Reconfiguration

East Wall
Approx. 9.0 Feet Wide


**Option #3** – New 200 Amp Disconnect Breaker can be placed on the South Wall if it allows for more efficient install of other electrical components.



Sac City Elementary School

RECONFIGURATION of New Electric Panels & ATS on East Wall

Division of Contractor Work

**COLOR CODE for WORK**

MidAmerican, Project Electrician, Rolling Hills

**Option #2**

ICN
NEW SquareD
200 Amp -
**"A" PANEL**
Breaker Box – 30 Slot
**200 Amp Main**
Installed by
Project Electrician
≈34"H X 15"W X 5.5"D

ICN
200 Amp Kohler
**Automatic Transfer Switch**
Installed by
Project Electrician
≈18"W X 15"D X 31"H

ICN
NEW SquareD 200 Amp Breaker Panel - 30 Slot
**"B" PANEL**
**150 Amp Main**
Installed by
Project Electrician
≈34"H X 15"W X 5.5"D

ICN NEW
200 Amp SquareD
**Disconnect Breaker**
Installed by
Project Electrician
≈25"H X 9.5"W X 5.5"D

ICN
**Rectifier Chassis Pwr Circuit**
Installed by
Project Electrician

ICN
**HVAC Circuits**
Installed by
Project Electrician

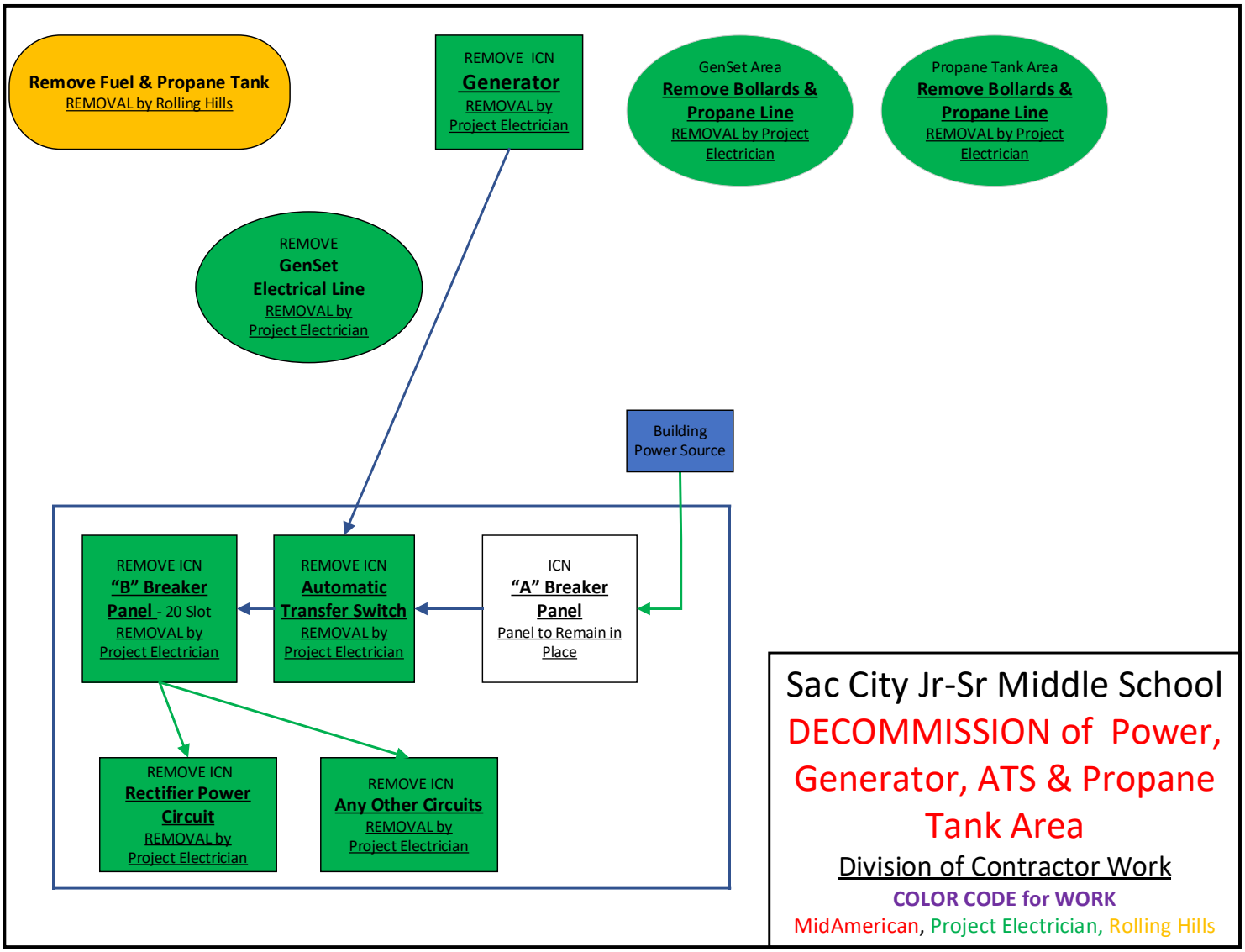
ICN
Other Circuits
Installed by
Project Electrician

