

CITY OF CANTON RECONSTRUCTION OF JOHN BARKER SPRING HOUSE STADIUM PARK CANTON, OHIO

ISSUED FOR BID: OCTOBER 17, 2016



VICINITY MAP
SCALE: N.T.S.

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PROJECT DATA - OBC (2011):
 THE INTENT OF THIS SUBMITTAL IS TO DOCUMENT COMPLIANCE OF THE OHIO BUILDING CODE FOR THE RECONSTRUCTION OF AN EXISTING SPRING WATER DISPENSING FACILITY FOR THE CITY OF CANTON PARKS DEPARTMENT
 TYPE OF CONSTRUCTION: SB
 USE GROUP CLASSIFICATION: U - UTILITY
 ALLOWABLE BUILDING AREA: 5,500 S.F. - 1 STORY
 ACTUAL BUILDING AREA: 130 S.F. - 1 STORY

CONSULTANTS

TTR ENGINEERS
 HINKEL ENGINEERING, INC
 STADELMAN ASSOCIATES, INC

STRUCTURAL ENGINEER
 PLUMBING ENGINEER
 ELECTRICAL ENGINEER

MOTTER & MEADOWS
 ARCHITECTS
 600 Market Avenue North Canton, Ohio 44702

REVISIONS:

600 MARKET AVENUE NORTH CANTON OHIO 44702

MOTT & MEADOWS
ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
STADIUM PARK CANTON, OHIO

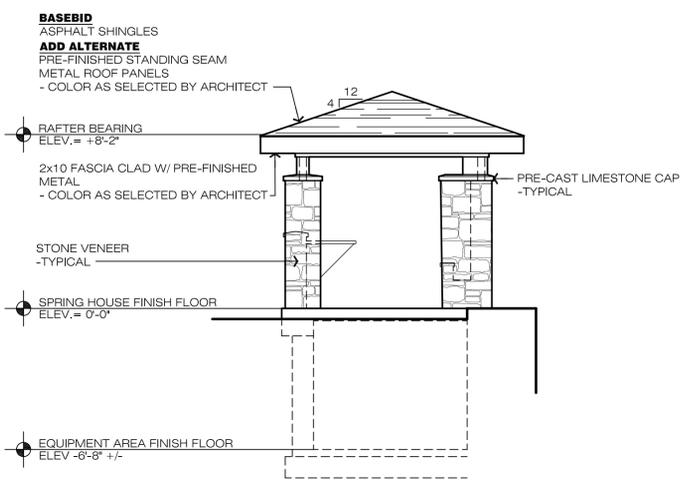
STATE OF OHIO
REGISTERED ARCHITECT
R.W. MEADOWS
7871
RODNEY W. MEADOWS
LICENSE #6781
EXPIRATION DATE
12-31-2017

THIS DWG :
SITE PLAN
DEMOLITION PLAN
FLOOR PLANS
EXTERIOR ELEVATIONS

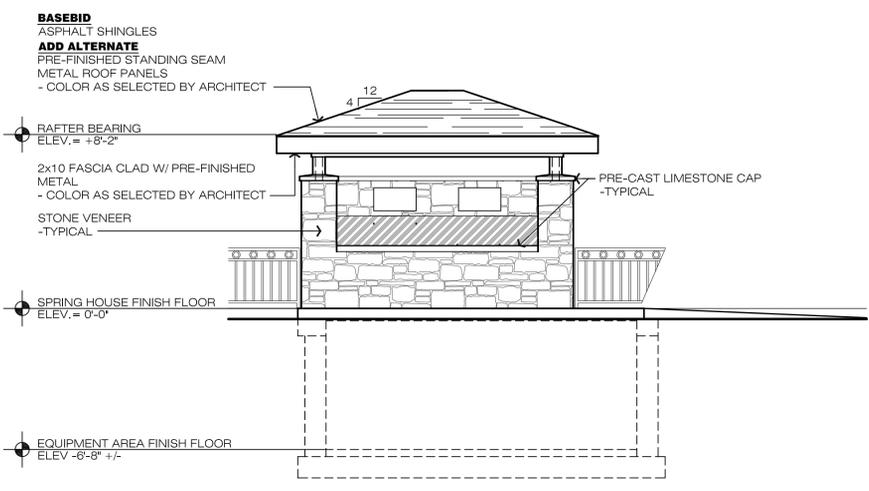
COMM 16126
DATE 10-17-2016

DWG
A-1.1

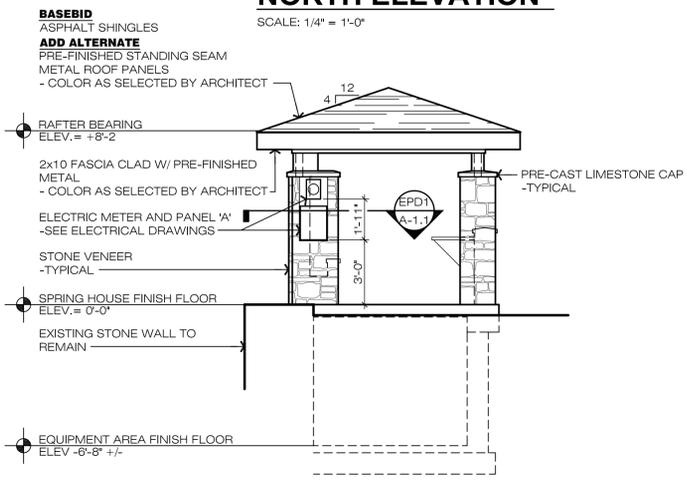
ISSUED FOR BID



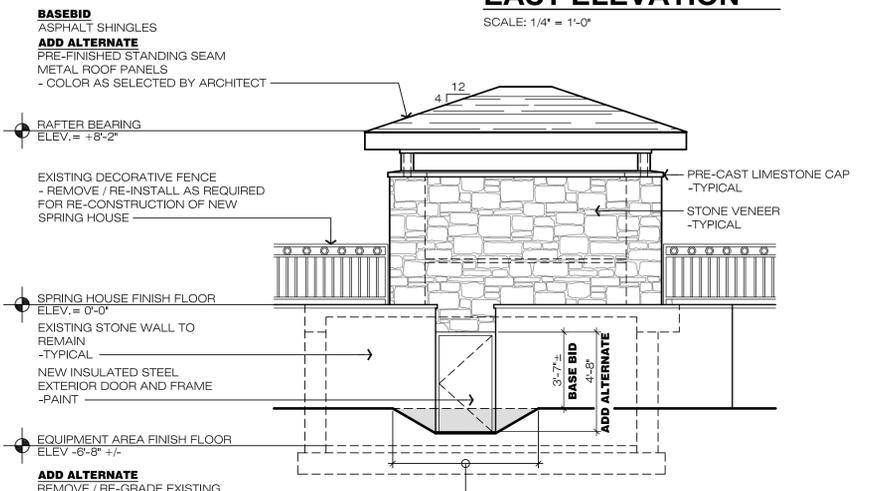
NORTH ELEVATION
SCALE: 1/4" = 1'-0"



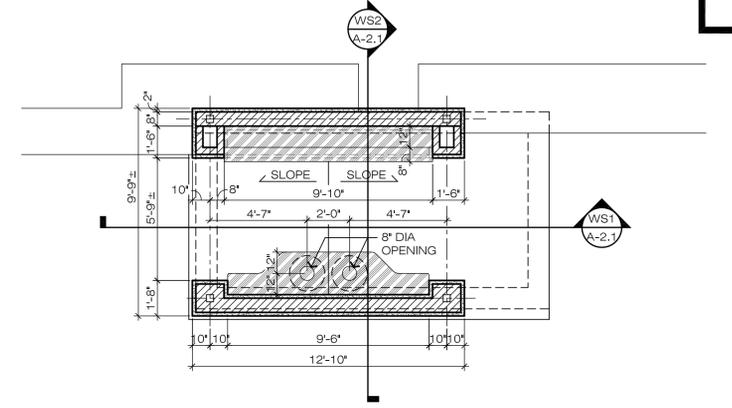
EAST ELEVATION
SCALE: 1/4" = 1'-0"



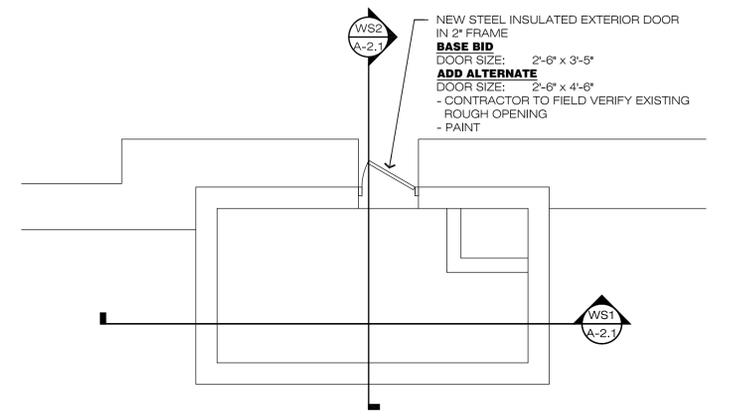
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 1/4" = 1'-0"



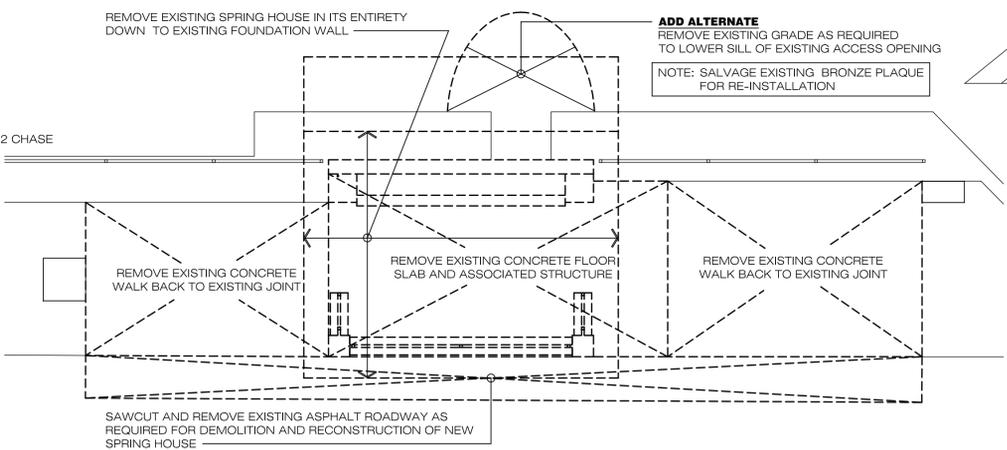
PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"



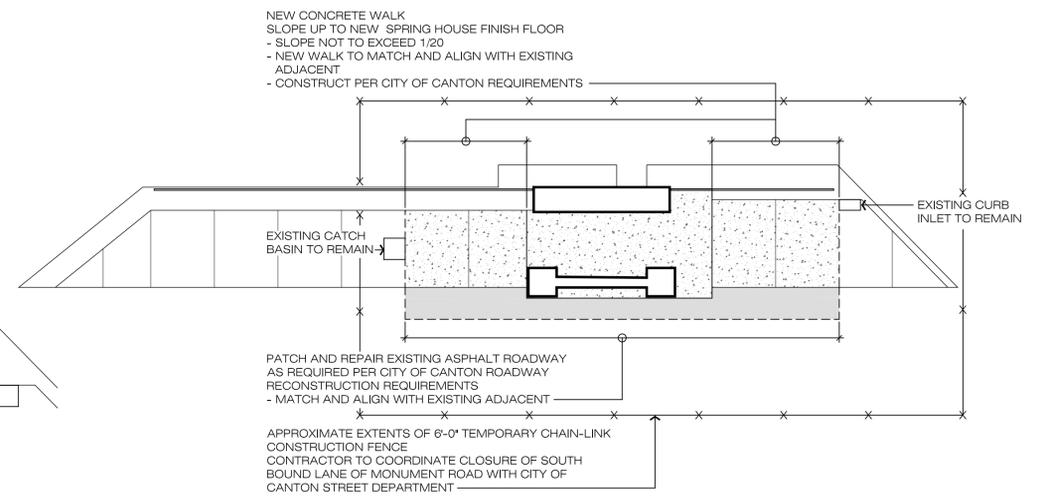
EQUIPMENT AREA FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION / CONSTRUCTION NOTES

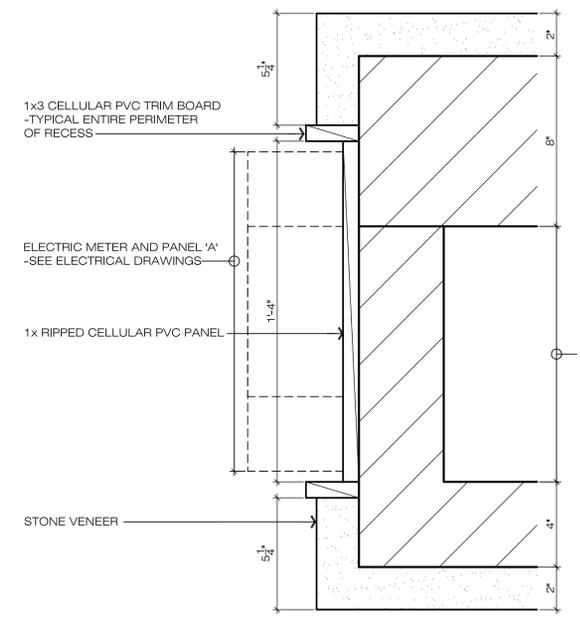
1. ALL WORK SHALL BE IN FULL COMPLIANCE WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION, REMOVAL FROM SITE, DISPOSAL, PATCHING AND REPAIRING EXISTING BUILDING FOR ITEMS REMOVED IN THEIR RESPECTIVE SCOPE(S) OF WORK
3. IF ANY MISCELLANEOUS ITEMS IN THE SPACES HAVE INADVERTENTLY BEEN OMITTED IN THE DEMOLITION DOCUMENTS, IT IS THE INTENT OF THIS PROJECT THAT THE WORK UNDER THIS DEMOLITION CONTRACT IS TO FACILITATE THE CONSTRUCTION OF A COMPLETE, CLEAN, AND READY TO USE SPACE. ANY SUCH ITEM SHOULD BE DEMOLISHED AS REQUIRED
4. CONTRACTOR SHALL VERIFY EXISTING CONSTRUCTION AND DIMENSIONS, AND NOTIFY ARCHITECT OF ANY DISCREPANCIES, PRIOR TO PROCEEDING WITH WORK.



DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"



SITE PLAN
SCALE: 1/8" = 1'-0"



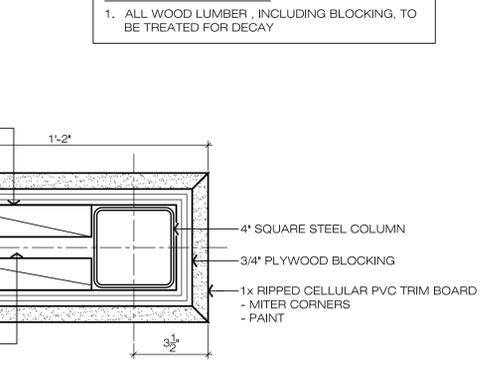
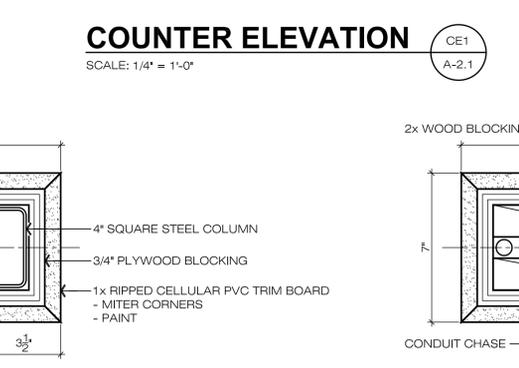
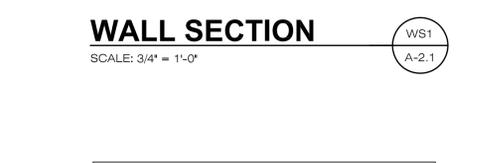
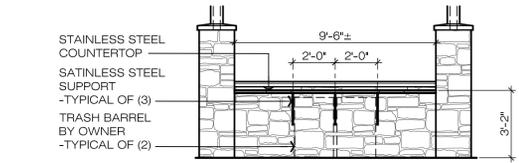
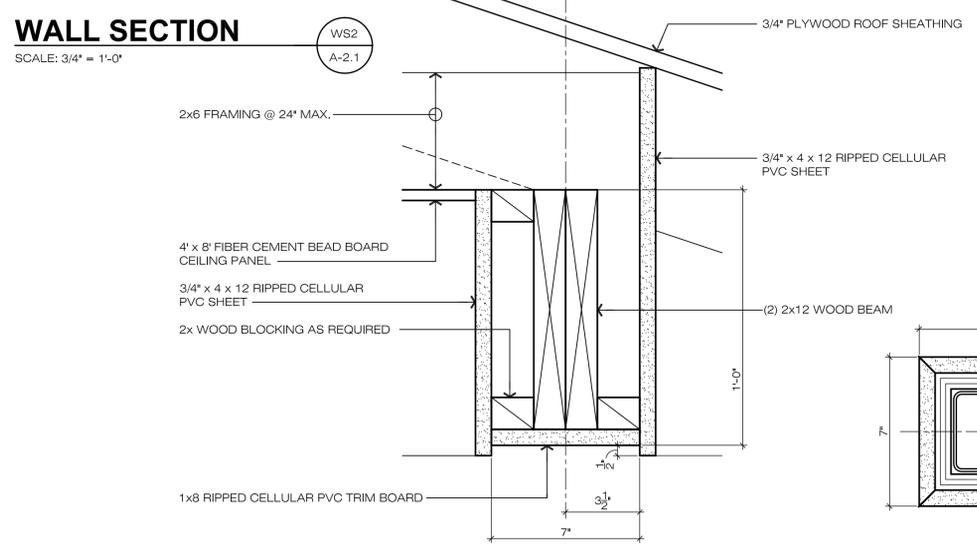
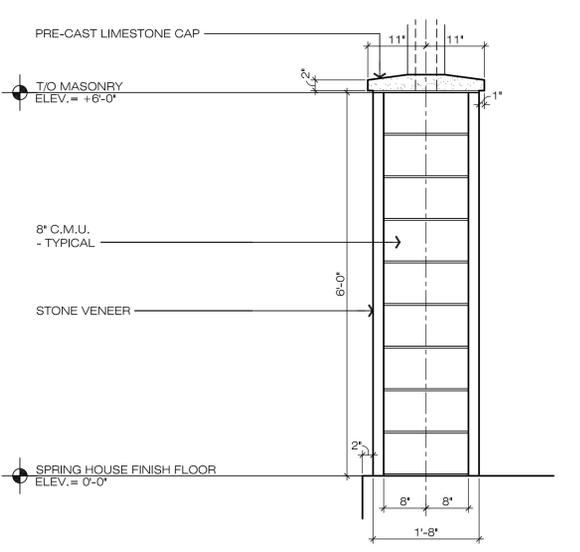
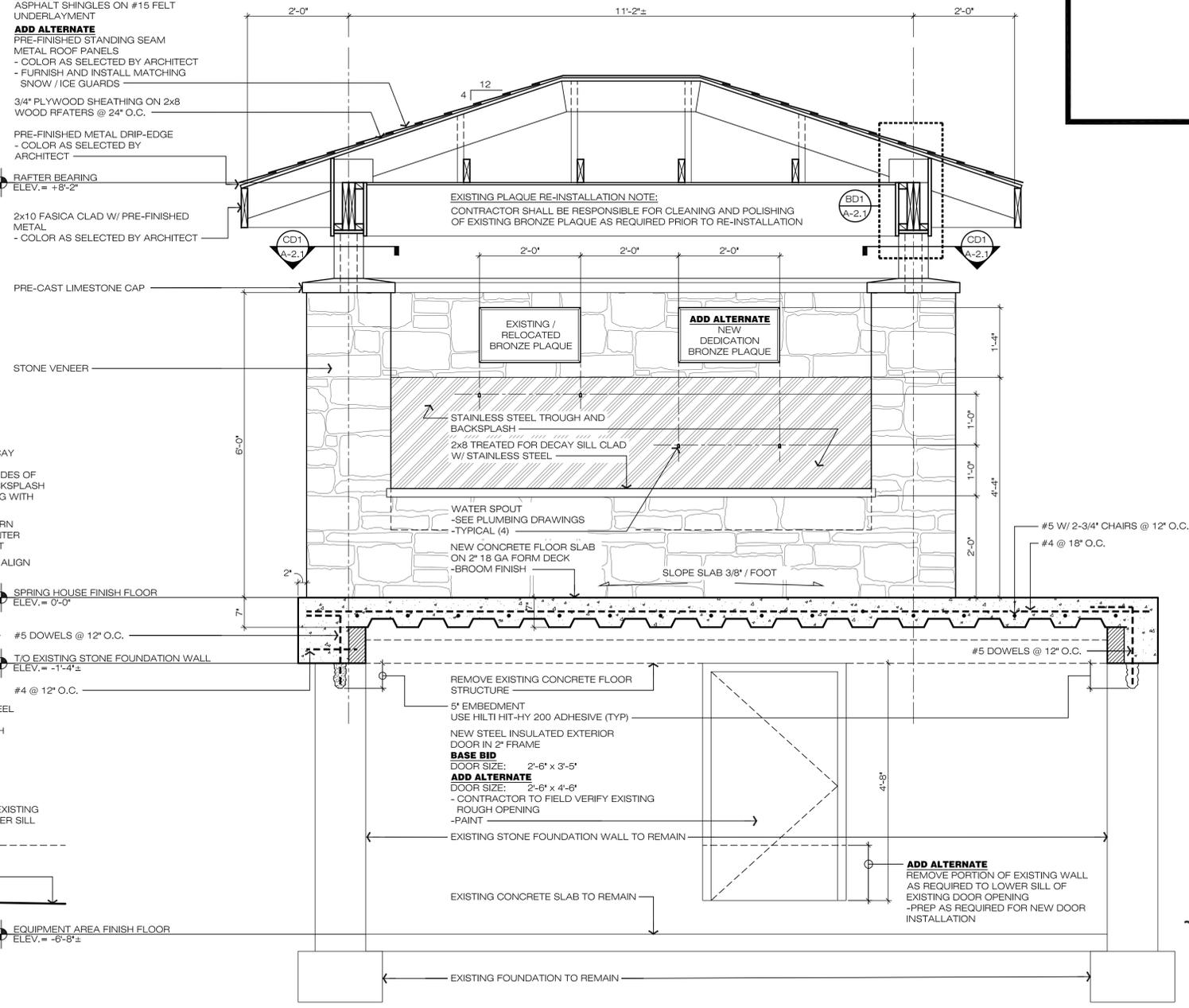
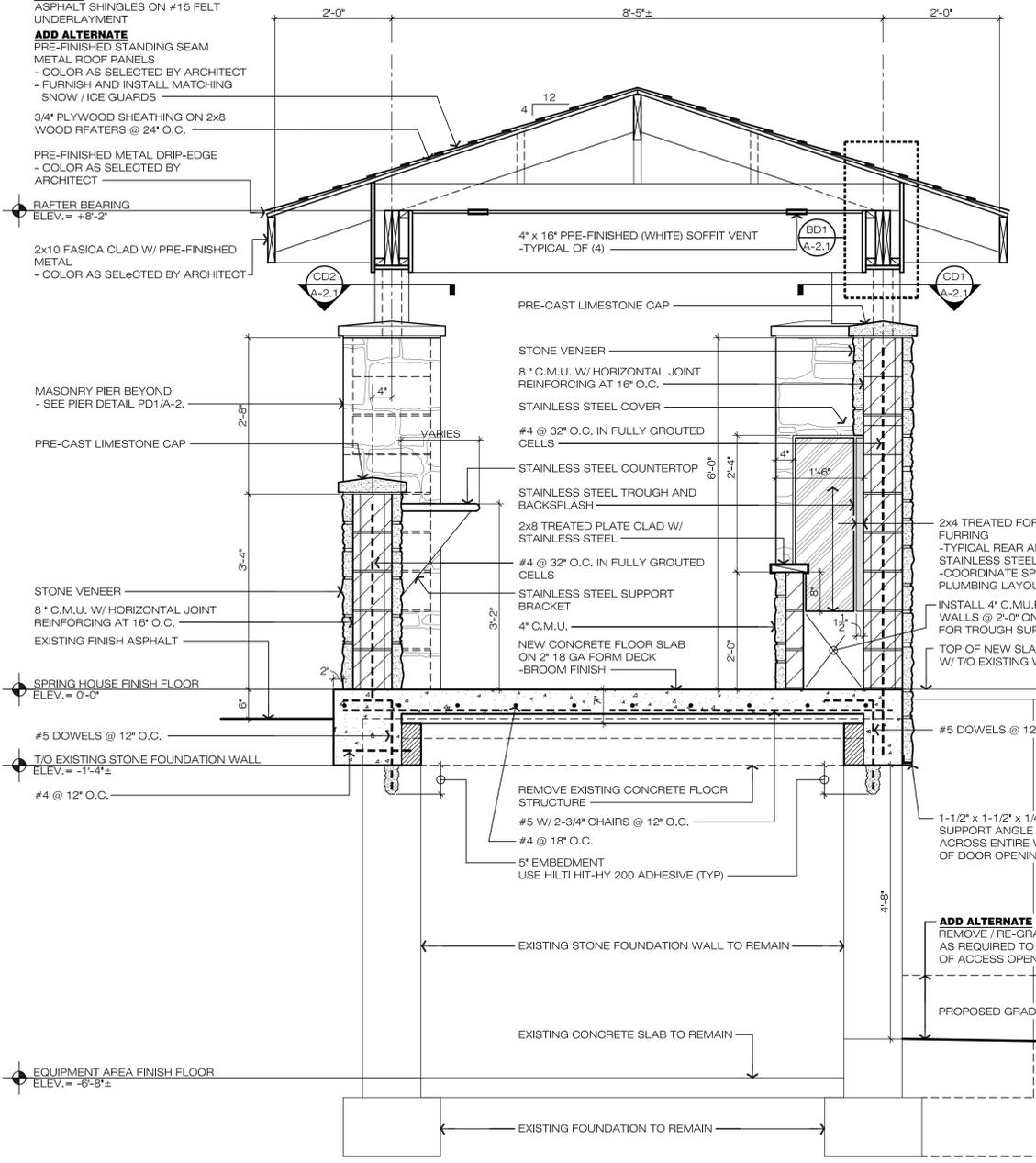
ELECTRICAL PANEL RECESS PLAN DETAIL
SCALE: 3" = 1'-0"

EPD1
A-1.1

BASE BID
 ASPHALT SHINGLES ON #15 FELT UNDERLAYMENT
ADD ALTERNATE
 PRE-FINISHED STANDING SEAM METAL ROOF PANELS
 - COLOR AS SELECTED BY ARCHITECT
 - FURNISH AND INSTALL MATCHING SNOW / ICE GUARDS

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 - FURNISH AND INSTALL MATCHING SNOW / ICE GUARDS

REVISIONS:



GENERAL LUMBER NOTES:
 1. ALL WOOD LUMBER, INCLUDING BLOCKING, TO BE TREATED FOR DECAY

600 MARKET AVENUE NORTH CANTON OHIO 44702
 MOTT & MEADOWS ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
 STADIUM PARK CANTON, OHIO

STATE OF OHIO REGISTERED ARCHITECT
 R.W. MEADOWS 6781
 RODNEY W. MEADOWS LICENSE #6781
 EXPIRATION DATE 12-31-2017

THIS DWG :
 WALL SECTIONS DETAILS

COMM 16126
DATE 10-17-2016

DWG
A-2.1

ISSUED FOR BID

SECTION 01 10 00 – GENERAL REQUIREMENTS

A. SUMMARY

- All work shall be in full compliance with National, State and Local codes and regulations.
- Contractor shall be responsible for obtaining and furnishing all required permits and inspections.
- Contractor shall verify existing construction and dimensions, and notify Architect of any discrepancies prior to proceeding with work.
- Contractor shall perform all patch and repair work, finished to match adjacent like surfaces, at all locations affected by demolition operations, or otherwise generally implied, as necessary for continuous finishes throughout the work area.
- Align finish surfaces of new construction with finish surfaces of existing.
- It is the intent of the Contract Documents to accomplish a complete and first-grade installation in which there shall be installed new materials and products of the latest and best design and manufacturer. Workmanship shall be thoroughly first-class and complete, executed by competent and experienced workmen.
- Equipment, specialties, and similar items shall be checked for compliance and fully approved prior to installation. Contractors are cautioned that work or equipment installed without approval is subject to condemnation, removal, and subsequent replacement with an approved item without extra cost to Owner.