**Option #2** – Panel Reconfiguration

East Wall
Approx. 9.0 Feet Wide

**Option #2** – Arranges B Panel Close to it's current location – Connection of existing Conduit will be easier.


**Option #3** – New 200 Amp Disconnect Breaker can be placed on the South Wall if it allows for more efficient install of other electrical components.




# Sac City Jr-Sr Middle School

## DECOMMISSION of Power, Generator, ATS & Propane Tank Area

Division of Contractor Work

**COLOR CODE for WORK**

MidAmerican, Project Electrician, Rolling Hills

## Preventative Maintenance Verification of AC Commercial Power Checklist

### Commercial Power

**BE SURE ALL SAFETY PRECAUTIONS AND METHOD OF PROCEDURES ARE FOLLOWED. CONTRACTOR IS RESPONSIBLE FOR ALL ACTIONS DURING POWER WORK OR BATTERY REPLACEMENT. FOLLOW CONTRACTOR STANDARD MOP**

| Activity | Details of Activity |
|---|---|
| List Name Of AC Commercial Power Provider | Mid American |
| Provide Power Service Information to each Panel and Use of Panel (Amps, Voltage, Main Panel, Backup Panel, Number of Breakers and Use etc.) | Use Form Below for this Information |
| Provide Brand Name and Type of Breakers | Use Form Below for this Information |
| Describe Break Panel Configuration (School Panel to A to B or Sch to B, etc) | 200 Amp Disconnect to a 200 Amp Breaker "A" Panel to 200 Amp ATS to a 200 Amp "B" Panel(with 150 Amp Main Breaker) |
| Verify that all Breakers are Labeled on Doors | Project Electrician to label all breakers |
| Verify and Describe if Power is straight from Power Company or feed through Location Power Grid | Hut to be power from NEW Secondary Transformer |
| Verify if Site is wired for Voltage, 208, 220, 240 etc. | Single Phase - 240 Volts AC |
| Verify if Site is wired for Single or Three Phase | Single Phase |

### 200 AMP SquareD Disconnect Breaker

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Description of Breaker Panel - Make and Model | NEW 200 AMP SquareD Disconnect Breaker | | | | | | |
| Main Breaker Size | 200 Amp | | | | | | |
| Type of Breaker | SquareD | | | | | | |
| Number of Breaker Slots | N/A | NEW 200 AMP SquareD Disconnect Breaker | | | | | |
| | Size of Breaker in Amps | Amp Load with Equip Running | Use of Breaker | | Size of Breaker in Amps | Amp Load with Equip Running | Use of Breaker |
| Breaker #1 | N/A | Not for 6-30-04 PM Cycle | N/A | Breaker #2 | N/A | Not for 6-30-04 PM Cycle | N/A |
| Breaker #3 | N/A | Not for 6-30-04 PM Cycle | N/A | Breaker #4 | N/A | Not for 6-30-04 PM Cycle | N/A |

# Utility AC "A" Electrical Breaker Panel

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Description of Breaker Panel - Make and Model** | SQUARE D | | | | | | |
| **Main Breaker Size** | 200 AMP | | | | | | |
| **Type of Breaker** | SQUARE D | | | | | | |
| **Number of Breaker Slots** | 30 | **NEW 200 Amp - 240 Volt - 30 Slot "A" Breaker Panel** | | | | | |
| | **Size of Breaker in Amps** | **Amp Load with Equip Running** | **Use of Breaker** | | **Size of Breaker in Amps** | **Amp Load with Equip Running** | **Use of Breaker** |
| **Breaker #1** | 20 | 1,500 | Generator Water Jacket Heater | **Breaker #2** | N/A | | N/A |
| **Breaker #3** | 20 | 700 | Generator Battery Charger | **Breaker #4** | N/A | | N/A |
| **Breaker #5** | N/A | | N/A | **Breaker #6** | N/A | | N/A |
| **Breaker #7** | N/A | | N/A | **Breaker #8** | N/A | | N/A |
| **Breaker #9** | N/A | | N/A | **Breaker #10** | N/A | | N/A |
| **Breaker #11** | N/A | | N/A | **Breaker #12** | N/A | | N/A |
| **Breaker #13** | N/A | | N/A | **Breaker #14** | N/A | | N/A |
| **Breaker #15** | N/A | | N/A | **Breaker #16** | N/A | | N/A |
| **Breaker #17** | N/A | | N/A | **Breaker #18** | N/A | | N/A |
| **Breaker #19** | N/A | | N/A | **Breaker #20** | N/A | | N/A |
| **Breaker #21** | N/A | | N/A | **Breaker #22** | N/A | | N/A |
| **Breaker #23** | N/A | | N/A | **Breaker #24** | N/A | | N/A |
| **Breaker #25** | N/A | | N/A | **Breaker #26** | N/A | | N/A |
| **Breaker #27** | N/A | | N/A | **Breaker #28** | N/A | | N/A |
| **Breaker #29** | N/A | | N/A | **Breaker #30** | N/A | | N/A |

# Utility AC "B or Backed Up" Electrical Breaker Panel

| Description of Breaker Panel - Make and Model | SQUARE D | | | | | | |
|---|---|---|---|---|---|---|---|
| Main Breaker Size | 150 Amp Main Breaker - (Breakers DO NOT Have to be in this Exact order) | | | | | | |
| Type of Breaker | SQUARE D | | | | | | |
| Number of Breaker Slots | 30 | NEW 200 Amp Panel - 240 Volt - 30 Slot "B" Breaker Panel | | | | | |
| | Size of Breaker in Amps | Amp Load with Equip Running | Use of Breaker | | Size of Breaker in Amps | Amp Load with Equip Running | Use of Breaker |
| Breaker #1 | 20 DP | 800 | Air Conditioning Unit #1 | Breaker #2 | 20 DP | 800 | Air Conditioning Unit #2 |
| Breaker #3 | 20 DP | 800 | Air Conditioning Unit #1 1600 Total Watts | Breaker #4 | 20 DP | 800 | Air Conditioning Unit #2 1600 Total Watts |
| Breaker #5 | 20 | 750 | Inside Lights | Breaker #6 | 20 | 1,500 | EXHAUST FAN and Intake Louvers |
| Breaker #7 | 15 | 200 | Outside Light | Breaker #8 | 20 | 1,000 | RECEPTACLES - Avg Load |
| Breaker #9 | 20 | 1,000 | RECEPTACLES - Avg Load | Breaker #10 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier #2 |
| Breaker #11 | 20 | 1,000 | RECEPTACLES - Avg Load | Breaker #12 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier #2 |
| Breaker #13 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier #1 | Breaker #14 | 30 DP | Computed HVAC due to More Amps - 2500 | Baseboard HEATER - Both Wired to Same Breaker |
| Breaker #15 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier #1 | Breaker #16 | 30 DP | Listed Above | Baseboard HEATER - Both Wired to Same Breaker |
| Breaker #17 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier #3 | Breaker #18 | N/A | | Blank |
| Breaker #19 | 20 DP | 1,356 | 50 Amp DC Sageon Rectifier#3 | Breaker #20 | N/A | | Blank |
| Breaker #21 | N/A | | Blank | Breaker #22 | N/A | | Blank |
| Breaker #23 | N/A | | Blank | Breaker #24 | N/A | | Blank |
| Breaker #25 | N/A | | Blank | Breaker #26 | N/A | | Blank |
| Breaker #27 | N/A | | Blank | Breaker #28 | N/A | | Blank |
| Breaker #29 | N/A | | Blank | Breaker #30 | N/A | | Blank |