B. QUALITY ASSURANCE

- Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
- Compatibility of Options: When the Contractor is given the option of selecting between 2 or more products for use on the project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.

C. PRODUCT DELIVERY, STORAGE, AND HANDLING

- Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft.

D. PRODUCT STANDARDS AND QUALITY

- The Contract is based on the materials, equipment and methods described in the Contract Documents.
- Where in the Drawings and Specifications certain products, manufacturer's trade names, or catalog numbers are given, it is done for the expressed purpose of establishing a basis of quality, durability, and efficiency of design for the work outlined and is not intended for the purpose of limiting competition.
- The Architect will consider proposals for substitution of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Architect to evaluate the proposed substitution. Such proposals need to be submitted at least ten (10) days prior to the scheduled date for receipt of bids.
- Do not substitute materials, equipment or methods unless such substitution has been specifically approved for this Work by the Architect as evidenced by the incorporation of such materials, equipment or methods into the Contract Documents by written Addendum.
- "Or equal":
 - Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Architect unless the item has been specifically approved via submittal process.
- Availability of Specified Items:
 - Verify prior to bidding that specified items will be available in time for installation during orderly and timely progress of the Work.
 - In the event specified item or items will not be so available, notify the Architect prior to bidding.
 - Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, will be back charged as necessary and shall not be borne by the Owner.
- The Architect reserves the right to refuse approval of substituted products proposed for those specified, if in his opinion the item to be substituted will not achieve the finished effect, appearance or performance desired, as portrayed in the Drawings and Specifications. The Architect's said refusal to approve, established by this paragraph, is final and not subject to arbitration.

E. MANUFACTURER'S DIRECTIONS

- Products shall be applied, installed, erected, and cleaned in accordance with the manufacturer's printed direction, unless herein specified to the contrary. Where manufacturer's printed directions are available and where reference is made to manufacturer's directions in the contract documents, the Contractor shall submit copies of such directions to the Architect prior to the beginning of Work covered thereby.
- Where specific installation instructions are not part of these Specifications and Drawings, equipment shall be installed in strict accordance with instructions from the respective manufacturers.

F. WARRANTIES

- Specific warranties called for in the Contract Documents, in addition to that falling under the general warranty as set forth in General Conditions, shall be furnished in accordance with the requirements of the Specifications.
 - Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
 - Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- Each Contractor shall and does hereby agree to warrant for a period of one year, or for longer periods, where so provided in the Specifications, as evidenced by the date of Substantial Completion issued by the Architect; products installed under the Contract to be of good quality in every respect and to remain so for periods described herein.
- Should defects develop in the Work within the specified periods, due to faults in products or their workmanship, the Contractor hereby agrees to make repairs and do necessary Work to correct defective Work to the Architect's satisfaction, in accordance with the General and Supplementary Conditions. Such repairs and corrective Work, including costs of making good other Work damaged by or otherwise affected by making repairs or corrective Work, shall be done without cost to the Owner and at the entire cost and expense of the Contractor within 14 days after written notice to the Contractor by the Owner.

G. MATERIAL DELIVERY AND RESPONSIBILITIES

- The Contractor shall be responsible for materials ordered for delivery to the jobsite. Responsibility includes, but is not limited to, receiving, unloading, storing, protecting and setting in place; ready for final connections.

H. PROTECTION

- The Contractor shall protect building elements and products when subject to damage. Should a building element of product become damaged, the entire cost of repairing said damage shall be assumed by the Contractor.
- Each Contractor shall protect their products prior to installation and final acceptance. Storage shall be dry, clean and safe. Materials or equipment damaged, deteriorated, rusted or defaced due to improper storage, shall be repaired or replaced, as required by the Architect. Products lost through theft or mishandling shall be replaced by the Contractor without cost to the Owner.

I. ACCEPTANCE OF EQUIPMENT OR SYSTEMS

- The Owner will not accept the start of the warranty period on systems or equipment until Substantial completion is issued to the Contractor for Owner's occupancy of the building, in part or whole.

SECTION 02 41 19 – SELECTIVE DEMOLITION, CUTTING AND PATCHING

A. INSPECTION AND PREPARATION

- Inspect existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching.
- After uncovering existing work, inspect conditions affecting performance of work.
- Provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.

B. SELECTIVE DEMOLITION

- Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete work within limitations of governing regulations and as follows:
 - Proceed with selective demolition systematically, from higher to lower level.
 - Neatly cut openings and holes plumb, square and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering or chopping. Temporarily cover openings to remain.
 - Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct or pipe interiors, verify condition and content of hidden space before starting flame-cutting operations. Maintain portable fire extinguishing devices during flame cutting operations.
 - Maintain adequate ventilation when using cutting torches.
 - Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off site.
 - Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact and dust generation.
- Colishing concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power driven masonry saw or hand tools; do not use power driven impact tools.

C. CUTTING AND PATCHING

- Execute cutting, fitting, and patching including excavation and fill to complete work.
- Fit products together, to integrate with other work.
- Structural Work:
 - Do not cut-and-patch structural work in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio. Submit proposal and request and obtain Architect's approval before proceeding with cut-and-patch of structural work.
- Visual/Quality Limitations:
 - Do not cut-and-patch work exposed to view (exterior and interior) in a manner resulting in noticeable reduction of visual qualities and similar qualities, as judged by the Architect.

D. PERFORMANCE

- Execute work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.
- Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- Restore work with new products in accordance with requirements of Contract Documents.
- Fit work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

SECTION 04 72 00 – CAST CONCRETE ARCHITECTURAL STONE

A. PRODUCTS

- Architectural Cast Stone – Indiana Limestone – See drawings for sizes, thickness and installation locations. Comply with ASTM C 1364
- Raw Materials
 - Portland cement – Type I or Type III, white and/or grey, ASTM C 150.
 - Coarse aggregates – Granite, quartz or limestone, ASTM C 33.
 - Fine aggregates – Manufactured or natural sands, ASTM C 33.
 - Colors – Inorganic iron oxide pigments, ASTM C 979 with no carbon black pigments.
- Admixtures – Comply with the following:
 - ASTM C 260 for air-entraining admixtures.
 - ASTM C 494/C 495M Types A – G for water reducing, accelerating and high range admixtures.
 - ASTM C 618 mineral admixtures of dark and variable colors shall not be used.
- Water – Potable
- Reinforcing bars:
 - ASTM A 615/A 615M. Galvanized or epoxy coated when cover is less than 1.5 in.
 - Welded Wire Fabric: ASTM A 185 where applicable for wet cast units.
- All anchors, dowels and other anchoring devices and shims shall be standard building stone anchors commercially available in a non-corrosive material.
- Color and Finish: All surfaces intended to be exposed to view shall have a fine-grained texture similar to natural stone.

SECTION 04 73 00 – MANUFACTURED LIGHTWEIGHT STONE VENEER

A. STONE MATERIALS

- "Limestone", as manufactured by Dutch Quality Stone, or approved equal.
- Color shall be selected by Architect from manufacturer's full range of colors.
- Trim: Furnish corners of selected stone where applicable.
- Setting Accessories:
 - Moisture Barrier: Tyvek Stucco Wrap, by E.I. Dupont, or comparable product as approved by Architect. Provide tape to seal joints, seams, and tears, of same permeance as membrane.
 - ASTM D226, no. 15 non-perforated asphalt saturated organic felt.
 - Metal Lath: ASTM C847; 18 gauge woven wire or self-furring, galvanized, 2.5 or 3.4 metal lath.
 - Fasteners: galvanized staples, nails, or screws of size, spacing, and type as recommended by simulated stone manufacturer.
- Mortar and Grout: Type and mixture as recommended by stone manufacturer for location of work. Color shall be selected by Architect from manufacturer's full range of colors.

SECTION 06 66 00 - SIMULATED WOOD ARCHITECTURAL MILLWORK

A. PRODUCTS

- General: CertainTeed Restoration Millwork Freefoam Cellular PVC that is homogenous and free of voids, holes, cracks, and foreign inclusions and other defects. Edges must be square and top and bottom surfaces shall be flat with no convex or concave deviation.
 - Workmanship, Finish, and Appearance:
 - Products are provided with a natural white color and a smooth finish on both sides.
 - Products do not require paint for protection but may be painted to achieve a custom color.
- Simulated Wood Architectural Millwork
 - General: Provide simulated wood trim to the following profiles and to the configurations indicated on the Drawings.
 - Trim Boards: 3/4 inch thickness, smooth Natural White finish.
 - Sheets: 3/4 inch thickness, smooth Natural White finish.
 - Beadboard Panel: 1/2 inch thickness, 5-1/2 inches nominal width, smooth Natural White finish.

SECTION 07 31 13 – ASPHALT SHINGLES ROOFING SYSTEM

A. PRODUCTS

- Asphalt saturated roofing felt, non-perforated, 15 lbs. Per square; ASTM D226.
- Asphalt Shingles: CertainTeed - "Landmark", or approved equal.
 - Conforming to ASTM D 3018 Type I – Self-Sealing, UL Certification of ASTM D 3462, ASTM D 3161/UL997 110-mph Wind Resistance and UL Class A Fire Resistance, glass fiber mat base, ceramically colored/UV resistant mineral surface granules across entire face of shingle; algae-resistance; two piece laminate shingle; 240 lbs. per square.
 - Color as selected by Architect from manufacturer's full range of colors.
 - Manufacturer's standard limited lifetime warranty.
- Nails: Standard round wire type roofing nails, corrosion resistant; hot dipped zinc coated steel, aluminum, or chromated steel; minimum 3/8 inch head diameter; minimum 11 or 12 gauge shank diameter; shank to be of sufficient length to penetrate through roof sheathing or 3/4 inch into solid wood, plywood, or non-veneer wood decking.
- Metal Drip Edge: Minimum .024" pre-finished, baked enamel, aluminum sheet, brake- formed to provide 3" roof deck flange, and 1 1-2" fascia flange with 3/8" drip at lower edge. Furnish in 8' or 10' lengths.
- Asphalt Roofing Cement: ASTM D 4586.

SECTION 07 61 00 – METAL ROOFING

A. PRODUCTS

- "TL-2512" Mechanically Attached Standing Seam Roof Panel System, as manufactured by Dimensional Metals, Inc., or approved equal.
 - System shall be installed directly on plywood and underlayment as indicated. Provide manufacturer's standard bearing plates for screw installation, and concealed fasteners.
- Warranties:
 - Coating: manufacturer's standard (20) year warranty
 - Watertight: manufacturer's standard (5) year warranty
- Panels shall be 24-Gauge Galvanized Steel, Pre-finished High Performance Kynar 500 Finish.
- Panel width shall be 12".
- Performance:
 - UL 90 rating.
 - ASTM E283 Air Infiltration Testing.
 - ASTM E331 Water Penetration Testing.
 - ASTM E330-90 Structural Performance Testing.
- Fasteners and accessories shall be provided by manufacturer as required.
- Color shall be selected by Architect from manufacturer's full range of colors.
- Accessories
 - Provide and install Ice Guards on edges of entire perimeter of metal roofing. Product shall be "S-5 ColorGuard" as manufactured by Metal Roof Innovations, Ltd., or approved equal. Color shall match pre-finished metal roof.

B. MANUFACTURERS

- Berridge Manufacturing Company
- Copper Sales, Inc.
- Dimensional Metals, Inc.
- Petersen Aluminum Corporation
- Metal Sales Manufacturing Corporation

SECTION 08 12 13 - STEEL DOORS AND FRAMES

A. STANDARDS AND MANUFACTURERS

- Standards: Comply with the requirements of Steel Door Institute, "Recommended Specifications for Standard Steel Doors and Frames," (SDI-100), and as herein specified.
- Manufacturers: A recognized producer of hollow metal work complying with the requirements, including any one of the following:
 - Ceco Corp.
 - Mesker Brothers Industries, Inc.
 - Republic Steel Corp.
 - Steelcraft Manufacturing Co.

B. MATERIALS

- Steel Doors and frames, cold-rolled steel per ASTM A 366 and A 568.
- Frames
 - All frames shall be welded; formed of #16 U. S. Standard gauge steel. All labeled frames shall be furnished with a minimum of three, (3), adjustable underwriters labeled anchors per each jamb member and loose clip angle floor anchor.
 - Frames shall be mortised, tapped, and reinforced for mortise finish hardware at the factory. Templates will be furnished by the finish hardware Subcontractor.
 - Each frame shall be furnished punched and supplied with three, (3), rubber silencers per each jamb member.
 - Following fabrication, all frames shall be bonderized and shop painted on all surfaces with one coat of baked-on primer, manufacturer's standard.
 - Back prime all hollow metal door frames that are to be installed in masonry walls with suitable product as recommended by manufacturer.
- Doors:
 - All doors shall be shop fabricated of #18 U. S. Standard gauge steel.
 - Doors shall be flush seamless and of pan-type construction. Visible seams at edges only.
 - Doors shall be reinforced, stiffened, sound deadened, and insulated with mineral rock wool or small honeycomb core which completely fills the inside of the door.
 - Continuous 14 gauge channels extending full width of the door shall be spot welded to each face, and top and bottom. Provide rigid vinyl top caps at all doors.
 - Doors shall be mortised, drilled, tapped, and reinforced for mortise finish hardware. Hardware Subcontractor will furnish templates.
 - Doors shall have flush smooth surfaces without warps, twists, and/or any other irregularities.
 - After fabrication, all doors shall be bonderized and shop painted on all surfaces with one coat of baked-on primer, manufacturer's standard.

SECTION 08 70 00 - FINISH HARDWARE

PRODUCT	SPECIFIED MANUFACTURER	APPROVED EQUAL
Hinges	Hager	McKinney
Locksets, Cylinders	Sargent	Schlage
Pulls	Rockwood	Hager,
Thresholds	National Guard	Pemko
Weatherstrip	National Guard	Pemko

HARDWARE SET

2 Ea.	Hinges	BB1279 4.5 x 4.5 x US26D x NRP	HA
1 Ea.	Deadbolt	480 x US26D	SA
1 Ea.	Pull	D133 x US32D	RK
1 Ea.	Threshold	424 x 36" x AL	NA
1 Ea.	Door Sweep	102 VA x 30"	NA
1 Ea.	Weatherstrip	700 NA 1 x 30" + 2 x 54"	NA

SECTION 10 14 16 - CAST PLAQUES

A. CAST BRONZE PLAQUE

- Material: Bronze.
- Size: 13" X 24" (Field Verify exact size -- to match size of existing plaque)
- Border: Raised single line.
- Letter Style: As selected by Architect
- Mounting: Blind stud mount.
- Copy: Approximately 90 Characters
- Finishes: Background: Pebble, Standard Bronze; Borders and letters: Satin.

B. MANUFACTURER

- A.R.K. Ramos
- ASI Sign Systems
- Gemini Incorporated
- Metal Arts

SECTION 10 14 16 - CAST PLAQUES

A. CAST BRONZE PLAQUE - ALLOWANCE

- Contractor shall include in his Base Bid, an allowance of \$ 1,000.00 for the new bronze plaque.

SECTION 11 40 00 - STAINLESS STEEL COUNTERS AND SHELVING

A. MATERIALS

- The materials used throughout shall be those of reputable manufacturers and shall be new. All work shall be installed in a neat and workmanlike manner in accordance with the best trade practices.
- Stainless steel sheets or shapes: Type 304, polished to No.4 finish.
- Galvanized Iron Sheets: Zinc G-90 coating.
- Sealant: ASTM C 920; Type S, Grade NS, Class 25, Use NT. Provide elastomeric sealant NSF certified for end-use application indicated.

B. CUSTOM FABRICATION

- Custom fabricated components shall be constructed in strict accordance with NSF 2 requirements.
- Fabricate field-assembled equipment prepared for field joining methods indicated. For metal butt joints, comply with reference SMACNA standard.
- Form metal with break bends that are not flaky, scaly or cracked in appearance; where breaks mar uniform surface appearance of material, remove marks by grinding, polishing and finishing.
- Provide surfaces as defined in NSF 2, free from exposed fasteners.

C. COUNTERS AND TOPS

- Metal tops shall be 14 gauge stainless steel. Shop seams and corners welded, ground and polished smooth. Tops shall be reinforced with 12 gauge channel. Exposed channels shall be stainless steel. Attach top to channel reinforcements with studs welded to the underside of top and cadmium plated lock nuts.
- Field joints provided in top only where necessary and located for practical construction and consistent with sizes convenient for shipping.
- Metal top open edges shall be turned down 1 3/4" at 90 degrees with a 1/2" return at 15 degrees on the horizontal. Burrs, projections and fins are not acceptable on sheared edges. Neatly grind miters and bullnosed corners to a uniform condition.

D. SHOP/FIELD JOINTS

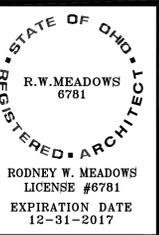
- Provide field joints only when equipment size must be limited for access into building or shipping.
- All field joints and/or seams must be fully welded, ground, and polished to match adjacent surface.
- Stainless steel welds, welded using stainless steel electrodes, shall be free of pits, flaws, discolorations, and panned to remove flux and impurities. Grind welds smooth, polish to original finish of metal, with grain uniform to grain of original sheet.

REVISIONS:

600 MARKET AVENUE NORTH CANTON OHIO 44702

MOTHER & MEADOWS
ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
STADIUM PARK CANTON, OHIO



THIS DWG :
SPECIFICATIONS

COMM 16126
DATE 10-17-2016

DWG
A-3.1

ISSUED FOR BID

GENERAL NOTES

- A. GENERAL**
- THIS STRUCTURE WAS DESIGNED IN ACCORDANCE WITH STATE OF OHIO BUILDING CODE (O.B.C.), 2011 EDITION w/2015 AMENDMENTS.
 - ALL CONSTRUCTION SHALL CONFORM TO THE OHIO BUILDING CODE AND TO OSHA STANDARDS, WORK STRUCTURAL DRAWINGS BY ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS AND FOR SAFETY CONDITIONS AT THE SITE.
 - TEMPORARY BRACING OF THE STRUCTURE COLUMNS, BEAMS, WALLS, ETC. DURING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. TEMPORARY BRACING OF THE STRUCTURE SHALL REMAIN IN PLACE UNTIL ALL LATERAL FORCE RESISTING ELEMENTS ARE INSTALLED (INCLUDING ROOF SHEATHING). FOUNDATION CONTRACTOR SHALL COORDINATE AND SCHEDULE WORK WITH MECHANICAL AND ELECTRICAL CONTRACTORS REGARDING ITEMS CONCEALED BY OR EMBEDDED IN FOUNDATIONS, WALLS OR FLOOR SLABS.

DESIGN LOAD INFORMATION:

- FLOOR LIVE LOAD**
- PUBLIC ROOMS = 100 PSF
- ROOF LIVE LOADS**
- LIVE LOAD = 25 PSF
- ROOF SNOW LOAD**
- GROUND SNOW LOAD (Pg) = 20.00 PSF
 - FLAT ROOF SNOW LOAD (P_f) = 20.00 PSF
 - SNOW EXPOSURE FACTOR (Ce) = 0.9
 - SNOW LOAD IMPORTANCE FACTOR (I) = 1.0
 - THERMAL FACTOR, Ct = 1.0

WIND LOAD

- BASIC WIND SPEED (3 SECOND GUST) = 90 MPH
- WIND IMPORTANCE FACTOR(I_w) = 1.0, OCCUPANCY CATEGORY = II
- WIND EXPOSURE = B
- INTERNAL PRESSURE COEFFICIENT = ±0.18
- COMPONENTS AND CLADDING WIND DESIGN PRESSURES - N/A

EARTHQUAKE DESIGN DATA

- SEISMIC USE GROUP = I
- SEISMIC IMPORTANCE FACTOR (IE) = 1.00
- MAPPED SPECTRAL RESPONSE ACCELERATIONS, S_s=16%, S₁=5.8%
- SITE CLASS = D
- SPECTRAL RESPONSE COEFFICIENTS, S_{ds}=0.17, S_{d1}= 0.09
- SEISMIC DESIGN CATEGORY = B
- BASIC SEISMIC-FORCE-RESISTING SYSTEM:
 - LIGHT FRAMED WALL w/WOOD STRUCTURAL SHEAR PANELS
- DESIGN BASE SHEAR = Xk
- SEISMIC RESPONSE COEFFICIENT C_s = 0.031
- RESPONSE MODIFICATION FACTOR R = 6.5
- V = (S_{ds})(W)_E/R (SIMPLIFIED ANALYSIS PROCEDURE)

B. CONCRETE AND REINFORCING STEEL

- ALL CONCRETE SHALL CONFORM TO THE FOLLOWING REFERENCED STANDARDS:
 - ACI 318-08: BUILDING CODE REQUIREMENT FOR REINFORCED CONCRETE.
 - ACI 315: DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
 - ACI 305: RECOMMENDED PRACTICES FOR HOT WEATHER CONCRETING.
 - ACI 306: RECOMMENDED PRACTICES FOR COLD WEATHER CONCRETING.
- ALL CAST-IN-PLACE EXTERIOR CONCRETE AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED SHALL BE 4000 PSI (W/C RATIO = 0.50) AT 28 DAYS WITH AIR ENTRAINMENT (6% ±1%).
- REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE-60.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. ONLY FLAT SHEETS SHALL BE USED.
- ALL WELDED WIRE FABRIC SPLICES SHALL BE NOT LESS THAN (2) SPACINGS OF CROSS WIRES OR 6", WHICHEVER IS GREATER.
- CORNER BARS SHALL BE PROVIDED TO MATCH HORIZONTAL WALL AND FOOTING REINFORCEMENT AT ALL CORNERS. LAP BARS 30 BAR DIAMETERS OR A MINIMUM OF 1'-0".
- PROVIDE A 3/4"x45° CHAMFER ON ALL EXPOSED EDGES OF CONCRETE.
- A CURING COMPOUND IS TO BE APPLIED TO THE CONCRETE AFTER FINISHING.

MINIMUM LAP SPLICE (CLASS B)
 (F_y = GRADE 60, NON-COATED BARS). SPLICE REINFORCING WHERE INDICATED ON THE DRAWINGS OR ON THE SHOP DRAWINGS. ALL SPLICES SHALL BE CLASS 'B' AS DEFINED IN ACI 318. IF SPLICE LENGTH IS NOT GIVEN ON THE DRAWINGS, PROVIDE LAP SPLICE LENGTHS (IN INCHES) AS FOLLOWS.

4000 PSI CONCRETE

BAR SIZE	TYPICAL	TOP
#3	18"	23"
#4	25"	33"
#5	31"	40"
#6	36"	48"
#7	55"	70"
#8	62"	80"

- WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE LARGER BAR OR THE TENSION LAP SPLICE OF SMALLER BAR, USE WHICHEVER DIMENSION IS LARGER.
- LAP LENGTHS ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM COVER OF 1 BAR DIAMETER. FOR DEVELOPMENT LENGTHS, DIVIDE TYPICAL DIMENSIONS BY 1.3.
- TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 1'-0" OF FRESH CONCRETE BELOW.

TYPICAL REINFORCING BAR CLEARANCE TABLE

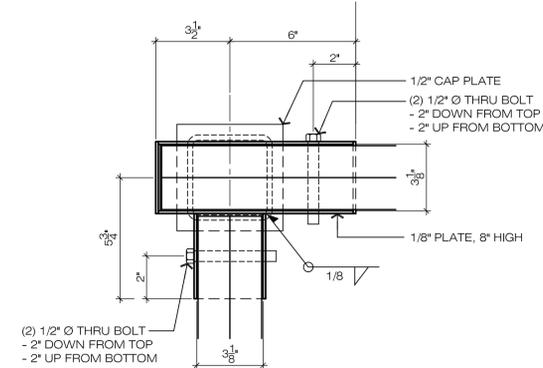
LOCATION	CLEARANCE
(a) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....	3"
(b) SLABS ON GRADE (WELDED WIRE FABRIC).....	3/4 SLAB THICKNESS FROM TOP OF SLAB
(c) CONCRETE EXPOSED TO EARTH OR WEATHER	
-NO. 6 THRU NO. 18 BARS.....	2"
-NO. 5 BAR, W/31 OR D31 WIRE, AND SMALLER.....	1 1/2"
(d) CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS	
-NO. 14 & NO. 18 BARS.....	1 1/2"
-NO. 11 BAR AND SMALLER.....	3/4"
BEAMS, COLUMNS	
-PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS.....	1 1/2"

- D. E SHALL CONFORM TO MINIMUM ASTM A-36 SPECIFICATIONS.**
- THE CONTRACTOR SHALL SUBMIT DETAILED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL PRIOR TO FABRICATING STEEL. THE SHOP DRAWINGS SHALL BEAR THE STAMP OF THE CONTRACTOR SHOWING THAT THE SHOP DRAWINGS HAVE BEEN REVIEWED BY THEM.
 - ALL STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B, SPECIFICATIONS. HSS SECTIONS (HOLLOW STRUCTURAL SECTIONS) SHALL CONFORM TO ASTM A500, GRADE B SPECIFICATIONS.
 - ANCHOR RODS SHALL CONFORM TO ASTM A36 OR ASTM-F1554 (GR.36) SPECIFICATIONS.
 - GROUT UNDER ALL COLUMN BASE PLATES SHALL BE A NON-SHRINK, NON-METALLIC TYPE CONSISTING OF A PREMIXED PRODUCT COMPLYING OF ALL REQUIREMENTS OF ASTM C1107. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI WHEN TESTED IN CONFORMANCE WITH ASTM C109.
 - WELDING SHALL CONFORM TO ASW D1.1 "STRUCTURAL WELDING CODE-STEEL", LATEST EDITION AND SHALL BE PERFORMED BY CERTIFIED WELDERS.
 - ALL WELDING ELECTRODES SHALL BE E70XX.
 - ALL NEW STEEL SHALL BE SHOP PRIMED WITH A FAST-CURING, LEAD AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79. USE PRIMER CONTAINING PIGMENTS THAT MAKE IT EASILY DISTINGUISHABLE FROM ZINC-RICH PRIMER.

- D. MASONRY**
- ALL DESIGN, MATERIALS, LABOR AND CONSTRUCTION OF THE MASONRY SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-08/ASCE 5-08/TMS 402-08) AND THE SPECIFICATION FOR MASONRY STRUCTURES (ACI 530-08/ASCE 6-08/TMS 602-08).
 - ALL HOLLOW CONCRETE BLOCK SHALL CONFORM TO ASTM C-90 WITH A NET COMPRESSIVE STRENGTH OF 2000 PSI.
 - MORTAR SHALL BE ASTM C 270, TYPE 'S', SPECIFIED BY PROPORTION WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.
 - AGGREGATE FOR MORTAR SHALL BE ASTM C 144. AGGREGATE FOR GROUT ASTM C404.
 - ALL MASONRY GROUT SHALL CONFORM TO ASTM C 476, SPECIFIED BY PROPORTION, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 P.S.I. (3/4" MAX. AGGREGATE SIZE).
 - REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE-60. WELDING OF REINFORCING STEEL SHALL CONFORM TO ANSI/AWS D1.4-92.
 - CONTINUOUS WIRE JOINT REINFORCING SHALL BE GALVANIZED FABRICATED UNITS WITH 9 GAGE SIDE RODS AND 9 GAGE CROSS RODS FABRICATED FROM COLD-DRAWN STEEL WIRE COMPLYING WITH ASTM A82. USE TRUSS TYPE AT NON-VERTICALLY REINFORCED WALLS AND LADDER TYPE AT VERTICALLY REINFORCED WALLS. PREFABRICATED CORNERS & TEES SHALL BE USED FOR ALL INTERSECTING WALLS.
 - ALL INTERSECTING MASONRY WALLS AND PILASTERS SHALL BE IN RUNNING BOND WITH AT LEAST 50% OF THE MASONRY UNITS INTERLOCKING AT THE INTERFACE.
 - LAY MASONRY UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. BED WEBS IN MORTAR IN STARTING COURSE ON FOOTING AND IN ALL COURSES OF COLUMN AND PILASTERS, AND WHERE ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT.
 - MISCELLANEOUS:
 - .a. CONSOLIDATE GROUT BY MECHANICAL VIBRATION AT TIME OF PLACEMENT AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER THE INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.
 - .b. MAX. GROUT POUR HEIGHT SHALL BE AS PER PAGE S-22 (TABLE 7) OF ACI 530-08/ASCE 5-08/TMS 402-08.
 - .c. CORRECT LOCATION OF THE VERTICAL REINFORCING STEEL MUST BE MAINTAINED BY THE USE OF VERTICAL BAR POSITIONERS PLACED AT THE TOP OF 1st COURSE AND COURSE BELOW TOP OF WALL W/ A MAXIMUM OF 6'-0" BETWEEN POSITIONERS.
 - .d. FILL CORE SOLID AROUND ANCHOR BOLTS, EMBEDDED STEEL AND REINFORCING.
 - .e. PROVIDE JOINT REINFORCING AT 16' EXCEPT AS NOTED. BOND BEAM REINFORCEMENT SHALL BE STOPPED EITHER SIDE OF VERTICAL CONTROL JOINTS.
 - .f. PROVIDE 100% SOLID BEARING, MINIMUM 3 COURSES (24") UNDER BEAMS AND WIDE FLANGE LINTELS, 1 COURSE (8") UNDER ANGLE LINTELS AND STEEL LINTELS UNLESS DETAILED OTHERWISE.
 - .g. LAP ALL SPLICES AS FOLLOWS:
 - #3 - 16"
 - #4 - 24"
 - #5 - 28"
 - #6 - 40"
 - #7 - 46"
11. FOR BRICK OR MASONRY VENEERS, PLACE ANCHORS WITHIN 12" OF ALL OPENINGS.