| GENERATOR LOAD INFORMATION FOR ELEM SCHOOL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 9,974 | 2,200 | | | | 6,812 | 18,986 | Total Watts Listed |
| | Watts Listed B Panel ODD Numbered Breakers | | Watts Listed A Panel | | | Watts Listed B Panel EVEN Numbered Breakers | | 240 | Volts |
| | | | | | | | | 79.1 | Amps |
| | | | | | | | | | |
| **Generator On Site (Not Large Enough)** | | | | **Generator to be Used - 40KW or a 45KW Depending on Storage** | | | | | |
| **25 KW REZG** | | | | | **40 KW REZG** | | **45 KW REZG** | | |
| GenSet Watts | 25,000 | | | GenSet Watts | 40,000 | | 45,000 | | |
| GenSet Volts | 240 | | | GenSet Volts | 240 | | 240 | | |
| GenSet Amps | 104.0 | Factory Rated | | GenSet Amps | 166.7 | | 187.5 | Factory Rated | |
| Listed Amps Above | 79.1 | | | Listed Amps Above | 79.1 | | 79.1 | | |
| Delta of Amps between "Listed Above" and "GenSet Factory Rating" | 24.9 | | | Delta of Amps between "Listed Above" and "GenSet Factory Rating" | 87.6 | | 108.4 | | |
| Percentage of Generator total Output based on numbers above. | 76% | | | Percentage of Generator total Output based on numbers above. | 47% | | 42% | | |

| 45REZG Kohler Generator - Fuel Consumption | | | | |
|---|---|---|---|---|
| | 60 Hz. | 60 Hz. | | |
| **LP Gas, at % load Prime Ratings** | **LP Gas, m3/hr.** | **LP Gas, cfh** | **BTU per Cubic feet of Propane** | **Total BTU Supply Needed** |
| 100% | 7.0 | 246 | 2516 | 618,936.0 |
| 75% | 5.7 | 202 | 2516 | 508,232.0 |
| 50% | 4.2 | 147 | 2516 | 369,852.0 |
| 25% | 2.9 | 104 | 2516 | 261,664.0 |

| 40REZG Kohler Generator - Fuel Consumption | | | | |
|---|---|---|---|---|
| | 60 Hz. | 60 Hz. | | |
| **LP Gas, at % load Prime Ratings** | **LP Gas, m3/hr.** | **LP Gas, cfh** | **BTU per Cubic feet of Propane** | **Total BTU Supply Needed** |
| 100% | 6.9 | 242 | 2516 | 608,872.0 |
| 75% | 5.4 | 191 | 2516 | 480,556.0 |
| 50% | 4.0 | 141 | 2516 | 354,756.0 |
| 25% | 2.9 | 101 | 2516 | 254,116.0 |

**Installer has to confirm that all pipe sizes used in Install will conform to Kohler Generator Standards which are greater than NFPA 58**

LP Gas flow is given in thousands of BTU/hr.
One cubic foot of LP gas = roughly 2516 BTU
This chart refers to low pressure LP, after regulation
Pipe length must include additional length for all fittings - Add 10ft for each 90* bend.