E. STRUCTURAL STEEL

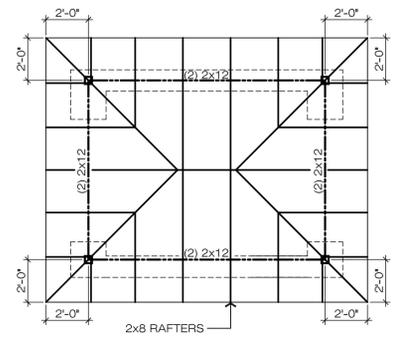
- ALL DETAILS, DETAILING, CONNECTIONS, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - 360-05.
- ALL W SHAPES SHALL CONFORM TO ASTM A-992 (F_y=50 KSI) SPECIFICATIONS. ALL OTHER STRUCTURAL STEEL SHAPES AND PLATE SHALL CONFORM TO MINIMUM ASTM A-36 SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT DETAILED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL PRIOR TO FABRICATING STEEL. THE SHOP DRAWINGS SHALL BEAR THE STAMP OF THE CONTRACTOR SHOWING THAT THE SHOP DRAWINGS HAVE BEEN REVIEWED BY THEM.
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- GROUT UNDER ALL COLUMN BASE PLATES SHALL BE A NON-SHRINK, NON-METALLIC TYPE CONSISTING OF A PREMIXED PRODUCT COMPLYING OF ALL REQUIREMENTS OF ASTM C1107. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI WHEN TESTED IN CONFORMANCE WITH ASTM C109.
- WELDING SHALL CONFORM TO ASW D1.1 "STRUCTURAL WELDING CODE-STEEL", LATEST EDITION AND SHALL BE PERFORMED BY CERTIFIED WELDERS.
- ALL WELDING ELECTRODES SHALL BE E70XX.
- ALL NEW STEEL SHALL BE SHOP PRIMED WITH A FAST-CURING, LEAD AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH MPI#79. USE PRIMER CONTAINING PIGMENTS THAT MAKE IT EASILY DISTINGUISHABLE FROM ZINC-RICH PRIMER.
- WOOD FRAMING
 - ALL WOOD SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, NDS (2008 EDITION).
 - JOISTS, RAFTERS, STUDS & HEADERS-(SPF, NO.1/NO.2, DOUGLAS FIR OR SOUTHERN PINE), DESIGN VALUES SHALL EQUAL OR EXCEED THE FOLLOWING:
 - .a. F_b = 875 P.S.I.
 - .b. F_v = 105 P.S.I.
 - .c. E = 1,400,000 P.S.I.
 - NAILING OF ALL FRAMING MEMBERS SHALL MEET THE RECOMMENDED NAILING SCHEDULE (TABLE 2304.9.1) CONTAINED IN THE OBC, CHAPTER 23.
 - CONNECT RAFTERS TO TOP PLATE WITH A SIMPSON "H" TIE UNLESS NOTED OTHERWISE.
 - LAMINATED VENEERED LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL):: DESIGN VALUES SHALL EQUAL OR EXCEED THE FOLLOWING:
 - .a. F_b: 2600 P.S.I. BENDING
 - .b. F_v: 285 P.S.I. HORIZONTAL SHEAR
 - .c. F_c: 2310 P.S.I. IN. COMPRESSION PARALLEL TO GRAIN
 - .d. E: 1,900,000 P.S.I.
- MULTIPLE MEMBER CONNECTIONS FOR LVL'S SHALL BE AS PER THE MANUFACTURER'S SPECIFICATIONS. MULTIPLE PLYS OF SAWN LUMBER SHALL BE CONNECTED WITH STRUCTURAL ADHESIVE & (2) ROWS OF 16d NAILS @ 6" o/c.
- NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY SHOWN, NOTED OR APPROVED.
- BOLTS HOLES SHALL BE 1/8" MAXIMUM LARGER THAN THE BOLT SIZE. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.
- 2x2x1/8" PLATE WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD.
- JOISTS AND PLATES SHALL BE PRESSURE TREATED AND MEET THE REQUIREMENTS OF OBC 2303.1.8 EXCEPT THE TREATING PROCESS SHALL NOT USE AMMONIA. JOIST HANGERS SHALL BE SIMPSON HANGERS OR AN APPROVED EQUAL. THE COATINGS SHALL BE "ZMAX". ALL FASTENERS (NAILS & BOLTS) SHALL BE GALVANIZED AS PER ASTM A153.



COLUMN CAP DETAIL

SCALE: 3" = 1'-0"

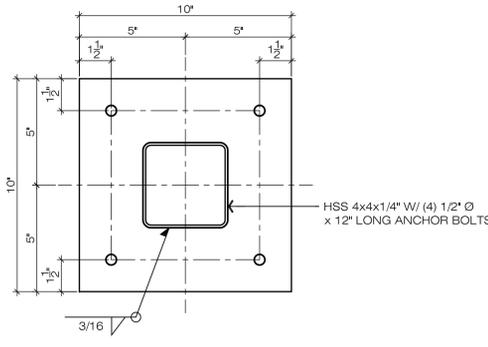
SD5
S-1.1



ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"

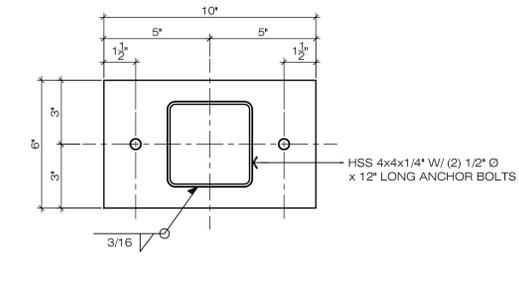
SD6
S-1.1



COLUMN BASEPLATE DETAIL

SCALE: 3" = 1'-0"

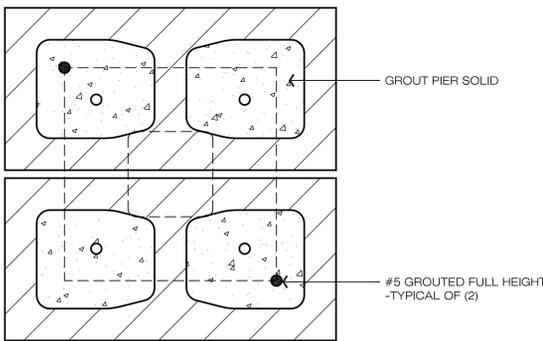
SD3
S-1.1



COLUMN BASEPLATE DETAIL

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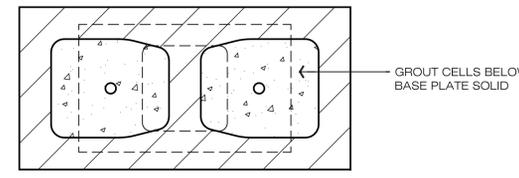
SD4
S-1.1



COLUMN WALL DETAIL

SCALE: 3" = 1'-0"

SD1
S-1.1

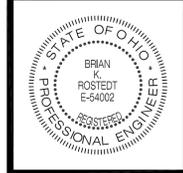


COLUMN WALL DETAIL

SCALE: 3" = 1'-0"

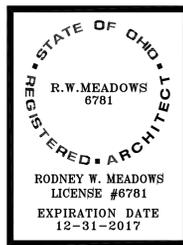
SD2
S-1.1

REVISIONS:



600 MARKET AVENUE NORTH CANTON OHIO 44702
MOTHER & MEADOWS ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
 STADIUM PARK CANTON, OHIO



THIS DWG :
 ROOF FRAMING PLAN
 DETAILS
 STRUCTURAL NOTES

COMM 16126
DATE 10-17-2016

DWG
S-1.1

ISSUED FOR BID

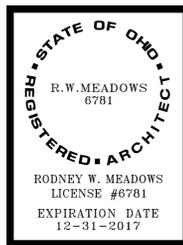
REVISIONS:



600 MARKET AVENUE NORTH CANTON OHIO 44702

MOTT & MEADOWS ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
STADIUM PARK CANTON, OHIO



**THIS DWG :
PLUMBING
FLOOR PLANS**

COMM 16126
DATE 10-17-2016

DWG
P-1

ISSUED FOR BID

PLUMBING EQUIPMENT AND DRAIN SCHEDULE			
SYM	TYPE	MAKE, MODEL	DESCRIPTION
TD-1	TRENCH DRAIN	J.R. SMITH 9666	GENERAL PURPOSE 2" INTERNAL WIDTH STAINLESS STEEL TRENCH DRAINAGE SYSTEM OF STAINLESS STEEL BODY AND VANDAL-PROOF STAINLESS STEEL PERFORATED GRATE AND 2" DIAMETER THREADED BOTTOM OUTLET. SYSTEM COMPLETE WITH SLOPED AND/OR NEUTRAL CHANNELS (AS REQUIRED FOR TOTAL LENGTH AS DETERMINED BY ARCHITECT).

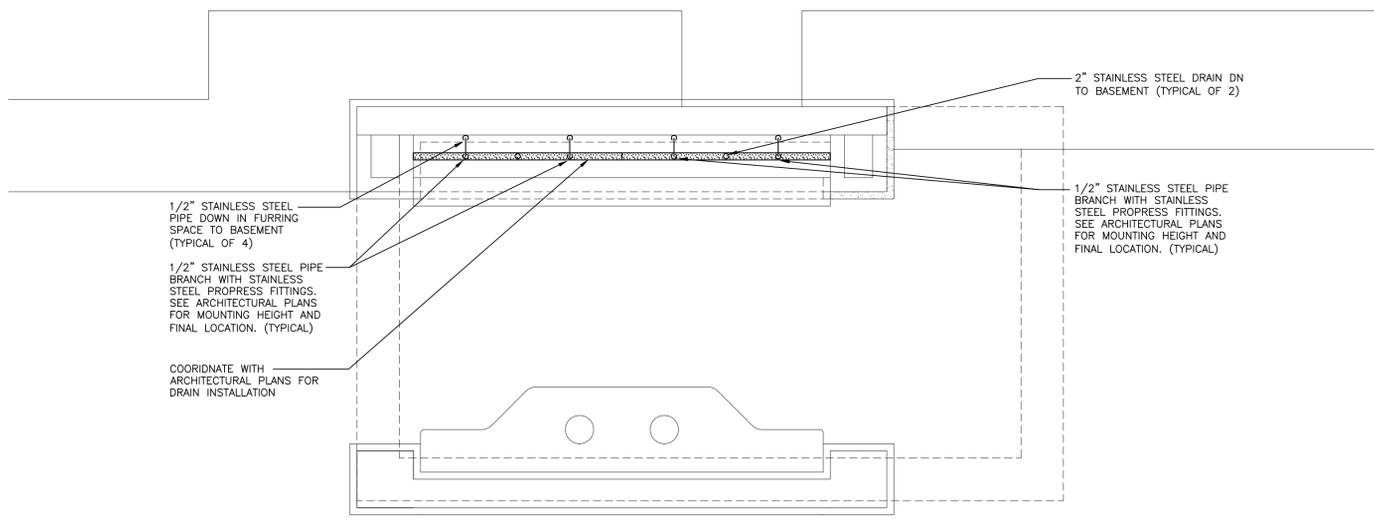
NOTE: ITEMS SCHEDULED ARE BASIS OF DESIGN. OTHER MANUFACTURERS MAY BE SUBSTITUTED IN ACCORDANCE WITH THE FOLLOWING LIST:
DRAINS, CLEANOUTS AND CARRIERS - JAY R. SMITH, ACO DRAIN, JOSAM, WADE, ZURN

ELECTRIC HEATER SCHEDULE											
NO	MAKE	MODEL	TYPE	HEAT CAPACITY		BLOWER		ELECTRICAL		WT LBS	OPTIONS NOTES
				WATTS	BTUH	CFM	HP	VOLT/PH/Hz	AMPS		
EH-1	MARTEL	RPH1-SA	WALL HEATER	500	1706	-	-	120/1/60	4.2	5	AG

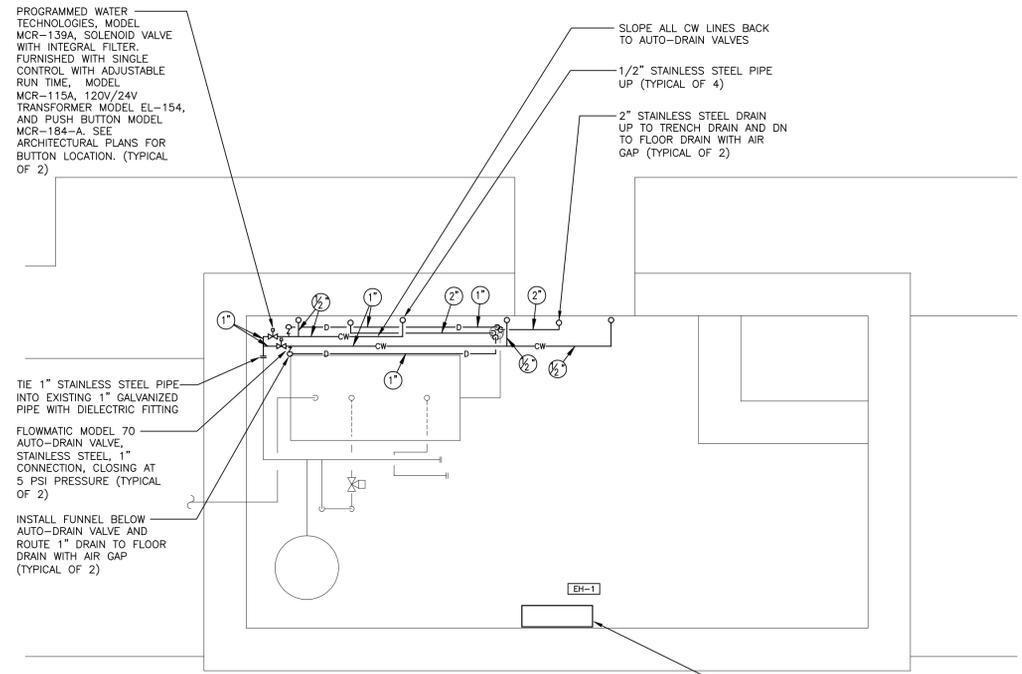
GENERAL NOTES FOR ALL HEATERS
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

OPTIONS (SEE SCHEDULE ABOVE FOR APPLICABLE OPTIONS FROM LIST BELOW)

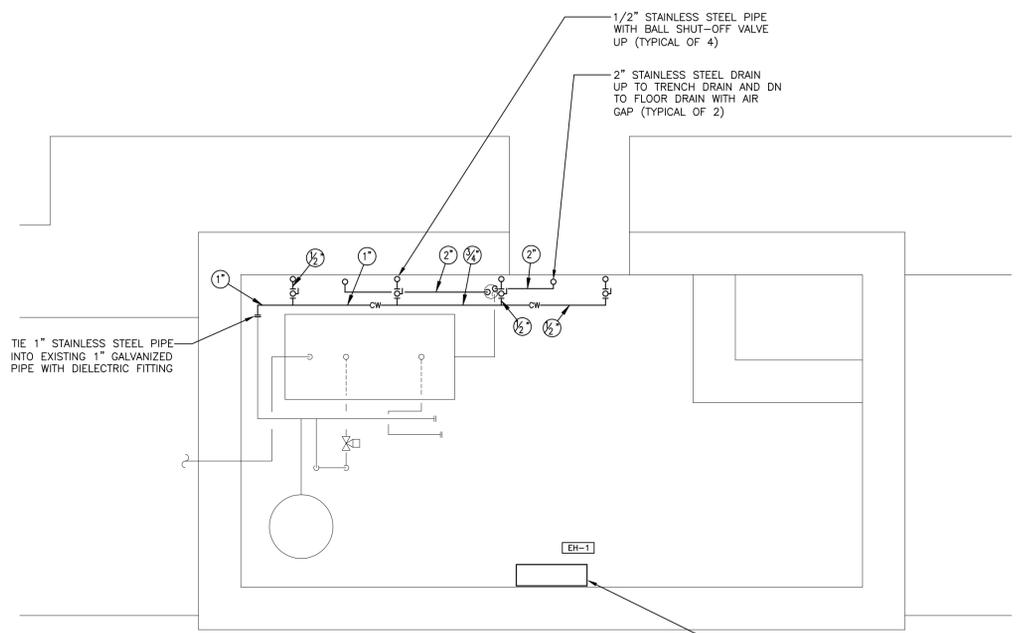
A. INTEGRAL THERMOSTAT	F. RECESS MOUNTING FRAME
B. REMOTE WALL MOUNTED THERMOSTAT	G. SURFACE MOUNTING FRAME
C. POWER DISCONNECT SWITCH	
D. HANGING BRACKET	
E. AIR FLOW SWITCH	



FIRST FLOOR PLUMBING PLAN
SCALE: 1/2" = 1'-0"



ADD ALTERNATE
BASEMENT FLOOR PLUMBING PLAN
SCALE: 1/2" = 1'-0"

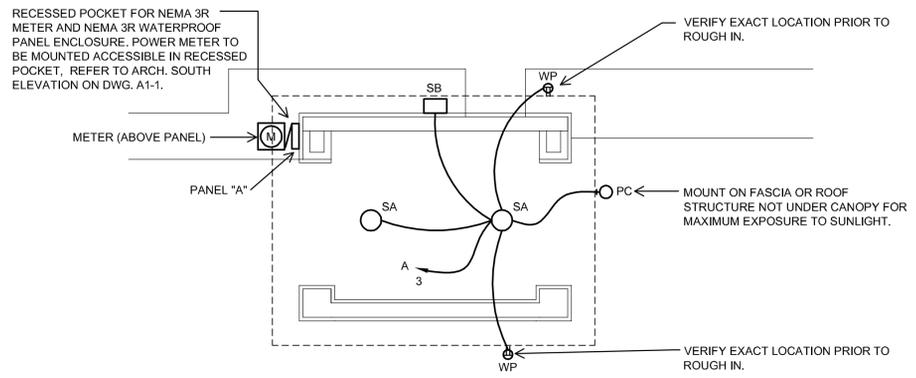


BASE BID
BASEMENT FLOOR PLUMBING PLAN
SCALE: 1/2" = 1'-0"

REVISIONS:



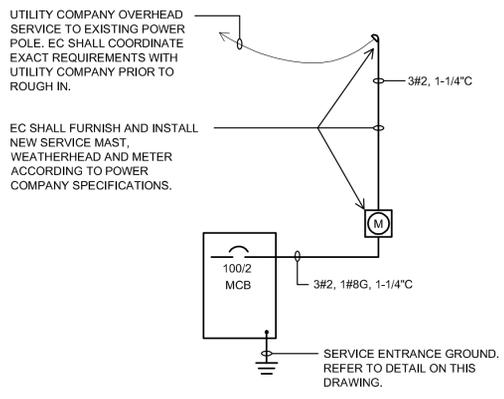
LIGHTING FIXTURE SCHEDULE									
TYPE AND SYMBOL	NO. OF LAMPS AND TYPE	LAMP WATTS	FIXTURE WATTS	VOLTS	MANUFACTURER CATALOG NO.	DIFFUSING LENS	MOUNTING	DESCRIPTION	EQUIVALENT MANUFACTURER
SA ○	LED LIGHT ENGINE	16.6	16.6	120	LITHONIA OLCFM DDB	POLYCARBONATE	SURFACE ON CEILING	LED MAINTENANCE FREE GENERAL ILLUMINATION FIXTURE WITH 1077 LUMENS AT 4,000 KELVIN. UL LISTED WET LOCATION. DARK BRONZE FINISH.	AS APPROVED BY ENGINEER
SB □	LED LIGHT ENGINE	13	9	120	LITHONIA WSTM LED 1A 40K 120 DDBXD	GLASS	WALL MOUNTED	LED MAINTENANCE FREE GENERAL ILLUMINATION MINI WALL SCONCE WITH 733 LUMENS AT 4,000 KELVIN. UL LISTED WET LOCATION. DARK BRONZE FINISH.	AS APPROVED BY ENGINEER
SC ○	LED LIGHT ENGINE	15	15	120	LITHONIA OLVTTM	POLYCARBONATE	WALL MOUNTED	LED MAINTENANCE FREE GENERAL ILLUMINATION VAPORTIGHT FIXTURE WITH 600 LUMENS AT 4,000 KELVIN. UL LISTED WET LOCATION. GREY FINISH.	AS APPROVED BY ENGINEER



GROUND FLOOR ELECTRICAL PLAN

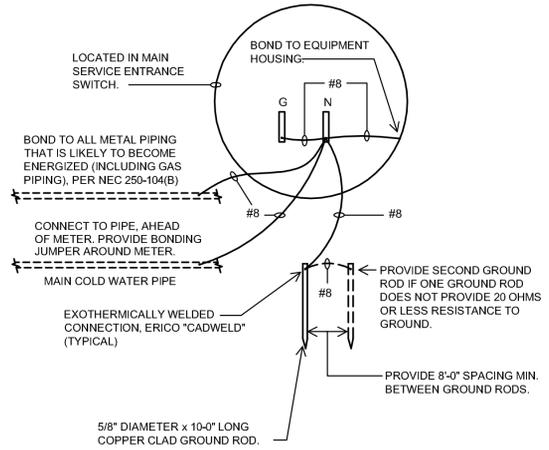
SCALE: 1/4" = 1'-0"

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
HA	HOMERUN TO PANEL INDICATING CIRCUIT NUMBERS - ALL WIRING SHALL BE #12 WITH GROUND WIRE UON (INCREASE TO #10 FOR CIRCUITS BETWEEN 100 AND 200 LF) CONSULT ENGINEER FOR RUNS OVER 200 LIN FEET IF WIRE SIZE IS NOT INDICATED - ALL HOMERUNS SHALL BE TO A 20 AMPERE, 1 POLE CIRCUIT BREAKER UON. WIRE FILL AS REQUIRED FOR APPLICATION INDICATED.
SW	STANDARD SWITCHES - 20 AMPERE, 120/277 VOLT, SINGLE POLE - MTD AT 48" AFF UON
DR	DUPLEX RECEPTACLE - 20 AMPERE, 125 VOLT - GROUND FAULT CIRCUIT INTERRUPTER TYPE - MOUNTED AT 15" AFF UON. "WP" INDICATES WITH WATERPROOF "WHILE IN USE" COVER.
PB	PANELBOARD (240/120V - 1 ph - 3W)
M	MOTOR. SEE PLAN FOR DESCRIPTION.
PC	PHOTO CELL, TORX #3010, 120V, 1200 VA RATING. FLUSH MOUNT IN RECESSED RAIN TIGHT JUNCTION BOX. MOUNT AS HIGH AS POSSIBLE.
REX	INDICATES EXISTING ELECTRICAL DEVICE - TO BE REMOVED WITH RELATED CONDUIT AND WIRE. UON
AFF	ABOVE FINISHED FLOOR
EC	ELECTRICAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AIR CONDITIONING
MC	MECHANICAL CONTRACTOR
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
PC	PLUMBING CONTRACTOR
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
ETR	EXISTING TO REMAIN
REX	REMOVE EXISTING



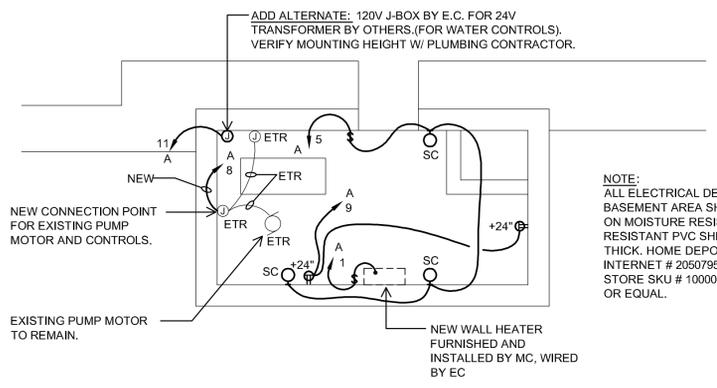
POWER RISER DIAGRAM

SCALE: NONE



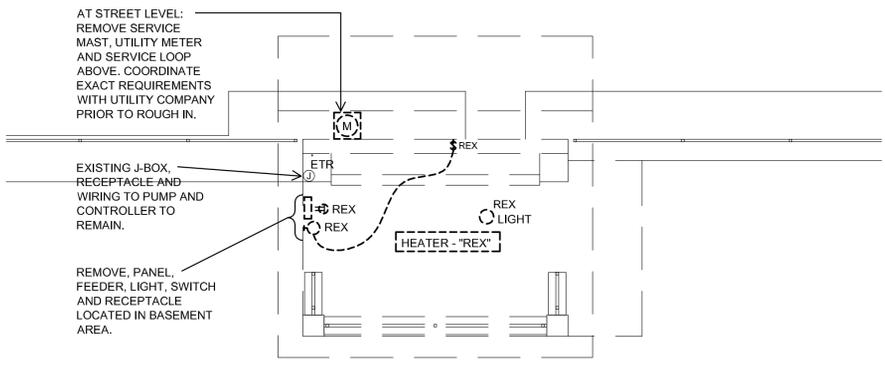
SERVICE GROUNDING DETAIL

SCALE: NONE



BASEMENT ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



ELECTRICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

S:\Active\169v004-Canton Parks Spring House\169v004.dwg [E], October 11, 2016 - 10:56am

600 MARKET AVENUE NORTH CANTON OHIO 44702

MOTTER & MEADOWS ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
STADIUM PARK CANTON, OHIO