## Liquid Propane Gas Pipe Sizing Chart

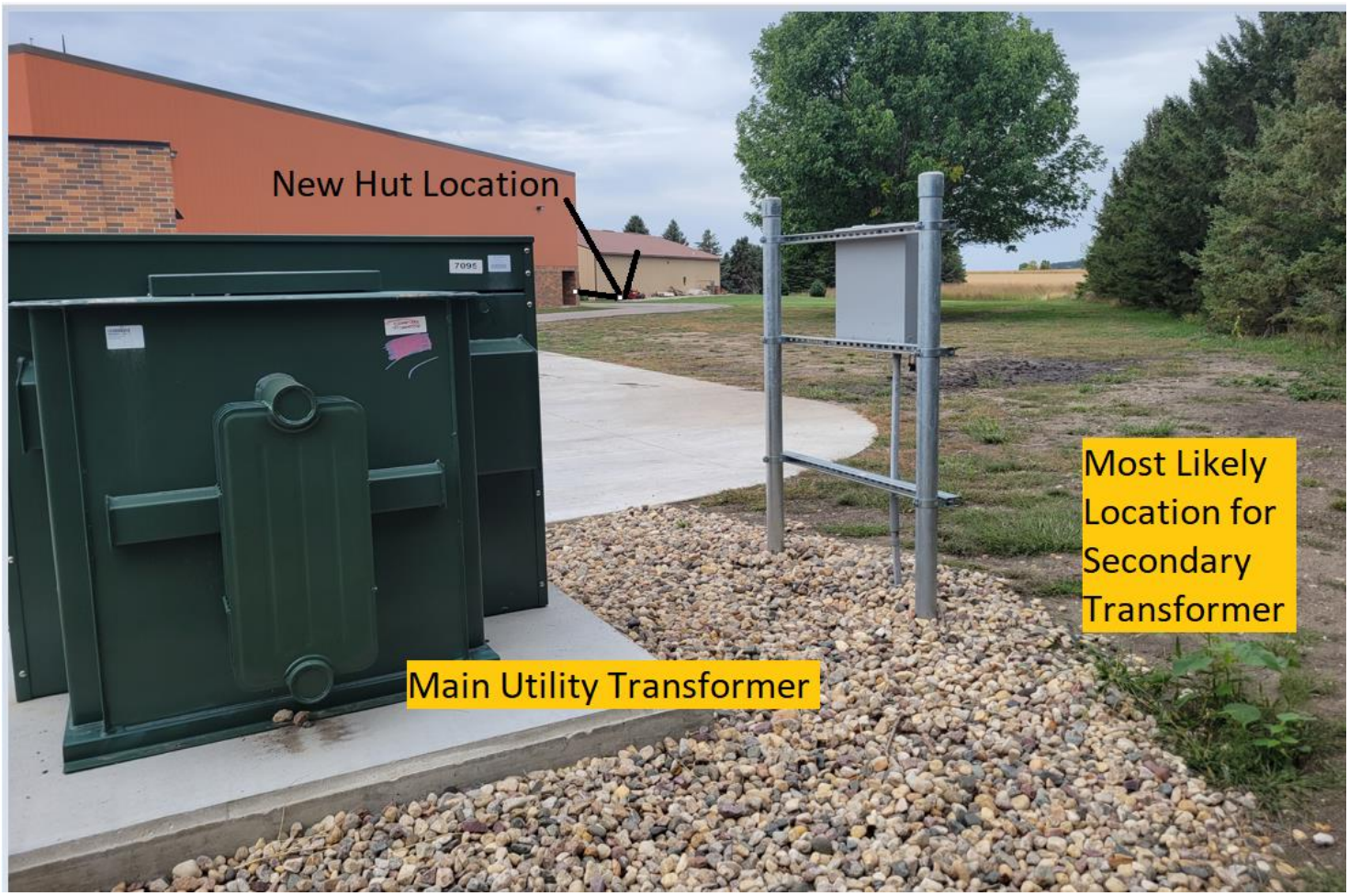
| Length of Pipe in Feet | Size of Pipe in Inches | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 4" |
| 10 | 275 | 567 | 1071 | 2205 | 3307 | 6221 | 10140 | 17990 | 35710 |
| 20 | ^ 189 | 393 | 732 | 1496 | 2299 | 4331 | 7046 | 12510 | 25520 |
| 30 | 152 | 315 | 590 | 1212 | 1858 | 3465 | 5695 | 10110 | 20620 |
| 40 | 129 | 267 | 504 | 1039 | 1559 | 2992 | 4778 | 8481 | 17300 |
| 50 | 114 | 237 | 448 | 913 | 1417 | 2646 | 4343 | 7708 | 15730 |
| 60 | 103 | 217 | 409 | 834 | 1275 | 2394 | 3908 | 6936 | 14150 |
| 80 | 89 | 185 | 346 | 724 | 1086 | 2047 | 3329 | 5908 | 12050 |
| 100 | 78 | 162 | 307 | 630 | 976 | 1811 | 2991 | 5309 | 10830 |
| 125 | 69 | 146 | 275 | 567 | 866 | 1606 | 2654 | 4711 | 9613 |
| 150 | 63 | 132 | 252 | 511 | 787 | 1496 | 2412 | 4281 | 8736 |
| 200 | 54 | 112 | 209 | 439 | 665 | 1282 | 2083 | 3618 | 7382 |
| 250 | 48 | 100 | 185 | 390 | 590 | 1138 | 1808 | 3210 | 6549 |
| 300 | 43 | 90 | 168 | 353 | 534 | 1030 | 1637 | 2905 | 5927 |
| 350 | 40 | 83 | 155 | 325 | 491 | 947 | 1505 | 2671 | 5450 |
| 400 | 37 | 77 | 144 | 303 | 458 | 887 | 1404 | 2492 | 5084 |