STATE OF OHIO
REGISTERED ARCHITECT
R.W. MEADOWS
8781
RODNEY W. MEADOWS
LICENSE # 6781
EXPIRATION DATE
12-31-2017

THIS DWG :
ELECTRICAL FLOOR PLANS, LEGEND AND SCHEDULES

COMM 16126
DATE 10-17-2016

DWG
E-1

ISSUED FOR BID

SECTION 16010 - ELECTRICAL GENERAL PROVISIONS

- THE PROVISIONS OF THE INSTRUCTIONS TO BIDDERS, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, ALTERNATES, ADDENDAS AND DIVISION 1 ARE A PART OF THIS SPECIFICATION. ELECTRICAL, ARCHITECTURAL, MECHANICAL AND ALL OTHER DRAWINGS AS WELL AS THE SPECIFICATIONS FOR ALL THE DIVISIONS ARE A PART OF THE CONTRACT DOCUMENTS. ALL REVISIONS TO THE DRAWINGS AND SPECIFICATIONS UP TO THE BID DUE DATE ARE A BINDING PART OF THE CONTRACT.
- VISIT THE SITE OF THE WORK AND BECOME FAMILIAR WITH THE CONDITIONS AFFECTING THE INSTALLATION. SUBMISSION OF A PROPOSAL SHALL PRESUPPOSE KNOWLEDGE OF SUCH CONDITIONS AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED WHERE EXTRA LABOR OR MATERIALS ARE REQUIRED BECAUSE OF IGNORANCE OF THESE CONDITIONS.
- DISCREPANCIES BETWEEN ELECTRICAL, MECHANICAL AND ARCHITECTURAL, CONTRACT DRAWINGS, OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO FINAL BID SUBMITTAL.
- DEFINITIONS:
 - "CONTRACTOR" AS USED WITHIN THE CONTEXT OF THE ELECTRICAL CONTRACT DOCUMENTS SHALL EXPLICITLY REFER TO THE "ELECTRICAL CONTRACTOR".
 - THE TERM "FURNISH" SHALL MEAN TO SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS.
 - THE TERM "INSTALL" SHALL MEAN WORK WHICH INCLUDES THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTING, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS.
 - THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
- INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, SERVICES AND PERMITS NECESSARY FOR THE PROPER COMPLETION OF ALL ELECTRICAL WORK SHOWN. ITEMS OMITTED, BUT NECESSARY, TO MAKE THE ELECTRICAL SYSTEM COMPLETE AND WORKABLE SHALL BE UNDERSTOOD TO FORM PART OF THE WORK. CONTRACTOR'S BID IS ASSUMED TO INCLUDE ANY PREMIUM TIME COSTS REQUIRED TO COMPLETE WORK.
- IT IS THE PURPOSE OF THE ELECTRICAL DRAWINGS TO INDICATE THE APPROXIMATE LOCATION OF ALL EQUIPMENT, OUTLETS, ETC. ASCERTAIN EXACT LOCATIONS AND ARRANGE WORK ACCORDINGLY. THE RIGHT IS RESERVED TO EFFECT REASONABLE CHANGES IN THE LOCATION OF OUTLETS UP TO THE TIME OF ROUGHING-IN, WITHOUT ADDITIONAL COST TO THE OWNER.
- TEMPERATURE AND INTERLOCK CONTROLS ARE PROVIDED AND WIRED BY A CONTROLS CONTRACTOR. LINE (120 VOLT) VOLTAGE CONTROL DEVICES, SUCH AS THERMOSTATS AND AQUASTATS, WHICH CONTROL FRACTIONAL HORSEPOWER, 120 VOLT MOTORS ARE FURNISHED BY MECHANICAL CONTRACTOR, AND ARE MOUNTED AND WIRED BY THE ELECTRICAL CONTRACTOR.
- SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE ELECTRICAL WORK.
- WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF LOCAL AND STATE (OBC - OHIO BUILDING CODE) CODES, AS WELL AS THE NATIONAL ELECTRICAL CODE (NEC), AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION (A.H.). NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY CHANGES NECESSARY FOR CODE COMPLIANCE. CONTRACTOR SHALL FOLLOW NECA STANDARDS OF INSTALLATION AS A MINIMUM.
- CONSULT THE DRAWINGS, PRODUCT DATA AND SHOP DRAWINGS COVERING THE WORK FOR VARIOUS OTHER TRADES, THE FIELD LAYOUTS OF THE CONTRACTORS FOR THE TRADE AND MAKE ADJUSTMENTS ACCORDINGLY IN LAYING OUT THE ELECTRICAL WORK. WHERE ELECTRICAL REQUIREMENTS FOR OTHER TRADES VARIES FROM WHAT IS INDICATED ON THE DRAWINGS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY AND SUSPEND ALL WORK ASSOCIATED WITH THE VARIATION UNTIL A DETERMINATION IS MADE BY THE ARCHITECT AND ENGINEER.
- CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS, AND THE SUCCESSFUL OPERATION OF ALL EQUIPMENT AND APPARATUS INSTALLED BY HIM FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE ENTIRE WORK BY THE OWNER, AND SHALL GUARANTEE TO REPAIR OR REPLACE AT HIS OWN EXPENSE ANY OF THE APPARATUS WHICH MAY SHOW TO BE DEFECTIVE DURING THAT TIME PROVIDED SUCH DEFECT IS, IN THE OPINION OF THE OWNER, DUE TO IMPERFECT MATERIAL OR WORKMANSHIP AND NOT TO CARELESSNESS OR IMPROPER USE.
- AUTHORIZED REPRESENTATIVES OF THE OWNER SHALL HAVE ACCESS TO AND PRIVILEGE OF INSPECTING ALL WORK AND MATERIALS AS WORK PROGRESSES. THESE REPRESENTATIVES SHALL HAVE AUTHORITY TO APPROVE OR REJECT WORK OR MATERIALS, USING DRAWINGS, SPECIFICATIONS, CODES AND GOOD ENGINEERING PRACTICES AS THE BASIS FOR APPROVAL OR REJECTION.
- BIDS SHALL BE BASED UPON THE SPECIFIED PRODUCTS OR LISTED ALTERNATIVE EQUALS. THE DRAWINGS AND SPECIFICATIONS ARE BASED ON THE PRODUCTS SPECIFIED BY TYPE, MODEL AND SIZE AND THUS ESTABLISH MINIMUM QUALITIES WHICH SUBSTITUTES MUST MEET TO QUALIFY FOR REVIEW. WHERE ONLY ONE MAKE IS NAMED, IT SHALL BE PROVIDED. VERBAL REQUESTS OR APPROVALS SHALL NOT BE BINDING ON THE ARCHITECT, ENGINEER OR OWNER. SHOULD THE CONTRACTOR PROPOSE TO FURNISH MATERIALS AND EQUIPMENT OTHER THAN THOSE SPECIFIED, HE SHALL SUBMIT A WRITTEN REQUEST FOR SUBSTITUTIONS TO THE ARCHITECT AT THE BID OPENING. INDICATE ANY ADDITIONS OR DEDUCTIONS TO THE CONTRACT PRICE ON THE BID FORM.
- EQUIPMENT AND MATERIALS USED ON THIS PROJECT SHALL BE NEW AND U.L. LISTED AND LABELED FOR THE APPLICATION.
- PROVIDE ELECTRONIC PDF SHOP DRAWINGS FOR LIGHTING FIXTURES, PANELBOARD, AND ALL OTHER SPECIFIED SYSTEMS AND COMPONENTS. THE SUBMITTALS WILL BE REVIEWED ONLY FOR GENERAL COMPLIANCE AND NOT FOR DIMENSIONS, QUANTITIES, ETC. THE SUBMITTALS THAT ARE RETURNED SHALL BE USED FOR PROCUREMENT. THE RESPONSIBILITY OF CORRECT PROCUREMENT REMAINS SOLELY WITH THE CONTRACTOR.
- THE SUBMITTAL REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS AND DEVIATIONS FROM THE CONTRACT REQUIREMENTS. IF THE SUBMITTAL SHOWS VARIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS FOR ANY REASON, THE CONTRACTOR SHALL MAKE MENTION OF SUCH VARIATION IN HIS LETTER OF TRANSMITTAL. THE CONTRACTOR SHALL NOTE IN RED ON THE SUBMITTAL ANY CHANGE IN DESIGN OR DIMENSION ON THE ITEMS SUBMITTED INCLUDING CHANGES MADE BY THE MANUFACTURER WHICH MAY DIFFER FROM CATALOG INFORMATION. WHERE CONTENTS OF SUBMITTAL LITERATURE INCLUDE DATA NOT PERTINENT TO THE SUBMITTAL, CLEARLY INDICATE WHICH PORTION OF CONTENT IS BEING SUBMITTED FOR REVIEW. WHERE ADDITIONAL INSTALLATION DRAWINGS, WIRING DIAGRAMS OR OTHER DRAWINGS ARE SPECIFIED AS A PART OF THE SUBMITTAL, THEY SHALL BE SUBMITTED AT THE SAME TIME WITH SHOP DRAWINGS AND PRODUCT DATA. PARTIAL SUBMITTALS AND SUBMITTALS NOT STAMPED WITH CONTRACTOR APPROVAL ARE NOT ACCEPTABLE, AND WILL BE RETURNED FOR REPROCESSING.
- THE CONTRACTOR SHALL KEEP ONE COMPLETE SET OF THE CONTRACT WORKING DRAWINGS ON THE PROJECT SITE ON WHICH HE SHALL RECORD ANY DEVIATIONS OR CHANGES FROM SUCH CONTRACT DRAWINGS MADE DURING CONSTRUCTION. AFTER THE PROJECT IS COMPLETED, RECORD SETS OF DRAWINGS SHALL BE DELIVERED TO THE ARCHITECT IN GOOD CONDITION, AS A PERMANENT RECORD OF THE INSTALLATION AS CONSTRUCTED.
- AFTER INSTALLATION, TEST FOR GROUNDS, SHORT CIRCUITS AND PROPER FUNCTION OF EACH SYSTEM AND RELATED WIRING. FAULTS IN THE INSTALLATION SHALL BE CORRECTED.
- INSULATION RESISTANCE TESTS SHALL BE MADE ON THE ELECTRICAL SYSTEM WITH AN APPROVED MEGOHMMETER. PROVIDE ADDITIONAL GROUNDING COMPONENTS (ROD, ACTIVE ELECTRODE, ETC.) AS REQUIRED TO ACHIEVE 5 OHM RESISTANCE MAXIMUM FOR THE MAIN SERVICE DISCONNECT GROUNDING ELECTRODE SYSTEM.
- A GROUND CONTINUITY TEST SHALL BE MADE ON THE GROUNDING SYSTEM SHOWN TO BE INSTALLED ON THE DRAWINGS, WHERE AN EXISTING SERVICE OR PANELS ARE BEING REUSED, CONTRACTOR SHALL VERIFY PROPER GROUNDING OF SERVICE, PANELS, AND

SEPARATELY DERIVED SYSTEMS AND CORRECT ANY DEFICIENCIES IN THE GROUNDING ELECTRODE SYSTEM AND EQUIPMENT GROUNDING IN ORDER TO COMPLY WITH THE NEC AND ABOVE REQUIREMENTS.

- AT ALL TIMES KEEP PREMISES AND BUILDING IN NEAT AND ORDERLY CONDITION CLEANED ON A DAILY BASIS WITH ALL DEBRIS BEING REMOVED FROM THE SITE DAILY. FOLLOW EXPLICITLY ANY INSTRUCTIONS OF THE OWNER'S REPRESENTATIVE. AFTER ALL TESTS AND ADJUSTMENTS HAVE BEEN COMPLETED, CLEAN ALL EQUIPMENT LEAVING EVERYTHING IN WORKING ORDER AT THE COMPLETION OF THIS WORK. CLEAN LIGHTING FIXTURES, OUTLET BOX PLATES, PANEL AND CABINET INTERIORS AND EXTERIORS, ETC., OF DIRT, DUST, DEBRIS AND PAINT, AFTER ALL OTHER TRADES HAVE COMPLETED THEIR WORK.
- DEMONSTRATE TO THE OWNER'S SATISFACTION THE PROPER OPERATION OF EACH OF THE SYSTEMS COMPRISING THIS CONTRACT BEFORE FINAL PAYMENT.
- AT THE END OF THE PROJECT THE CONTRACTOR SHALL MEASURE THE LOADING ON PANELBOARD AND VERIFY THAT THE EQUIPMENT IS NOT LOADED TO MORE THAN 80% OF THE NAMEPLATE RATING, IF LOAD MEASUREMENTS SHOW OTHERWISE THE CONTRACTOR SHALL INFORM THE ARCHITECT AND ENGINEER IMMEDIATELY AND SHUT OFF NON CRITICAL LOADS UNTIL THE SYSTEM CAN BE MODIFIED TO WITHIN PROPER LOAD RATINGS.
- LOADS SHALL BE ADJUSTED ON PANEL SO THAT LOADING ON EACH PHASE IS WITHIN 10% OF EACH OTHER.
- PROVIDE TEMPORARY ELECTRICAL SERVICE ADEQUATE IN SIZE FOR HEATING, FOR THE USE OF ALL TRADES AND FOR THE LIGHTING OF EACH ROOM DURING CONSTRUCTION (20 FOOT CANDLES MIN.). TEMPORARY WIRING SHALL BE TO OSHA REQUIREMENTS. THE OWNER MUST APPROVE OF THE POINT OF SUPPLY, THE METHOD OF EXTENSION AND THE ROUTING OF NECESSARY TEMPORARY FEEDERS. THE CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH A UTILITY TEMPORARY POWER SERVICE IF REQUIRED. ALL 120 VOLT SINGLE PHASE 15 AND 20 AMP RECEPTACLES USED BY WORKMEN SHALL BE PROTECTED BY A GFCI. PROVIDE A TEMPORARY TELEPHONE SERVICE FOR THE USE OF ALL TRADES DURING CONSTRUCTION.

SECTION 16050 - BASIC MATERIAL AND METHODS

- ALL BOXES AND CONDUIT SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE INDEPENDENT OF THE CONDUIT SYSTEM. ALL BOXES SHALL BE 4" SQUARE BOXES MINIMUM WITH RAISED COVERS SUITABLE FOR THE WALL MATERIAL.
- RACEWAYS:
 - CONDUIT SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) OR INTERMEDIATE GRADE STEEL (IMC) IN EXTERIOR MASONRY WALLS, IN MASONRY WALLS BELOW GRADE, IN CRAWL SPACES, IN CONCRETE FLOORS, IN SLABS, AND IN DAMP OR WET LOCATIONS. EXPOSED CONDUITS IN HIGH TRAFFIC AREAS WHERE CONDUITS ARE SUBJECT TO PHYSICAL ABUSE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL TO A LEVEL OF 8 FEET ABOVE THE FINISHED FLOOR. ALL OTHER INTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING (EMT), UNLESS OTHERWISE NOTED ON THE DRAWINGS OR WITHIN THESE SPECIFICATIONS. CONDUITS SHALL BE 1/2" TRADE SIZE, MINIMUM, UNLESS OTHERWISE NOTED ON THE DRAWINGS OR WITHIN THESE SPECIFICATIONS.
 - CONDUIT BELOW SLABS AND UNDERGROUND SHALL BE SCHEDULE 40 PVC CONDUIT. FOR CONDUITS LARGER THAN 3" PROVIDE RGS OR IMC LONG SWEEP ELBOWS FOR STUB UPS INTO ELECTRICAL EQUIPMENT. PROVIDE RGS TRANSITIONS WHERE SUBJECT TO PHYSICAL DAMAGE.
 - FLEXIBLE METAL CONDUIT SHALL BE USED FROM OUTLET BOXES TO RECESSED LIGHTING FIXTURES, 6 FT. IN LENGTH. METAL CLAD (TYPE MC) CABLE OR MANUFACTURED WIRING SYSTEMS MAY BE UTILIZED IN LIEU OF BRANCH CIRCUIT EMT CONDUIT. INSTALLATION OF MC CABLE SHALL COMPLY WITH ARTICLE 334 OF THE NATIONAL ELECTRICAL CODE. INSTALLATION OF MANUFACTURED WIRING SYSTEMS SHALL COMPLY WITH ARTICLE 604 OF THE NATIONAL ELECTRICAL CODE. ALL BRANCH CIRCUIT HOMERUN CONDUITS WITHIN THE CEILING SPACE COMPLETE TO THE PANELBOARDS SHALL BE IN EMT CONDUIT.
 - CONDUIT CONNECTIONS TO MOTORS SHALL BE FLEXIBLE METAL CONDUIT "SEAL-TITE" TYPE "UA" AS MANUFACTURED BY THE AMERICAN BRASS COMPANY OR EQUIVALENT AND SHALL BE OF THE SAME SIZE AS THE FEEDER CONDUIT.
 - CONDUIT CONNECTIONS TO UNDERCABINET TYPE LIGHTING FIXTURES SHALL BE 3/8" FLEXIBLE METAL CONDUIT OR MC TYPE CABLE FROM THE WALL OUTLET BOX TO THE FIXTURE HOUSING.
 - CONDUITS PASSING FROM INTERIOR OF THE BUILDING TO EXTERIOR OF THE BUILDING SHALL BE FILLED WITH A UL APPROVED MATERIAL TO PREVENT CIRCULATION OF WARM AIR TO THE EXTERIOR RACEWAY PER NEC SECTION 300.7(A).