## SEVEN PICTURES ADDED BELOW

**Sac City HS Generator**


**Sac City HS Propane Tank**

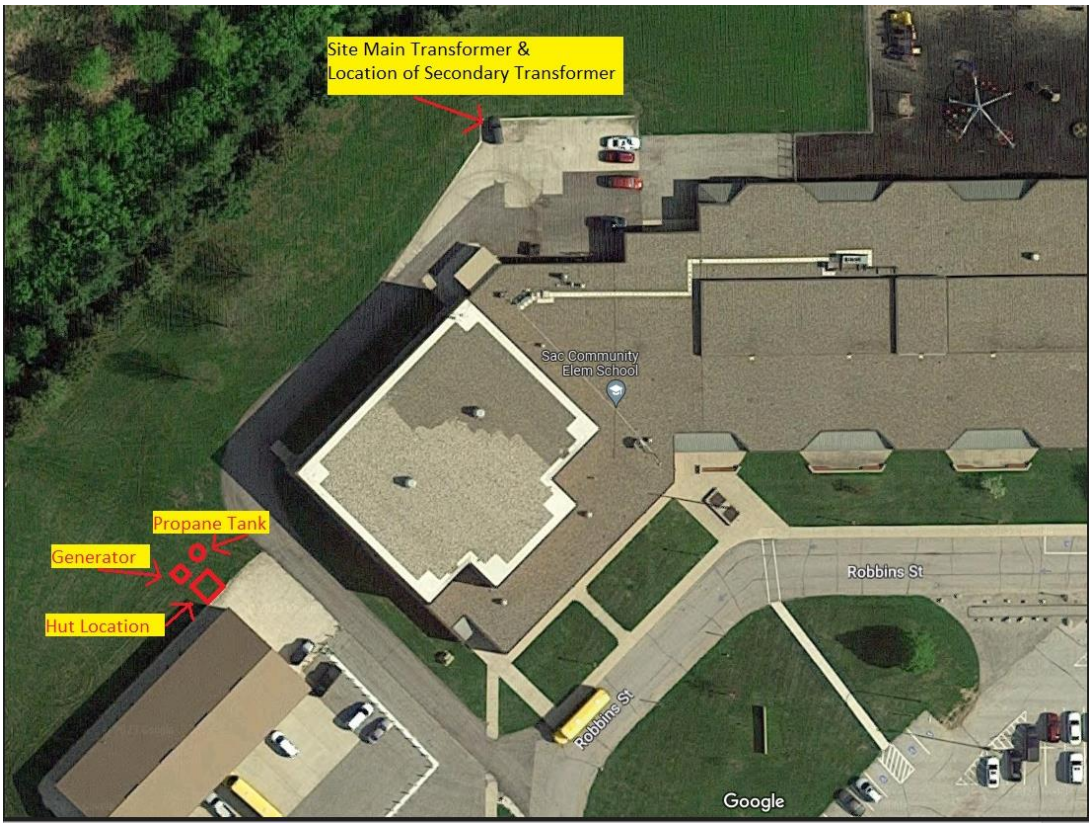
**New Electrical Entrance at Elem School**



**Hut Disconnect Breaker and B Panel**

**Hut HVAC Circuits (Opposite wall from Breaker Panel)**

**Sac City Elementary School**



**Placement of Propane Tank and Generator**