3. WIRING DEVICES:

- LOCAL LIGHT SWITCHES SHALL BE 20 AMPERE, 120/277 VOLTS, AC SPECIFICATION GRADE, WITH GROUNDING TERMINAL, AS MANUFACTURED BY HUBBELL, OR EQUIVALENT, #CS-122 SERIES.
- GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLES WHERE INDICATED ON THE DRAWINGS OR WHERE REQUIRED BY CODE, SHALL HAVE AN INTEGRAL GROUND FAULT PROTECTOR FOR PERSONNEL PROTECTION (5MA) AND SHALL BE 20A, 125V, 2 POLE, 3 WIRE GROUNDING: HUBBELL #GFR5352. GROUND FAULT RECEPTACLES SHALL NOT BE THRU-WIRED. PROVIDE INDIVIDUAL DUPLEX RECEPTACLES AS SHOWN ON THE DRAWINGS.
- WIRING DEVICES (SWITCHES, RECEPTACLES, ETC.) SHALL BE IVORY UNLESS OTHERWISE INDICATED. VERIFY COLOR WITH THE ARCHITECT.
- THE FOLLOWING ARE EQUIVALENT WIRING DEVICES:

- RECEPTACLES: #5362 SERIES MANUFACTURED BY PASS AND SEYMOUR OR LEVITON.
- LIGHT SWITCHES: PASS AND SEYMOUR #20AC1 SERIES OR LEVITON #121 SERIES.
- WIRE AND CABLE FOR BRANCH CIRCUITS AND FOR FEEDERS SHALL BE 600 VOLT, TYPE THHN/THWN COPPER ONLY, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. MINIMUM SIZE FOR POWER AND LIGHTING BRANCH CIRCUITS SHALL BE #12. FLEXIBLE CORD SHALL BE HEAVY DUTY TYPE "SO" WITH AN EQUIPMENT GROUND CONDUCTOR.
- RACEWAY INSTALLATION:
 - CONDUITS SHALL BE CONTINUOUS AND SECURED TO ALL BOXES IN SUCH A MANNER THAT EACH CONDUIT SYSTEM SHALL BE ELECTRICALLY CONTINUOUS FROM THE POINT OF SERVICE TO ALL OUTLET BOXES. RUN CONDUITS CONCEALED UNLESS OTHERWISE INDICATED.
 - INDIVIDUAL BRANCH CIRCUITS ARE SHOWN ON THE DRAWINGS FOR CLARITY. MULTIWIRE BRANCH CIRCUITS MAY BE UTILIZED AS DEFINED BY N.E.C. ARTICLE 210.4. NEUTRAL CONDUCTORS IN RECEPTACLE CIRCUITS SERVING DATA EQUIPMENT LOADS SHALL NOT BE SHARED.
- WIRE AND CABLE INSTALLATION:
 - PULL WIRE AND CABLES INTO CONDUIT USING IDEAL INDUSTRIES "YELLOW 190", OR EQUIVALENT.

B.) COLOR CODE WIRE AND CABLE FOR CIRCUITS AS CALLED FOR IN THE NATIONAL ELECTRICAL CODE. COLOR CODING OF FEEDERS SHALL BE BY MEANS OF COLORED TAPE AT TERMINALS AND ALL POINTS OF ACCESS INCLUDING JUNCTION BOXES. COLOR CODE AS FOLLOWS:

- | | | |
|------------|----------|--|
| | 240/120V | |
| a. PHASE A | BLACK | |
| b. PHASE B | RED | |
| c. PHASE C | BLUE | |
| d. NEUTRAL | WHITE | |
| e. GROUND | GREEN | |

7. WIRING DEVICE INSTALLATION:

- ADJACENT DEVICES SHALL BE MOUNTED IN GANGED BOXES WITH COMMON COVER PLATES.
 - VERIFY MOUNTING HEIGHTS AND LOCATIONS WITH THE ARCHITECT BEFORE ROUGH-IN. REFER TO DETAILS AND INTERIOR WALL ELEVATIONS SHOWN ON THE ARCHITECTURAL DRAWINGS.
 - ALL RECEPTACLES SHALL BE MOUNTED WITH THE GROUND OPENING ABOVE THE PHASE AND NEUTRAL OPENINGS.
 - ALL DEVICES SHALL BE SECURED WITH MORE THAN A SINGLE SCREW.
- ALL HARDWARE, SUPPORTS, HANGERS, BRACKETS, ANGLE IRON, CHANNELS, RODS AND CLAMPS NECESSARY TO INSTALL ELECTRICAL EQUIPMENT SHALL BE PROVIDED TO SUIT THE FIELD CONDITIONS AND THE APPLICATIONS INTENDED AS SHOWN ON THE DRAWINGS. THE USE OF PERFORATED STRAPS IS NOT PERMITTED.
 - ALL EQUIPMENT MOUNTED ON EQUIPMENT ROOM WALLS SHALL BE ATTACHED TO 3/4" PLYWOOD BOARDS, PAINTED WITH FIRE RESISTANT PAINT.

SECTION 16400 - SERVICE AND DISTRIBUTION

- GROUND ALL ELECTRICAL SYSTEM CONDUITS, MOTORS, PANELS AND OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ALL PROVISIONS OF THE NATIONAL ELECTRICAL CODE, STATE BUILDING CODE AND LOCAL OR REGIONAL CODES.
- GROUNDING OF THE ELECTRICAL SYSTEM SHALL BE BY MEANS OF AN INSULATED GROUNDING CONDUCTOR INSTALLED WITH FEEDER AND BRANCH CIRCUIT CONDUCTORS IN ALL CONDUITS. GROUNDING CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH NEC ARTICLE 250. WHERE CONDUCTORS ARE INCREASED IN SIZE DUE TO VOLTAGE DROP THE GROUND CONDUCTOR SIZE SHALL ALSO BE PROPORTIONALLY INCREASED.
- SYSTEM NEUTRAL CONDUCTORS SHALL BE GROUND AT THE SOURCE. NEUTRAL CONDUCTORS SHALL NOT BE USED FOR EQUIPMENT GROUNDING.
- THE GROUNDING CONDUCTOR FOR BRANCH CIRCUITS FEEDING ISOLATED GROUND RECEPTACLES SHALL BE CONNECTED ONLY AT THE ISOLATED GROUND RECEPTACLE GROUND TERMINAL, AND AT THE ISOLATED GROUND BUS IN THE ISOLATED GROUND PANEL, OR AS INDICATED ON THE DRAWINGS.
- GROUND EACH EXTERIOR LIGHTING POLE OR GROUND MOUNTED FIXTURE SEPARATELY WITH #6 COPPER GROUND CONDUCTOR EXOTHERMICALLY WELDED TO GROUND ROD.
- PROVIDE PROPER GROUNDING OF EACH SEPARATELY DERIVED SYSTEM PER THE DRAWINGS AND THE NEC.
- FURNISH AND INSTALL COMMERCIAL BRANCH CIRCUIT BREAKER PANELBOARDS EQUIPPED WITH CIRCUIT BREAKERS, WITH FRAME AND TRIP RATINGS LISTED ON THE DRAWINGS. CIRCUIT BREAKERS SHALL BE THERMAL-MAGNETIC, MOLDED CASE TYPE, ALL CURRENT CARRYING PARTS OF THE BUS STRUCTURE SHALL BE TIN-PLATED ALUMINUM. EACH PANELBOARD SHALL CONTAIN A GROUNDING BUS.
- PANELBOARDS SHALL BE AS MANUFACTURED BY SQUARE D, SIEMENS, GENERAL ELECTRIC OR CUTLER HAMMER.
- PANELS SHALL BE MOUNTED SO THAT TOP OF THE CABINET IS AT 6'-0" ABOVE FLOOR. A GLAZED DIRECTORY FRAME SHALL BE PROVIDED INSIDE EACH PANEL DOOR AND SHALL BE OF SUFFICIENT SIZE TO GIVE A COMPLETE DESCRIPTION OF EACH CIRCUIT. TYPED DIRECTORY CARDS SHALL BE PROVIDED LISTING EACH CIRCUIT SERVED.
- THE BRANCH CIRCUIT NUMBERS USED ON THE DRAWINGS SHALL BE APPLIED FOR THE CONSTRUCTION. HOWEVER, AT THE COMPLETION OF THE WORK, CIRCUIT NUMBER ADJUSTMENTS SHALL BE MADE AS REQUIRED TO PROVIDE BALANCED PHASE LOADING ON EACH PANELBOARD.
- ELECTRICAL EQUIPMENT SUCH AS PANELBOARDS, METER SOCKET ENCLOSURES, ETC. SHALL BE PROVIDED WITH AN ORANGE "WARNING" LABEL TO WARN QUALIFIED SERVICE PERSONNEL OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE LABEL SHALL BE LOCATED IN A CLEARLY VISIBLE LOCATION ON THE EQUIPMENT. THE LABEL SHALL INDICATE THE CATEGORY LEVEL AND REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE) TO WEAR AND THE AVAILABLE INCIDENT ENERGY OF AN ARC FAULT AT THE EQUIPMENT AT THE REQUIRED WORKING DISTANCE. PROVIDE A RED "DANGER" LABEL WITH THE SAME INFORMATION FOR ALL EQUIPMENT WITH AN INCIDENT ENERGY EQUAL TO OR GREATER THAN 40 CAL/CM2 AT THE REQUIRED WORKING DISTANCE.

SECTION 16500 - LIGHTING

- RECESSED FIXTURES SHALL BE PROVIDED TO BE COMPATIBLE WITH THE CEILING TYPES INSTALLED. VERIFY ALL CEILING TYPES WITH THE DIVISION 1 CONTRACTOR, OR WITH THE ARCHITECT BEFORE PROCUREMENT OF FIXTURES.
- WHERE LIGHT FIXTURES ARE CONNECTED TO MULTIWIRE BRANCH CIRCUITS, THE DISCONNECTING MEANS SHALL SIMULTANEOUSLY BREAK ALL THE SUPPLY CONDUCTORS TO ALL CIRCUITS.
- RECESSED AND SURFACE MOUNTED FIXTURES MOUNTED IN, OR ON CEILINGS OTHER THAN ACCESSIBLE LAY-IN CEILING SYSTEMS, SHALL BE SECURELY SUPPORTED IN A MANNER APPROVED BY THE ARCHITECT. MOUNTING SHALL ALSO BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE ARTICLE 410, AND AS RECOMMENDED BY THE FIXTURE MANUFACTURER.
- FURNISH AND INSTALL INTERNAL DISCONNECTING MEANS AS REQUIRED BY N.E.C. 410-130 (G).

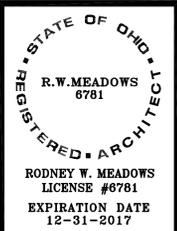
REVISIONS:



CANTON OHIO 44702
600 MARKET AVENUE NORTH

MOTTER & MEADOWS
ARCHITECTS

RECONSTRUCTION OF:
CITY OF CANTON JOHN BARKER SPRING HOUSE
STADIUM PARK
CANTON, OHIO



THIS DWG :
ELECTRICAL
SPECIFICATIONS
AND PANEL
SCHEDULE

COMM 16126
DATE 10-17-2016

DWG
E-2

ISSUED FOR BID

PANEL NAME: A				LOAD SUMMARY							PHASE BREAKDOWN				NOTES					
MOUNTING:	SURFACE	VOLTAGE:	120/240-1ph-4W	LOAD	KWC	D.F.	KWD	AMPS	TOTAL PANEL											
BUS RATING:	100A	MAIN:	100A MAIN CIRCUIT BREAKER	LTG	0.1	1.25	0.1		KWC PHASE A:	0.9										
A.I.C.	10,000	ETR OR NEW:	NEW	REC	0.7	N.E.C.	0.7		KWC PHASE B:	1.7										
				AC	0.0	1.00	0.0													
				HTG	0.5	1.00	0.5													
				W. HTR.	0.0	1.25	0.0													
				MISC.	1.3	1.00	1.3													
				TOTAL	3		3	14												
CCT	NOTES	DESCRIPTION	LTG	REC	AC	HTG	W.HTR.	MISC	C/B	PHASE	C/B	DESCRIPTION	LTG	REC	AC	HTG	W.HTR.	MISC	NOTES	CCT
1		NEW HEATER				0.50			20/1	A	20/2	SPARE								2
3		CANOPY LIGHTING	0.05	0.36					20/1	B										4
5		BASEMENT LIGHTING	0.05						20/1	A	20/1	SPARE								6
7		SPARE							20/1	B	20/1	EXISTING PUMP					1.20			8
9		BASEMENT RECEPTACLES		0.36					20/1	A	20/1	SPARE								10
11		CONTROL J-BOX (ADD ALTERNATE)						0.10	20/1	B	20/1	SPARE								12
TOTALS:			0.09	0.72	0.00	0.50	0.00	0.10					0.00	0.00	0.00	0.00	0.00	1.20	TOTALS:	